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**COMMUNICATIONS**

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1. Notes: Weghorst
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted.
4. Determine which items may be approved without discussion.

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**INFORMATION**

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5. WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS AND PROGRAMS – PALACIO / SANCHEZ / WEGHORST

Recommendation: Receive and file.

6. PVID FOLLOWING – LINDSAY / SANCHEZ / WEGHORST

Recommendation: Receive and file.


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**OTHER BUSINESS**

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7. Receive Oral Updates from District’s liaison to Dudley Ridge Water District and provide information on relevant activities.
8. Directors’ Comments
9. Adjourn

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 Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District’s office, 15600 Sand Canyon Avenue, Irvine, California (“District Office”). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

September 19, 2024  
Prepared by: N. Palacio  
Submitted by: F. Sanchez / P. Weghorst  
Approved by: Paul A. Cook 

## SUPPLY RELIABILITY PROGRAMS COMMITTEE

### WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, AND PROGRAMS.

#### SUMMARY:

Staff has prepared information related to IRWD’s water banking facilities, capacities, operations, and exchange programs. The information is regularly updated to reflect changes in the status of IRWD’s projects, programs, and operations. At the Committee meeting, staff will review this information, provide an overview of IRWD’s forecasted monthly recharge operations for 2024, and provide an update on the status of discussions with the Kern County Water Agency on the Kern Fan Groundwater Storage Project (Kern Fan Project).

#### BACKGROUND:

Staff has prepared reference materials in tabular, map, and schematic formats to describe IRWD’s water banking facilities, capacities, operations, storage, and exchange programs. These reference materials are updated regularly to reflect changes in the status of the projects, programs, and operations. The following is an overview of the reference materials as well as forecasted recharge operations for calendar year 2024 at the IRWD Water Bank.

#### Capacity and Operations Tables:

A table presenting storage, recharge, and recovery capacities of existing and planned IRWD water banking projects, including capacities available to IRWD in the Kern Water Bank, is provided as Exhibit “A”. Exhibits “B” and “C” provide an update on water banking recovery and recharge operations as well as the balance of the water stored in the Kern Water Bank. Exhibit “B” provides before-loss estimates of water recharged and in storage at the water banking projects, which has been updated to include a footnote providing the total banking losses incurred for deliveries in 2023 and 2024. Exhibit “C” shows after-loss estimates of water recharged and in storage at the projects.

#### Summary of Programs:

A table summarizing IRWD’s water purchase and exchange programs is presented as Exhibit “D”. This table lists each water purchase and exchange program IRWD has entered into and presents information related to the type of exchange, year executed, agreement type, and water type. IRWD and partner shares are listed, and the table shows the total amount of water included in each program. The balances listed for IRWD and its partners show the amount of water remaining in storage with IRWD’s balances specifying whether the water is stored in Metropolitan Water District’s system, Kern County, or owed to IRWD by Dudley Ridge. The table also provides details related to the exportability of IRWD’s supplies. There were no changes to Exhibit “D” this month.

Exhibit “E” graphically depicts how storage of State Water Project (SWP) and non-SWP water has changed annually in the Strand and Stockdale Integrated Banking Projects. Exhibit “E” also depicts the balance of water owed to IRWD by Dudley Ridge (shown as credits). The table provided as Exhibit “F” shows how capacities in the water banking projects have been dedicated to IRWD’s existing and proposed exchange programs.

#### Project Maps:

To support the tables and figures provided as Exhibits “A”, “B”, “C”, “D”, “E”, and “F”, staff has prepared maps depicting project wells, pipelines, recharge basins, and Cross Valley Canal turnout locations, along with the most current recharge rates. These maps are provided as Exhibits “G”, “H”, and “I”, respectively. Exhibit “I” includes the most recent recharge rates at the IRWD Water Bank. The facilities shown on the maps are associated with the Strand Ranch, Stockdale West, Stockdale East, and Drought Relief Projects.

#### Program Agreement Diagrams:

Schematic diagrams have been prepared that depict IRWD water banking and exchange programs with Rosedale-Rio Bravo Water Storage District, Buena Vista Water Storage District, Dudley Ridge, Metropolitan, and AVEK. These diagrams are provided as Exhibits “J”, “K”, “L”, “M”, “N”, “O”, and “P” as described in the List of Exhibits.

#### Cost of Water Table:

A table presenting a summary of the costs of water from each of IRWD’s unbalanced exchange partnerships through the year 2021 is provided as Exhibit “Q”. The table lists each of IRWD’s unbalanced exchange partnerships and presents information related to the period over which water was acquired, water type, IRWD’s share of water, and various cost components as well as the total cost of water delivered to IRWD’s service area. Cost components include fixed and variable operating costs, estimated future IRWD recovery costs, the 2024 Metropolitan Full Service Untreated Tier-1 Rate, and a capital cost of water. The variable costs include an administrative fee issued by the Kern County Water Agency for staff time related to processing Transaction Request Forms. The costs of water are presented on a dollar per acre-foot basis. Exhibit “Q” will be updated to reflect 2022 and 2023 operations once all invoices have been received from Rosedale.

#### IRWD’s Coordinated Agreement with Metropolitan:

An overview of IRWD’s Coordinated Operating, Water Storage, Exchange, and Delivery Agreement with Metropolitan and Municipal Water District of Orange County (Coordinated Agreement) is provided as Exhibit “R”. The benefits to IRWD are foundational to the success of IRWD’s water banking project and programs.

Forecasted 2024 Water Recharge Activities:

Projected deliveries to IRWD's Water Bank in 2024 are depicted in Exhibit "S". Staff will update the forecasted delivery amounts shown in Exhibit "S" as more information becomes available. Anticipated water bank deliveries in 2024 are as follows:

- *Homer Capacity Exchange Program:* In 2023, IRWD recharged 1,854 acre feet (AF) of water into storage at the IRWD Water Bank using Homer's Cross Valley Canal capacity. Consistent with the terms of the Pilot Capacity Exchange Program, Homer can use recharge capacity at the IRWD Water Bank to recharge an equal amount of its supplies in 2024. 1,854 AF of recharge has been included in Exhibit "S" for Homer in 2024.
- *Silvertip Unbalanced Exchange Program:* Staff anticipates that Silvertip is unlikely to deliver SWP supplies to the IRWD Water Bank in 2024. Accordingly, Exhibit "S" has been revised to reflect this expectation.
- *Valley Water Unbalanced Exchange Program:* Santa Clara Valley Water District (Valley Water) expects to have at least 5,000 AF of SWP Table A Water available for delivery to the IRWD Water Bank in 2024. The letter agreement between IRWD and Valley Water has been fully executed and Metropolitan has consented to the exchange. Staff anticipates that the necessary DWR agreements and approvals will be secured before the end of the year.
- *IRWD's SWP Table A Allocation:* The 2024 SWP Table A allocation is 40%. IRWD will take delivery of its 700 AF of Table A water from Dudley Ridge into the Strand Ranch.
- *Metropolitan Deliveries:* In 2021 and 2022, Metropolitan took direct delivery of IRWD's Dudley Ridge SWP Table A water. Metropolitan has notified staff that they would like to return the water in the amount of 157 AF to IRWD this year. Metropolitan will deliver 50% of the water to IRWD's Water Bank and the remaining 50% of water to Dudley Ridge for use on the Jackson Ranch.

Kern Fan Groundwater Storage Project:

On August 29, staff from Rosedale-Rio Bravo Water Storage District met with representatives from the Kern County Water Agency, the Cross Valley Canal Contractors Association, the Kern Water Bank, and Dudley Ridge Water District to discuss the Kern Fan Project. The meeting focused on options for a turnout on the California Aqueduct and a new conveyance. These improvements would be part of the Kern Fan Project and could potentially provide additional regional benefits to Kern County. At the meeting, staff will provide an update on the discussions and next steps.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

- Exhibit “A” – Recharge, Storage and Recovery Capacities of Current and Anticipated Water Banking Projects
- Exhibit “B” – Water Banking Storage, Recharge, and Recovery Operations before Losses
- Exhibit “C” – Water Banking Storage, Recharge, and Recovery Operations after Losses
- Exhibit “D” – Status of IRWD Purchase and Exchange Programs
- Exhibit “E” – Historic Water Storage in Strand and Stockdale Projects
- Exhibit “F” – Dedicated Capacities of Current Water Banking Projects
- Exhibit “G” – Map of Water Banking Project Wells and Pipelines
- Exhibit “H” – Map of Water Banking Recharge Basins and Turnout Facilities
- Exhibit “I” – Map of Water Banking Recharge Rates
- Exhibit “J” – Diagram of IRWD-Rosedale Water Banking and Exchange Program Agreements
- Exhibit “K” – Diagram of Long-term Water Exchange Program with Buena Vista Water Storage District and Diagram of One-year Program to Augment Recharge Using Stockdale West Recharge Facilities with Buena Vista Water Storage District
- Exhibit “L” – Diagram of Unbalanced Exchange Program Diagram with Dudley Ridge
- Exhibit “M” – Diagram of Coordinated Operating, Water Storage, Exchange, and Delivery Agreement with Metropolitan
- Exhibit “N” – Diagram of Template Wheeling Agreement with Metropolitan
- Exhibit “O” – Diagram of Dudley Ridge One-for-One Exchange
- Exhibit “P” – Diagram of Long-term Water Exchange Program with Antelope Valley-East Kern
- Exhibit “Q” – Cost of Water Tables
- Exhibit “R” – Summary of IRWD’s Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan and MWDOC (updated 8 Feb 2024)
- Exhibit “S” – Actual and Forecasted 2024 Recharge Operations

Exhibit "A"

**TABLE 1**  
**Current and Anticipated Water Banking Projects**  
**Recharge, Storage and Recovery Capacities**  
 September 19, 2024

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO		ALLOCATED CAPACITY (AF)					1 <sup>ST</sup> PRIORITY RECOVERY CONDITIONS (CFS)		2 <sup>ND</sup> PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 <sup>ST</sup> PRIORITY	ANNUAL RECHARGE 2 <sup>ND</sup> PRIORITY	ANNUAL RECOVERY 1 <sup>ST</sup> PRIORITY	ANNUAL RECOVERY 2 <sup>ND</sup> PRIORITY	RECOVERY CAPACITY AS PLANNED <sup>1</sup>	RECOVERY CAPACITY (Average Daily Production 1/1/2021 - 7/31/2022)	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	50,000	17,500	-	17,500	-	40.0	20.5	-	-
Stockdale West	Yes	3	26,000	27,100	-	11,250	-	15.0	11.6	-	-
Stockdale East	No	2	-	-	19,000	-	7,500	-	-	10.0	9.0
IRWD Acquired Storage Account <sup>2</sup>	No	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells <sup>2</sup>	No	3	-	-	-	-	-	15.0	16.5	-	-
Kern Water Bank Storage Account <sup>4</sup>	No	-	9,495	3,200	-	1,520	<5,000	-	-	-	-
<b>TOTALS</b>		<b>15</b>	<b>135,495</b>	<b>47,800</b>	<b>19,000</b>	<b>30,270</b>	<b>12,500</b>	<b>70.0</b>	<b>48.6</b>	<b>10.0</b>	<b>9.0</b>
Partner Capacities <sup>3</sup>			38,000	22,300	9,500	10,850	0	35.5	25.0	-	-
IRWD Capacities (does not include Kern Water Bank capacities)			88,000	22,300	9,500	17,900	7,500	34.5	25.0	-	-
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)								12,420	9,000	-	-
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)								5,480	6,733	-	-
<b>TOTALS (AF)</b>								<b>17,900</b>	<b>15,733</b>	<b>-</b>	<b>-</b>
Number of months needed to recover IRWD's total AF after partners' recovery (Assumes IRWD has use of total recovery capacity after partners' recovery)								8.6	10.2	-	-
Strand Ranch monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)										4,518	
Stockdale West monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)										2,331	

<sup>1</sup>Based on designed Strand recovery capacity assuming 370' bgs. Assumes 5 cfs for each of the Stockdale West and Drought Relief wells in order to meet IRWD's Water Banking, Transfers, and Wheeling policy position. Assumes partners' water is recovered over 6 months.

<sup>2</sup>IRWD has use of Acquired Storage and Drought Relief Project wells until January 12, 2039, unless the term of the agreement is extended.

<sup>3</sup>One half of storage capacity at Stockdale West and Strand Ranch will be allocated for partners.

<sup>4</sup>Kern Water Bank capacities based on 6.58% of Dudley Ridge Water District's 9.62% share of the Kern Water Bank. Annual recharge amount is based on an average of recharge rates for high and low groundwater level conditions. 5,000 AF of recovery capacity may be available for second priority use.

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## Exhibit "B"

**TABLE 2**  
**IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES**  
 September 19, 2024

TRANSACTIONS	WATER BANKING ENTITY							TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	ANTELOPE VALLEY-EAST KERN (AVEK)	SILVERTIP	DUDLEY RIDGE WATER DISTRICT (DRWD) <sup>3</sup>	
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	SWP	SWP	
<b>BEGINNING WATER IN STORAGE 2023 (AF)</b>								
Total Kern Water Bank <sup>4</sup>	-	3,751	-	-	-	-	-	3,751
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	1,383	9,641	225	-	-	-	-	11,249
Total DRWD 1-for-1 Long Term Exchange Credit <sup>5</sup>	16,500	-	-	-	-	-	-	16,500
<b>TOTAL STORED WATER (1/1/2023)</b>	<b>29,916</b>	<b>13,392</b>	<b>225</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>43</b>	<b>43,576</b>
<b>(RECOVERY) AND RECHARGE IN 2023 (AF)</b>								
KWB Recovery for use on Jackson Ranch <sup>6</sup>	-	(232)	-	-	-	-	-	(232)
KWB Deliveries <sup>7</sup>	-	803	-	-	-	-	-	803
2023 SWP Allocation (100%)	873	-	-	-	-	-	872	1,745
2020 Reserve Water	13	-	-	-	-	-	-	13
BV Long Term Program Kern River Water	-	8,713	8,713	-	-	-	-	17,426
BV 2023 Recharge Kern River Water	-	2,244	2,243	-	-	-	-	4,487
CCWA 2023 Short Term Exchange	225	-	-	225	-	-	-	450
AVEK Long Term Exchange Est.	3,537	-	-	-	3,536	-	-	7,073
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	8,975	-	-	-	-	-	-	8,975
<b>TOTAL 2023 TRANSACTIONS<sup>8</sup></b>	<b>13,623</b>	<b>11,528</b>	<b>10,956</b>	<b>225</b>	<b>3,536</b>	<b>-</b>	<b>872</b>	<b>40,740</b>
Total Kern Water Bank <sup>4</sup>	-	4,322	-	-	-	-	-	4,322
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	15,006	20,598	11,181	225	3,536	-	872	51,418
Total DRWD 1-for-1 Long Term Exchange Credit <sup>5</sup>	7,525	-	-	-	-	-	-	7,525
<b>TOTAL STORED WATER (1/1/2024)</b>	<b>34,564</b>	<b>24,920</b>	<b>11,181</b>	<b>225</b>	<b>-</b>	<b>-</b>	<b>915</b>	<b>71,805</b>
<b>(RECOVERY) AND RECHARGE IN 2024 (AF)</b>								
KWB Recovery for use on Jackson Ranch <sup>6</sup> Est. 2024	-	-	-	-	-	-	-	-
SWP Allocation (40%)	-	-	-	-	-	-	-	-
BV Long Term Program Kern River Water Est.	-	-	-	-	-	-	-	-
AVEK Long Term Exchange Est.	-	-	-	-	-	-	-	-
Silver Tip 2023 Short Term Exchange	-	-	-	-	-	-	-	-
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	2,200	-	-	-	-	-	-	2,200
<b>TOTAL ESTIMATED 2024 TRANSACTIONS<sup>8</sup></b>	<b>2,200</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,200</b>
<b>ESTIMATED WATER IN STORAGE 2024 (AF)</b>								
Total Kern Water Bank <sup>4</sup>	-	4,322	-	-	-	-	-	4,322
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	17,206	20,598	11,181	225	3,536	-	872	53,618
Total DRWD 1-for-1 Long Term Exchange Credit <sup>5</sup>	5,325	-	-	-	-	-	-	5,325
<b>TOTAL ESTIMATED STORED WATER TO DATE</b>	<b>34,564</b>	<b>24,920</b>	<b>11,181</b>	<b>225</b>	<b>3,536</b>	<b>-</b>	<b>915</b>	<b>75,341</b>

**NOTES:** MWD = Metropolitan Water District of Southern California.

<sup>1</sup> IRWD's SWP includes 295 AF from CVWD that stays in Kern County.

<sup>2</sup> IRWD's Non-SWP total includes 2,403 AF, net of losses, of Kern County Water Agency Article 21 Water.

<sup>3</sup> DRWD water supply will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch. MWD took delivery of IRWD's 2022 SWP allocation in June 2022.

<sup>4</sup> IRWD's KWB Account balance includes SWP, Friant and Kern River water. The KWB account balance is included in the Non-SWP column because it is not exportable to IRWD's service area.

<sup>5</sup> Per the DRWD Long-Term 1-for-1 Exchange Program, Non-SWP water delivered to DRWD landowners will be returned to IRWD as SWP water at a later date. To account for the SWP water that will be returned at a later date, the amount of water owed will be shown as a credit. Total assumes all water is returned to IRWD Water Bank which adds in a 10% loss factor.

<sup>6</sup> Water recovered from IRWD's Kern Water Bank account for use on Jackson Ranch.

<sup>7</sup> A portion of IRWD's 2023 SWP deliveries from DRWD include 803 AF of Article 21 water, which was delivered to the Kern Water Bank.

<sup>8</sup> Total banking losses for 2023 deliveries to the IRWD bank are estimated to be 3,506 AF. Total banking losses for 2024 deliveries to the IRWD Water Bank are estimated to be 314 AF.

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## Exhibit "C"

**TABLE 3**  
**IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES**  
 September 19, 2024

TRANSACTIONS	WATER BANKING ENTITY							TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	ANTELOPE VALLEY-EAST KERN (AVEK)	SILVERTIP	DUDLEY RIDGE WATER DISTRICT (DRWD) <sup>3</sup>	
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	SWP	SWP	
<b>BEGINNING WATER IN STORAGE 2023 (AF)</b>								
Total Kern Water Bank <sup>4</sup>	-	3,751	-	-	-	-	-	3,751
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	344	5,705	225	-	-	-	-	6,274
Total DRWD 1-for-1 Long Term Exchange Credit <sup>5</sup>	15,000	-	-	-	-	-	-	15,000
<b>TOTAL STORED WATER (1/1/2023)</b>	<b>27,377</b>	<b>9,456</b>	<b>225</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>43</b>	<b>37,101</b>
<b>(RECOVERY) AND RECHARGE IN 2023 (AF)</b>								
KWB Recovery for use on Jackson Ranch <sup>6</sup>	-	(232)	-	-	-	-	-	(232)
KWB Deliveries <sup>7</sup>	-	723	-	-	-	-	-	723
2023 SWP Allocation (100%)	748	-	-	-	-	-	748	1,496
2020 Reserve Water	12	-	-	-	-	-	-	12
BV Long Term Program Kern River Water	-	7,470	7,863	-	-	-	-	15,333
BV 2023 Recharge Kern River Water	-	1,923	2,025	-	-	-	-	3,948
CCWA 2023 Short Term Exchange	193	-	-	193	-	-	-	386
AVEK Long Term Exchange	3,032	-	-	-	3,032	-	-	6,064
DRWD 1-for-1 Long Term Exchange (Recharge)	7,694	-	-	-	-	-	-	7,694
<b>TOTAL 2023 TRANSACTIONS</b>	<b>11,679</b>	<b>9,884</b>	<b>9,888</b>	<b>193</b>	<b>3,032</b>	<b>-</b>	<b>748</b>	<b>35,424</b>
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	12,023	15,098	10,113	193	3,032	-	748	41,207
Total DRWD 1-for-1 Long Term Exchange Credit	7,306	-	-	-	-	-	-	7,306
<b>TOTAL STORED WATER (1/1/2024)</b>	<b>31,362</b>	<b>19,340</b>	<b>10,113</b>	<b>193</b>	<b>3,032</b>	<b>-</b>	<b>791</b>	<b>64,831</b>
<b>(RECOVERY) AND RECHARGE IN 2024 (AF)</b>								
KWB Recovery for use on Jackson Ranch <sup>6</sup> Est.	-	-	-	-	-	-	-	-
2024 SWP Allocation (40%)	-	-	-	-	-	-	-	-
BV Long Term Program Kern River Water Est.	-	-	-	-	-	-	-	-
AVEK Long Term Exchange Est.	-	-	-	-	-	-	-	-
Silver Tip 2023 Short Term Exchange	-	-	-	-	-	-	-	-
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	1,886	-	-	-	-	-	-	1,886
<b>TOTAL ESTIMATED 2024 TRANSACTIONS</b>	<b>1,886</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,886</b>
<b>ESTIMATED WATER IN STORAGE 2024 (AF)</b>								
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	13,909	15,098	10,113	193	3,032	-	748	43,093
Total DRWD 1-for-1 Long Term Exchange Credit	5,420	-	-	-	-	-	-	5,420
<b>TOTAL ESTIMATED STORED WATER TO DATE</b>	<b>31,362</b>	<b>19,340</b>	<b>10,113</b>	<b>193</b>	<b>3,032</b>	<b>-</b>	<b>791</b>	<b>64,831</b>

**NOTES:** Water in storage has been adjusted to account for losses. IRWD's water stored in Kern County is adjusted 15% for losses (5% for out of county loss, 6% surface loss, and 4% reserve loss); Water stored for BVWSD in Kern County is adjusted 10% (6% for surface loss and 4% for reserve loss); no losses for water directly delivered to MWD system.

MWD = Metropolitan Water District of Southern California.

<sup>1</sup> IRWD's SWP includes 251 AF from CVWD that stays in Kern County.

<sup>2</sup> IRWD's Non-SWP total includes 2,403 AF of Kern County Water Agency Article 21 Water.

<sup>3</sup> DRWD water will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch. MWD took delivery of IRWD's 2022 SWP allocation in June 2022. MWD will not take delivery of IRWD's 2023 SWP Allocation.

<sup>4</sup> IRWD's KWB Account balance includes SWP, Friant and Kern River water. The KWB account balance is included in the Non-SWP column because it is not exportable to IRWD's service area. The 2022 beginning KWB balance was revised by DRWD based on KCWA 2021 end of year balances.

<sup>5</sup> Per the DRWD Long-Term 1-for-1 Exchange Program, Non-SWP water delivered to DRWD landowners will be returned to IRWD as SWP water at a later date. To account for the SWP water that will be returned at a later date, the amount of water owed will be shown as a credit. Total assumes all water is returned to IRWD Water Bank which adds in a 10% loss factor. Final amounts may be subject to additional CVC losses.

<sup>6</sup> Water recovered from IRWD's Kern Water Bank account for use on Jackson Ranch.

<sup>7</sup> A portion of IRWD's 2023 SWP Deliveries from DRWD include 723 AF of Article 21, after losses, which was delivered to the Kern Water Bank.

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## Exhibit "D"

**TABLE 4**  
**Status of IRWD Purchase and Exchange Programs (AFTER LOSSES)**  
 September 19, 2024

PARTNER	EXCHANGE RATIO	YEAR EXECUTED	AGREEMENT TYPE	WATER TYPE	PARTNER WATER		IRWD WATER									SELLABLE (Y/N)
					PARTNER SHARE (AF)	PARTNER BALANCE (AF)	IRWD SHARE (AF)	IRWD BALANCE			EXPORTABILITY					
								IN MWD SYSTEM (AF)	STORED IN KERN (AF)		OWED BY DUDLEY RIDGE WD	TOTAL (AF)	EXPORTABLE TO IRWD (AF)	NON-EXPORTABLE (AF)	FOR USE ON JACKSON RANCH (DRWD)	
							Strand and Stockdale	Kern Fan (W.Enos)								
Semitropic Water Storage District	NA	2008	Purchase	SWP Article 21	NA	NA	2,842		2,403			2,403		2,403		Yes
Carpinteria Valley Water District	2-for-1	2008	Short-Term	SWP Table A	277		250		250			250		250		Yes
Buena Vista Water Storage District <sup>1</sup>	2-for-1	2010	Pilot	Kern River	4,108		3,903									Yes
	2-for-1	2011	Long-Term	Kern River	29,336	8,088	27,869		10,772			10,772		10,772		
Antelope Valley East Kern Water Agency	2-for-1	2011	Pilot	SWP Table A	2,229		2,337	2,337				2,337	2,337			No
Carpinteria Valley Water District	2-for-1	2011	Pilot	SWP Table A	624		655	655				655	655			No
Dudley Ridge Water District (SWPAO #13012)	2-for-1	2013	SWPAO	SWP Table A	1,876		1,876	1,876				1,876	1,876			Yes
				SWP Article 21	1,553		1,554	1,554			1,554	1,554				Yes
Metropolitan Water District <sup>2</sup>	1-for-1	2014	Short-Term	SWP Table A	NA	NA	4,000	4,000				4,000	4,000			No
Dudley Ridge Water District (SWPAO #17030)	2-for-1	2018	SWPAO	SWP Table A	1,802	791	1,885	1,055	829			1,885	1,885		791	Yes
Central Coast Water Authority (SWPAO #17001)	2-for-1	2017	Short-Term	SWP Table A	258		258	258				258	258			No
Dudley Ridge Water District <sup>3</sup> (SWPAO #19001)	1-for-1	2017	Long-Term	SWP Table A	NA	NA	9,580		9,580			9,580	15,000			No
				Credit	NA	NA	5,420			5,420	5,420				No	
Central Coast Water Authority (SWPAO #19031)	2-for-1	2019	Short-Term	SWP Table A	298		323	298	25			323	323			No
Buena Vista Water Storage District <sup>1</sup>	2-for-1	2023	Short-Term	Kern River	2,025	2,025	1,923		1,183	741		1,923		1,923		Yes
Central Coast Water Authority (SWPAO #23012)	2-for-1	2023	Short-Term	SWP Table A	193	193	193			193		193	193			No
Antelope Valley East Kern Water Agency	2-for-1	2018	Long-Term	SWP Table A	3,032	3,032	3,032		2,461	571		3,032	3,032			No
<b>Total:</b>					<b>47,610</b>	<b>14,128</b>	<b>67,899</b>	<b>12,033</b>	<b>27,503</b>	<b>1,504</b>	<b>5,420</b>	<b>46,460</b>	<b>31,112</b>	<b>15,348</b>	<b>791</b>	<b>NA</b>

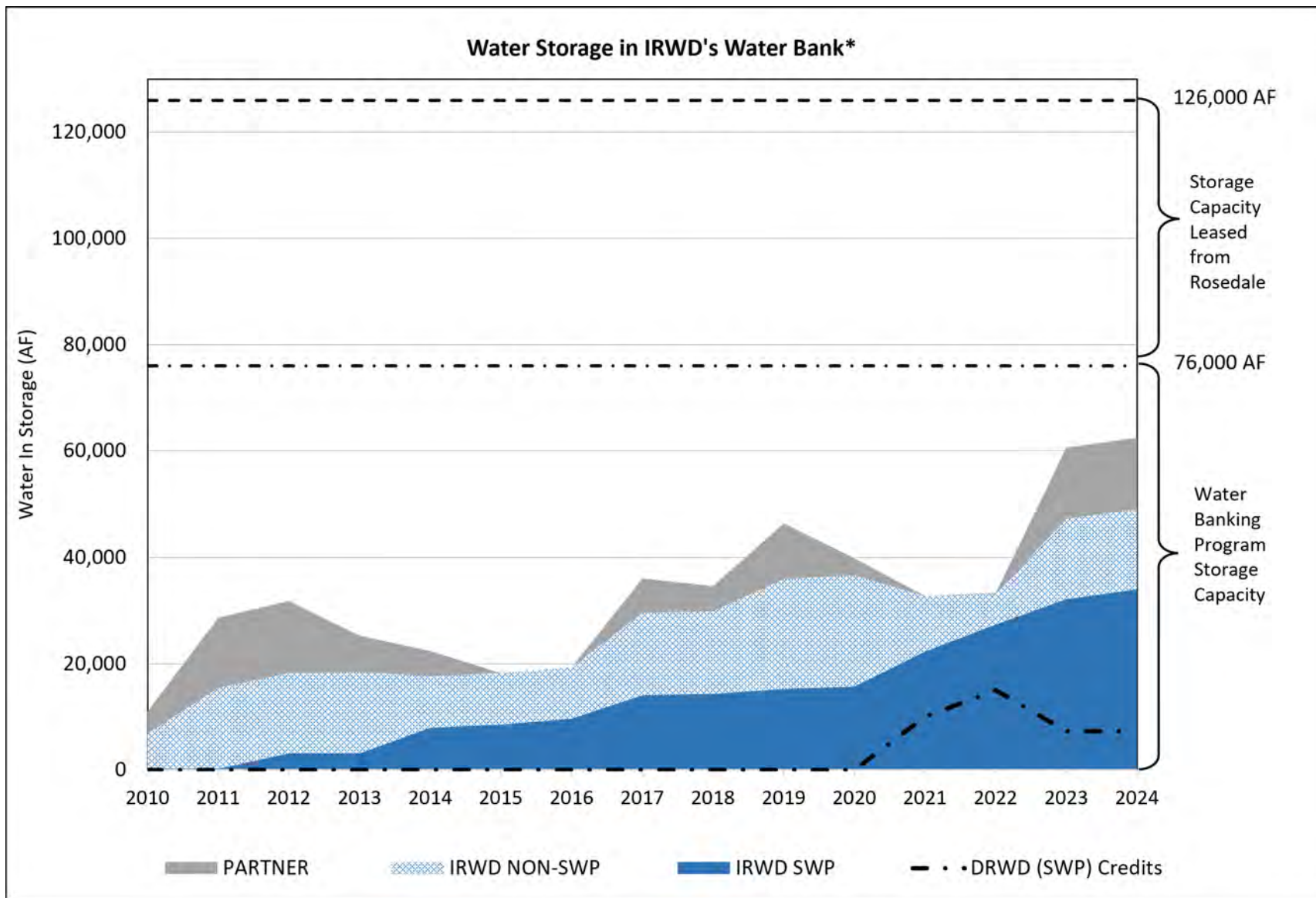
<sup>1</sup> Water acquired through BVWSD will be exportable after it is exchanged for SWP Table A through 1-for-1 exchange with Dudley Ridge Water District.

<sup>2</sup> Source of water was Buena Vista Water Storage District Kern River high flow water.

<sup>3</sup> To account for the SWP water that will be returned to IRWD, the amount of water owed is shown as a credit. The total net of losses is 15,000 AF.

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Exhibit "E"



\*After losses

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Exhibit "F"

TABLE 5

IRWD Dedicated Water Banking Capacities for Existing and Proposed Exchange Programs

September 19, 2024

STORAGE CAPACITY

Program	Dedicated Storage Capacity Strand Ranch (AF)	Dedicated Storage Capacity Stockdale West (AF)	Dedicated Storage Capacity Leased Storage Account (AF)	Kern Water Bank Storage Capacity (AF)
Total Capacity	50,000	26,000	50,000	9,495
BVWSD	40,000	-	-	-
IRWD/DRWD	10,000	6,000	-	-
AVEK	-	20,000	-	-
<i>Proposed Programs:</i>				
Santa Clara	-	-	20,000	-
Silvertip LLC	-	-	8,000	-
Homer LLC	-	-	8,000	-
Total Dedicated	50,000	26,000	36,000	-
Total Remaining	-	-	14,000	9,495

FIRST-PRIORITY RECHARGE CAPACITY

Program	Dedicated Recharge Capacity Strand Ranch (AF)	Dedicated Recharge Capacity Stockdale West (AF)	Dedicated Recharge Capacity Leased Storage Account (AF)	Kern Water Bank Recharge Capacity (AF)
Total Capacity	17,500	27,100	-	3,200
BVWSD	17,500	-	-	-
IRWD/DRWD	-	7,100	-	-
AVEK	-	20,000	-	-
Total Dedicated	17,500	27,100	-	-
Total Remaining	-	-	-	3,200

FIRST-PRIORITY RECOVERY CAPACITY

Program Partner	Dedicated Recovery Capacity Strand Ranch (AF)	Dedicated Recovery Capacity Stockdale West (AF)	Dedicated Recovery Capacity Leased Storage Account (AF)	Kern Water Bank Recovery Capacity (AF)
Total Capacity	17,500	11,250	-	1,520
BVWSD	6,667	-	-	-
DRWD	-	-	-	-
AVEK	-	3,333	-	-
IRWD	10,833	7,917	-	1,520
Total Dedicated	17,500	11,250	-	1,520
Total Remaining	-	-	-	-

**TABLE 6**

**Second-Priority Recharge and Recovery Capacity Available after Annual Scheduling of Dedicated First-Priority Recharge and Recovery Allocated to Existing Programs**

September 19, 2024

**SECOND-PRIORITY RECHARGE CAPACITY**

<b>Program</b>	<b>Dedicated Recharge Capacity Strand Ranch and Stockdale West (AF)</b>	<b>Minimum Program Share for Second-Priority <sup>1</sup></b>	<b>Available Minimum Recharge Capacity if not used by Existing Programs (AF)</b>	<b>Total Program Recharge Capacity (AF)</b>
Total Capacity	44,600		44,600	
Existing Programs	44,600		-	44,600
<i>Proposed Programs:</i>				
Santa Clara	-	40%	17,840	20,000
Silvertip LLC	-	16%	7,136	8,000
Homer	-	16%	7,136	8,000
Total Dedicated	44,600	72%	32,112	
Total Remaining	-		12,488	

**SECOND-PRIORITY RECOVERY CAPACITY**

<b>Program Partner</b>	<b>Dedicated Recovery Capacity Strand Ranch and Stockdale West (AF)</b>	<b>Minimum Program Share for Second Priority <sup>1</sup></b>	<b>Minimum Available Recovery Capacity if not used by Existing Programs (AF)</b>	<b>Total Program Recovery Capacity (AF)</b>
Total Capacity	28,750		28,750	
Existing Programs	28,750		-	2,750
<i>Proposed Programs:</i>				
Santa Clara	-	40%	3,333	3,333
Silvertip LLC	-	16%	1,333	1,333
Homer LLC	-	16%	1,333	1,333
Total Dedicated	28,750	72%	6,000	
Total Remaining	-		22,750	

<sup>1</sup> Second-priority recharge and recovery capacity allocated to programs on a pro-rata share based on share of leased storage capacity.

For example:

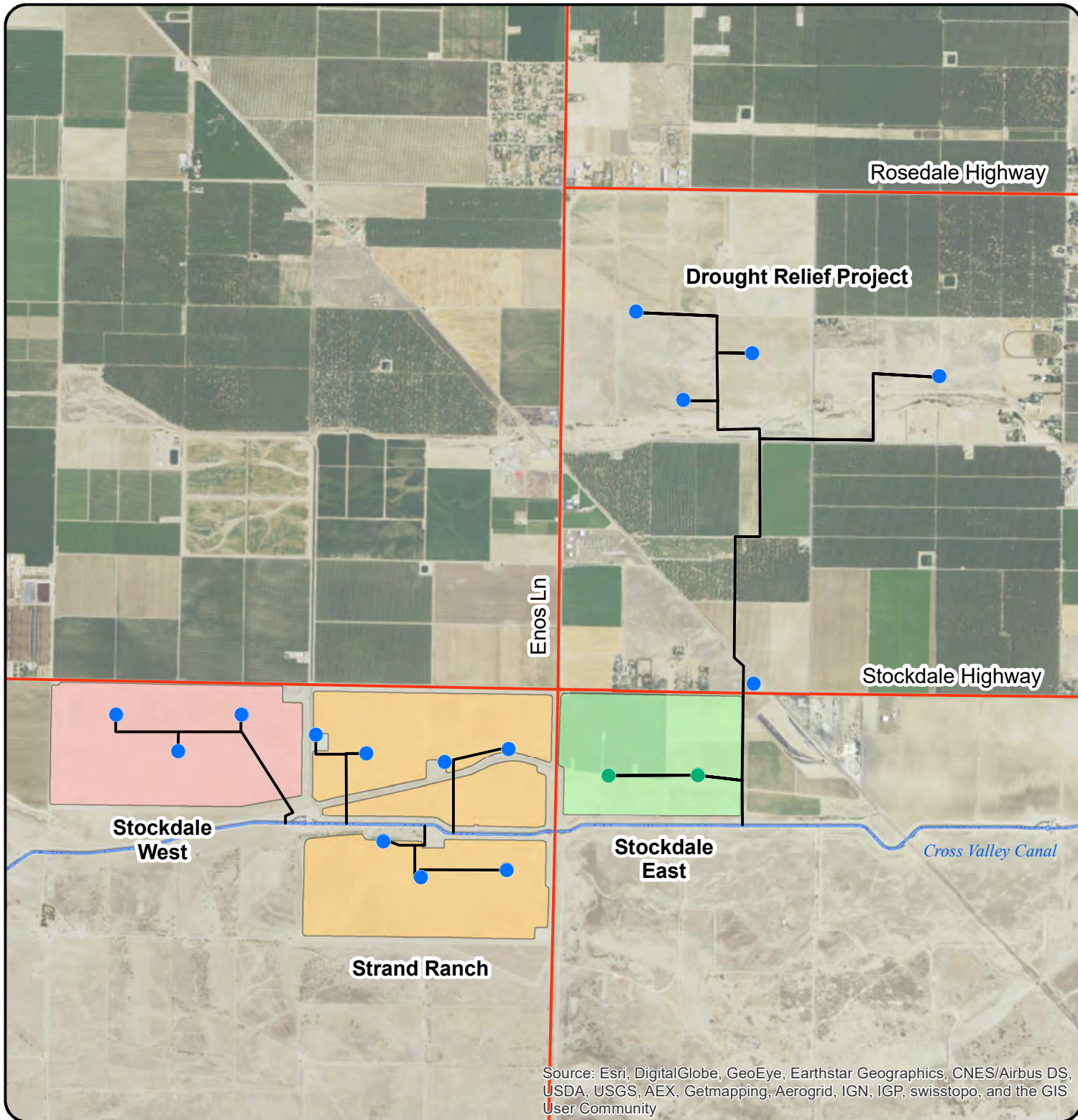
Santa Clara Share: 20,000 AF of 50,000 AF leased storage (40%)

Silvertip LLC Share: 8,000 AF of 50,000 AF leased storage (16%)

Homer LLC Share: 8,000 AF of 50,000 AF leased storage (16%)



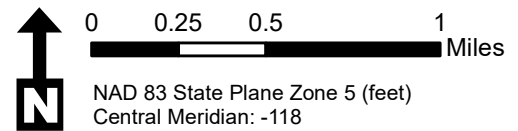
### Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines



**MAP FEATURES**

- Extraction Well
- Extraction Well
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

This figure shows the location of IRWD's water banking project sites and extraction wells.



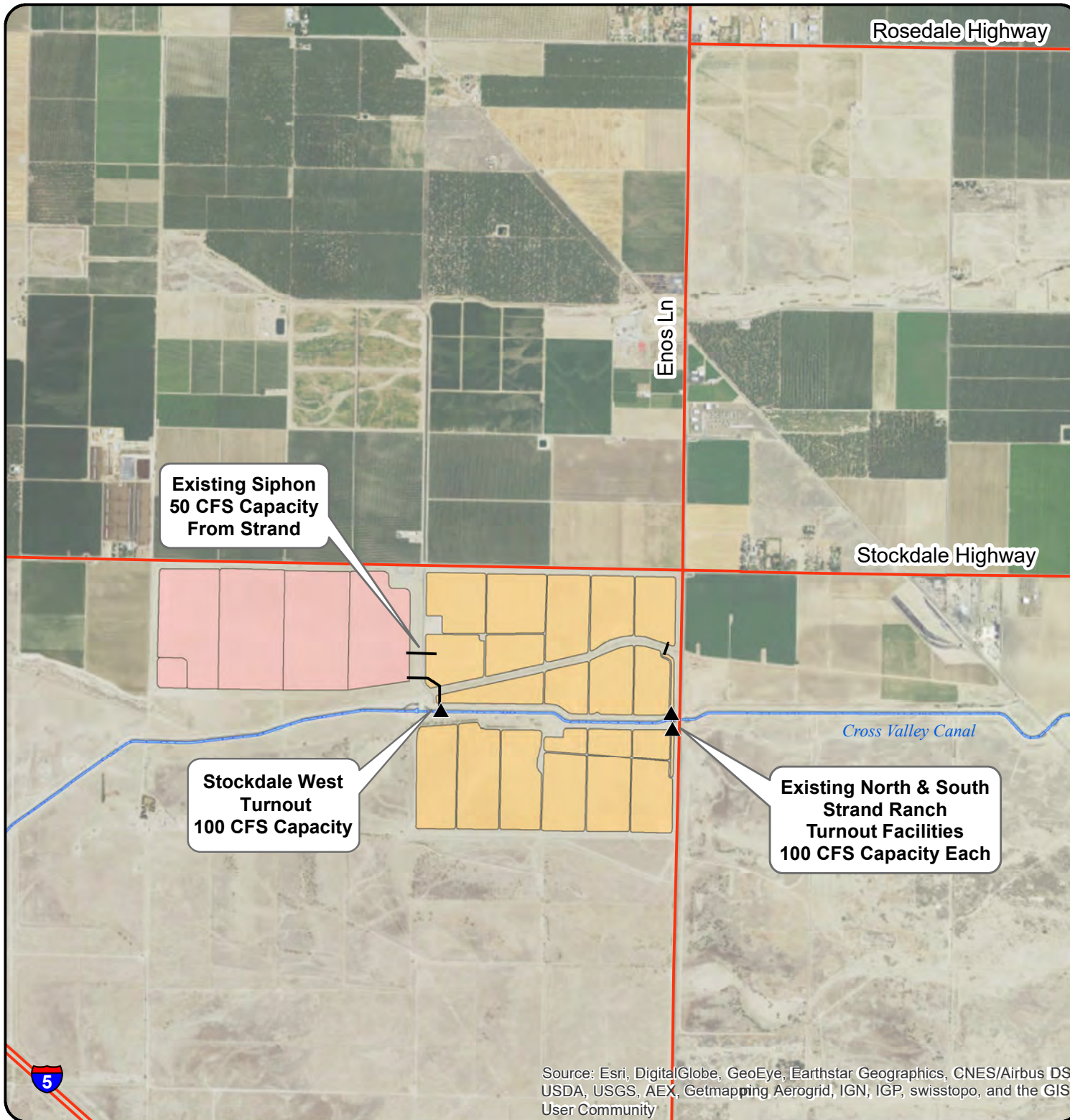
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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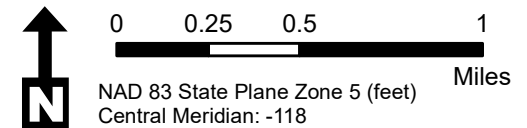
### Location Map: IRWD Water Banking Projects Recharge Basins & Turnout Facilities



**MAP FEATURES**

- ▲ Turnouts
- Stockdale West
- Strand Ranch

This figure shows the location of recharge basins, pipelines and turnout facilities.



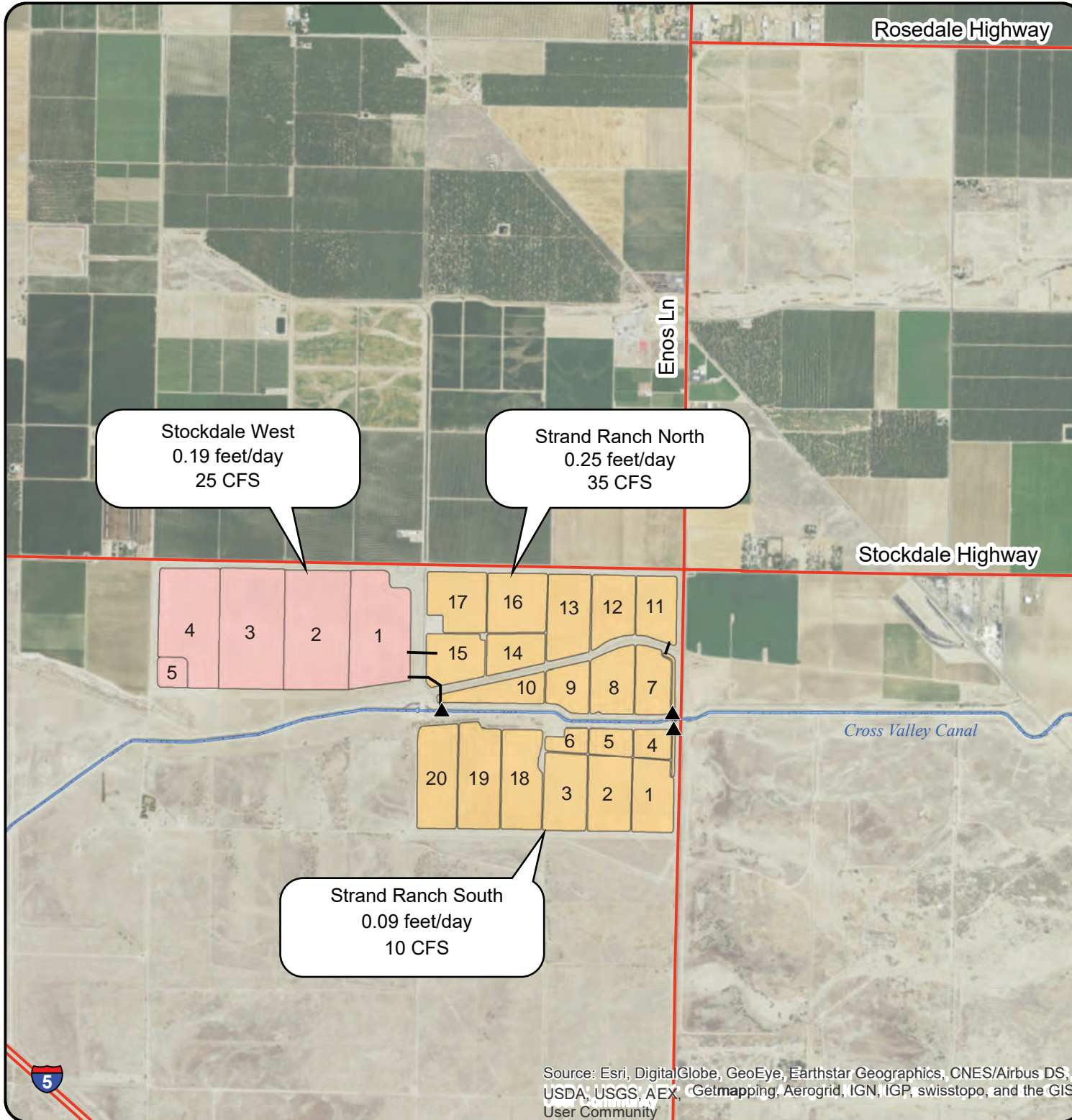
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping AeroGrid, IGN, IGP, swisstopo, and the GIS User Community

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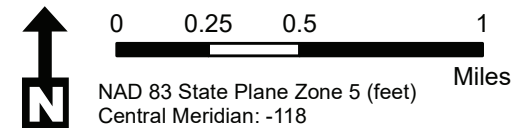
### Location Map: IRWD Water Banking Projects Recharge Rates



**MAP FEATURES**

- ▲ Turnouts
- Stockdale West
- Strand Ranch

This figure shows the location of recharge basins and their associated recharge rates as of January 4, 2024



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

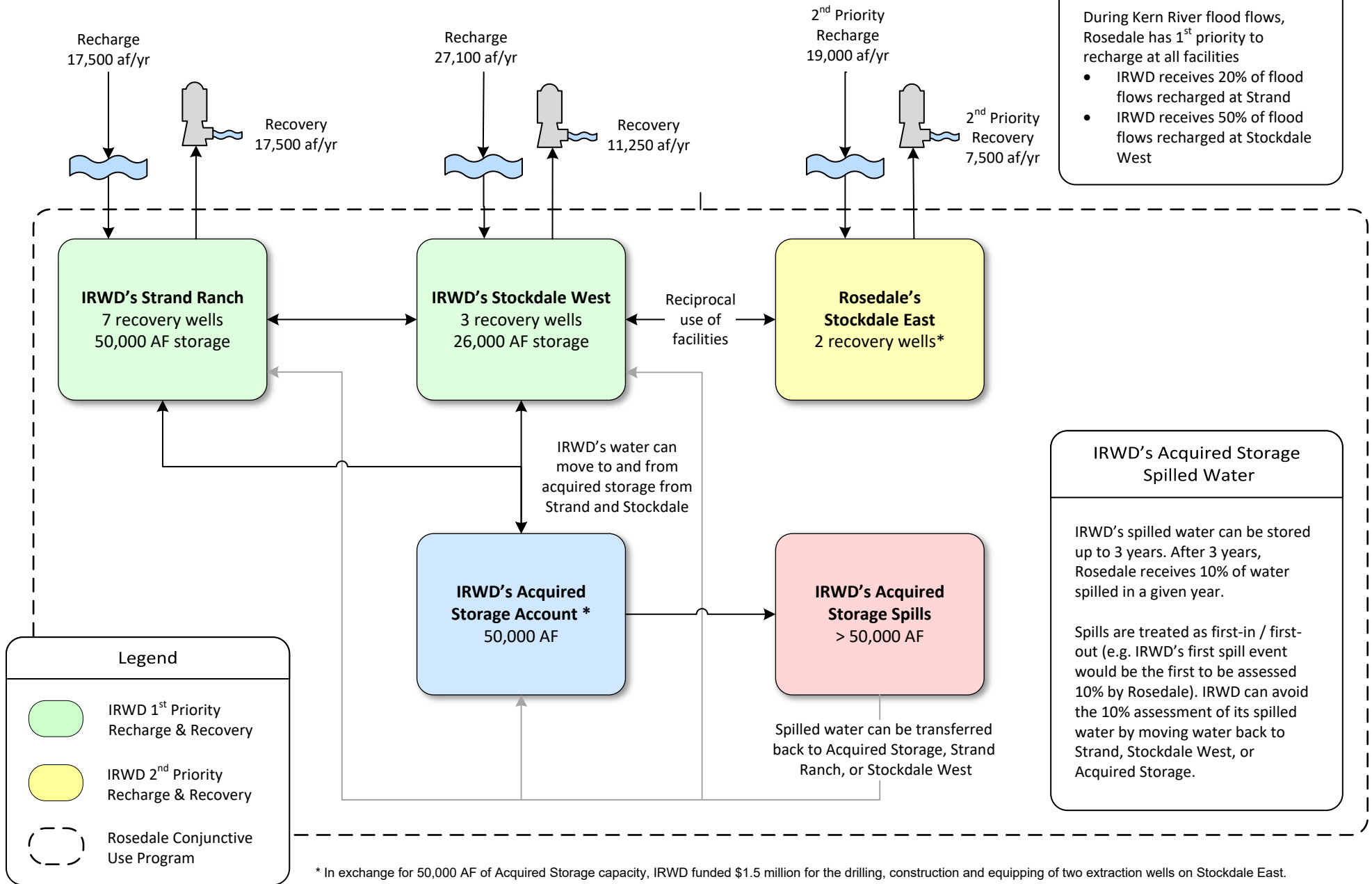
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**IRWD-Rosedale Water Banking and Exchange Program Agreements**

Effective 1/12/2009 through 1/12/2039 (Strand Ranch)

2/4/2016 through 1/12/2039 (Stockdale West)

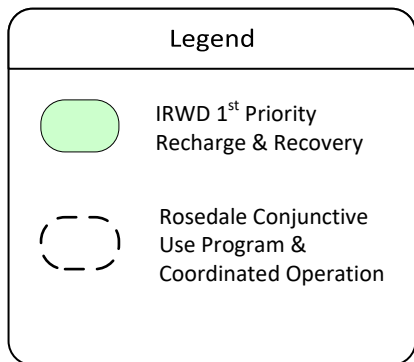
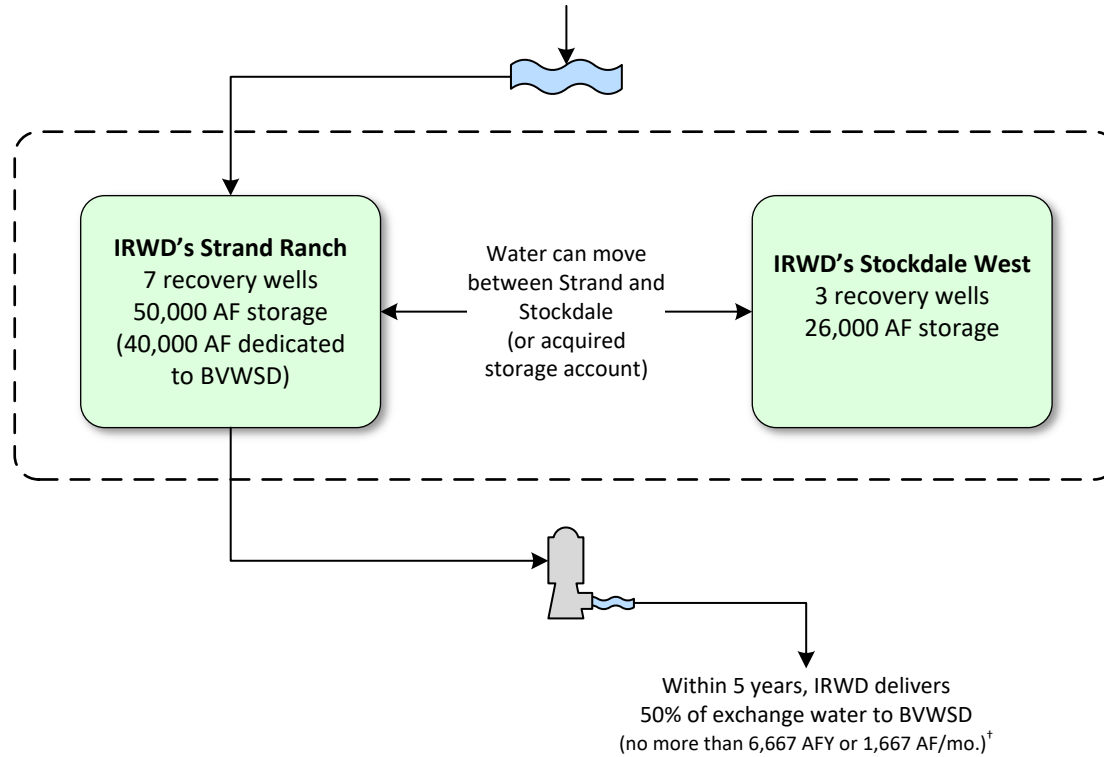


\* In exchange for 50,000 AF of Acquired Storage capacity, IRWD funded \$1.5 million for the drilling, construction and equipping of two extraction wells on Stockdale East.

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**Buena Vista Water Storage District Long Term Water Exchange Program**  
 Effective 1/1/2011 through 1/12/2039

BVWSD delivers non-SWP water to Strand Ranch  
 (IRWD receives 50%)  
 (Up to 17,500 AFY or 4,375 AF/mo.)

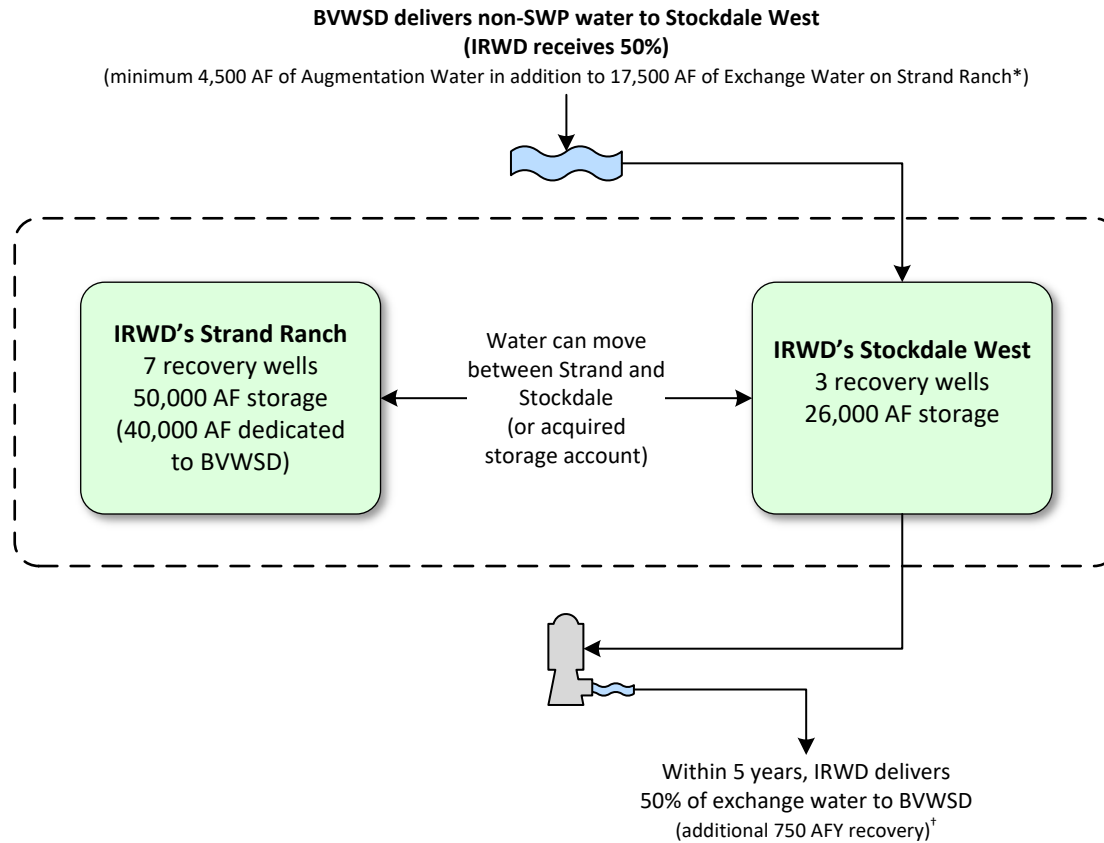




†IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31<sup>st</sup> of the 4<sup>th</sup> year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch beyond the 4<sup>th</sup> year, in exchange for a greater percent being transferred to IRWD as compensation per the table shown to the right:

Year Following Recharge Event	Percent Transferred to IRWD	Percent Returned to BV During or Before Indicated Year
1	50%	50%
2	50%	50%
3	50%	50%
4	50%	50%
5	60%	40%
6	70%	30%
7	80%	20%
8	90%	10%
9	100%	0%

# Buena Vista Water Storage District One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities

Effective 6/28/2023 through 12/31/2023



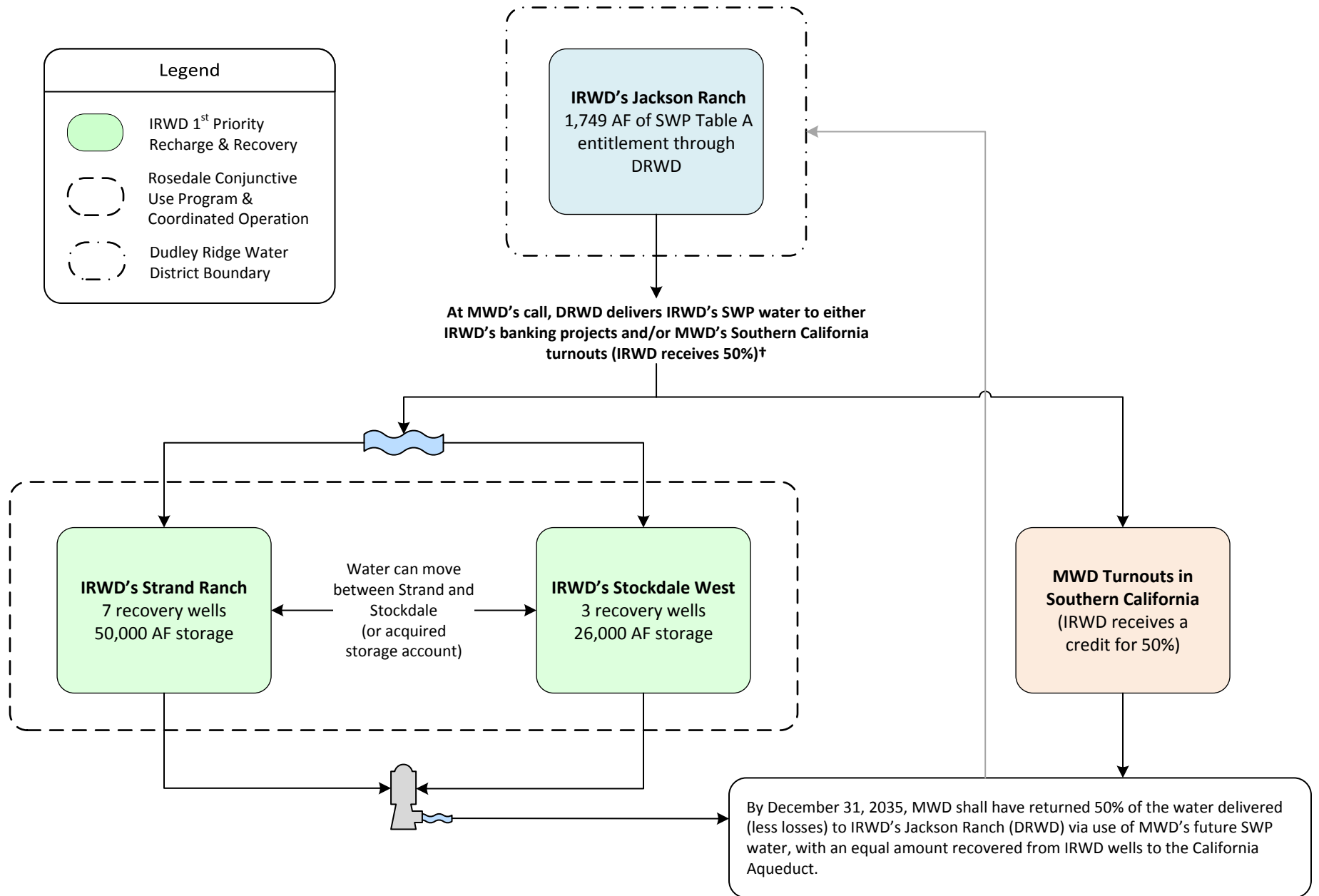
Legend	
	IRWD 1 <sup>st</sup> Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

\* IRWD agrees to pay BV \$25 per AF for IRWD's share of the Augmentation Water and Exchange Water

<sup>†</sup>IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31<sup>st</sup> of the 4<sup>th</sup> year following the associated recharge event. BV pays for recovery of its share of Augmentation Water. Water to be remitted back to BV may remain in storage at Strand Ranch beyond the 4<sup>th</sup> year, in exchange for a greater percent being transferred to IRWD as compensation per the table shown to the right:

Year Following Recharge Event	Percent Transferred to IRWD	Percent Returned to BV During or Before Indicated Year
1	50%	50%
2	50%	50%
3	50%	50%
4	50%	50%
5	60%	40%
6	70%	30%
7	80%	20%
8	90%	10%
9	100%	0%

Exhibit "L"  
**Dudley Ridge Water District (DRWD) Unbalanced Exchange Program**  
 Up to 12,240 AF delivered from 6/7/2018 through 12/31/2027



†Consistent with IRWD-MWD coordinated operating agreement.

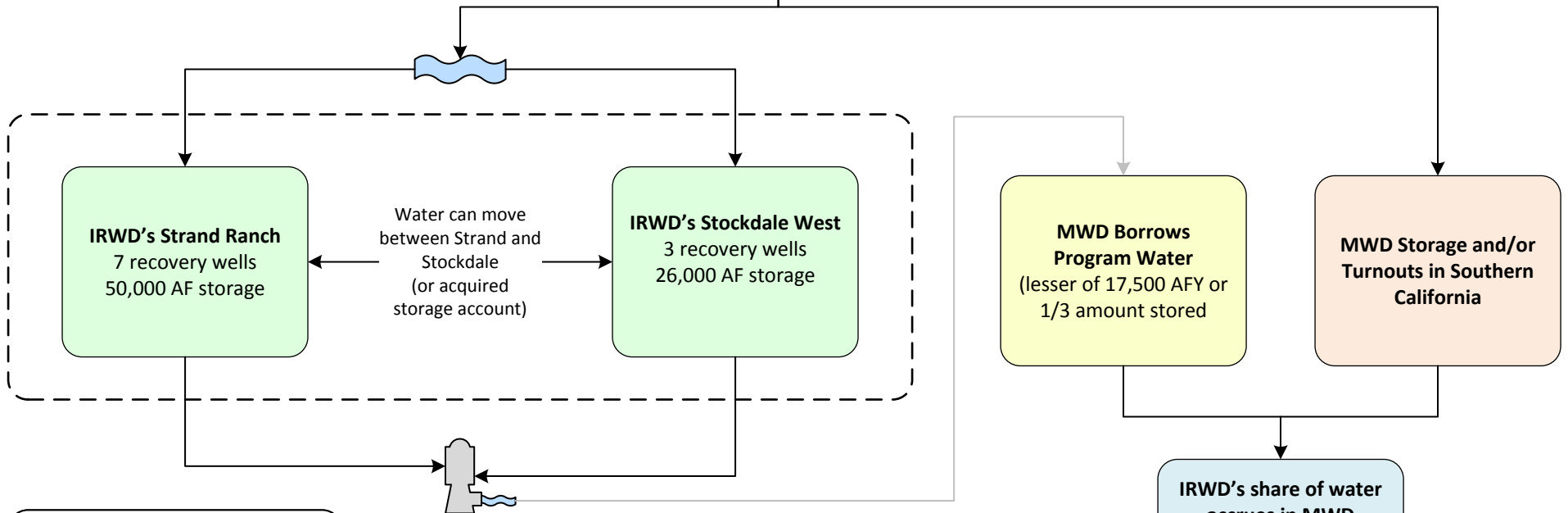
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**Coordinated Operating, Water Storage, Exchange and Delivery Agreement Between MWD, MWDOC and IRWD**  
 Effective 5/1/2011 through 11/4/2035

With MWD's consent, IRWD secures SWP water (Program Water) through exchanges with IRWD Banking Partners for use as extraordinary supply under MWD Water Supply Allocation Plan

MWD has three options for the use and storage of Program Water:

- Storage of water in IRWD's Integrated Banking Project
- Delivery to Southern California for immediate use and/or storage in MWD system
- Borrow a portion of Program water, with accrual in MWD Delivery Account



**Legend**

- IRWD 1<sup>st</sup> Integrated Banking Project
- Rosedale Conjunctive Use Program & Coordinated Operation

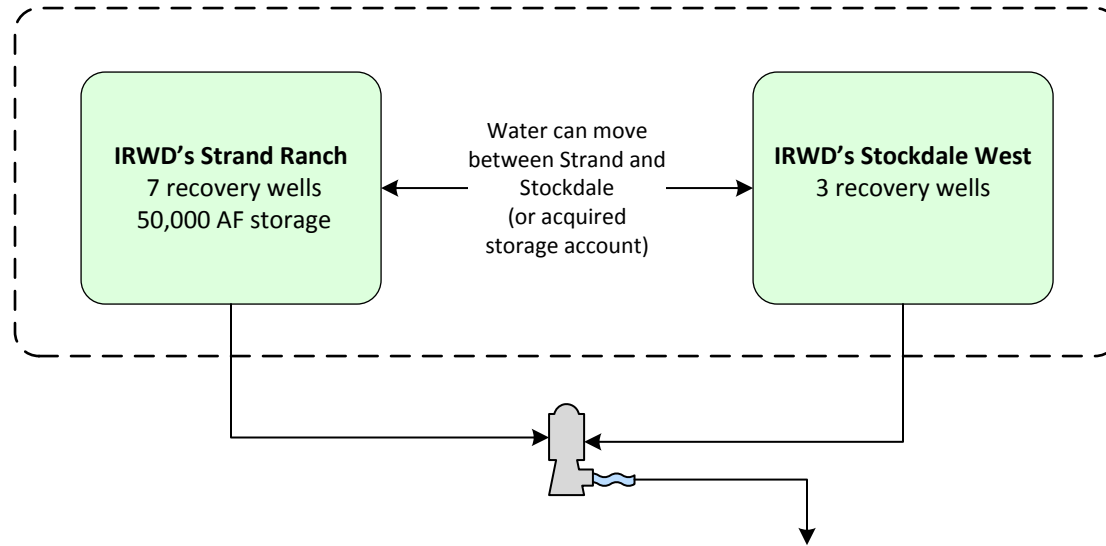
- Under an MWD Allocation, when IRWD calls for water, IRWD must first recover Program Water from the Integrated Banking Project before receiving water from the MWD Delivery Account.
- MWDOC shall pass through extraordinary supply credits for IRWD's benefit.
- † IRWD's banking partner share of Program Water to be returned by MWD.

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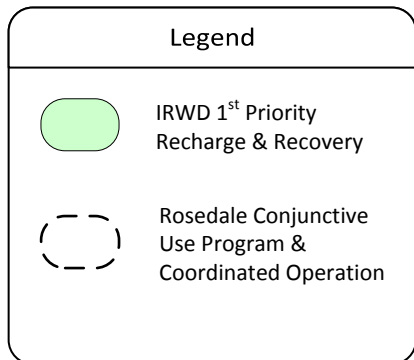


Exhibit "N"

**Agreement for Conveyance of Water Between MWD, MWDOC, and IRWD (Wheeling Agreement)**  
Template for future agreements



IRWD recovers its share of non-SWP water from its Integrated Banking Projects for use as extraordinary supply under a declared MWD Water Supply Allocation. MWD will coordinate the conveyance and delivery of recovered water to be used within IRWD's Service Area. Delivery can also occur through an operational exchange.\*



\*The recovered water must be used within IRWD's service area. IRWD to pay MWD wheeling charges, including system access rate, water stewardship rate, and treatment surcharge (if applicable), for each acre foot of recovered water wheeled by MWD. IRWD will pay the actual costs of power incurred by MWD to convey recovered water in the California Aqueduct to IRWD delivery points.

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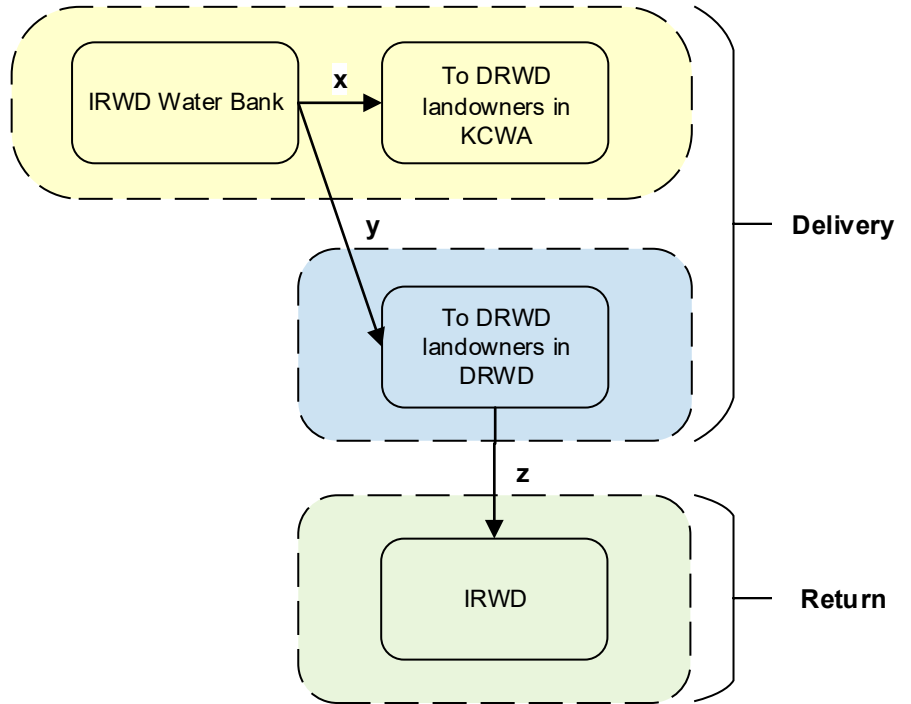
**Dudley Ridge Water District Long Term 1-for-1 Water Exchange Program**  
 Effective 5/31/2017 through 11/4/2035

**Scenario A**  
 (Per Sections 2, 3, 4.1.1, and 4.1.3)

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x= Non-Project Water required to stay in Kern County  
 y= Non-Project Water allowed to leave Kern County  
 z= DRWD Table A Water equal to x+y less applicable losses, if any

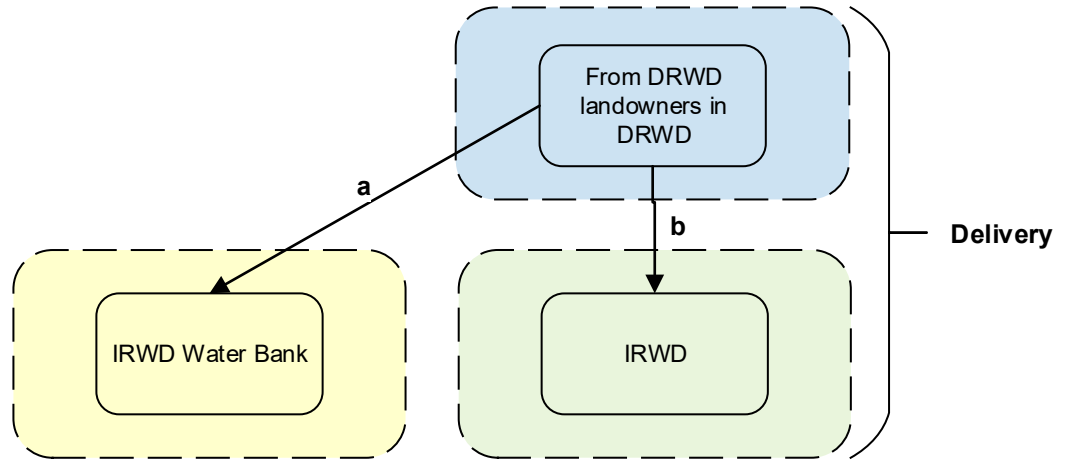
Per Section 4.1.3, z can be delivered to IRWD via in-ground transfer to IRWD, SWP delivery to IRWD banking facilities, or SWP delivery to MWDSC



**Scenario B**  
 (Per Sections 2, 3, and 4.1.2)

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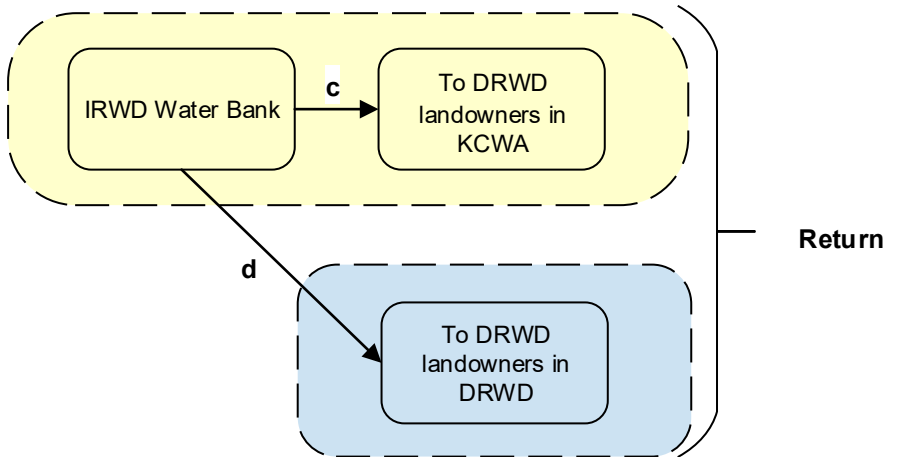
$a + b = c + d$   
 (less applicable losses, if any)



**Legend**

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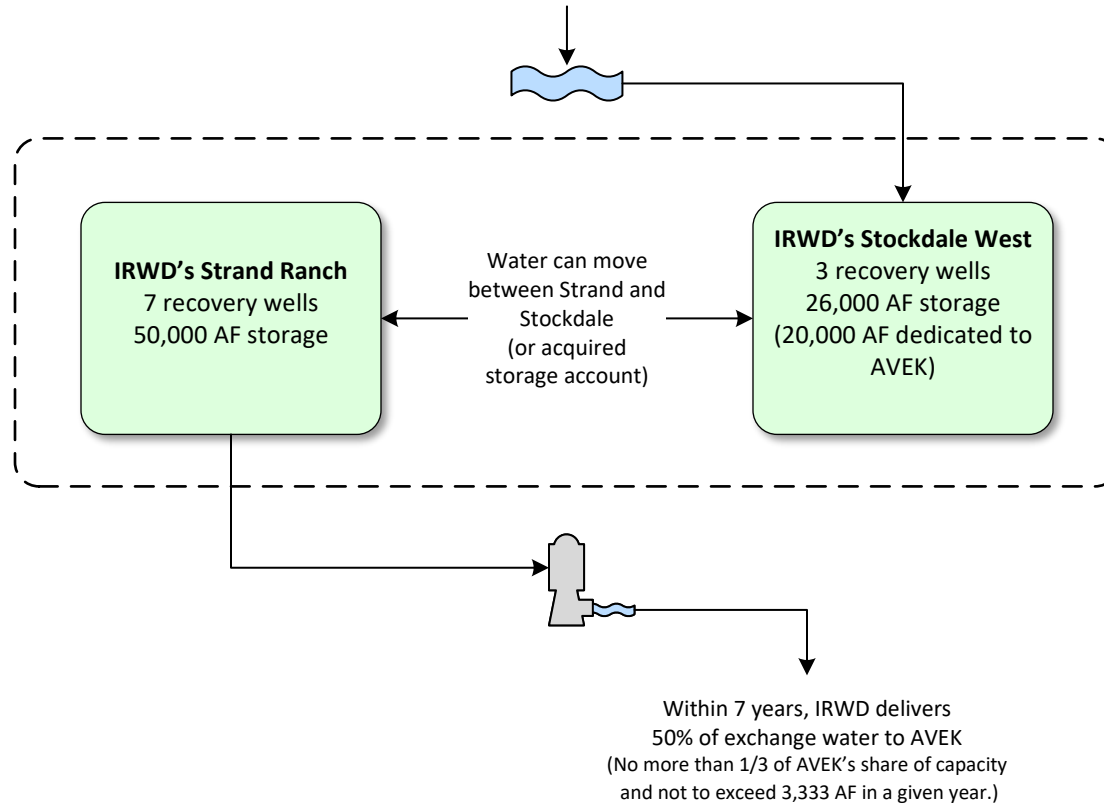
- KCWA Service Area
- DRWD Service Area
- IRWD Service Area





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**Exhibit "P"**  
**Antelope Valley-East Kern Water Agency (AVEK) Long Term Water Exchange Program**  
 Effective 12/21/2018 through 12/31/2035

AVEK delivers SWP water to IRWD Water Bank  
**(IRWD receives 50%)**  
 (Up to 20,000 AFY or 2,200 AF/mo.)\*



Legend	
	IRWD 1 <sup>st</sup> Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

\*Up to 20,000 AF per year of AVEK Exchange Water may be delivered to IRWD for recharge using recharge facilities at the Strand Ranch and Stockdale West for storage in the Stockdale West Bank. IRWD shall remit one-half of stored supplies less one half of losses back to AVEK no later than December 31<sup>st</sup> of the 7<sup>th</sup> year, following the associated recharge event.

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Exhibit "Q"

**TABLE 7**  
**IRWD Water Banking Program Costs of Water Summary**  
 September 19, 2024

Program Partner	Time Period	Water Type	IRWD Amount (AF)	Variable costs <sup>2</sup> (\$/AF)	Fixed Cost Component <sup>3</sup> (\$/AF)	Fixed & Variable (\$/AF)	Capital Component <sup>4</sup> (\$/AF)	Cost of Water (\$/AF)	Estimated Recovery of Water <sup>5</sup> (\$/AF)	2024 MWD Tier 1 Untreated Rate + SAC Surcharge <sup>6</sup> (\$/AF)	Cost of Water in IRWD Service Area (\$/AF)
				(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
						A+B		C+D			E+F+G
Buena Vista	2010-2015	Kern River	12,832	\$ 75.98	\$ 48.36	\$124.34	\$ 190.00	\$ 314.34	\$ 120.00	\$ 903.99	\$ 1,338.33
Buena Vista <sup>1</sup>	2017-2021	Kern River	11,256	\$ 159.16	\$ 48.36	\$207.52	\$ 190.00	\$ 397.52	\$ 120.00	\$ 903.99	\$ 1,421.51
AVEK	2012-2014	SWP Table A	2,229	\$ 11.70	\$ 48.36	\$ 60.06	\$ 190.00	\$ 250.06	\$ 120.00	\$ 903.99	\$ 1,274.05
AVEK <sup>7</sup>	2012-2014	SWP Table A	108	\$ 11.70	\$ 48.36	\$ 60.06	\$ 190.00	\$ 250.06	\$ -	\$ 903.99	\$ 1,154.05
Carpinteria	2010-2015	SWP Table A	874	\$ 27.04	\$ 48.36	\$ 75.40	\$ 190.00	\$ 265.40	\$ 120.00	\$ 903.99	\$ 1,289.39
Carpinteria <sup>7</sup>	2010-2015	SWP Table A	31	\$ 27.04	\$ 48.36	\$ 75.40	\$ 190.00	\$ 265.40	\$ -	\$ 903.99	\$ 1,169.39
Central Coast <sup>7</sup>	2017-2021	SWP Table A	556	\$ 30.34	\$ 48.36	\$ 78.70	\$ 190.00	\$ 268.70	\$ -	\$ 903.99	\$ 1,172.69
DRWD <sup>7</sup>	2014-2021	SWP Table A /Article 21	4,452	\$ 362.67	\$ 48.36	\$411.03	\$ 190.00	\$ 601.03	\$ -	\$ 903.99	\$ 1,505.02
<b>Total</b>			<b>32,338</b>								

<sup>1</sup> Water purchased in 2019 includes commodity charge of \$110/AF

<sup>2</sup> Variable Costs shown above are based on actual costs. The different components and average costs included in the variable cost are as follows: recharge variable operating costs (\$5.00/AF), Rosedale administration fees (\$3.00/AF), CVC pumping (\$9.00/AF), operating and stand-by fees (\$3.50/AF), and KCWA fees (\$5.00/AF) plus \$3,000 per transaction request. IRWD pays Buena Vista recovery costs. (Net of partner payments to IRWD for their share of water)

<sup>3</sup> Fixed costs include IRWD share of fixed operating costs (\$25.00/AF), annual property taxes (\$88,000), PG&E standby costs (up to \$5,000/year), GSP fees (\$8,450/year) and CVC expansion costs (\$28,000/year)

<sup>4</sup> Capital component does not include land costs, grants received, and revenue from DRWD water sold in 2021. Add \$60/AF to include these costs.

<sup>5</sup> Increased PG&E costs for recovering water.

<sup>6</sup> Assumes IRWD would take delivery as extraordinary supply through Irvine Lake to the Baker Water Treatment Plant. The SAC surcharge rate as of 6/30/2023 was \$0.99 per AF.

<sup>7</sup> No recovery costs for DRWD water delivered in 2014-2016 and water recovered in 2022 as part of MWD borrowing.

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## Exhibit "R"

### Summary of IRWD's Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan Water District and Municipal Water District of Orange County (MWDOC) (February 8, 2024)

Agreement approved (unanimously) by the IRWD Board on November 22, 2010;  
Agreement Term: April 21, 2011 to November 4, 2035

#### Summary of Benefits to IRWD:

1. IRWD benefits from all State Water Project (SWP) water IRWD secures; Metropolitan's borrowing of this water is temporary.
2. On behalf of IRWD, Metropolitan uses its SWP exchange and conveyance capacities to move IRWD's water for banking.
3. IRWD can "store" water in Metropolitan's system as a credit, freeing up space in IRWD's Water Bank with the water stored closer to the IRWD service area.
4. IRWD does not incur conveyance or evaporation losses on its water that is conveyed in Metropolitan's system and stored in Metropolitan's reservoirs.
5. IRWD avoids groundwater recovery (pumping) costs when Metropolitan issues a credit for IRWD's SWP supplies in Southern California (currently \$122/AF<sup>1</sup>).
6. IRWD pays Metropolitan's melded system power rate – currently \$182/AF, not DWR's current power costs of \$330/AF<sup>2</sup> (\$148/AF savings).
7. Deliveries are on-demand to IRWD at its service connections in Orange County, which are not subject to lower priorities for wheeling.
8. Metropolitan pays all SWP costs, including variable OMP&R supply costs, associated with SWP water secured by IRWD<sup>3</sup>.
9. IRWD pays Metropolitan's Full-Service Tier-1 Untreated Rate, which is currently \$903/AF, for deliveries at its service connections allowing IRWD to avoid higher Metropolitan wheeling charges.
10. IRWD only pays once for supply at the current Tier-1 Supply Rate of \$332/AF.
11. Deliveries to IRWD's service area qualify as Extraordinary Supply during a Water Supply Allocation, allowing IRWD to avoid Metropolitan's Allocation Surcharge of between \$1,480/AF and \$2,960/AF.
12. IRWD increases local water supply reliability for its ratepayers.

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<sup>1</sup> Estimated from IRWD's current groundwater pumping costs and Water Bank related operations costs. Metropolitan has the option to extinguish credits by returning water to the IRWD Water Bank. In recent borrowing letter agreement, Metropolitan agreed to waive its ability to return borrowed water to the Water Bank.

<sup>2</sup> Melded system and actual power costs were taken from Metropolitan's Fiscal Years 2022-23 and 2023-24 Biennial Budget Report and 2022 Cost of Service Study.

<sup>3</sup> Does not include fixed costs paid by IRWD's unbalanced exchange partners. In 2014 and 2017, Metropolitan's SWP costs were \$1,097/AF and \$359/AF, respectively.

Summary of Benefits to MWD:

1. Metropolitan maintains control of all SWP supplies entering its service area as required by its SWP Contract with California Department of Water Resources (DWR).
2. Metropolitan's investments in the SWP are protected by not causing a reduction in revenue received by Metropolitan for payment of SWP fixed charge obligations.
3. Metropolitan can temporarily borrow SWP water secured by IRWD.
4. Metropolitan is assured that IRWD is not competing for water supplies.
5. Increased regional water supply reliability.

Exhibit "S"


**IRWD 2024 Recharge Operations- BEFORE LOSSES**

September 19, 2024

**Actual and Forecasted Amounts:**

Month	IRWD Table A (AF)	DRWD 1:1 (AF)	MWD <sup>1</sup> (AF)	Buena Vista (AF)	AVEK (AF)	Homer (AF)	Valley Water (AF)	Total (AF)	Status	Expected Recharge <sup>2</sup> (AF)	Expected Recharge Rate (CFS)
January	-	2,200	-	-	-	-	-	2,200	prelim	2,200	80
February	-	-	-	-	-	-	-	-	prelim	-	70
March	-	-	-	-	-	-	-	-	prelim	-	60
April	-	-	-	-	-	-	-	-	prelim	-	60
May	-	-	-	-	-	-	-	-	prelim	-	60
June	-	-	-	-	-	-	-	-	prelim	-	60
July	-	-	-	-	-	-	-	-	prelim	-	60
August	-	-	-	-	-	-	-	-	prelim	-	60
September	-	-	-	-	-	-	-	-	prelim	-	60
								2,200		2,200	
October	700	-	79	-	-	1,854		2,633		3,689	60
November	-	-	-	-	-	-	3,500	3,500		3,570	60
December	-	-	-	-	-	-	1,500	1,500		3,689	60
	700	2,200	79	-	-	1,854	5,000	9,833		13,149	
Recharge goal:	700	7,525	79	-	-	1,854	20,000	30,158			

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September 19, 2024  
Prepared by: M. Lindsay  
Submitted by: F. Sanchez / P. Weghorst  
Approved by: Paul A. Cook 

## SUPPLY RELIABILITY PROGRAMS COMMITTEE

### PALO VERDE IRRIGATION DISTRICT PROPERTY FALLOWING PAYMENTS FOR CONTRACT YEARS 2023 THROUGH 2026

#### SUMMARY:

IRWD owns land within the Palo Verde Irrigation District (PVID). IRWD's properties participate in the Palo Verde Land Management, Crop Rotation, and Water Supply Program (Fallowing Program), which is managed by Metropolitan Water District (Metropolitan). Through this program, Metropolitan pays IRWD to fallow a portion its lands. In August, IRWD signed conservation program letters with Metropolitan to facilitate additional payments to IRWD for fallowing land through the Fallowing Program. This item provides an overview of the Fallowing Program, the related conservation program, and the fallowing payments to be received by IRWD.

#### BACKGROUND:

IRWD owns approximately 3,100 acres of land within PVID, of which 2,845 are water toll acres. IRWD's water toll acres are enrolled in the Fallowing Program through agreements with Metropolitan and PVID. Through the Fallowing Program, IRWD receives annual payments from Metropolitan based on the number of acres fallowed.

To address increasing drought conditions on the Colorado River, the Bureau of Reclamation (Reclamation) is providing additional funding for existing conservation programs, including the Fallowing Program. In December 2023, Reclamation and Metropolitan entered into a System Conservation Implementation Agreement (SCIA) whereby Reclamation will provide Metropolitan funding for water conserved through the Fallowing Program. Below is an overview of the Fallowing Program, the terms of the SCIA, and the resultant additional fallowing payments IRWD will receive from August 2023 to July 2026. Staff's summary presentation of this information is provided as Exhibit "A".

#### Fallowing Program Overview:

In 2005, Metropolitan and PVID implemented a 35-year crop rotation and fallowing program whereby Metropolitan makes payments to participating landowners in return for fallowing a portion of their land for a specific period. The conserved agricultural water is then available for Metropolitan's use. Metropolitan has a 10-year limit on maximum fallowing calls (100% calls) within the 35-year program. To date, a maximum fallowing call has been issued six times.

Metropolitan issues two-year fallowing calls to participating landowners one year in advance. Landowners identify which fields are to be designated for fallowing for the next year based on Metropolitan's fallowing call. Fallowing calls are made from August 1 to July 31 each year. Under the Fallowing Program terms, IRWD's land lessees may be called upon to fallow a minimum of 243 acres up to a maximum of 969 acres.

System Conservation Implementation Agreement:

In June 2022, Reclamation announced that the Lower Colorado River Basin states need to conserve annually an additional two to four million acre-feet of water to protect Lake Mead storage volumes. The Inflation Reduction Act (IRA) of 2022 provided up to \$4 billion in funding for conservation efforts in the Colorado River Basin. On December 20, 2023, Reclamation and Metropolitan executed the SCIA that is provided as Exhibit "B". This agreement provides IRA funding to Metropolitan for the Following Program.

The SCIA requires Metropolitan to call for 100% fallowing for the next three contract years to support Reclamation's conservation efforts in the Lower Colorado River Basin. Terms of the SCIA are summarized in Exhibit "C". The agreement requires Reclamation to pay Metropolitan \$400 per acre-foot of conserved water, up to \$46,808,400 annually. Participating landowners will be paid in September of each year. It is expected that 4.51 acre-feet will be conserved for each fallowed acre for an estimated 117,021 acre-feet to be conserved annually. The conserved water will be stored in Lake Mead.

The \$400 per acre-foot payments to Metropolitan will be used to provide additional funding to participating landowners in Fallowing Program as well as funding for program administrative costs, and community support incentives in PVID. To receive payments, participating landowners were required to sign letters with Metropolitan acknowledging the changes to the Fallowing Program. Letters for IRWD's participation in the program were signed in early August.

Additional Fallowing Payments to IRWD:

In August 2023, Metropolitan paid IRWD \$1,003 per acre to fallow 969 acres of land for a total of approximately \$972,000. This payment was for the contract period of August 1, 2023 to July 31, 2024. By participating in the SCIA, IRWD will receive an additional payment of \$550 per acre of fallowed land. This will result in a total payment to IRWD for fallowing 969 acres in the approximate amount of \$1,505,000 for the 2023-2024 contract year. Slightly increased payments will be made for the next two contract years.

FISCAL IMPACTS:

As a result of participating in the SCIA, IRWD is expected to receive a total of \$1,629,000 in additional fallowing payments from the Fallowing Program through July 31, 2026.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit “A” – Following Program Draft Presentation

Exhibit “B” – System Conservation Implementation Agreement between Metropolitan and  
Bureau of Reclamation

Exhibit “C” – Summary of Terms for System Conservation Implementation Agreement (SCIA)  
between Metropolitan and Bureau of Reclamation

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# PALO VERDE IRRIGATION DISTRICT FOLLOWING PAYMENTS FOR CONTRACT YEARS 2023-2026

*SUPPLY RELIABILITY PROGRAMS  
COMMITTEE MEETING*


SEPTEMBER 19, 2024

1

1

## OVERVIEW

- Background on the Land Fallowing Program
- IRWD's Participation in the Land Fallowing Program
- System Conservation Implementation Agreement
- Benefits to IRWD



2

2

## BACKGROUND ON THE LAND FALLOWING PROGRAM

- In 2005, Metropolitan and PVID implemented a 35-year crop rotation and fallowing program.
- Metropolitan has a limit of 10 maximum fallowing calls (100% calls) within the 35 years.
- Fallowing calls are made from August 1 to July 31 each year.
- IRWD owns approximately 3,100 acres in PVID, of which 2,845 acres are “Water Toll Acres” and enrolled in the Fallowing Program.



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## IRWD'S PARTICIPATION IN LAND FALLOWING PROGRAM

Contract	IRWD Property Name	Minimum Fallowed Acres (25%)	Maximum Fallowed Acres (100%)
63952	Martin	6	25
65033	Eaton /Stroschein	68	271
65353	Barnes-Berger	48	190
65359	Williams	112	446
65366	Holt	9	37
<b>Total:</b>		<b>243</b>	<b>969</b>



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## SYSTEM CONSERVATION IMPLEMENTATION AGREEMENT

- June 14, 2022: Reclamation announced that the Lower Colorado River Basin states need to conserve an additional 2 to 4 million acre-feet (MAF).
- The Inflation Reduction Act of 2022 provided up to \$4 billion in funding for conservation efforts in the Colorado River Basin.
- December 20, 2023: Reclamation and Metropolitan entered into a System Conservation Implementation Agreement (SCIA).



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## SCIA TERMS AND IMPLEMENTATION

- Under the SCIA:
  - Reclamation will pay \$400 per acre-foot of System Conservation Water
  - Metropolitan will issue a 100% following call for the next 3 contract years
  - 4.51 acre-feet estimated savings for each fallowed acre
  - Approximately 117,000 acre-feet conserved annually
  - Water conserved to be stored in Lake Mead
- IRWD signed letters with Metropolitan to facilitate additional payments to IRWD from August 2023 to July 2026.



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## SYSTEM CONSERVATION IMPLEMENTATION AGREEMENT BETWEEN METROPOLITAN AND RECLAMATION



— BUREAU OF —  
RECLAMATION



\$400 per acre-foot → \$ per acre → \$ total

Following Program Year	MWD's Total Fallowing Payment (\$ per acre)	Payment to IRWD, under 100% Fallow Call
Standard, August 2023 to July 2024	\$1,003	\$971,568
SCIA, August 2023 to July 2024	\$1,553	\$1,504,784
SCIA, August 2024 to July 2025	\$1,561	\$1,513,043
SCIA, August 2025 to July 2026	\$1,574	\$1,525,601



7

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## BENEFITS TO IRWD

- IRWD will receive an additional payment of approximately \$972,000 for fallowing year 2023-24, an increase of \$550 per acre
- Estimated additional payments to IRWD will total approximately \$1.6 Million over three years (2023-26)



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SYSTEM CONSERVATION IMPLEMENTATION AGREEMENT (SCIA) BETWEEN THE UNITED STATES BUREAU OF RECLAMATION AND THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, TO IMPLEMENT THE LOWER COLORADO CONSERVATION AND EFFICIENCY PROGRAM (LC CONSERVATION PROGRAM)

1. PREAMBLE This SCIA to implement the LC Conservation Program is entered into this 20<sup>th</sup> day of December, 2023, by and between the United States, Department of the Interior, Bureau of Reclamation ("Reclamation"), acting through the Regional Director of the Lower Colorado Basin Region of the Bureau of Reclamation and The Metropolitan Water District of Southern California ("MWD"), hereinafter referred to singularly as "Party" or collectively as "Parties" and pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), designated the Reclamation Act, and acts amendatory thereof or supplementary thereto, the Act of December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon Project Act, the Act of September 30, 1968 (82 Stat. 885), designated the Colorado River Basin Project Act, Public Law 116-14, the Colorado River Drought Contingency Plan Authorization Act dated April 16, 2019, and the Inflation Reduction Act of 2022, Public Law 117-169.

2. EXPLANATORY RECITALS

2.1 WHEREAS, the Colorado River Basin is experiencing the driest 23-year period in the historical record, and Lake Mead's elevation has dropped to levels where the Secretary of the Interior ("Secretary") determined shortage conditions for Lake Mead in calendar years 2022 and 2023;

2.2 WHEREAS, prior to the Secretary declaring shortage conditions for Lake Mead in calendar years 2022 and 2023, Public Law 116-14, the Colorado River Drought Contingency Plan Authorization Act ("Act") was signed into law on April 16, 2019. This Act directed the Secretary to execute several agreements hereinafter referred to collectively as ("DCP Agreements"), and the DCP Agreements were subsequently executed on May 20, 2019;

2.3 WHEREAS, one of the DCP Agreements that was executed on May 20, 2019, was an agreement between the United States and the Colorado River Basin States entitled, *Agreement Concerning the Colorado River Drought Contingency Management and Operations* ("Companion Agreement"), that provided implementation of several interstate agreements including the *Lower Basin Drought Contingency Plan Agreement* ("LB DCP Agreement") which is Attachment B to the Companion Agreement, that included Exhibit 1 entitled, *Lower Basin Drought Contingency Operations* that was designed to create new flexibility to incentivize additional voluntary conservation of water to be stored in Lake Mead;

2.4 WHEREAS, Section 3 b. of the LB DCP Agreement, among other things, provides that, subject to applicable law, including the availability of appropriations, (1) the Secretary will take affirmative actions to implement Lower Basin programs designed to create or conserve 100,000 acre-feet per annum or more of Colorado River System water to contribute to conservation

of water supplies in Lake Mead and other Colorado River reservoirs in the Lower Basin and (2) the other Parties to the LBDCP shall not request delivery of, and the Secretary shall not deliver to any Party or Contractor the volumes of Colorado River System water conserved through such programs;

2.5 WHEREAS, on September 22, 2022, the Department of the Interior (“Department”) announced that it is taking additional steps to address drought in the Colorado River Basin;

2.6 WHEREAS, the Department, through Reclamation, created a new LC Conservation Program, similar to the previous program entitled, *Pilot System Conservation Program* and Colorado River System water conservation activities under the LB DCP;

2.7 WHEREAS, the purpose of the LC Conservation Program is to increase system conservation and efficiency opportunities to address the unprecedented drought in the Lower Colorado River Basin and it is a part of the commitment made by the Department on August 16, 2022, to address the drought crisis with prompt and responsive actions and investment to ensure the entire Colorado River Basin can function and support all who rely on it;

2.8 WHEREAS, the LC Conservation Program is funded in part by the Inflation Reduction Act of 2022 that provides \$4 billion in funding specifically for water management and conservation efforts in the Colorado River Basin and other basins experiencing comparable levels of long-term drought;

2.9 WHEREAS, as a follow-up to the Department’s September 22, 2022, announcement, by letter dated October 12, 2022, to interested parties having a Colorado River water delivery contract or entitlement holders and Central Arizona Project (“CAP”) water delivery contract or entitlement holders, Reclamation announced the funding opportunity for voluntary participation in the new LC Conservation Program which included an enclosure entitled, “*Enclosure 1 - Requirements for Lower Basin System Conservation and Efficiency Project Proposals*” (“Enclosure 1”) that described the proposal and selection requirements under a set fixed price (Program 1.a. in the letter) and under an agreed upon price (Program 1.b. in the letter);

2.10 WHEREAS, MWD is a metropolitan water district created under the California Metropolitan Water District Act, codified at Section 109-1 et seq., of the Appendix to the California Water Code; and delivers Colorado River water to portions of its service area in Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties, California, pursuant to its contracts issued under Section 5 of the Boulder Canyon Project Act of 1928;

2.11 WHEREAS, the Palo Verde Irrigation District (“PVID”) holds an entitlement to Colorado River water for the irrigation of the Palo Verde Valley lands within its service area under Contract for Delivery of Water dated February 7, 1933, between the United States and PVID;

2.12 WHEREAS, MWD and PVID executed an agreement entitled, Forbearance and Following Program Agreement dated August 18, 2004 (“Program Agreement”), which established the 35-year Palo Verde Irrigation District Land Management, Crop Rotation and Water Supply Program, by which MWD executed agreements with the owners of land within the PVID service area that is eligible to receive Priority 1 water pursuant to the California Seven-Party Agreement of 1931 and that has historically been irrigated. Under such agreements the participating

landowners (herein after referred to as "Participating Landowners") fallow land in exchange for monetary payments from MWD making such water available to MWD;

2.13 WHEREAS, as provided in Section 3.8 of the Program Agreement, PVID agreed it shall not divert, take delivery of, or authorize the diversion or use of, or transfer to third parties the water conserved under the Program Agreement;

2.14 WHEREAS, as discussed in Section 6.1 of the Program Agreement, by letter dated October 10, 2003, the Imperial Irrigation District and the Coachella Valley Water District agreed to not directly or indirectly claim, pump, divert, use, or demand the water conserved under the Program Agreement;

2.15 WHEREAS, the Program Agreement is attached hereto as Exhibit A;

2.16 WHEREAS, MWD and PVID jointly submitted to Reclamation a LC Conservation Program proposal dated November 21, 2022, to enter into a three-year agreement to voluntarily fallow lands in the PVID service area to conserve water in exchange for monetary compensation;

2.17 WHEREAS, the LC Conservation Program proposal was evaluated by Reclamation pursuant to the proposal and selection requirements as shown in Enclosure 1 to Reclamation's October 12, 2022 letter;

2.18 WHEREAS, the LC Conservation Program proposal was selected by Reclamation for inclusion in the LC Conservation Program under a set fixed price of \$400.00 per acre-foot (Program 1.a.in the October 12, 2022 letter);

2.19 WHEREAS, a copy of the LC Conservation Program proposal dated November 21, 2022, is attached hereto as Exhibit B and made part of this SCIA;

2.20 WHEREAS, MWD and PVID have a history of working with the United States by entering into agreements to help mitigate the impacts of the drought by conserving water in Lake Mead as system water in exchange for financial compensation;

2.21 WHEREAS, although PVID and MWD jointly submitted the LC Conservation Program proposal, the Parties to this SCIA are MWD and Reclamation with concurrence by PVID. MWD and PVID intend to execute a separate agreement to implement this SCIA; and

2.22 WHEREAS, the Parties desire to enter into this SCIA to provide funding for land fallowing under the Program Agreement to create System Conservation Water.

NOW, THEREFORE, in consideration of the terms and conditions set forth herein, the Parties agree as follows:

### 3. DEFINITIONS

3.1 Colorado River Compact means the document signed on November 24, 1922, at Santa Fe, New Mexico, pursuant to an act of Congress approved August 19, 1921 (42 Stat. 171). The Colorado River Compact was approved in Section 13(a) of the Boulder Canyon Project Act.

3.2 Colorado River System shall have the meaning ascribed to such term in the Colorado River Compact.

3.3 Exhibit A is a copy of the Program Agreement. Exhibit A is attached hereto and part of this SCIA.

3.4 Exhibit B is a copy of the LC Conservation Program proposal dated November 21, 2022, as modified through negotiation of this SCIA. Exhibit B is attached hereto and part of this SCIA.

3.5 System Conservation Water means Colorado River water that is conserved under the SCIA and left in Lake Mead to benefit the Colorado River System pursuant to this SCIA.

#### 4. PURPOSE

4.1 The purpose of this SCIA is for Reclamation to fund land fallowing under the Program Agreement to create System Conservation Water. Instead of using the water created under the Program Agreement for its own use, MWD will create System Conservation Water under this SCIA, unless otherwise determined in accordance with Section 6.4 herein. MWD proposes to create System Conservation Water during a three-year period that began August 1, 2023 and continues through July 31, 2026, which will be 117,021 acre-feet per year, as described in Section 6.3 herein, less any Call Back under Section 6.4, thereby allowing such System Conservation Water to remain in Lake Mead as Colorado River System Water. MWD attests that such water was used in previous years and it would have been used in the years covered under this SCIA.

#### 5. SYSTEM CONSERVATION IMPLEMENTATION

5.1 The term of this SCIA begins upon execution of this SCIA and continues until the final payment in accordance with Section 9 herein is made by Reclamation to MWD and all terms and conditions herein are satisfied.

5.2 MWD and PVID jointly submitted a LC Conservation Program proposal dated November 21, 2022, and is attached to this SCIA as Exhibit B. The proposed plan to be implemented under this SCIA is to use the Program Agreement capacity to participate in the LC Conservation Program to cover a three-year period that began August 1, 2023 through July 31, 2026. The Program Agreement has 25,947 acres enrolled that are entitled to receive Priority 1 water pursuant to the California Seven-Party Agreement of 1931. MWD issues following call notices from time-to-time that declare the number of acres to be fallowed for a given year ranging from a minimum of 6,487 fallowed acres, which is 25 percent, to the maximum amount of 25,947 acres, which is 100 percent.

5.3 MWD made or will make a fallowing call notice declaring the maximum amount of up to 25,947 acres allowed in the Program Agreement to be fallowed whereby, beginning August 1, 2023 through July 31, 2026, the Program Agreement will be at maximum fallowing of up to 25,947 acres to create up to 117,021 acre-feet per year of System Conservation Water under this SCIA. MWD has executed or will execute agreements with PVID and the Participating Landowners within PVID ensuring that the land fallowing is performed in accordance with the terms and conditions of the Program Agreement and such landowner agreements.



6. LAND FALLOWING

6.1 MWD agrees it has caused or will cause the PVID Participating Landowners to fallow up to the maximum fallowing amount of 25,947 acres by making a one hundred percent (100 percent) fallowing call in accordance with the Program Agreement for the following periods that are covered under this SCIA:

6.1.1 First Year from August 1, 2023 through July 31, 2024.

6.1.2 Second Year from August 1, 2024 through July 31, 2025.

6.1.3 Third Year from August 1, 2025 through July 31, 2026.

6.2 Consumptive Use: The Parties agree that for each fallowed acre within PVID pursuant to this SCIA, the consumptive use reduction is 4.51 acre-feet per acre.

6.3 The System Conservation Water created each year will be 117,021 acre-feet (25,947 acres x 4.51 acre-feet per acre), less any Call Back under Section 6.4.

6.4 The Parties agree that MWD has the option to call back and divert water saved in an amount equal to the minimum call (i.e. 29,255 acre-feet) into the Colorado River Aqueduct for each of the Second Year and Third Year, hereinafter referred to as the "Call Back Option".

6.4.1 MWD shall notify Reclamation in writing of a decision to exercise its Call Back Option for the Second Year and Third Year on or before September 1, and the quantity to be called back. If MWD does not timely notify Reclamation that MWD is exercising its Call Back Option, then the Call Back Option will be deemed declined. If MWD exercises its Call Back Option in any year, it shall submit a modification to its water order for that year.

6.4.2 Any determination by MWD to exercise or decline its Call Back Option is considered final and is not subject to revision.

6.5 MWD agrees that Reclamation shall not compensate PVID for water that MWD calls back under the Call Back Option in accordance with this SCIA.

6.6 MWD agrees it shall not seek reimbursement from Reclamation for the water that is called back under the Call Back Option in accordance with this SCIA.

6.7 The Parties agree that implementation of this SCIA including all payments from Reclamation under this SCIA is contingent upon the forbearance of the California Colorado River water contractors for the creation of System Conservation Water under this SCIA.

6.8 The Parties agree that implementation of this SCIA including all payments from Reclamation under this SCIA is contingent upon MWD executing a separate written agreement with PVID regarding implementation of this SCIA. MWD will provide a copy of its agreement with PVID to Reclamation after it is executed.

7. MONITORING AND ACCOUNTING

7.1 The Parties agree that Reclamation shall (1) verify and document reductions in consumptive use of Colorado River water under this SCIA and (2) report the verified volume of System Conservation Water created from the August 1, 2023 through July 31, 2026, under this SCIA in the annual *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*. (“Water Accounting Report”).

7.2 Reclamation will use its existing Colorado River water order approval process and legal authorities established by law and contract to ensure that the Colorado River water under this SCIA is not ordered or used by other Colorado River water entitlement holders.

7.3 The Parties agree that the terms of this SCIA shall not establish a precedent for potential future water conservation activities.

7.4 For Reclamation approval, MWD will submit to Reclamation and MWD will request PVID submit to Reclamation a revised water order, as needed, for calendar years 2023, 2024, 2025, and 2026 to account for the land fallowing and System Conservation Water created during the period of August 1, 2023 through July 31, 2026.

7.5 Subject to Section 6.4 herein, MWD agrees to forbear the delivery and diversion of Colorado River water conserved under the Program Agreement in the amounts determined according to this SCIA and will submit adjusted annual water orders as described in Section 7.4 herein.

8. IDENTIFICATION AND TRACKING OF COLORADO RIVER SYSTEM WATER

8.1 Reclamation will document the quantity of System Conservation Water created under this SCIA through the reductions in consumptive use described in this SCIA in the annual Water Accounting Report. The quantity of System Conservation Water to remain in Lake Mead, as determined by Reclamation, will be reported in the section of the annual Water Accounting Report titled, “Conservation, Transfers and Exchanges.”

8.2 The Parties agree that the water left in Lake Mead pursuant to this SCIA shall accrue to the benefit of the Colorado River System and shall not accrue to the individual benefit of MWD, PVID, or any third party.

9. PAYMENTS

9.1 Reclamation will pay MWD \$400.00 per acre-foot for water conserved under this SCIA during the three-year period beginning August 1, 2023 through July 31, 2026, estimated to be up to 117,021 acre-feet per year.

9.1.1 MWD will invoice Reclamation based on the total number of acres fallowed under the Program Agreement, and only for the portion of fallowed acreage that is contributed to the creation of System Conservation Water, within 60 days after MWD makes its payments to the Participating Landowners in September of each year.

9.1.1.1 The Parties agree that for the First Year MWD will invoice Reclamation after MWD has made its second payment to the Participating Landowners for the period beginning August 1, 2023, through July 31, 2024. Reclamation will pay MWD no later than 60 days after the last of the following events occur: (1) execution of this SCIA, (2) receipt of the invoice from MWD for the First Year for a lump sum payment of not to exceed \$46,808,400.00 (\$400.00 per acre-foot multiplied by up to 117,021 acre-feet), and (3) receipt from MWD of the agreement between MWD and PVID that implements this SCIA as provided Section 6.10 herein.

9.1.2 For the Second Year and Third Year respectively, Reclamation will pay MWD no later than 60 days after receiving the annual invoice from MWD a lump sum annual payment of not to exceed \$46,808,400.00 (\$400.00 per acre-foot multiplied by up to 117,021 acre-foot), for a total of not to exceed \$140,425,200.00 over the three-year period.

9.2 If Reclamation finds that the System Conservation Water volume in accordance with SCIA was not created in accordance with this SCIA or that MWD did not forbear such System Conservation Water in accordance with Section 7.5, the annual payments in Section 9.1.2 herein shall be reduced accordingly and MWD will be required to reimburse Reclamation as provided in Section 11 herein.

## 10. MWD COSTS

10.1 MWD agrees to bear its costs for implementation of this SCIA under this SCIA in return for the payments to be made by Reclamation, as specified in this SCIA.

## 11. REIMBURSEMENT FOR OVERPAYMENT

11.1 Unless otherwise provided in this SCIA, in the unanticipated and unforeseen event the total amount of water under this SCIA is not added to Lake Mead as System Conservation Water as was paid for by Reclamation, due to MWD taking an action that interferes with the foregoing objective and if MWD did not forbear such System Conservation Water in accordance with Sections 7.5, MWD agrees to reimburse for the overpayment for the water that was not added to Lake Mead within 30 days of receipt of a bill for collection from Reclamation.

## 12. DISPUTE RESOLUTION

12.1 If any Party disputes any compliance with or performance under this SCIA by the other Party, the Party claiming such dispute shall notify the other Party in writing, specifically identifying the claimed deficiency in compliance or performance. Upon such notice, the Parties shall timely meet and confer regarding the claim and use good faith efforts to resolve the claim informally.

12.2 To the extent any claim of non-compliance or non-performance affects any payment from Reclamation to MWD hereunder, amounts of such payment that are not associated with such non-compliance or non-performance shall be paid in a timely manner, and any remaining balance shall be held pending resolution of the claim of non-compliance or non-performance.

13. SYSTEM CONSERVATION WATER IS NOT A DCP CONTRIBUTION

13.1 The Parties to this SCIA agree that the System Conservation Water created under this SCIA shall be additive to the total conserved water volume associated with the LC Conservation Program and shall not be used to satisfy any Lower Division States' DCP contribution required under the Lower Basin Drought Contingency Operations.

14. ENVIRONMENTAL COMPLIANCE

14.1 Because implementation of this SCIA may result in reduced flows in the Colorado River, MWD agrees to consult with Reclamation on measures to fulfill any of its environmental obligations resulting from reduction in river flows including, any conservation measures required by the Endangered Species Act; provided, any funding obligations between the Parties for the Endangered Species Act compliance shall be pursuant to the Lower Colorado River Multi-Species Conservation Program Funding Agreements.

15. THIRD PARTY BENEFICIARIES

15.1 This SCIA is not intended nor shall it be construed to create any third-party beneficiary rights to enforce the terms of this SCIA in any person that is not a Party.

16. GENERAL TERMS

16.1 MWD agrees to remain in compliance with applicable Federal, State, and local environmental, cultural, and paleontological resource protection laws and regulations throughout the term of this SCIA.

16.2 The Parties agree that consistent with the provisions of 3(b) of the LB DCP Agreement, and Section IV F. of the Lower Basin Drought Contingency Operations, water intentionally conserved pursuant to this SCIA will remain in Lake Mead and shall not be subject to release pursuant to Article II of the Consolidated Decree in the year in which the conservation occurs.

16.3 The water left in Lake Mead under this SCIA will not be reported as a MWD diversion or consumptive use or as a PVID diversion or consumptive use.

16.4 None of the provisions of this SCIA shall be considered waived, except when such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions, or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or that Party's relinquishment of any such rights for the future, but such provisions and rights shall continue and remain in full force and effect.

16.5 The Parties do not intend that any right or remedy given to a Party on the breach of any provision under this SCIA be exclusive; each such right or remedy is cumulative and in addition to any other remedy provided in this SCIA or otherwise available at law or in equity. If the non-breaching Party fails to exercise or delays in exercising any such right or remedy, the non-breaching party does not thereby waive that right or remedy. In addition, no single or partial exercise of any right, power or privilege precludes any other or further exercise of a right, power or privilege granted by this SCIA or otherwise.

16.6 Each Party to this SCIA represents that the person executing on behalf of such Party has full power and authority to do so, and that his/her signature is legally sufficient to bind the Party on whose behalf he/she is signing.

16.7 This SCIA constitutes a valid and binding agreement of each Party, enforceable against each Party in accordance with its terms. This SCIA is and will be binding upon and will inure to the benefit of the Parties and, upon dissolution, the legal successors and assigns of their assets and liabilities.

16.8 This SCIA may be supplemented, amended, or modified only by the written agreement of the Parties. No supplement, amendment, or modification will be binding unless it is in writing and signed by the Parties.

16.9 Any notice, demand, or request shall be deemed properly served, given, or made if delivered in person; emailed; sent by registered or certified mail, postage prepaid; or overnight delivery to the addresses below, charges prepaid or charged to the sender's account to the persons in the positions executing this SCIA.

If to Reclamation:

Bureau of Reclamation  
Interior Region 8: Lower Colorado Basin  
Attn: Regional Director  
500 Date Street, Building 900  
Boulder City, NV 89005  
Email: [jgould@usbr.gov](mailto:jgould@usbr.gov)

With a copy to:

Bureau of Reclamation  
Interior Region 8: Lower Colorado Basin  
Attn: Chief, Boulder Canyon Operations Office  
500 Date Street, Building 900  
Boulder City, NV 89005  
Email: [dbunk@usbr.gov](mailto:dbunk@usbr.gov)

If to MWD:

The Metropolitan Water District of Southern California  
Attn: General Manager  
P.O. Box 54153  
Los Angeles, CA 90054-0153  
Email: [OfficeoftheGeneralManager@mwdh2o.com](mailto:OfficeoftheGeneralManager@mwdh2o.com);  
[WRMGroupManager@mwdh2o.com](mailto:WRMGroupManager@mwdh2o.com)

16.10 All information and data obtained, books, and other records or developed with the performance of duties mentioned in this SCIA shall be available for inspection and audit upon request to a Party for five years after completion of this SCIA, subject to the provisions of the Freedom of Information Act and California public records law, if applicable, or other applicable law. However, use of said reports, data and information shall appropriately reference the source for the respective documents.

16.11 The expenditure or advance of any money or the performance of any obligation by the United States under this SCIA shall be contingent upon the appropriation or allotment of funds. No monetary liability shall accrue to the United States in case funds are not appropriated or allocated. Nothing in this SCIA shall bind the United States to expenditures in excess of funds appropriated and allotted for the purposes outlined in this SCIA.

16.12 No member of or Delegate to Congress, Resident Commissioner, or official of MWD shall benefit from this SCIA other than as a water user or landowner in the same manner as other water users or landowners.

16.13 Nothing in this SCIA diminishes or abrogates the authority of the Secretary under applicable Federal law, regulations, or the Consolidated Decree of the Supreme Court of the United States in the case of *Arizona v. California, et al.*, entered March 27, 2006, (547 U.S. 150 (2006)), or as it may be further modified.

16.14 If a dispute arises regarding this SCIA, the Parties agree to meet and attempt to resolve the dispute before seeking any remedy. The Parties agree to engage in any alternative dispute resolution procedures authorized by their statutes, regulations, and court rules.

16.15 The Parties agree to comply with all applicable federal or state laws relating to equal opportunity and non-discrimination.

16.16 This SCIA shall be interpreted, governed by, and construed under applicable Federal law and any relevant provisions of California state law. In case of conflict between Federal law and California state law, Federal law controls. To the extent permissible under the Federal Rules of Civil Procedure and other applicable Federal authority, venue for adjudication of any disputes under this SCIA shall be in appropriate Federal Court.

## 17. COUNTERPARTS

17.1 This SCIA may be executed in counterparts, each of which shall be an original and all of which, together, shall constitute only one agreement.

## 18. EFFECTIVE DATE

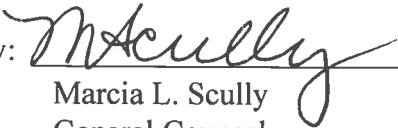
18.1 This SCIA shall become effective upon the date of its execution by the Parties. Once effective, this SCIA will remain in effect until all of the terms and conditions are satisfied.

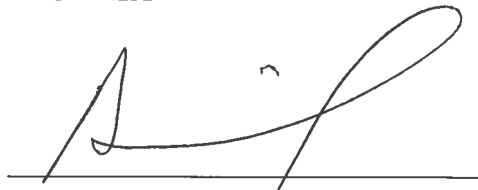
18.2 The Parties hereto have executed this SCIA on the day and year first written above.

*Signatures next page.*

Approved as to form:

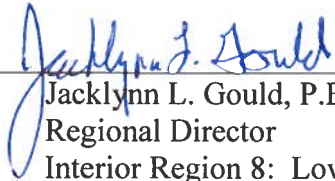
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:   
Marcia L. Scully  
General Counsel

By:   
Adel Hagekhalil  
General Manager

*Signatures continued next page.*

**THE UNITED STATES OF AMERICA**

By:  \_\_\_\_\_  
Jacklynn L. Gould, P.E.  
Regional Director  
Interior Region 8: Lower Colorado  
Basin  
Bureau of Reclamation


*Signatures continued next page.*




Concur:

Approved as to form:

**PALO VERDE IRRIGATION  
DISTRICT**

By:   
DISTRICT COUNSEL

By:   
J.R. Echard  
General Manager

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**Summary of Terms for System Conservation Implementation Agreement  
(SCIA) between Metropolitan and Bureau of Reclamation**

<b>Parties</b>	Metropolitan Water District of Southern California (Metropolitan) and United States Bureau of Reclamation (Reclamation)
<b>Executed / Effective Date</b>	December 20, 2023
<b>Term</b>	Once final payment is made to Metropolitan by Reclamation at the end of the third following year.
<b>Description</b>	<p>The Inflation Reduction Act of 2022 provides \$4 billion in funding for conservation efforts in the Colorado River Basin.</p> <p>A System Conservation Implementation Agreement (SCIA) was executed to facilitate Reclamation funding for the Metropolitan and Palo Verde Irrigation District (PVID) Land Management, Crop Rotation and Water Supply Program (Fallowing Program), to create System Conservation Water in the Colorado River system. Metropolitan shall create system water for three-years, from August 1, 2023, to July 31, 2026.</p> <p>Under the SCIA, Reclamation would pay \$400 per acre-foot of water for up to 25,947 acres for a 100% fallowing call. The calculated consumptive use reduction for the fallowed acres is estimated at 117,021 acre-feet of water to be conserved annually.</p>
<b>System Conservation Water</b>	<p>System Conservation Water is Colorado River water that is conserved under the SCIA and left in Lake Mead to benefit the Colorado River System.</p> <p>The system water created under the SCIA shall not be used to satisfy the Lower Division States' Drought Contingency Plan (DCP) obligations.</p>
<b>Land Fallowing</b>	<p>Metropolitan will call for 100% fallowing in accordance with the Fallowing Program agreement for PVID Participating Landowners for three consecutive years:</p> <p><b>First Year:</b> August 1, 2023, through July 31, 2024  <b>Second Year:</b> August 1, 2024, through July 31, 2025  <b>Third Year:</b> August 1, 2025, through July 31, 2026</p> <p>For each acre fallowed, within PVID, the consumptive use reduction is estimated at 4.51 acre-feet per acre.</p> <p>Metropolitan shall make a fallowing call declaring the maximum amount of 25,947 acres (100% fallowing call), beginning August 1, 2023, through July 31, 2026. The maximum fallowing call is estimated to result in 117,021 acre-feet of System Conservation Water per year (25,947 acres x 4.51 AF/acre).</p>

<p><b>Call Back Option</b></p>	<p>Metropolitan maintains a “call back option,” for the second and third fallowing years, whereby Metropolitan may call back and divert water saved in the amount equal to the minimum fallowing call (6,487 acres at 25% fallowing call, equivalent to 29,255 acre-feet). Metropolitan must notify Reclamation in writing on or before September 1, to exercise the call back option.</p> <p>Reclamation shall not compensate Metropolitan or PVID for water that is called back, in accordance with the SCIA.</p>
<p><b>Monitoring and Accounting of Colorado River System Water</b></p>	<p>Reclamation shall (1) verify and document reductions in consumptive use of Colorado River water under the SCIA and (2) report the verified volume of System Conservation Water created from August 1, 2023, through July 31, 2026. This information shall be reported by Reclamation in the annual <i>Colorado River Accounting and Water Use Report: Arizona, California, and Nevada</i>.</p>
<p><b>Payments, Costs, and Reimbursement</b></p>	<p>Reclamation will pay Metropolitan \$400 per acre-foot of water conserved under the SCIA from August 1, 2023, through July 31, 2026 (up to \$46,808,400 annually).</p> <p>Metropolitan shall invoice Reclamation for System Conservation Water, based on the total number of acres fallowed, within 60 days of making payments to Participating Landowners. Participating Landowners shall be paid in September of each year.</p> <p>Metropolitan agrees to bear the implementation costs of the SCIA. Metropolitan agrees to reimburse Reclamation for overpayment of water, not added to Lake Mead based on Reclamation’s monitoring and accounting.</p>
<p><b>Environmental</b></p>	<p>Metropolitan agrees to consult with Reclamation on measures to fulfill any environmental obligations resulting from reduction in river flows including any conservation measures required by the Endangered Species Act.</p>
<p><b>Other Provisions</b></p>	<p>The water left in Lake Mead under the SCIA will not be reported as a Metropolitan diversion or consumptive use or as a PVID diversion or consumptive use.</p> <p>All information and data obtained or developed to perform the duties mentioned in the SCIA shall be available upon request for five years after completion of the SCIA.</p> <p>This SCIA is contingent upon a separate agreement executed between Metropolitan and PVID regarding SCIA implementation.</p>