



April 6, 2022

To: Pablo Arroyave, Chief Operating Officer

From: Bob Martin, Facilities O&M Director

Subject: O&M Report for March 2023

Operations Department

The C.W. "Bill" Jones Pumping Plant (JPP) operated with 4-5 units for the first 30 days of March. Due to extreme weather at the Tracy Fish Collection Facility (TFCF) there was one event during the month where pumping was reduced to 3 units. This reduction was due to water entering a breaker cabinet (UZB) which damaged a fuse holder, and associated wiring. The damage was repaired and power was restored to the breaker after several hours.

The average rate of pumping for the JPP was 4,094 cfs for the first 30 days of March with total pumping of 243,248 acre-feet. The O'Neill Pump/Generating Plant (OPP) generated 0 acre-feet, and pumped 220,196 acre-feet during the same period. A total of 22,845 acre-feet was pumped at the Delta-Mendota Canal/California Aqueduct Intertie Plant (DCI) and 0 acre-feet was reversed from the California Aqueduct to the Delta-Mendota Canal (DMC) for the first 30 days of March.

The Federal share in the San Luis Reservoir as of March 30th was 921,960 acre-feet as compared to 333,166 acre-feet for the end of March 2022.

During the first 30 days of March, releases from Friant Dam ranged from 461 to 10,892 cfs with 55,442 AF entering the Mendota Pool. Flows past the Mendota Dam for the San Joaquin River Restoration Program (SJRRP) were 17,762 AF for the first 30 days of March.

Canal Operations staff performed open channel and closed-pipe flow measurements, routine patrols, storm patrols, wasteway inspections, bi-weekly meter readings, water samples, well soundings, and routine meter maintenance during the month of March.

Control Operations switching/clearance placements performed this month:

- C-22-JP-91 JPP Unit 3 Rewind/Annual Maintenance
- C-22-JP-92 JPP Unit 3 Suction elbow repair
- C-22-JP-93 OPP Unit 1 Distributor oil leak repair
- C-23-TF-13 TFF UZB Reset breaker wiring repair
- C-23-ON-14 OPP Unit 3 Speed head inspection
- C-23-JP-15 JPP Units 1-6 Discharge air vent valve repairs

Plant Maintenance Department

The Plant Maintenance crews worked on the following projects this month:

Electrical/C&I Staff:

- JPP flood alarm PM
- TFO meter Maintenance Shop lighting inspection PM
- CMT building lighting inspection PM
- Warehouse lighting inspection PM
- SLDMWA entrance gate PM
- USBR entrance gate PM
- JPP emergency lighting PM (Annual)
- JPP emergency lighting PM
- Control Room drain pump inspection PM
- Control Building 1 ton monorail hoist PM
- Control Building 2 ton monorail hoist PM
- JPP 21 ton bridge crane/hoist PM
- JPP ¼ ton monorail hoist PM
- Electric Shop ½ ton crane hoist PM
- Electric Shop 2 ton monorail hoist PM
- Supported USBR/TSC with check and gate inspections along the DMC
- Station service battery PM
- Marked communication cable at various locations along the DMC
- Replaced lights in the Hazmat Storage Room
- Control Building conference room remodel
- DMC Check 1, gate 2 troubleshoot and repair
- Checks 13-21 inspect and replace PLC and electrical equipment UPS system
- DMC Check 19 level detector troubleshoot, adjust, and repair
- OPP Unit 2 motor stator hot alarm troubleshoot, investigation and repair
- OPP penstock/siphon breaker ventilation fan PM
- OPP ½ ton chain hoist crane PM
- OPP 1 ton chain hoist crane PM
- OPP 3 ton chain hoist crane PM
- OPP 65/10 ton bridge crane PM
- OPP 65 ton crane PM
- OPP station service dry transformer PM
- OPP CO2 system PM
- OPP compressed air systems PM's
- OPP annunciator panel PM
- OPP HP compressor system (New pressure transducer, conduit, and wiring)
- OPP GFCI replacement project
- OPP cable tray inspection PM
- LBAO lighting troubleshooting and repairs
- LBFO HVAC PM
- LBFO domestic well pump motor PM
- LBFO electric security gate PM
- LBFO infra-red inspection PM
- OPP Unit 1 SCADA PC graphics modification
- OPP domestic water pump PM
- OPP sump pump PM

- OPP 5 ton stop log crane PM
- OPP intrusion alarm troubleshoot, investigation and repair
- OPP station service annunciator audible alarm replacement
- OPP SEL annunciator programming extraction and adjustment programming
- OPP Lenel alarm system troubleshoot and repair
- OPP emergency generator PM
- OPP Plant PM's
- OPP lighting upgrades
- Volta cross channel upstream elevation sensor repairs

Mechanical Staff:

- JPP trashrack cleaning
- JPP spare Kinney strainer rehabilitation
- JPP machinery PM
- JPP carwash PM
- JPP Unit 3 rewind
- JPP Unit 3 cooler rehabilitation
- JPP Unit 4 wheelpit pump switch inspection and repair
- Kinney strainer gearbox rehabilitation
- TFO Industrial water strainer rehabilitation and PM
- Routine sandblast/painting
- TFO Water Treatment Plant leak inspection and repair
- JPP replaced discharge tube 10 inch header valve
- Supported USBR/TSC with check and gate inspections along the DMC
- OPP domestic water pump bearing inspection and replacement
- OPP domestic water system valve check and replacement
- OPP sewage system PM
- OPP 1 Ton chain hoist crane PM
- OPP Unit 2 shut down and visual inspection
- OPP 3 Ton JIB crane repair and hardware replacement
- OPP 65 Ton crane PM
- OPP Unit 3 basement drain issue repairs and cleaning
- OPP Plant PM's
- OPP Plant checks and backwash filters
- OPP Siphon House bridge crane PM
- OPP Unit 6 siphon breaker Bailey valve replacement and inspection
- OPP trashrack cleaning
- OPP Shop cleanup
- Trash rake crane PM

USBR Support Services

Water Authority crews performed the following work at USBR facilities this month:

- TFCF Hyacinth and tree removal support
- Hyacinth pit intake lower road repairs
- Hyacinth pit pushing (Dozer)

Civil Maintenance Department

The Civil Maintenance crews worked on the following projects this month:

- Moved file cabinets, shelves, and chairs from LBAO to the warehouse
- LBFO building PM's
- LBAO HVAC filter PM
- Assisted JPP Mechanics on U3 lower guide bearing packaging and delivery
- DMC Checks 16 and 18 door maintenance
- Storm patrol along the DMC
- Inspect drain inlets, overchutes and culverts
- Garbage collection on DMC and wasteways
- Chemical and mechanical weed control on DMC and San Luis Drain (SLD)
- Maintenance and repairs to float lines, signs, fences, guard rails and gates
- Erosion repairs along SLD
- Installed new drain at MP 47.92
- Hardware and anode inspection PM on DMC Checks 1-13
- Assisted with louver cleaning at TFCF
- Assisted with Hyacinth removal at TFCF
- Cleaned the drain inlet at MP 55.92-R
- Test can modification at MP 61.37
- Fabricate handrails at MP 59.53-L
- Painted over graffiti along the DMC
- DMC pothole and road repair
- Assist with East Side Bypass Levee flood patrol
- DMC erosion inspection and repair
- Cleaned drain inlets along the DMC
- TFO yard maintenance
- LBFO yard maintenance
- Inspect landscape and irrigation systems at USBR and TFO
- Corp Stop modification at MP 52.08
- B.I.T. inspection on the Sterling dump truck and belly dump
- Fire extinguisher, eye wash station, first aid and defibrillator PM's
- Fuel Tank Storage inspection PM
- Hazardous Waste Inspection PM
- Corp Stop maintenance at MP 47.37-R A&B
- Salado Creek debris removal

Engineering Department

The Engineering staff worked on the following O&M projects this month:

- DMC seepage monitoring @ MP 20.15L
- Data management of well readings and creation of Warren Act hydrographs
- DCI U3 & U4 pump installations engineering support
- DCI U3 & U4 SCADA development
- OPP SCADA user station development
- JPP OPERATOR2 server replacement
- DCI cathodic protection system improvement
- TFO & JPP electrical preventive maintenance program
- Ongoing repair to Salado Creek Levee and 41.93 bridge erosion

- Sink hole inspection and investigation at MP 56.18R
- Stormwater ponding investigation at DMC intake channel embankment
- Stormwater ponding investigation at DMC MP 10.78- 11.04 R
- Intake channel erosion repair at MP 1.28
- SPCC Plan for TFO
- Support to Electric Shop for work with JPP sewage control system
- Support to Electric Shop with replacement of bus duct cooling fan in building UZ6A
- OPP support with acquisition of test equipment

Land Management Activity Summary

The Engineering staff issued two (2) access permits this month:

- Access permit P2402001 was issued to Del Puerto Water District allowing the removal of non-native spoil material from the Delta-Mendota Canal right-of-way (Little Salado Creek Spoil Area) near Milepost 45.75-L
- Access permit P2402002 was issued to Del Puerto Water District allowing them to conduct a study to monitor Trihalomethanes for regulatory compliance for the North Valley Regional Recycled Water Program from Milepost 37.24-L to Milepost 45.77-L on the Delta-Mendota Canal right-of-way

The Engineering staff were involved with the following land management projects this month:

- Orestimba Creek Recharge Project
- City of Patterson – Rogers Road bridge replacement
- Grasslands Water District – Pipe installation at Volta wasteway
- City of Tracy – Lammers Road Bridge replacement

Safety Department

The Safety Department worked on the following items this month:

- Provided Job Hazard Analysis support for the crews
- Sent out Weekly Safety Tailgate Topics:
 - 3-1-2023 Trenching Excavation Safety
 - 3-2-2023 Heavy Equipment Safety
 - 3-3-2023 Caught In Between/Struck By
 - 3-4-2023 Roadside Safety
- Provided Safety Message for March 2023 Water Authority Newsletter
- Conducted New Hire Safety Orientation for new Control Operator
- Provided Facility Hazardous Energy Program training
- Conducted Quarterly Facility Safety Inspections
- Arranged Hazardous Waste pickup at OPP & TFO
- Arranged training on Spill Prevention Control and Countermeasures Plan for JPP and TFO employees
- Scheduled testing of dielectric insulated rubber gloves with Burlington Safety Labs

Procurement and Work & Asset Management Department

The Work & Asset Management Department worked on the following items this month:

- Continuous staff training and support for newer employees
- Finalized annual inventory reports and submitted to Accounting

- Attended various Requisition Training sessions conducted by NetSuite contractor FMT
- Staff worked with maintenance to get additional warehouse roof leaks repaired
- Resolved various invoice issues and disputes
- Contracts/PO Agreements/LOA's Status Update:
 - F22-OPP-059, OPP main transformer rehabilitation – 1 proposal received 3/16/23 with evaluations currently taking place
 - F22-JPP-071- UZ11A, Switchgear Bushing Box replacement materials – Notice To Proceed issued for phase 2 on 3/9/23. Estimated work for phase 2 is September/October 2023.
 - F23-TFO-013, Landscape Maintenance – Conducted negotiations with both landscape vendors with success in lowering price. Preparing contract with an anticipated effective date of 5/1/23.
 - Issued PO 5289 for single source bearing repair on JPP U3 – Kingsbury \$128,320
 - F23-TFF-017, Tension Arm Repairs - Finalized additional negotiations/edits and preparing for final execution
 - Issued Letter of Agreement (LOA) wire transfer to Bureau for LOA 19-XC-20-0417 \$58,456
 - PO 5158 issued for A/C heater replacement in control room \$17,405.96
 - Issued PO 5258 for Confined Space Rescue Training \$10,975.00

Ongoing:

- Purchasing in support of the O&M crews, and maintaining/replenishing warehouse stock
- Warehouse receiving, stocking, and distribution
- Invoicing/vendor bills/vendor credits processing/invoice disputes
- Janitorial cleaning & disinfecting per COVID-19 guidelines
- Participated in NetSuite weekly & biweekly meetings
- Contract Management/Administration Activities, including bi-weekly contract update meetings with Engineering Staff
- Developing/implementing purchasing/procurement and asset/inventory procedures/boilerplate templates
- Bi-weekly WAM staff meetings to discuss updates/issues
- Contract invoice payment reviews, invoice disputes as needed, invoice payments
- Continuous testing for improvements to procedures in NetSuite as well as ongoing issues related to NetSuite constraints
- Development of Blanket Contracts and Blanket Purchase Orders/Agreements
- Reviewing/closing out old/open PO's in NetSuite
- Reviewing and marking dead stock inventory for disposal
- Bi-weekly Shepherd meetings

Information Technology Department

The Information Technology Department worked on the following items this month:

- NetSuite
 - User and administration
 - Bi-Weekly Implementation Team meetings
 - Monitor FMT support activities for NetSuite

- Resolved bundle error
- Assisted with monthly FAC, WRC and BOD meetings with Zoom
- Desktop support calls
- Server refresh hardware order placed
 - Configured new servers
 - AD1, AD2, AD3, File1, File2, VMS
- Copier upgrades are completed
- Monitor Symantec Anti-Virus Management Console
- Security updates on servers
- Monitor firewall
- Update additional AV security settings
- Multi Factor Authentication vendor SurePass
 - Virtual server installed. Proof of Concept (3/30/23)
- Cyber security Incidence Response Plan
- Disaster Recovery Plan
- Business Continuity Plan
- Cyber Security Team
- First Net deploying iPhones and iPad SIMS
- MDM IBM (MAAS360) monitoring
- Reviewed Infagard dispatches – FBI Cyber Security group
- Cyber Security training and webinars
- Configured and deployed Darktrace Cyber Security appliance in IT network
- WAM servers, prepping for redeployment
- Troubleshoot ongoing Email auto-discover issues
- Support of Water Operations iPads and new app deployments via MDM
- File sharing/collaboration software solutions
- Create deployment packages for Office 2021 and began deployment
- Backup appliance replacement installed, configured and deployed
 - Moved TFO appliance to LBAO
- Research of gate control and request quote from vendor
 - Ongoing
- New user / Control Operator setup
- Re-organized computer racks and cabling for new servers
 - Ongoing
- Deployed new workstation to LBFO
- Researched fiber connection from TFO to DWR check 12 and toured facilities with DWR
- Document management solution planning

HR Department

The Human Resources Department worked on the following items this month:

General Administrative Activities:

- Active Recruitments:
 - Mechanical Engineer, Tracy (continued recruitment)
 - Accountant II, Los Banos (continued recruitment)
 - Control Operator, Tracy (added)

- Closed Recruitments:
 - Heavy Equipment Operator, Tracy (skills testing candidates)
 - HR Analyst II, Los Banos (scheduling interviews)
 - Accountant II, Los Banos (scheduling interviews)
- Candidates Selected:
 - None at this time
- Background checks for PIV cards (continuing)
- New Hire Orientations

Trainings:

- Remain up to date with COVID-19 compliance
- Cyber Security Training (all staff)
- Sexual Harassment Prevention Training (all staff)
- Defensive Driving Training (all staff)

Government Reporting:

- Affirmative Action, OFCCP

Ongoing:

- FMLA notices/follow ups
- COBRA notices/follow ups
- Worker's Comp follow ups
- Monthly safety points distribution
- Health benefits eligibility/employee assistance
- Job description updates
- Policy updates
- Maintain OSHA logs for calendar year
- PIV Cards (USBR)
- Wellness program

EXTRAORDINARY O&M & CAPITAL PROJECTS

DELTA-MENDOTA CANAL (DMC)

Bridge Abutment Repair at MP 92.73 (FY21)

Status: PG&E has completed the relocation of the 6-inch gas transmission line that crosses under the MP 92.73 bridge serving the City of Dos Palos. In the process of removing the pipeline from the bridge, PG&E's contractor damaged the concrete stem wall. Staff performed a visual inspection with PG&E inspectors and contractor and determined that the damage is within SLDMWA's capabilities for repair. PG&E has agreed to reimburse SLDMWA the full cost of the repair which is currently scheduled to be completed with the erosion repair.

SLDMWA will be performing erosion and liner repairs under the bridge abutment in Spring 2023; meanwhile the bridge remains closed until repairs are complete.

DMC Subsidence Correction Project

Status: SLDMWA is continuing to work closely with Reclamation on the DMC Subsidence Correction Project and is managing the \$2.4M CDM Smith Feasibility Study contract, and the \$2.7M Terracon Geotechnical contract. The Feasibility Report is expected to be completed in approximately one year, with certain environmental permitting extending longer as needed. The Final Draft Report has been scheduled to be completed by September 2023. Progress this month consisted of addressing comments and finalizing the next round of project reports. The EA/IS public review has concluded with a few commentors. CDM will review and coordinate with Reclamation and SLDMWA on addressing the comments next month. The 2nd Administration Draft of the Feasibility Study was released for internal review with minor edits recommended. Terracon was awarded the Contract Amendment to complete the final Geotechnical Investigation Phases 2 & 3 in December 2022 and has completed 92% of the CPT's and 41% of the drill holes. SLDMWA staff is working with Reclamation on a new Cooperative Agreement that will bring in an additional \$3M from Reclamation that will be utilized to reimburse the Terracon contract costs.

Numerous design data collection efforts have been coordinated and continue to be discussed as time and weather permits. Data collection efforts consist of: field surveys of the DMC and bridges; lower DMC liner inspection; concrete core sampling of check structures; inspection and limits of gate operations of check structures; underwater dive inspection of select DMC structures; and geoarcheological explorations.

SLDMWA staff recently met with TSC staff in person to discuss final design details.

The SLDMWA continues to provide support to Reclamation as they manage the construction contract with Unico Services to install the two additional pumps at the DMC/CA Intertie Pumping Plant (DCI). Field work for final commissioning occurred last month. Reclamation is awaiting the final vibration analysis from the contractor in order to provide final acceptance. SLDMWA activities to integrate the pumps into SCADA will occur after final acceptance. Reclamation staff is

EXTRAORDINARY O&M & CAPITAL PROJECTS

working on expediting the required environmental clearance to allow all six (6) pumps to operate concurrently.

DMC Turnout Flowmeter Upgrade Program – Phase 3 (FY23)

Status: Staff is finalizing the design date for the flowmeters required with this phase. These measurements will be supplied to McCrometer in order to obtain a final quote and a single-source contract will be pursued. Contract is expected to be executed in Spring 2023.

O&M Road Maintenance Program – Phase 2 of 5 (FY24)

Status: No activity

C.W. “BILL” JONES PUMPING PLANT (JPP)

JPP Excitation System & Control Cabinet Modernization (FY18)

Status: SLDMWA is currently in contract with Reclamation through a Letter of Agreement. Reclamation TSC has provided the 60% Technical Specifications and Drawings, while the Engineer's Estimate will be provided in the 90% package. The 60% package has been reviewed by SLDMWA and Reclamation Design and Construction Branch CGB-250. The 90% package (Spec D) is scheduled for completion in April 2023, with the 100% design package (Spec B) scheduled for completion in July 2023. Once received, SLDMWA staff will begin putting together the solicitation package.

JPP Wear Ring Purchase (FY22)

Status: No activity

JPP Unit No. 3 Rewind

Status: Jones Unit 3 rewind is underway. The rotor has been removed and placed in the JPP Machine Shop. The rotor poles have been removed and shipped to Texas for refurbishment and non-destructive testing has been completed on the rotor frame. The new stator laminations have been installed, and the finger press plates and through bolts have been reinstalled and torqued. The stator slots have been painted and NEC is currently installing the surge rings and bus bars.

TSY Switchgear Building UZ11A Repairs (Unplanned Project)

Status: A ground fault incident occurred in October 2021 that damaged the main feeder switchgear and bushing box in switchgear building UZ11A. Partial repairs were made, and the building is currently energized via adjacent switchgear building UZ8A (or UZ6A depending on circumstance). A two-phase contract was issued to Powell, the original designer and installer of the switchgear building, to supply repair materials (Phase 1), and perform the onsite repair work (Phase 2). Phase 1 supply contract has been completed, which included supplying the replacement bushing box, CTs, surge arresters, etc. Phase 2, onsite installation of the parts, was originally scheduled to occur October 2022 but was delayed when repair

EXTRAORDINARY O&M & CAPITAL PROJECTS

materials in Phase 1 were not ready. Phase 2 is now tentatively scheduled to be completed in September 2023, pending approval of a three week outage of units 2 and 6. Note: Unit 3 rewind is scheduled to be completed and back in service prior to starting the field work. Pump Outage for Units 2 & 6 have been sent to CVO for approval starting mid-September to early October 2023.

JPP Concrete Slab by Trashrake Dumpster (FY23)

Status: Project is currently in the planning and design phase. A geotechnical investigation was completed by Terracon to characterize the subgrade to ensure an optimum design is pursued. Final geotechnical and structural recommendations were supplied from Terracon. Technical specifications are currently being prepared in order to formally solicit for construction. Design drawings are 90% complete and are currently under internal review. Construction is tentatively scheduled to occur in Spring 2023.

O'NEILL PUMPING/GENERATING PLANT (OPP)

Main Transformers Rehabilitation/Replacement

Status: A Transformer Condition Assessment was performed by TSC in 2019. The transformers were in such poor condition that it was recommended that the transformers be refurbished or replaced. A Value Planning Study was conducted in 2020 and concluded to refurbish/rehabilitate the transformers in short term and plan to replace the transformers in the future. Emergency measures were also performed which included replacing (3) obsolete high voltage bushings (2019) and hot oil reconditioning of the in-service transformers (2020) to ensure transformers remained eligible for rehabilitation.

SLDMWA formerly re-solicited for the rehabilitation of the transformers on January 3, 2023. One proposal was received on March 16th from Cal Electro Inc. (CEI). SLDMWA and TSC has completed the proposal evaluation, but the overall assessment was that the proposal was incomplete in terms of personnel document requirements and scope of work details. SLDMWA and TSC have met with CEI to provide them a memo with a chance to provide a revised proposal. The meeting and memo covered the missing requirements and required information. SLDMWA will seek board approval to issue a contract on May 4th if the revised proposal meets the requirements. The system outage at O'Neill PG Plant will still be scheduled in April-May 2024, pending favorable hydraulic conditions. Monitoring transformer insulation fluid continues quarterly with recent results confirming oil is still in good condition.

Arc Flash Hazard Analysis, Facility Rating, & Protective Relays Reviews (Electrical Equipment Periodic Reviews) (FY22)

Status: The field work for all three inspections occurred in FY22. The Facility Rating and Arc Flash Hazard Analysis are complete, with final reports received. The draft Protective Relays Review report was recently received and is being reviewed by staff.

EXTRAORDINARY O&M & CAPITAL PROJECTS

OPP Upgrades (Previously Pump Bowl Modification & Replacement)

Status: Staff has been working with Reclamation to begin the assessments recommended during the value planning study. Reclamation staff is currently putting together a Project Management Plan that will allow us to enter a Letter of Agreement to begin the assessments. SLDMWA staff recently attended an onsite meeting at TSC to discuss the project and convey the critical need for the assessments.

OPP UPS Battery Charging System Replacement (FY22)

Status: Staff is planning on issuing a contract to supply and install the batteries, with the site work occurring during the planned outage for the OPP Main Transformer Rehab. The contract will be issued 6-8 months prior to the planned outage.

OPP Station Service Backup Battery System Replacement (FY23)

Status: This project will be done concurrently with the UPS Battery Charging System Replacement. Staff is planning on issuing a contract to supply and install the batteries, with the site work occurring during the planned outage for the OPP Main Transformer Rehab. The contract will be issued 6-8 months prior to the planned outage.

OPP Accusonic Flowmeter Console Upgrades (FY23)

Status: Consoles have been purchased and received, with 4 of them installed. Staff discovered a faulty communication component on two of the consoles and replacements were recently received and tested. Installation to occur in March.

OPP Plant Water Storage Tanks Rehabilitation (FY24)

Status: Began the development of workscope documents.

OPP Sand Filter System Rehabilitation Design (FY24)

Status: Began discussions with USBR Sacramento on scope of work.

OPP Cooling Water System Rehabilitation Design (FY24)

Status: Began discussions with USBR Sacramento on scope of work.

TRACY FACILITIES (TFO)

TFO Domestic Water Treatment Plant Replacement (FY20)

Status: Work began on equipment selection, layout, and construction phasing. Received approval from State Water Board on proposed replacement equipment. In pursuit of purchase agreement with selected vendor.

EXTRAORDINARY O&M & CAPITAL PROJECTS

MULTIPLE FACILITIES

TFO/LBFO/DCI Arc Flash Hazard Analysis (FY22)

Status: No activity this month. The Analysis was conducted by Reclamation TSC through a LOA. The onsite surveys for TFO, LBFO, and DCI were completed in September 2022. The Arc Flash Hazard Analysis Reports are expected to be completed by September 2023. Engineering support has been provided to TSC for DCI Arc Flash Hazard Analysis.

SCADA System Evaluation (FY23)

Status: Site discovery and documentation of the existing SCADA System is ongoing. The development of controls and SCADA standards and best practices is in process. Research is being conducted on how best (with major supply chain issues) to upgrade the system to current standards and then maintain the system with a newly developed 10-year plan. Staff is waiting for parts to conduct concept for checks controls remediation plan. Communication continues to determine if an existing fiber line owned and operated by DWR could be utilized for SLDMWA communication. Staff is working with vendors evaluating and developing operational technology (OT) cyber security needs and response plan. Work continues to build a controlled area to evaluate and test new hardware and software implementations before going live. Testing on virtual machines for the SCADA environment is underway. Development of a software conversion/rewrite plan is underway. Starting to test some of these ideas in sandbox environment. SandBox Servers installed in server room. Staff has developed a remediation plan to meet CISA and federal mandate requirements and will begin testing and implementation as the next step.

TFO O&M Compound, Seal Coat Surfacing & Striping (Including USBR Lot) (FY23)

Status: Continued preliminary planning for project. Created new drawings showing project area and worked with Contract Specialist to draft bid documentation.



**San Luis & Delta-Mendota Water Authority
OPERATIONS SUMMARY**

NOTE: ALL FIGURES ARE IN ACRE FEET

	February-2023	February-2022
JONES PUMPING PLANT - PUMPED	204,326	114,055
DCI PLANT - PUMPED	11,554	0
DCI PLANT - RETURNED	0	0
O'NEILL P/G PLANT - PUMPED	167,895	83,747
O'NEILL P/G PLANT - GENERATED	70	1,064
DMC DELIVERIES	5,243	7,065
RIVER/WELL/RECYCLE WATER INTO DMC	2,732	9,412
MENDOTA POOL DELIVERIES	37,785	33,063
SHASTA RESERVOIR STORAGE	2,747,100	2,277,400
SAN LUIS RESERVOIR STORAGE	1,560,651	1,180,268
* FEDERAL SHARE	672,705	475,383

	February-2023	February-2022
SAN LUIS UNIT DELIVERIES	892	11,252
SAN LUIS UNIT WELL WATER	0	0
SAN FELIPE UNIT DELIVERIES	0	8,672

Jones Pumping Plant monthly average = 3,679 cfs



**San Luis & Delta-Mendota Water Authority
Monthly Deliveries
February 2023**

Date: 3/22/23

<u>District/Other</u>	Total Available Water into System (INCOMING) (Acre Feet)	AG/Refuge Deliveries (Acre Feet)	M & I Deliveries (Acre Feet)	Total Deliveries (OUTGOING) (Acre Feet)
Total Pumped @ Jones Pumping Plant	204,326			
Total Pumped @ DCI	(11,554)			
Total Reversed @ DCI	0			
City of Tracy		0	0	0
Byron Bethany I.D.		3	0	3
West Side I.D.		0	0	0
Banta Carbona I.D.		0	0	0
West Stanislaus I.D.		0	0	0
Patterson I.D.		0	0	0
Del Puerto W.D.		78	2	80
Central California I.D. - above check #13		255	0	255
San Luis W.D.- above check #13		0	0	0
Volta Wildlife Mgmt. Area (Fish & Game)		551	0	551
Fish & Wildlife (Volta) Santa Fe - Kesterson		0	0	0
Grasslands W.D. (Volta)		0	0	0
Total Pumped @ O'Neill PP	(167,895)			
Total Generated @ O'Neill PP	70			
Central California I.D. - below check #13		2,077		2,077
Grasslands W.D. (76.05-L)		0	0	0
Fish & Game Los Banos Refuge (76.05-L)		368	0	368
Fish & Wildlife Kesterson (76.05-L)		435	0	435
Freitas Unit (76.05-L)		580	0	580
Salt Slough Unit (76.05-L)		181	0	181
China Island (76.05-L)		0	0	0
San Luis W.D. - below check #13		23	0	23
Panoche W.D.		363	2	365
Eagle Field W.D.		72	0	72
Oro Loma W.D.		0	0	0
Mercy Springs W.D.		0	0	0
Firebaugh Canal W.D. (D.M.C.)		253	0	253
River and Groundwater well pump-in	1,149			
North Valley Regional Recycled Water Program	1,583			
Change in Canal Storage	354			
Wasteway Flushing and Spill	0			
Total Available in Delta-Mendota Canal	28,033			
TOTAL DELIVERY FROM DELTA-MENDOTA CANAL	(5,243)	5,239	4	5,243
Theoretical DMC Delivery to Mendota Pool	22,790			
Total DMC Metered Delivery to MP	18,672			
Estimated (Loss) or Gain in DMC	(4,118)			
Estimated % Loss or Gain in DMC	-2.01%			



**San Luis & Delta-Mendota Water Authority
Monthly Deliveries
February 2023**

<u>District/Other</u>	Total Available Water into System (INCOMING) (Acre Feet)	AG/Refuge Deliveries (Acre Feet)	M & I Deliveries (Acre Feet)	Total Deliveries (OUTGOING) (Acre Feet)
Estimated DMC Inflow to MP	18,672			
Mendota Pool Groundwater Well Pump-In	1,238			
(+)SJRR Releases into Mendota Pool	23,047			
(+)Kings River Flood Releases into the Mendota Pool	1,619			
<u>Mendota Pool Delivery Information</u>				
<u>Exchange Contractors:</u>				
Central California Irrigation District (CCID)		6,351	0	6,351
Columbia Canal Company (CCC)		984	0	984
Firebaugh Canal Water District (FCWD)		458	0	458
San Luis Canal Company (SLCC)		0	0	0
<u>Refuge:</u>				
Conveyance Losses		928	0	928
Calif Dept of F/G-LB Unit (CCID)		356	0	356
Calif Dept of F/G-LB Unit (SLCC)		755	0	755
Calif Dept of F/G-Salt Slough Unit (CCID)		175	0	175
Calif Dept of F/G-China Island Unit (CCID)		0	0	0
US Fish & Wildlife-San Luis Refuge (SLCC)		5,076	0	5,076
US Fish & Wildlife-Freitas (CCID)		560	0	560
US Fish & Wildlife-Kesterson (CCID)		419	0	419
Grasslands WD (CCID)		4,001	0	4,001
Grasslands WD (SLCC)		744	0	744
Grasslands (Private)		68	0	68
San Luis WD Conveyance (CCID)		0	0	0
Del Puerto WD Conveyance (CCID)		0	0	0
<u>San Joaquin River Restoration:</u>				
SJRR		11,693	0	11,693
<i>Other: (see MP Operations Report)</i>		5,217	0	5,217
<i>Total Available Water in Mendota Pool</i>	44,576			
TOTAL DELIVERY FROM MENDOTA POOL	(37,785)	37,785	0	37,785
*Estimated (Loss) or Gain in Mendota Pool	(6,791)			
*Estimated % Loss or Gain in Mendota Pool	-15.23%			
Total System Delivery	(43,028)			
*Total Estimated System (Loss) or Gain	(10,909)			
*Total Estimated % System Loss or Gain	-4.74%			

Special Notes: Flood Releases from Friant Dam and Pine Flat Dam



Jones Pumping Plant
February - 2023

Date	# OF UNITS	TIME ON/OFF	AVG DAILY CFS
1	5	0	4126
2	5	0	4200
3	5	0	4240
4	5	0	4228
5	3	0	2704
6	3	0	2684
7	3	0	2671
8	3-5-0-5-1-4	0	3086
9	4-5	0	3759
10	5	0	4120
11	5	0	4148
12	5	0	4167
13	5	0	4181
14	5	0	4215
15	5-2	0	4229
16	2-5-4-5	0	3668
17	5-2-5	0	4049
18	4	0	3501
19	4	0	3507
20	4	0	3499
21	4	0	3498
22	4	0	3499
23	4	0	3500
24	4	0	3505
25	4	0	3508
26	4	0	3504
27	4	0	3507
28	4	0	3511
29	0	0	
30	0	0	
31	0	0	
AVG CFS for the month			3679



NON-PROJECT WATER CREDITS REPORT
 (ALL FIGURES IN ACRE FEET)
 February 2023 WA Credits

Date: 3/15/2023

CREDITS UNDER WARREN ACT CONTRACTS									
Turnout	Start Meter Reading	End Meter Reading	Factor	Adjust	District	Total	Less 5%	Month	Year
3.32-R1	0	0	1	0	BBID	0	0	0	0
3.32-R2	0	0	1	0	BBID	0	0	0	0
3.32-R3	12,798	12,798	1	0	BBID	0	0	0	4,572
13.31-L	4,804	4,804	1	0	BBID	0	0	0	0
15.11-R	2,974	2,974	1	0	BBID	0	0	0	213
20.42-L	41,462,301	41,497,335	1	0	BCID	0	0	0	13,883
20.42-L	41,462,301	41,497,335	1	0	USBR/FWA	108	0	108	5,694
21.12-L	990	990	1.01	0	DPWD	0	0	0	0
21.86-L	770	770	1	0	DPWD	0	0	0	0
24.38-L	3,003	3,076	1	0	DPWD	73	(4)	69	444
29.95-R	1,334	1,334	0.87	0	DPWD	0	0	0	0
30.43-L	7,464	7,464	1	0	DPWD	0	0	0	0
30.43-R	2,123	2,123	0.92	0	DPWD	0	0	0	0
30.95-L	2,149	2,149	1.03	0	DPWD	0	0	0	222
31.31-L1	87,615	87,779	1	0	WSTAN	0	0	0	12,618
31.31-L2	87,615	87,779	1	0	DPWD	163	(8)	155	5,209
31.31-L3	87,615	87,779	1	0	PID	0	0	0	0
31.60-L	8,183	8,183	0.93	0	DPWD	0	0	0	0
32.35-L	1,794	1,794	0.86	0	DPWD	0	0	0	0
33.71-L	751	751	0.94	0	DPWD	0	0	0	0
36.45-R	4,679	4,719	1	0	DPWD	40	(2)	38	38
36.80-L	1,847	1,847	1	0	DPWD	0	0	0	0
37.10-L	3,787	3,870	0.94	0	DPWD	78	(4)	74	458
37.32-L	2,653	2,653	0.91	0	DPWD	0	0	0	0
42.50-R	1,034	1,034	0.96	0	DPWD	0	0	0	0
42.53-L	6,833,470	6,833,470	1	0	PID	0	0	0	10,018
42.53-L	6,833,470	6,833,470	1	0	DPWD	0	0	0	0
42.53-L	6,833,470	6,833,470	1	0	USBR/FWA	0	0	0	605
43.22-L	55	55	1	0	DPWD	0	0	0	0
48.97-L	3,853	028	1	0	SLWD	187	(9)	178	1,062
50.46-L	5,896	6,025	1.07	0	DPWD	138	(7)	131	869
51.00-R	297	297	0.89	0	DPWD	0	0	0	0
51.66-L	910	3,434	0.98	(2,474)	DPWD	0	0	0	211
52.40-L	1,481	1,481	1	0	DPWD	0	0	0	66
58.28-L	3,319	3,365	1.02	0	SLWD	47	(2)	45	523
58.60-L	917	917	0.96	0	DPWD	0	0	0	0
58.73-R	490	494	1	0	DPWD	4	0	4	60
64.85-L	1,662	1,662	0.72	0	DPWD	0	0	0	0
UPPER DMC SUB TOTAL								802	56,765



NON-PROJECT WATER CREDITS REPORT

(ALL FIGURES IN ACRE FEET)

February 2023 WA Credits

CREDITS UNDER WARREN ACT CONTRACTS									
Turnout	Start Meter Reading	End Meter Reading	Factor	Adjust	District	Total	Less 5%	Month	Year
78.31-L	4,469	4,469	1.08	0	SLWD	0	0	0	0
79.12-R	5,812	5,812	0.91	0	SLWD	0	0	0	249
79.13-L	1,084	1,164	1	0	SLWD	80	(4)	76	514
79.13-R	4,928	4,964	1.08	0	SLWD	39	(2)	37	54
79.60-L	5,686	5,979	0.84	0	SLWD	246	(12)	234	1,416
80.03-L	834	834	0.94	0	SLWD	0	0	0	128
80.03-R	717	717	1.05	0	SLWD	0	0	0	0
98.60-R	14,194	14,194	1	0	PANOCH/MS	0	0	0	1,534
98.74-L	5,695	5,695	1.14	0	PANOCH/MS	0	0	0	0
99.24-L	10,493	10,493	0.92	0	PANOCH/MS	0	0	0	0
100.70-L	6,211	6,211	1	0	PANOCH/MS	0	0	0	0
102.04-R	4,087	4,087	1	0	WIDREN WD	0	0	0	1,404
LOWER DMC SUB TOTAL								347	5,299
WARREN ACT CONTRACT CREDIT TOTAL								1,149	62,064
TOTAL GROSS PUMP-IN								CREDIT	
TOTAL (BYRON BETHANY IRRIGATION DISTRICT)						0	0	213	
TOTAL (BANTA CARBONA IRRIGATION DISTRICT)						0	0	0	
TOTAL (DEL PUERTO WATER DISTRICT)						333	316	2,368	
TOTAL (WEST STANISLAUS IRRIGATION DISTRICT)						0	0	9,178	
TOTAL (PATTERSON IRRIGATION DISTRICT)						0	0	0	
TOTAL (SAN LUIS WATER DISTRICT)						599	570	3,946	
TOTAL (PANOCH/MS WATER DISTRICT)						0	0	1,534	
TOTAL (MERCY SPRINGS WATER DISTRICT)						0	0	0	
TOTAL (WIDREN WATER DISTRICT)						0	0	1,404	
Other Warren Act Conveyance Credit Totals									
Del Puerto Water District:						163	155	5,209	
Banta Carbona Irrigation District:						0	0	13,883	
West Stanislaus Irrigation District:						0	0	3,440	
Byron Bethany Irrigation District:						0	0	4,572	
Patterson Irrigation District:						0	0	10,018	
San Joaquin River Restoration Pump Back BCID:						108	108	5,694	
San Joaquin River Restoration Pump Back PID:						0	0	605	
Central California Irrigation District L.B. Creek Diversion Structure						0	0	0	
Grassland Water District L.B. Creek Diversion Structure						0	0	1,618	
San Luis Water District L.B. Creek Diversion Structure						0	0	20	

Notes: 3.32-R, 20.42-L, 31.31-L and 42.53-L are River water



MENDOTA POOL OPERATIONS

2023

ALL FIGURES IN ACRE-FEET

Date: 3/15/2023

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FRESNO SLOUGH	0	60											60
TPUD	0	18											18
JAMES I.D.	916	2,156											3,072
MEYERS	0	0											0
M.L. DUDLEY & INDART ¹	0	0											0
MID VALLEY* (Kings River)	0	0											0
REC. DIST. 1606	0	0											0
STATE FISH & WILDLIFE	199	1,119											1,318
TRACTION	170	566											736
UNMETERED	40	125											165
Total	409	1,810	0	0	0	0	0	0	0	0	0	0	2,219
COELHO FAMILY TRUST ²	0	18											18
TRANQUILITY I.D.	0	678											678
WESTLANDS LATERAL-6	0	0											0
WESTLANDS LATERAL-7	610	477											1,087
CARVALHO TRUST	0	0											0
TOTAL	1,935	5,217	0	0	0	0	0	0	0	0	0	0	7,152

NUMBERS SHOWN IN **BOLD** WERE REVISED AFTER DISTRIBUTION OF REPORT

1 aka COELHO-GARDNER-HANSEN 2 aka TERRA LINDA FARMS

Article 215 Water

January James ID 916 AF

February James ID 2156 AF

Kings River Water

February Tranquility ID 44 AF

BECK	120	PATOS	COLE	TRANQUILITY	1 ACRE
0%	0%	0%	0%	0%	0%

Duck Clubs (Percent Full)

Jan, 2023
DMC Inflow 3,372 AF
James Bypass Flows 0 AF

May, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Sept, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Feb, 2023
DMC Inflow 18672 AF
James Bypass Flows 1,619 AF

June, 2023
DMC Inflow A.F
James Bypass Flows 0 AF

Oct, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Mar, 2023
DMC Inflow AF
James Bypass Flows 0 AF

July, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Nov, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Apr, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Aug, 2023
DMC Inflow AF
James Bypass Flows 0 AF

Dec, 2023
DMC Inflow AF
James Bypass Flows 0 AF

**TABLE 19: GOVERNOR EDMUND G. BROWN CALIFORNIA AQUEDUCT
SAN LUIS FIELD DIVISION MONTHLY DELIVERIES**

Revised 3/14/23

FEBRUARY 2023

REACH TOTALS	POOL	INFLOW INTO AQUEDUCT	CUSTOMERS	AMOUNT IN AF
R3A 0			Parks & Rec. @ San Luis Reservoir	0
			Santa Clara Valley Water District	0
			Casa de Fruta (Santa Clara Valley Water District)	0
			San Benito Water District	0
R3 71	13		DFG @ O'Neill Forebay	0
	13		Parks & Rec. @ O'Neill Forebay	0
	13		DWR Water Truck at O'Neill 1 AF for Cattle Program @ O'Neill Forebay	1
	13		Santa Nella County Water District	16
	13		San Luis Water District	54
R4 1322	14		City of Dos Palos	30
	14		Pacheco Water District	180
	14		San Luis Water District	250
	14		Panoche Water District	50
	15		San Luis Water District	145
	15		Panoche Water District	191
	15		Westlands Water District	476
R5 3431	16		DFG @ Lat. 4L (Pilibos)	0
	16		DFG @ Lat. 4L	1
	16		DFG @ Lat. 6L	0
	16		DFG @ Lat. 7L	0
	16	568	Westlands Water District	530
	17		Westlands Water District	367
	18		City of Coalinga	149
	18		Pleasant Valley Pumping Plant	1294
	18		Westlands Water District	1090
	R6 256	19		Alta Gas
19			City of Huron (P&R-Area 11) @ Lat. 22R	1
19			DWR Water Truck @ 22R/F&G @ Lat.22R	0
19			Lemoore N.A.S. thru WWD 28L,29L,&30L	51
19			Kings County thru WWD 30L	0
19			Westlands Water District	204
R7 481	20		City of Huron @ Lat. 23R	39
	20		DWR Water Truck @ 23R	0
	20		Westlands Water District	174
	21		City of Avenal	147
	21		Kings County thru WWD 37L,38L	0
	21		Westlands Water District	121
5561		568	<---TOTALS--->	5561
TOTALS BY CUSTOMERS				
Inflow Into Aqueduct:				
568 AF TOTAL for PUMP-IN				
0 AF TOTAL for FLOOD				
			Santa Nella County Water District	16
			Pacheco Water District	180
			San Luis Water District	449
			Panoche Water District	241
			Westlands Water District	4256
			AltaGas	0
			City of Huron @ LAT. 23R	39
			City of Huron (P&R/Area 11 @ 22R)	1
			Lemoore N.A.S. thru WWD @ 28L,29L&30L	51
			Kings County thru WWD Laterals in Pools 19 - 21	0
			City of Avenal	147
			City of Dos Palos	30
			City of Coalinga	149
			DFG @ O'Neill Forebay	0
			Pacheco Tunnel	0
			DFG @ Lateral 4L & 6L & 7L	1
			DWR Water Truck @ 22R/F&G @ Lat.22R	0
			Parks & Recreation	0
			0 AF for DWR Water Truck at O'Neill, 1 AF for Cattle Program @ O'Neill Reservoir	1
Pool 12 - Reach 2B			Customers Total:	5561
VA Turnout Use AF = 6				
DWR 3137(Rev.9/15)				5567



Monthly Availability Report

CW "Bill" Jones Pumping Plant

February - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	672	0.0	0.00%	0.0	0.00%	100.00%	6	
Unit-2	672	0.0	0.00%	0.0	0.00%	100.00%	5	
Unit-3	672	672.0	100.00%	0.0	0.00%	0.00%	0	
Unit-4	672	0.0	0.00%	0.0	0.00%	100.00%	5	
Unit-5	672	0.0	0.00%	0.0	0.00%	100.00%	5	
Unit-6	672	0.0	0.00%	0.0	0.00%	100.00%	3	
Total	4032	672.0	17%	0.0	0.00%	83.00%	24	

Notes:

(1) Planned maintenance

(2) Emergency outages and maintenance performed with less than 24 hours advance notice



Monthly Availability Report

O'Neill Pump/Generating Plant
February - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts		Comments
							Pump	Gen	
Unit-1	672	0.0	0.00%	0.0	0.00%	100.00%	1	0	
Unit-2	672	0.0	0.00%	0.0	0.00%	100.00%	1	0	
Unit-3	672	0.0	0.00%	26.7	3.97%	96.03%	2	0	
Unit-4	672	0.0	0.00%	0.0	0.00%	100.00%	1	0	
Unit-5	672	0.0	0.00%	0.0	0.00%	100.00%	1	1	
Unit-6	672	0.0	0.00%	0.0	0.00%	100.00%	1	0	
Total	4032	0.0	0%	26.7	0.66%	99.34%	7	1	

Notes:

(1) Planned maintenance

(2) Emergency outages and maintenance performed with less than 24 hours advance notice



Monthly Availability Report

DCI Pumping Plant

February - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	672	0.0	0.00%	0.0	0.00%	100.00%	6	
Unit-2	672	0.0	0.00%	0.0	0.00%	100.00%	7	
Unit-5	672	0.0	0.00%	0.0	0.00%	100.00%	6	
Unit-6	672	0.0	0.00%	0.0	0.00%	100.00%	6	
Total	2688	0.0	0%	0.0	0.00%	100.00%	25	

Notes:

(1) Planned maintenance

(2) Emergency outages and maintenance performed with less than 24 hours advance notice