



December 8, 2022

To: Pablo Arroyave, Chief Operating Officer

From: Bob Martin, Facilities O&M Director

Subject: O&M Report for November 2022

Operations Department

The C.W. "Bill" Jones Pumping Plant (JPP) operated with 1-3 units for the month of November. The average rate of pumping for the JPP during the month was 1,353 cubic feet per second (cfs).

Total pumping at the JPP for the month of November was 80,602 acre-feet. The O'Neill Pump/Generating Plant (OPP) generated 14,395 acre-feet, and pumped 14,677 acre-feet during the month of November. Zero acre-feet was pumped at the Delta-Mendota Canal/California Aqueduct Intertie Plant (DCI) and zero acre-feet was reversed from the California Aqueduct to the DMC for the month of November.

The Federal share in the San Luis Reservoir at the end of November 30th was 190,477 acre-feet as compared to 71,850 acre-feet for end of November 2021.

During the month of November, releases from Friant Dam ranged from 480 to 681 cfs with 9,342 acre-feet entering the Mendota Pool. Flows past the Mendota Dam for the San Joaquin River Restoration Program (SJRRP) were 9,332 acre-feet for November.

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

Control Operations switching/clearance placements performed this month:

- C-22-JP-60 JPP Unit 2 annual maintenance
- C-22-JP-61 JPP Unit 2 suction elbow
- C-22-JP-76 JPP Unit 4 cooling water leaks (motor housing)
- C-22-JP-77 JPP Unit 2 accumulator tank
- C-22-JP-78 JPP Unit 4 balance test
- C-22-JP-79 Volta West well repair
- C-22-JP-80 JPP Unit 4 balance test
- C-22-JP-80-A JPP Unit 4 RTU
- C-22-JP-80-B JPP Unit 4 RTU
- C-22-JP-80-C JPP Unit 4 lower guide inspection
- C-22-JP-81 JPP Unit 4 balancing

- C-22-JP-82 JPP Unit 4 balancing
- C-22-JP-83 JPP Unit 4 balancing
- C-22-JP-84 JPP Unit 4 balancing weights on rotor
- C-22-JP-85 JPP Unit 4 testing
- C-22-JP-86 JPP Unit 4 testing
- C-22-DM-87 DMC MP 62.08R install lower meter bracket
- C-22-DM-88 DMC MP 49.56R install new turnout gate

Plant Maintenance Department

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

Electrical/C&I Staff:

- JPP Unit 2 annual maintenance
- JPP Unit 2 AC/DC lube oil pump repair
- JPP Unit 4 rewind assembly
- JPP Unit 3 cooling water repair
- JPP Unit 1 excitation AVR troubleshooting
- JPP Unit 1 SCADA indication troubleshooting
- TFO facility lighting repair
- OPP Unit 2 annual maintenance
- Control Room HVAC system repairs
- OPP Unit 2 flowmeter install and programming
- Volta West well troubleshooting
- Investigate TFO entrance gate control box failure

Mechanical Staff:

- JPP trash rack cleaning
- JPP Unit 4 cooling water strainer repair
- JPP trash rake PM
- JPP Unit 2 annual maintenance
- JPP plant checks and PM's
- JPP Unit 4 rewind assembly
- JPP Unit 4 vibration testing
- Sandblast and paint handrails for building hatches
- OPP Unit 2 annual maintenance
- OPP plant checks and back wash
- OPP Unit 2 annual maintenance

USBR Support Services

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

- TFCF DRS dive inspection
- TFCF tension arm repairs
- TFCF monorail gripper repairs
- TFCF trolley removal

Civil Maintenance Department

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

- Mowing of DMC ROW
- LBFO building PM's
- LBAO building PM's
- JPP support
- Fabricate handrails along the DMC
- Fabricate pipe fencing along the DMC
- Installed new drain piping at MP 78.59
- 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
- Drain Inlet cleaning PM's along the DMC
- Installed poles for guardrail at MP 67.15
- New employee Class A driver training and trucking school
- Fabrication of handrails for TFO roof hatch openings
- San Luis Drain sign repairs and replacement
- Painting over graffiti on DMC structures
- Fabricated new meter covers at MP 38.80 and 48.60
- DMC pot hole and road repair
- Farm Bridge repair at MP 36.81 and 38.14
- DMC erosion repair
- Installed three new meters at MP 93.25
- TFO yard maintenance
- Attended the November Quarterly

Engineering Department

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

- OPP Unit 1 enclosure tube repair
- USBR tile drain drawings
- DMC seepage monitoring @ MP 20.15L
- Data management of well readings and creation of Warren Act hydrographs
- OPP cooling water strainer purchase (Special Project)
- DCI U3 & U4 pump installations engineering support and SCADA development
- OPP Unit 1 & 3 generator switchgear transfer switch repair
- OPP SCADA user station development
- JPP OPERATOR 2 server replacement
- Backup Red Lion Controller (DCI,JPP,OPP)
- OPP Red Lion web client some screens not functional
- TFO remote view of camera at OPP not functioning on one feed
- OPP Kinney strainer purchase
- Roof access hatch guardrails design for Electric Shop and Canal & Vehicle Maintenance Shop
- TFO Transformer Main leak monitoring
- DCI cathodic protection system survey and repairs
- OPP Unit 5 motor breaker hi-pot test
- OPP Unit 5 stator inspection

- TFO/DCI/OPP transformer oil monitoring
- TFO & JPP Electrical PM research

2022 DMC Pumpback Project

- Finalized plans and documented work completed
- Final report and invoice preparation in progress.

Land Management Activity Summary

The Engineering staff issued three (3) access permits this month:

- Access permit P2302023 was issued to PG&E to replace the broken anchor to their existing utility pole located near MP 56.90-R on the Delta-Mendota Canal.
- Access permit P2302027 was issued to PG&E to blast and re-coat their existing pipeline attached to the county bridge (Orestimba Rd.) located at MP 52.01 on the Delta-Mendota Canal.
- Emergency access permit P2302030 was issued to Del Puerto Water District to repair the existing underground pipeline servicing the turnout at MP 52.02-R on the Delta-Mendota Canal.

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

- Orestimba Creek Recharge Project
- City of Tracy commercial developments
- City of Patterson – Roger Road developments & Baldwin Ranch comments
- Nees Avenue bridge replacement
- I-205 bridge replacement
- PG&E pipeline replacement at MP 92.73
- Koster Road bridge guardrail extension, San Joaquin County
- City of Tracy Schulte warehouse annex
- Black Gulch Creek license renewal
- Lammers Road bridge replacement

Safety Department

The Safety Department worked on the following items this month:

- Provided Job Hazard Analysis support for the crews.
- Conduct Weekly Safety Tailgate talks with Maintenance and Operations crews.
- Sent out Weekly Safety Tailgate Topics – 11-1 Emergency Preparedness, 11-2 Basic First Aid Procedures, 11-3 Fire Prevention, 11-4 Driving in the Fog
- Provided Safety Message for November 2022 Newsletter – Situational Awareness and Personal Safety
- Provide rescue standby service at OPP
- Conducted New Hire Safety Orientation for Travis Roberts
- Issued Zoleo Satellite Communicators and conducted training
- Conducted Quarterly Safety Inspections of SLDMWA facilities

Procurement and Work & Asset Management Department

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

- Continued training and support with Warehouse Inventory Control Clerk and Buyer
- New Contract Specialist started November 14th with ongoing training
- Completed 8-month probationary appraisal for employee
- Tested and finalized outstanding NetSuite issues, moved to production
- Advanced Procurement Software testing continued in NetSuite.
- Completed Procurement Activity Report
- Attended and participated in November Quarterly Safety Meeting
- Worked with Safety Officer to coordinate annual fire extinguisher service
- Participated in Shepherd Bi-weekly meetings and Affirma meetings
- Contracts/PO Agreements/LOA's Status Update:
 - F22-OPP-059 - OPP Main Transformer Rehabilitation. Worked with engineering team and Contract Specialist to prepare for second RFI releasing and re-release of RFP in January
 - F22-JPP-071- UZ11A Switchgear Bushing Box Replacement. Board approved single source in February with contract executed April. Received all materials and now preparing to issue NTP for construction portion.
 - F22-DMC-047, DMC Subsidence GEX. Worked on amendment to execute in December
 - F23-TFO-013, Landscape Maintenance. Worked with Contract Specialist on updating RFQ to re-solicit services with plans to release early December
 - Issued PO4603 for professional services to IAQ-EMF Consulting \$6,332

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
- 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

Information Technology Department

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

- NetSuite
 - User and Administration
 - Bi-Weekly Implementation Team meetings
 - Affirma absorbed into FTC; met with principals on future support

- Assisted with monthly FAC, WRC and BOD meetings with Zoom
- Desktop support calls
- Planning server refresh
- Upgrading/replacing copiers
 - Signed contract with Caltronics
- Monitor Symantec Anti-Virus management console
- Security updates on servers
- Monitor firewall
- Update additional AV security settings
- Multi Factor Authentication vendor SurePass
- Follow-up meeting with Active Directory threat defense vendor
- Additional meeting with Protective DNS vendor
- Cyber Security Incidence Response Plan
- Disaster Recovery Plan
- Business Continuity Plan
- Cyber Security purchase requirements list developed. IT and SCADA
- 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
- WAM servers, prepping for redeployment
- Troubleshoot ongoing email Autodiscover issues after WEB site move
 - Purchased and installed new security certificate
- Completed Darktrace evaluation for Cyber Security monitoring
- Support of Water Operations iPads and new app deployments via MDM
- 2nd meeting with Tyler technologies regarding Cyber Security support
- Start researching file sharing/collaboration software solutions
- Working with Brandon Souza regarding USBR Work Request email process
- Firewall replacement completed
- Create deployment packages for Office 2019 and 2021 and install in test environment and deploy to two users for testing in WA environment
- Assist C&I with copying configuration files from protective relays at DCI and upload to relays for new units 3 & 4
- Assist with troubleshooting of facility entrance gate controls at LBFO & TFO
- Research cameras for Brown Act requirements
- Quotes for backup appliance renewal
- Completed InfraGard course; How to Plan for and Conduct a Tabletop Exercise

HR Department

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

General Administrative Activities:

- Active Recruitments:
 - Hydro Electric Electrician, Tracy (continued recruitment)
 - Mechanical (Plant) Engineer, Tracy (continued recruitment)
 - Control Operator, Tracy (continued recruitment)

- Closed Recruitments:
 - Apprentice Plant Mechanic, Tracy (interviews scheduled)
 - Heavy Equipment Operator (skills testing scheduled)
 - Hydro Tech II (skills testing scheduled)
- Background checks for PIV cards (continuing)
- New Hire Orientations

Training:

- Remain up to date with COVID-19 compliance
 - Corona Virus 101 Training (new hires)
- Cyber Security Training (all staff)
- Sexual Harassment Prevention Training (all staff)
- Defensive Driving Training (all staff)

Government Reporting:

- Merced County Public Health COVID Reporting (as needed)
- Alameda County Public Health COVID Reporting (as needed)
- Affirmative Action Reporting – gathering data for end of year reports

Ongoing:

- COVID protocols
- 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: The abutment repair is on hold until PG&E relocates their gas pipeline. A 6-inch gas transmission pipeline owned by PG&E crosses under the bridge serving the City of Dos Palos. All parties have agreed that it would be a safety hazard to conduct work with the gas line in place. USBR, SLDMWA, and PGE have worked on developing new plans and license amendment to have the pipeline rerouted under the DMC. PG&E is currently onsite and scheduled to be completed with the pipeline realignment by the end of the year.

SLDMWA will be performing erosion and liner repairs under the bridge abutment once PG&E demobilizes or as weather permits. SLDMWA is planning for the repairs to occur in early 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. CDM Smith was awarded the \$2.4M contract in February 2022 to complete the Feasibility Study. The Feasibility Report is expected to be completed in approximately one year, with certain environmental permitting extending longer if needed. The Final Draft Report is scheduled to be completed by 3/6/2023. CDM subconsultants submitted the 1st and 2nd Administrative Draft of the EA/IS, however it was recently determine that the additional pumps at the DCI intertie were not included in the original modeling CDM received during the data gathering phase of the project. Additional modeling must be performed and include associated costs resulting in updates to the previously submitted drafts. The effort will delay the project completion date by a currently undetermined amount however staff and CDM is working diligently to minimize the delays. The modeled results will also feed into the benefits and Ability to Pay (ATP) analysis.

USBR Design Estimating and Construction (DEC) review has concluded and resulted in eight (8) preliminary recommendations for consideration. The final joint memorandum for the DEC review is currently being drafted. SLDMWA has received an updated Geotechnical Scope of Work from USBR and an updated cost estimate and schedule from Terracon Geotechnical Engineers to complete the final geotechnical phases 2 & 3. SLDMWA is currently preparing the contract amendment to reflect the changes to the SOW and the updated cost estimates. Staff is seeking Board approval in December and requesting the Notice to Proceed to be executed by the Board.

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). After numerous supply chain issues, all materials were received by Unico and they mobilized back to the site on 9/26. Commissioning of the new units began late October, however an issue with the

EXTRAORDINARY O&M & CAPITAL PROJECTS

relay settings was discovered. The Water Authority is assisting Reclamation to resolve the settings in order for the contractor to proceed with commissioning.

DMC Turnout Flowmeter Upgrade Program – Phase 3

Status: No activity this month. Engineering staff is coordinating with Water Operations for 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.

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 is scheduled for completion in December.

The following activities have been completed to date:

- Surveyed existing equipment and conditions.
- Reviewed the upgrades to the motor protection.
- Reviewed the electrical design, assembly and placement of the Excitation Cabinets.
- Reviewed the design, dimensions and placement of new Power Transformers.
- Reviewed the design, reliability, security, and assembly of the Unit Control Panels.

An alternative location of the Excitation Cabinets that would streamline the new 13.8kV wiring is still under investigation.

JPP Wear Ring Purchase (FY22)

Status: No activity

JPP Unit No. 4 Rewind

Status: Reassembly of Jones Unit 4 by SLDMWA crews was completed in November. Performance Testing of the Unit was completed on Nov. 28, 2022. The Unit has been returned to available status to be used as necessary to support pumping operations at JPP.

JPP Unit No. 3 Rewind

Status: Production of laminations began October 13, 2022 and is on schedule to be completed December 5, 2022. Laminations will be shipped to US and arrive in Texas (NEC factory) early January 2023. Unit 3 is on schedule to begin rewind in January of 2023.

EXTRAORDINARY O&M & CAPITAL PROJECTS

TSY Switchgear Building UZ11A Repairs (Unplanned Project)

Status: A ground fault incident that damaged the main feeder switchgear and bushing box in switchgear building UZ11A occurred in October 2021. SLDMWA electricians have made partial repairs and investigations have been performed by Reclamation's TSC and Powell (original designer and installer of the switchgear building). Building UZ11A is currently energized via adjacent switchgear building UZ8A (or UZ6A depending on circumstance). The contract for Powell to provide the repairs and replacement has been executed with the majority of submittals reviewed and approved. In August, Powell informed SLDMWA that they could not furnish the bushing box for September, and requested to reschedule the repairs. The clearance for the damaged equipment was modified until the construction is scheduled. The repairs and system outage is tentatively rescheduled for April 2023. The replacement bushing box, CTs, surge arresters, etc. have been fully received in November. Phase 1 will be complete pending processing of the invoice. SLDMWA is working on scheduling the construction (Phase 2), which is tentatively scheduled in April 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 Geotech and structural recommendations from Terracon were received recently and reviewed by SLDMWA. The Project Engineer will prepare Technical Specifications along with the final design and formally solicit the project. 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 were to 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. Quarterly oil monitoring continues and the latest test results in August were acceptable. Next oil monitoring will be in late November.

SLDMWA formerly solicited for the rehabilitation of the transformers in March and received one proposal. SLDMWA and Reclamation worked closely to review the initial proposal and obtained Board approval in August to award the contract pending a satisfactorily revised proposal score and successful negotiations with the contractor. Ultimately, the contractor was unable to resolve the issues with the proposal and opted to withdraw their proposal on June 8. After accepting the withdrawal of the proposal, SLDMWA regrouped and evaluated the lessons

EXTRAORDINARY O&M & CAPITAL PROJECTS

learned and is now taking a more proactive approach to attract greater contractor interest that should lead to additional proposals. An RFI was publically solicited. The RFP is tentatively scheduled to be advertised January 2023, with construction scheduled to occur April/May of 2024, pending favorable hydrologic conditions for the outage.

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

Status: No activity this month. The Facility Rating Review has been received. The personal protective grounds were upgraded per recommendations from the Facility Rating Review. Staff performed an inspection of the unit busses. The Arc Flash Hazard Analysis final report has been received. The Protective Relays Review is still pending delivery of the final report.

OPP Pump Bowl Modification & Replacement (Design and USBR Approval)

Status: The value planning study was completed and staff is currently regrouping on how best to accomplish tasks identified in the study. Several assessments were recommended to be completed to determine the best way to move forward to achieving a reliable plant. EO&M projects have been reprioritized to prevent reworks and sunk costs. FY24 proposed projects are focused on ancillary systems that are critical but won't be affected by the assessment results. SLDMWA staff is working with Reclamation to develop an agreement to perform the recommended assessments.

UPS Battery Charging System Replacement (FY22)

Status: Staff is evaluating whether or not to pursue this job separately from the transformer rehabilitation (April/May 2024). Initially it was planned to purchase the equipment 6 months prior to the start of the Main Transformer Rehabilitation project in order to take advantage of the planned outage, however plans may continue for an April 2023 installation.

OPP Station Service Backup Battery System Replacement (FY23)

Status: This project, along with the UPS Battery Charging System Replacement will be done concurrently. It was planned to purchase the equipment 6 months prior to the start of the Main Transformer Rehabilitation project in order to take advantage of the planned outage, however plans may continue for an April 2023 installation.

OPP Accusonic Flowmeter Console Upgrades (FY23)

Status: Consoles have been purchased and recieved. Installation activities are underway. Staff discovered a faulty communication component within the new consoles and are working with Accusonics on a replacement.

EXTRAORDINARY O&M & CAPITAL PROJECTS

TRACY FACILITIES (TFO)

TFO Domestic Water Treatment Plant Replacement (FY20)

Status: No activity this month.

MULTIPLE FACILITIES

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

Status: The Analysis will be conducted by Reclamation TSC through a LOA. The onsite surveys for TFO, LBFO, and DCI were completed in September 2022. SLDMWA provided additional information to TSC regarding emergency generator and LBFO's station service. The Arc Flash Hazard Analysis Reports are expected to be completed by September 2023.

SCADA System Evaluation (FY23)

Status: Site discovery and documentation of the existing SCADA System is ongoing. The development of controls and SCADA standards 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. Communication continues to determine if an existing fiber line owned and operated by DWR could be utilized for SLDMWA communication. Staff is 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. Pricing on hardware and software have been acquired. The PepLink cellular modems (APN) for an air gapped network have been evaluated and found to be successful with security and connection to AT&T FirstNet (First responders network). Staff is currently testing ESTEEM radios and preliminary results of security and speeds have been promising. Testing on virtual machines for the SCADA environment is underway. Construction of a PLC test rack also began this month.

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

Status: No Activity.



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

NOTE: ALL FIGURES ARE IN ACRE FEET

	October-2022	October-2021
JONES PUMPING PLANT - PUMPED	63,333	106,496
DCI PLANT - PUMPED	0	38
DCI PLANT - RETURNED	0	0
O'NEILL P/G PLANT - PUMPED	3,326	31,216
O'NEILL P/G PLANT - GENERATED	46,605	18,068
DMC DELIVERIES	38,768	31,058
RIVER/WELL/RECYCLE WATER INTO DMC	4,869	6,694
MENDOTA POOL DELIVERIES	60,870	57,584
SHASTA RESERVOIR STORAGE	1,414,200	1,002,000
SAN LUIS RESERVOIR STORAGE	501,134	286,786
* FEDERAL SHARE	187,957	41,777

	October-2022	October-2021
*SAN LUIS UNIT DELIVERIES	20,400	21,695
SAN LUIS UNIT WELL WATER	0	0
SAN FELIPE UNIT DELIVERIES	8,742	6,902

Jones Pumping Plant monthly average = 1,030 cfs



**San Luis & Delta-Mendota Water Authority
Monthly Deliveries
October 2022**

Date:11/15/22

<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	63,333			
Total Pumped @ DCI	0			
Total Reversed @ DCI	0			
City of Tracy		0	508	508
Byron Bethany I.D.		89	0	89
West Side I.D.		0	0	0
Banta Carbona I.D.		0	0	0
West Stanislaus I.D.		332	0	332
Patterson I.D.		114	0	114
Del Puerto W.D.		1,736	5	1,741
Central California I.D. - above check #13		675	0	675
San Luis W.D.- above check #13		0	0	0
Volta Wildlife Mgmt. Area (Fish & Game)		1,643	0	1,643
Fish & Wildlife (Volta) Santa Fe - Kesterson		0	0	0
Grasslands W.D. (Volta)		11,839	0	11,839
Total Pumped @ O'Neill PP	(3,326)			
Total Generated @ O'Neill PP	46,605			
Central California I.D. - below check #13		479	0	479
Grasslands W.D. (76.05-L)		14,597	0	14,597
Fish & Game Los Banos Refuge (76.05-L)		1,508	0	1,508
Fish & Wildlife Kesterson (76.05-L)		1,374	0	1,374
Freitas Unit (76.05-L)		1,374	0	1,374
Salt Slough Unit (76.05-L)		808	0	808
China Island (76.05-L)		485	0	485
San Luis W.D. - below check #13		133	0	133
Panoche W.D.		74	1	75
Eagle Field W.D.		39	0	39
Oro Loma W.D.		0	0	0
Mercy Springs W.D.		0	0	0
Firebaugh Canal W.D. (D.M.C.)		955	0	955
River and Groundwater well pump-in	2,606			
North Valley Regional Recycled Water Program	2,263			
<i>Change in Canal Storage</i>	(268)			
<i>Wasteway Flushing and Spill</i>	0			
<i>Total Available in Delta-Mendota Canal</i>	111,213			
TOTAL DELIVERY FROM DELTA-MENDOTA CANAL	(38,768)	38,254	514	38,768
Theoretical DMC Delivery to Mendota Pool	72,445			
Total DMC Metered Delivery to MP	73,031			
Estimated (Loss) or Gain in DMC	586			
Estimated % Loss or Gain in DMC	0.53%			



**San Luis & Delta-Mendota Water Authority
Monthly Deliveries
October 2022**

<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	73,031			
Mendota Pool Groundwater Well Pump-In	2,752			
(+)SJRR Releases into Mendota Pool	1,460			
(+)Kings River Flood Releases into the Mendota Pool	0			
<u>Mendota Pool Delivery Information</u>				
<u>Exchange Contractors:</u>				
Central California Irrigation District (CCID)		25,084	0	25,084
Columbia Canal Company (CCC)		6,170	0	6,170
Firebaugh Canal Water District (FCWD)		1,284	0	1,284
San Luis Canal Company (SLCC)		8,054	0	8,054
<u>Refuge:</u>				
Conveyance Losses		1,529	0	1,529
Calif Dept of F/G-LB Unit (CCID)		223	0	223
Calif Dept of F/G-LB Unit (SLCC)		1,274	0	1,274
Calif Dept of F/G-Salt Slough Unit (CCID)		120	0	120
Calif Dept of F/G-China Island Unit (CCID)		72	0	72
US Fish & Wildlife-San Luis Refuge (SLCC)		3,732	0	3,732
US Fish & Wildlife-Freitas (CCID)		203	0	203
US Fish & Wildlife-Kesterson (CCID)		203	0	203
Grasslands WD (CCID)		1,381	0	1,381
Grasslands WD (SLCC)		2,193	0	2,193
Grasslands (Private)		779	0	779
San Luis WD Conveyance (CCID)		45	0	45
Del Puerto WD Conveyance (CCID)		0	0	0
<u>San Joaquin River Restoration:</u>				
SJRR		962	0	962
<i>Other: (see MP Operations Report)</i>		7,562	0	7,562
<i>Total Available Water in Mendota Pool</i>	77,243			
TOTAL DELIVERY FROM MENDOTA POOL	(60,870)	60,870	0	60,870
*Estimated (Loss) or Gain in Mendota Pool	(16,373)			
*Estimated % Loss or Gain in Mendota Pool	-21.20%			
Total System Delivery	(99,638)			
*Total Estimated System (Loss) or Gain	(15,787)			
*Total Estimated % System Loss or Gain	-13.55%			

Special Notes: Extra water sent into the Mendota Pool to raise elevation due to hyacinth and operational needs.



Jones Pumping Plant
October - 2022

Date	# OF UNITS	TIME ON/OFF	AVG DAILY CFS
1	2	CONTINUOUSLY	1821
2	2	CONTINUOUSLY	1814
3	2	CONTINUOUSLY	1808
4	2	CONTINUOUSLY	1817
5	2	CONTINUOUSLY	899
6	2	CONTINUOUSLY	914
7	2	CONTINUOUSLY	914
8	2	CONTINUOUSLY	915
9	2	CONTINUOUSLY	917
10	2	CONTINUOUSLY	905
11	2	CONTINUOUSLY	905
12	2 to 3	0001	904
13	3	CONTINUOUSLY	918
14	3	CONTINUOUSLY	919
15	3	CONTINUOUSLY	923
16	3	CONTINUOUSLY	921
17	3	CONTINUOUSLY	916
18	3	CONTINUOUSLY	913
19	3	CONTINUOUSLY	913
20	3	CONTINUOUSLY	910
21	3	CONTINUOUSLY	920
22	3	CONTINUOUSLY	925
23	3	CONTINUOUSLY	923
24	3	CONTINUOUSLY	920
25	3	CONTINUOUSLY	913
26	3	CONTINUOUSLY	910
27	3	CONTINUOUSLY	909
28	3	CONTINUOUSLY	910
29	3	CONTINUOUSLY	910
30	3	CONTINUOUSLY	911
31	3 to	0001	914
AVG CFS for the month			1030



NON-PROJECT WATER CREDITS REPORT
 (ALL FIGURES IN ACRE FEET)
 October 2022 WA Credits

Date: 11/9/22

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	39,596,328	39,596,771	1	(1)	BCID	0	0	0	13,883
20.42-L	39,596,328	39,596,771	1	0	USBR/FWA	0	0	0	0
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	2,711	2,733	1.04	0	DPWD	23	(1)	22	108
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	2,115	2,149	1.03	0	DPWD	35	(2)	33	222
31.31-L1	84,404	86,510	1	0	WSTAN	1,107	(55)	1,052	12,586
31.31-L2	84,404	86,510	1	0	DPWD	999	(50)	949	4,025
31.31-L3	84,404	86,510	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
36.80-L	1,847	1,847	1	0	DPWD	0	0	0	0
37.10-L	3,481	3,481	0.94	0	DPWD	0	0	0	110
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	6,604,119	6,611,336	1	0	PID	166	(8)	158	5,749
42.53-L	6,604,119	6,611,336	1	0	DPWD	0	0	0	0
42.53-L	6,604,119	6,611,336	1	0	USBR/FWA	0	0	0	0
43.22-L	55	55	1	0	DPWD	0	0	0	0
48.97-L	3,143	3,143	0.95	0	SLWD	0	0	0	243
50.46-L	5,554	5,582	1.07	0	DPWD	30	(2)	28	418
51.00-R	296	297	0.89	(1)	DPWD	0	0	0	0
51.66-L	809	846	0.98	0	DPWD	36	(2)	34	143
52.40-L	1,481	1,481	1	0	DPWD	0	0	0	66
58.28-L	3,125	3,125	1.02	0	SLWD	0	0	0	290
58.60-L	917	917	0.96	0	DPWD	0	0	0	0
58.73-R	454	458	1	0	DPWD	4	0	4	25
64.85-L	1,662	1,662	0.72	0	DPWD	0	0	0	0
UPPER DMC SUB TOTAL								2,280	42,653



NON-PROJECT WATER CREDITS REPORT

(ALL FIGURES IN ACRE FEET)

October 2022 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	905	918	1	0	SLWD	13	(1)	12	280
79.13-R	4,928	4,928	1.08	0	SLWD	0	0	0	17
79.60-L	4,866	4,964	0.84	0	SLWD	82	(4)	78	605
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	13,765	13,813	1	(31)	PANOCH/MS	17	(1)	16	1,328
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	3,696	3,928	1	0	WIDREN WD	232	(12)	220	1,253
LOWER DMC SUB TOTAL								326	3,860
WARREN ACT CONTRACT CREDIT TOTAL								2,606	46,513
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)						128		121	1,092
TOTAL (WEST STANISLAUS IRRIGATION DISTRICT)						0		0	10,027
TOTAL (PATTERSON IRRIGATION DISTRICT)						0		0	0
TOTAL (SAN LUIS WATER DISTRICT)						95		90	1,812
TOTAL (PANOCH/MS WATER DISTRICT)						17		16	1,328
TOTAL (MERCY SPRINGS WATER DISTRICT)						0		0	0
TOTAL (WIDREN WATER DISTRICT)						232		220	1,253
Other Warren Act Conveyance Credit Totals									
Del Puerto Water District:						999		949	4,025
Banta Carbona Irrigation District:						0		0	13,883
West Stanislaus Irrigation District:						1,107		1,052	2,559
Byron Bethany Irrigation District:						0		0	4,572
Patterson Irrigation District:						166		158	5,749
San Joaquin River Restoration Pump Back BCID:						0		0	0
San Joaquin River Restoration Pump Back PID:						0		0	0

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



MENDOTA POOL OPERATIONS
2022
 ALL FIGURES IN ACRE-FEET

Date: 11/14/22

Revised 11/15/22

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FRESNO SLOUGH	0	86	60	87	201	298	115	15	5	0			867
TPUD	0	0	0	12	16	20	18	0	0	0			66
JAMES I.D.	141	172	97	2,476	5,320	8,493	5,833	850	107	0			23,489
MEYERS	0	177	150	49	136	199	256	161	137	108			1,373
M.L. DUDLEY & INDART ¹	0	126	159	317	373	421	403	212	192	148			2,351
MID VALLEY* (Kings River)	0	0	0	0	0	0	0	0	0	0			0
REC. DIST. 1606	0	41	0	59	75	106	114	45	23	0			463
STATE FISH & WILDLIFE	1,643	1,954	159	206	516	439	435	758	1,597	4,474			12,181
TRACTION	547	795	290	328	140	503	565	645	773	1,416			6,002
UNMETERED	40	140	15	10	150	40	40	45	175	260			915
Total	2,230	2,889	464	544	806	982	1,040	1,448	2,545	6,150	0	0	19,098
COELHO FAMILY TRUST ²	58	337	529	470	668	994	594	392	402	404			4,848
TRANQUILITY I.D.	0	1,877	1,226	1,719	3,626	4,742	5,400	2,756	1,576	677			23,599
WESTLANDS LATERAL-6	0	0	5	20	39	48	71	48	55	25			311
WESTLANDS LATERAL-7	0	0	0	0	2,093	1,324	2,058	3,177	3,102	0			11,754
CARVALHO TRUST	0	39	41	63	109	138	65	40	56	50			601
TOTAL	2,429	5,744	2,731	5,816	13,462	17,765	15,967	9,144	8,200	7,562	0	0	88,820

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

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

Article 215 Water

Kings River Water

Duck Clubs (Percent Full)

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

Jan, 2022
 DMC Inflow 17,602 AF
 James Bypass Flows 0 AF

May, 2022
 DMC Inflow 16,463 AF
 James Bypass Flows 0 AF

Sept, 2022
 DMC Inflow 57,120 AF
 James Bypass Flows 0 AF

Feb, 2022
 DMC Inflow 53,145 AF
 James Bypass Flows 0 AF

June, 2022
 DMC Inflow 35,872 A.F
 James Bypass Flows 0 AF

Oct, 2022
 DMC Inflow 73,031 AF
 James Bypass Flows 0 AF

Mar, 2022
 DMC Inflow 38,882 AF
 James Bypass Flows 0 AF

July, 2022
 DMC Inflow 91,637 AF
 James Bypass Flows 0 AF

Nov, 2022
 DMC Inflow 0 AF
 James Bypass Flows 0 AF

Apr, 2022
 DMC Inflow 11,912 AF
 James Bypass Flows 0 AF

Aug, 2022
 DMC Inflow 95,944 AF
 James Bypass Flows 0 AF

Dec, 2022
 DMC Inflow 0 AF
 James Bypass Flows 0 AF



**MENDOTA POOL WELL PUMP IN
2022**
(ALL FIGURES IN ACRE-FEET)

Date: 11/14/2022

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
COELHO FAMILY TRUST ¹	121	163	479	672	746	832	1,419	863	636	221			6,152
M.L. DUDLEY & INDART ²	20	16	282	68	198	325	294	309	304	0			1,816
FORDEL	0	294	339	419	443	339	320	89	33	0			2,276
COELHO WEST	0	0	0	0	143	201	183	151	148	0			826
CASACA VINYARDS	0	0	0	0	94	121	107	92	75	0			489
DPF	0	0	0	0	64	107	90	36	47	0			344
SOLO MIO	0	0	0	0	27	59	55	51	47	0			239
BAKER FARMS	0	0	0	105	318	401	368	0	456	0			1,648
FARMERS W.D.	0	0	0	331	645	899	1,054	0	914	0			3,843
MEYERS	0	186	172	51	93	100	227	169	147	66			1,211
MEYERS BANKED	0	559	1,579	306	0	131	1,256	1,346	1,259	1,393			7,829
SILVER CREEK	0	0	0	0	53	120	108	94	86	1			462
TRANQUILITY I.D.	0	0	0	0	0	1,714	2,245	1,540	1,243	783			7,525
FCWD	0	0	0	80	273	333	355	148	409	240			1,838
YRIBARREN FARMS	0	0	0	32	172	4	17	0	9	0			234
CARVALHO TRUST	0	0	23	180	8	0	0	0	67	47			325
ETCHEGOINBERRY	0	0	0	0	225	280	102	286	134	0			1,027
FRESNO SLOUGH W.D.	0	0	0	0	0	234	179	145	154	0			712
LSK-1	0	0	27	6	288	129	147	183	189	1			970
TOTAL	141	1,218	2,901	2,250	3,790	6,329	8,526	5,502	6,357	2,752	0	0	39,766

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

¹ aka TERRA LINDA FARMS

² aka COELHO-GARDNER-HANSEN

Mar 2022 Pump in amount for Coelho West & Casaca Vinyards was due to vandals and has been removed (per Chase Hurley)

April 2022 Etchengoinberry transferred 150 AF non-project water to FCWD

Spill Back Credit

James ID (per JID)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
141	269	2447	3541	4501	4433	486	64	204	0	0	0	16086

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

OCTOBER 2022

REACH TOTALS	POOL	INFLOW INTO AQUEDUCT	CUSTOMERS	AMOUNT IN AF
R3A 8743			Parks & Rec. @ San Luis Reservoir	1
			Santa Clara Valley Water District	8742
			Casa de Fruta (Santa Clara Valley Water District)	0
			San Benito Water District	0
R3 245	13		DFG @ O'Neill Forebay	49
	13		Parks & Rec. @ O'Neill Forebay	0
	13		DWR Water Truck at O'Neill 0 AF for Cattle Program @ O'Neill Forebay	0
	13		San Luis Water District	196
R4 5466	14		City of Dos Palos	102
	14		Pacheco Water District	147
	14		San Luis Water District	2432
	14		Panoche Water District	32
	15		San Luis Water District	715
	15		Panoche Water District	526
	15		Westlands Water District	1512
R5 4094	16		DFG @ Lat. 4L (Pilibos)	0
	16		DFG @ Lat. 4L	0
	16		DFG @ Lat. 6L	0
	16		DFG @ Lat. 7L	0
	16		Westlands Water District	1107
	17		Westlands Water District	779
	18		City of Coalinga	287
	18		Pleasant Valley Pumping Plant	1109
	18		Westlands Water District	812
R6 955	19		Alta Gas	1
	19		City of Huron (P&R-Area 11) @ Lat. 22R	3
	19		DWR Water Truck @ 22R/F&G @ Lat.22R	0
	19		Lemoore N.A.S. thru WWD 28L,29L,&30L	133
	19		Kings County thru WWD 30L	0
	19		Westlands Water District	818
897	20		City of Huron @ Lat. 23R	69
	20		DWR Water Truck @ 23R	0
	20		Westlands Water District	518
	21		City of Avenal	196
	21		Kings County thru WWD 37L,38L	0
	21		Westlands Water District	114
20400		0	<---TOTALS--->	20400
TOTALS BY CUSTOMERS				
Inflow Into Aqueduct:		0		
0 AF TOTAL Pump-In			Pacheco Water District	147
0 AF TOTAL Reported for Credit			San Luis Water District	3343
			Panoche Water District	558
			Westlands Water District	6769
			AltaGas	1
			City of Huron @ LAT. 23R	69
			City of Huron (P&R/Area 11 @ 22R)	3
			Lemoore N.A.S. thru WWD @ 28L,29L&30L	133
			Kings County thru WWD Laterals in Pools 19 - 21	0
			City of Avenal	196
			City of Dos Palos	102
			City of Coalinga	287
			DFG @ O'Neill Forebay	49
			Pacheco Tunnel	8742
			DFG @ Lateral 4L & 6L & 7L	0
			DWR Water Truck @ 22R/F&G @ Lat.22R	0
			Parks & Recreation	1
		0 AF for DWR Water Truck at O'Neill, 1 AF for Cattle Program @ O'Neill Reservoir		0
Pool 12 - Reach 2B			Customers Total:	20400
VA Turnout Use AF =	21			
DWR 3137(Rev.9/15)				20421



Monthly Availability Report

CW "Bill" Jones Pumping Plant

October - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	744	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-2	744	279.0	37.50%	0.0	0.00%	62.50%	0	
Unit-3	744	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-4	744	744.0	100.00%	0.0	0.00%	0.00%	0	
Unit-5	744	343.4	46.16%	0.0	0.00%	53.84%	1	
Unit-6	744	61.7	8.29%	0.0	0.00%	91.71%	0	
Total	4464	1428.1	32%	0.0	0.00%	68.00%	1	

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
October - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts		Comments
							Pump	Gen	
Unit-1	744	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-2	744	16.5	2.22%	0.0	0.00%	97.78%	0	0	
Unit-3	744	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-4	744	0.0	0.00%	0.0	0.00%	100.00%	0	1	
Unit-5	744	579.9	77.94%	0.0	0.00%	22.06%	0	1	
Unit-6	744	0.0	0.00%	0.0	0.00%	100.00%	0	1	
Total	4464	596.4	13%	0.0	0.00%	87.00%	0	3	

Notes:

(1) Planned maintenance

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



Monthly Availability Report

DCI Pumping Plant

October - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	744	134.6	18.09%	0.0	0.00%	81.91%	0	
Unit-2	744	134.6	18.09%	0.0	0.00%	81.91%	0	
Unit-5	744	134.6	18.09%	0.0	0.00%	81.91%	0	
Unit-6	744	134.6	18.09%	0.0	0.00%	81.91%	0	
Total	2976	538.4	18%	0.0	0.00%	82.00%	0	

Notes:

(1) Planned maintenance

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