



January 12, 2023

To: Pablo Arroyave, Chief Operating Officer

From: Bob Martin, Facilities O&M Director

Subject: O&M Report for December 2022

Operations Department

The C.W. "Bill" Jones Pumping Plant (JPP) operated with 1-4 units for the month of December. The average rate of pumping for the JPP during the month was 1,406 cubic feet per second (cfs).

Total pumping at the JPP for the month of December was 86,469 acre-feet. The O'Neill Pump/Generating Plant (OPP) generated 4,195 acre-feet, and pumped 72,363 acre-feet during the month of December. There was 1,511 acre-feet pumped at the Delta-Mendota Canal/California Aqueduct Intertie Plant (DCI) that was necessary to help manage the DMC water levels due to the increased pumping at JPP in late December. Zero (0) acre-feet was reversed from the California Aqueduct to the DMC this month.

The Federal share in the San Luis Reservoir at the end of December was 259,356 acre-feet as compared to 102,386 acre-feet for end of December 2021.

During the month of December, releases from Friant Dam ranged from 504 to 655 cfs with 16,429 acre-feet entering the Mendota Pool. Flows past the Mendota Dam for the San Joaquin River Restoration Program (SJRRP) were 16,285 acre-feet for December.

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 December.

Control Operations switching/clearance placements performed this month:

- C-22-JP-79 Volta West well repair
- C-22-JP-91 JPP Unit 3 rewind/annual maintenance
- C-22-JP-92 JPP Unit 3 suction elbow
- C-22-JP-93 OPP Unit 1 distributor oil leak repair
- C-22-DCI-94 DCI UAA reset
- C-22-DCI-95 DCI UAA troubleshoot kilowatt metering

Plant Maintenance Department

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

Electrical/C&I Staff:

- JPP Unit 3 rewind
- JPP sump pump level controller repair
- JPP monorail PM
- JPP sewer system controller repair
- JPP lighting system
- JPP MP6A breaker alarm repair
- Butterfly valve air compressor leak repair
- TFO Warehouse HVAC PM
- TFO HVAC PM
- TFO industrial water system PM
- TFO facilities lighting
- TFO Electric shop heater PM
- DCI Unit 3 & 4 assistance
- LBFO Electrical & C&I PM's
- Check 9 Gate 1 - repairs and adjustment on drum shaft to limit switch
- Check 9 Gate 2 - repairs and adjustment on drum shaft to limit switch
- Check 9 Gate 3 - repairs and adjustment on drum shaft to limit switch
- SCADA room HVAC system repairs
- OPP Unit 6 Penstock upgrade from an Accusonic 7510+ to a 8510+
- OPP Siphon breaker building exterior repairs
- OPP battery room exhaust fan failure repair
- OPP security alarm system troubleshooting/investigation on Siphon building

Mechanical Staff:

- JPP & OPP trash rack cleaning
- JPP trash rack PM
- JPP Unit 4 cooling water pipe weld repair
- JPP HVAC PM
- JPP Unit 2 annual maintenance
- JPP Unit 3 rewind prep work
- JPP Unit 3 rewind
- JPP Unit 4 butterfly valve repairs
- JPP routine painting
- JPP & OPP plant checks and PM's
- CMT water heater replacement
- Fabricated lower guide bearing shoulder bolts
- Water treatment plant leak repairs
- Industrial water valve replacement
- Industrial water pump #2 rebuild
- Butterfly valve air compressor leak repair
- Routine sandblast/painting
- OPP plant sand filter back wash
- OPP Unit 1 oil leak in the distributor housing investigation and repair
- Check 9 - repairs and adjustments on drum shaft to limit switches on all gates

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 stoplog seal replacement
- TFCF install stoplogs in the velocity channel and holding tank vaults
- TFCF travel screen repairs
- TFCF hot tap waterline repairs

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 and repairs (floor and kitchen wall)
- JPP Support
- Fabricate handrails along the DMC
- Fabricate pipe fencing along the DMC
- Inspect drain inlets, overchutes and culverts
- Garbage collection on DMC and wasteways
- Chemical and mechanical weed control on DMC and SLD
- Maintenance and repairs to float lines, signs, fences, guardrails and gates
- Fabricated lids for water pipes at the TFO Water Treatment Plant
- Test can replacement and repairs at MP 85.08 and 88.64
- New employee Class A driver training
- Fabrication of handrails for TFO roof hatch openings
- San Luis Drain sign repairs and replacement
- Painting over graffiti on DMC structures
- Turnout gate replacement at MP 49.56 and 62.08
- DMC pot hole and road repair
- Installed three traffic gates at MP 40.37
- DMC erosion repair
- TFO yard maintenance
- LBFO yard maintenance
- Repair entry gate for USBR
- 90 Day BIT inspections
- Replaced broken traffic strips on bridge at MP 84.82
- Annual and quad tests for boom trucks
- Installed new boot cleaners at LBFO
- Smoke tested all big rigs

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 and SCADA development
- OPP Unit 1 & 3 generator switchgear transfer switch repair
- OPP SCADA user station development
- JPP OPERATOR2 server replacement
- OPP Kinney strainer purchase
- DCI cathodic protection system repairs
- TFO & JPP electrical PM program

2022 DMC Pumpback Project

- Final report completed including summary of activities and plan set
- Final invoicing partially completed, awaiting correction to indirect charges

Land Management Activity Summary

The Engineering staff issued five (5) access permits this month:

- Access permit P2302032 was issued to Del Puerto Water District to repair the leaky distribution meter box at Milepost 43.73-L on the Delta-Mendota Canal.
- Access permit P2302033 was issued to Del Puerto Water District allowing them to install a temporary turnout truck filling station at Milepost 45.78-R on the Delta-Mendota Canal right-of-way.
- Access permit P2302034 was issued to Forensic Analytical Consulting Services allowing them to conduct a pre-construction survey for the new bridge crossing at Milepost 9.29 (International Parkway) on the Delta-Mendota Canal.
- Access permit P2302035 was issued to Del Puerto Water District allowing them to install a temporary turnout truck filling station at Milepost 43.24-R on the Delta-Mendota Canal right-of-way.
- Access permit P2302037 was issued to Del Puerto Water District allowing them to install a temporary overhead water filling station at Milepost 45.78-R 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 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 MP92.73
- 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
- Assisted Alameda County Environmental Health Inspector with a hazardous materials inspection of the Tracy facilities
- Sent out Weekly Safety Tailgate topics – 12-1 Handle Glass Safely, 12-2 Accident Prevention, 12-3 Office Safety, 12-4 Caught In Between and Struck By
- Provided Safety Message for December 2022 Building Healthy Habits newsletter
- Provide Rescue Standby service at OPP
- Conducted ergonomic evaluation for Gloria Badillo
- Conducted Fall Protection Harness inspections
- Conducted Fall Protection Safety training to USBR employees

Procurement and Work & Asset Management Department

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

- Continued new staff training and support
- Completed staff annual performance appraisals and submitted to HR
- Provided SLDMWA contract “boiler plate” to legal for review
- Completed Procurement Activity Report
- 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 Materials- Board approved single source on 2/10. Contract executed 4/14. Received all materials. Now preparing to issue NTP for Construction portion.
 - F22-DMC-047, DMC Subsidence GEX– Worked on amendment to be executed next month
 - F23-TFO-013, Landscape Maintenance – Worked with Contract Specialist on updating RFQ to re-solicit services. Plan 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
- 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

Information Technology Department

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

- NetSuite
 - User and Administration
 - Bi-Weekly Implementation Team meetings
 - Reviewed FTC contract, FTC will sign WA Contract and add theirs along with SOW as addendums
- Assisted with monthly FAC, WRC and BOD meetings with Zoom
- Desktop support calls
- Server refresh quotes sent out
- Upgrading/replacing copiers
 - Caltronics; awaiting delivery
- Monitor Symantec Anti-Virus management console
- Security updates on servers
- Monitor firewall
- Update additional AV security settings
- Multi Factor Authentication vendor SurePass
- 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
 - FBI Infagard site hacked and data stolen
- Cyber Security training and webinars
- WAM servers, prepping for redeployment
- Troubleshoot ongoing Email Auto-discover issues after WEB site move
- 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
- Create deployment packages for Office 2019 and 2021 and install in test environment and deploy to two users for testing in WA environment
- Backup appliance replacement received
- Ordered camera for Brown Act requirements in Board Room

HR Department

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

General Administrative Activities:

- Active Recruitments:
 - Hydro Electric Electrician, Tracy (continued recruitment, skills testing scheduled)
 - Mechanical (Plant) Engineer, Tracy (continued recruitment, interview scheduled)
 - Control Operator, Tracy (continued recruitment, interview scheduled)
- Closed Recruitments:
 - Heavy Equipment Operator (skills testing scheduled)
- Candidates Selected:
 - Apprentice Plant Mechanic
 - Hydro Tech II
- 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: PGE has completed the relocation of the 6-inch gas transmission line that crosses under the MP92.73 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. 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 has been scheduled to be completed by 3/10/2023, however recent USBR comments may require additional work and time. CDM submitted a backcheck to the 2nd Administrative Draft of the EA/IS which included the additional modeling for the increased pumping capacity at DCI Intertie. The additional pumping capacity reduced the Benefit Cost Ratio (B/C), but remains above >1, deeming the project still economically feasible. Upon review, USBR advised that their Policy Reviewers may require a more in-depth economic analysis on non-structural alternatives to demonstrate to reviewers that a full range of alternatives were evaluated. CDM is currently working on quantifying the impacts of completing the additional analysis.

SLDMWA executed a Contract Amendment and Notice to Proceed to complete the final Geotechnical Phases 2 & 3 Exploration after Board granted approvals at the December board meeting. Staff is setting up biological clearances while Terracon performs preliminary USA clearances with drilling anticipated to begin in late January.

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 relay settings was discovered. The Authority and Reclamation just resolved the relay settings, and Reclamation is working with the Contractor on a remobilization date. Final work is expected to take 3 days once the contractor and subcontractors mobilize to site.

EXTRAORDINARY O&M & CAPITAL PROJECTS

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 January 2023.

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: The USBR has accepted the performance test data from NEC following the testing that occurred in November 2022. The final payment to NEC for Jones Unit 4 was paid in December 2022.

JPP Unit No. 3 Rewind

Status: 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. Authority staff is currently working on the disassembly of the unit.

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 was executed April 2022, with installation planned for September 2022, however installation was postponed due to delays in parts. All parts, including the replacement bushing box, CTs, surge arresters, etc. were received in November which completed Phase 1. Phase 2, onsite installation of the parts, is tentatively scheduled to be completed in April 2023, pending approval of outage.

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. Technical Specifications are currently being prepared in order to formally solicit for construction. 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 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

EXTRAORDINARY O&M & CAPITAL PROJECTS

and resulted with 16 vendors expressing interest. The RFP has been revised with a new procurement schedule. The RFP will be issued on January 3, 2023 with proposals due on March 16th. SLDMWA anticipates going to the Board in April to issue the contract. Construction on the Spare Transformer is tentatively scheduled to start late February 2024, and the System Outage at O'Neill PG Plant will still be scheduled in April-May 2024, pending favorable hydraulic conditions.

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 and the 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 received, with 4 of them installed. However staff discovered a faulty communication component on two of the consoles and is working with Accusonics on getting replacements.

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. Testing on virtual machines for the SCADA environment is underway. Construction of a PLC test rack continued this month, and currently awaiting parts. Developing a software conversion/rewrite plan for the SCADA upgrade. Evaluating current network to develop a remediation plan to meet CISA and federal mandate requirements. Evaluating Firewalls that would best fit our current and future network types.

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

	November-2022	November-2021
JONES PUMPING PLANT - PUMPED	80,602	183,896
DCI PLANT - PUMPED	0	8,773
DCI PLANT - RETURNED	0	0
O'NEILL P/G PLANT - PUMPED	14,677	113,997
O'NEILL P/G PLANT - GENERATED	14,395	859
DMC DELIVERIES	23,540	14,723
RIVER/WELL/RECYCLE WATER INTO DMC	5,194	7,336
MENDOTA POOL DELIVERIES	61,471	43,450
SHASTA RESERVOIR STORAGE	1,398,800	1,117,200
SAN LUIS RESERVOIR STORAGE	514,265	480,482
* FEDERAL SHARE	190,504	71,850
	November-2022	November-2021
*SAN LUIS UNIT DELIVERIES	1,581	11,956
SAN LUIS UNIT WELL WATER	0	0
SAN FELIPE UNIT DELIVERIES	23	6,575

Jones Pumping Plant monthly average = 1,353 cfs



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

Date: 12-14-2022

<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)
Total Pumped @ Jones Pumping Plant	80,602			
Total Pumped @ DCI	0			
Total Reversed @ DCI	0			
City of Tracy		0	0	0
Byron Bethany I.D.		0	0	0
West Side I.D.		0	0	0
Banta Carbona I.D.		0	0	0
West Stanislaus I.D.		628	0	628
Patterson I.D.		0	0	0
Del Puerto W.D.		286	6	292
Central California I.D. - above check #13		383	0	383
San Luis W.D.- above check #13		0	0	0
Volta Wildlife Mgmt. Area (Fish & Game)		1,213	0	1,213
Fish & Wildlife (Volta) Santa Fe - Kesterson		0	0	0
Grasslands W.D. (Volta)		5,420	0	5,420
Total Pumped @ O'Neill PP	(14,677)			
Total Generated @ O'Neill PP	14,395			
Central California I.D. - below check #13		295	0	295
Grasslands W.D. (76.05-L)		12,047	0	12,047
Fish & Game Los Banos Refuge (76.05-L)		362	0	362
Fish & Wildlife Kesterson (76.05-L)		563	0	563
Freitas Unit (76.05-L)		783	0	783
Salt Slough Unit (76.05-L)		232	0	232
China Island (76.05-L)		304	0	304
San Luis W.D. - below check #13		2	0	2
Panoche W.D.		54	2	56
Eagle Field W.D.		41	0	41
Oro Loma W.D.		0	0	0
Mercy Springs W.D.		0	0	0
Firebaugh Canal W.D. (D.M.C.)		919	0	919
River and Groundwater well pump-in	3,024			
North Valley Regional Recycled Water Program	2,170			
Change in Canal Storage	203			
Wasteway Flushing and Spill	0			
Total Available in Delta-Mendota Canal	85,717			
TOTAL DELIVERY FROM DELTA-MENDOTA CANAL	(23,540)	23,532	8	23,540
Theoretical DMC Delivery to Mendota Pool	62,177			
Total DMC Metered Delivery to MP	61,592			
Estimated (Loss) or Gain in DMC	(585)			
Estimated % Loss or Gain in DMC	-0.61%			



**San Luis & Delta-Mendota Water Authority
Monthly Deliveries
November 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	61,592			
Mendota Pool Groundwater Well Pump-In	1,524			
(+)SJRR Releases into Mendota Pool	9,342			
(+)Kings River Flood Releases into the Mendota Pool	0			
<u>Mendota Pool Delivery Information</u>				
<u>Exchange Contractors:</u>				
Central California Irrigation District (CCID)		24,685	0	24,685
Columbia Canal Company (CCC)		3,329	0	3,329
Firebaugh Canal Water District (FCWD)		1,264	0	1,264
San Luis Canal Company (SLCC)		4,400	0	4,400
<u>Refuge:</u>				
Conveyance Losses		1,370	0	1,370
Calif Dept of F/G-LB Unit (CCID)		235	0	235
Calif Dept of F/G-LB Unit (SLCC)		385	0	385
Calif Dept of F/G-Salt Slough Unit (CCID)		150	0	150
Calif Dept of F/G-China Island Unit (CCID)		198	0	198
US Fish & Wildlife-San Luis Refuge (SLCC)		2,584	0	2,584
US Fish & Wildlife-Freitas (CCID)		509	0	509
US Fish & Wildlife-Kesterson (CCID)		365	0	365
Grasslands WD (CCID)		7,047	0	7,047
Grasslands WD (SLCC)		2,092	0	2,092
Grasslands (Private)		779	0	779
San Luis WD Conveyance (CCID)		8	0	8
Del Puerto WD Conveyance (CCID)		0	0	0
<u>San Joaquin River Restoration:</u>				
SJRR		9,332	0	9,332
<i>Other: (see MP Operations Report)</i>		2,739	0	2,739
<i>Total Available Water in Mendota Pool</i>	72,458			
TOTAL DELIVERY FROM MENDOTA POOL	(61,471)	61,471	0	61,471
*Estimated (Loss) or Gain in Mendota Pool	(10,987)			
*Estimated % Loss or Gain in Mendota Pool	-15.16%			
Total System Delivery	(85,011)			
*Total Estimated System (Loss) or Gain	(11,572)			
*Total Estimated % System Loss or Gain	-10.61%			

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



Jones Pumping Plant
November - 2022

Date	# OF UNITS	TIME ON/OFF	AVG DAILY CFS
1	1	CONTINUOUSLY	922
2	1	CONTINUOUSLY	922
3	1	CONTINUOUSLY	911
4	1	CONTINUOUSLY	917
5	1	CONTINUOUSLY	911
6	1	CONTINUOUSLY	905
7	1	CONTINUOUSLY	918
8	1	CONTINUOUSLY	905
9	1 to 2	0001	1533
10	2	CONTINUOUSLY	1813
11	2	CONTINUOUSLY	1811
12	2	CONTINUOUSLY	1809
13	2	CONTINUOUSLY	1811
14	2	CONTINUOUSLY	1818
15	2	CONTINUOUSLY	1820
16	2	CONTINUOUSLY	1810
17	2	CONTINUOUSLY	1808
18	2	CONTINUOUSLY	1814
19	2	CONTINUOUSLY	1812
20	2	CONTINUOUSLY	1817
21	2	CONTINUOUSLY	1820
22	2	CONTINUOUSLY	1820
23	2	CONTINUOUSLY	1833
24	2 to 1	0001	905
25	1	CONTINUOUSLY	906
26	1	CONTINUOUSLY	908
27	1	CONTINUOUSLY	912
28	1	CONTINUOUSLY	914
29	1	CONTINUOUSLY	901
30	1	CONTINUOUSLY	893
31			
AVG CFS for the month			1353



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

Date: 12/14/22
 Revised 12/20/22

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	39,596,771	39,616,467	1	0	BCID	0	0	0	13,883
20.42-L	39,596,771	39,616,467	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	2,733	2,801	1.04	0	DPWD	71	(4)	67	175
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	86,510	86,510	1	0	WSTAN	0	0	0	12,586
31.31-L2	86,510	86,510	1	13	DPWD	13	(1)	12	4,037
31.31-L3	86,510	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
36.45-R	4,477	4,477	1	0	DPWD	0	0	0	0
36.80-L	1,847	1,847	1	0	DPWD	0	0	0	0
37.10-L	3,481	3,567	0.94	0	DPWD	81	(4)	77	187
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	6,611,336	6,707,771	1	0	PID	2,214	(111)	2,103	7,852
42.53-L	6,611,336	6,707,771	1	0	DPWD	0	0	0	0
42.53-L	6,611,336	6,707,771	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	3,357	0.95	0	SLWD	203	(10)	193	436
50.46-L	5,582	5,683	1.07	0	DPWD	108	(5)	103	521
51.00-R	297	297	0.89	0	DPWD	0	0	0	0
51.66-L	846	889	0.98	0	DPWD	42	(2)	40	183
52.40-L	1,481	1,481	1	0	DPWD	0	0	0	66
58.28-L	3,125	3,193	1.02	0	SLWD	69	(3)	66	356
58.60-L	917	917	0.96	0	DPWD	0	0	0	0
58.73-R	458	458	1	0	DPWD	0	0	0	25
64.85-L	1,662	1,662	0.72	0	DPWD	0	0	0	0
UPPER DMC SUB TOTAL								2,661	45,314



NON-PROJECT WATER CREDITS REPORT

(ALL FIGURES IN ACRE FEET)

November 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	918	942	1	0	SLWD	24	(1)	23	303
79.13-R	4,928	4,928	1.08	0	SLWD	0	0	0	17
79.60-L	4,964	5,183	0.84	0	SLWD	184	(9)	175	780
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	13,813	13,840	1	(12)	PANOCH/MS	15	(1)	14	1,342
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	3,928	4,087	1	0	WIDREN WD	159	(8)	151	1,404
LOWER DMC SUB TOTAL								363	4,223
WARREN ACT CONTRACT CREDIT TOTAL								3,024	49,537
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)						302		287	1,379
TOTAL (WEST STANISLAUS IRRIGATION DISTRICT)						0		0	9,178
TOTAL (PATTERSON IRRIGATION DISTRICT)						2,214		2,103	7,852
TOTAL (SAN LUIS WATER DISTRICT)						480		457	2,269
TOTAL (PANOCH/MS WATER DISTRICT)						15		14	1,342
TOTAL (MERCY SPRINGS WATER DISTRICT)						0		0	0
TOTAL (WIDREN WATER DISTRICT)						159		151	1,404
Other Warren Act Conveyance Credit Totals									
Del Puerto Water District:						13		12	4,037
Banta Carbona Irrigation District:						0		0	13,883
West Stanislaus Irrigation District:						0		0	3,408
Byron Bethany Irrigation District:						0		0	4,572
Patterson Irrigation District:						0		0	0
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: 12/13/22

	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	0		867
TPUD	0	0	0	12	16	20	18	0	0	0	0		66
JAMES I.D.	141	172	97	2,476	5,320	8,493	5,833	850	107	0	0		23,489
MEYERS	0	177	150	49	136	199	256	161	137	108	6		1,379
M.L. DUDLEY & INDART ¹	0	126	159	317	373	421	403	212	192	148	9		2,360
MID VALLEY* (Kings River)	0	0	0	0	0	0	0	0	0	0	0		0
REC. DIST. 1606	0	41	0	59	75	106	114	45	23	0	0		463
STATE FISH & WILDLIFE	1,643	1,954	159	206	516	439	435	758	1,597	4,474	1,773		13,954
TRACTION	547	795	290	328	140	503	565	645	773	1,416	402		6,404
UNMETERED	40	140	15	10	150	40	40	45	175	260	75		990
Total	2,230	2,889	464	544	806	982	1,040	1,448	2,545	6,150	2,250	0	21,348
COELHO FAMILY TRUST ²	58	337	529	470	668	994	594	392	402	404	101		4,949
TRANQUILITY I.D.	0	1,877	1,226	1,719	3,626	4,742	5,400	2,756	1,576	677	348		23,947
WESTLANDS LATERAL-6	0	0	5	20	39	48	71	48	55	25	0		311
WESTLANDS LATERAL-7	0	0	0	0	2,093	1,324	2,058	3,177	3,102	0	25		11,779
CARVALHO TRUST	0	39	41	63	109	138	65	40	56	50	0		601
TOTAL	2,429	5,744	2,731	5,816	13,462	17,765	15,967	9,144	8,200	7,562	2,739	0	91,559

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

BECK	120	PATOS	COLE	TRANQUILITY	1 ACRE
0%	0%	100%	0%	100%	0%

Duck Clubs (Percent Full)

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

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

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

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

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

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

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

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

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

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

Nov, 2022
 DMC Inflow 61,592 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: 12/13/2022

	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	309		6,461
M.L. DUDLEY & INDART ²	20	16	282	68	198	325	294	309	304	0	18		1,834
FORDEL	0	294	339	419	443	339	320	89	33	0	0		2,276
COELHO WEST	0	0	0	0	143	201	183	151	148	0	0		826
CASACA VINYARDS	0	0	0	0	94	121	107	92	75	0	0		489
DPF	0	0	0	0	64	107	90	36	47	0	0		344
SOLO MIO	0	0	0	0	27	59	55	51	47	0	0		239
BAKER FARMS	0	0	0	105	318	401	368	0	456	0	0		1,648
FARMERS W.D.	0	0	0	331	645	899	1,054	0	914	0	0		3,843
MEYERS	0	186	172	51	93	100	227	169	147	66	10		1,221
MEYERS BANKED	0	559	1,579	306	0	131	1,256	1,346	1,259	1,393	647		8,476
SILVER CREEK	0	0	0	0	53	120	108	94	86	1	0		462
TRANQUILITY I.D.	0	0	0	0	0	1,714	2,245	1,540	1,243	783	315		7,840
FCWD	0	0	0	80	273	333	355	148	409	240	85		1,923
YRIBARREN FARMS	0	0	0	32	172	4	17	0	9	0	0		234
CARVALHO TRUST	0	0	23	180	8	0	0	0	67	47	0		325
ETCHEGOINBERRY	0	0	0	0	225	280	102	286	134	0	79		1,106
FRESNO SLOUGH W.D.	0	0	0	0	0	234	179	145	154	0	0		712
LSK-1	0	0	27	6	288	129	147	183	189	1	61		1,031
TOTAL	141	1,218	2,901	2,250	3,790	6,329	8,526	5,502	6,357	2,752	1,524	0	41,290

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**

NOVEMBER 2022

REACH TOTALS	POOL	INFLOW INTO AQUEDUCT	CUSTOMERS	AMOUNT IN AF
R3A 23			Parks & Rec. @ San Luis Reservoir	0
			Santa Clara Valley Water District	23
			Casa de Fruta (Santa Clara Valley Water District)	0
			San Benito Water District	0
R3 102	13		DFG @ O'Neill Forebay	45
	13		Parks & Rec. @ O'Neill Forebay	1
	13		DWR Water Truck at O'Neill 1 AF for Cattle Program @ O'Neill Forebay	1
	13		San Luis Water District	55
R4 1859	14		City of Dos Palos	62
	14		Pacheco Water District	266
	14		San Luis Water District	648
	14		Panoche Water District	24
	15		San Luis Water District	327
	15		Panoche Water District	205
	15		Westlands Water District	327
R5 1001	16		DFG @ Lat. 4L (Pilibos)	0
	16		DFG @ Lat. 4L	0
	16		DFG @ Lat. 6L	0
	16		DFG @ Lat. 7L	0
	16	34	Westlands Water District	244
	17		Westlands Water District	117
	18		City of Coalinga	239
	18		Pleasant Valley Pumping Plant	219
	18		Westlands Water District	182
R6 125	19		Alta Gas	2
	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	0
	19		Kings County thru WWD 30L	0
	19		Westlands Water District	123
340	20		City of Huron @ Lat. 23R	55
	20		DWR Water Truck @ 23R	0
	20		Westlands Water District	72
	21		City of Avenal	174
	21		Kings County thru WWD 37L,38L	0
	21		Westlands Water District	39
3450	34		<---TOTALS--->	3450
			TOTALS BY CUSTOMERS	
Inflow Into Aqueduct:	34			
34 AF TOTAL Pump-In			Pacheco Water District	266
32 AF TOTAL Reported for Credit			San Luis Water District	1030
			Panoche Water District	229
			Westlands Water District	1323
			AltaGas	2
			City of Huron @ LAT. 23R	55
			City of Huron (P&R/Area 11 @ 22R)	0
			Lemoore N.A.S. thru WWD @ 28L,29L&30L	0
			Kings County thru WWD Laterals in Pools 19 - 21	0
			City of Avenal	174
			City of Dos Palos	62
			City of Coalinga	239
			DFG @ O'Neill Forebay	45
			Pacheco Tunnel	23
			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		1
Pool 12 - Reach 2B			Customers Total:	3450
VA Turnout Use AF =	7			
DWR 3137(Rev.9/15)				3457



Monthly Availability Report

CW "Bill" Jones Pumping Plant

November - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	721	0.0	0.00%	39.5	5.48%	94.52%	0	
Unit-2	721	721.0	100.00%	0.0	0.00%	0.00%	0	
Unit-3	721	0.0	0.00%	0.0	0.00%	100.00%	4	
Unit-4	721	721.0	100.00%	0.0	0.00%	0.00%	0	
Unit-5	721	0.0	0.00%	0.0	0.00%	100.00%	7	
Unit-6	721	0.0	0.00%	0.0	0.00%	100.00%	1	
Total	4326	1442.0	33%	39.5	0.91%	66.09%	12	

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
November - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts		Comments
							Pump	Gen	
Unit-1	721	0.0	0.00%	0.0	0.00%	100.00%	0	0	
Unit-2	721	517.0	71.71%	0.0	0.00%	28.29%	0	0	
Unit-3	721	0.0	0.00%	0.0	0.00%	100.00%	1	0	
Unit-4	721	0.0	0.00%	0.0	0.00%	100.00%	0	2	
Unit-5	721	0.0	0.00%	0.0	0.00%	100.00%	3	0	
Unit-6	721	0.0	0.00%	0.0	0.00%	100.00%	2	0	
Total	4326	517.0	12%	0.0	0.00%	88.00%	6	2	

Notes:

(1) Planned maintenance

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



Monthly Availability Report

DCI Pumping Plant

November - 2022

Unit #	Max Hours	Scheduled Outages (1)	%	Unscheduled Outages (2)	%	Over-all Availability %	Starts	Comments
							Pump	
Unit-1	721	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-2	721	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-5	721	0.0	0.00%	0.0	0.00%	100.00%	0	
Unit-6	721	0.0	0.00%	0.0	0.00%	100.00%	0	
Total	2884	0.0	0%	0.0	0.00%	100.00%	0	

Notes:

(1) Planned maintenance

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