
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

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

Recommendation: Receive and file.

6. PROPOSED METROPOLITAN INTERAGENCY LOCAL SUPPLY EXCHANGE PROGRAM – LINDSAY / WELCH / SANCHEZ / WEGHORST

Recommendation: Receive and file.

ACTION

7. ALLOCATING SECOND PRIORITY RECHARGE AND RECOVERY CAPACITY – WELCH / SANCHEZ / WEGHORST

Recommendation: That the Committee approve incorporating the described method for allocating second priority recharge and recovery capacity into the term sheets for the Silvertip LLC, Santa Clara Valley Water District, and Homer LLC exchange programs.

OTHER BUSINESS


8. Receive Oral Updates from District’s liaison to Dudley Ridge Water District and provide information on relevant activities.
9. Directors’ Comments
10. 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.

May 16, 2024

Prepared by: N. Palacio / K. Welch

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 and provide an overview of IRWD's forecasted monthly recharge operations for 2024.

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 (KWB), 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, and Exhibit "C" provides after-loss estimates of water recharged and in storage at the projects. Since last month's update, there are no changes to Exhibits "B" and "C".

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 Water District (Dudley Ridge). The table also provides details related to the exportability of IRWD's supplies. There were no changes to Exhibit "D" from last month.

Exhibit "E" graphically depicts how storage of 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. 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 current estimated 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 Antelope Valley-East Kern Water Agency (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:

- AVEK Unbalanced Exchange Program: Early this year, AVEK informed staff that it may deliver up to 13,000 AF of SWP Table A water to the IRWD Water Bank but has not provided any further information. Deliveries from AVEK have been removed from Exhibit “S” until further communication has been received from AVEK.
- Homer Capacity Exchange Program: In 2023, IRWD recharged approximately 1,800 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.
- Silvertip Unbalanced Exchange Program: Staff estimates that Silvertip may deliver up to 4,000 AF of SWP supplies to the IRWD Water Bank in 2024. A draft agreement will be submitted to Silvertip for review within the month. The preparation of the necessary DWR agreement and securing the approval of Metropolitan and the Kern County Water Agency could require several months to finalize.
- Valley Water Unbalanced Exchange Program: Santa Clara Valley Water District (Valley Water) informed staff that it expects to have up to 20,000 AF of SWP Table A Water available for delivery to the IRWD Water Bank in 2024. Staff anticipates that the necessary DWR agreements and approvals may be secured over the next few months.
- IRWD’s SWP Table A Allocation: Last month, DWR announced an increase in the 2024 SWP Table A allocation from 30% to 40%. IRWD will take delivery of its 700 acre-feet of Table A water from Dudley Ridge into Strand Ranch.

At the meeting, staff will update the Committee on water supply conditions in California.

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

Supply Reliability Programs Committee: Water Banking Project Facilities, Capacities,
Operations, and Programs

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- 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
 May 16, 2024

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.

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Exhibit "B"

TABLE 2
IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES
 May 16, 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) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2023 (AF)								
Total Kern Water Bank ⁴	-	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 ⁵	16,500	-	-	-	-	-	-	16,500
TOTAL STORED WATER (1/1/2023)	29,916	13,392	225	-	-	-	43	43,576
(RECOVERY) AND RECHARGE IN 2023 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	(232)	-	-	-	-	-	(232)
KWB Deliveries ⁷	-	803	-	-	-	-	-	803
2023 SWP Allocation (100%) Est.	875	-	-	-	-	-	874	1,749
2020 Reserve Water	13	-	-	-	-	-	-	13
BV Long Term Program Kern River Water Est.	-	8,750	8,750	-	-	-	-	17,500
BV 2023 Recharge Kern River Water Est.	-	2,250	2,250	-	-	-	-	4,500
CCWA 2023 Short Term Exchange Est.	225	-	-	225	-	-	-	450
AVEK Long Term Exchange Est.	3,425	-	-	-	3,424	-	-	6,849
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	9,358	-	-	-	-	-	-	9,358
TOTAL 2023 TRANSACTIONS	13,896	11,571	11,000	225	3,424	-	874	40,990
Total Kern Water Bank ⁴	-	4,322	-	-	-	-	-	4,322
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	15,279	20,641	11,225	225	3,424	-	874	51,668
Total DRWD 1-for-1 Long Term Exchange Credit ⁵	7,142	-	-	-	-	-	-	7,142
TOTAL STORED WATER (1/1/2024)	34,454	24,963	11,225	225	3,424	-	917	71,784
(RECOVERY) AND RECHARGE IN 2024 (AF)								
KWB Recovery for use on Jackson Ranch ⁶ Est.	-	-	-	-	-	-	-	-
2024 SWP Allocation (40%)	-	-	-	-	-	-	-	-
BV Long Term Program Kern River Water Est.	-	-	-	-	-	-	-	-
AVEK Long Term Exchange Est.	-	-	-	-	-	-	-	-
Silver Tip Short Term Exchange	-	-	-	-	-	-	-	-
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	2,200	-	-	-	-	-	-	2,200
TOTAL ESTIMATED 2024 TRANSACTIONS	2,200	-	-	-	-	-	-	2,200
ESTIMATED 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	17,479	20,641	11,225	225	3,424	-	874	53,868
Total DRWD 1-for-1 Long Term Exchange Credit ⁵	4,942	-	-	-	-	-	-	4,942
TOTAL ESTIMATED STORED WATER TO DATE	34,454	24,963	11,225	225	3,424	-	917	75,208

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. MWD took delivery of IRWD's 2022 SWP allocation in June 2022.

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 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.

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Exhibit "C"

TABLE 3
IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES
 May 16, 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) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2023 (AF)								
Total Kern Water Bank ⁴	-	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 ⁵	15,000	-	-	-	-	-	-	15,000
TOTAL STORED WATER (1/1/2023)	27,377	9,456	225	-	-	-	43	37,101
(RECOVERY) AND RECHARGE IN 2023 (AF)								
KWB Recovery for use on Jackson Ranch ⁶	-	(232)	-	-	-	-	-	(232)
KWB Deliveries ⁷	-	723	-	-	-	-	-	723
2023 SWP Allocation (100%) Est.	750	-	-	-	-	-	749	1,499
2020 Reserve Water	12	-	-	-	-	-	-	12
BV Long Term Program Kern River Water Est.	-	7,501	7,896	-	-	-	-	15,397
BV 2023 Recharge Kern River Water Est.	-	1,929	2,030	-	-	-	-	3,959
CCWA 2023 Short Term Exchange Est.	193	-	-	193	-	-	-	386
AVEK Long Term Exchange Est.	2,936	-	-	-	2,935	-	-	5,871
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	8,022	-	-	-	-	-	-	8,022
TOTAL 2023 TRANSACTIONS	11,913	9,921	9,926	193	2,935	-	749	35,637
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	12,257	15,135	10,151	193	2,935	-	749	41,420
Total DRWD 1-for-1 Long Term Exchange Credit	6,978	-	-	-	-	-	-	6,978
TOTAL STORED WATER (1/1/2024)	31,268	19,377	10,151	193	2,935	-	792	64,716
(RECOVERY) AND RECHARGE IN 2024 (AF)								
KWB Recovery for use on Jackson Ranch ⁶ Est.	-	-	-	-	-	-	-	-
2024 SWP Allocation (40%)	-	-	-	-	-	-	-	-
BV Long Term Program Kern River Water Est.	-	-	-	-	-	-	-	-
AVEK Long Term Exchange Est.	-	-	-	-	-	-	-	-
Silver Tip Short Term Exchange	-	-	-	-	-	-	-	-
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	1,886	-	-	-	-	-	-	1,886
TOTAL ESTIMATED 2024 TRANSACTIONS	1,886	-	-	-	-	-	-	1,886
ESTIMATED WATER IN STORAGE 2024 (AF)								
Total Kern Water Bank	-	4,242	-	-	-	-	-	4,242
Total MWD System	12,033	-	-	-	-	-	43	12,076
Total Kern County	14,143	15,135	10,151	193	2,935	-	749	43,306
Total DRWD 1-for-1 Long Term Exchange Credit	5,092	-	-	-	-	-	-	5,092
TOTAL ESTIMATED STORED WATER TO DATE	31,268	19,377	10,151	193	2,935	-	792	64,716

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.

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. MWD took delivery of IRWD's 2022 SWP allocation in June 2022. MWD will not take delivery of IRWD's 2023 SWP Allocation.

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. The 2022 beginning KWB balance was revised by DRWD based on KCWA 2021 end of year balances.

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 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)
 May 16, 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 ¹	2-for-1	2010	Pilot	Kern River	4,108		3,903									Yes
	2-for-1	2011	Long-Term	Kern River	29,369	8,121	27,900		10,803	0		10,803		10,803		
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	1,803	792	1,887	1,055	831			1,887	1,887		792	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	9,908		9,682	226		9,908	15,000			No
				Credit	NA	NA	5,092			5,092	5,092					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	2,030	2,030	1,929		1,268	661		1,929		1,929		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	2,935	2,935	2,936		2,041	895		2,936	2,936			No
Total:					47,554	14,071	67,843	12,033	27,496	1,782	5,092	46,403	31,018	15,385	792	NA

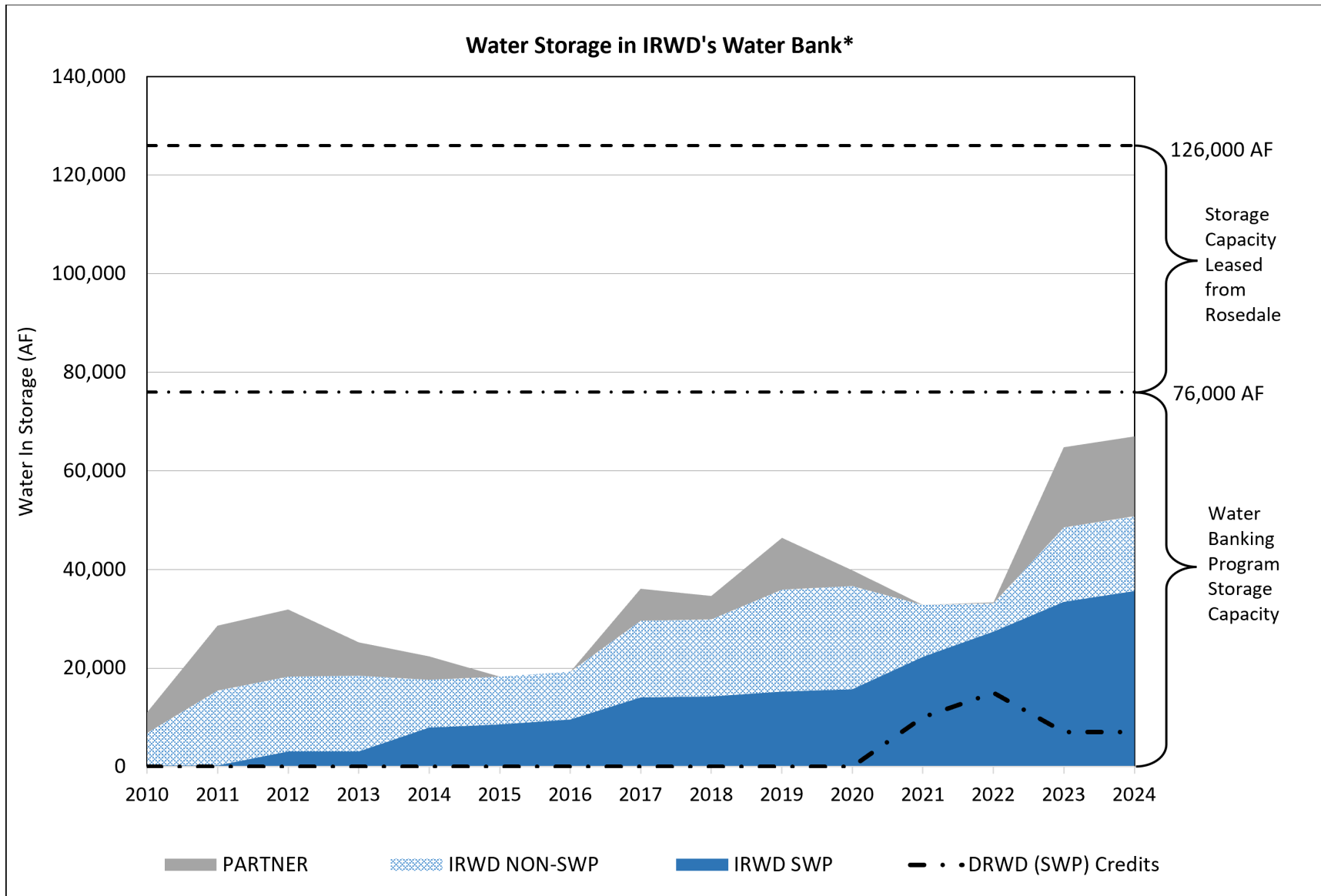
¹ Water acquired through BVWSD will be exportable after it is exchanged for SWP Table A through 1-for-1 exchange with Dudley Ridge Water District.

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

³ 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

May 16, 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	-	-	-
DRWD	10,000	-	-	-
AVEK	-	20,000	-	-
Total Dedicated	50,000	20,000	-	-
Total Remaining	-	6,000	50,000	9,495

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	-	-	-
DRWD	-	-	-	-
AVEK	-	20,000	-	-
Total Dedicated	17,500	20,000	-	-
Total Remaining	-	7,100	-	3,200

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	7,084	-	1,520
Total Dedicated	17,500	10,417	-	1,520
Total Remaining	-	833	-	-

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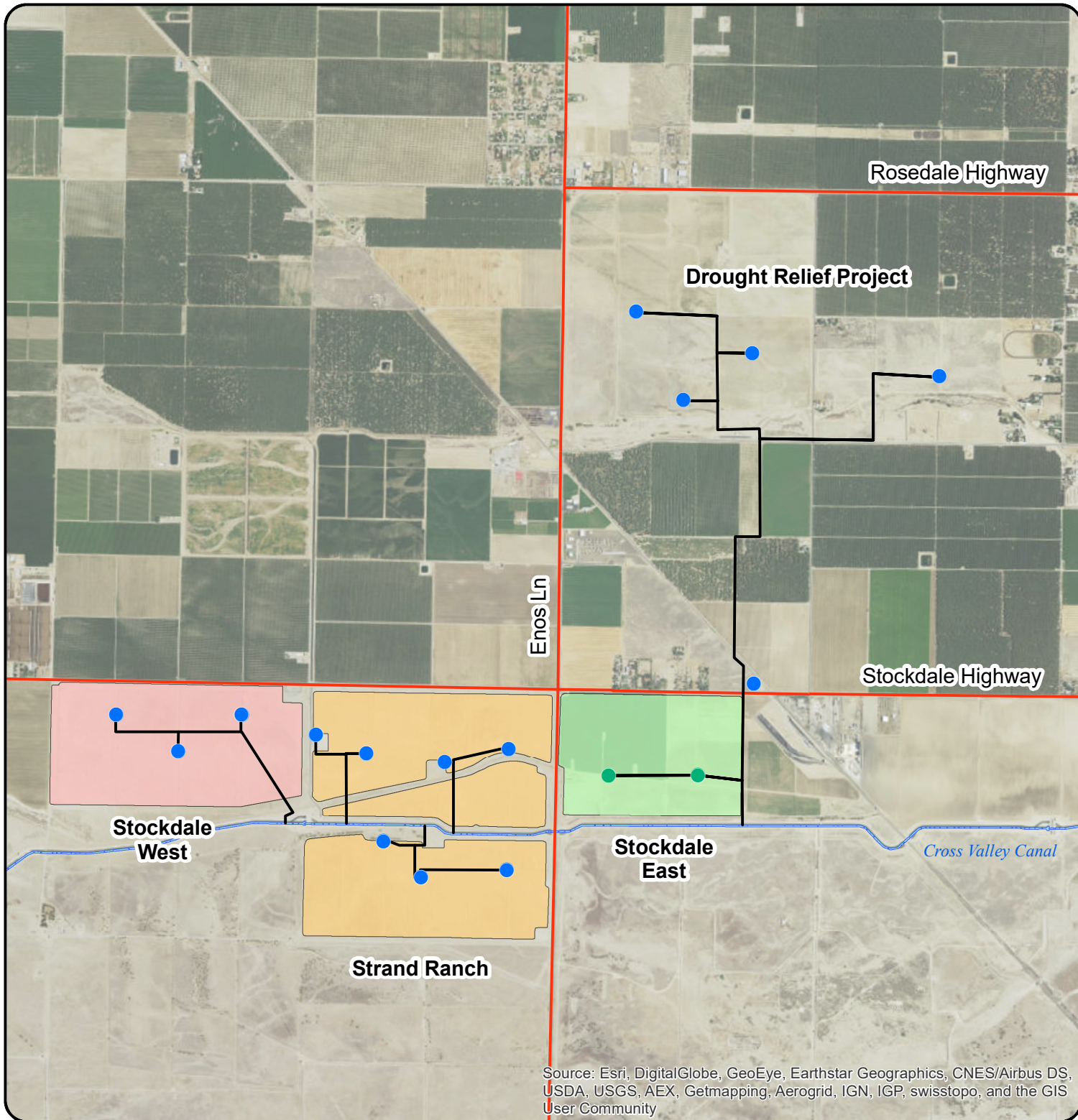


Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

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

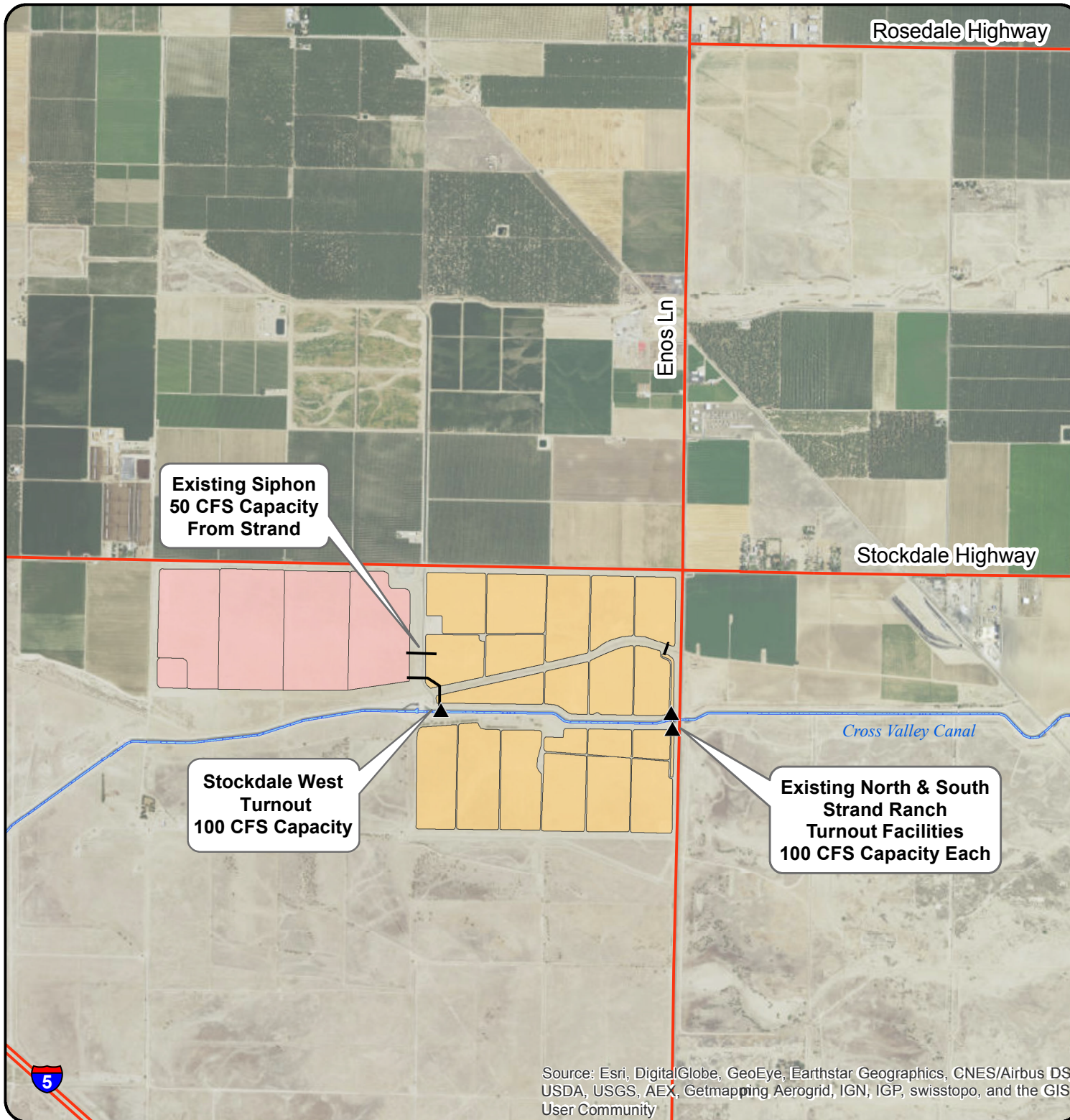
0 0.25 0.5 1 Miles

N NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

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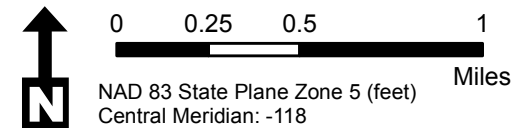
Location Map: IRWD Water Banking Projects Recharge Basins & Turnout Facilities



MAP FEATURES

- ▲ Turnouts
- Stockdale West
- Strand Ranch

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

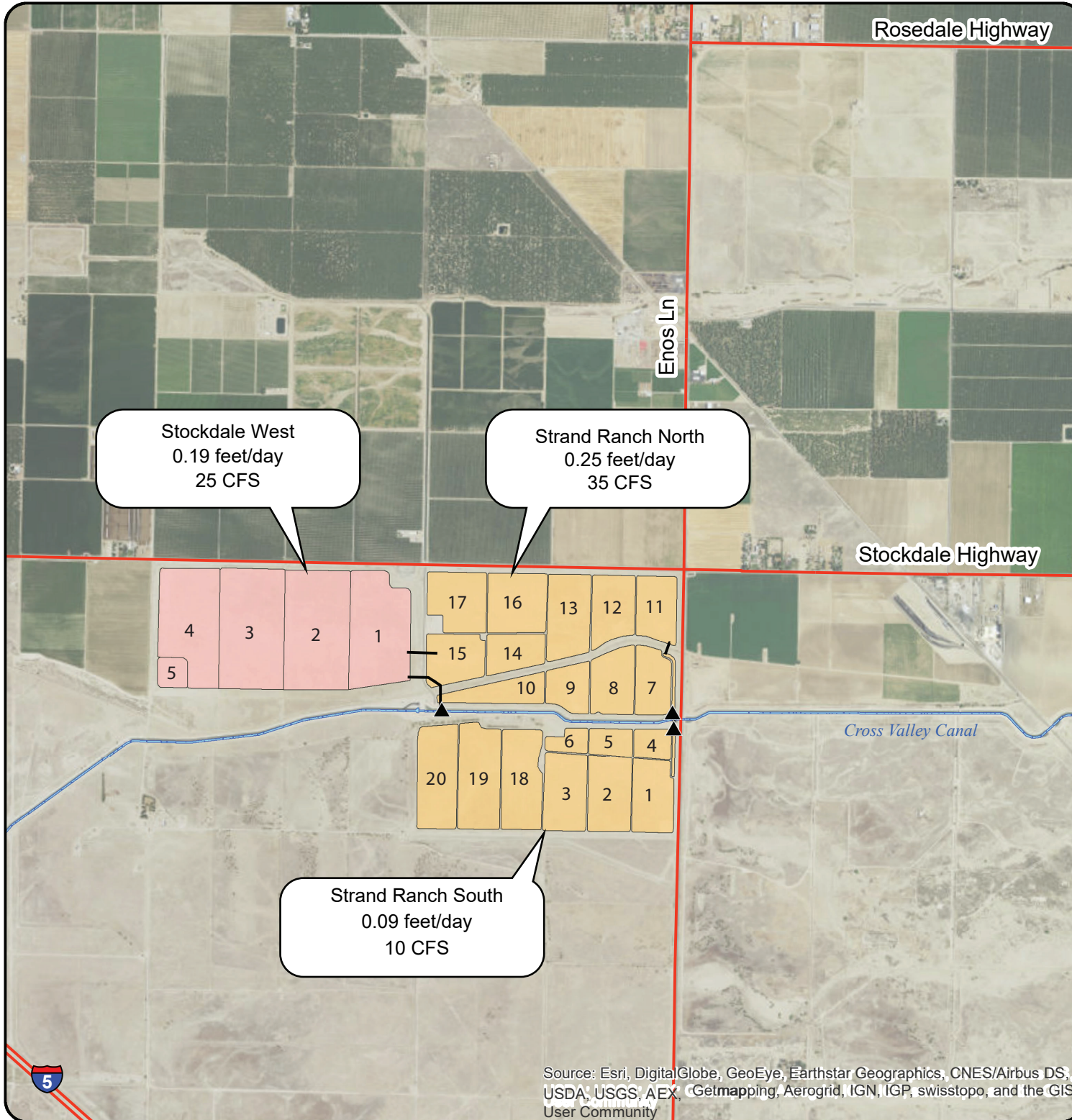


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping AeroGrid, IGN, IGP, swisstopo, and the GIS User Community

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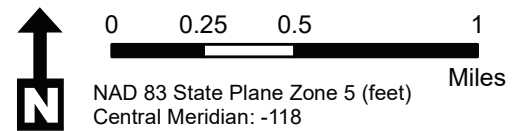
Location Map: IRWD Water Banking Projects Recharge Rates



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



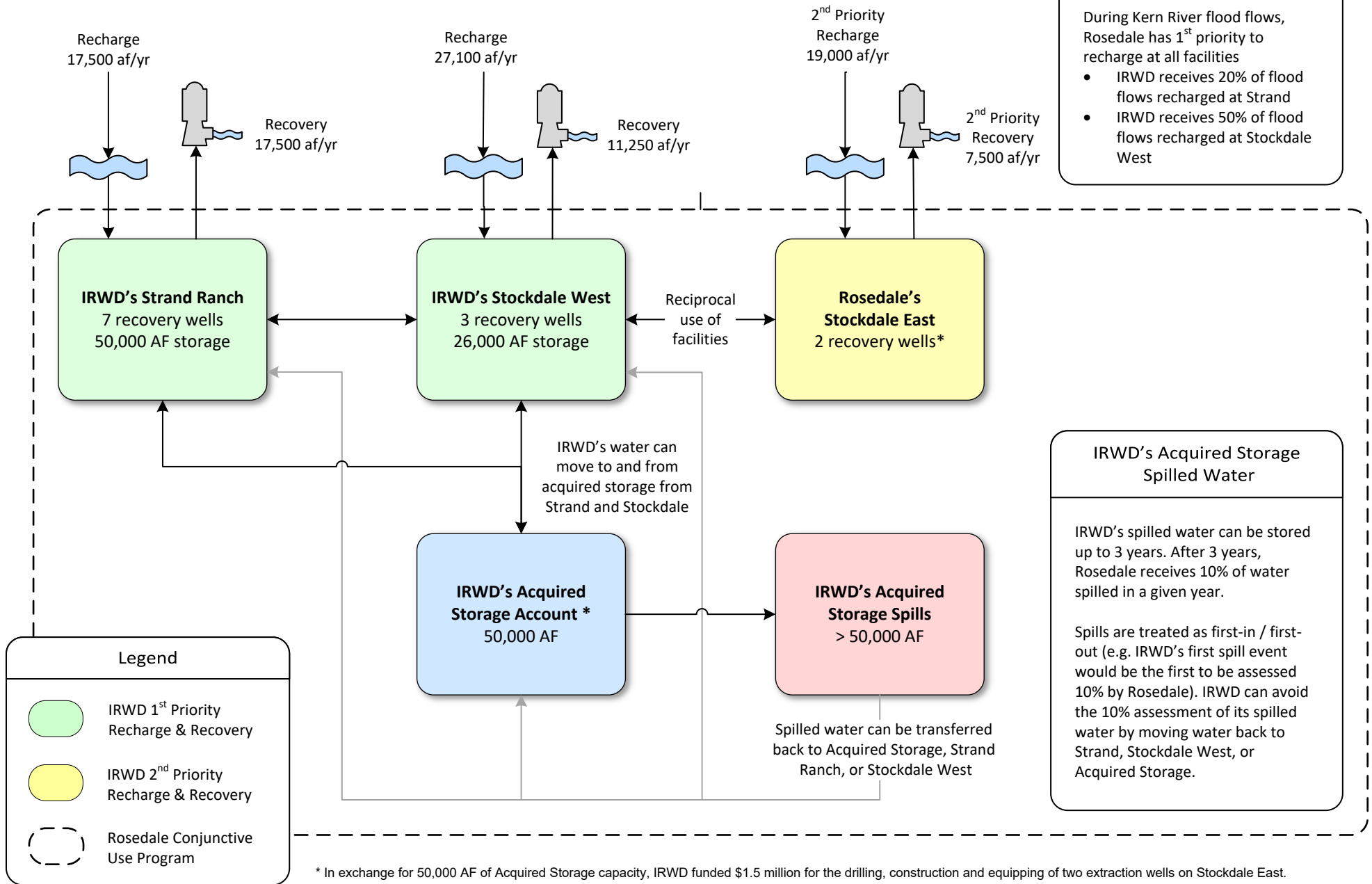
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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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)

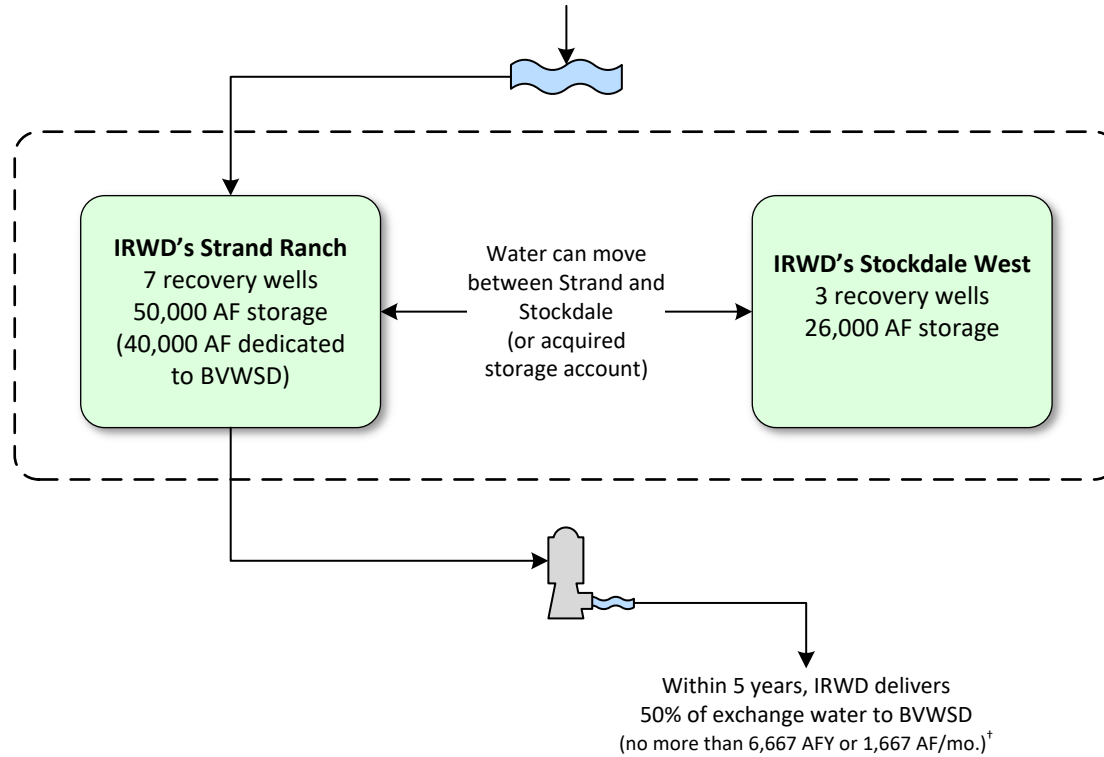


* In exchange for 50,000 AF of Acquired Storage capacity, IRWD funded \$1.5 million for the drilling, construction and equipping of two extraction wells on Stockdale East.

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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.)



Legend

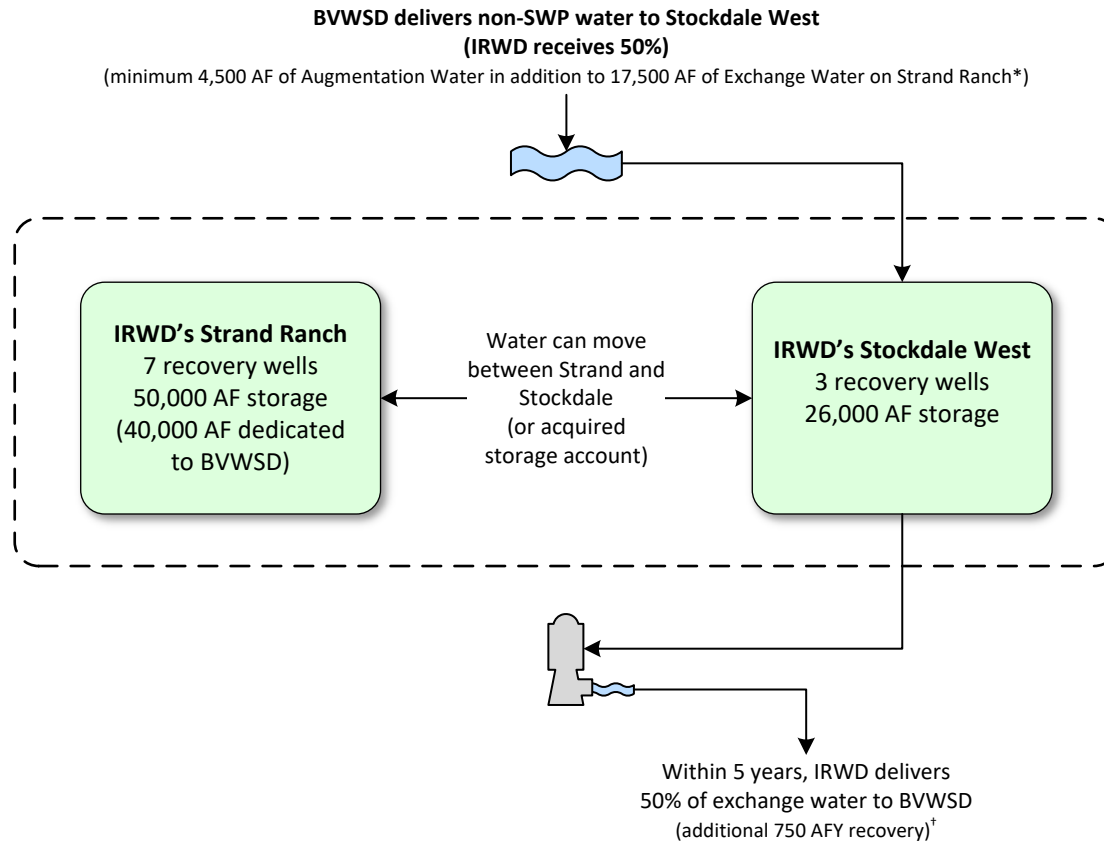
- IRWD 1st Priority Recharge & Recovery
- Rosedale Conjunctive Use Program & Coordinated Operation



†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



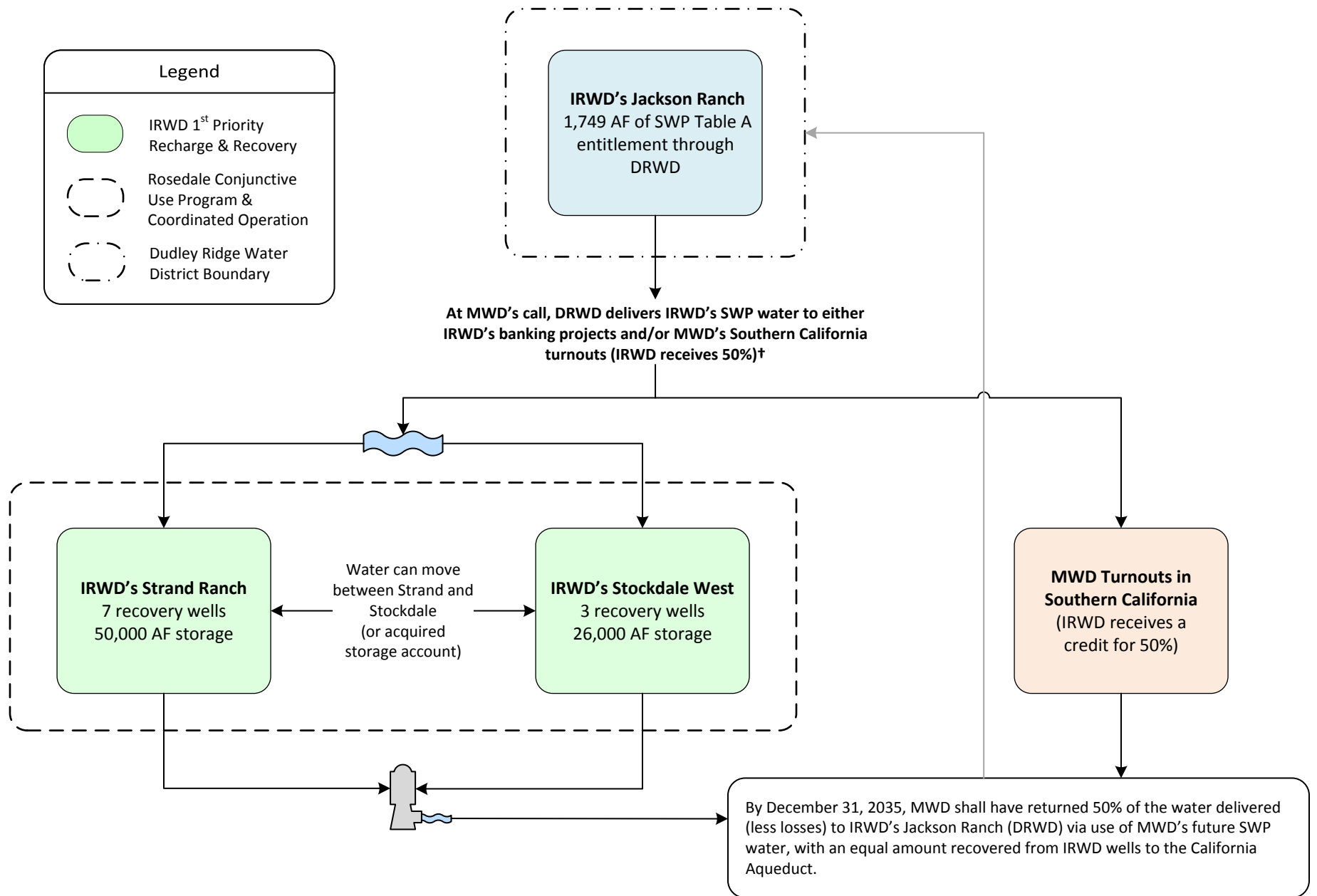
Legend	
	IRWD 1 st Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

* 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.

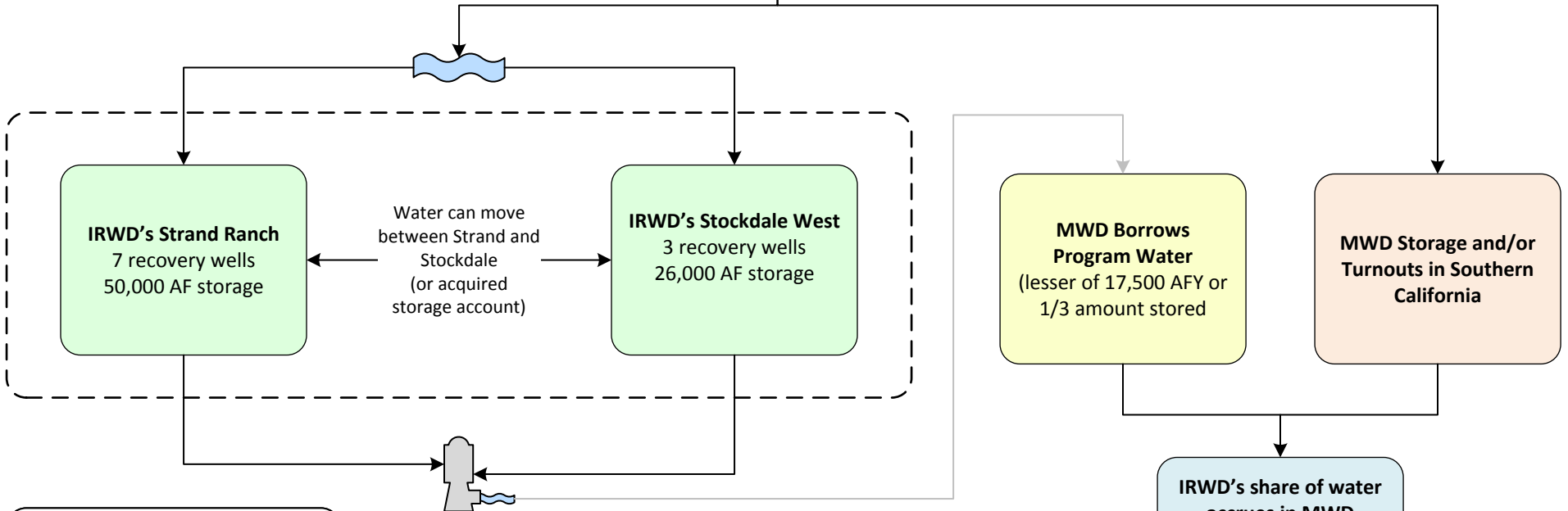
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Coordinated Operating, Water Storage, Exchange and Delivery Agreement Between MWD, MWDOC and IRWD
 Effective 5/1/2011 through 11/4/2035

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

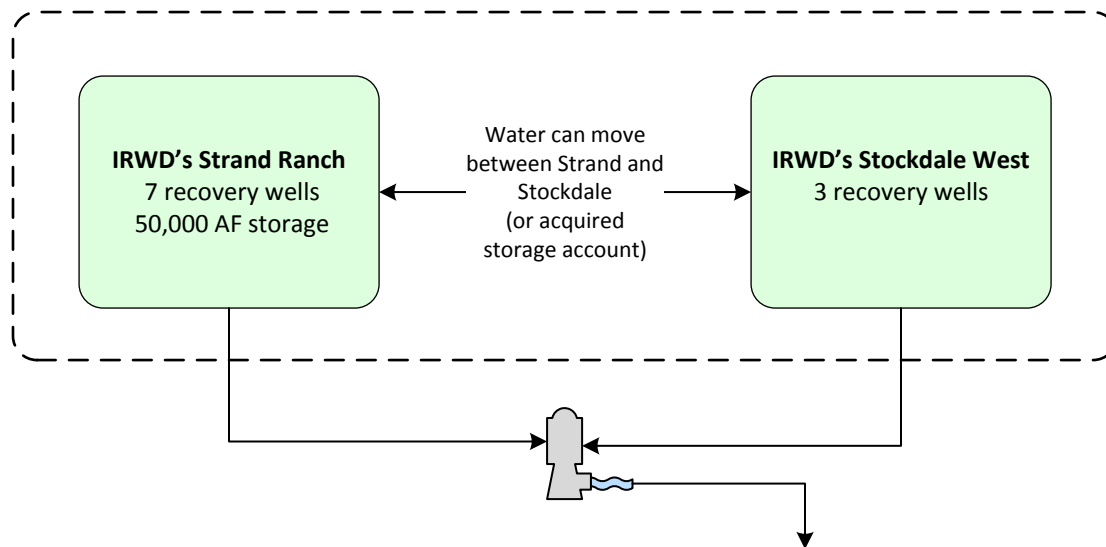
- IRWD 1st Integrated Banking Project
- Rosedale Conjunctive Use Program & Coordinated Operation

- 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.

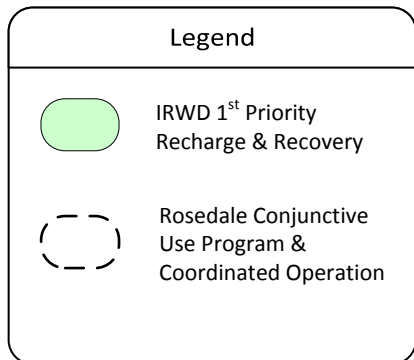
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Exhibit "N"

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.

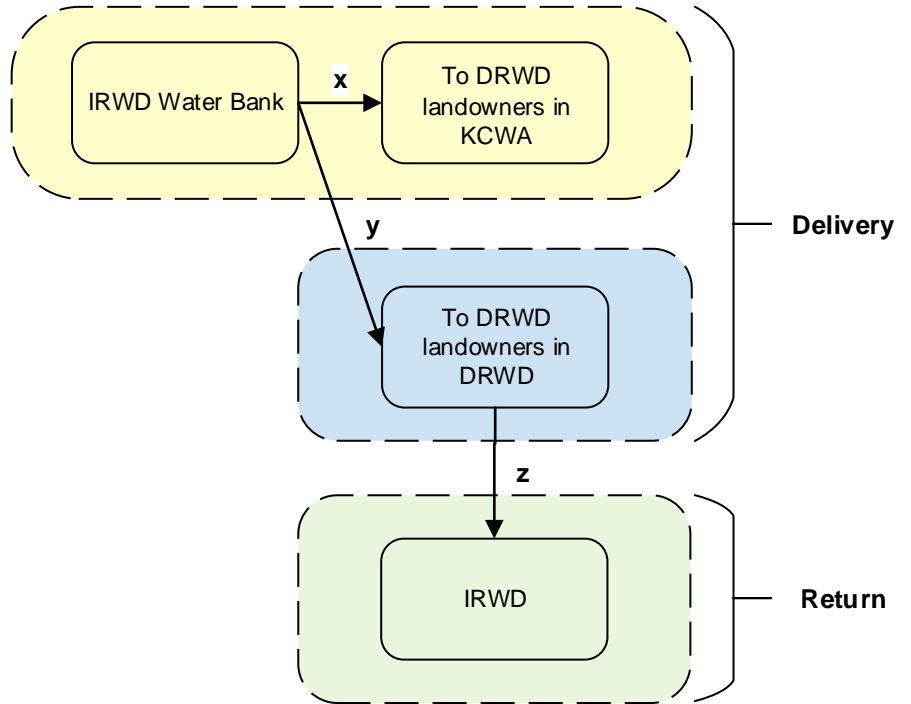
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Dudley Ridge Water District Long Term 1-for-1 Water Exchange Program
 Effective 5/31/2017 through 11/4/2035

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

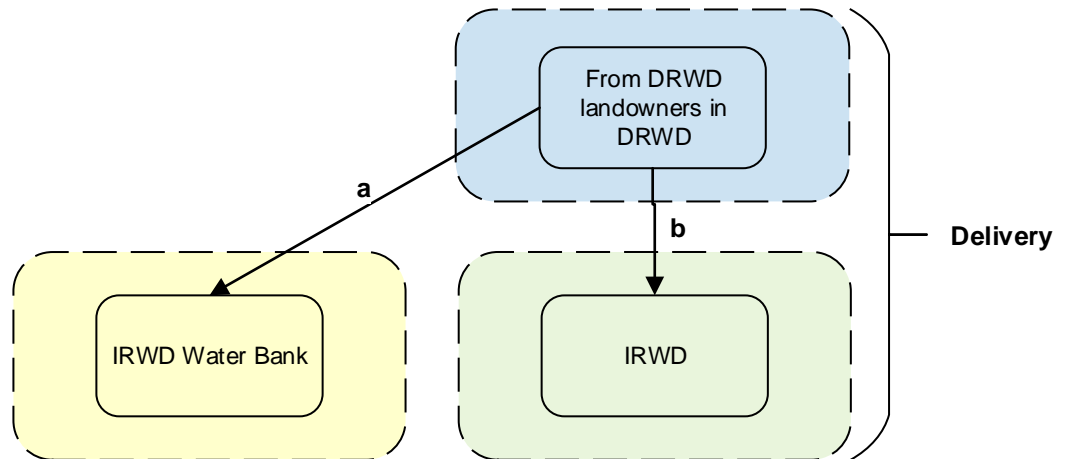
x= Non-Project Water required to stay in Kern County
 y= Non-Project Water allowed to leave Kern County
 z= DRWD Table A Water equal to x+y less applicable losses, if any

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



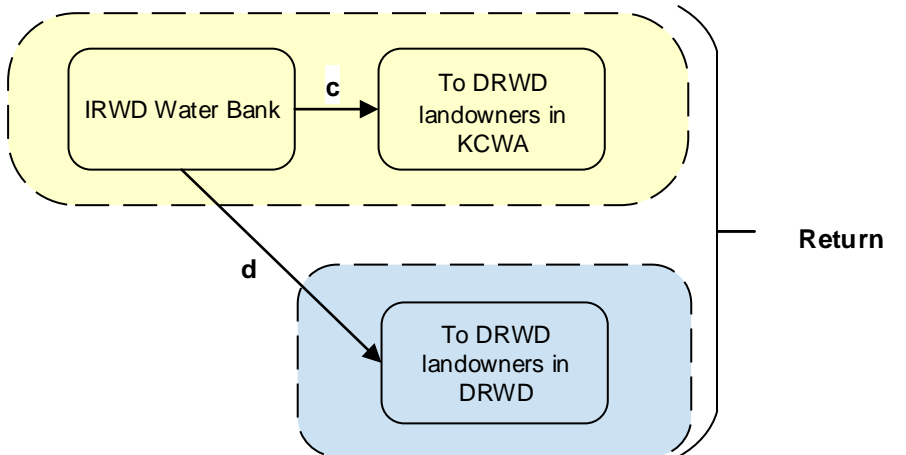
Scenario B
 (Per Sections 2, 3, and 4.1.2)

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



Legend

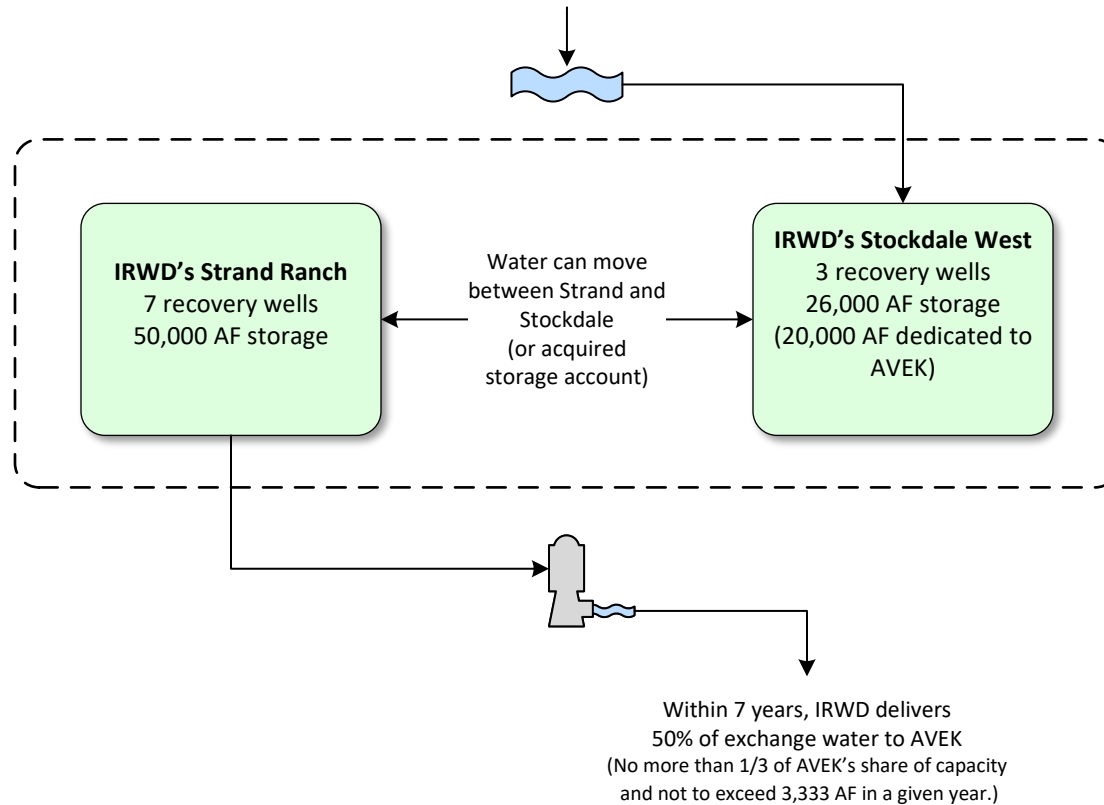
- KCWA Service Area
- DRWD Service Area
- IRWD Service Area





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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 st 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 31st of the 7th year, following the associated recharge event.

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Exhibit "Q"

TABLE 6
IRWD Water Banking Program Costs of Water Summary
 May 16, 2024

Program Partner	Time Period	Water Type	IRWD Amount (AF)	Variable costs ² (\$/AF) (A)	Fixed Cost Component ³ (\$/AF) (B)	Fixed & Variable (\$/AF) (C)	Capital Component ⁴ (\$/AF) (D)	Cost of Water (\$/AF) (E)	Estimated Recovery of Water ⁵ (\$/AF) (F)	2024 MWD Tier 1 Untreated Rate + SAC Surcharge ⁶ (\$/AF) (G)	Cost of Water in IRWD Service Area (\$/AF) (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 ¹	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 ⁷	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 ⁷	2010-2015	SWP Table A	31	\$ 27.04	\$ 48.36	\$ 75.40	\$ 190.00	\$ 265.40	\$ -	\$ 903.99	\$ 1,169.39
Central Coast ⁷	2017-2021	SWP Table A	556	\$ 30.34	\$ 48.36	\$ 78.70	\$ 190.00	\$ 268.70	\$ -	\$ 903.99	\$ 1,172.69
DRWD ⁷	2014-2021	SWP Table A /Article 21	4,452	\$ 362.67	\$ 48.36	\$411.03	\$ 190.00	\$ 601.03	\$ -	\$ 903.99	\$ 1,505.02
Total			32,338								

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

² 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) DRWD variable costs include DWR fixed and variable costs for SWP Table A water.

³ 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)

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

⁵ Increased PG&E costs for recovering water.

⁶ 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.

⁷ 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/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 "S"

TABLE 7
IRWD 2024 Recharge Operations- BEFORE LOSSES
 May 16, 2024

Actual and Forecasted Amounts:

Month	IRWD Table A (AF)	DRWD 1:1 (AF)	Buena Vista (AF)	AVEK (AF)	Homer (AF)	Valley Water (AF)	Silver Tip (AF)	Total (AF)	Status	Expected Recharge ¹ (AF)	Expected Recharge Rate (CFS)
January	-	2,200	-	-	-	-	-	2,200	prelim	2,200	80
February	-	-	-	-	-	-	-	-	prelim	-	70
March	-	-	-	-	-	-	-	-	prelim	-	60
April	-	-	-	-	-	-	-	-	prelim	-	60
								2,200		2,200	
May	-	-	-	-	-	-	-	-		-	60
June	-	-	-	-	-	1,570	2,000	3,570		3,570	60
July	-	-	-	-	-	3,689	-	3,689		3,689	60
August	-	-	-	-	-	3,689	-	3,689		3,689	60
September	-	-	-	-	-	3,570	-	3,570		3,570	60
October	-	-	-	-	-	3,689	-	3,689		3,689	60
November	-	-	-	-	811	2,760	-	3,570		3,570	60
December	700	-	-	-	989	-	2,000	3,689		3,689	60
	700	2,200	-	-	1,800	18,968	4,000	27,668		27,668	
Recharge goal:	700	7,142	-	-	1,800	20,000	4,000	33,642			

¹The expected recharge is based on the expected recharge rate and remaining recharge capacity.

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May 16, 2024

Prepared by: M. Lindsay / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

PROPOSED METROPOLITAN INTERAGENCY LOCAL SUPPLY EXCHANGE PROGRAM

SUMMARY:

Metropolitan Water District is developing an Interagency Local Supply Exchange Program (ILSEP) that will facilitate sales and exchanges of local water supply production among Metropolitan's member agencies. At the Committee meeting staff will present an overview of program and how it might be expanded to facilitate exchanges involving the IRWD Water Bank.

BACKGROUND:

At Metropolitan's One Water and Stewardship Committee meeting that was held on April 8, 2024, Metropolitan staff presented terms for the proposed ILSEP that would facilitate sales and exchanges of local water supplies among Metropolitan's member agencies. The purpose of the program would be to encourage local supply production and increase water supply reliability in the Metropolitan's service area.

Overview of Program:

Metropolitan proposes to establish the ILSEP to facilitate sales and exchanges of local supplies among willing Buyer and Seller member agencies. A willing Seller agency would increase local supplies above existing production and make this supply available for sale and exchange to a willing Buyer agency. Draft concepts for the program include the following:

- No physical connection to deliver the local supplies would be needed -- Metropolitan would deliver the supplies by exchange;
- The Seller and Buyer would negotiate terms and enter into a separate agreement for the purchase and sale of the local supply;
- The increased local supply production would be consumed in the Seller's service area with an equal reduction in the Seller's purchases of water from Metropolitan;
- Metropolitan would deliver by exchange an equivalent amount of treated or untreated water to the Buyer's service area;
- The Seller would pay the applicable Full-Service Rate for the Metropolitan delivery to Buyer's service area; and
- During periods when Metropolitan implements its Water Supply Allocation Plan, the Buyer would benefit from the extra local supply production.

To implement the proposed ILSEP, an amendment to the Metropolitan Administrative Code would be necessary to permit requests for deliveries of water to alternative service connections.

Deliveries to the Buyer would be subject to Metropolitan's operational conditions and existing use of facilities. The information letter to the Metropolitan Board committee and related presentation is provided as Exhibit "A".

Advocating for Revisions:

At the Committee meeting, staff will present information on how the proposed ILSEP might be modified to accommodate sales of water and exchanges at the IRWD Water Bank in Kern County. Staff will be working with Metropolitan and Municipal Water District of Orange County in advocating for revisions that could help facilitate water bank transactions with Las Virgenes Municipal Water District, as contemplated in 2022.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Metropolitan Board Information Report to One Water and Stewardship Committee dated April 9, 2024



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Information

- **Board of Directors**
One Water and Stewardship Committee

4/9/2024 Board Meeting

9-2

Subject

Proposed Interagency Local Supply Exchange Program

Executive Summary

This letter details the development of and a proposal for a program to allow transfers of locally produced supplies between Metropolitan's member agencies. After many discussions with member agencies and evaluation of Metropolitan's system and administrative structure, staff developed the Interagency Local Supply Exchange Program (ILSEP). The primary goal of ILSEP is to create an administrative framework for Metropolitan to facilitate the exchange of extra local supply production among its member agencies that do not have a pipeline to deliver their local supplies to each other. The local supplies at issue involve water that cannot be put into Metropolitan's system. This program will be further developed through our business model refinement initiatives, which will commence in April 2024.

ILSEP is responsive to the feedback that Metropolitan received from the Board and member agencies regarding the need for a process that facilitates the exchange of local supplies among its member agencies. Under ILSEP, Metropolitan will be facilitating the increasing of total local supply production in the region and will provide regional benefits by enabling member agencies to sell and exchange their extra local supply resources within the region. Under this program, the purchasing member agency (referred to as the "Buyer") would coordinate with the selling member agency (referred to as the "Seller") to arrange the purchase of the available extra local supplies produced. Metropolitan would not be involved in the price negotiations or agreements for local supplies between the Buyer and Seller. In ILSEP, the Seller and Buyer would agree to exchange extra local supply production under terms that they negotiate. The Seller would consume or use the extra local supply production in its service area. The Seller would be responsible for purchasing Metropolitan supplies for delivery to the Buyer in an amount equivalent to the extra local supplies produced. The Buyer would take delivery of the Metropolitan supplies into its service area. The Seller would be required to pay Metropolitan the full-service water rate applicable at the time the water is delivered to the Buyer.

The purchase of Metropolitan water by one agency for delivery to a different location is possible due to Metropolitan's integrated system, costs, and rate structure. However, deliveries to the Buyer will be subject to Metropolitan's operational conditions, availability, and Administrative Code. To implement ILSEP, an amendment to Metropolitan's Administrative Code will be necessary to permit requests for delivery to an alternative service connection.

Fiscal Impact

No fiscal impact estimated at this time. Member agencies responsible for ordering water supplies using ILSEP would incur the obligation to pay the applicable full-service rate for all Metropolitan water supplies delivered.

Applicable Policy

Metropolitan Water District Act Section 61: Ordinances, Resolutions and Orders

Metropolitan Water District Act Section 130: General Powers to Provide Water Services

Metropolitan Water District Act Section 130.5: Legislative Findings and Declarations Relating to Conservation

Metropolitan Water District Administrative Code Section 4201: Mission Statement

Metropolitan Water District Administrative Code Section 4205: Sale of Water By One Member Public Agency to Another

Related Board Action(s)/Future Action(s)

Staff plans to bring the proposed ILSEP to the Board for approval in Spring of 2024.

Details and Background

Background

Metropolitan was founded with the purpose of providing supplemental water supplies to its 26 member agencies across Southern California. While Metropolitan's main supplies are imported from the Colorado River and Northern California, local supplies and conservation efforts combine with Metropolitan's imported supplies to meet the retail level water demands in the service area. The region faces the increasing challenges to regional water supply reliability, but Metropolitan has long recognized the importance of local supplies within Metropolitan's water supply portfolio to meet those challenges. Over the past few decades, Metropolitan has played a pivotal role in supporting local agencies in developing and maximizing their local supply projects within the region through the Local Resources Program.

Metropolitan has received feedback from its member agencies and the Board that member and local agencies may have potential new or extra local supply production capability that is not being utilized and that other agencies may be interested in financing or purchasing those supplies. However, the situation exists where the interested agencies are not physically connected by their local infrastructure to deliver water that is not compatible with Metropolitan water and thus cannot directly deliver that water to each other. Because Metropolitan's distribution system and water supplies essentially connect the member agencies through the ability of all member agencies to receive Metropolitan water supplies, Metropolitan was requested to explore and develop a framework that could facilitate the exchange and use of these local supplies. Metropolitan's staff has developed a framework to address this challenge. The framework will enable the member agencies to increase the production and use of local supplies in the service area, which provides the overall regional benefit of increasing water supply reliability by increasing the total water supply. This also aligns with a key objective of Climate Adaptation Master Plan for Water (CAMP4W), which aims "to increase resilience and reliability of Southern California's water supplies."

Interagency Local Supply Exchange Program

Metropolitan staff has developed a framework that it named the Interagency Local Supply Exchange Program (ILSEP). ILSEP establishes a framework for Metropolitan to facilitate the sale and exchange of local supply production among its member and local agencies. ILSEP is an administrative framework intended to facilitate indirect exchanges of local supply. Indirect exchanges do not involve the direct delivery of the local supply between participating agencies or the introduction of the local supply into Metropolitan's distribution system.

Under ILSEP, one local agency (Seller) would increase production of its local supplies above its existing production and make those local supplies available for sale and exchange to another local agency (Buyer). The actual increased local supply production would be consumed in the Seller's service area and would decrease the amount of Metropolitan water supplies that they would otherwise purchase. However, Metropolitan would deliver Metropolitan water supplies (Exchanged Supplies) to the Buyer's service area in an amount equal to the local supplies produced and sold by the Seller to the Buyer. The Seller will be responsible for paying the applicable full-service water rate for Metropolitan's deliveries made under the Program. The Buyer and Seller would arrange for payment or other agreements between them for the sale of the local supply. Metropolitan would not need to be involved in any of the agreement negotiations between the Buyer and Seller for the sale of the local supply. The Seller would be required to pay Metropolitan's full-service water rate applicable to the deliveries made to the Buyer at the time the water is delivered to the Buyer.

The sale from one agency to another is not a wheeling or transportation arrangement, because the Seller's water will not be transported. The locally supplied water project is not connected to Metropolitan's distribution system and is likely not compatible to be introduced into Metropolitan's system. Instead, the Program involves an indirect exchange through the use of Metropolitan deliveries to Metropolitan member agencies, in a very similar manner as current water sales to member agencies. Accommodation of Metropolitan deliveries to meet a seller's commitment under the Program, however, will be subject to Metropolitan's operational capabilities.

Program Process

Upon separate agreement by the Seller and Buyer for the sale and exchange of a local supply, Metropolitan, Seller, and Buyer would enter a three-party ILSEP agreement. Under the ILSEP agreement, the Seller would agree to coordinate with Metropolitan and identify the service connection(s) where Metropolitan would deliver the Exchanged Supplies to the Buyer. The Buyer would agree to the delivery of the Exchange Supplies to its designated service connections. The delivery of the Exchanged Supplies to the Buyer will be contingent upon Metropolitan's operational conditions, supply availability, and compliance with the Metropolitan Administrative Code.

Metropolitan will invoice the Seller at the full-service water rate applicable for the water delivered at the time the water is delivered on the Seller's monthly bill. The Seller has the option to request Metropolitan to deliver either treated or untreated water, provided that those connections are available for the Buyer to take delivery of the Exchanged Supplies. ILSEP is intended for indirect exchanges only. Metropolitan will not be wheeling or transporting water in its distribution system. Rather, Metropolitan is facilitating Metropolitan water deliveries to the Buyer at existing service connections. Metropolitan staff, in cooperation with the Seller and the Buyer, will complete a yearly reconciliation of the local supply production and the delivered Exchanged Supplies.

Considerations During a Water Supply Allocation Plan Implementation

A key consideration for Metropolitan is to ensure that the regional water supplies available to its service area are not negatively impacted by an ILSEP exchange, specifically during a Water Supply Allocation Plan (WSAP) implementation. Metropolitan's WSAP supply allocations to the member agencies are impacted by a member agency's local supply production and use during a WSAP Implementation. If not accounted for correctly, local supplies exchanged under ILSEP may not be credited to the proper member agency and Metropolitan could end up allocating more water supply than intended. Under ILSEP, for the purposes of WSAP implementation, the credit and benefit of local supply production are accounted to the Buyer and not to the Seller. The Exchanged Supplies are accounted to the Seller as Metropolitan supplies and not to the Buyer. With that accounting, Metropolitan would enforce any penalties or surcharges applicable at the time of the restriction for any parties that exceed their allocated Metropolitan supplies in the WSAP in line with the existing WSAP policy and procedures.

Metropolitan's Administrative Code does not currently allow member agencies to specify alternative delivery options to other member agency service connections. To accommodate the procedures under ILSEP, an amendment to Metropolitan's current Administrative Code will be required, to allow requests for delivery to an alternative connection while also allowing billing for the delivery to go to the Seller.

Summary

Metropolitan has long recognized the importance of facilitating local supply development and production to increase regional water supply reliability and mitigate climate change impacts and has been instrumental in supporting the development of regional local supply projects through the Local Resources Program. ILSEP is an innovative and straightforward approach that will help Metropolitan maximize regional local supply production and facilitate agreements between member agencies and local agencies to sell and exchange their extra local supply resources within the region. ILSEP is responsive to the member agencies and the Board's request for a program that facilitates these local supply exchanges and accomplishes it with no impact to non-participating agencies. The draft terms for the ILSEP are included in the **Attachment 1**. This program will become a component of Metropolitan's new business model as it is developed over the next few months.


Next Steps

Staff will incorporate feedback received from the Committee and return to the Board for approval and authorization of ILSEP.



Brandon J. Goshi
Interim Manager
Water Resource Management

4/2/2024
Date



Adel Hagekhalil
General Manager

4/3/2024
Date

Attachment 1 – Potential Interagency Local Supply Exchange Program (ILSEP)

Ref# wrm12697979

Potential

Interagency Local Supply Exchange Program (ILSEP)

General Process for Exchanges:

1. A member agency with extra local supplies (Seller) may sell those supplies to another member agency (Buyer) in the absence of a physical connection between the two agencies for local supplies.
2. The Seller would purchase treated or untreated Metropolitan water at the full-service rate to be delivered to the Buyer's available connection.
3. The local supplies sold to another member agency will be reported to Metropolitan as the Buyer's local supply and not as the Seller's local supply.
4. The exchange is subject to operational capabilities of Metropolitan.

Program Criteria:

1. Metropolitan and participating Member Agencies (Seller and Buyer) would enter into an agreement, which agreement term is on a case-by-case basis, as long as the Program is active. Metropolitan's role in any such contract would be to facilitate the exchange by agreeing to deliver Metropolitan water purchased by the seller to the buyer in lieu of local supplies.
2. However, each delivery is contingent on Metropolitan's determination that the amount of water requested for the exchange is available for delivery to the buyer at the time requested and that operational capability is available for deliveries to the specified connections.

Definitions:

1. Local Supply is defined as water supply that is produced locally by a Metropolitan member agency or their customer in Metropolitan's service area.
2. Extra local supply is defined as local supply produced above a member agency's current local supply production.

Seller:

1. Seller will provide Metropolitan a proposed delivery schedule and proof that it is permitted to legally sell/exchange ILSEP water with the buyer.
2. Seller will confirm Metropolitan's ability to deliver supplies in the amount of water involved in the transaction at the time requested.
3. Seller will purchase Metropolitan water at the full-service rate in effect at the time the water is to be delivered in an amount equivalent to the local supplies it sells to the buyer. Seller may request treated/untreated water if a connection is available to the buyer.
4. The Seller will provide annual documentation to Metropolitan for local supply accounting for the purpose of future water supply allocation plans.
5. During a time of shortage (Emergency Conservation / Allocation Year) the Seller will provide proof to Metropolitan that the local supplies for sale are developed above the submitted local supply production as part of the Emergency Conservation / Allocation process.

Buyer:

1. Buyer will coordinate with Seller to develop a delivery schedule for Metropolitan.
2. Buyer will arrange payment for the purchase of local supply water with Seller, which will not involve Metropolitan.
3. Buyer will provide annual documentation of local supply received to Metropolitan for local supply accounting for the purpose of future water supply allocation plans.

Metropolitan:

1. Metropolitan will not be involved in negotiation of local supply purchase price between buyer and seller.
2. Metropolitan will invoice the Seller for deliveries made pursuant to the Program. The Seller will be charged all rates and charges applicable to any other water sales.
3. Reconciliation of local supply production will be conducted on a yearly basis.
4. During Emergency Conservation / Allocation, Metropolitan will impose penalties in place at the time of the restriction to any parties exceeding their volumetric limit / allocation.
5. Metropolitan will not be wheeling or transporting any member agency water under the Program but instead redirecting water purchased by a member agency to another member agency.
6. There will be no losses associated with Metropolitan's delivery of water exchanged under this Program. Metropolitan's delivery of Metropolitan water under this Program will be subject to the Administrative Code, no different than delivery of any other water purchased from Metropolitan.



One Water & Stewardship Committee

Proposed Interagency Local Supply Exchange Program (ILSEP)

Item 9-2

April 8, 2024

Introduction Slide

Subject

Information on Interagency Local Supply Exchange Program (ILSEP)

Purpose

The proposed ILSEP creates a framework for Metropolitan to facilitate the exchange of extra local supply production among its member agencies

Next Steps

Receive committee feedback and incorporate into upcoming Business Model discussion

Background



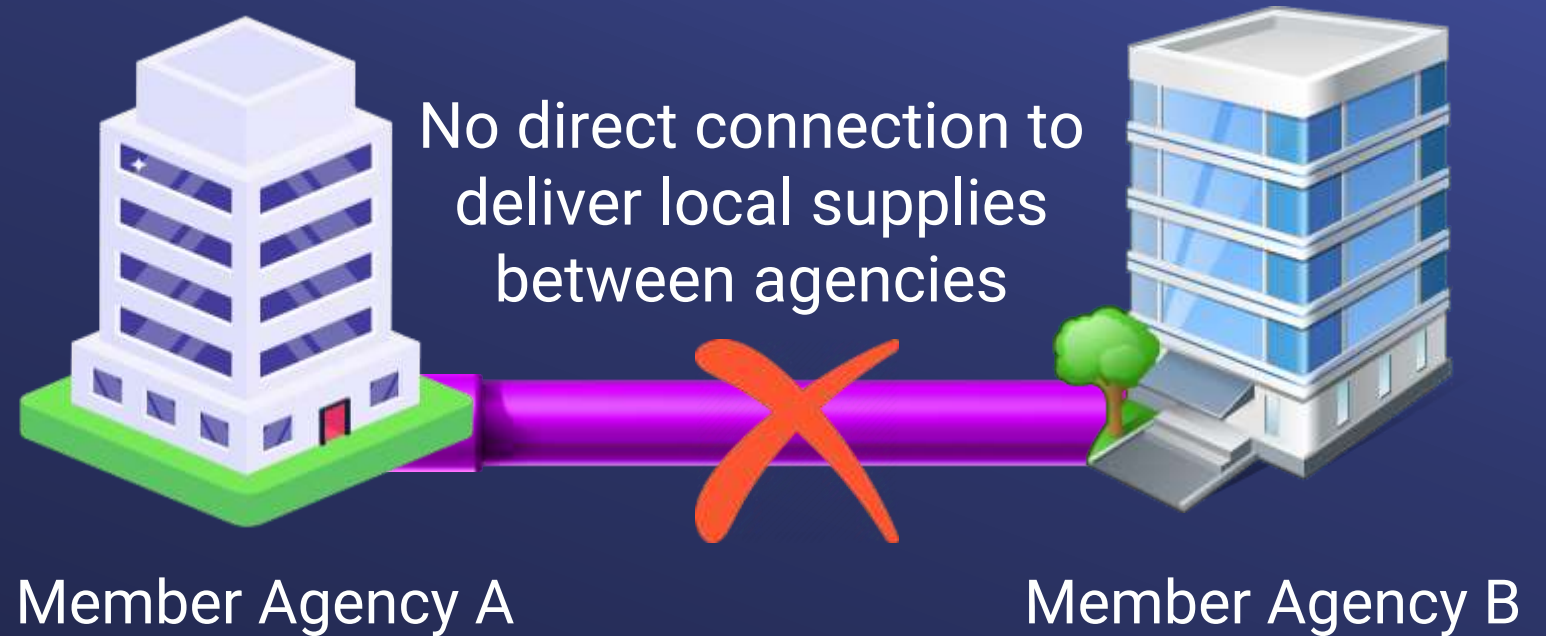
Member Agency A
has ability to increase
local supply production



Member Agency B
is interested in investing
in local supplies

A-9

No Physical Connections Between Interested Member Agencies



A-10

As Regional Agency,
Metropolitan
Can Facilitate
An Indirect
Exchange



A-11

Interagency Local Supply Exchange Program (ILSEP)



A framework that would facilitate the exchange of one member agency's extra local supply to another member agency

A-12

What is the proposed framework?

Seller



Seller produces and consumes extra local supply in seller's service area



Buyer



Metropolitan delivers imported water equivalent to extra local supply amount to Buyer's connection

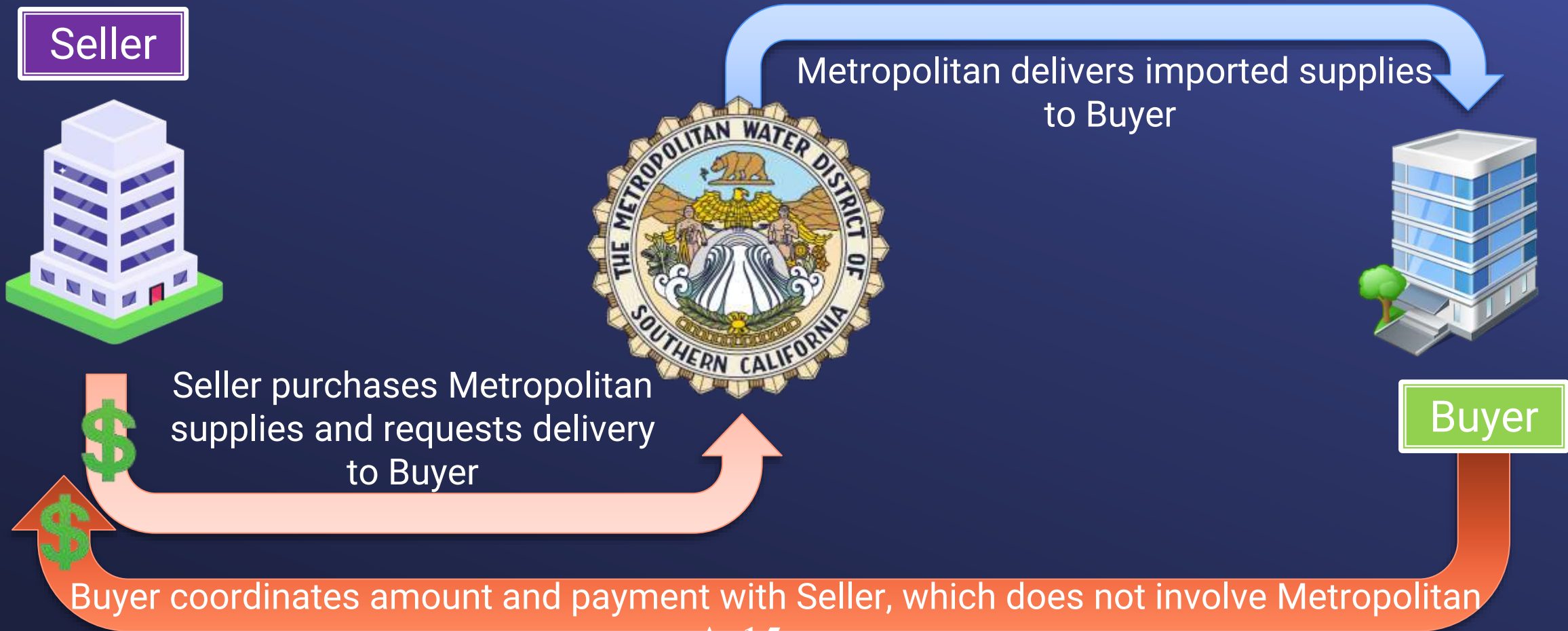
What's
being
exchanged?



- Seller is receiving payment from the Buyer for the extra local supply that is now being produced and consumed in the Seller's service area
- Seller is exchanging the delivery of Metropolitan supply to the Seller's service area for the delivery of Metropolitan supply to the Buyer's service area
- Buyer is receiving the delivery of the Metropolitan water now paid by the Seller for the extra local supply now paid by the Buyer
- Buyer is receiving the benefits of new local supply

A-14

How would the water and money exchange work?



Proposed ILSEP Key Terms



- ILSEP local supply eligible for exchange must be above the seller's existing local supply production
 - *Reconciliation and certification of ILSEP water on an annual basis*
- Seller must have an imported demand on Metropolitan
 - *Seller must consume the increased local supply production in the Seller's service area and decrease equal amount of Metropolitan supplies*
- Local supplies will not be introduced into Metropolitan's system and no wheeling will be taking place
- Metropolitan will receive the full-service rate for any Metropolitan supplies delivered

What Happens During a WSAP Allocation?



The credit and benefit of the local supply production are accounted to the Buyer



The exchanged supplies are accounted to the Seller as Metropolitan purchases



Metropolitan would enforce any penalties applicable at the time of the restriction for any parties that exceed their allocated Metropolitan supplies in the WSAP

Summary



- ILSEP increases total local supply production in the region and facilitates agreements between member agencies to exchange the extra local supply in the region



Participating Member Agencies would benefit from indirect access to available local supplies



ILSEP is responsive to member agency and Board's request for a program to facilitate local supply exchanges




Update of Administrative Code is required to accommodate appropriate billing of deliveries

Next Steps



- Receive committee feedback
- Incorporate framework into upcoming Business Model discussion



May 16, 2024
Prepared by: K. Welch
Submitted by: F. Sanchez / P. Weghorst
Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

ALLOCATING SECOND PRIORITY RECHARGE AND RECOVERY CAPACITY

SUMMARY:

Recently, the IRWD Board approved the execution of agreements for new exchange programs with Silvertip LLC, Santa Clara Valley Water District (Valley Water), and Homer LLC. Based on the approved terms, these exchange partners would receive second priority use of recharge and recovery capacity at the IRWD Water Bank. At the Committee meeting, staff and special legal counsel will present a method for allocating second priority capacity to the new programs. Staff recommends the Committee approve incorporating the method into the term sheets for the three exchange programs.

BACKGROUND:

The IRWD Board of Directors recently authorized the execution of unbalanced exchange program agreements with Silvertip, Valley Water, and Homer. These authorizations were provided subject to substantive changes to program terms approved by the Committee and special legal counsel. Each of the program agreements would provide second priority use of IRWD Water Bank recharge and recovery capacity after IRWD's use of facilities for itself and its existing program partners. Before finalizing the agreements for the three new programs, IRWD special legal counsel at Kronick Moskovitz recommends that IRWD establish a method for allocating second priority recharge and recovery capacity to Silvertip, Valley Water, and Homer.

Method for Allocating Second Priority Capacity:

Staff proposes a simple method for allocating second priority recharge and recovery capacity to Silvertip, Valley Water, and Homer. The process would allocate capacity based on each partner's proportionate share of IRWD's 50,000 AF leased storage capacity. For example, the Valley Water program will utilize up to 20,000 AF or 40% of the leased capacity. Accordingly, the allocation method would provide Valley Water access to a minimum of 40% of available second priority recharge and recovery capacity. Silvertip and Homer will use up to 8,000 AF each of the leased capacity and would therefore each receive a minimum of 16% of available second priority capacity.

Using this allocation method, each of the three exchange partners would also receive access to a share of recharge and recovery capacity that is currently not obligated to any program. IRWD currently has 7,100 AF of unobligated annual recharge capacity and 833 AF of unobligated recovery capacity in the IRWD Water Bank. Exhibit "A" provides an overview of how much of this unobligated recharge and recovery capacity would be dedicated to the Silvertip, Valley Water, and Homer programs. The exhibit also depicts how much second priority recharge and

recovery capacity would be available if IRWD is not using capacity for itself and its existing exchange partners.

At the Committee meeting, staff will present an overview of the described allocation method and the content of Exhibit “A”. Additionally, IRWD special legal counsel from Kronick Moskovitz will discuss corresponding changes to the term sheets to accommodate the method. Staff recommends that Committee approve incorporating the method for allocating second priority recharge and recovery capacity into the term sheets for the Silvertip, Valley Water, and Homer exchange programs.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Committee approve incorporating the described method for allocating second priority recharge and recovery capacity into the term sheets for the Silvertip LLC, Santa Clara Valley Water District, and Homer LLC exchange programs.

LIST OF EXHIBITS:

Exhibit “A” – IRWD Allocated Capacities for Existing and Proposed Banking Programs

Exhibit "A"

Irvine Ranch Water District Allocated Capacities for Existing and Proposed Banking Programs

STORAGE CAPACITY				
Program Partner	Dedicated Storage Capacity in Strand Ranch (AF)	Dedicated Storage Capacity in Stockdale West (AF)	Dedicated Storage Capacity in 50,000 AF Leased Storage (AF)	Percent Share of Leased Storage Capacity Used to Allocate Access to 2nd Priority Recharge and Recovery Capacity (AF)
Existing Programs				
Buena Vista Water Storage District	40,000	-	-	
Dudley Ridge Water District	10,000	-	-	
Antelope Valley-East Kern	-	20,000	-	
Proposed Programs				
Santa Clara Valley Water District	-	-	20,000	40%
Silvertip LLC	-	-	8,000	16%
Homer LLC	-	-	8,000	16%
Total Dedicated	50,000	20,000	36,000	72%
RECHARGE CAPACITY				
Program Partner	Dedicated Recharge Capacity in Strand Ranch (AF/year)	Dedicated Recharge Capacity in Stockdale West (AF/year)	Available 2nd Priority Recharge Capacity (If Not Used by Existing Programs) (AF/year)	Total Recharge Capacity (AF/year)
Existing Programs				
Buena Vista Water Storage District	17,500	-	-	17,500
Dudley Ridge Water District	-	-	-	-
Antelope Valley-East Kern	-	20,000	-	20,000
Proposed Programs				
Santa Clara Valley Water District	-	2,840	17,160	20,000
Silvertip LLC	-	1,136	6,864	8,000
Homer LLC	-	1,136	6,864	8,000
Total Dedicated	17,500	25,112	30,888	
RECOVERY CAPACITY				
Program Partner	Dedicated Recovery in Strand Ranch (AF/year)	Dedicated Recovery Capacity in Stockdale West (AF/year)	Available 2nd Priority Recovery Capacity (If Not Used by Existing Programs) (AF/year)	Total Recovery Capacity (AF/year)
Existing Programs				
Buena Vista Water Storage District	6,667	-	-	6,667
Dudley Ridge Water District	-	-	-	-
Antelope Valley-East Kern	-	3,333	-	3,333
IRWD	10,833	7,084	-	17,917
Proposed Programs				
Santa Clara Valley Water District	-	333	3,000	3,333
Silvertip LLC	-	133	1,200	1,333
Homer LLC	-	133	1,200	1,333
Total Dedicated	17,500	11,017	5,400	

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