



Westlands Water District
MEMORANDUM

TO: SLDMWA BOARD OF DIRECTORS
FROM: TOM BOARDMAN, WATER RESOURCES ENGINEER
SUBJECT: JULY OPERATIONS UPDATE
DATE: JULY 8, 2022

Project Operations

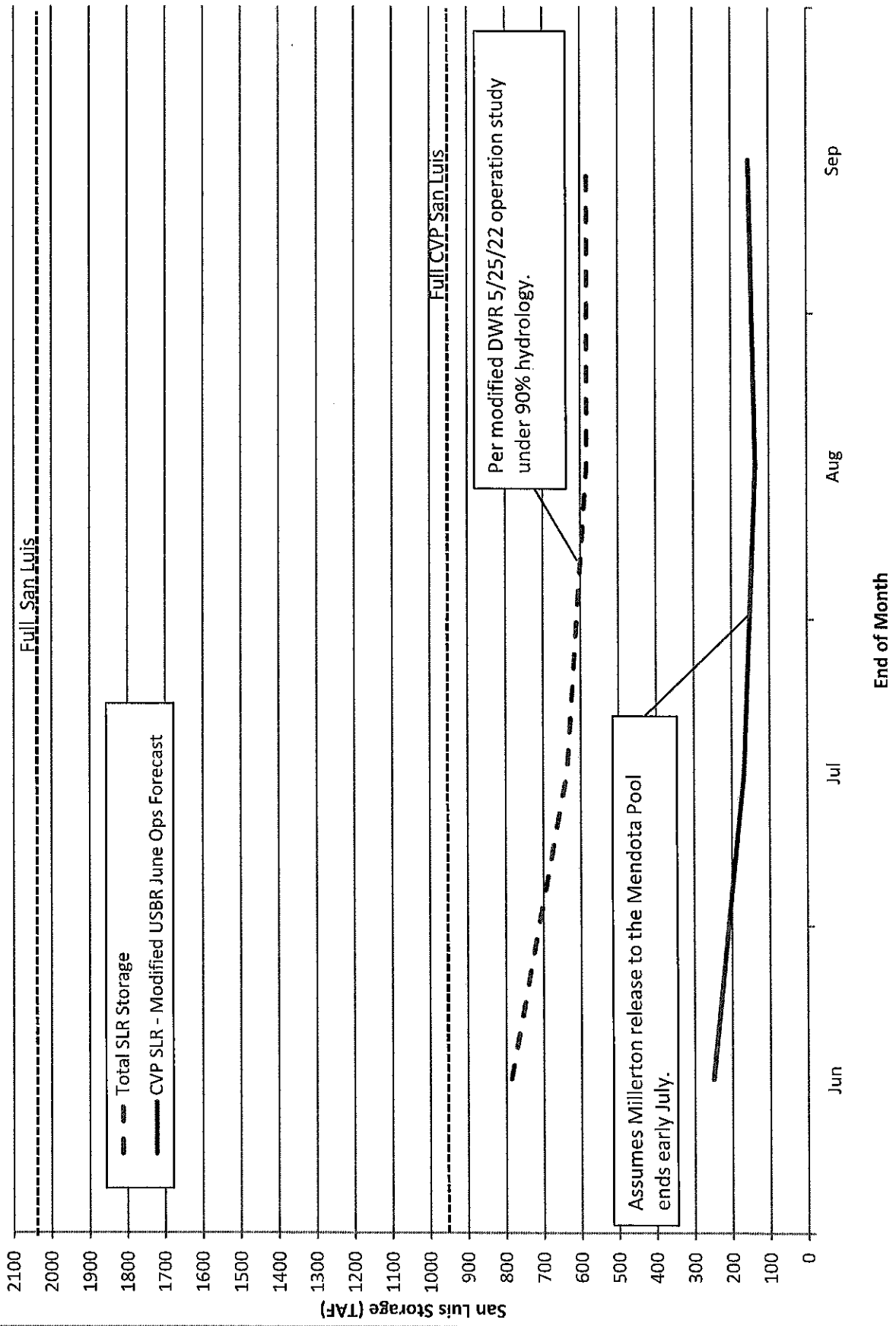
- Jones pumping during June was limited to about 900 cfs while minimal releases were made to meet relaxed Delta requirements as allowed by a Temporary Urgency Change Order (TUCO) that was granted by the State Water Resources Control Board in early April. CVP exports increased to 1,800 cfs when the TUCO expired on July 1 and D-1641 requirements resumed. Jones is scheduled to increase to 2,700 cfs on July 10 thanks to anticipated freshening of Delta water quality.
- Reclamation latest forecast shows the accounting balance under the Coordinated Operations Agreement (COA) at about 120 TAF in favor of the CVP. The current balance includes 59 TAF released from New Melones last year to meet part of the SWP's share of Delta requirements. Although Reclamation and DWR have not reached an agreement for the payback of New Melones water, Reclamation anticipates all other water owed to the CVP will be paid back by the end of July.
- Shasta storage is 1.76 MAF - 57% of average. As releases were held to near minimum levels during June, storage dropped by only 38 TAF which is the smallest amount of storage decline during a single summer month in a critical year. Reclamation's latest forecast shows Shasta releases at about 35% of average during the summer with a projected carryover storage of 1.4 MAF.
- Folsom storage is 747 TAF – 107% of average. Releases increased by 60% by late June in preparation for D1641 requirements resuming in July and to support higher summer CVP exports. Summer releases are expected to remain at about 4,500 cfs through August to reach a carry-over target of 300 TAF.
- CVP demands for June were about 55% of the 15-year average. About 60 TAF or 30% of the monthly demand flowed into the Mendota Pool from the San Joaquin River to meet Exchange Contractor demands.

2021-22 San Luis Reservoir Operations

The current CVP share of San Luis is at 232 TAF which reflects a daily draw down rate of about 4 TAF. The draw down rate is expected to slow by early next week when Jones pumping increases. Friant releases to help meet Exchange Contractor demands at the Mendota Pool ended early this month. Total CVP SLR storage includes an estimated 180 TAF of undelivered rescheduled water.

The attached 90% and 50% exceedance SLR graphs reflect an anticipated 2-3 unit operation at Jones to capture increased summer releases from Folsom. Both graphs project CVP SLR storage to remain above 100 TAF through September.

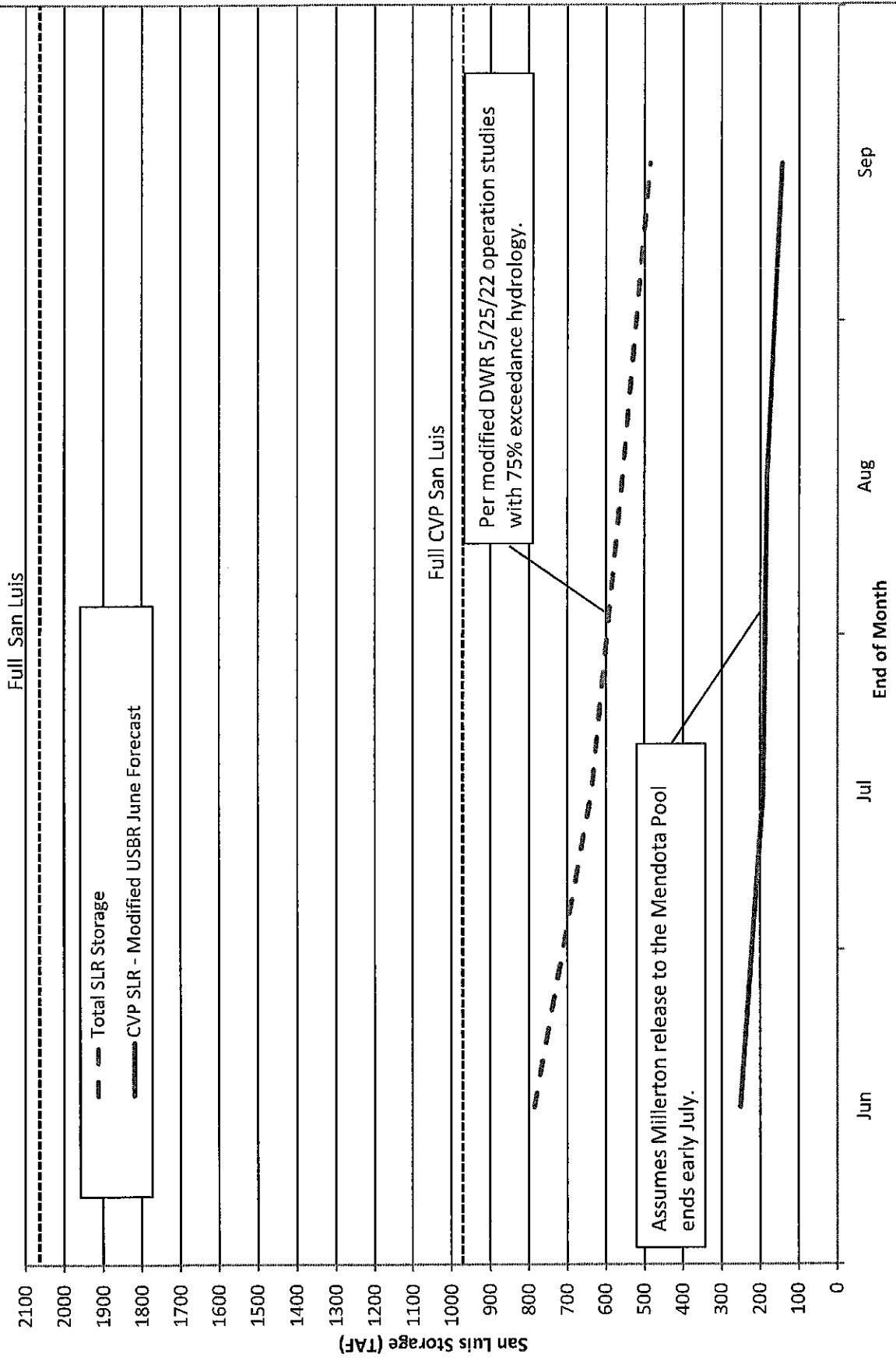
2021-22 San Luis Storage Projection 90% Exceedance Hydrology



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2021-22 San Luis Storage Projection

50% Exceedance Hydrology



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VII.B.



P.O. Box 1596 Patterson, CA 95363-1596

Phone (209) 892-4470 • Fax (209) 892-4469

July 15, 2022

VIA EMAIL

Bureau of Reclamation, SSCAO – Fresno Office

1243 N. Street

Fresno, CA 93721-11813

Attn: Richard Reyes

Re: CORRECTION to Request to Reschedule 2021 Acquired Non-Project Water and 2021 NVRRWP Exchanged/Stored Supply

Dear *Richard* Mr. Reyes:

Due to a reporting error and subsequent adjustment to the District's February 2022 actual, the District hereby corrects its Request to reschedule 13,472 AF of water Exchanged/Stored under the North Valley Regional Recycled Water Program, reducing the amount to 13,452, instead. This correction results in a total of 19,186 AF of supply Rescheduled.

At your soonest convenience, please issue a revision to the Final Approved Rescheduling Request dated June 8, 2022 to reflect acknowledgement of this correction. We apologize for any extra work this error has caused the USBR team.

Sincerely,

A handwritten signature in cursive script that reads "Anthea".

Anthea G. Hansen

General Manager

Cc: Pablo Arroyave, SLDMWA

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VII. B

DEL PUERTO WATER DISTRICT 2022-23 SUPPLY/USE/COMPLETED TRANSACTIONS SUMMARY
as of June 30, 2022

Supply Type	2022-23
2021-22 Rescheduled Warren Act Supply	1,453
2021-22 Rescheduled Warren Act Supply	4,291
2021-22 Rescheduled NVRW Supply	13,452
Lees: Monthly 1% Storage Loss Est.	(420)
Sub-Total: Rescheduled Supplies	18,776
2022 CVP Allocation (0%)	0
2022 Ground Water Pump-Ins	2,039
2022 NVRW	18,717
2022 CCID Exchange	371
Sub-Total: Current Year Customer Supplies	21,127
2022 YCWA	2,226
2022 AEWS	9
2022 GWD Transfer	250
2022 Volta Wells Transfer	175
2021 Mapes Transfer (Continued into 2022)	5,210
Subtotal: Outside Purchases	7,870
Total Gross Projected Supply Available	47,773

June 2022 Quantity	Completed to Date
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99	590
2171	8726
83	158

	9
31	63
3	18
	3076

2021-22 IN DISTRICT USE		2022-23 IN DISTRICT USE	2022-23 OCRRP USE	2022-23 TRANSFERS OUT	2022-23 MONTHLY USE
1,930	MAR	1,824			1,824
4,307	APR	3,064			3,064
5,716	MAY	5,529			5,529
6,976	JUN	6,387			6,387
7,551	JUL				0
4,654	AUG				0
2,984	SEP				0
1,625	OCT				0
188	NOV				0
255	DEC				0
45	JAN				0
1,591	FEB				0
37,822		16,804	0	0	
TOTAL USED & TRANSFERRED OUT					16,804
TOTAL SCHEDULED					19,450
TOTAL ESTIMATED FOR RESCHEDULING INTO 2023-24					11,519
TOTAL GROSS PROJECTED SUPPLY AVAILABLE					47,773

NOTE: The District has 3,356 AF in storage at AEWS and 2,000 AF in storage at LTRID.

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VII.C.



P.O. Box 1596 Patterson, CA 95363-1596

Phone (209) 892-4470 • Fax (209) 892-4469

Board of Directors, Patterson Irrigation District
C/O Vince Lucchesi, General Manager
P.O. Box 685
Patterson, CA 95363

Via Email to:

trussell@pid.org / vlucchesi@pid.org

Re: Request for Reconsideration of Water Purchase Request – 716 AF

July 12, 2022

Dear Vince and Patterson Irrigation District Board of Directors:

Please accept my sincere appreciation for your initial consideration of my request to Vince a few weeks ago for assistance in the form of a water transfer to support Del Puerto Water District's July, August, and September irrigation needs. Vince left me a message following your Special Board Meeting last week to explain that, while Patterson Irrigation District does have supplies excess to its needs for potential sale, the direction he received was to seek other opportunities in the open market first to "test" the possibility of achieving a higher price than I had proposed, which was \$880/AF. Based on my understanding of the current market further south of our region, your "test" will surely be successful. Despite that, I'd like to provide a bit more context to my request, which I hope you will not interpret as anything other than my effort to do my job to meet the needs of Del Puerto Water District's growers, many of whom are common to our Districts, or otherwise connected in the local area.

As you know, Del Puerto Water District's primary water supply comes from its CVP Repayment Contract, which should provide 3.2 AF/acre to every irrigable acre served by the District. Ongoing and increasing regulatory requirements, coupled with intermittent times of actual hydrological drought, have yielded our contract insufficient in most years. To address this, we have invested heavily into alternative sources of supply, including the North Valley Regional Recycled Water Program, and various multi-year transfers, which add some level of reliability to our situation. Early in each water year we solicit our growers' supplemental supply needs, collect pre-payments, and attempt to meet all requests received. This year our growers requested only 3,717 AF. Based on what we knew at the time, we would have been able to meet those requests in full at a price of \$880/AF delivered. In normal years, our supplemental requests easily exceed 15-20,000 AF, but the excessive cost of this year's supply makes pushing old orchards and/or fallowing or deficit irrigating, and unfortunately, heavy reliance on ground-water pumping, more necessary options for some.

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In addition to several smaller yielding transactions, the District is party to two long-term transfers, the San Joaquin River Exchange Contractors Water Authority (SJRECWA) transfer and the Yuba Accord. Because of the Critical Year designation for Shasta Reservoir this year and last, the SJRECWA transfer has yielded no supply for our supplemental program, leaving only the Yuba Transfer as the primary source for the current water year. In March of 2022, the District was estimating a conservative 4,792 AF of Yuba supply at a cost of \$877/AF delivered. Unfortunately, the storms of late April caused the Yuba Accord estimates to decrease in quantity, and increase in price. (I know it's counter-intuitive, but that is how the Accord works.) Ultimately, Del Puerto Water District "lost" 2,565 AF of supply it was counting upon to meet its' customers in-District needs, and another 20 AF that we were intending to provide to the Fantozzi Corn Maze, a local attraction important to this community which operates on land previously within the District, but detached a number of years ago.

Subsequent to the change in the Yuba information becoming available in mid-June, the District notified customers of the price increase and our requests for supplemental supply were reduced by 340 AF, leaving the total need at 3,377 AF. We estimate we can fulfill 2,661 AF of those requests, leaving our customers 716 AF short. If your Board were to change its previous direction, we could promptly process payment for this quantity of water at \$880/AF, which should yield a profit to Patterson Irrigation District of over \$500,000. Again, I recognize that this is likely not the best "deal" to be found, but it would be a way to realize a healthy gain, and to keep some small portion of what your District has available for sale here in the local region. We certainly could and would like to purchase more than the 716 AF, but given your other potential opportunities, we are not making such a request. I understand you are to have a meeting on July 21st. I would be extremely grateful if you would discuss this request, as we are at a point where we need to notify 14 of our 31 customers who have requested a supplemental supply that we will not be able to fully meet their needs.

As always, on behalf of our Board and Landowners, thank you for your neighborly consideration of our situation. I will look forward to hearing from Vince about any ability that PID may have to make the 716 AF available to DPWD growers.

Very Sincerely Yours,



Anthea G. Hansen
General Manager
Del Puerto Water District



VII.C.

Anthea Hansen

From: Anthea Hansen
Sent: Tuesday, July 19, 2022 1:55 PM
To: 'Jeevan Muhar'
Cc: David Grant
Subject: RE: 2022 Water Transfer from Arvin-Edison WSD to Del Puerto WD

Hi Jeevan,

July works.

Anthea

Anthea G. Hansen

General Manager

Del Puerto Water District

PH 209-892-4470/FAX 209-892-4469

From: Jeevan Muhar <jmuhar@aewsd.org>
Sent: Tuesday, July 19, 2022 11:55 AM
To: Anthea Hansen <ahansen@delpuertowd.org>
Cc: David Grant <DGRANT@aewsd.org>
Subject: RE: 2022 Water Transfer from Arvin-Edison WSD to Del Puerto WD

Hi Anthea,

I'm working with staff on our schedules and I think we have roughly 100 AF of SJRRP water in SLR for you.

Will let you know tomorrow or Thursday.

What month do you want to schedule it?

Jeevan Muhar, P.E.
Engineer-Manager
Arvin-Edison Water Storage District
PO Box 175
Arvin, CA 93203

661-854-5573 office phone
661-854-5213 office fax
661-747-0062 mobile phone

email: jmuhar@aewsd.org

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From: Anthea Hansen <ahansen@delpuertowd.org>
Sent: Thursday, July 14, 2022 4:45 PM
To: Jeevan Muhar <jmuhar@aewsd.org>
Subject: FW: 2022 Water Transfer from Arvin-Edison WSD to Del Puerto WD
Importance: High

Hi Jeevan,

I hope you are well. MJ reported today on ops, indicating the recent allocation to Friant and another to come soon. He said he thinks USBR will get your area to 30%. I know our agreement specifies returns only at 40% or greater, but I am short of fulfilling all of our current requests because the Yuba Transfer quantities changed between March and May, shorting DPWD by about 2,500AF.

If there is anything you can commit to freeing up (no quantity is too small), I would really appreciate it.

Sincerely,
Anthea

Anthea G. Hansen
General Manager
Del Puerto Water District
PH 209-892-4470/FAX 209-892-4469

From: Micah Clark <mclark@aewsd.org>
Sent: Wednesday, May 4, 2022 9:00 AM
To: 'Prieto, Moses J' <mprieto@usbr.gov>; 'Hyatt, David E' <dhyatt@usbr.gov>; 'Manzano, Gregorio' <gmanzano@usbr.gov>; 'Mora, Gabriel' <gmora@usbr.gov>; 'Leal, Erma O' <eleal@usbr.gov>
Cc: 'Jeevan Muhar' <jmuhar@aewsd.org>; 'Sherry Jauch' <arvined@aewsd.org>; Paul Stearns <pstearns@delpuertowd.org>; Anthea Hansen <ahansen@delpuertowd.org>
Subject: RE: 2022 Water Transfer from Arvin-Edison WSD to Del Puerto WD
Importance: High

Sending again to include Erma in this thread.

Thank you,

Micah Clark
Engineering Technician
Arvin-Edison Water Storage District
20401 Bear Mountain Blvd.

Mailing: PO Box 175
Arvin, CA 93203-0175

(661) 854-5573 office
(661) 854-5213 fax
(661) 978-2459 cell
Email: mclark@aebsd.org
Website: <https://aebsd.org/>



From: Micah Clark <mclark@aebsd.org>
Sent: Wednesday, May 4, 2022 8:18 AM
To: 'Prieto, Moses J' <mprieto@usbr.gov>; 'Hyatt, David E' <dhyatt@usbr.gov>; 'Manzano, Gregorio' <gmanzano@usbr.gov>; 'Mora, Gabriel' <gmora@usbr.gov>
Cc: 'Jeevan Muhar' <jmuhar@aebsd.org>; 'Sherry Jauch' <arvined@aebsd.org>; 'Paul Stearns' <pstearns@delpuertowd.org>; 'Anthea Hansen' <ahansen@delpuertowd.org>
Subject: 2022 Water Transfer from Arvin-Edison WSD to Del Puerto WD

Gabe/Greg/Moses/David et al,

Please find attached subject transfer agreement and accompanying schedule for your acknowledgment.

Call/email with questions or comments.

Please confirm receipt.

Thank you,

Micah Clark

Engineering Technician
Arvin-Edison Water Storage District
20401 Bear Mountain Blvd.
Mailing: PO Box 175
Arvin, CA 93203-0175

(661) 854-5573 office
(661) 854-5213 fax
(661) 978-2459 cell
Email: mclark@aebsd.org
Website: <https://aebsd.org/>

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VII. C.

Anthea Hansen

From: Anthea Hansen
Sent: Tuesday, July 19, 2022 8:52 AM
To: 'Eric Limas'
Subject: RE: 2019 agreement

Eric,

We normally do have some demand every month of the year. Is there any way to estimate the quantity you may have?

Anthea

From: Eric Limas <elimas@ltrid.org>
Sent: Tuesday, July 19, 2022 8:40 AM
To: Anthea Hansen <ahansen@delpuertowd.org>
Subject: Re: 2019 agreement

URFs are made available to us in Millerton. So, on URFs the answer would be no. Just because there is no way to get it to you. However, since exchange contractor releases have stopped, Restoration flows will be starting up in October. So, whatever we can recapture this fall October-Feb, we can make available. Do you have demand at that time of year?

Crossing our fingers that next year is wetter and we will have spring recapture and/or CVC allocation to deliver you.

Thank You,

Eric Limas
General Manager
Lower Tule River and Pixley Irrigation Districts
Tea Pot Dome Water District
Tel: 559-686-4716

On Tue, Jul 19, 2022 at 8:36 AM Anthea Hansen <ahansen@delpuertowd.org> wrote:

Hi Eric,

With the increase to the Friant Allocation and the URF's, is there any portion (even small) of our exchange that you can commit to in the next few months?

Sincerely,

Anthea

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Anthea G. Hansen

General Manager

Del Puerto Water District

PH 209-892-4470/FAX 209-892-4469

From: Eric Limas <elimas@ltrid.org>
Sent: Wednesday, June 1, 2022 8:48 AM
To: Anthea Hansen <ahansen@delpuertowd.org>
Subject: Re: 2019 agreement

Thanks Anthea.

Thank You,

Eric Limas

General Manager

Lower Tule River and Pixley Irrigation Districts

Tea Pot Dome Water District

Tel: 559-686-4716

On Wed, Jun 1, 2022 at 8:41 AM Anthea Hansen <ahansen@delpuertowd.org> wrote:

Eric,

Del Puerto Water District
Active Permits and Licenses
 As of June 30, 2022

<u>Active Permits</u>	<u>Issued Date</u>	<u>Expires</u>	<u>Project</u>	<u>Landowner/Entity</u>	<u>Location</u>
<u>Permit No.</u> P2202026	3/3/2022	7/31/2022	Temporary Drafting of Construction Water - NextEra Solar Project	Ford Construction & Dacon Corp.	45.78R/Davis Road
P2303001	3/3/2022	7/31/2022	Sheep Grazing	Van Elderen/Brent Azevedo	60.65L to 62.09L
P2302003	4/8/2022	5/31/2023	Monthly Water Samples for Trihalomethanes (THM's)	City of Turlock/NVRRWP	37.24 to 45.77
P2302010	6/2/2022	8/1/2022	Pipeline Repair (complete)	Sandhu Bros. Farm	18.06R
<u>Active Licenses</u>	<u>Issued Date</u>	<u>Expires</u>	<u>Project</u>	<u>Location</u>	
<u>Contract No.</u> 15-LC-20-0643	7/14/2015	Not Const.	Installation of Non-Project Warren Act Pump-In	Shiraz Ranch	51.00R

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VII.A.



— BUREAU OF —
RECLAMATION

2022 Temporary Change in Water Quality Requirements for Groundwater Introduced into the Delta-Mendota Canal

CGB-EA-2022-030

Draft Environmental Assessment

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Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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1 Introduction

1.1 Background

Since 1995, the San Luis & Delta-Mendota Water Authority (Authority), on behalf of eight of its member agencies¹ located along the Delta-Mendota Canal (DMC), have implemented a project referred to as the DMC Groundwater Pump-in Program. The DMC Pump-in Program involves the annual cumulative introduction of up to 50,000 acre-feet (AF) of groundwater into the DMC as long as specific criteria are met (e.g., water quality requirements and monitoring). The DMC Pump-in Program been analyzed in various Environmental Assessments (EAs) the most recent of which was in 2018 (Reclamation 2018). In 2018, due to

the Bureau of Reclamation (Reclamation) revised the DMC Pump-in Program to include additional design constraints to address groundwater level impacts and subsidence. All wells that participate in the DMC Pump-in Program are required to meet Reclamation's then-current water quality requirements (Reclamation 2018).

Due to current drought conditions, three of the member agencies (Del Puerto Water District, Panoche Water District, and San Luis Water District) have requested a temporary change in certain water quality requirements for the DMC Pump-in Program that would allow additional wells to be used to provide supplemental water supplies to meet existing agricultural demands.

1.2 Purpose and Need for the Proposed Action

On February 23, 2022², due to a third year of drought, Reclamation declared a 0 percent allocation for south of Delta Central Valley Project (CVP) agricultural contractors. As a result, Del Puerto Water District, Panoche Water District, and San Luis Water District have a need to find alternative sources of water to fulfill demands. The purpose of the Proposed Action is to temporarily allow wells that are not meeting Reclamation's current water quality criteria for nitrates to participate in the Program to provide supplemental water supplies during this contract year (through February 28, 2023).

¹ The member agencies that participate in the DMC Groundwater Pump-in Program include the following: Banta Carbona Irrigation District, Byron-Bethany Irrigation District, Del Puerto Water District, Mercy Springs Water District, Panoche Water District, Pacheco Water District, San Luis Water District, and West Stanislaus Irrigation District.

² [Reclamation outlines initial 2022 water allocations for Central Valley Project contractors \(usbr.gov\)](#)

2 Alternatives Including Proposed Action

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not temporarily change water quality requirements for nitrates through February 28, 2023. Only wells that meet the water quality requirements specifically described in Reclamation's water quality monitoring plan (Reclamation 2018) would be allowed to pump groundwater into the DMC as previously approved under the existing DMC Groundwater Pump-in Program.

2.2 Proposed Action

Reclamation proposes to temporarily change water quality requirements for nitrates through February 28, 2023. The Proposed Action is subject to the following conditions:

- Nitrates (as NO_3) at the well head cannot exceed 75 mg/L. Nitrates (as NO_3) in the DMC measured downstream of Check 13 and Mile Post 100.70 (downstream of Panoche Water District's last introduction point) may not exceed 20 mg/L.
- Only wells that have current (2021 or more recent) water quality data can participate.

Weekly sampling will be done by the Authority for nitrates. Each weekly collection will consist of one sample from each location (Check 13 and Mile Post 100.70), plus one duplicate sample (total of four samples per week). All samples would be collected in bottles provided by Reclamation and delivered to the South-Central California Area Office by 5pm on Thursday. The Authority will pay for all water sampling conducted for this variance. Each sample will be tested for nitrates (as NO_3) with a minimum detection level of 1 microgram per liter ($\mu\text{g/L}$). If the concentration of nitrates exceeds the parameters listed above, the Authority will incrementally direct the well operators with the highest levels to stop pumping into the DMC until thresholds are met. The Authority, as Reclamation's contractor, will determine which wells should be shut off.

In addition to the conditions described above and the criteria included in Reclamation's then-current water quality requirements for the DMC Pump-in Program (Reclamation 2018), the Authority and participating member agencies shall continue to implement the following environmental commitments as required for the DMC Groundwater Pump-in Program:

- Each district would be required to confirm that the proposed pumping of groundwater would be compatible with local ordinances. Each district would be limited to pumping a quantity below the "safe yield" as established in applicable ordinances or their groundwater management plan, in order to prevent groundwater overdraft and avoid adverse impacts.
- No groundwater pumping would occur in Management Areas 2 and 3 since these areas are subject to inelastic subsidence.
- All districts participating in the DMC Groundwater Pump-in Program must annually provide the depth to groundwater in every well prior to start of pumping.

- Though most of the wells are privately owned, the Districts must provide access to each well for Reclamation and Authority staff.
- All compliance monitoring data collected by the Authority would be entered into worksheets and presented each week to Reclamation via e-mail. Reclamation would review the data to identify potential changes in the local aquifer that could lead to overdraft or subsidence,
- Groundwater measurements have been collected by the Authority since May 1995. Annually, the current depth to groundwater in each well would be compared to the measured depths. If the current depth exceeds the maximum measured depth, Reclamation would recommend that the District stop pumping from that well until the depth of water recovers to an agreed depth, such as the median observed depth.
- The water shall be used for beneficial purposes and in accordance with Federal Reclamation law and guidelines, as applicable.
- Use of the water shall comply with all federal, state, local, and tribal law, and requirements imposed for protection of the environment and Indian Trust Assets.
- The water shall be used within the permitted place of use.
- No land conversions may occur and no construction or other ground disturbing activity may occur as part of the Proposed Action.
- No native or untilled land (fallow for three years or more) may be cultivated with the water involved with these actions. Most of the water would be used to sustain existing permanent crops (orchards, vineyards).

3 Affected Environment and Environmental Consequences

The Affected environment is the same as described in the 2018 EA (Reclamation 2018) which is hereby incorporated by reference and not repeated here.

3.1 Air Quality

The pumping of wells for the Program was previously analyzed in the 2018 EA which found emissions of all of the proposed pumps, including those under the Proposed Action considered here, to be well below the de minimis thresholds for the San Joaquin Valley Air Pollution Control District. As such, there would be no additional direct, indirect, or cumulative impacts beyond those previously covered and a conformity analysis pursuant to the Clean Air Act is not required.

3.2 Biological Resources

Nitrate is an important useable source of nitrogen for living organisms, but may be toxic in certain concentrations. Nitrate is the least toxic of the three major nitrogenous compounds (ammonia, nitrate, and nitrite) that are commonly found in water supplies, so its effects on wildlife have not

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been as extensively studied. The United States Environmental Protection Agency only has nitrate criteria for drinking water and has not yet established criteria for maximum nitrate concentrations necessary to protect aquatic life. Studies that have been conducted on the effects of nitrate to freshwater aquatic life have recommended maximum nitrate levels ranging from 21.7 mg NO₃⁻/L to 40 mg NO₃⁻/L (Monson & Preimesberger 2010; Nordin & Pommen 2001). The maximum recommended nitrate concentration for terrestrial organisms is 100 mg NO₃⁻/L (Nordin & Pommen 2001). However, as described in Section 2.2, the total concentration of nitrates in the DMC would not be allowed to exceed 20 mg/L, and would therefore remain within the suggested concentrations necessary to protect aquatic and terrestrial wildlife.

Although the DMC may be occasionally occupied by non-native fish like bass, blue-gill and minnows, the canal's fast flows do not provide much suitable habitat for aquatic wildlife. No federally listed or proposed aquatic species occur within the DMC, so none would be affected by increased nitrate concentrations. The water associated with the Proposed Action would only be used to irrigate agricultural lands which would maintain the baseline conditions for listed species. No native or fallowed lands, untilled for three or more years, would be converted as a result of the Proposed Action. Land use patterns of cultivated and fallowed fields that could provide suitable habitat for listed species or birds protected under the Migratory Bird Treaty Act (MBTA) would also not be changed as a result of the Proposed Action. No ground disturbance, construction, or alteration of natural stream courses would be required to complete the Proposed Action. There is no designated critical habitat within the Action area, so none would be affected. With the implementation of the environmental commitments listed in Section 2.2, Reclamation has determined that the Proposed Action would result in *No Effect* to listed species or designated critical habitat under the Endangered Species Act (16 U.S.C. §1531 et seq.) and *No Take* of birds protected under the MBTA (16 U.S.C. 703 et seq.).

As the Proposed Action is not expected to result in any direct or indirect impacts to biological resources, there would be no cumulative impacts.

3.3 Climate Change

The pumping of wells for the DMC Groundwater Pump-in Program was previously analyzed in the 2018 EA which found emissions of all of the proposed pumps, including those under the Proposed Action considered here, were well below the de minimis thresholds for the Environmental Protection Agency. As such, there would be no additional direct, indirect, or cumulative impacts beyond those previously covered.

3.4 Cultural Resources

There would be no impacts to cultural resources as a result of implementing the Proposed Action as the Proposed Action would facilitate the flow of water through existing facilities to existing users. No new construction or ground disturbing activities would occur as part of the Proposed Action. Reclamation has determined that these activities have no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

3.5 Environmental Justice

Executive Order 12898 requires each federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. The Proposed Action would facilitate the flow of water through existing facilities to existing users and would, therefore, not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations. As the Proposed Action would not result in any direct or indirect impacts to environmental justice, it would not contribute cumulatively to any impacts to these resources.

3.6 Indian Sacred Sites

Executive Order 13007 (May 24, 1996) requires that federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoids adversely affecting the physical integrity of such sacred sites. The Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or affect the physical integrity of such sacred sites. There would be no direct, indirect, or cumulative impacts to Indian sacred sites as a result of the Proposed Action.

3.7 Indian Trust Assets

Indian Trust Assets are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. There are no Indian reservations, rancherias or allotments in the Proposed Action area. The nearest Indian Trust Asset is a public domain allotment about 35 miles to the southwest of the Proposed Action area. Based on the nature of the Proposed Action it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the Proposed Action will not have any direct, indirect, or cumulative impacts on Indian Trust Assets.

3.8 Land Use

The additional groundwater allowed to be pumped and introduced under the Proposed Action would be used to meet existing agricultural demands. There would be no land use change. As the Proposed Action would not result in any direct or indirect impacts to land use, it would not contribute cumulatively to any impacts to these resources.

3.9 Water Resources

Current 2022 baseline nitrate concentrations (as NO₃) in the DMC average 5.98 mg/L. The Proposed Action would temporarily allow certain wells that currently do not meet Reclamation's water quality criteria for nitrates (45 mg/L) to be used to provide a much-needed supplemental

water supply during this critical drought period. Well head thresholds can only be exceeded up to 75 mg/L and blending in the canal cannot exceed half the MCL.

As shown in Table 1, currently seven wells meet Reclamation's current water quality standards for conveyance in the canal while one exceeds the well head MCL for nitrates. The eight wells could provide an additional supply of 17.4 cubic feet per second (cfs) of supplemental water assuming all other water quality criteria are met. Additional wells may be added if they meet current and proposed water quality criteria.

Table 1. List of Wells in DMC Pump-in Program that May be Able to Participate*

Mile Post	District	Well Discharge (cfs)	Nitrate as NO ₃ (mg/L)
29.95R	Del Puerto Water District	0.5	15.05
31.60L	Del Puerto Water District	1.5	70.83
32.36L	Del Puerto Water District	1.5	31.87
36.45R	Del Puerto Water District	2.5	23.02
50.46R	Del Puerto Water District	2.4	13.28
51.66L	Del Puerto Water District	1.0	27.89
98.60R	Panoche Water District	6.0	0.97
79.13L	San Luis Water District	2.0	41.58

*Full Title 22 water quality data is needed prior to approval for participation.

The Proposed Action would allow blending in the canal up to 20 mg/L over a short-term period (through February 2023) and would then return to current water quality requirements. All other water quality requirements would be unchanged.

Introduced groundwater would be within the 50,000 AF per year limit placed on the entire pump-in program. In order to prevent potential impacts to municipal and industrial (M&I) users downstream of pump-in locations, Reclamation is requiring weekly monitoring to ensure that nitrates in the DMC do not exceed 20 mg/L, less than half the MCL for nitrates established by the State of California for drinking water standards. If the concentration of nitrates in the DMC exceeds the thresholds, the Authority would incrementally direct the well operators with the highest levels of nitrates to stop pumping into the FKC until thresholds are met.

The temporary relaxation would not directly, indirectly, or cumulatively adversely impact water resources as criteria would remain below established thresholds known to protect water quality.

3.10 Agencies and Persons Consulted

Reclamation has consulted and coordinated with the following regarding the Proposed Action:

- Banta Carbona Irrigation District
- Byron-Bethany Irrigation District
- Del Puerto Water District
- Mercy Springs Water District

- Pacheco Water District
- Panoche Water District
- San Luis Water District
- San Luis & Delta-Mendota Water Authority
- West Stanislaus Irrigation District

3.11 Public Review Period

Reclamation intends to provide the public with an opportunity to comment on this Draft EA during a 10-day comment period.

4 References

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