

AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
MONDAY, AUGUST 18, 2025

This meeting will be held in-person at the District’s headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will be held on the second floor in the Committee room, please check in with the receptionist for access. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=mfc06209bfc9e628091562954fadab033>

Meeting Number (Access Code): 2484 615 8929

Meeting Password: z9MJAiREc78

As courtesy to the other participants, please mute your device when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the Webex lobby when (if) the Committee enters Closed Session. Participants who remain in the “lobby” will automatically be returned to the open session of the Committee once the closed session has concluded. Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the Closed Session has concluded.

CALL TO ORDER 3:00 p.m.

ATTENDANCE Committee Chair: Doug Reinhart _____
 Committee Member: Peer Swan _____

<u>ALSO PRESENT</u>	Paul Cook	_____	Paul Weghorst	_____
	Neveen Adly	_____	Fiona Nye	_____
	Natalie Palacio	_____	Robert Huang	_____
	Melody Seesangrit	_____		_____
	_____	_____	_____	_____
	_____	_____	_____	_____

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 8:00 a.m. on Monday, August 18, 2025.

COMMUNICATIONS

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.

INFORMATION

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| 5. <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, AND PROGRAMS – PALACIO / NYE / WEGHORST</u> | |
|---|--|

Recommendation: Receive and file.

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| 6. <u>SITES RESERVOIR PROJECT UPDATE – HUANG / NYE / WEGHORST</u> | |
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Recommendation: Receive and file.

OTHER BUSINESS

7. Receive Oral Updates from District’s liaison to Dudley Ridge Water District and provide information on relevant activities.
8. Closed Session
 - A. CONFERENCE WITH REAL PROPERTY NEGOTIATORS- Pursuant to Government Code Section 54956.8:

Property: Interim Operations of Recharge and Recover Facilities Rights on West Enos (APNs 104-240-22, 104-240-30, and 104-240-31, County of Kern) and North Stockdale (APN 104-291-07, County of Kern).

Agency Negotiator: Paul Cook, General Manager, and Paul Weghorst, Executive Director of Water Policy

Negotiating Parties: Rosedale Rio Bravo Water Storage District

Under negotiation: Price and Terms of Payment
9. Open Session
10. Directors’ Comments
11. Adjourn

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.

August 18, 2025
Prepared by: N. Palacio
Submitted by: F. Nye / 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 and provide an overview of IRWD's actual and forecasted monthly recharge operations for 2025. Staff will also provide an update on water supply conditions in California.

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 actual and forecasted recharge operations for calendar year 2025 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 stored at the water banking projects. Exhibit "C" shows after-loss estimates of water recharged and stored at the projects. Changes to Exhibits "B" and "C" reflect deliveries to the IRWD Water Bank from Dudley Ridge Water District (DRWD) through an in-lieu exchange of water recovered for Buena Vista Water Storage District. Deliveries from DRWD in July totaled 9,588 AF of State Water Project (SWP) Table A water, which consisted of the following:

- 877 AF of IRWD's 2025 SWP Table A allocation from IRWD's Jackson Ranch;
- 2,711 AF owed to IRWD as part of DRWD's return obligation under the one-for-one exchange program. The 2,711 AF delivered in July in addition to the 1,978 AF delivered in January fulfills DRWD's obligation associated with deliveries of Kern River Water to DRWD that occurred in 2021 and 2022; and
- 6,000 AF of SWP Table A water pre-delivered by DRWD on behalf of landowner Wonderful Orchards, under the one-for-one exchange program. This water will be exchanged with 6,000 AF of Kern River Water stored in the IRWD Water Bank for use by Wonderful Orchards at a later date. The 6,000 AF of exportable Table A water will be

stored for IRWD's use in the Water Management and Exchange Program with Las Virgenes Municipal Water District.

The in-lieu exchange of water was not subject to losses. The 10,112 AF of water recovered for Buena Vista was the remaining balance in their storage account. This water was delivered on the surface using the 9,588 AF of water from DRWD and 524 AF of additional surface water facilitated by Rosedale. The in-lieu exchange saved IRWD an estimated \$1.8 million. Other changes to Exhibits "B" and "C" include Cross Valley Canal loss adjustments made to January deliveries from the one-for-one program with DRWD.

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 accumulated total amount of water secured by 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. Changes to Exhibit "D" this month correlate with changes made to Exhibits "B" and "C".

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 tables 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 sustained 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, Antelope Valley-East Kern Water Agency, and Santa Clara Valley Water District (Valley Water). These diagrams are provided as Exhibits "J", "K", "L", "M", "N", "O", "P", and "Q" as described in the List of Exhibits.

Cost of Water Tables:

A summary of the costs of water from each of IRWD's unbalanced exchange partnerships through the year 2023 is provided as Exhibit "R". Exhibit "R" provides a summary of the cost to recover exportable water from the IRWD Water Bank and deliver it to IRWD's service area. 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, various cost components, and the total cost of water delivered to IRWD's service area. Cost components include a *Cost of Water* made up of fixed and variable operating costs plus a capital cost of water, estimated future IRWD recovery costs, and the 2025 Metropolitan Full Service Untreated Tier-1 Rate. The costs of water are presented on a dollar per acre-foot basis. Exhibit "R" will be updated periodically 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 "S". The benefits to IRWD are foundational to the success of IRWD's water banking project and programs.

Forecasted 2025 Water Recharge Activities:

Actual and forecasted 2025 deliveries to IRWD's Water Bank are depicted in Exhibit "T". To date, 11,566 AF of water has been recharged at the Water Bank in 2025. In November, Metropolitan will return 79 AF of Dudley Ridge Table A water taken by Metropolitan in 2021 and 2022. Homer, LLC is expected to recharge 1,854 AF in October. Staff will continue to update the forecasted and delivery amounts shown in Exhibit "T" as the year progresses. At the meeting, staff will update the Committee on the status of unbalanced exchange-related discussions with Valley Water and Zone 7 Water Agency.

Water Supply Conditions Updates:

At the meeting, staff will update the Committee on California water supply conditions and how conditions might affect recharge operations at IRWD's Water Bank in 2025.

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” – Diagram of Long-term Water Exchange Program with Valley Water
- Exhibit “R” – Water Banking Estimated Cost of Water Exportable to IRWD Service Area
- Exhibit “S” – Summary of IRWD’s Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan and MWDOC (updated 8 Feb 2024)
- Exhibit “T” – Actual and Forecasted 2025 Recharge Operations

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
August 18, 2025

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO		ALLOCATED CAPACITY (AF)					1 ST PRIORITY RECOVERY CONDITIONS (CFS)		2 ND PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 ST PRIORITY	ANNUAL RECHARGE 2 ND PRIORITY	ANNUAL RECOVERY 1 ST PRIORITY	ANNUAL RECOVERY 2 ND PRIORITY	RECOVERY CAPACITY AS PLANNED ¹	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 ²	No	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells ²	No	3	-	-	-	-	-	15.0	16.5	-	-
Kern Water Bank Storage Account ⁴	No	-	9,495	3,200	-	1,520	<5,000	-	-	-	-
TOTALS		15	135,495	47,800	19,000	30,270	12,500	70.0	48.6	10.0	9.0
Partner Capacities ³			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	-	-
TOTALS (AF)								17,900	15,733	-	-
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	

¹ 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.

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

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

⁴ 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.

Note: This page is intentionally left blank.

Exhibit "B"

TABLE 2
IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES
August 18, 2025

TRANSACTIONS	WATER BANKING ENTITY							TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	ANTELOPE VALLEY- EAST KERN (AVEK)	SANTA CLARA VALLEY WATER DISTRICT	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2024 (AF)								
Total Kern Water Bank ⁴	-	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 ⁵	7,525	-	-	-	-	-	-	7,525
TOTAL STORED WATER (1/1/2024)	34,564	24,920	11,181	225	3,536		915	75,341
(RECOVERY) AND RECHARGE IN 2024 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	-	-	-	-	-	-	-
2024 SWP Allocation (40%)	346	-	-	-	-	-	346	692
DRWD 1-for-1 Long Term Exchange (Recharge)	2,195	-	-	-	-	-	-	2,195
TOTAL 2024 TRANSACTIONS ⁷	2,541	-	-	-	-		346	2,887
Total Kern Water Bank ⁴	-	4,322	-	-	-	-	-	4,322
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	17,547	20,598	11,181	225	3,536	-	1,218	54,305
Total DRWD 1-for-1 Long Term Exchange Credit ⁵	5,330	-	-	-	-	-	-	5,330
TOTAL STORED WATER (1/1/2025)	34,910	24,920	11,181	225	3,536		1,261	76,033
(RECOVERY) AND RECHARGE IN 2025 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	-	-	-	-	-	-	-
2025 SWP Allocation (50%) Est.	439	-	-	-	-	-	438	877
DRWD 1-for-1 Long Term Exchange- Predelivery Est. ⁸	6,000	-	-	-	-	-	-	6,000
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	4,689	-	-	-	-	-	-	4,689
Buena Vista Recovery	-	-	(10,112)	-	-	-	-	(10,112)
TOTAL ESTIMATED 2025 TRANSACTIONS ⁷	11,128	-	(10,112)	-	-	-	438	1,454
ESTIMATED WATER IN STORAGE 2025 (AF)								
Total Kern Water Bank ⁴	-	4,322		-	-	-	-	4,322
Total MWD System	12,033	-	-		-	-	43	12,076
Total Kern County	28,675	20,598	1,069	225	3,536	-	1,656	55,759
Total DRWD 1-for-1 Long Term Exchange Credit ⁹	-	-		-	-	-	-	-
TOTAL ESTIMATED STORED WATER TO DATE	40,708	24,920	1,069	225	3,536	-	1,699	72,157

NOTES: MWD = Metropolitan Water District of Southern California.

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

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

³ DRWD water supply will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch.

⁴ 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.

⁵ 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.

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

⁷ 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 414 AF.

⁸ DRWD pre-delivered 6,000 AF of SWP Table A on behalf of landowner Wonderful Orchards under the 1-for-1 long-term exchange program. This water will be exchanged with 6,000 AF of Kern River Water stored in the IRWD Water Bank for use by Wonderful at a later date.

⁹ The 4,689 AF delivered by DRWD in 2025 fulfills DRWD's remaining obligation associated with deliveries of Kern River Water to DRWD in 2021 and 2022. The difference between the 5,330 AF credit balance shown in 2024 and the 4,689 AF delivered in 2025 is due to losses in the CVC and California Aqueduct. To account for these conveyance losses, the credit balance shown in 2025 has been zeroed out.

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Exhibit "C"

TABLE 3
IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES
August 18, 2025

TRANSACTIONS	WATER BANKING ENTITY							TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	ANTELOPE VALLEY-EAST KERN (AVEK)	SANTA CLARA VALLEY WATER DISTRICT	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2024 (AF)								
Total Kern Water Bank ⁴	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	12,023	15,098	10,112	193	3,032	-	748	41,206
Total DRWD 1-for-1 Long Term Exchange Credit ⁵	7,306	-	-	-	-	-	-	7,306
TOTAL STORED WATER (1/1/2024)	31,362	19,340	10,112	193	3,032	-	791	64,830
(RECOVERY) AND RECHARGE IN 2024 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	-	-	-	-	-	-	-
2024 SWP Allocation (40%)	297	-	-	-	-	-	297	594
DRWD 1-for-1 Long Term Exchange (Recharge)	1,882	-	-	-	-	-	-	1,882
TOTAL 2024 TRANSACTIONS	2,179	-	-	-	-	-	297	2,476
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	14,202	15,098	10,112	193	3,032	-	1,045	43,682
Total DRWD 1-for-1 Long Term Exchange Credit	5,424	-	-	-	-	-	-	5,424
TOTAL STORED WATER (1/1/2025)	31,659	19,340	10,112	193	3,032	-	1,088	65,424
(RECOVERY) AND RECHARGE IN 2025 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	-	-	-	-	-	-	-
2025 SWP Allocation (50%) Est. ⁷	417	-	-	-	-	-	416	833
DRWD 1-for-1 Long Term Exchange- Predelivery Est. ^{7, 8}	5,700	-	-	-	-	-	-	5,700
DRWD 1-for-1 Long Term Exchange Est. ⁷	4,271	-	-	-	-	-	-	4,271
Buena Vista Recovery	-	-	(10,112)	-	-	-	-	(10,112)
TOTAL ESTIMATED 2025 TRANSACTIONS	10,388	-	(10,112)	-	-	-	416	692
ESTIMATED WATER IN STORAGE 2025 (AF)								
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	24,590	15,098	-	193	3,032	-	1,461	44,374
Total DRWD 1-for-1 Long Term Exchange Credit ⁹	-	-	-	-	-	-	-	-
TOTAL ESTIMATED STORED WATER TO DATE	36,623	19,340	-	193	3,032	-	1,504	60,692

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.

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

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

³ DRWD water will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch.

⁴ 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.

⁵ 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.

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

⁷ The water recharged in July through an in-lieu exchange of water being recovered for Buena Vista is not subject to surface (6%) and reserve (4%) losses.

⁸ DRWD pre-delivered 6,000 AF of SWP Table A on behalf of landowner Wonderful Orchards under the 1-for-1 long-term exchange program. This water will be exchanged with 6,000 AF of Kern River Water stored in the IRWD Water Bank for use by Wonderful at a later date.

⁹ The 4,271 AF delivered by DRWD in 2025 fulfills DRWD's remaining obligation associated with deliveries of Kern River Water to DRWD in 2021 and 2022. The difference between the 5,424 AF credit balance shown in 2024

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Exhibit "D"

TABLE 4
Status of IRWD Purchase and Exchange Programs (AFTER LOSSES)
 August 18, 2025

PARTNER	EXCHANGE RATIO	YEAR EXECUTED	AGREEMENT TYPE	WATER TYPE	PARTNER WATER		IRWD WATER									
					PARTNER SHARE (AF)	PARTNER BALANCE (AF)	IRWD SHARE (AF)	IRWD BALANCE				EXPORTABILITY				SELLABLE (Y/N)
								IN MWD SYSTEM (AF)	STAND AND STOCKDALE	KERN FAN (W. ENOS)	OWED BY DUDLEY RIDGE WD	TOTAL (AF)	EXPORTABLE TO IRWD (AF)	NON-EXPORTABLE (AF)	FOR USE ON JACKSON RANCH (DRWD)	
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 ⁴	2-for-1	2008	Short-Term	SWP Table A	277		250		250			250		250		Yes
Buena Vista Water Storage District ¹	2-for-1	2010	Pilot	Kern River	4,108		3,903									Yes
	2-for-1	2011	Long-Term	Kern River	29,336	0	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 ²	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	2,516	1,505	2,598	1,055	1,542			2,598	2,598		1,505	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 ³ (SWPAO #19001)	1-for-1	2017	Long-Term	SWP Table A	NA	NA	19,547		19,547			19,547	19,547			No
				Credit	NA	NA	0				0	0				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 ¹	2-for-1	2023	Short-Term	Kern River	2,025	0	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
Santa Clara Valley Water District	2-for-1	2024	Long-Term	SWP Table A												No
				Total:	48,324	4,729	73,159	12,033	38,182	1,504	-	51,720	36,372	15,348	1,505	NA

¹ 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.

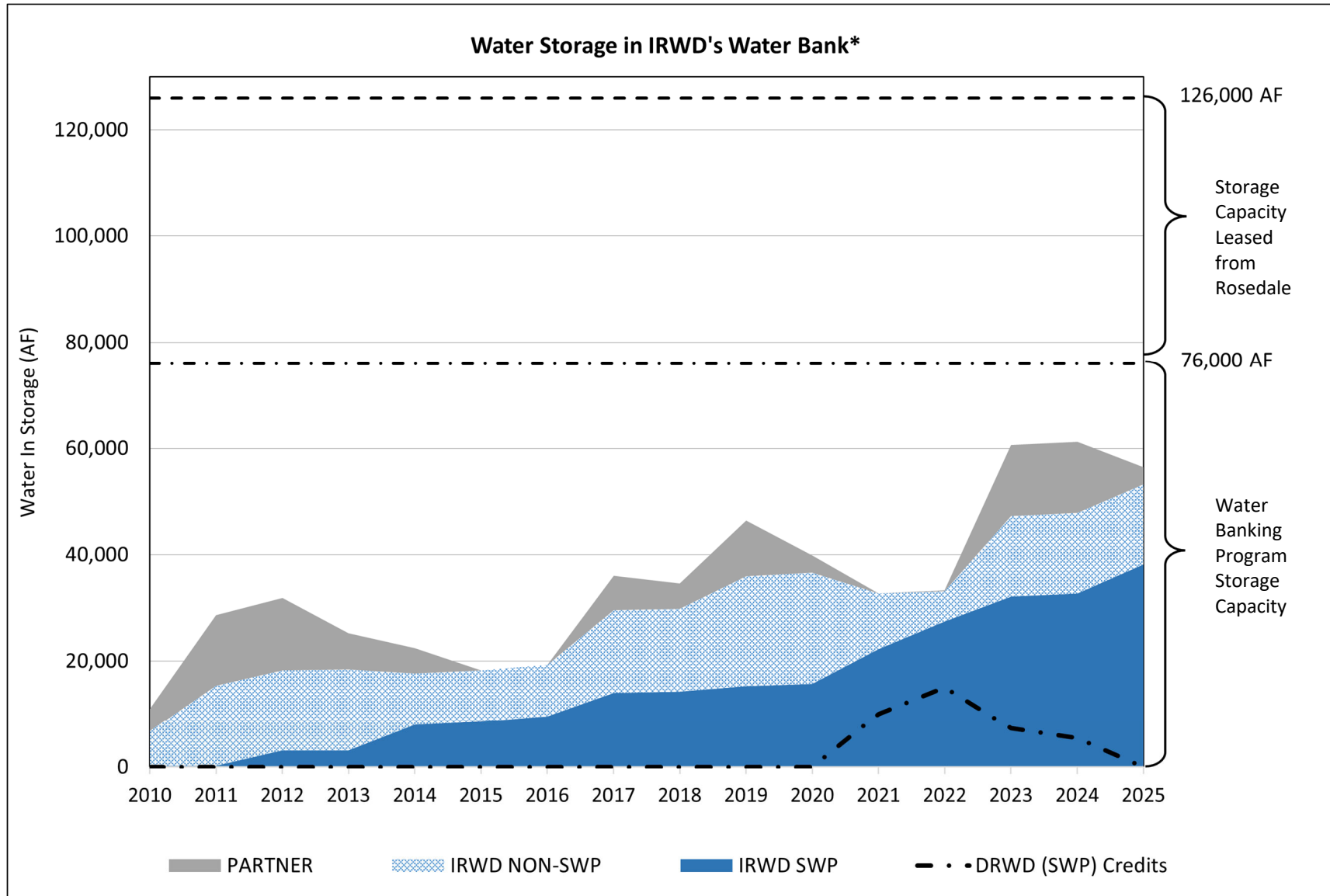
² Source of water was Buena Vista Water Storage District Kern River high flow water.

³ In July 2025, DRWD fulfilled its remaining obligation associated with deliveries of Kern River Water to DRWD in 2021 and 2022 therefore all remaining credits are shown as 0. DRWD also pre-delivered 5,700 AF, net of banking losses, of SWP Table A to the IRWD Water Bank. This water will be exchanged with Kern River Water stored in the IRWD Water Bank for use by DRWD at a later date.

⁴ Water acquired through Carpinteria is not exportable but can be exchanged for an exportable water supply.

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Exhibit "E"



*After losses

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TABLE 5
IRWD Dedicated Water Banking Capacities for Existing and Proposed Exchange Programs
August 18, 2025

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	-	-
Valley Water	-	-	20,000	-
<i>Proposed Programs:</i>				
Homer LLC	-	-	8,000	-
Total Dedicated	50,000	26,000	28,000	-
Total Remaining	-	-	22,000	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**

August 18, 2025

SECOND-PRIORITY RECHARGE CAPACITY

Program	Dedicated Recharge Capacity Strand Ranch and Stockdale West (AF)	Minimum Program Share for Second- Priority ¹	Available Minimum Recharge Capacity if not used by Existing Programs (AF)	Total Program Recharge Capacity (AF)
Total Capacity	44,600		44,600	
First Priority Programs	44,600		-	44,600
Valley Water	-	40%	17,840	20,000
<i>Proposed Programs:</i>				
Homer LLC	-	16%	7,136	8,000
Total Dedicated	44,600	56%	24,976	
Total Remaining	-		19,624	

SECOND-PRIORITY RECOVERY CAPACITY

Program Partner	Dedicated Recovery Capacity Strand Ranch and Stockdale West (AF)	Minimum Program Share for Second Priority ¹	Minimum Available Recovery Capacity if not used by Existing Programs (AF)	Total Program Recovery Capacity (AF)
Total Capacity	28,750		28,750	
First Priority Programs	28,750		-	2,750
Valley Water	-	40%	3,333	3,333
<i>Proposed Programs:</i>				
Homer LLC	-	16%	1,333	1,333
Total Dedicated	28,750	56%	4,666	
Total Remaining	-		24,084	

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

For example:

Valley Water Share: 20,000 AF of 50,000 AF leased storage (40%)

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

Exhibit "G"

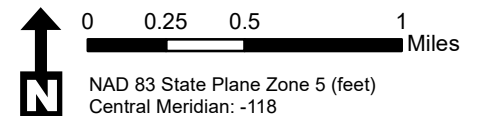
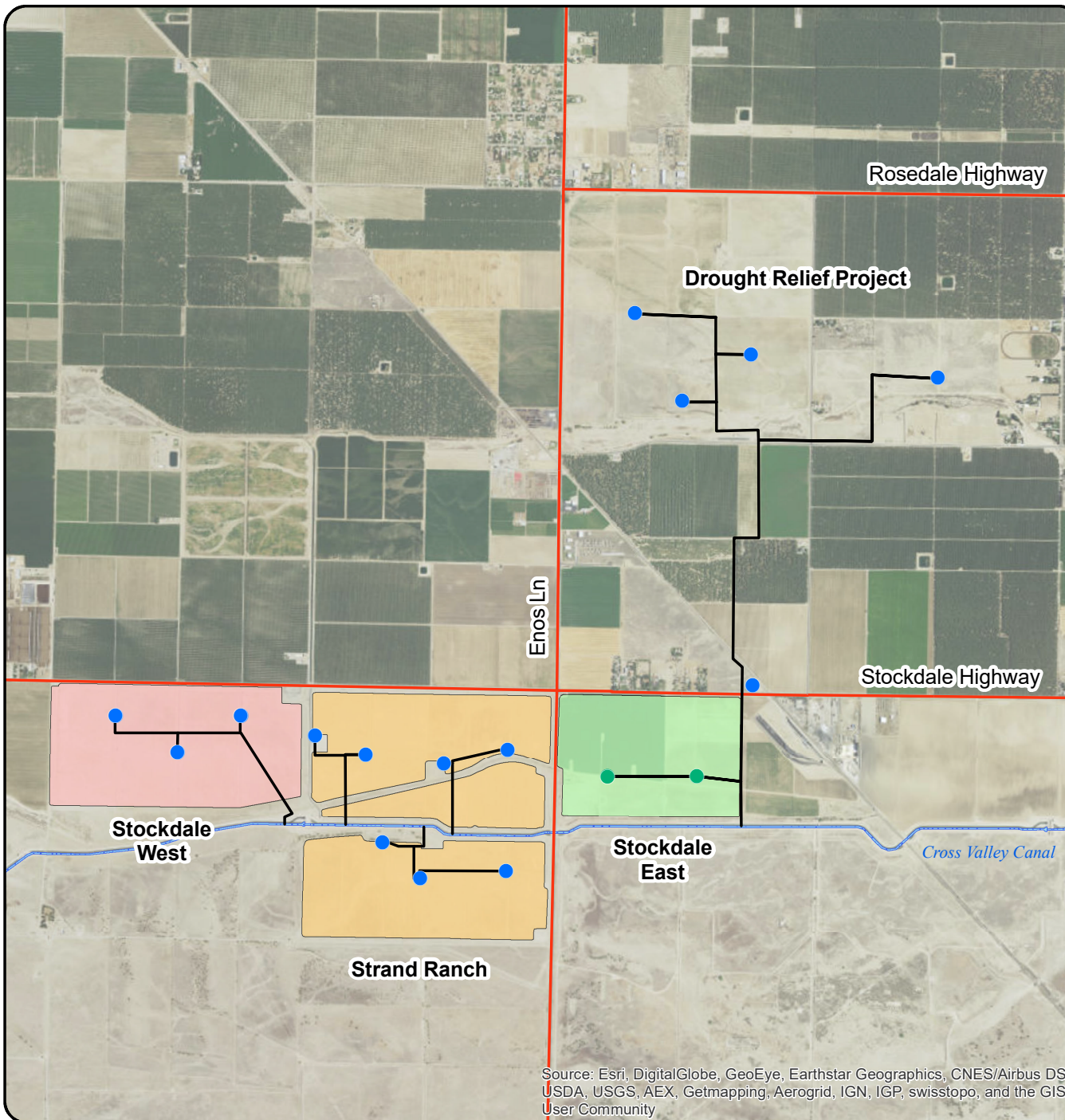


**Location Map:
IRWD Water Banking Projects
Wells and Turnin Pipelines**

MAP FEATURES

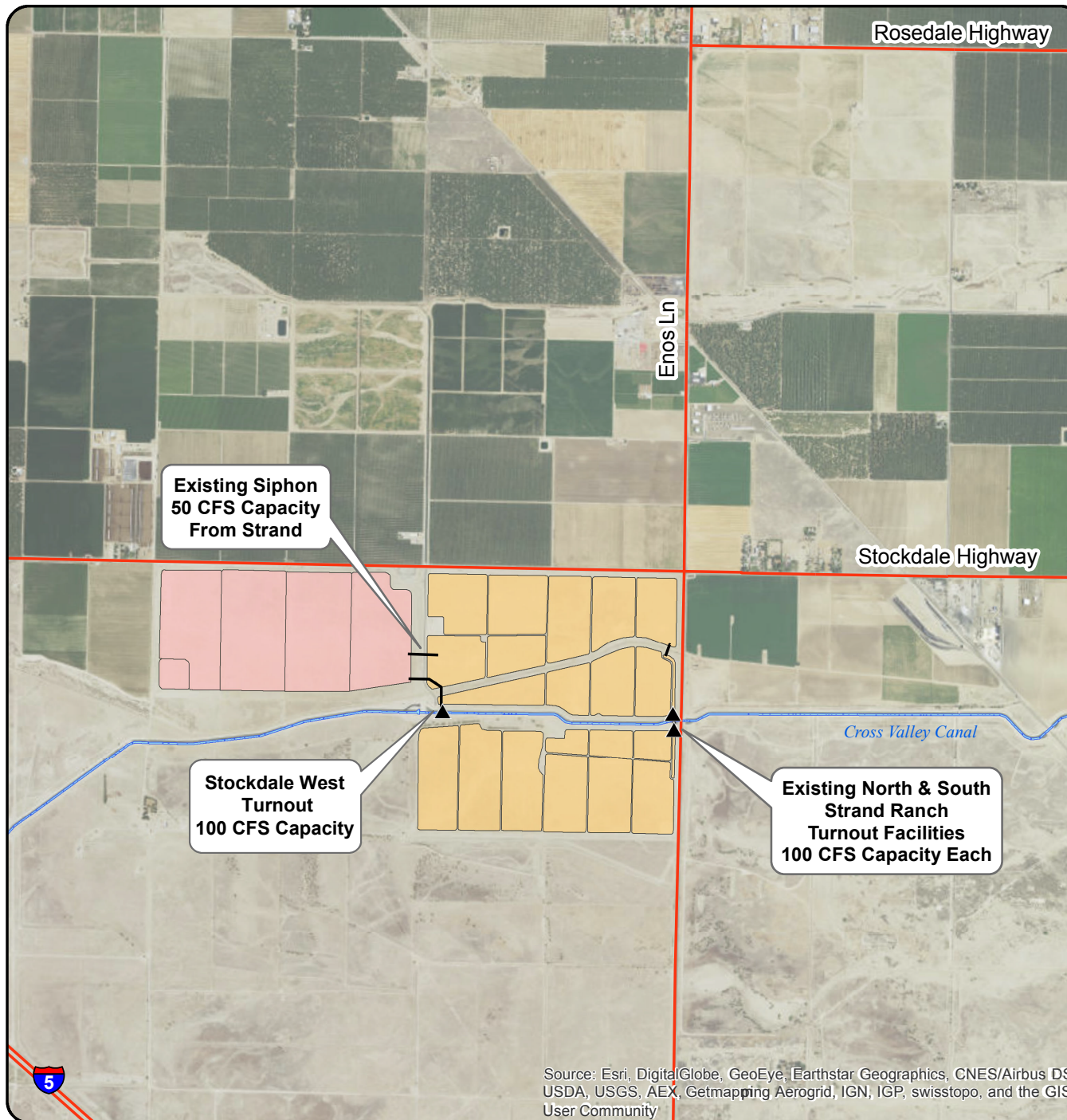
- Extraction Well
- Extraction Well
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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



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Exhibit "H"

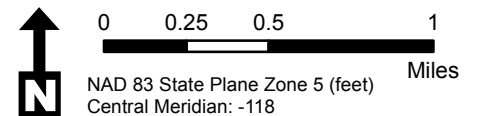


**Location Map:
IRWD Water Banking Projects
Recharge Basins & Turnout
Facilities**

MAP FEATURES

- ▲ Turnouts
- Stockdale West
- Strand Ranch

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



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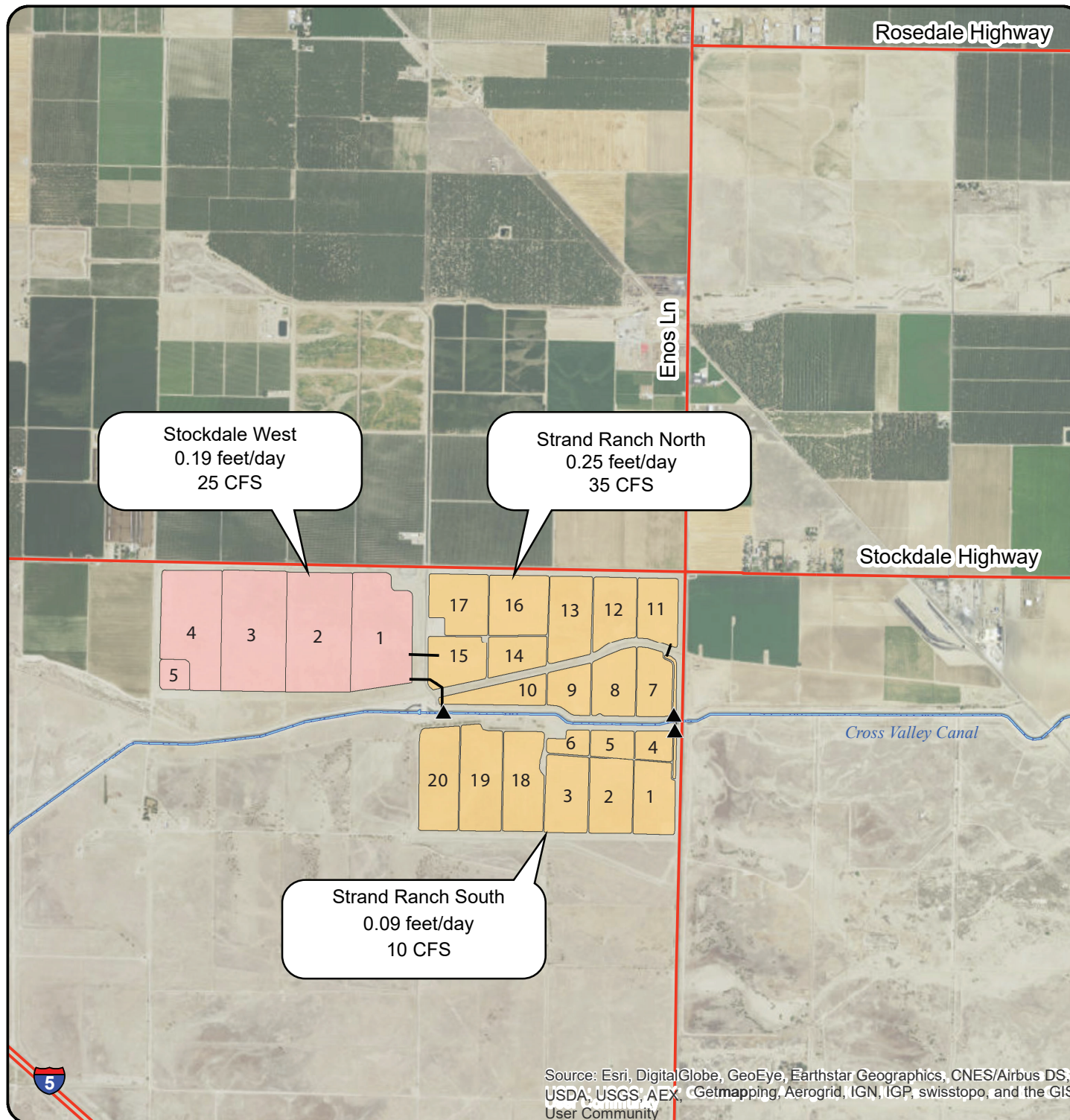


**Location Map:
IRWD Water Banking Projects
Recharge Rates**

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



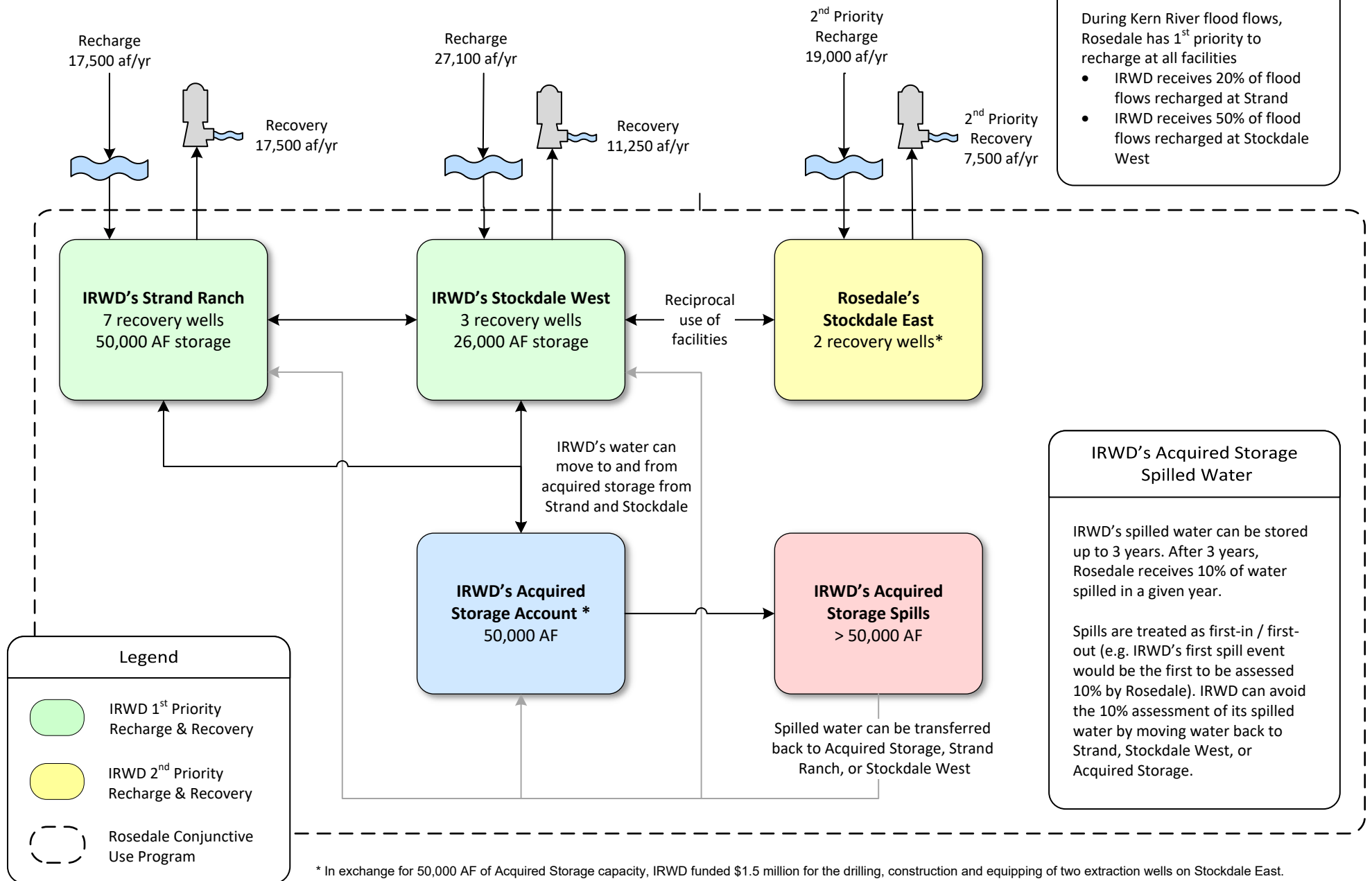
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Exhibit "J"

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)

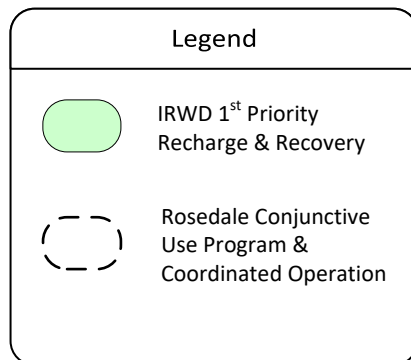
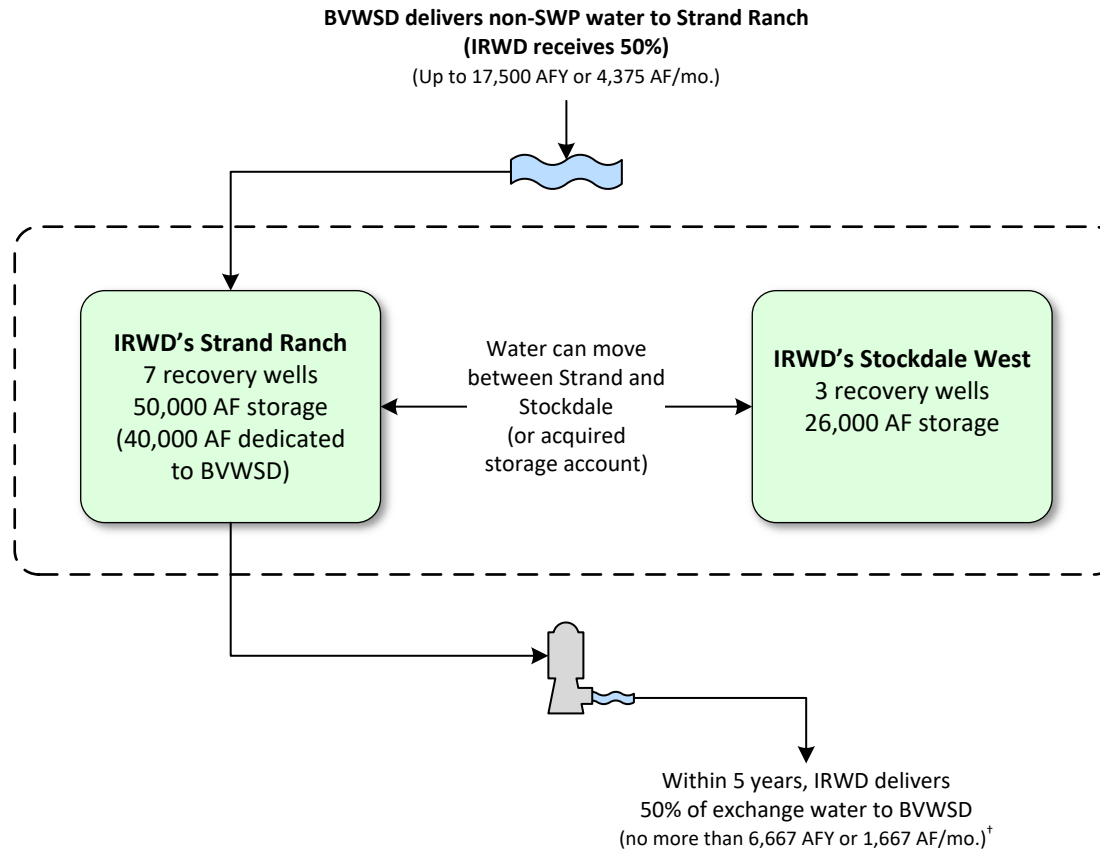


* In exchange for 50,000 AF of Acquired Storage capacity, IRWD funded \$1.5 million for the drilling, construction and equipping of two extraction wells on Stockdale East.

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Buena Vista Water Storage District Long Term Water Exchange Program

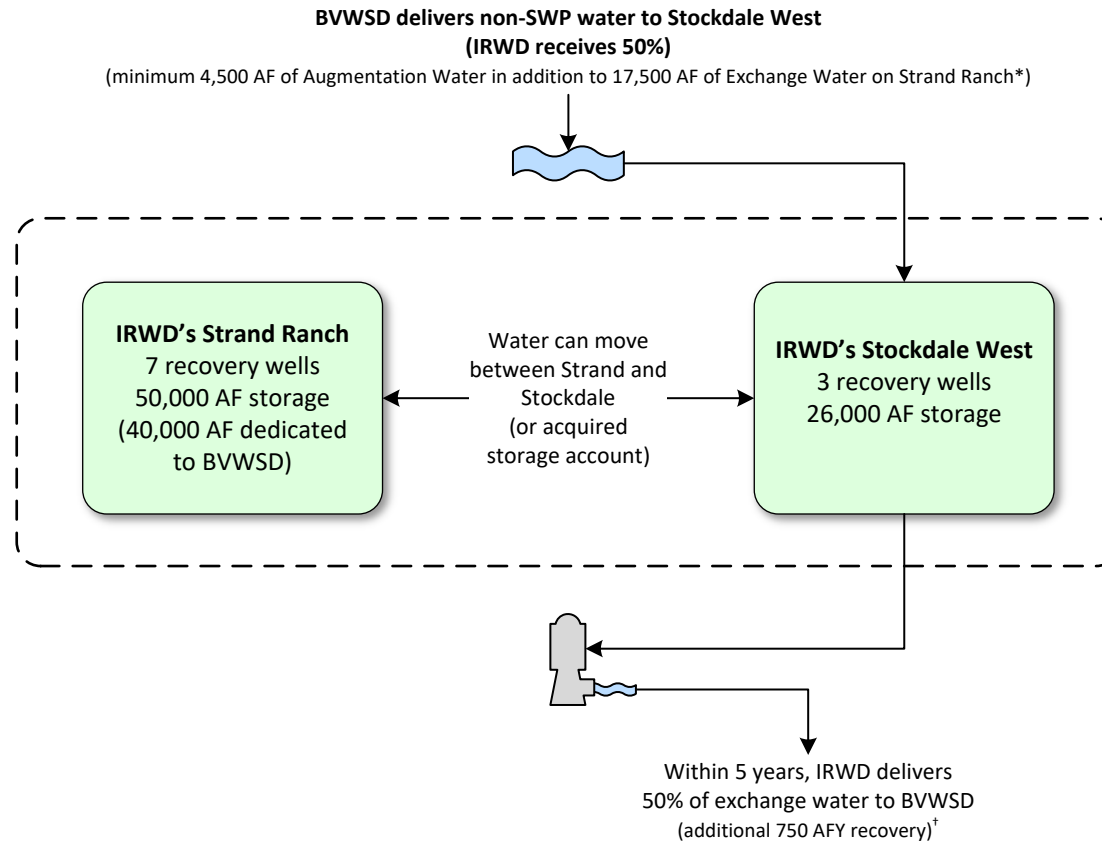
Effective 1/1/2011 through 1/12/2039



[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 4th 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 4th 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 st Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

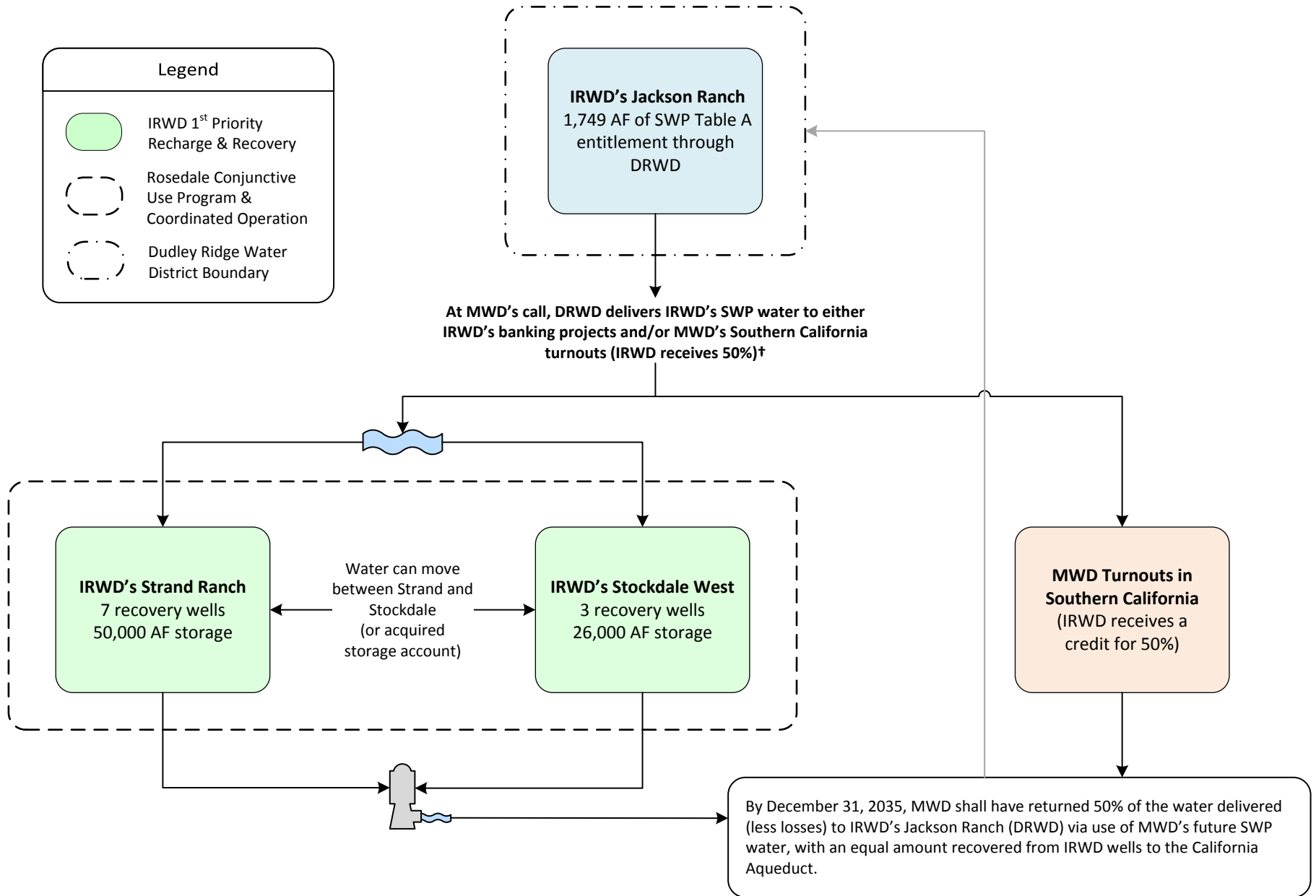
* IRWD agrees to pay BV \$25 per AF for IRWD's share of the Augmentation Water and Exchange Water

[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 4th 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 4th 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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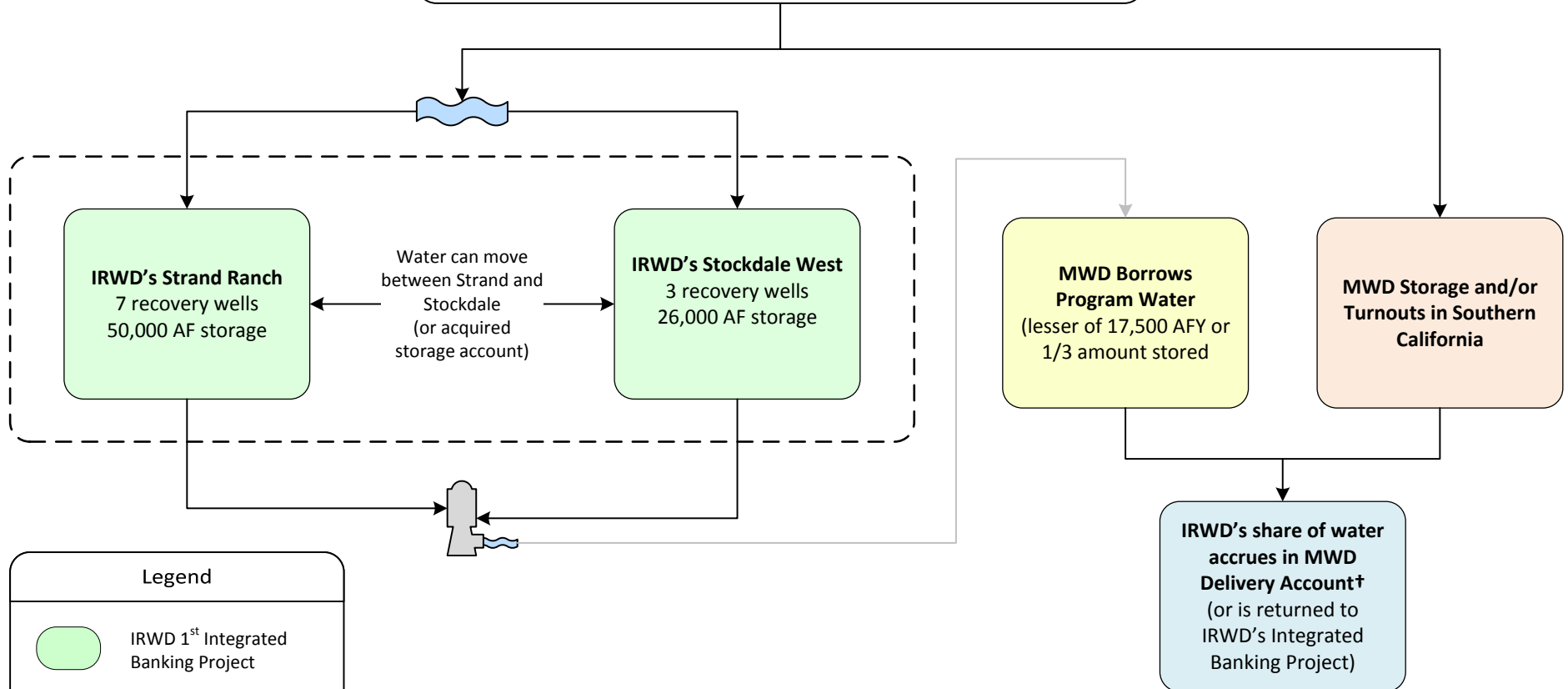
Exhibit "M"

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

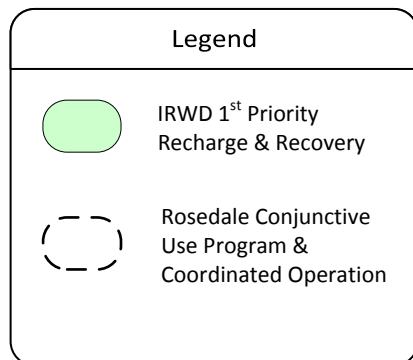
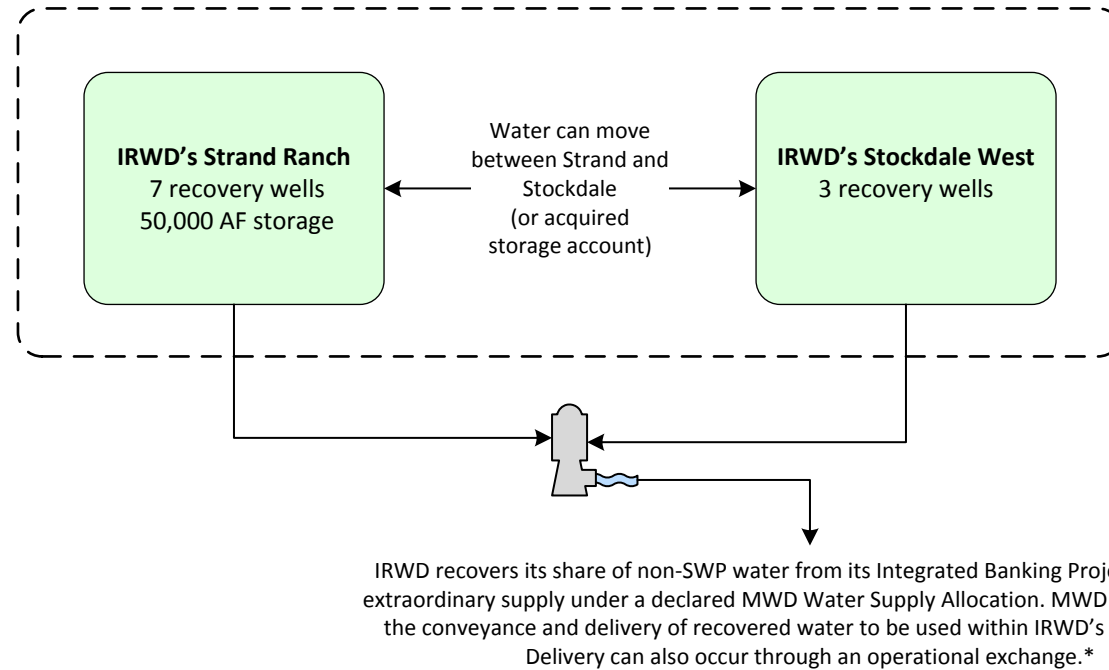


- Under an MWD Allocation, when IRWD calls for water, IRWD must first recover Program Water from the Integrated Banking Project before receiving water from the MWD Delivery Account.
- MWDOC shall pass through extraordinary supply credits for IRWD's benefit.
- † IRWD's banking partner share of Program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



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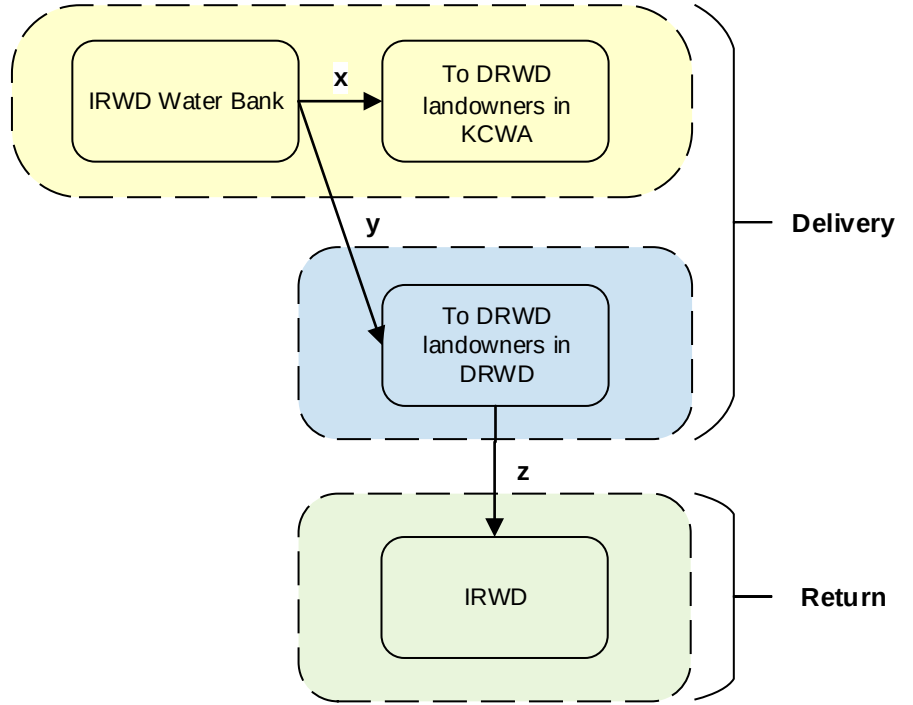
Exhibit "O"
Dudley Ridge Water District Long Term 1-for-1 Water Exchange Program
 Effective 5/31/2017 through 11/4/2035

Scenario A

(Per Sections 2, 3, 4.1.1, and 4.1.3)

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

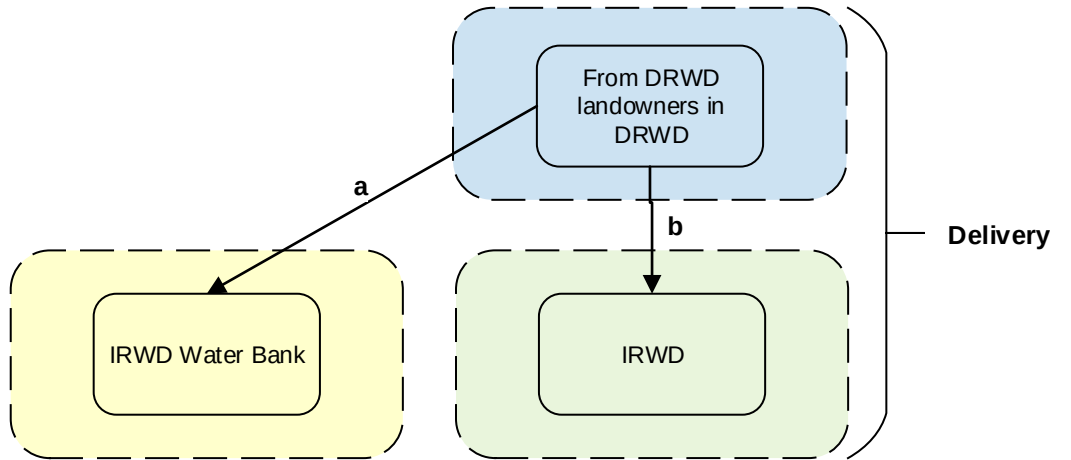
Per Section 4.1.3, z can be delivered to IRWD via in-ground transfer to IRWD, SWP delivery to IRWD banking facilities, or SWP delivery to MWDSC



Scenario B

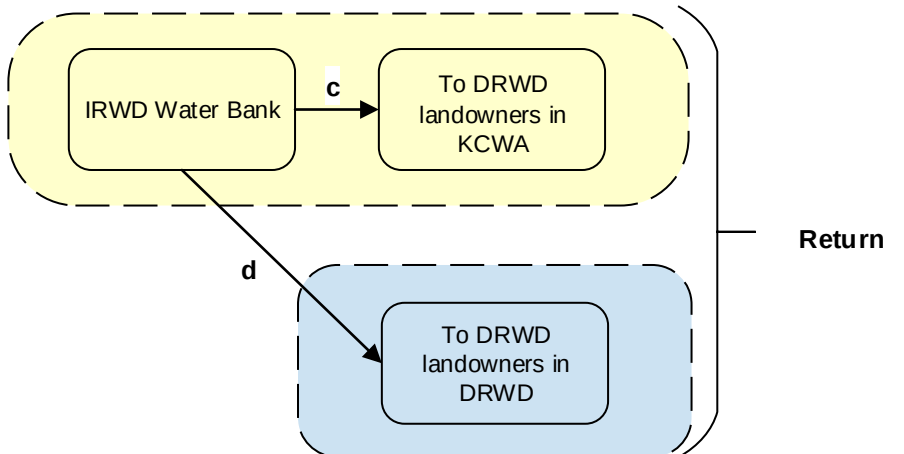
(Per Sections 2, 3, and 4.1.2)

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



Legend

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

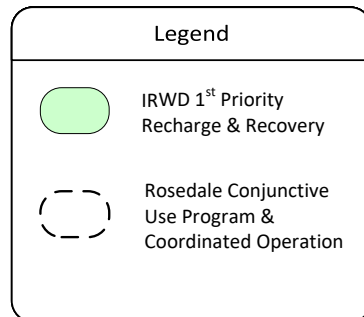
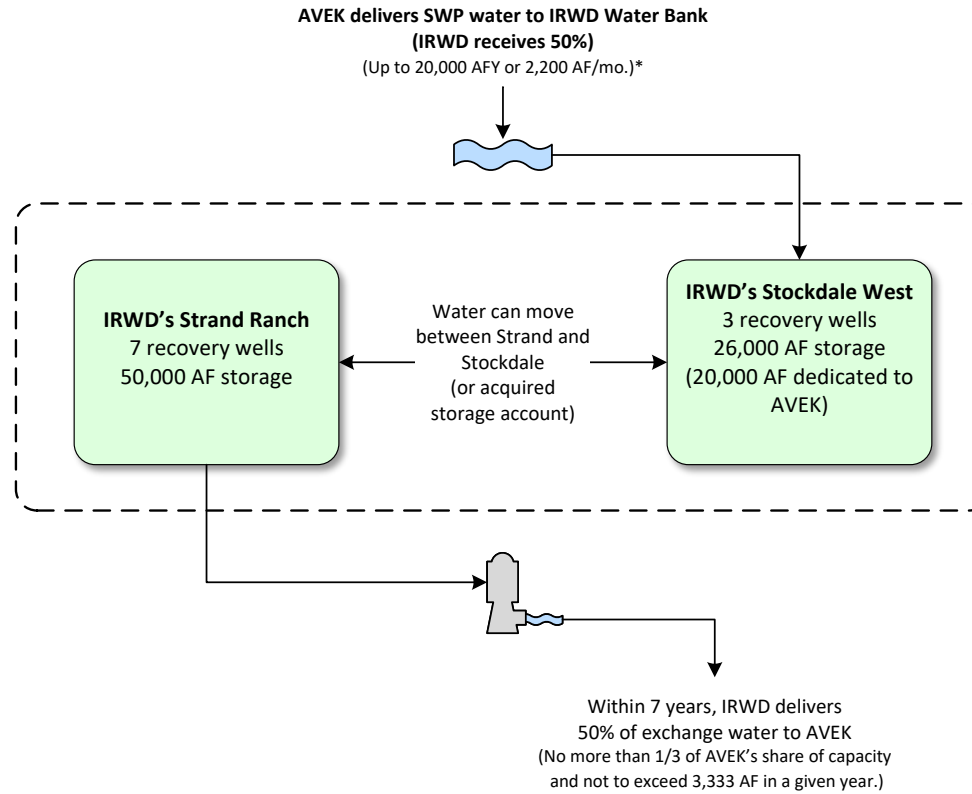


†The cost of water exchanged between IRWD and DRWD will be equalized

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Exhibit "P"

Antelope Valle-East Kern Water Agency (AVEK) Long Term Water Exchange Program Effective 12/21/2018 through 12/31/2035

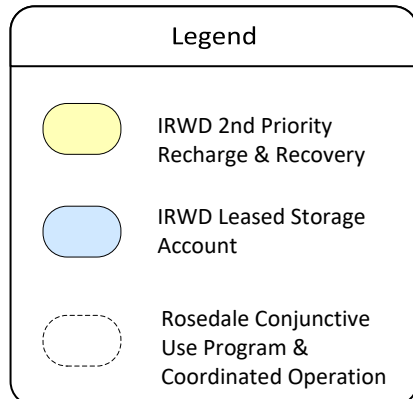
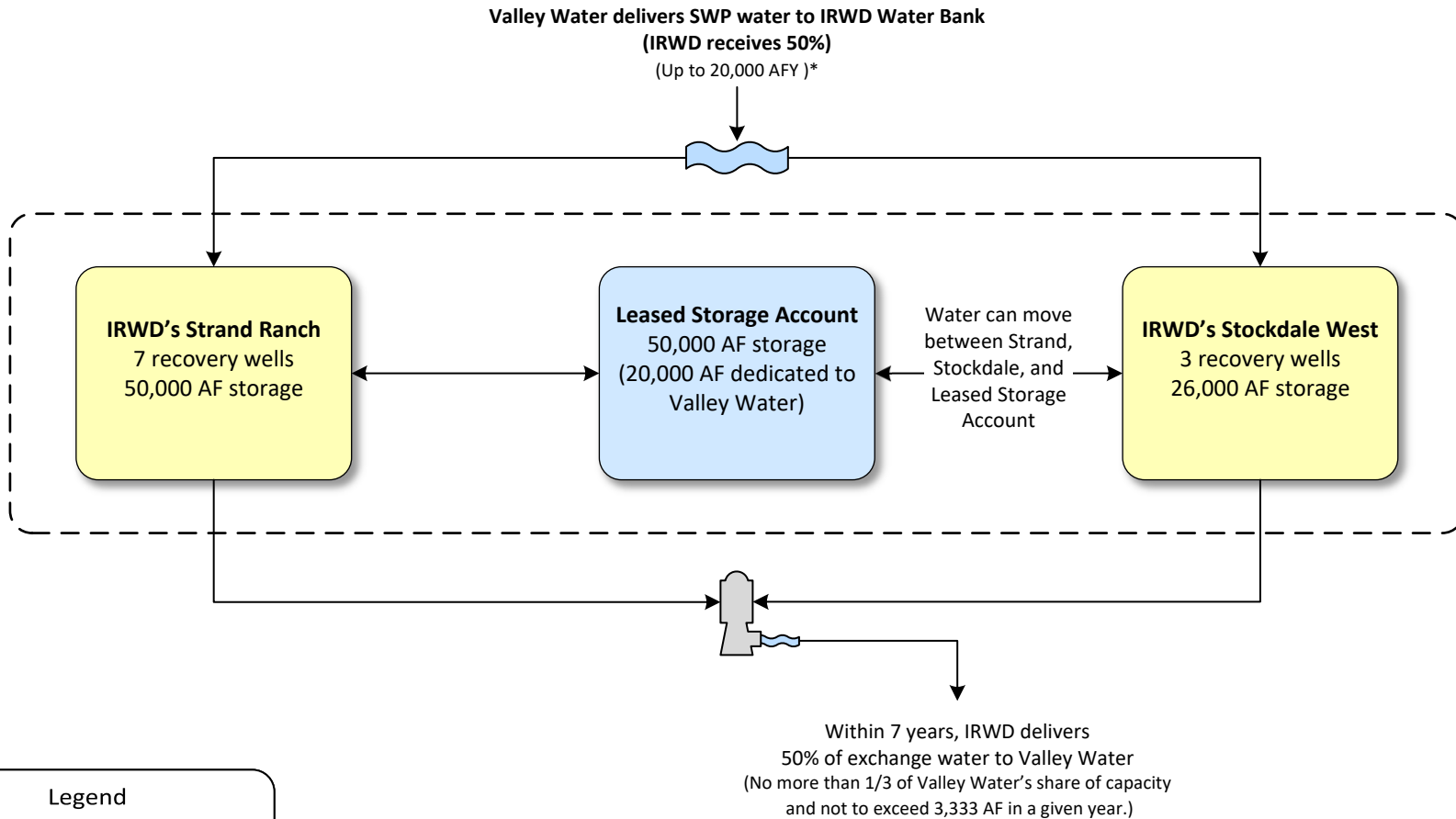


*Up to 20,000 AF per year of AVEK Exchange Water may be delivered to IRWD for recharge using recharge facilities at the Strand Ranch and Stockdale West for storage in the Stockdale West Bank. IRWD shall remit one-half of stored supplies less one half of losses back to AVEK no later than December 31st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

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Exhibit "Q"

Santa Clara Valley Water District (Valley Water) Long Term Water Exchange Program
Effective 9/4/2024 through 12/31/2035



*Up to 20,000 AF per year of Valley Water Exchange Water may be delivered to IRWD for recharge using recharge facilities at the Strand Ranch and Stockdale West for storage in IRWD's Leased Storage Account. IRWD shall remit one-half of stored supplies less one half of losses back to Valley Water no later than December 31st of the 7th year, following the associated recharge event.

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Exhibit "R"

TABLE 6

Cost of Water Exportable to IRWD Service Area

April 17, 2025

Program Partner	Agreement	Water Type	IRWD Exportable Water Stored in Kern County ^{1,4} (AF)	Cost of Water (\$/AF) ⁵	Estimated Recovery of Water ² (\$/AF)	2025 MWD Tier 1 Untreated Rate and SAC Surcharge ³ (\$/AF)	Total Cost of Water to IRWD Service Area (\$/AF)
Carpinteria	2008 Short Term	Table A	250	\$223	\$130	\$ 913	\$1,266
	2011 Short Term	Table A	-	\$219	\$130	\$ 913	\$1,262
Buena Vista	2010 Short Term	Kern River	-	\$225	\$130	\$ 913	\$1,268
	2011 Long Term	Kern River	10,772	\$230	\$130	\$ 913	\$1,273
	2023 Short Term	Kern River	1,923	<i>Pending</i>	\$130	\$ 913	<i>Pending</i>
AVEK	2011 Short Term	Table A	-	\$220	\$130	\$ 913	\$1,263
	2023 Long Term	Table A	3,032	<i>Pending</i>	\$130	\$ 913	<i>Pending</i>
Metropolitan	2014 Short Term	Table A	-	\$227	\$130	\$ 913	\$1,270
Central Coast	2017 Short Term	Table A	-	\$249	\$130	\$ 913	\$1,292
	2019 Short Term	Table A	25	\$239	\$130	\$ 913	\$1,282
	2023 Short Term	Table A	193	<i>Pending</i>	\$130	\$ 913	<i>Pending</i>
DRWD	2013 Long Term	Table A, Article 21	-	<i>Pending</i>	\$130	\$ 913	<i>Pending</i>
	2018 Long Term	Table A	1,542				
Total			17,737				

¹ Water banking data from 2010 to 2023. Buena Vista water and Carpinteria 2008 water is not exportable but can be exchanged for an exportable water supply.

² Recovery costs include estimated PG&E power for pumping, CVC charges, Recovery O&M, and Rosedale administrative charges to deliver to MWD service area.

³ Assumes IRWD would take delivery as extraordinary supply through Irvine Lake to the Baker Water Treatment Plant. The SAC surcharge rate is estimated at \$1/AF.

⁴ Exhibit R takes the IRWD balance stored in Kern minus the following non-exportable supplies: Semitropic, Dudley Ridge (SWPAO #19001), and Buena Vista 2023.

⁵ Cost of Water = Capital Component (\$190) + Fixed Costs (\$21) + Variable Recharge Costs

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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/AF¹).
6. IRWD pays Metropolitan's melded system power rate – currently \$182/AF, not DWR's current power costs of \$330/AF² (\$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 IRWD³.
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.

¹ 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.

² 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.

³ 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 "T"

TABLE 8
IRWD 2025 Recharge Operations- BEFORE LOSSES
 August 18, 2025

Actual and Forecasted Amounts:

Month	IRWD Table A (AF)	DRWD 1:1 (AF)	DRWD 1:1 Pre-delivery (AF)	MWD ¹ (AF)	Homer (AF)	Valley Water (AF)	Total (AF)	Status	Expected Recharge ² (AF)	Expected Recharge Rate (CFS)
January	-	1,978		-	-	-	1,978	prelim	1,978	130
February	-	-		-	-	-	-	prelim	-	120
March	-	-		-	-	-	-	prelim	-	100
April	-	-		-	-	-	-	prelim	-	80
May	-	-		-	-	-	-	prelim	-	80
June	-	-		-	-	-	-	prelim	-	80
July	877	2,711	6,000	-	-	-	9,588	prelim	na	na
August	-	-		-	-	-	-	prelim	-	80
	877	4,689	6,000	-	-	-	11,566			
September	-	-		-	-	-	-		-	80
October	-	-		-	1,854		1,854		1,854	80
November	-	-		79	-	-	79		79	80
December	-	-		-	-	-	-		-	80
Total	877	4,689	6,000	79	1,854	-	13,499		3,911	
Recharge goal:	877	4,689	6,000	79	1,854	-	13,499			

¹ In 2021 and 2022, MWD took direct delivery of IRWD's DRWD SWP Table A water. MWD will return 50% of the water to the IRWD Water Bank this year and the remaining 50% will be delivered to Jackson Ranch.

² The expected recharge is based on the expected recharge rate and remaining recharge capacity. Deliveries to the IRWD Water Bank in July were recharged through an in-lieu exchange of water being recovered for Buena Vista Water Storage District.

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August 18, 2025
Prepared by: R. Huang
Submitted by: F. Nye / P. Weghorst
Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

SITES RESERVOIR PROJECT UPDATE

SUMMARY:

IRWD is participating in the development of the Sites Reservoir Project for the purpose of securing 1,000 acre-feet (AF) of annual release capacity and 6,234 AF of storage capacity in the reservoir. The Sites Project would provide a small schedulable annual water supply for recharge at the proposed Kern Fan and South Valley Groundwater Storage Projects. The following is an update on Sites Project development activities. At the Committee meeting, staff will present an overview of the information.

BACKGROUND:

The Sites Project will provide 1.5 million AF of off-stream storage that would allow for the diversion and storage of stormwater flows from the Sacramento River. The project facilities will be owned by the Sites Project Authority and the capacities will be owned by the participants. A map showing the project facilities map is provided as Exhibit "A."

IRWD's participation in the Sites Project would be equivalent to 1,000 AF of annual release capacity and 6,234 AF of storage capacity, representing 0.4% of the project. This schedulable annual water supply is intended to provide recharge water at the proposed Kern Fan and South Valley Groundwater Storage Projects. An update on Sites Project environmental review, water rights, permitting, agreements, costs, funding, and schedule is provided below. Staff's draft powerpoint presentation summarizing this information is provided as Exhibit "B."

Environmental Review:

In November 2023, the Reservoir Committee and Sites Authority Board approved and certified the Final Environmental Impact Report (EIR)/ Environmental Impact Statement (EIS) for the Sites Project in compliance with the California Environmental Quality Act (CEQA). All court challenges to the Final EIR failed. The Bureau of Reclamation is the lead federal agency under the National Environmental Policy Act and a Record of Decision for the Final EIS is expected in Fall 2025.

Water Rights Permit:

The Sites Authority submitted its closing water right proceedings reply brief to the State Water Resources Control Board on June 27, 2025. A decision on draft water right permits is pending with the State Board's Administrative Hearings Office. A status conference on the water right application is scheduled for September 4, 2025, to consider draft permit terms. The Sites Authority estimates the State Board will issue a draft water rights permit in Fall 2025.

Other Permitting:

Under the Clean Water Act, a Section 401 water quality certification and a Section 404 permit for discharging dredged or fill material is needed for the Sites Project. The Sites Authority plans to resubmit permit applications this month and expects the permits will be issued in mid-2026. Consistent with the Federal Endangered Species Act, the U.S. Fish and Wildlife Service issued a biological and conference opinion for construction of the Sites Project on July 16, 2025. The opinion identifies the effects of the Sites Project construction on eight endangered or threatened species. On July 7, 2025, the California Department of Fish and Wildlife issued a Master Lake and Streambed Alteration Agreement for the project.

Benefits and Obligations Contract:

Advancing the Sites Reservoir Project beyond the current planning phase into detailed design, construction, and operations activities will require participants to execute a Benefits and Obligations Contract (B&O Contract). The contract between the Sites Authority and the participants will establish funding commitments for the construction and operation of the Sites Project in return for capacity interest rights. The Sites Authority expects a six-month process, from Fall 2025 to early 2026, whereby participants seek authorization from their respective governing bodies to execute the B&O Contract. IRWD staff and special legal counsel from Kronick Moskowitz are working with Sites Authority staff to prepare a draft of the B&O Contract that will be reviewed with the IRWD Board in the fall. The Sites Reservoir Operations Plan describes the day-to-day decision process for when and how to divert and release water and will be an appendix to the B&O contract. The Sites Authority expects to proceed with final design and construction of the project in the Spring of 2026.

Other Agreements:

The Sites Authority will need to execute several other agreements and contracts. Final operations agreements with Tehama-Colusa Canal Authority, Glenn-Colusa Irrigation District, the California Department of Water Resources and State Water Contractors, as well as the Bureau of Reclamation are expected to be executed by December 2025. In addition, the Sites Authority hopes to execute a Proposition 1 Water Storage Investment Program Public Benefits Contract in July 2026.

Design Work and Costs:

The Sites Authority is developing a Project Baseline Report (PBR) to help participants develop a detailed understanding of the Sites Project. The PBR will include a project cost estimate, benefits analysis, and affordability assessments. The document will be finalized after issuance of the water right permit and execution of State and Federal agreements.

In June 2025, the Sites Authority provided a Class 3 cost estimate for the project with a range from \$6.2 to \$7.5 billion in 2025 dollars, which considers both design and construction contingencies. IRWD's share of costs would be approximately \$26 million to \$31 million. Changes and refinements since the 2021 estimate of \$3.9 billion includes increased state / federal permitting and regulatory requirements; advancement to a 30% design; a detailed evaluation of

design and construction cost risk factors; and significant inflation and construction cost escalations. At the Committee meeting, staff will present an update on the unit cost of water delivered to the Kern Fan and South Valley Groundwater Storage Projects based on the above range of costs. The Benefit-Cost Ratio is conservatively estimated to be between 1.1 to 1.9.

In September 2024, the Sites Authority Board and Reservoir Committee authorized submittal of a reservoir construction application to the Division of Safety of Dams (DSOD). DSOD's review of the 30% design is being expedited, and it should be complete in Fall 2025.

Federal and State Funding:

The Sites Project has been awarded \$875 million in conditional funding from the Proposition 1 Water Storage Investment Program. On August 20, the California Water Commission will consider awarding the project an additional \$219 million in inflationary adjustment funding. In March 2025, Sites Reservoir received \$134 million in funding from the Water Infrastructure Improvement for the Nation Act, bringing the total federal investment up to \$780 million through the Bureau of Reclamation.

Sites Project Schedule:

Major upcoming milestones for the Sites Project are shown in the table below:

Sites Reservoir Project Schedule

Milestone	Expected Completion Date
DSOD Review of 30% Design	Fall 2025
Execution of Final Operations Agreements with Facility Partners, State, and Federal Agencies	December 2025
Execution of Coordinated Operations Agreement with Reclamation and Department of Water Resource	December 2025
NEPA Final EIS Record of Decision	December 2025
Final Water Rights Permit	December 2025
Final Project Baseline Report	December 2025
B&O Contract Execution by Project Participants	March 2026
401 Certification and 404 Permits Issued	September 2026
Construction Groundbreaking	December 2026
Construction Complete	December 2032
Start-up Complete	March 2033

FISCAL IMPACTS:

Based on the current feasibility level cost estimate for the Sites Project, IRWD's share of the capital cost would be \$26 to \$31 million. If the Sites Reservoir Authority is successful in getting a \$219 million inflationary adjustment from the California Water Commission, IRWD's share of the capital cost would be about \$1 million less.

ENVIRONMENTAL COMPLIANCE:

The Sites Authority certified the Final EIR / EIS for the Sites Project in November 2023. IRWD would need to adopt the Final EIR / EIS as a responsible agency prior to execution of the B&O Contract.

RECOMMENDATION:

Receive and file.

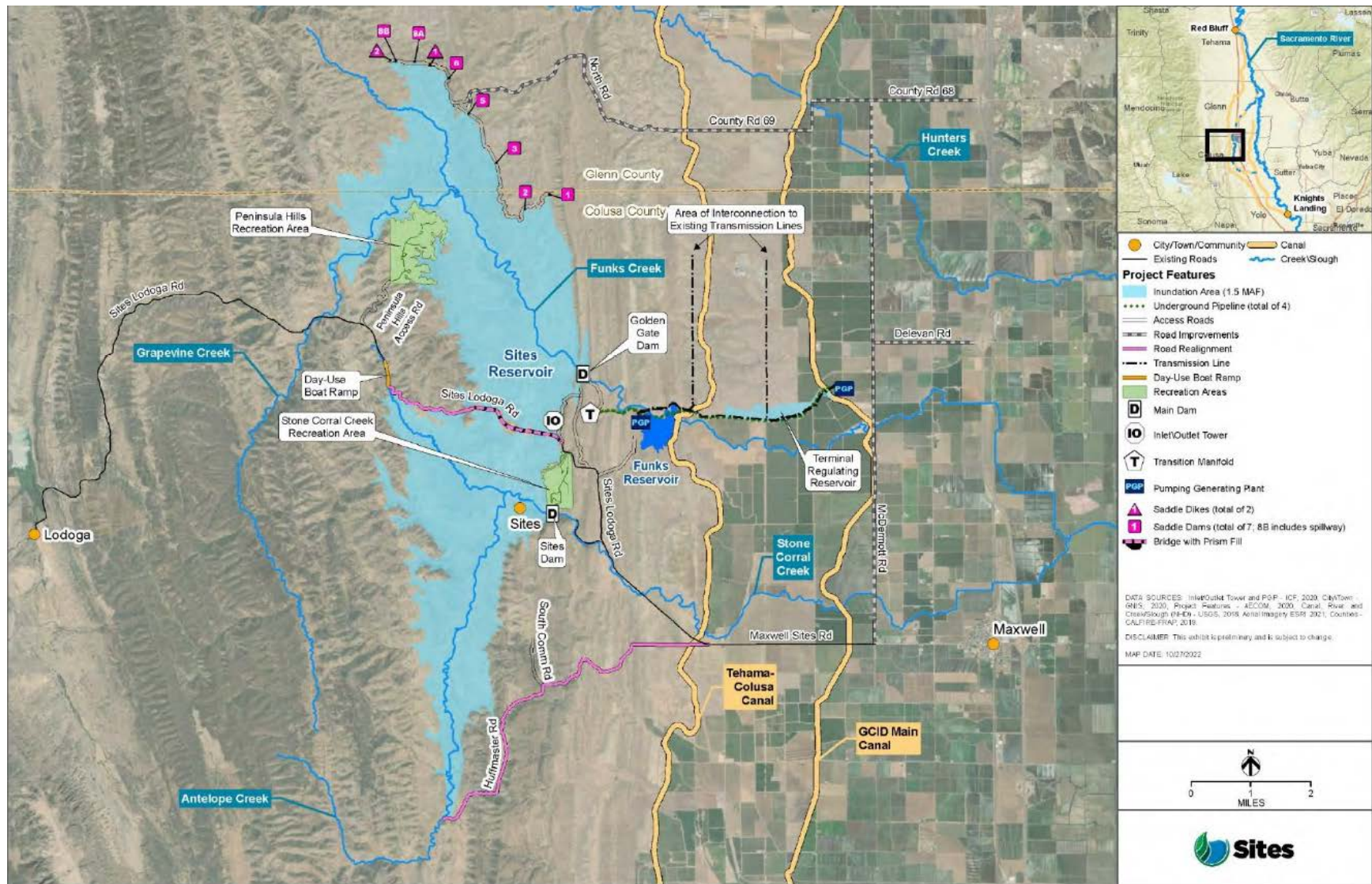
LIST OF EXHIBITS:

Exhibit "A" – Sites Project Location and Facilities Map

Exhibit "B" – Draft PowerPoint Presentation Providing Update on Sites Project

Exhibit "A"

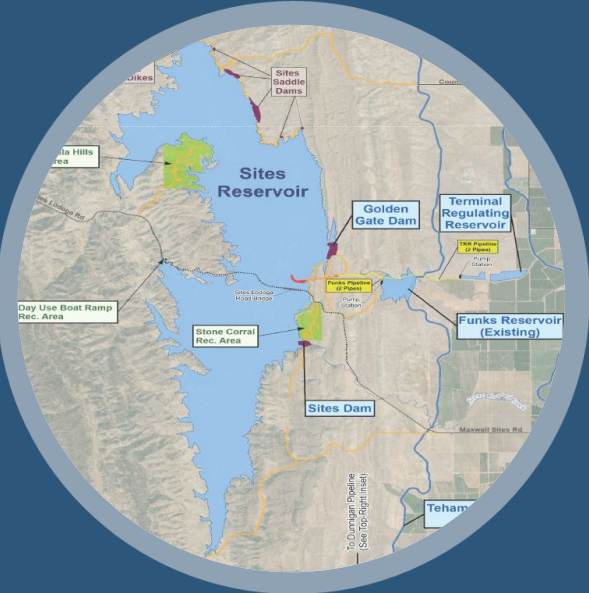
Sites Project Location and Facilities Map



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DRAFT


Irvine Ranch
Water District



SITES RESERVOIR PROJECT UPDATE

SUPPLY RELIABILITY PROGRAMS
COMMITTEE

AUGUST 18, 2025

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PRESENTATION OVERVIEW

1. Background
2. Project Update
 - Permitting
 - Water rights
 - Agreements
 - Design
 - Capital Costs
3. IRWD Participation in Sites Reservoir Project
4. Cost of Water Comparison
5. Project Schedule



 Irvine Ranch
Water District

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SITES PROJECT BACKGROUND

- Capacity: 1.5 million AF
 - For agricultural and urban uses
 - 8th largest reservoir in CA
- Sites Reservoir Project Governance
 - Owner: Sites Project Authority
 - Nine-member Board from Sacramento Valley
 - Capacity owned by Participants
 - Reservoir Committee
 - 22 participants (including IRWD) that will own capacity
 - Participates in all Authority Board meetings
 - Will oversee project operations



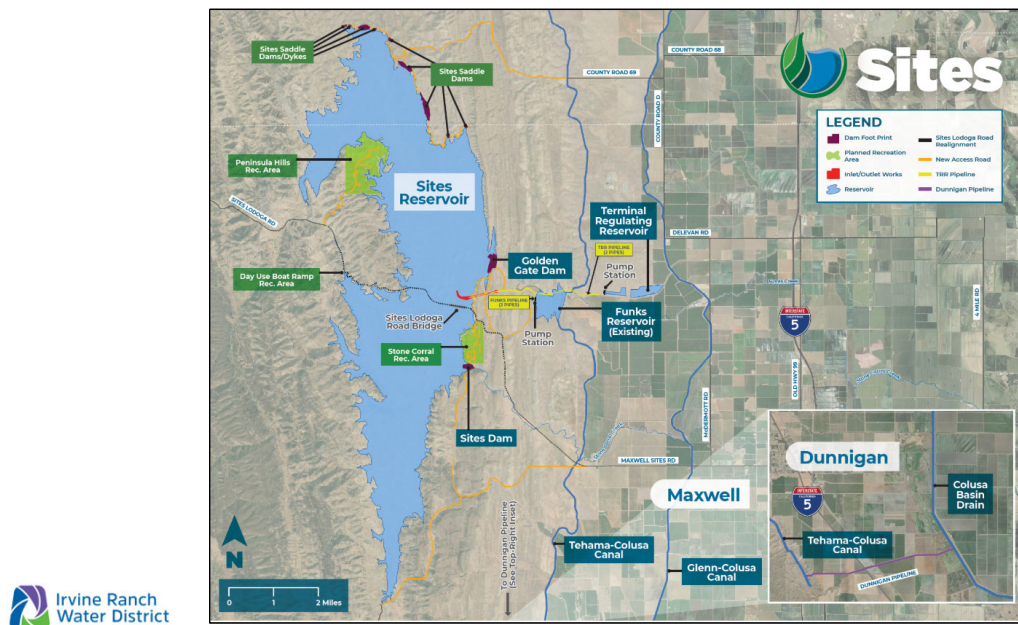
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PROJECT PHASING

- Phase 1: Formation of the JPA and state funding award (complete)
- Phase 2: Environmental review, permits, preliminary design and construction, agreements, land acquisitions, and financing (in progress)
- Phase 3: Final design and right-of-way acquisition
- Phase 4: Construction and commissioning
- Phase 5: Construction close-out and operations

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SITES RESERVOIR LOCATION AND FACILITIES



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SITES PROJECT – ENVIRONMENTAL COMPLIANCE

- Final Environmental Impact Report (EIR) / Environmental Impact Statement (EIS)
 - ✓ Sites Reservoir Authority lead on EIR
 - ✓ Reclamation lead on EIS
- Authority Board certified the Final EIR in November 2023
- All court challenges failed
- Record of Decision for Final EIS expected in December 2025



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SITES PROJECT PERMITS

- Clean Water Act Applications

- ✓ Section 401 water quality certification and Section 404 (dredge and fill) permits applications to be submitted in August 2025 and approved by Fall 2026



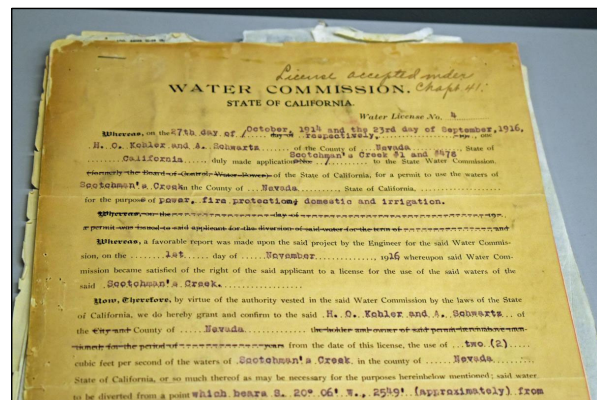
- Two Permits Issued in July 2025

- ✓ U.S. Fish and Wildlife Service issued a Biological and Conference Opinion for construction
 - Identifies the effects of construction on eight endangered or threatened species
- ✓ CA Department of Fish and Wildlife issued a Master Lake and Streambed Alteration Agreement
 - Identifies the effects of the construction on fish and wildlife resources associated with waters in the construction footprint



SITES WATER RIGHTS

- Application to State Board deemed complete in May 2023
- State Board assigned matter to Administrative Hearings Office in Nov. 2023
- Public hearings scheduled to end in Feb. 2025
- Submitted closing reply briefs in June 2025
- Draft Water Rights Permit expected in Fall 2025



SITES PROJECT AGREEMENTS

- Coordinated Operations Agreement
 - Day-to-day communications between Bureau of Reclamation (Reclamation) and Department of Water Resources (DWR)
 - Expected complete by end of 2025
- Benefits and Obligations (B&O) Contract
 - B&O Contract defines participant commitments in return for capacity interests
 - Operating Plan describes when/how to divert/release water
 - Expected 6-month period for participants to ask Boards for authorization to execute B&O contract (to be complete spring 2026)
- Other agreements with facility partners are expected by end 2025



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SITES PROJECT DESIGNS AND FUNDING

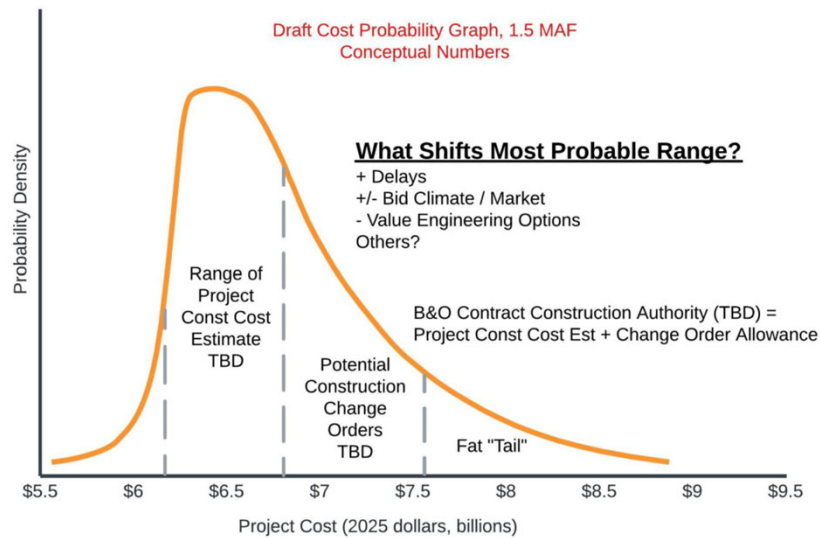
- Project Design
 - 30% design completed in April 2025
 - DSOD application submitted in Fall 2024; 12-month expected review period
- Program Baseline Report (PBR)
 - Cost estimates, benefits analyses, and affordability assessments
 - Expected completed by end of 2025
- State and Federal Funding
 - \$875 million from Prop 1 - Water Storage Investment Program
 - Recommended to receive additional \$219 million inflationary increase
 - \$780 million from Water Infrastructure Improvement for the Nation Act and Infrastructure Investment and Jobs Act



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SITES PROJECT – CLASS 3 COST ESTIMATE



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IRWD PARTICIPATION IN SITES PROJECT

- IRWD's Purpose: secure a 1,000 AF annual schedulable release supply for the Kern Fan and South Valley Groundwater Storage Projects
- This equates to 6,234 AF of IRWD-owned storage capacity

IRWD Share of Sites Capital Costs:

Project Cost Description	2025 Capital Cost of Project (\$ Million)	IRWD Share of Capital Cost (\$ Million)
With Design and Construction Contingencies	\$7,500	\$31.2

- To date, IRWD has spent \$608,500 for Phase 1 (Formation) and Phase 2 (Permitting)

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IRWD COST OF WATER COMPARISON

Comparison of cost of *schedulable* water delivered into the IRWD Water Banks from two different sources: **Site Reservoir** and **IRWD's Jackson Ranch**

Cost Component	Sites Water (\$/AF)	IRWD's Jackson Ranch (\$/AF)
Capital Costs	\$704	\$512
Sites Fixed and Variable Operating Costs	\$246	\$403
Water Banking Operating Costs	\$5	\$5
Energy	\$12	\$12
DWR Conveyance	\$25	\$25
TOTAL	\$992	\$957

Note: Arguably, water supply deliveries from Sites Reservoir will be more reliable than deliveries from Jackson Ranch.



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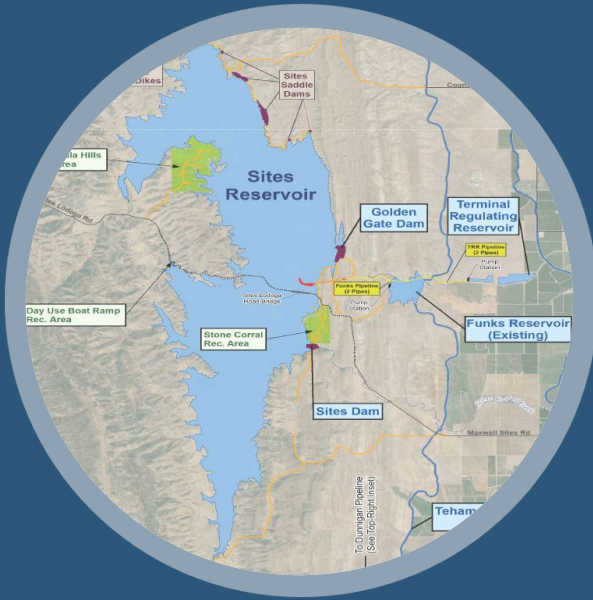
SITES PROJECT SCHEDULE

Schedule Item	Completion Date
DOSD Review of 30% Design	Fall 2025
Final Operations Agreements with Facility Partners, State, and Federal Agencies Executed	Dec. 2025
Coordinated Operations Agreements with Reclamation and DWR Executed	Dec. 2025
NEPA Final EIS Record of Decision	Dec. 2025
Final Water Rights Permit	Dec. 2025
Final Program Baseline Report	Dec. 2025
B&O Contract Execution by Project Participants	March 2026
401 Certification and 404 Permit Issued	Sept. 2026
Construction Groundbreaking	Dec. 2026
Construction Complete	Dec. 2032
Start-up Complete	March 2033



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QUESTIONS