ARVIN-EDISON WATER STORAGE DISTRICT

REPORT OF DISTRICT OPERATIONS

August 2022

Pump and Power Testing at
Forrest Frick Pumping Plant Forebay

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WATER SUPPLY

Friant Division Central Valley Project (CVP)

- The 2022 Water Year allocation is 30% which amounts to 12,000 AF.
- Exhibit “A” provides additional supply information for 2022 Water Year supplies

San Joaquin River (SJR) Restoration Program (SJRRP)

- The 2022 Runoff Year is estimated at 1,072,000 AF of natural river runoff in the SJR watershed, which is a “Normal-Dry” year type pursuant to SJR settlement and accordingly, the SJRRP would receive a 232,470 AF of water supply
- Given the need to meet San Joaquin River Exchange Contract demands, the SJRRP was reduced to zero in April. However, once this demand was starting to be met by the Delta-Mendota Canal in July, the Restoration Administrated updated its flow recommendation to conserve remaining volume of cold water for fall and winter months. As a result, approximately 101,000 acre-feet is being released as Unreleased Restoration Flows URF (see Exhibit A for additional URF supplies)
- District’s RWA credit beginning balance is approximately 90,630 AF (subject to reconciliation and staff review). RWA credits allow the District to purchase water for $10/AF during wet periods when RWA water is declared

Shasta System CVP

- The 2022 allocation for south of Delta Ag remains at 0%

State Water Project (SWP)

- The 2022 Table A allocation remains at 5%

Kern River

- 2022 supplies are currently estimated at 25% of average

Water Bank Facilities

- Given limited initial surface supply allocations, heavy reliance on wellfields and previously banked water is expected for the 2022 Water Year (80,000 AF)

Metropolitan Water District (MWD) Program

- MWD beginning balance is 119,127 AF in water bank reserves
- The District obtained its thirteenth consecutive year approval from the State Water Resources Control Board regarding a Petition for a Consolidated Place-of-Use (CPOU) which now expires on July 21, 2023
- The CPOU petition includes the ability to exchange all types of Arvin-Edison supplies with MWD including unbalanced exchanges
- The District’s 10-year NEPA documentation is complete and approved until March 21, 2024

Rosedale-Rio Bravo Water Storage District (RRBWSD) Program

- The District’s 2022 beginning account balance for water held in RRBWSD is at 54,461 AF
- District anticipates receiving 10,000 AF from the program to supplement other surface water supplies

- Districts executed a “2022 Use of CVC/FKC Intertie Agreement” for the RRBWSD-Delano Earlimart banking program

Kern Delta Water District (KDWD)

- Staff continues meeting with KDWD staff to advance water management opportunities including joint partnership in groundwater recharge facilities and interconnection facilities between Forrest Frick Pumping Plant Discharge Pipeline and the Eastside Canal
- AEWSD-KDWD-RRBWSD executed a 2022 operational exchange in which AEWSD’s 10,000 acre-feet from RRBWSD would be delivered via KDWD from April through September

District Partnerships

- The District has participated in water management programs with the following districts/agencies in Water Year 2022:

Chowchilla Water District
Del Puerto Water District
Exeter Irrigation District
Fresno County
Ivanhoe Irrigation District
Kern Delta Water District
Kern Water Bank
Lindmore Irrigation District
Lindsay- Strathmore Irrigation District
Orange Cove Irrigation District
Rosedale-Rio Bravo Water Storage District
San Joaquin River Exchange Contractors
San Joaquin River Restoration Program
Saucelito Irrigation District
Shafter-Wasco Irrigation District
Sun Pacific
Tulare Irrigation District
Westside Mutual Water Company

WATER DEMAND

- District surface water deliveries for the month were 14,349 AF
- The following is a summary of surface water deliveries for August 2022

	August 2022		Year to Date	
	Historical	2022 WY	Historical	2022 WY
Turnout Deliveries	18,891	14, 349	94,133	79, 014
In-Lieu Deliveries	-	-	-	-
Temporary Water	-	-		-
Spreading	-	-	-	-
Total	18,891	14,349	94,2133	79,014

- Exhibit “B” illustrates the delivery data
- The month's peak daily in-District demand was 371 cfs, which occurred on the 24th
- Exhibit "C-1” details Canal Water Quality information
- Exhibit “C-2” presents the Aquatic Pest Control Treatments ($335,746) for Calendar Year 2022

GENERAL

- District vehicles consumed an estimated 4,301 gallons of fuel during the month (average fuel efficiency of 13.1 mpg)

- There were 502 hours lost due to illness (including COVID-19 hours) and 184 hours lost due to on-the-job injuries with one (1) employee out on Workers' Compensation Claim

- Staff continued to assist landowners with the Drought Allocation Program including administration of the 3rd Reallocation Pool

- District is experiencing more frequent theft at various District facilities including Headquarters

- Exhibit "D" highlights precipitation, temperature, and wind speed

- Exhibit "E" summarizes energy consumption and power demand to date and for Water Year 2022 it is expected to generate an electrical demand of approximately 118 million kilowatt hours

ENGINEERING DEPARTMENT ACTIVITIES

Routine Activities

- Review and accounting of District's water supply and related contracts
- Administration or proposals of water management and wheeling agreements
- Groundwater level surveys and associated exhibits
- Water quality testing
- ArcGIS database updates and maintenance (facilities, water service areas, boundaries, etc.)
- Inspection/evaluation and/or repair of cathodic protection rectifiers and test stations
- CIMIS station management (https://cimis.water.ca.gov/Stations.aspx)
- Land use/crop surveys with data entry
- Monthly/annual reports regarding water deliveries, water use, and energy use

Grants & Funding Opportunity Updates

- District **was awarded** 2020 USBR WaterSMART grant application for the Forrest Frick Pipeline/Eastside Canal Intertie at $500,000 (with a $500,000 local cost share) and a grant contract was executed; the NEPA Categorical Exclusion has been completed.
- NRCS landowner incentive programs assist with implementing various conservation activities, including but not limited to, irrigation system improvements, filtration needs, water/nutrient/pest management, and engine replacement:
    - Phone (661) 336-0967
    - Website (www.ca.nrcs.usda.gov)
- North West Kern Resource Conservation District provides discounted on-farm irrigation distribution uniformity and efficiency testing
    - Phone (661) 281-2746
    - Website (http://northwestkernrcd.org)

Other Activities

- Administration and accounting of on-going water management programs
- Technical support and review of ongoing projects/studies such as:
  - Sunset Groundwater Recharge Facility (w/Kern Delta WD)
    - Coordinating power extension (PG&E, contractors, consultants)
    - Pump station and pipeline out for bids with potential award in September
  - Forrest Frick and Eastside Canal Intertie (w/ Kern Delta WD)
    - Completed environmental compliance with USBR
    - Working with PG&E on facilities extension for new service
    - Bid was awarded to W.M. Lyles Company
  - Potential Interconnections (w/ Wheeler Ridge-Maricopa WSD)
    - Coordination with both Districts' staff continued to deliver District water into the 850 Canal, which will ultimately be delivered back into AEWSD overlap lands with Wheeler-Ridge
  - Pump Replacement Program
    - Staff continues to make progress on Phase 2 of the program
  - Turnout Modification Requests
  - Temporary and/or In-Lieu Water Service Contract Requests
    - Freedom Farms
    - Frick Unit (Kern IRWMP project with application due in August)
  - Cathodic protection system upgrades
  - Pump Efficiency Testing
    - As needed for replaced pumps
  - Real Time Water Quality Monitoring
    - Remote connection for data access completed and website display is in progress
  - Intertie Pipeline Inspection
    - Coordinating potential use of pipeline diver tool with Xylem
  - Groundwater Metering
    - Coordinate warranty repairs with Manufacturer
  - Standtank Painting
    - Project management training with Engineering Technician Jose Santana
    - Notice of Completion has been executed
  - Tejon Spreading Works
    - Design repair for interbasin structure
  - Performed job interviews for new Engineering Technician position

SGMA Activities

- Continued coordination meetings and outreach activities
- Continued review of well permits and submitted comment letters to those within or near AEWSD
- Attended various GSA meetings
- Development of a potential Well Mitigation Policy
- Draft response to County's "Proof of Water" Policy
- Evaluate various Water Budget methodologies
- Development of a customized Groundwater Model for AEWSD
- Continued coordination efforts to complete South of Kern River GSP
  - Various Agreements approved and executed

        - Draft South of Kern River GSP was adopted at the "public hearing" on July 12 (posted on website www.aewsd.org)

Requests for Information/Easements/Planning Notices

- Water supply
- Water costs
- Historical groundwater levels
- Monitoring well conversions
- Water quality
- Land use data
- Easements and/or right-of-way encroachments
    - Shell Oil (Intake Canal)
    - Quad Knopf development (Intake Canal)
    - City of Bakersfield (Intake Canal)
    - Kern Delta Water District (Intake Canal)
- Reviewing/responding to multiple planning notices
    - Kern County (various developments/potential facility conflicts)
- Reviewed/responded to environmental documents, as necessary

Power Related Activities

- Assisted PWRPA consultants with
    - Power coordination and monitoring
    - PWRPA invoice and demand data changes
    - Monthly billing anomalies/meter reconciliations
    - Load forecast updates and rate analysis
    - Contract demand analysis
    - WDT 3 impact review
    - Power accounting report
    - Renewable Portfolio Standards review
- PG&E Power Safety Public Shutoff coordination
- Coordinated meter database changes with PG&E
- Reviewed long-term power management activities
    - Continued investigation of low head hydro potential (Intake Canal)
    - District Headquarters Solar construction coordination
        - Construction was completed waiting on County and PG&E for startup
    - Reviewed available local solar renewable energy certificates to Western Renewable Energy Generation Information System (credits to be used by District/PWRPA)
    - Review and coordinate Demand Response Program
    - MWD power correspondence review
    - District Power Master Planning and MicroGrid investigations
    - Forrest Frick Pumping Plant load capacity coordination
- Coordinate long term power analysis for Sunset GW Recharge Facility
- Calendar Year and Water Year power reconciliations and summaries
- Groundwater Service Program
    - Monthly invoicing and program coordination

SPREADING WORKS OPERATIONS (WELLFIELDS AND BASINS)

- Exhibit “F” summarizes wellfield production, which totaled 5,934 AF for the month
- Exhibit “G” summarizes gross direct spreading of zero AF for the month August
- Exhibits “H-1” and “H-2” summarize current static and/or pumping water in table and graphic forms

Following is a summary of repairs associated with “active” District wells:

Field	Well #	Year	HP	Reason	Work
Sycamore	2	1967	300	Low Production and Excess Vibrations	Pulled equipment, replacement pump install to be scheduled
Sycamore	17	1967	300	Low Production	Back in Service
Sycamore	21	1970	300	Low Production	Back in Service
Tejon	77	1966	300	Excess Vibrations	Pulled equipment, replacement pump installed
Tejon	78	1966	300	Low Production	Pulled and inspected equipment, pump install to be scheduled
Tejon	83	1970	300	Excess Vibrations	Pulled and inspected equipment, replacement pump installed, startup scheduled
Tejon	95	1998	300	Low Production and Excess Vibrations	Equipment pulled, video, replacement pump install to be scheduled

- Seven (7) out of 86, or 8%, of District wells are currently out of service and consultants are reviewing repair options
    - Two (2) long-term failures in Sycamore 34 and Tejon 91

OPERATIONS DEPARTMENT ACTIVITES

Routine Activities

- Operate and monitor the District’s water distribution and delivery systems including canals, wells, and reservoirs
- Monthly safety meetings
- Inspected control systems at pumping plants (transducers, Cla-valves, battery back-ups, etc.)
- Assisted personnel in the repair, replacement, and/or maintenance of facilities on an as-needed basis for the following items:
    - Replaced flowmeter batteries (turnouts and wells)
    - Flushed and cleaned various turnouts and appurtenances
    - Greased turnout valve operators
    - Maintained weed control (pumping plants, turnouts, air vents, and isolation valves)
    - Changed lights and panel bulbs (as needed)

        - Inspected/replaced water quality warning labels at turnouts
        - Cleaned and/or replaced air-chamber sight glasses
        - Replaced missing locks and chains (canal gates and turnouts)
    - Staff performed middle of the month and end-of-month meter readings at Interties, Wells, Turnouts, and Pumping Plants (power)

Additional Activities

- Continued wellfield operations
- Cross-trained staff for Basin/Console Operator position
- Continued water patrol during the prorate period
- Attended pump and power load test at FFPP
- Perform wellfield switch over for water quality testing at all District locations
- Flush/clean lateral pipeline and wellfield airvents (North and South side)
- Responded to multiple facilities and pumping plant alarms (reset and primed laterals)
- Assisted PG&E with shutdowns for Power Demand and Response Program
- Addressed various wellfield start-up/shut down issues
- Stencil identification numbers on turnouts, air vents, and isolation valves Greased and exercised various turnout/wellfield valve operators (North & South)
- Repaired or replaced meters (Turnouts C-112, T-30, W-19, and M-39) valve operators (T31, W-4, and T-23)
- Assisted Standtank Painting crew with pressure water

Replacing Meter at Turnout C-112

Underground Service Alert (USA) Report

- District initiated 0
- Responded to 114 USA notices to locate District underground facilities
    - 18 required markings of District facilities
    - 31 were renewals
    - 65 with no conflicts

Power Outages and/or Interruptions Involving the Following Systems

- Power outages for the month were (Laterals N1 (1), N8 (2), N55 (1), and S38 (1))

Laterals Prorates (number of days)

- S38 (2)

MAINTENANCE DEPARTMENT ACTIVITIES

Routine Activities

- Aquatic and terrestrial weed control (South Canal)
- Routine gardening and maintenance at Headquarters and CIMIS station

- Fence and gate repairs (Balancing Reservoir, Intake Canal, and Gosford to Panama Lane)
- Grading and water truck (Sycamore Ponds)
- Discing (Sycamore Spreading Works)
- Mowing (CIMAS Station and Sycamore Spreading Works)
- Cleared out forebays (North and South Canal)
- Assisted other Departments as needed (Mechanic, Operations, and Pump Shop)
- Conducted monthly safety meeting

Additional Activities

- Assisted Maintenance Shop rebuilding disc
- Repair gate hinges (Tejon Spreading Works)
- Removed and cut down tree (Headquarters)
- Installed new fans (Lateral N55-P1)
- Discing at Balancing Reservoir
- Repaired sprinklers on CIMIS station
- Used backhoe to remove weeds (FFPP forebay)
- Used dump truck and Gradall to remove build up (Bear Mountain Blvd. bridge)
- Used Grader and water truck (Sycamore & North Ponds)
- Used backhoe, water truck, and grader (FFPP banks and roads)
- Used backhoe to repair washout and Wasteway entrance
- Prepared and painted various facilities:
  - Tejon motor control building
  - Pumping Plant S32-P1
  - Replaced 60-feet of stolen fencing (Lateral N8-P4)

Replacing Gear Box for Check Gate (Tejon Spreading Works

Mechanic's Shop Repair Activities

- Routine weekly inspection on the fuel tank, gas pumps, and generator
- Fleet repairs/replacement parts

Part	Repair/Replaced	Part	Repair/Replaced
Brakes	4	A/C Compressor	9
Tires	6	Headlights	1
Tire Repairs	4	Tail Lights	2
Rotors/Drums /Wheel Bearings	2	Wiper Blades/Engine Washes	12
Batteries	4	Cabin Filter	8
Fuel Filter/Fuel Pumps	7	Trailer Lights	2
Tune-ups	2	Routine Service	18

- Heavy Equipment Repairs
  - Repaired air conditioning (Challenger Tractor and John Deer Backhoe)
  - Installed new tire (Backhoe)
  - Installed new bearings and discs (Krause disc)
  - Weekly inspection (gas tank and pump)

PUMP DEPARTMENT ACTIVITIES

Routine Pump Maintenance Activities

- Replacing pump packing
- Pump bearing lubrication at various pumping plants
- Maintain drip oil on District Wells
- Inspection and maintenance of air compressors
- Inspection and/or adjustment of travelling water screens/moss screens

Additional Activities

- Continued working with Engineering Department on Pump Replacement Program
  - Continued pilot testing for Phase 2 (horizontal pumps)
- Staff attended ITRC Pumps I & II training at Cal Poly Tech San Luis Obispo
- Replaced motor (S64-P2 Compressor #1)
- Repaired check valve spring (S64-P2)

PUMP & MOTOR REPAIR SUMMARY

	Pumping Plant/Wells	Unit	Size	Time/Hours	Reason
Vertical Pumps	S38-P1	4	5 CFS	8,500	Failed bushings/impeller
	Spillway	4	20 CFS	11,000	Failed bushing/liner
Vertical Motors	Spillway	4	75 HP	11,000	Reverse Ratchet
Horizontal Pumps	N55-P2	5	10 CFS	New Meter	Broken shaft
Horizontal Motors	N55-P2	5	200 HP	2,000	Windings
	N55-P4	2	200 HP	6,300	Windings
	N8-P2	2	200 HP	29,000	Windings/water damage

CONTROLS DEPARTMENT ACTIVITIES

Routine Activities

- SCADA/radio maintenance or troubleshooting
- Monthly and annual inventory
- Testing and repair/replacement of distribution system and well facility electrical components as needed

Component	Replaced/Repaired	Component	Replaced/Repaired
Contactors/Soft Start	1	Circuit Breakers	2
PLC's/Control Modules	2	Trip Units	2
Hour Meters	1	Photo Cell Lights	2
Panel Wiring/Circuit Breakers	1	12KV Fuses	1

Additional Activities

- Programed Master SCADA ignition pro designer software, updated graphic designs for pumping plants
- Worked with CEI and Aspect technicians to troubleshoot the "loss of signal" and "communication shutdown" alarms (Lateral S73-P2)

- Worked with GIGA Electrical to modify the motor control panel and retrofitted the new installed circuit breakers (Laterals N8-P2 Unit #2 and N55-P2 Unit #7)
- Assisted Agilitech to replace radio antenna on top of Standtank of S73-P2

FORREST FRICK PUMPING PLANT

- 9,247 AF of water was pumped during the month
- Consultants are designing reverse flow facilities into the Intake Canal to assist in regulating wellfield production during shoulder months to increase peaking water supplies

HOWARD FRICK PUMPING PLANT (AQUEDUCT INTERTIE)

- There was no import (gravity delivery) or export (pumped delivery) of water (0 AF) through the Howard Frick Pumping Plant/Pipeline.

EXHIBIT "A-1"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 WATER SUPPLY AND DEMAND

SUPPLY		***AF***	***%***
FRIANT-KERN (F-K)			
CARRYOVER OF 2021 WATER		6,317	
30% OF 40,000 AF CLASS 1		12,000	
0% OF 311,675 AF CLASS 2 (Uncontrolled Season)/RWA		0	
0% OF 311,675 AF CLASS 2		0	
URF TIER 2 BLOCK 1		2,000	
PRIORITY URF		5,600	
URF TIER 2 BLOCK 2		1,581	
PRIORITY URF		4,403	
TRANSFER IN URF (TID)		870	
TRANSFER IN URF (LSID)		1,000	
TRANSFER IN CLASS 1 (SWID)		174	
	SUBTOTAL	33,945	
FRESNO COUNTY		-600	
SJRRP RETURN		-3,500	
EXETER ID		-282	
IVANHOE ID		-281	
LINDMORE ID		-214	
ORANGE COVE ID		-50	
SAUCELITO ID		-100	
	TOTAL F-K	28,918	24.1%
CROSS VALLEY CANAL (CVC)			
ROSEDALE-RIO BRAVO WSD (KDWD EXCHANGE)		0	
SLR 2022 RECIRCULATION		17	
LINDMORE ID		14	
CHOWCHILLA WD		24	
SHAFTER-WASCO ID		51	
DEL PUERTO WD		-106	
SLR 1% EVAPORATION LOSS		0	
	TOTAL CVC	0	0.0%
STATE WATER PROJECT (AQUEDUCT)			
KT EXCHANGE		0	
	TOTAL AQUEDUCT	0	0.0%
INTERTIE PIPELINE (IPL)			
RETURN TO MWD		0	
	TOTAL IPL	0	0.0%
KERN RIVER			
FRESNO COUNTY		0	
MWD BANKING		0	
KERN DELTA (RRBWSD EXCHANGE)		0	
	TOTAL KERN RIVER	0	0.0%
INTAKE CANAL PUMP-IN (IC)			
KERN DELTA WELLS		7,181	
KERN DELTA CENTRAL		2,819	
	TOTAL INTAKE CANAL	10,000	8.3%
TOTAL IMPORT		**38,918**	**32.4%**
GROUNDWATER PUMPING			
IRRIGATION DEMAND		81,041	
FARM PUMP IN		0	
RETURN TO MWD		0	
	TOTAL PUMPING	81,041	67.6%
TOTAL WATER SUPPLY		119,959	100.0%

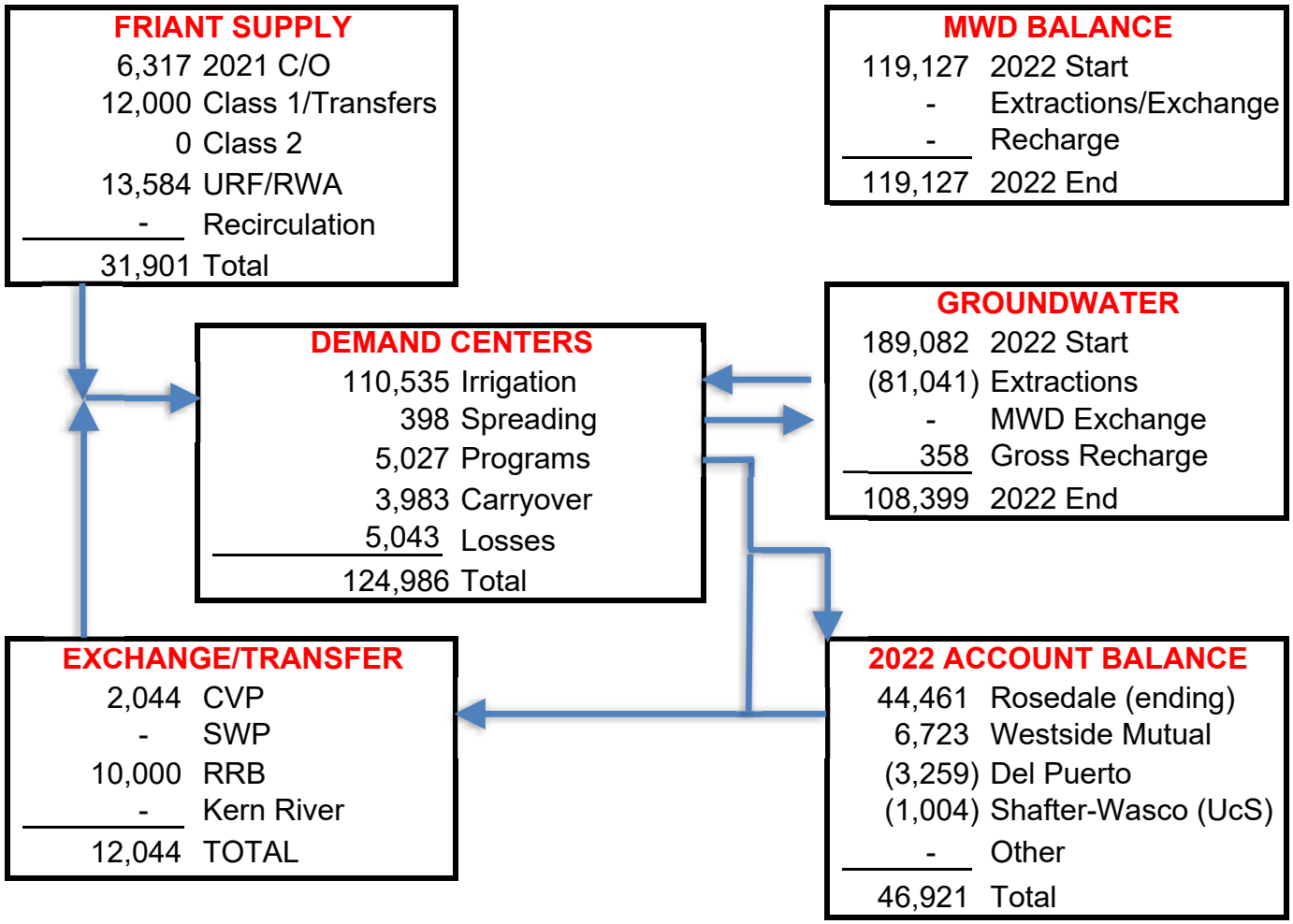
DEMAND		
IRRIGATION DEMAND (MARCH-AUGUST)	78,998	65.9%
IRRIGATION DEMAND (SEPTEMBER-FEBRUARY)	31,537	26.3%
SPREADING (MARCH-AUGUST)	398	0.3%
SPREADING (SEPTEMBER-FEBRUARY)	0	0.0%
CARRYOVER TO 2023	3,983	3.3%
LOSSES/METERING INACCURACIES	5,043	4.2%
TOTAL DEMAND	119,959	100.0%

9/8/2022

Exhibit "A-2"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 WATER MANAGEMENT



Surface Water	29,892	27%
Groundwater (50% of Max)	81,041	73%
Projected Irrigation Demand	110,933	100%

EXHIBIT "B"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 WATER YEAR DELIVERIES

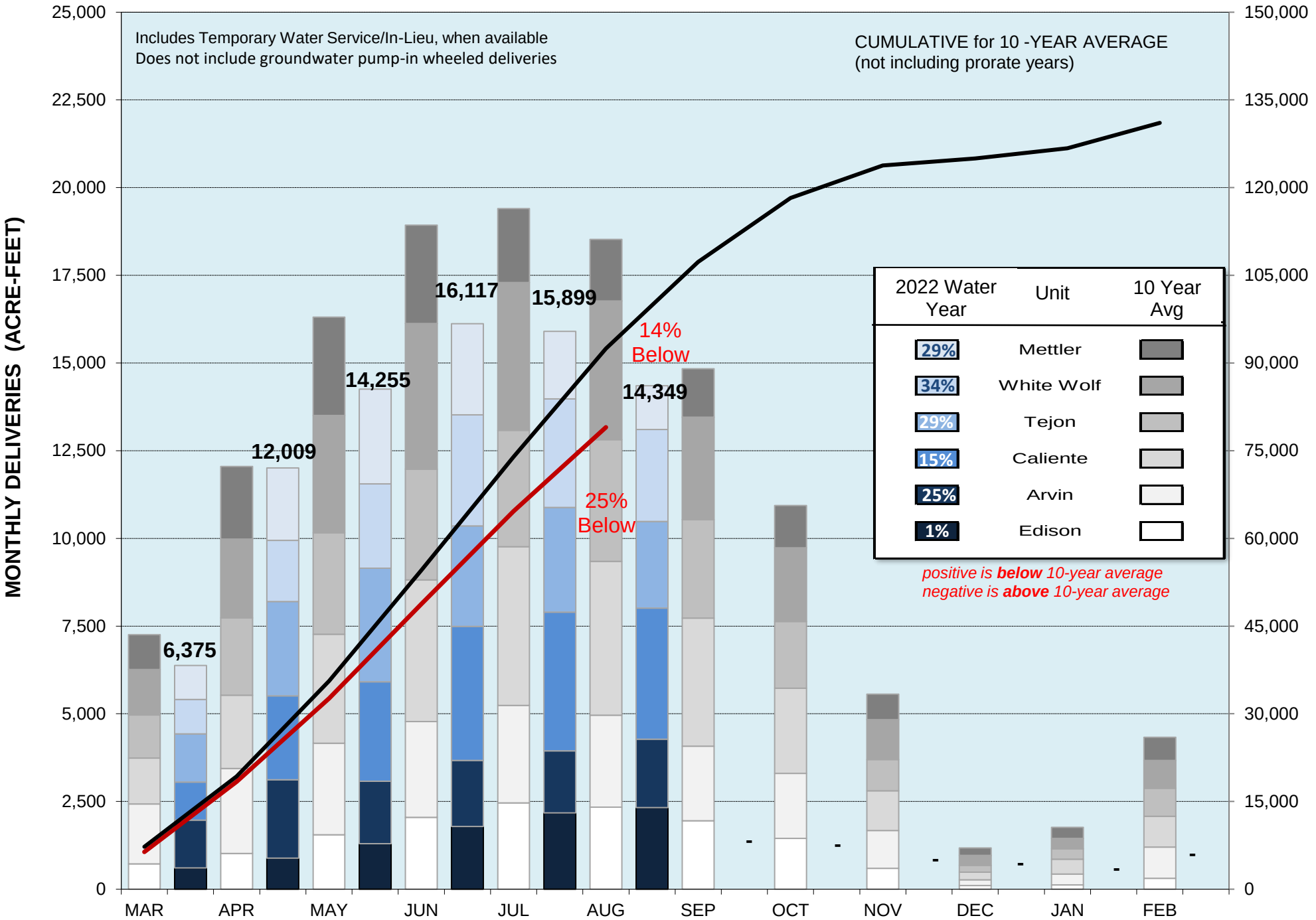


EXHIBIT "C1"

ARVIN-EDISON WATER STORAGE DISTRICT

WATER SUPPLY WATER QUALITY SUMMARY

	Date	Flow	Import	Calcium		Magnesium		Sodium		Bicarbonate		Chloride		Nitrate		TDS	pH	EC	Hardness	SAR	Gypsum	Boron	Turbidity
		cfs	Source	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l		umhos/cm	mg/l		lbs/AF	mg/l	NTU
Intake Canal	08/11/22	180	FKC(82%)/KD WELLS(18%)	13.0	0.65	1.4	0.11	11.0	0.47	52	0.85	6.7	0.19	3.00	0.05	71	8.12	135	37	0.8	0.46	0.052	1.6
	07/08/22	82	FKC(61%)/KD WELLS(39%)	23.0	1.15	2.3	0.19	19.0	0.82	90	1.48	12.0	0.34	4.80	0.08	120	8.44	223	67	1.0	0.98	0.096	1.9
	06/07/22	30	FKC(81%)/KD WELLS & KD CENTRAL(19%)	30.0	1.50	4.5	0.37	26.0	1.12	110	1.80	17.0	0.48	8.70	0.14	170	8.4	313	93	1.2	0.37	0.15	2.1
	05/09/22	30	KD WELLS & KD CENTRAL(100%)	20.0	1.00	3.5	0.29	24.0	1.03	98	1.61	9.3	0.26	2.50	0.04	130	8.2	254	64	1.3	1.40	0.16	6.4
	04/07/22	30	KD WELLS & KD CENTRAL(100%)	33.0	1.65	5.3	0.43	25.0	1.08	120	1.97	16.0	0.45	7.70	0.12	180	8.2	320	110	1.0	ND	0.16	3.2
	03/09/22	0	RESIDUAL FKC(100%)	6.0	0.30	0.8	0.06	5.5	0.24	29	0.48	3.3	0.09	0.34	ND	33	7.7	70	18	0.6	0.50	0.03	4.7
	02/08/22	150	FKC(100%)	3.9	0.20	0.6	0.05	4.3	0.19	20	0.33	4.1	0.12	0.50	0.01	20	7.6	53	12	0.1	0.00	0.10	2.8
	01/10/22	60	FKC(100%)	5.2	0.26	0.7	0.06	4.5	0.19	26	0.43	2.8	0.08	0.37	0.01	29	7.5	56	16	0.5	0.45	0.04	4.2
	12/13/21	0	RESIDUAL FKC(100%)	17.0	0.85	1.0	0.08	25.0	1.08	58	0.95	17.0	0.48	6.60	0.11	120	8.1	221	46	1.6	0.12	0.04	1.7
	11/09/21	80	FKC(100%)	16.0	0.80	1.2	0.10	21.0	0.91	67	1.10	13.0	0.37	3.50	0.06	100	8.0	197	46	1.3	0.78	0.09	2.6
	10/07/21	40	CVC(100%)	7.5	0.38	0.7	0.06	8.0	0.34	33	0.54	3.8	0.11	1.10	0.02	43	7.6	79	22	0.8	0.47	0.03	1.8
	09/09/21	60	CVC(100%)	8.0	0.40	0.7	0.06	7.8	0.34	36	0.59	4.3	0.12	1.10	0.02	45	7.8	90	23	0.7	0.54	0.02	2.3
	08/09/21	35	CVC(56%)/KD WELLS(44%)	28.0	1.40	4.0	0.33	21.0	0.91	110	1.80	14.0	0.39	6.80	0.11	150	8.3	274	88	1.0	0.03	0.11	1.6
	07/08/21	35	CVC(56%)/KD WELLS(44%)	27.0	1.35	2.8	0.23	27.0	1.16	110	1.80	18.0	0.51	5.10	0.08	150	8.3	298	80	1.3	0.97	0.12	2.6
	Average			**16.8**	**0.8**	**2.2**	**0.2**	**16.6**	**0.7**	**68.1**	**1.1**	**10.2**	**0.3**	**3.7**	**0.1**	**97.5**	**8.0**	**185.4**	**51.5**	**0.9**	**0.5**	**0.1**	**3.0**
North Canal	08/11/22	80	FKC(59%)/KD WELLS(13%)/WELLS(28%)	23.0	1.15	3.7	0.30	35.0	1.51	100	1.64	21.0	0.59	10.00	0.16	180	8.4	323	73	1.8	1.30	0.28	2.1
	07/08/22	80	FKC(25%)/KD WELLS(16%)/WELLS(59%)	27.0	1.35	4.4	0.36	43.0	1.85	120	1.97	23.0	0.65	9.30	0.15	200	8.4	373	87	2.0	1.40	0.29	2.8
	06/07/22	94	FKC(43%)/KD WELLS & KD CENTRAL(10%)/WELLS(47%)	21.0	1.05	3.7	0.30	55.0	2.37	120	1.97	27.0	0.76	11.00	0.18	220	8.4	380	68	2.9	3.20	0.41	2.8
	05/09/22	48	KD WELLS & KD CENTRAL(18%)/WELLS(82%)	26.0	1.30	4.9	0.40	55.0	2.37	140	2.30	30.0	0.84	11.00	0.18	240	8.3	450	85	2.6	2.30	0.41	3.2
	04/07/22	48	KD WELLS & KD CENTRAL(18%)/WELLS(82%)	19.0	0.95	3.8	0.31	27.0	1.16	100	1.64	13.0	0.37	5.80	0.09	130	8.1	241	64	1.5	1.70	0.09	3.6
	03/09/22	38	WELLS(100%)	16.0	0.80	2.9	0.24	43.0	1.85	95	1.56	20.0	0.56	2.10	ND	160	8.6	322	52	2.6	2.80	0.37	4.4
	02/08/22	134	FKC(100%)	5.0	0.25	0.6	0.05	4.4	0.19	23	0.37	5.1	0.14	0.50	0.01	22	8.0	59	15	0.1	0.00	0.10	4.7
	01/10/22	80	FKC(100%)	7.2	0.36	0.8	0.06	4.7	0.20	40	0.66	2.9	0.08	0.36	0.01	39	7.5	69	21	0.5	1.00	0.05	5.1
	12/13/21	0	RESIDUAL FKC(100%)	31.0	1.55	2.7	0.22	21.0	0.91	130	2.13	9.4	0.26	2.80	0.05	150	7.7	310	88	1.0	1.60	0.07	6.7
	11/09/21	58	FKC(100%)	17.0	0.85	1.3	0.11	19.0	0.82	71	1.16	12.0	0.34	2.70	0.04	98	8.2	190	47	1.2	0.94	0.10	3.3
	10/07/21	14	CVC(24%)/WELLS(76%)	20.0	1.00	3.5	0.29	54.0	2.33	130	2.13	23.0	0.65	8.90	0.14	200	8.3	346	63	3.0	3.50	0.40	2.0
	09/09/21	70	CVC(31%)/WELLS(69%)	18.0	0.90	3.6	0.30	56.0	2.41	120	1.97	26.0	0.73	10.00	0.16	200	8.4	369	60	3.1	4.10	0.41	3.0
	08/09/21	14	CVC(10%)/KD WELLS(8%)/WELLS(82%)	24.0	1.20	4.4	0.36	34.0	1.47	130	2.13	15.0	0.42	12.00	0.19	170	8.2	314	77	1.7	2.40	0.12	2.9
	07/08/21	58	CVC(10%)/KD WELLS(8%)/WELLS(82%)	19.0	0.95	3.8	0.31	43.0	1.85	130	2.13	19.0	0.53	8.20	0.13	180	8.3	335	63	2.4	3.40	0.26	1.9
	Average			**18.6**	**0.9**	**3.0**	**0.2**	**34.7**	**1.5**	**102.4**	**1.7**	**16.9**	**0.5**	**6.3**	**0.1**	**150.8**	**8.1**	**282.1**	**58.6**	**1.9**	**2.2**	**0.2**	**3.6**
South Canal	08/11/22	70	FKC(53%)/KD WELLS(11%)/WELLS(36%)	31.0	1.55	6.7	0.55	39.0	1.68	120	1.97	34.0	0.96	13.00	0.21	220	8.3	399	110	1.7	ND	0.22	1.5
	07/08/22	90	FKC(20%)/KD WELLS(13%)/WELLS(67%)	33.0	1.65	7.8	0.64	41.0	1.77	140	2.30	33.0	0.93	12.00	0.19	230	8.3	422	110	1.7	ND	0.21	2.4
	06/07/22	150	FKC(34%)/KD WELLS & KD CENTRAL(8%)/WELLS(58%)	29.0	1.45	7.6	0.62	50.0	2.16	140	2.30	41.0	1.15	11.00	0.18	240	8.2	437	100	2.1	1.20	0.27	1.3
	05/09/22	30	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	23.0	1.15	5.1	0.42	51.0	2.20	120	1.97	29.0	0.81	16.00	0.26	230	8.5	424	79	2.5	2.60	0.40	3.0
	04/07/22	80	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	33.0	1.65	9.8	0.80	37.0	1.59	140	2.30	37.0	1.04	9.20	0.15	220	8.2	419	120	1.4	ND	0.11	1.2
	03/09/22	20	WELLS(100%)	16.0	0.80	2.9	0.24	42.0	1.81	110	1.80	19.0	0.53	1.60	ND	160	8.6	311	51	2.6	3.80	0.37	5.0
	02/08/22	70	FKC(100%)	5.2	0.26	0.6	0.05	4.4	0.19	24	0.40	3.9	0.11	0.50	0.01	26	7.8	60	16	0.1	0.00	0.10	3.6
	01/10/22	40	FKC(100%)	8.0	0.40	0.8	0.06	4.8	0.21	36	0.59	2.8	0.08	0.35	0.01	37	7.8	73	23	0.5	0.51	0.05	3.8
	12/13/21	N/A	DOWN FOR WINTER MAINTENANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/09/21	160	FKC(100%)	18.0	0.90	1.4	0.11	20.0	0.86	74	1.21	12.0	0.34	2.70	0.04	100	8.1	199	51	1.2	0.86	0.10	3.1
	10/07/21	120	CVC(17%)/WELLS(83%)	32.0	1.60	8.6	0.70	49.0	2.11	140	2.30	40.0	1.12	11.00	0.18	240	8.1	428	120	2.0	0.05	0.21	2.0
	09/09/21	110	CVC(23%)/WELLS(77%)	32.0	1.60	9.2	0.75	45.0	1.94	140	2.30	44.0	1.24	10.00	0.16	240	8.3	453	120	1.8	0.06	0.22	1.8
	08/09/21	0	CVC(7%)/KD WELLS(5%)/WELLS(88%)	40.0	2.00	12.0	0.98	45.0	1.94	160	2.62	61.0	1.71	12.00	0.19	280	8.2	525	150	1.6	ND	0.14	1.6
	07/08/21	90	CVC(7%)/KD WELLS(6%)/WELLS(87%)	31.0	1.55	8.7	0.71	41.0	1.77	140	2.30	37.0	1.04	11.00	0.18	230	8.2	440	110	1.7	0.27	0.16	1.5
	Average			**24.3**	**1.2**	**6.1**	**0.5**	**35.4**	**1.5**	**111.3**	**1.8**	**29.7**	**0.8**	**7.8**	**0.1**	**182.1**	**8.2**	**342.6**	**85.5**	**1.6**	**1.0**	**0.2**	**2.5**

EXHIBIT "C1"

ARVIN-EDISON WATER STORAGE DISTRICT

WATER SUPPLY WATER QUALITY SUMMARY

	Date	Flow[1]	Import	Calcium		Magnesium		Sodium		Bicarbonate		Chloride		Nitrate		TDS	pH	EC	Hardness	SAR	Gypsum	Boron	Turbidity
		cfs	Source	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l		umhos/cm	mg/l		lbs/AF	mg/l	NTU
Intertie Pipeline	08/11/22	0	FKC(53%)/KD WELLS(11%)/WELLS(36%)	27.0	1.35	6.6	0.54	42.0	1.81	110	1.80	34.0	0.96	11.00	0.18	220	8.38	396	94	1.9	0.19	0.26	3.4
	07/08/22	0	FKC(20%)/KD WELLS(13%)/WELLS(67%)	34.0	1.70	8.5	0.70	43.0	1.85	140	2.30	36.0	1.01	12.00	0.19	240	8.23	442	120	1.7	ND	0.24	2.3
	06/07/22	0	FKC(34%)/KD WELLS & KD CENTRAL(8%)/WELLS(58%)	29.0	1.45	8.1	0.66	45.0	1.94	130	2.13	38.0	1.07	11.00	0.18	230	8.4	426	110	1.9	0.73	0.24	4.3
	05/09/22	0	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	30.0	1.50	8.7	0.71	42.0	1.81	130	2.13	37.0	1.04	10.00	0.16	230	8.5	440	110	1.8	0.75	0.19	5.4
	04/07/22	0	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	33.0	1.65	9.5	0.78	36.0	1.55	140	2.30	35.0	0.98	9.50	0.15	220	8.2	402	120	1.4	ND	0.12	2.7
	03/09/22	0	WELLS(100%)	15.0	0.75	3.0	0.25	15.0	0.65	65	1.07	10.0	0.28	4.10	0.07	90	8.2	187	51	0.9	0.24	0.07	4.4
	02/08/22	-40	FKC(100%)	6.7	0.34	0.8	0.06	4.5	0.19	26	0.43	4.4	0.12	0.50	0.01	29	8.1	76	20	0.0	0.00	0.10	7.0
	01/10/22	-40	FKC(100%)	9.8	0.49	0.9	0.08	5.7	0.25	41	0.67	3.5	0.10	0.54	0.01	44	7.9	87	28	0.5	0.45	0.05	4.5
	12/13/21	N/A	DOWN FOR WINTER MAINTENANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/09/21	0	FKC(100%)	22.0	1.10	4.6	0.38	31.0	1.34	93	1.52	18.0	0.51	4.90	0.08	150	8.4	299	73	1.6	0.72	0.20	4.0
	10/07/21	0	CVC(17%)/WELLS(83%)	38.0	1.90	12.0	0.98	48.0	2.07	150	2.46	49.0	1.38	12.00	0.19	270	8.3	477	140	1.7	ND	0.17	4.5
	09/09/21	0	CVC(23%)/WELLS(77%)	37.0	1.85	12.0	0.98	44.0	1.90	160	2.62	49.0	1.38	13.00	0.21	260	8.2	496	140	1.6	ND	0.14	5.3
	08/09/21	0	CVC(7%)/KD WELLS(5%)/WELLS(88%)	31.0	1.55	10.0	0.82	43.0	1.85	130	2.13	44.0	1.24	11.00	0.18	240	8.5	451	120	1.7	ND	0.15	2.4
	07/08/21	0	CVC(7%)/KD WELLS(6%)/WELLS(87%)	32.0	1.60	9.9	0.81	43.0	1.85	150	2.46	40.0	1.12	11.00	0.18	240	8.3	453	120	1.7	0.04	0.17	1.8
	Average			**25.8**	**1.3**	**7.2**	**0.6**	**32.5**	**1.4**	**110.5**	**1.8**	**29.8**	**0.8**	**8.0**	**0.1**	**182.1**	**8.3**	**344.9**	**93.8**	**1.3**	**0.4**	**0.1**	**4.2**

Water Supply Water Quality Note: [1] Positive flow rate is reverse flow into the District. Where the reported value is ND, the method detection limit is entered.

Water Supply Water Quality Note: [2] Reverse flow into the District South Canal (Sycamore check gate was closed).

Water Supply Water Quality Note: [3] Constituent ran past sample hold time.

ND: NONE DETECTED.

NA: NOT AVAILABLE OR NOT TESTED.

mg/l: MILLIGRAMS PER LITER; SAME AS PARTS PER MILLION (ppm).

me/l: MILLEQUIVALENTS PER LITER; SAME AS EQUIVALENTS PER MILLION (epm).

INTAKE: SAMPLE TAKEN AT COTTONWOOD RD. SOUTH OF PANAMA LANE.

NORTH: SAMPLE TAKEN DOWNSTREAM OF SYCAMORE CHECK GATE.

SOUTH: SAMPLE TAKEN DOWNSTREAM OF TEJON CHECK GATE.

INTERTIE: TERMINUS OF SOUTH CANAL (S93 FOREBAY).

SODIUM: FOR SURFACE IRRIGATION: SAR < 3 IS GOOD. FOR SPRINKLER IRRIGATION: SODIUM < 3 me/l IS GOOD.

NITRATE: NITRATE IN WATER SLIGHTLY REDUCES FERTILIZER REQUIREMENT.

BICARBONATE: BICARBONATE < 1.5 me/l IS SATISFACTORY FOR OVERHEAD SPRINKLERS.

CHLORIDE: FOR SURFACE IRRIGATION CHLORIDE < 4 me/l IS GOOD.

TDS: TDS < 450 IS ACCEPTABLE FOR UNRESTRICTED USE.

GYPSUM: AMOUNT OF CALCIUM SULFATE IN POUNDS PER ACRE-FOOT OF WATER APPLIED. INCREASES WATER PERMEABILITY AND HELPS CORRECT EXCESS SODIUM. INCREASES CLAY FLOCCULATION FOR INCREASING PERMEABILITY.

pH: A MEASURE OF ACIDITY. A pH < 7 IS ACIDIC, pH = 7 IS NEUTRAL, pH > 7 IS BASIC. NORMAL RANGE IS 6.5 - 8.4. A pH > 8 MAY NEED TO BE BUFFERED FOR PESTICIDE APPLICATION. AFFECTS NUTRIENT AVAILABILITY.

EC: ELECTRICAL CONDUCTIVITY. A MEASURE OF WATER SALINITY; SOIL - IN MILLIMHOS PER CENTIMETER (mmho/cm); WATER - MORE OFTEN, IN MICROMHOS PER CENTIMETER (umhos/cm). EC < 700 (umhos/cm) HAS NO RESTRICTIONS FOR AGRICULTURAL USE. EC < 200 (umhos/cm) CAN REDUCE INFILTRATION RATE.

HARDNESS: HARD WATER, INDICATING CALCIUM AND MAGNESIUM, IS BENEFICIAL FOR AGRICULTURE.

SAR: SODIUM ADSORPTION RATIO. A RATIO OF SODIUM TO CALCIUM AND MAGNESIUM.
EVALUATE WITH EC.
SAR = 0 - 3 AND EC > 400 ACCEPTABLE
SAR = 3 - 6 AND EC > 900 ACCEPTABLE

BORON: BORON < 0.50 mg/l IS SATISFACTORY FOR ALL CROPS. EXCESSIVE BORON IS PHYTOTOXIC (BURNS) TO PLANTS.

EXHIBIT "C-2"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 AQUATIC PEST CONTROL TREATMENTS TO CANALS & SPREADING BASINS

Treatment Weeks (Monday)		Temps	Intake	North						South									
			Stine Siphon	Bal. Res.	PP 24P1	NCSW	PP 41P1	PP 55P1	Syc. Ponds	Syc. Check	PP 32P1	PP 38P1	Tej. Ponds	Tej. Check	615 Check	729 Check	883 Check	Spill Way	Intertie Forbay
			353+87	145+00	237+00	326+50	413+10	546+00	576+50	664+30	291+50	386+30		458+40	615+00	729+10	883+00	885+45	900+27
JAN	01/03/22	36-62																	
	01/10/22																		
	01/17/22																		
	01/24/22																		
	01/31/22																		
FEB	02/07/22	33-67																	
	02/14/22																		
	02/21/22																		
	02/28/22																		
	02/28/22																		
MAR	03/07/22	43-73																	
	03/14/22																		
	03/21/22																		
	03/28/22																		
APR	04/04/22	48-77					10	20	20										
	04/04/22					65	2.5	5	5				9			9			
	04/11/22						5	10	10				5	10					
	04/11/22						2.5	2.5	2.5				11	2.5		7			
	04/18/22						10	10											
	04/18/22						2.5	2.5					17			7			
	04/25/22						10	10					10	10	10				
	04/25/22						2.5	2.5					14.5	2.5	2.5	4			
MAY	05/02/22	53-83					2.5	2.5	275	15	14		16			11			
	05/02/22						10	10											
	05/09/22												10		10				
	05/09/22												2.5		2.5				
	05/16/22						2.5	2.5		16	16								
	05/16/22						10	10											
	05/23/22												10			10	10		
	05/23/22					65	194						32.5			2.5	2.5		
	05/30/22					97	32						15			11			
JUN	06/06/22	63-93						10	2.5	21	21		24						
	06/13/22							10	2.5				20	10	2.5	11			
	06/20/22						5	240	80	16	16		12			6			
	06/20/22						10	10											
	06/27/22						2.5	10					23			19			
JUL	07/04/22	69-100						2.5	10					15		10	21		
	07/11/22							88.0	275.0	14	14			7		5			
	07/18/22			105				10	10										
	07/18/22			31					1				18			9			
	07/25/22						10	120.5	170				11			25			
AUG	08/01/22	70-101			127	38	148	65	5				12			5			
	08/01/22						46	10	10										
	08/08/22									26	18		11			10			
	08/15/22					65	204	88	250				8		10	9	10		
	08/22/22						10	10	5	23	23		13			13			
	08/29/22																		
SEPT	09/05/22																		
	09/12/22																		
	09/19/22																		
	09/26/22																		
OCT	10/03/22																		
	10/10/22																		
	10/17/22																		
	10/24/22																		
	10/31/22																		
NOV	11/07/22																		
	11/14/22																		
	11/21/22																		
	11/28/22																		
DEC	12/05/22																		
	12/12/22																		
	12/19/22																		
	12/26/22																		

2022 Cost To Date

Treatment	Material	Labor	Total
Captain/Nautique	$84,002	$8,435	$92,437
Phycomycin	$13,425	$11,795	$25,220
Cascade	$0	$0	$0
Teton/Hydrothol	$179,169	$38,920	$218,089
Spreading Basins	$0	$0	$0
Total	$276,596	$59,150	$335,746

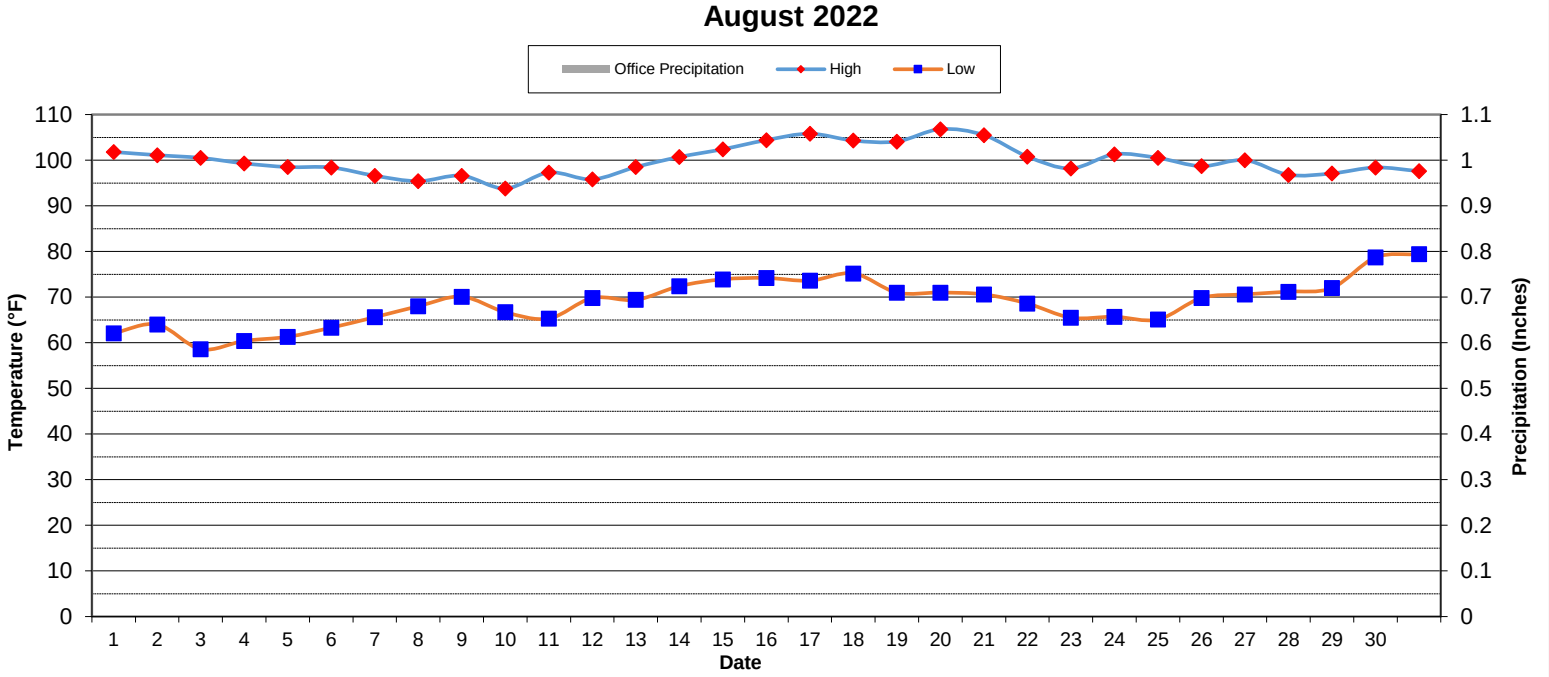
Shaded weeks are actual
Copper treatment (gal/lbs) for algae and pondweed (injected/broadcast)
Phycomycin (hydrogen peroxide) treatment (lbs) for algae (broadcast)
Endothall treatment (gal) for milfoil/basins (injected)
Endothall treatment (gal) for algae (injected)
Sonar/Clearcast/RoundUp Custom/MSO (gal)
Winter Maintenance

Year	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Year Type	Critical-High	Dry	Wet	Normal-Dry	Wet	Normal-Dry	Critical-Low	Critical-High	Dry	Dry	Wet	Normal-Wet	Normal-Wet	Normal-Dry	Dry	Wet	Wet	Normal-Dry	Normal-Dry
Amount	$420,296	$399,808	$105,928	$235,599	$222,685	$186,034	$262,734	$367,563	$528,770	$504,159	$233,449	$24,969	$226,466	$341,506	$464,165	$341,920	$89,797	$65,324	$106,107

EXHIBIT "D"

ARVIN-EDISON WATER STORAGE DISTRICT

SUMMARY OF CLIMATOLOGICAL OBSERVATIONS



PRECIPITATION	BAL RES *(1)*		OFFICE *(2)*		SYCAMORE *(3)*		TEJON *(4)*		INTERTIE *(5)*	
	INCHES	% AVG.	INCHES	% AVG.	INCHES	% AVG.	INCHES	% AVG.	INCHES	% AVG.
AVG. MONTHLY	0.04		0.09		0.07		0.07		0.04	
AVG. YEAR TO DATE	7.33		8.46		8.13		7.13		7.39	
CURRENT MONTH	0.00	7%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
CUMULATIVE (07/01/21 - 06/30/22)	6.76	92%	7.81	92%	9.60	118%	6.98	98%	7.16	97%

TEMPERATURE *(6)*	(ºF)	DATE	TIME
MAXIMUM TEMPERATURE	107	8/20/2022	4:00 PM
AVERAGE MAXIMUM TEMPERATURE	100		
# DAYS THIS MONTH ABOVE 100 ºF	14		
MINIMUM TEMPERATURE	69	8/10/2022	4:00 AM
AVERAGE MINIMUM TEMPERATURE	70		
# DAYS THIS MONTH BELOW 32 ºF	0		

WIND *(6)*	M.P.H.	DATE	TIME	DRCTN
MAXIMUM WIND SPEED	16.0	8/5/2022	7:00 PM	NE
AVERAGE WIND SPEED	6.0			
AVERAGE WIND SPEED @ 8:00 AM	3.6			

BAROMETRIC PRESSURE *(7)*	IN. HG	DATE	TIME
AVERAGE PRESSURE @ 8:00 AM	29.41		
MAXIMUM PRESSURE	29.50	8/1/2022	9:00 AM
MINIMUM PRESSURE	29.10	8/27/2022	8:00 PM

NOTES

(1) October 2018 to Present data gathered from District rain gauges
(2) 1975 to Present data gathered from District rain gauges
(3) 1968 to Present data gathered from District rain gauges
(4) 1967 to Present data gathered from District rain gauges
(5) October 2018 to Present data gathered from District rain gauges
(6) Data retrieved from CIMIS (http://www.cimis.water.ca.gov/WSNReportCriteria.aspx)
(7) Data retrieved from Weather Underground (https://www.wunderground.com/us/ca/arvin/zmw:93203.1.99999)
Precipitation Day is 8:00 AM to 8:00 AM

EXHIBIT "E"

ARVIN-EDISON WATER STORAGE DISTRICT

WY2022 ENERGY CONSUMPTION AND POWER DEMAND

	ENERGY CONSUMED - KWH						TOTAL DEMAND - KW						
Month	Forrest Frick PP	Distrib. System	Spreading	Wells	Intertie PP	Total	Forrest Frick PP	Distrib. System	Spreading	Wells	Intertie PP	Total	Load Factor
MAR 22	97,947	2,033,650	1,275	5,215,376	3,443	7,351,691	1,904	12,244	2	14,649	7	28,805	34%
APR	389,787	3,790,053	1,224	9,611,736	3,469	13,796,269	1,515	13,874	2	19,143	6	34,540	55%
MAY	607,866	4,566,990	13,773	11,461,732	3,770	16,654,130	2,715	14,821	341	19,138	6	37,022	60%
JUN	1,007,223	5,354,176	11,609	11,547,317	3,949	17,924,273	2,998	15,012	170	18,920	7	37,107	67%
JUL	1,415,785	5,520,288	8,626	8,849,588	4,243	15,798,529	4,166	14,719	357	13,224	8	32,473	65%
AUG	1,960,480	5,394,388	1,248	5,302,189	4,559	12,662,864	17,676	13,727	2	7,616	7	39,028	44%
SEP													
OCT													
NOV													
DEC													
JAN 23													
FEB													
TOTAL	5,479,087	26,659,544	37,755	51,987,938	23,433	84,187,756							

Notes: - Since 2005 KW records reflect non-simultaneous demands.

- Energy use for lighting accounts for approximately 90,000 kWh/month at District wellfields and 4,000 kWh/month at the Intertie Pumping Plant

9/8/2022

EXHIBIT "F"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 WATER YEAR WELLFIELD PRODUCTION - AF

Month	Bal Res		North Canal 5		Wellfield						Total		
					North		Sycamore		Tejon				
	AF	% of Historical Max	AF	% of Historical Max	AF	% of Historical Max	AF	% of Historical Max	AF	% of Historical Max	AF	AF / Day	% of Historical Max
MAR - 22	0	0%	988	81%	2,003	78%	1,886	29%	1,495	27%	6,372	206	41%
APR	0	0%	1,113	92%	2,943	96%	3,531	51%	3,503	70%	11,090	370	74%
MAY	0	0%	1,108	89%	3,402	92%	3,868	53%	4,018	74%	12,397	400	82%
JUN	0	0%	1,026	51%	3,160	86%	3,775	188%	3,782	189%	11,743	379	78%
JUL	0	0%	1,105	88%	3,510	92%	2,409	32%	2,636	49%	9,660	312	59%
AUG	0	0%	852	68%	2,086	55%	1,290	18%	1,707	33%	5,934	191	37%
SEP		0%		0%		0%		0%		0%	0	0	0%
OCT		0%		0%		0%		0%		0%	0	0	0%
NOV		0%		0%		0%		0%		0%	0	0	0%
DEC		0%		0%		0%		0%		0%	0	0	0%
JAN - 23		0%		0%		0%		0%		0%	0	0	0%
FEB		0%		0%		0%		0%		0%	0	0	0%
Total	0		6,192		17,105		16,760		17,141		57,197	155	31%
Ratio	0%		11%		30%		29%		30%		100%	Average	
Wells	4		5		14		34		29		86		

EXHIBIT "G"

ARVIN-EDISON WATER STORAGE DISTRICT

2022 WATER YEAR GROSS SPREADING - AF

Month	Bal Res	North Gravity	North Pressure	Sycamore	Tejon Gravity	Tejon Pressure	Murray Gravity	Landowner Recharge	Subtotal	In-Lieu	Temporary Water	Total
MAR-22	0	0	0	0	0	0	0	0	0	0	0	0
APR	0	0	0	0	0	0	0	0	0	0	0	0
MAY	79	0	0	0	0	0	0	0	79	0	0	79
JUN	202	0	0	0	0	0	0	0	202	0	0	202
JUL	117	0	0	0	0	0	0	0	117	0	0	117
AUG	0	0	0	0	0	0	0	0	0	0	0	0
SEP												
OCT												
NOV												
DEC												
JAN-23												
FEB												
Total	398	0	0	0	0	0	0	0	398	0	0	398
Ratio												
Ratio												

Total Pressure	398		0			0			398			398

EXHIBIT "H-1"

ARVIN-EDISON WATER STORAGE DISTRICT

STATIC VS PUMPING WATER LEVELS IN DISTRICT WELLS - AUGUST 2022

ALL VALUES IN FEET

	WELL #	STATIC LEVEL	PUMPING LEVEL	BOWL DEPTH	TOTAL DEPTH	DRAW DOWN	BOWL COVERAGE
NORTH CANAL (23)	N1	432	492	610	840	60	118
	N2	451	568	700	840	118	132
	N3	384	409	610	840	25	201
	N4	444	465	550	864	21	85
	N5	461	470	650	864	9	180
	N6	515	615	640	920	99	25
	N7	475	496	600	1010	21	104
	N8	421	458	560	970	37	102
	N9	453	550	700	990	97	150
	N10	469	513	560	990	44	47
	N11	426	456	562	1020	30	106
	N12	473	498	600	1030	25	102
	N13	475	501	600	1000	25	99
	N14	448	468	540	900	21	72
	N15	390	527	700	1200	136	173
	N16	393	469	600	1200	76	131
	N17	411	518	610	1200	106	92
	N18	449	581	610	1190	132	29
	N19	470	515	760	1300	45	245
	N20	594	631	820	1020	37	189
	N21	469	559	660	950	90	101
	N22	461	483	680	990	22	197
	N23	453	470	680	990	17	210
	Avg	453	509				

	WELL #	STATIC LEVEL	PUMPING LEVEL	BOWL DEPTH	TOTAL DEPTH	DRAW DOWN	BOWL COVERAGE
TEJON (29)	71	590	620	800	1050	30	180
	72	553	581	800	1045	28	219
	73	541	576	800	1018	35	224
	74	537	576	800	1084	39	224
	75	541	557	800	1045	16	243
	76	527	578	700	996	51	122
	77	520	619	800	1066	99	181
	78	525	585	800	1038	60	215
	79	518	573	700	1032	55	127
	80	514	613	800	996	99	187
	81	402	448	700	925	46	252
	82	432	476	800	996	44	324
	83	553	606	800	996	53	194
	84	411	453	700	955	42	247
	86	571	601	800	996	30	199
	87	564	592	800	984	28	208
	88	560	597	800	948	37	203
	89	539	569	800	996	30	231
	90	448	485	700	996	37	215
	91	N/A	N/A	700	996	N/A	N/A
	92	594	638	800	996	44	162
	93	585	601	800	996	16	199
	94	597	636	860	996	39	224
	95	528	554	800	996	26	246
	96	590	689	800	996	99	111
	98	561	601	760	1340	39	159
	99	554	586	760	1340	32	174
	100	544	577	760	1340	33	183
	101	531	591	760	1310	60	169
	Avg	533	578				

	WELL #	STATIC LEVEL	PUMPING LEVEL	BOWL DEPTH	TOTAL DEPTH	DRAW DOWN	BOWL COVERAGE
SYCAMORE (34)	1	460	504	705	800	44	201
	2	476	524	690	876	48	166
	4	485	522	700	876	37	178
	5	498	528	720	876	30	192
	6	424	487	690	876	62	203
	7	481	536	700	830	55	164
	8	432	467	640	860	35	173
	9	485	524	700	886	39	176
	10	461	503	690	850	42	187
	11	460	504	700	880	44	196
	12	481	515	700	860	35	185
	13	448	499	700	850	51	201
	14	409	453	670	810	44	217
	15	474	615	710	820	141	95
	16	471	624	700	888	152	76
	17	435	565	650	820	129	85
	18	449	468	650	820	18	182
	20	454	488	680	804	35	192
	21	445	505	690	856	60	185
	22	434	462	610	792	28	148
	23	434	471	600	788	37	129
	24	439	474	580	780	35	106
	25	432	462	610	777	30	148
	26	445	491	690	816	46	199
	28	408	466	660	782	58	194
	29	459	482	690	787	23	208
	31	447	482	660	725	35	178
	32	414	506	640	739	92	134
	33	460	522	700	780	62	178
	34	N/A	N/A	700	781	N/A	N/A
	35	451	529	700	800	79	171
	36	467	497	600	820	30	103
	37	452	477	540	820	25	63
	38	460	496	860	1270	36	364
	Avg	452	504				

MONTHLY SUMMARY - AVERAGE WATER LEVELS

READINGS END OF	STATIC LEVELS N. CANAL	STATIC LEVELS SYCAMORE	STATIC LEVELS TEJON	PUMPING LEVELS N. CANAL	PUMPING LEVELS SYCAMORE	PUMPING LEVELS TEJON
AUG-21	445	462	548	501	529	605
SEP	448	464	550	506	532	607
OCT	432	445	512	489	502	566
NOV	434	429	501	488	483	547
DEC	431	426	477	486	480	524
JAN	430	421	465	484	476	512
FEB	434	421	463	491	474	510
MAR	435	435	471	492	480	517
APR	448	444	518	505	494	566
MAY	453	471	547	509	525	593
JUN	457	467	547	512	523	591
JUL	454	462	542	510	517	588
AUG-22	453	452	533	509	504	578
CHANGE TO-DATE	-8	10	15	-8	25	27

OUT OF SERVICE (10)

AIRLINE FAILURE (14)

FAILED (2)

86 TOTAL WELLS

*Bowl depth measured to top of pump

*Pumping levels are estimated based on previous draw down records. (6 month average)

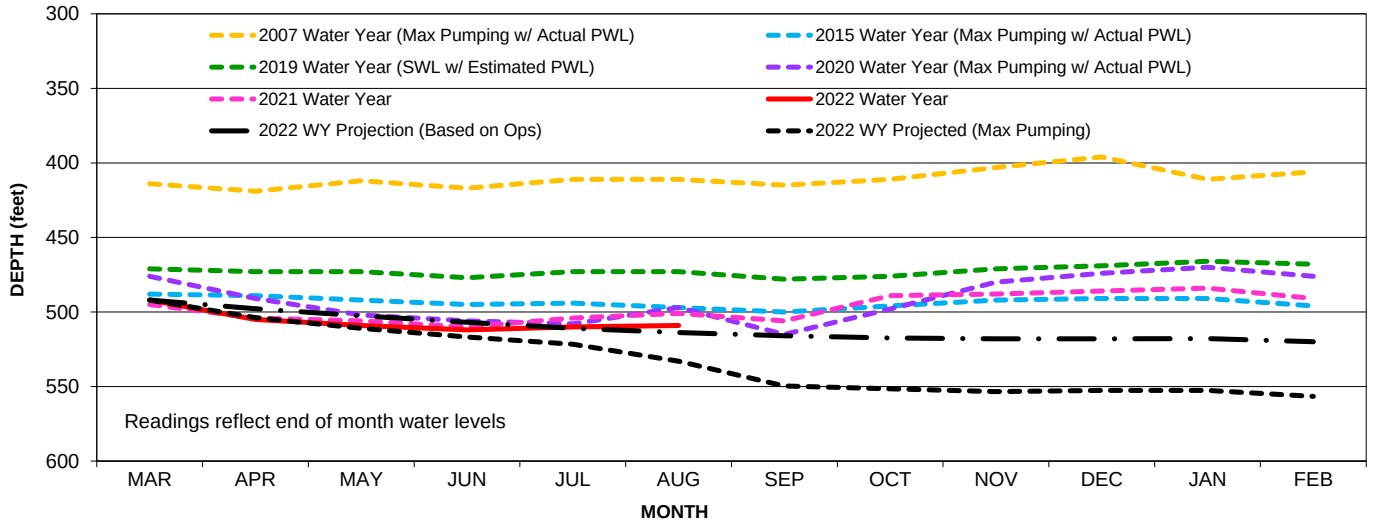
*Airline failure levels were obtained with acoustic sounder

EXHIBIT "H-2"

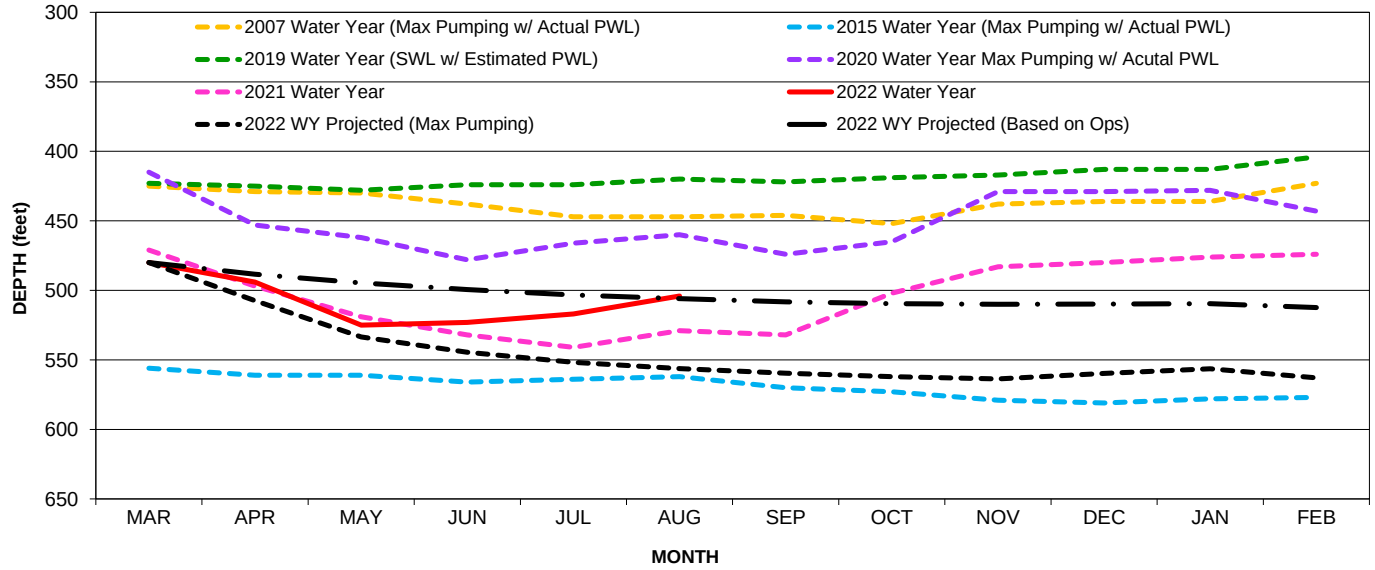
ARVIN-EDISON WATER STORAGE DISTRICT

WELLFIELD PUMPING WATER LEVELS - 2007, 2015, AND 2019-22

NORTH CANAL



SYCAMORE WELLFIELD



TEJON WELLFIELD