



May 4, 2023

To: Pablo Arroyave, Chief Operating Officer

From: Bob Martin, Facilities O&M Director

Subject: O&M Report for April 2023

### **Operations Department**

The C.W. "Bill" Jones Pumping Plant (JPP) operated with 1-4 units for the first 25 days of April. The average rate of pumping for the JPP was 2,056 cfs, for the first 25 days of April.

Total pumping at the JPP for the first 25 days of April was 101,936 acre-feet. The O'Neill Pump/Generating Plant (OPP) generated 0 acre-feet, and pumped 95,265 acre-feet during the same period. A total of 91 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 DMC for the first 25 days of April.

The Federal share in the San Luis Reservoir as of April 25<sup>th</sup> was 961,076 acre-feet as compared to 356,990 acre-feet for the end of April 2022.

During the first 25 days of April, releases from Friant Dam ranged from 8,294 to 9,193 cfs with 41,623 acre-feet entering the Mendota Pool during that period. Flows past the Mendota Dam for the San Joaquin River Restoration Program (SJRRP) were 14,876 acre-feet for the first 25 days of April. During the first 25 days of April, an additional 207,179 acre-feet of Kings River water entered the Mendota Pool via the James Bypass.

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

Control Operations switching/clearance placements performed this month:

- C-22-JP-91 JPP Unit 3 Rewind/annual maintenance
- C-23-JP-16 JPP Unit 1 annual maintenance
- C-23-JP-16A JPP Unit 1 annual maintenance
- C-23-JP-17 JPP Unit 1 suction elbow repair
- C-23-ON-18 OPP Unit 1 annual maintenance
- C-23-DCI-21 DCI Cathodic protection system improvement
- C-23-DCI-21A DCI Cathodic protection system improvement erosion repair
- C-23-DM-22 DMC pipe leak repair at Milepost 43.22-L

## **Plant Maintenance Department**

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

### **Electrical/C&I Staff:**

- JPP Unit 1 annual maintenance
- 13.8KV Building monthly PM
- Tracy Switchyard lighting inspection PM
- Water Treatment Plant test and inspection PM
- TFO Warehouse HVAC PM
- JPP Unit 1 pump electrical test and inspection PM
- JPP Unit 1 motor maintenance PM
- JPP Unit 1 13.8KV breaker F1(122) PM
- Tracy UPS battery test and inspection
- JPP Station service battery test and inspection PM
- Control Room Conference Room Improvements
- DMC Check 11 Block house alarm malfunction investigation and repair
- DMC Checks 10-21 electrical equipment PM
- OPP Unit 1 annual maintenance; megger, testing and electrical inspections
- OPP Unit 1 annual maintenance; relays, RTD's and metering calibrations
- OPP Unit 4 cooling water motor replacement
- OPP Station service dry transformer PM
- OPP Units 1-6 annunciator testing with Control Room
- OPP Station service battery PM
- OPP Station service battery charger PM
- OPP cathodic protection system PM
- OPP annunciator panel PM
- OPP North and South security gate PM's
- OPP security system (Light Post) PM
- OPP LP compressed air systems PM
- OPP PLC cabinet and terminal block cleaning, investigation, and maintenance
- OPP emergency lighting PM

### **Mechanical Staff:**

- JPP Unit 3 Rewind support
- JPP Unit 1 annual maintenance
- JPP Unit 1 cooling water maintenance
- JPP CO2 inspection PM
- JPP toilet repair
- JPP leaking roof hatch repair
- JPP Unit 3 coolers repairs
- Repaired Tracy Warehouse roll up door
- JPP trashrake PM
- JPP cleanup PM
- JPP 100-ton bridge crane/hoist PM
- JPP 21-ton bridge crane/hoist PM
- DMC checks 14-21 PM's
- DMC check 5 gate 3 troubleshoot and repair

- DMC radial gate test and inspection PM
- OPP domestic water system back wash valve replacement
- OPP Unit 4 cooling water motor replacement
- OPP sewage system test and inspection PM
- OPP siphon breaker/penstock fresh air blower rehab
- OPP Unit 1 annual maintenance; bearings, packing, filters, cooling water pump
- OPP Plant PM's
- OPP Plant checks and back wash filters
- OPP trashrack cleaning

### **USBR Support Services**

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

- Hyacinth Pit lower road repairs

### **Civil Maintenance Department**

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

- Grading of DMC unpaved roads
- Paint check 20 blockhouse due to vandalism
- Grading of San Luis Drain roads
- San Luis Drain erosion repairs
- DMC turnout maintenance and repair PM
- Haul material to DMC for Intake Channel erosion repairs
- Inspect roof on Water Treatment Plant Building
- Garbage collection on DMC and wasteways
- Chemical and mechanical weed control on DMC and SLD
- Maintenance and repairs to float lines, signs, fences, guard rails and gates
- San Luis Drain check structure maintenance and repairs
- Remodeled Control Building Conference Room
- TFO entry gate sign repair
- Repaired the upstream staff gauge at Check 10
- Road grading of USBR Hyacinth pit roads
- Cleaned the meter well at MP 62.08-R
- Test can maintenance at MP 48.60
- Fabricate handrails along the DMC
- Painted graffiti along the DMC
- DMC pot hole and road repair
- Hauled aggregate to OPP (prep work)
- DMC erosion inspection and repair from Check 16 to 17
- Blew out turnouts along the DMC
- TFO yard maintenance
- LBFO yard maintenance
- Inspect landscape and irrigation systems at USBR and TFO
- Assist JPP crew with Unit 3 Rewind work
- Turnout pipe leak repair at MP 43.22-L
- DCI cathodic protection system improvement

## **Engineering Department**

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

- Data management of well readings and creation of Warren Act hydrographs
- 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
- 41.93 bridge erosion, bridge use & ownership research
- 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 with replacement of bus duct cooling fan in building UZ6A
- Contracting repair to JU-3 lower guide bearing and spare lower guide bearing with Kingsbury
- OPP Unit 1 ramp test
- Participation in USBR Quarterly Meeting

## **Land Management Activity Summary**

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

- Access permit P2402004 was issued to Del Puerto Water District to remove and re-install existing motor and pump servicing the turnout at Milepost 58.73-R
- Access permit P2402005 was issued to Del Puerto Water District for goat grazing along the Delta-Mendota Canal right-of-way from Milepost 60.65-L to Milepost 62.06-L

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

- Orestimba Creek Recharge Project
- City of Patterson – Rogers Road bridge replacement
- 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
  - 4-1-2023 Distracted Driving
  - 4-2-2023 Office Safety
  - 4-3-2023 Back Safety
  - 4-4-2023 Hand Safety
- Provided Safety Message for April 2023 Water Authority newsletter
- Provided Facility Hazardous Energy Program training
- Conducted Fall Protection - Harness Safety Inspections
- Arranged for hazardous waste pickup at OPP & TFO

- Scheduled annual hearing tests for employees
- Completed Alameda County CUPA inspection report issues

### **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 sales tax report submitted to Accounting Department
- Finalized new NetSuite Requisition and Drag and Drop Attachment SOP's
- Resolved various invoice issues and disputes
- Closed out several pending NetSuite tickets for various issues
- Contracts/PO Agreements/LOA's Status Update:
  - F22-OPP-059 - OPP Main Transformer Rehabilitation – Evaluations completed and Notice of Intent issued. Will submit to Board for approval 5/4/23
  - F23-TFO-013, Landscape Maintenance – Contract executed 4/18/23 with effective date 5/1/23
  - Issued PO5158 for A/C unit replacement in Control Room - \$17,926.96
  - F23-TFF-017- Tension Arm Repairs - Contract executed 4/12/23, start date pending funding from USBR
  - F24-ALL-Confined Space Rescue Training Services – Executed agreement 4/17/23 - \$10,975.00
  - Started work on Amendment 1 for F22-DMC-065, Not to Exceed \$33,779.92 (Board approval not required)
  - F24-OPP-003- Plant Water Storage Tank Rehab - Pre-solicitation phase
  - F24-TFO-001 – Seal Coat Project – Pre-solicitation phase

### **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, and 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 FTC 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
  - Installed 300va UPS to LBAO server rack
- Monitor Symantec Anti-Virus Management Console
- Security updates on servers
- Monitor Firewall
- Update additional AV security settings
- Multi Factor Authentication vendor SurePassID
  - Virtual server installed and testing in progress
- Cyber Security Incidence Response Plan
- Disaster Recovery Plan
- Business Continuity Plan
- Cyber Security Team
- MDM IBM (MAAS360) monitoring
- Review InfraGard dispatches – FBI Cyber Security group
- Cyber Security training and webinars
- Monitoring Darktrace Cyber Security appliance in IT network
  - Installed into SCADA network
- WAM Servers, prepping for redeployment
- Troubleshoot ongoing Email auto-discover issues
- Support of Water Operations iPads and new app deployments via MDM
- Create deployment packages for Office 2021 and deployment
  - Ongoing
- Research of gate control and request quote from vendor
  - Ongoing
- Re-organized computer racks and cabling for new servers
  - Ongoing
- Continued conversation with DWR regarding use of fiber from a 1992 contract agreement
- Document management: Initial meetings with potential vendors, one demo completed
- Logistical and technical support provided to Trofholz, new site security installation vendor hired by BOR

## **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 (continued recruitment)
- Closed recruitments:
  - HR Analyst II, Los Banos (interviews scheduled)
- Candidates selected:
  - Heavy Equipment Operator, Tracy
- ADA accommodation
- Skills testing
- New hire orientations
- Performance appraisal tracking
  - On-going

### **Trainings:**

- Cyber Security Training tracking (all staff)
- Sexual Harassment Prevention Training tracking (all staff)
- Defensive Driving Training tracking (all staff)
- Ethics Training tracking (executive staff)

### **Government Reporting:**

- Affirmative Action, OFCCP
- EEOC reporting

### **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. Scheduling for the erosion and liner repairs under the bridge abutment was planned for Spring 2023, however; there is a discussion of a planned Mendota Pool Dewatering which will allow SLDMWA to perform the repair in the dry. This will save SLDMWA money and time for construction and allow us to repair an adjacent site. Further discussions to occur. In the meantime 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 public comments to the EA/IS and finalizing the next round of project reports. The 2<sup>nd</sup> Administration Draft of the Feasibility Study is being updated with a final backcheck prior to release to USBR for Policy Review. A contract amendment is being sought to include CESA compliance permitting to ensure that SLDMWA may be able to award potential future contracts to support the Project. 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 64% 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. Completed data collection efforts consist of: concrete core sampling of check structures; inspection and limits of gate operations of check structures and upcoming efforts consist of field surveys of the DMC and bridges; lower DMC liner inspection; underwater dive inspection of select DMC structures; and geoarcheological explorations.

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



## **EXTRAORDINARY O&M & CAPITAL PROJECTS**

contractor in order to provide final acceptance. SLDMWA activities to integrate the pumps into SCADA will occur after final acceptance. Reclamation staff is 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 have finalized the design data 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 May 2023, with the 100% design package (Spec B) scheduled for completion in August 2023. Once received, SLDMWA staff will begin putting together the solicitation package. SLDMWA has received notice the application for \$25M of BIL (Aging Infrastructure) funding was approved.

### **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, the finger press plates and through bolts have been reinstalled and torqued. The stator slots have been painted, the surge rings and bus bars have been installed, NEC is currently installing the stator coils which should be completed the first week of May. Overall the rewind is on schedule and the unit is scheduled to return to service in Sept. 2023.

### **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-phased contract was issued to Powell, the original designer and installer of the switchgear building, to supply

## ***EXTRAORDINARY O&M & CAPITAL PROJECTS***

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 materials in Phase 1 were not ready. Phase 2 is now scheduled starting September 2023 for three weeks. CVO has given the approval for units 2 and 6 outage, which UZ11A Switchgear Building feeds power to. Note: Unit 3 rewind is scheduled to be completed and back in service prior to starting the UZ11A repairs.

### **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 substantially complete, awaiting 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 16<sup>th</sup> from Cal Electro Inc. (CEI). SLDMWA and TSC has completed the proposal evaluation, and Cal Electro's revised proposal was scored a 90% by the Technical Proposal Evaluation Committee comprised of SLDMWA and TSC technical staff. SLDMWA is seeking board approval to issue the construction contract on May 4<sup>th</sup>. 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 has been reviewed and commented on my SLDMWA 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 of final 2 units to occur as Operations allow.

### **OPP Plant Water Storage Tanks Rehabilitation (FY24)**

Status: Began the development of scope of work documents. Waiting test results of existing interior lining of tanks to determine if hazardous materials are present. Planning bid walk for later in May.

### **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. Presently waiting for USBR acceptance of key water treatment equipment. Purchase agreement with selected vendor to transpire early May. Site grading and drainage plans are currently being designed by staff.

## **EXTRAORDINARY O&M & CAPITAL PROJECTS**

### **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. Staff is currently evaluating the roadway areas (seal coat vs slurry seal).

## **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. Ongoing engineering support has been provided to TSC for DCI Arc Flash Hazard Analysis regarding recommendations from Arc Flash Hazard Analysis 2013.

### **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. The first steps of our cyber security was implemented. We are currently working with DarkTrace and installing a network device to track cyber data and threats on the SCADA system. We are also currently incorporating a structured file server system to keep SCADA backups and for much needed organized file storage on the local network. We are currently building a strategy to implement better wiring housekeeping in our SCADA server rack help maintenance activities on the racks. A new Active Directory/DHCP/DNS server was ordered this month. 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.



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

*NOTE: ALL FIGURES ARE IN ACRE FEET*

	<b>March-2023</b>	<b>March-2022</b>
JONES PUMPING PLANT - PUMPED	251,791	72,663
DCI PLANT - PUMPED	23,780	1,064
DCI PLANT - RETURNED	0	0
O'NEILL P/G PLANT - PUMPED	227,748	43,483
O'NEILL P/G PLANT - GENERATED	0	4,161
DMC DELIVERIES	3,018	11,677
RIVER/WELL/RECYCLE WATER INTO DMC	7,108	14,766
MENDOTA POOL DELIVERIES	35,095	52,431
SHASTA RESERVOIR STORAGE	3,770,900	1,735,100
SAN LUIS RESERVOIR STORAGE	1,996,029	920,682
FEDERAL SHARE	928,425	333,166

	<b>March-2023</b>	<b>March-2022</b>
SAN LUIS UNIT DELIVERIES	1,387	4,339
SAN LUIS UNIT WELL WATER	0	0
SAN FELIPE UNIT DELIVERIES	1,155	4,706

Jones Pumping Plant monthly average = 4,102 cfs



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

Date: 4/18/23

District/Other	Total Available Water into System (INCOMING) (Acre Feet)	AG/Refuge Deliveries (Acre Feet)	M & I Deliveries (Acre Feet)	Total Deliveries (OUTGOING) (Acre Feet)
<b>Total Pumped @ Jones Pumping Plant</b>	<b>251,791</b>			
<b>Total Pumped @ DCI</b>	<b>(23,780)</b>			
<b>Total Reversed @ DCI</b>	<b>0</b>			
City of Tracy		0	0	0
Byron Bethany I.D.		4	0	4
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.		591	0	591
Central California I.D. - above check #13		5	0	5
San Luis W.D.- above check #13		0	0	0
Volta Wildlife Mgmt. Area (Fish & Game)		397	0	397
Fish & Wildlife (Volta) Santa Fe - Kesterson		0	0	0
Grasslands W.D. (Volta)		0	0	0
<b>Total Pumped @ O'Neill PP</b>	<b>(227,748)</b>			
<b>Total Generated @ O'Neill PP</b>	<b>0</b>			
Central California I.D. - below check #13		935	0	935
Grasslands W.D. (76.05-L)		0	0	0
Fish & Game Los Banos Refuge (76.05-L)		0	0	0
Fish & Wildlife Kesterson (76.05-L)		0	0	0
Freitas Unit (76.05-L)		377	0	377
Salt Slough Unit (76.05-L)		0	0	0
China Island (76.05-L)		0	0	0
San Luis W.D. - below check #13		74	0	74
Panoche W.D.		122	2	124
Eagle Field W.D.		127	0	127
Oro Loma W.D.		0	0	0
Mercy Springs W.D.		0	0	0
Firebaugh Canal W.D. (D.M.C.)		384	0	384
River and Groundwater well pump-in	4,980			
North Valley Regional Recycled Water Program	2,128			
Change in Canal Storage	174			
Wasteway Flushing and Spill	0			
Total Available in Delta-Mendota Canal	7,545			
<b>TOTAL DELIVERY FROM DELTA-MENDOTA CANAL</b>	<b>(3,018)</b>	<b>3,016</b>	<b>2</b>	<b>3,018</b>
Theoretical DMC Delivery to Mendota Pool	4,527			
Total DMC Metered Delivery to MP	2,608			
Estimated (Loss) or Gain in DMC	(1,919)			
Estimated % Loss or Gain in DMC	-0.76%			



**San Luis & Delta-Mendota Water Authority  
Monthly Deliveries  
March 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	2,608			
Mendota Pool Groundwater Well Pump-In	45			
(+)SJRRP Releases into Mendota Pool	18,357			
(+)Available Flood Releases from Friant into Mendota Pool	25,077			
(+)Other San Joaquin River Water	4,332			
(+)Kings River Flood Releases into the Mendota Pool	162,266			
<u>Mendota Pool Delivery Information</u>				
<u>Exchange Contractors:</u>				
Central California Irrigation District (CCID)		7,586	0	7,586
Columbia Canal Company (CCC)		520	0	520
Firebaugh Canal Water District (FCWD)		0	0	0
San Luis Canal Company (SLCC)		5,288	0	5,288
<u>Refuge:</u>				
Conveyance Losses		0	0	0
Calif Dept of F/G-LB Unit (CCID)		0	0	0
Calif Dept of F/G-LB Unit (SLCC)		232	0	232
Calif Dept of F/G-Salt Slough Unit (CCID)		0	0	0
Calif Dept of F/G-China Island Unit (CCID)		0	0	0
US Fish & Wildlife-San Luis Refuge (SLCC)		0	0	0
US Fish & Wildlife-Freitas (CCID)		0	0	0
US Fish & Wildlife-Kesterson (CCID)		0	0	0
Grasslands WD (CCID)		0	0	0
Grasslands WD (SLCC)		450	0	450
Grasslands (Private)		0	0	0
San Luis WD Conveyance (CCID)		1	0	1
Del Puerto WD Conveyance (CCID)		0	0	0
<u>San Joaquin River Restoration Project:</u>				
SJRRP		18,357	0	18,357
<i>Other: (see MP Operations Report)</i>		2,661	0	2,661
<i>Total Available Water in Mendota Pool</i>	212,685			
<b>TOTAL DELIVERY FROM MENDOTA POOL</b>	<b>(35,095)</b>	<b>35,095</b>	<b>0</b>	<b>35,095</b>
*Estimated (Loss) or Gain in Mendota Pool	(177,590)			
*Estimated % Loss or Gain in Mendota Pool	-83.50%			
Total System Delivery	(38,113)			
<b>*Total Estimated System (Loss) or Gain</b>	<b>(179,509)</b>			
<b>*Total Estimated % System Loss or Gain</b>	<b>-38.26%</b>			

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



Jones Pumping Plant  
March - 2023

Date	# OF UNITS	TIME ON/OFF	AVG DAILY CFS
1	5	0	3999
2	5	0	4187
3	5	0	4189
4	5	0	4208
5	5	0	4193
6	5	0	4233
7	5	0	4278
8	5	0	4276
9	5-3	5	3771
10	3-5	3	3825
11	5	0	4276
12	5	0	4301
13	5	0	4287
14	5	0	4257
15	5	0	4264
16	5	0	4291
17	5	0	4297
18	5	0	4390
19	5	0	4341
20	5	0	4328
21	5	0	4356
22	5	0	4273
23	4	0	3942
24	4	0	3524
25	4	0	3547
26	4	0	3551
27	4	0	3553
28	4	0	3571
29	4-5	0	4065
30	5	0	4294
31	5	0	4307
<b>AVG CFS for the month</b>			<b>4102</b>





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

Date: 4/7/23

<b>CREDITS UNDER WARREN ACT CONTRACTS</b>									
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	0
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	0
20.42-L	41,497,335	43,062,245	1	0	BCID	0	0	0	0
20.42-L	41,497,335	43,062,245	1	0	USBR/FWA	4,803	0	4,803	4,803
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	3,076	3,081	1	(5)	DPWD	0	0	0	0
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	0
31.31-L1	87,779	87,779	1	0	WSTAN	0	0	0	0
31.31-L2	87,779	87,779	1	0	DPWD	0	0	0	0
31.31-L3	87,779	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	4,719	4,719	1	0	DPWD	0	0	0	0
36.80-L	1,847	1,847	1	0	DPWD	0	0	0	0
37.10-L	3,870	3,870	0.94	0	DPWD	0	0	0	0
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	6,841,176	1	0	PID	0	0	0	0
42.53-L	6,833,470	6,841,176	1	0	DPWD	0	0	0	0
42.53-L	6,833,470	6,841,176	1	0	USBR/FWA	177	0	177	177
43.22-L	55	55	1	0	DPWD	0	0	0	0
48.97-L	028	028	1	0	SLWD	0	0	0	0
50.46-L	6,025	6,025	1.07	0	DPWD	0	0	0	0
51.00-R	297	297	0.89	0	DPWD	0	0	0	0
51.66-L	3,434	3,434	0.98	0	DPWD	0	0	0	0
52.40-L	1,481	1,481	1	0	DPWD	0	0	0	0
58.28-L	3,365	3,365	1.02	0	SLWD	0	0	0	0
58.60-L	917	917	0.96	0	DPWD	0	0	0	0
58.73-R	494	494	1	0	DPWD	0	0	0	0
64.85-L	1,662	1,662	0.72	0	DPWD	0	0	0	0
<b>UPPER DMC SUB TOTAL</b>								<b>4,980</b>	<b>4,980</b>



## NON-PROJECT WATER CREDITS REPORT

(ALL FIGURES IN ACRE FEET)

March 2023 WA Credits

<b>CREDITS UNDER WARREN ACT CONTRACTS</b>									
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	0
79.13-L	1,164	1,164	1	0	SLWD	0	0	0	0
79.13-R	4,964	4,964	1.08	0	SLWD	0	0	0	0
79.60-L	5,979	5,979	0.84	0	SLWD	0	0	0	0
79.60-R	1,724	1,724	1	0	CCID	0	0	0	0
79.60-R	1,724	1,724	1	0	GWD	0	0	0	0
79.60-R	1,724	1,724	1	0	SLWD	0	0	0	0
80.03-L	834	834	0.94	0	SLWD	0	0	0	0
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	0
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	0
<b>LOWER DMC SUB TOTAL</b>								<b>0</b>	<b>0</b>
<b>WARREN ACT CONTRACT CREDIT TOTAL</b>								<b>4,980</b>	<b>4,980</b>
<b>TOTAL GROSS PUMP-IN</b>								<b>CREDIT</b>	
<b>TOTAL (BYRON BETHANY IRRIGATION DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (BANTA CARBONA IRRIGATION DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (DEL PUERTO WATER DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (WEST STANISLAUS IRRIGATION DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (PATTERSON IRRIGATION DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (SAN LUIS WATER DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (PANOCH/MS WATER DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (MERCY SPRINGS WATER DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (CENTRAL CALIFORNIA IRRIGATION DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>TOTAL (WIDREN WATER DISTRICT)</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>Other Warren Act Conveyance Credit Totals</b>									
<b>Del Puerto Water District:</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>Banta Carbona Irrigation District:</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>West Stanislaus Irrigation District:</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>Byron Bethany Irrigation District:</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>Patterson Irrigation District:</b>						<b>0</b>		<b>0</b>	<b>0</b>
<b>San Joaquin River Restoration Pump Back BCID:</b>						<b>4,803</b>		<b>4,803</b>	<b>4,803</b>
<b>San Joaquin River Restoration Pump Back PID:</b>						<b>177</b>		<b>177</b>	<b>177</b>

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: 4/13/2023

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FRESNO SLOUGH	0	60	0										60
TPUD	0	18	0										18
JAMES I.D.	916	2,156	0										3,072
MEYERS	0	0	876										876
M.L. DUDLEY & INDART <sup>1</sup>	0	0	206										206
MID VALLEY* (Kings River)	0	0	0										0
REC. DIST. 1606	0	0	0										0
STATE FISH & WILDLIFE	199	1,119	42										1,360
TRACTION	170	566	56										792
UNMETERED	40	125	0										165
<b>Total</b>	<b>409</b>	<b>1,810</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,317</b>
COELHO FAMILY TRUST <sup>2</sup>	0	18	0										18
TRANQUILITY I.D.	0	678	197										875
WESTLANDS LATERAL-6	0	0	0										0
WESTLANDS LATERAL-7	610	477	2,160										3,247
CARVALHO TRUST	0	0	0										0
<b>TOTAL</b>	<b>1,935</b>	<b>5,217</b>	<b>3,537</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,689</b>

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  
 March Meyers 90 AF

**Kings River Water**

February Tranquility ID 44 AF  
 March Tranquility ID 197 AF  
 March Meyers 486 AF

Duck Clubs (Percent Full)

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

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 2,341 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

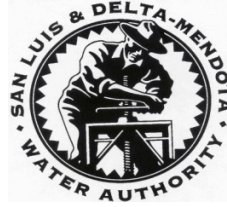
Dec, 2023  
 DMC Inflow AF  
 James Bypass Flows 0 AF



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

**MARCH 2023**

REACH TOTALS	POOL	INFLOW INTO AQUEDUCT	CUSTOMERS	AMOUNT IN AF
R3A 1156			Parks & Rec. @ San Luis Reservoir	1
			Santa Clara Valley Water District	449
			Casa de Fruta (Santa Clara Valley Water District)	0
			San Benito Water District	706
R3  27	13		DFG @ O'Neill Forebay	0
	13		Parks & Rec. @ O'Neill Forebay	1
	13		DWR Water Truck at O'Neill 1 AF for Cattle Program @ O'Neill Forebay	1
	13		Santa Nella County Water District	13
	13	95	San Luis Water District	12
R4  2417	14		City of Dos Palos	38
	14		Pacheco Water District	136
	14		San Luis Water District	171
	14		Panoche Water District	60
	15		San Luis Water District	283
	15		Panoche Water District	710
	15	509	Westlands Water District	1019
R5  6402	16		DFG @ Lat. 4L (Pilibos)	0
	16		DFG @ Lat. 4L	0
	16		DFG @ Lat. 6L	0
	16		DFG @ Lat. 7L	0
	16	1986	Westlands Water District	1340
	17	65	Westlands Water District	1219
	18		City of Coalinga	218
	18		Pleasant Valley Pumping Plant	2209
	18	1631	Westlands Water District	1416
R6  1615	19		Alta Gas	0
	19		City of Huron (P&R-Area 11) @ Lat. 22R	0
	19		DWR Water Truck @ 22R/F&G @ Lat.22R	0
	19		Lemoore N.A.S. thru WWD 28L,29L,&30L	152
	19		Kings County thru WWD 30L	0
	19		Westlands Water District	1463
R7  3891	20		City of Huron @ Lat. 23R	44
	20		DWR Water Truck @ 23R	0
	20	20825	Westlands Water District	3174
	21		City of Avenal	164
	21		Kings County thru WWD 37L,38L	0
	21		Westlands Water District	509
15508	25111		<---TOTALS--->	15508
<b>TOTALS BY CUSTOMERS</b>				
Inflow Into Aqueduct:				
1986 AF TOTAL for PUMP-IN				
23125 AF TOTAL for FLOOD				
			Santa Nella County Water District	13
			Pacheco Water District	136
			San Luis Water District	466
			Panoche Water District	770
			Westlands Water District	12349
			AltaGas	0
			City of Huron @ LAT. 23R	44
			City of Huron (P&R/Area 11 @ 22R)	0
			Lemoore N.A.S. thru WWD @ 28L,29L&30L	152
			Kings County thru WWD Laterals in Pools 19 - 21	0
			City of Avenal	164
			City of Dos Palos	38
			City of Coalinga	218
			DFG @ O'Neill Forebay	0
			Pacheco Tunnel	1155
			DFG @ Lateral 4L & 6L & 7L	0
			DWR Water Truck @ 22R/F&G @ Lat.22R	0
			Parks & Recreation	2
			0 AF for DWR Water Truck at O'Neill, 1 AF for Cattle Program @ O'Neill Reservoir	1
			<b>Customers Total:</b>	<b>15508</b>
Pool 12 - Reach 2B VA Turnout Use AF = 2				
DWR 3137(Rev.9/15)				15510



## Monthly Availability Report

CW "Bill" Jones Pumping Plant  
March - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	743	0.0	0.00%	0.0	0.00%	100.00%	3	
Unit-2	743	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-3	743	743.0	100.00%	0.0	0.00%	0.00%	0	
Unit-4	743	0.0	0.00%	0.0	0.00%	100.00%	1	
Unit-5	743	0.0	0.00%	0.0	0.00%	100.00%	1	
Unit-6	743	0.0	0.00%	0.0	0.00%	100.00%	0	
Total	4458	743.0	17%	0.0	0.00%	83.00%	5	

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  
March - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts		Comments
							Pump	Gen	
Unit-1	743	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-2	743	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-3	743	0.0	0.00%	12.3	1.66%	98.34%	1	0	
Unit-4	743	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-5	743	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-6	743	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Total	4458	0.0	0%	12.3	0.28%	99.72%	1	0	

Notes:

(1) Planned maintenance

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



## Monthly Availability Report

DCI Pumping Plant

March - 2023

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	743	0.0	0.00%	0.0	0.00%	100.00%	6	
Unit-2	743	0.0	0.00%	0.0	0.00%	100.00%	5	
Unit-5	743	0.0	0.00%	0.0	0.00%	100.00%	6	
Unit-6	743	0.0	0.00%	0.0	0.00%	100.00%	5	
Total	2972	0.0	0%	0.0	0.00%	100.00%	22	

Notes:

(1) Planned maintenance

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