AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, APRIL 16, 2026

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=m61ce1e72b2d895d267b574cca008f41e
Meeting Number (Access Code): 2486 433 9868
Meeting Password: xyDbpAED322

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 1:30 p.m.

ATTENDANCE
Committee Chair: Daniel Ferons_____
Alt. Committee Member: Doug Reinhart_____

ALSO PRESENT

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, you may attend the meeting in person and submit a "speaker slip" to the Committee Chair. Forms are provided at the front of the Committee Room. Public comments are limited to three minutes per speaker on each subject. If you wish to submit written comments to the Committee, please submit your public comment in advance of the meeting by emailing comments@irwd.com before 12:00 p.m. on Thursday, April 16, 2026, and your remarks will be added to the record at the meeting.

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 / NYE / WEGHORST

   Recommendation: Receive and file.

6. SITES RESERVOIR – DRAFT WATER RIGHTS DECISION AND PERMIT – WEGHORST

   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. Directors' Comments

9. CLOSED SESSION

   A. CONFERENCE WITH REAL PROPERTY NEGOTIATOR – Pursuant to Government Code Section 54956.8
   Property: Acquisition of water supplies and facilities capacity from Sites Reservoir Project
   Agency Negotiators: Paul Weghorst, Executive Director of Water Policy and Eric Robinson, Counsel for IRWD
   Negotiating Parties: Sites Project Authority
   Under Negotiation: Price and terms of payment

   B. CONFERENCE WITH REAL PROPERTY NEGOTIATOR - Pursuant to Government Code Section 54956.8
   Property: Enns Ranch (APN(s): 104-280-18 and 104-291-06, County of Kern County)
   Agency Negotiators: Paul Weghorst, Executive Director of Water Policy, and Fiona Nye, Director of Water Resources
   Negotiating Parties: Rosedale Rio-Bravo Water Storage District, and the Groundwater Banking Joint Powers Authority
   Under Negotiation: Price and terms of payment

OTHER BUSINESS, continued

10. OPEN SESSION

11. Adjourn

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

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April 16, 2026
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 forecasted monthly recharge operations for 2026. 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 forecasted recharge operations for calendar year 2026 at the IRWD Water Bank.

Capacity and Operations Tables:

A table presenting storage, recharge, and recovery capacities of existing 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. There are no changes to Exhibits "B" and "C" this month.

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.

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, which are now zero acre-feet. The tables provided as Exhibit "F" show 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 2026 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 as invoices are 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 2026 Water Recharge Activities:

Forecasted 2026 deliveries to IRWD's Water Bank are depicted in Exhibit "T". IRWD's Dudley Ridge Table A allocation is projected at 526 AF, based on a SWP allocation of 30%. At the Committee meeting, staff will provide an update on the status of anticipated water deliveries to the IRWD Water Bank for 2026. Currently, staff anticipates deliveries from Valley Water and Homer to the IRWD Water Bank towards the end of the year. Staff also will provide an update on the status of proposed exchange agreements with Valley Water and Zone 7 Water Agency, other opportunities, as well as a proposed amendment that would incorporate the Kern Fan Project into the Coordinated Operating and Exchange Agreement with Metropolitan Water District.

Water Supply Conditions:

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.

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" – Forecasted 2026 Recharge Operations

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
April 16, 2026

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO		ALLOCATED CAPACITY (AF)					1st PRIORITY RECOVERY CONDITIONS (CFS)		2nd PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1ST PRIORITY	ANNUAL RECHARGE 2ND PRIORITY	ANNUAL RECOVERY 1ST PRIORITY	ANNUAL RECOVERY 2ND 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 ***during*** 6 month partner recovery period (AF)								12,420	9,000	-	-
IRWD's recovery ***after*** 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 monthy recharge amount assuming 0.3 ft/day average recharge rate (AF)	4,518
Stockdale West monthy 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
April 16 2026

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 2025 (AF)								
Total Kern Water Bank[4]	-	5,482	-	-	-	-	-	5,482
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	26,080	11,181	225	3,536	-	1,261	77,193
(RECOVERY) AND RECHARGE IN 2025 (AF)								
DRWD Supplemental Water[6]		235						235
KWB Recovery for use on Jackson Ranch[7]	-	(232)	-	-	-	-	-	(232)
2025 SWP Allocation (50%) Est.	439	-	-	-	-	-	438	877
DRWD 1-for-1 Long Term Exchange- Predelivery Est. [9]	6,000	-	-	-	-	-	-	6,000
DRWD 1-for-1 Long Term Exchange (Recharge) Est.	4,689	-	-	-	-	-	-	4,689
Buena Vista Recovery	-	-	(10,112)	-	-	-	-	(10,112)
DRWD 1-for-1 Long Term Exchange Credit	-	(6,000)						(6,000)
TOTAL 2025 TRANSACTIONS [7]	11,128	(5,997)	(10,112)	-	-		438	(4,543)
Total Kern Water Bank[4]	-	5,485	-	-	-	-	-	5,485
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[9,10]	-	(6,000)	-	-	-	-	-	(6,000)
TOTAL STORED WATER (1/1/2026)	40,708	20,083	1,069	225	3,536		1,699	67,320
(RECOVERY) AND RECHARGE IN 2026 (AF)								
KWB Recovery for use on Jackson Ranch[7]	-	-	-	-	-	-	-	-
2026 SWP Allocation (30%) Est.	-	-	-	-	-	-	-	-
TOTAL ESTIMATED 2026 TRANSACTIONS [8]	-	-	-	-	-	-	-	-
ESTIMATED WATER IN STORAGE 2026 (AF)								
Total Kern Water Bank[4]	-	5,485		-	-	-	-	5,485
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[9,10]	-	(6,000)	-	-	-	-	-	(6,000)
TOTAL ESTIMATED STORED WATER TO DATE	40,708	20,083	1,069	225	3,536	-	1,699	67,320

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] In 2025, IRWD purchased supplemental water from DRWD on behlaf of its lessee for use on Jackson Ranch.

[7] Water recovered from IRWD's Kern Water Bank account for use on Jackson Ranch.

[8] Total banking losses for 2025 deliveries to the IRWD bank are estimated to be 762 AF.

[9] 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.

[10] 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

April 16, 2026

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 2025 (AF)								
Total Kern Water Bank[4]	-	4,934	-	-	-	-	-	4,934
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]	5,424	-	-	-	-	-	-	5,424
TOTAL STORED WATER (1/1/2025)	31,659	20,032	10,112	193	3,032	-	1,088	66,116
(RECOVERY) AND RECHARGE IN 2025 (AF)								
DRWD Supplemental Water[6]	-	235	-	-	-	-	-	235
KWB Recovery for use on Jackson Ranch[7]	-	(232)	-	-	-	-	-	(232)
2025 SWP Allocation (50%) Est. [8]	417	-	-	-	-	-	416	833
DRWD 1-for-1 Long Term Exchange- Predelivery Est. [8,9]	5,700	-	-	-	-	-	-	5,700
DRWD 1-for-1 Long Term Exchange Est. [8]	4,271	-	-	-	-	-	-	4,271
Buena Vista Recovery	-	-	(10,112)	-	-	-	-	(10,112)
DRWD 1-for-1 Long Term Exchange Credit	-	(5,455)						(5,455)
TOTAL 2025 TRANSACTIONS	10,388	(5,452)	(10,112)	-	-	-	416	(4,760)
Total Kern Water Bank	-	4,937	-	-	-	-	-	4,937
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	-	(5,455)	-	-	-	-	-	(5,455)
TOTAL STORED WATER (1/1/2026)	36,623	14,580	-	193	3,032	-	1,504	55,932
(RECOVERY) AND RECHARGE IN 2026 (AF)								
KWB Recovery for use on Jackson Ranch[7]	-	-	-	-	-	-	-	-
2026 SWP Allocation (30%) Est. [8]		-	-	-	-	-		-
TOTAL ESTIMATED 2026 TRANSACTIONS	-	-	-	-	-		-	-
ESTIMATED WATER IN STORAGE 2026 (AF)								
Total Kern Water Bank	-	4,937	-	-	-	-	-	4,937
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[10]	-	(5,455)	-	-	-	-	-	(5,455)
TOTAL ESTIMATED STORED WATER TO DATE	36,623	14,580	-	193	3,032	-	1,504	55,932

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] In 2025, IRWD purchased supplemental water from DRWD on behlaf of its lessee for use on Jackson Ranch.

[7] Water recovered from IRWD's Kern Water Bank account for use on Jackson Ranch.

[8] 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.

[9] 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.

[10] 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 and the 4,271 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 "D"

TABLE 4
Status of IRWD Purchase and Exchange Programs (AFTER LOSSES)
April 16, 2026

PARTNER	EXCHANGE RATIO	YEAR EXECUTED	AGREEMENT TYPE	WATER TYPE	PARTNER WATER		IRWD WATER									
								IRWD BALANCE					EXPORTABILITY			
					PARTNER SHARE (AF)	PARTNER BALANCE (AF)	IRWD SHARE (AF)	IN MWD SYSTEM (AF)	STORED IN KERN (AF)		1-for-1 EXCH CREDITS	TOTAL (AF)	EXPORTABLE TO IRWD (AF)	NON-EXPORTABLE (AF)	FOR USE ON JACKSON RANCH (DRWD)	SELLABLE (Y/N)
									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 [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		-5,455	5,317		5,317		
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**	**(5,455)**	**46,265**	**36,372**	**9,893**	**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. Th 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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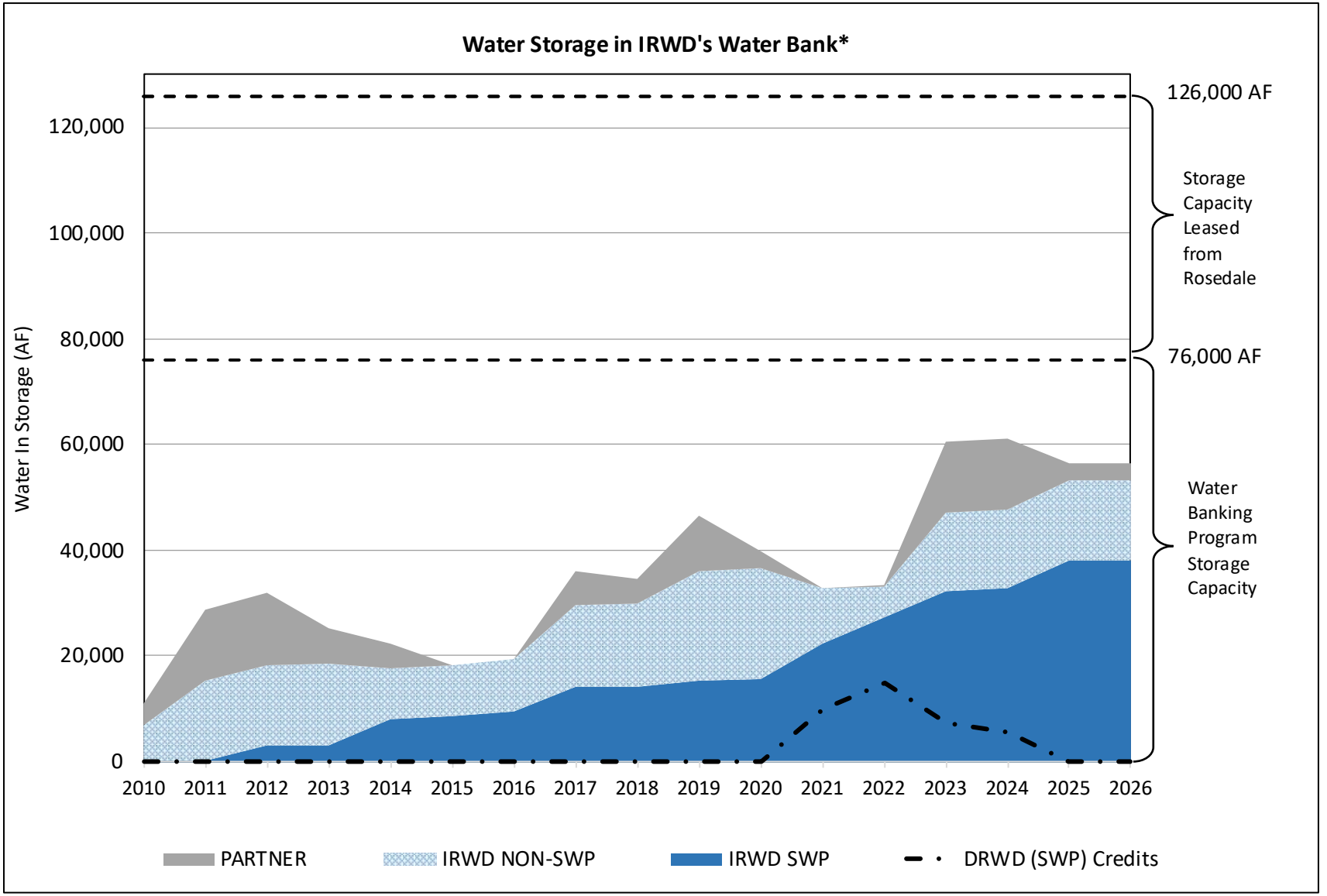
Exhibit "E"



*After losses

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Exhibit "F"

TABLE 5

IRWD Dedicated Water Banking Capacities for Existing and Proposed Exchange Programs

April 16, 2026

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	-
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

February 19, 2026

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
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		-	28,750
Valley Water	-	40%	3,333	3,333
Homer LLC	-	16%	1,333	1,333
Total Dedicated	28,750	56%	4,666	
Total Remaining	-		24,084	

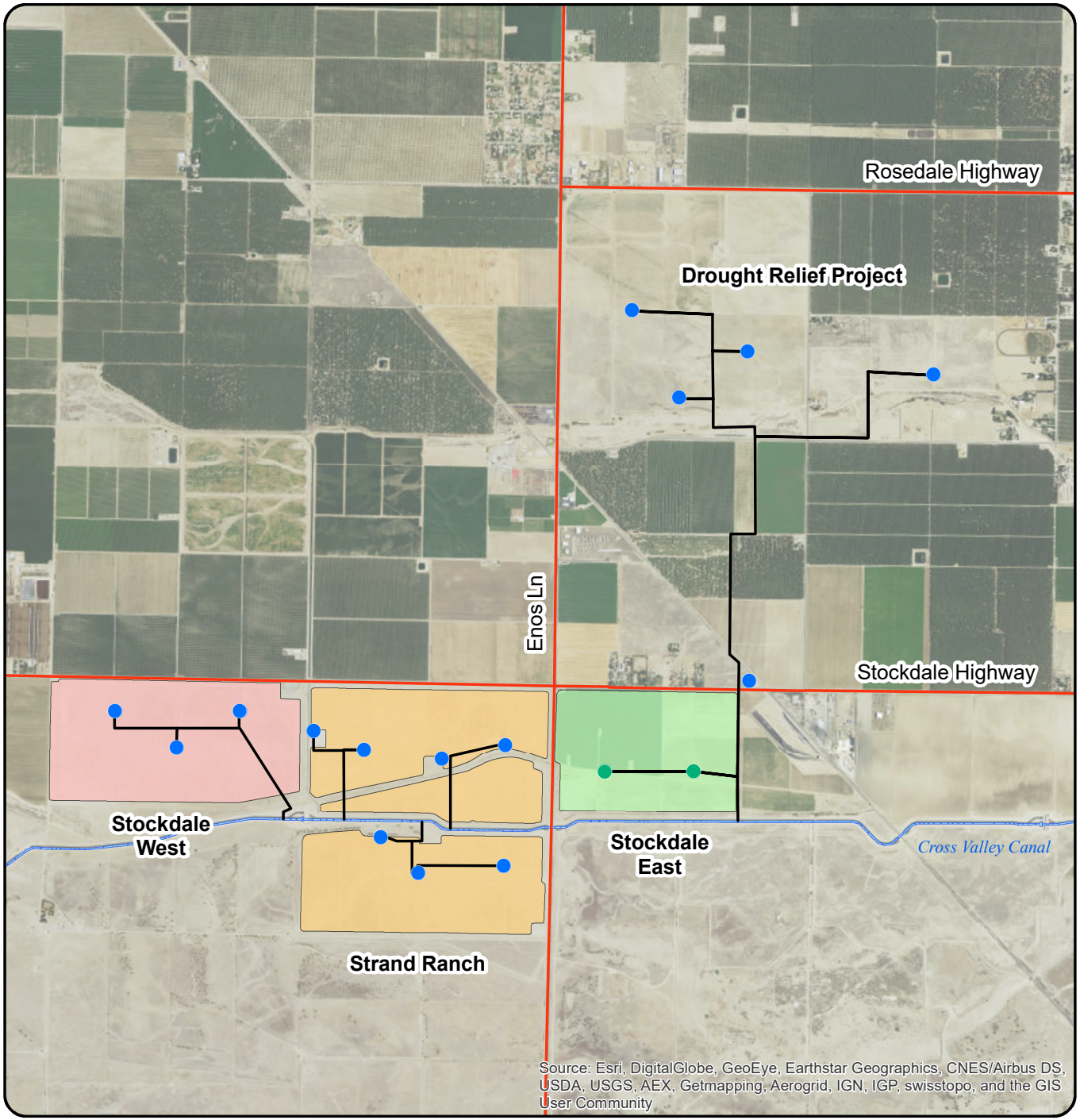
[1] Second-priority recharge and recovery capacity allocated to programs on a pro-rata share based on share of leased storage capacity.

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"



Irvine Ranch WATER DISTRICT

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.

N

0 0.25 0.5 1 Miles

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

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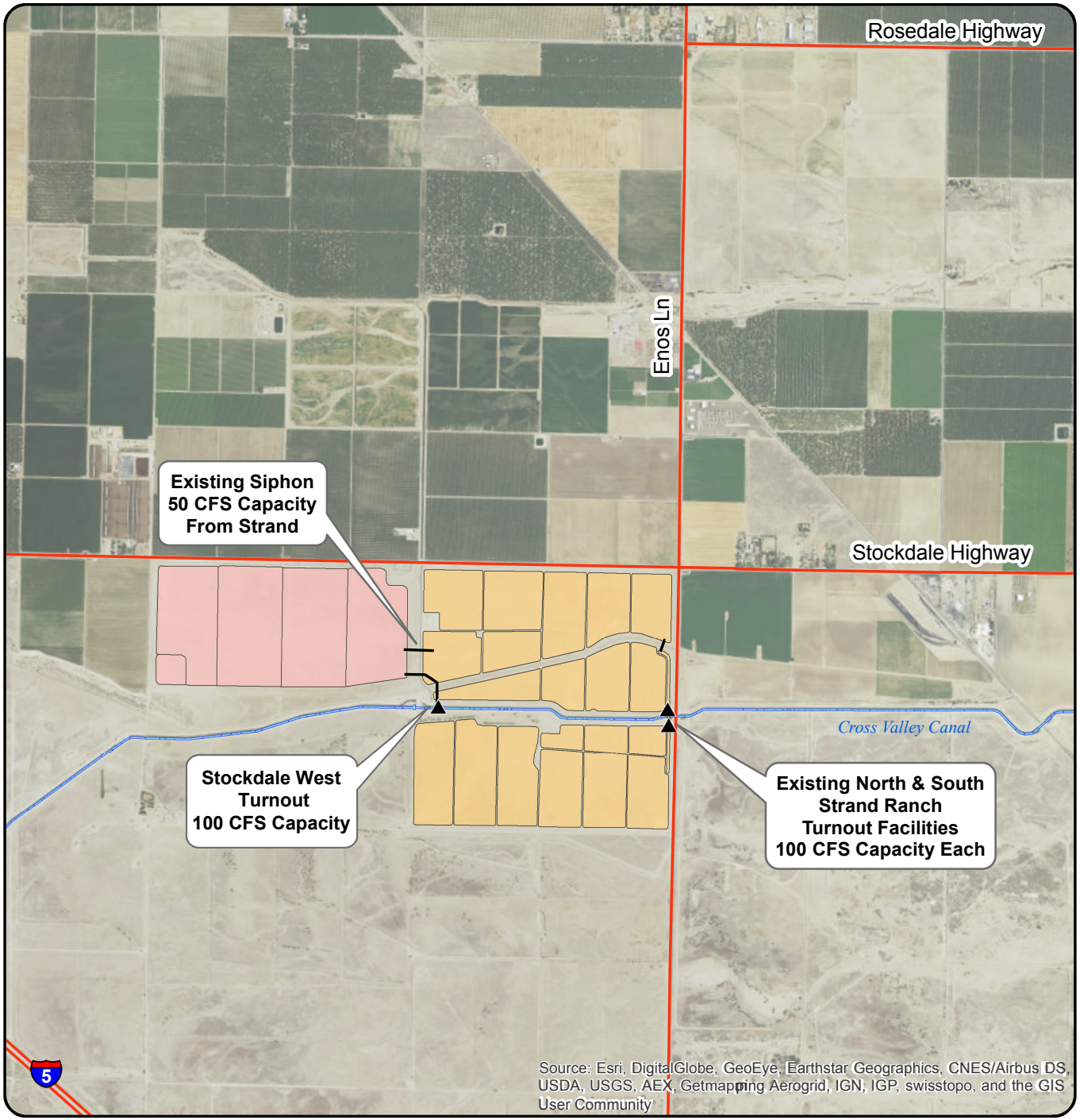
Exhibit "H"



Irvine Ranch WATER DISTRICT

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.

N

0 0.25 0.5 1 Miles

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

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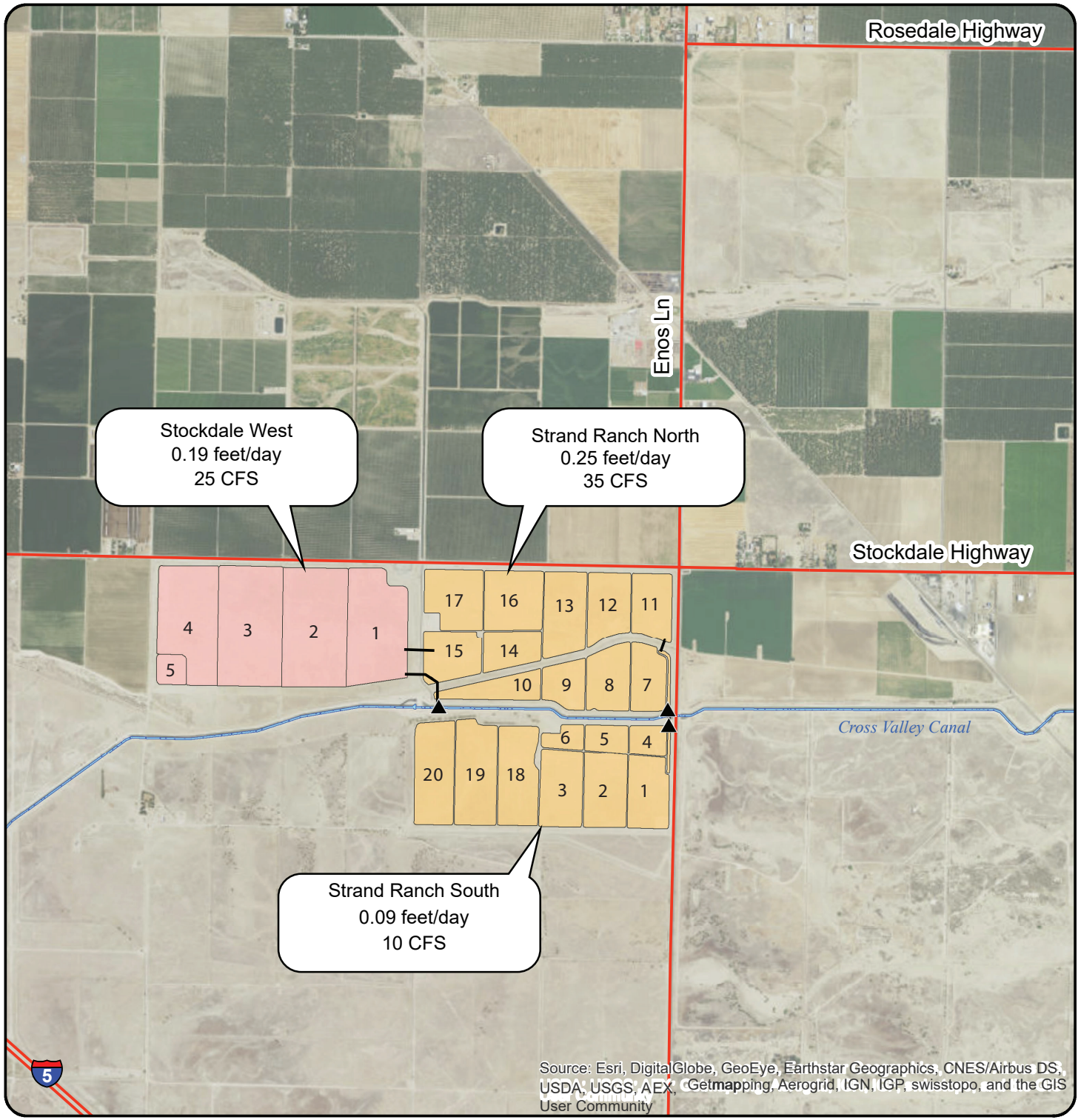

Irvine Ranch WATER DISTRICT

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

N

0 0.25 0.5 1 Miles

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

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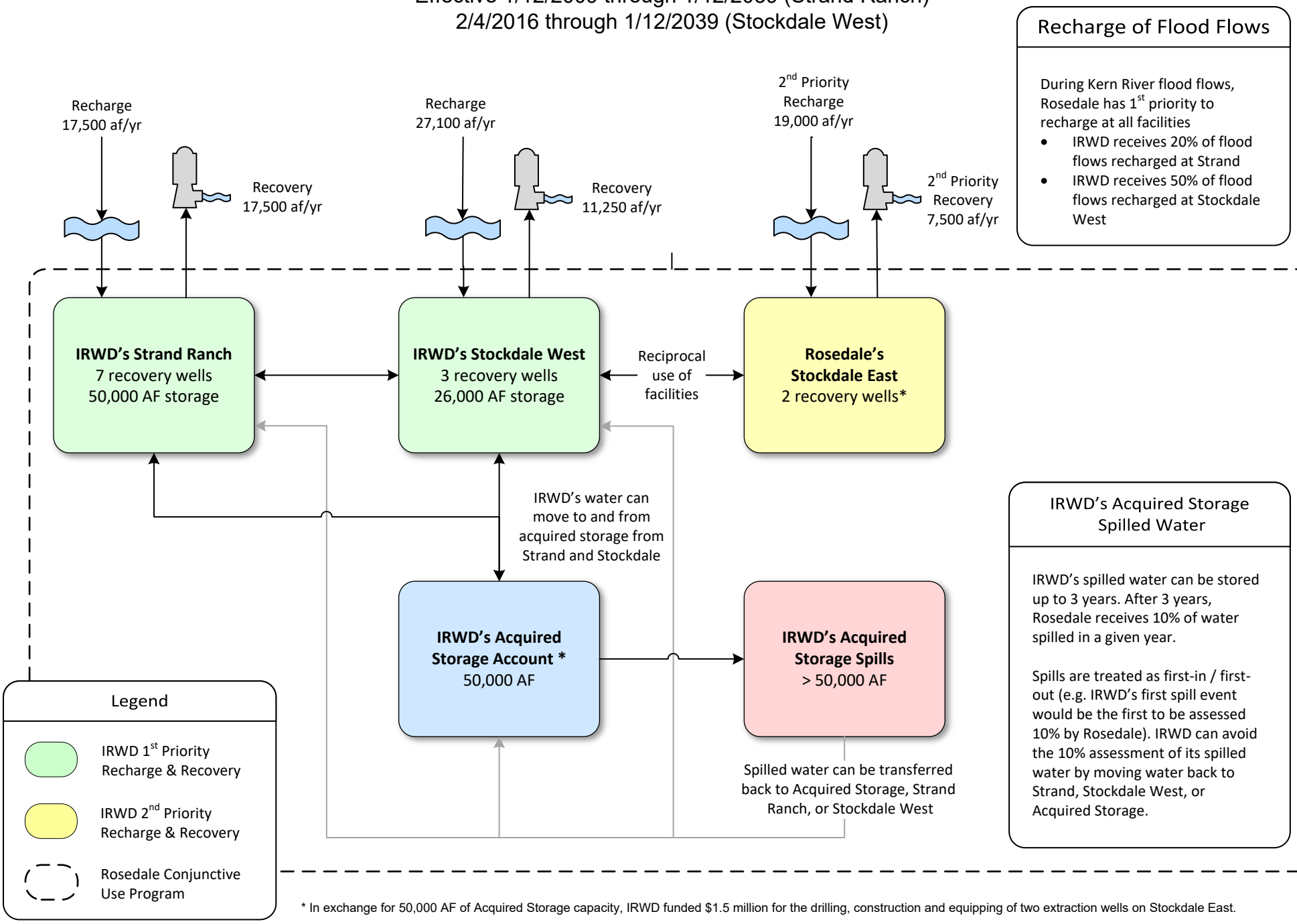
Exhibit "J"

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)



Recharge of Flood Flows

During Kern River flood flows, Rosedale has 1st priority to recharge at all facilities

- IRWD receives 20% of flood flows recharged at Strand
- IRWD receives 50% of flood flows recharged at Stockdale West

IRWD's Acquired Storage Spilled Water

IRWD's spilled water can be stored up to 3 years. After 3 years, Rosedale receives 10% of water spilled in a given year.

Spills are treated as first-in / first-out (e.g. IRWD's first spill event would be the first to be assessed 10% by Rosedale). IRWD can avoid the 10% assessment of its spilled water by moving water back to Strand, Stockdale West, or Acquired Storage.

* 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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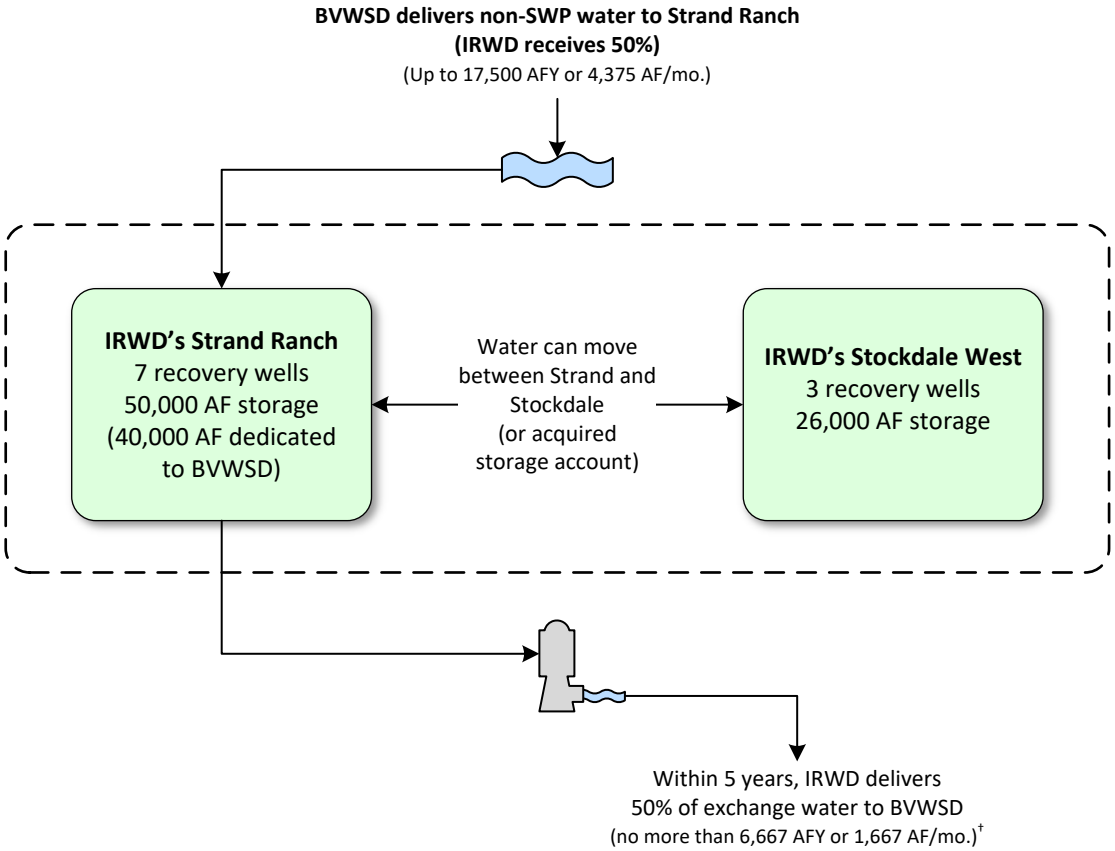
Exhibit "K"

Buena Vista Water Storage District Long Term Water Exchange Program

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



Legend

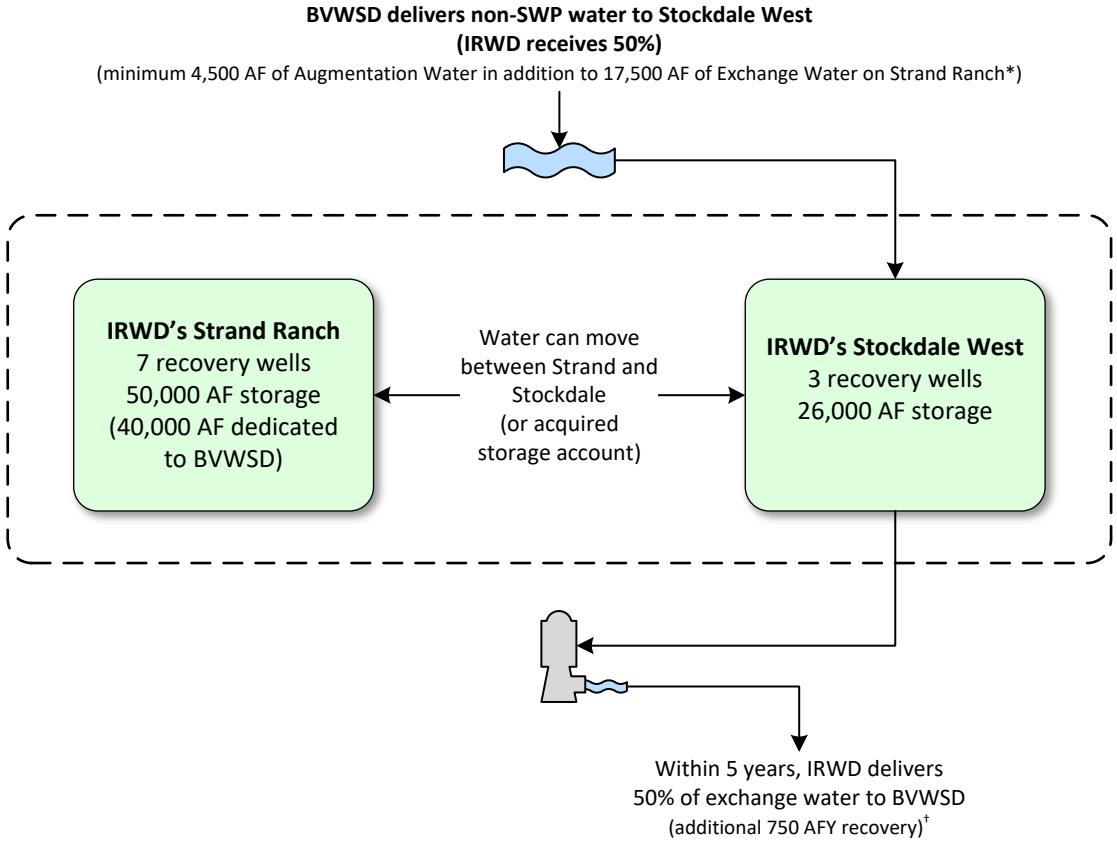
- IRWD 1st Priority Recharge & Recovery
- Rosedale Conjunctive Use Program & Coordinated Operation

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

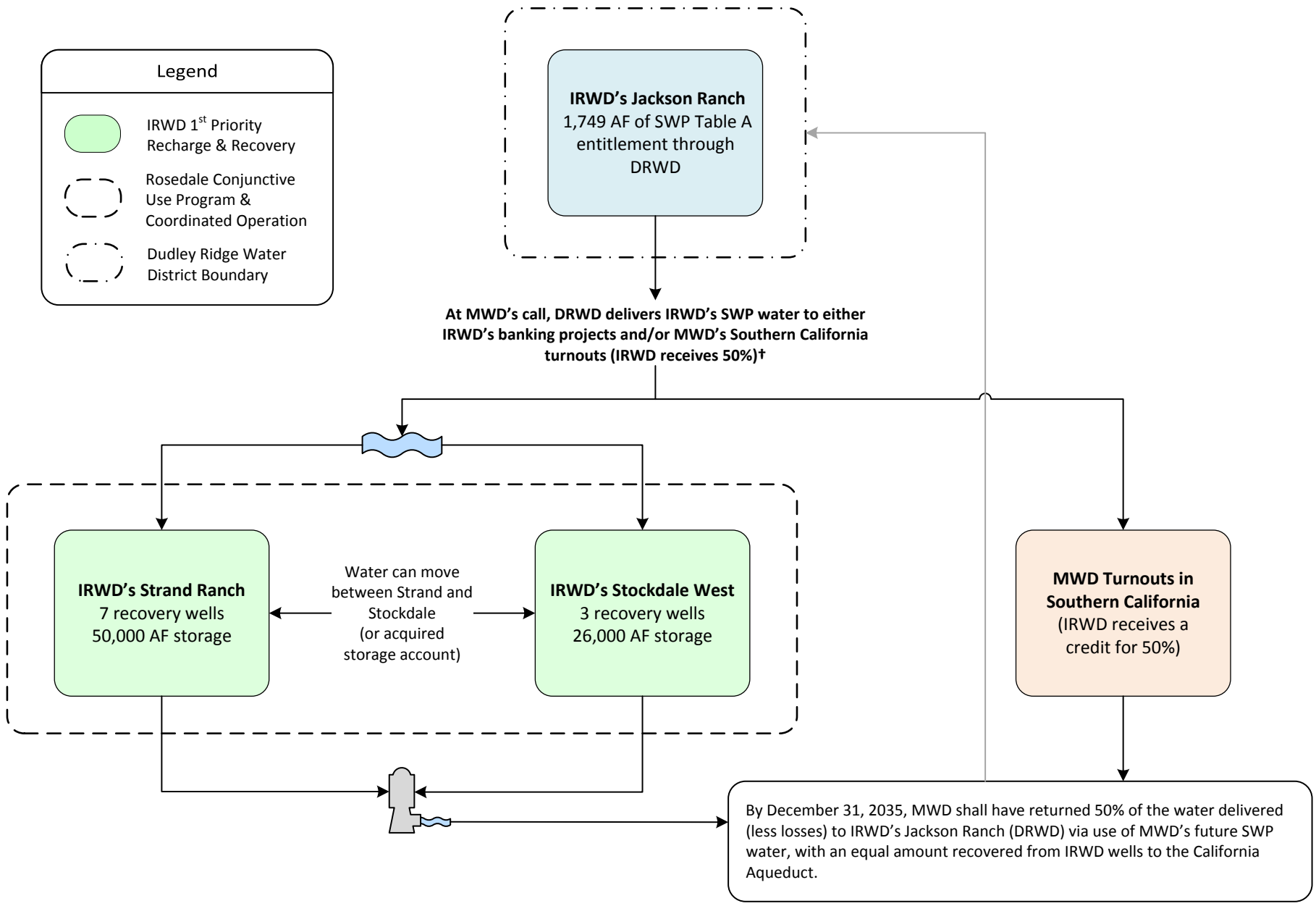
* IRWD agrees to pay BV $25 per AF for IRWD's share of the Augmentation Water and Exchange Water

†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

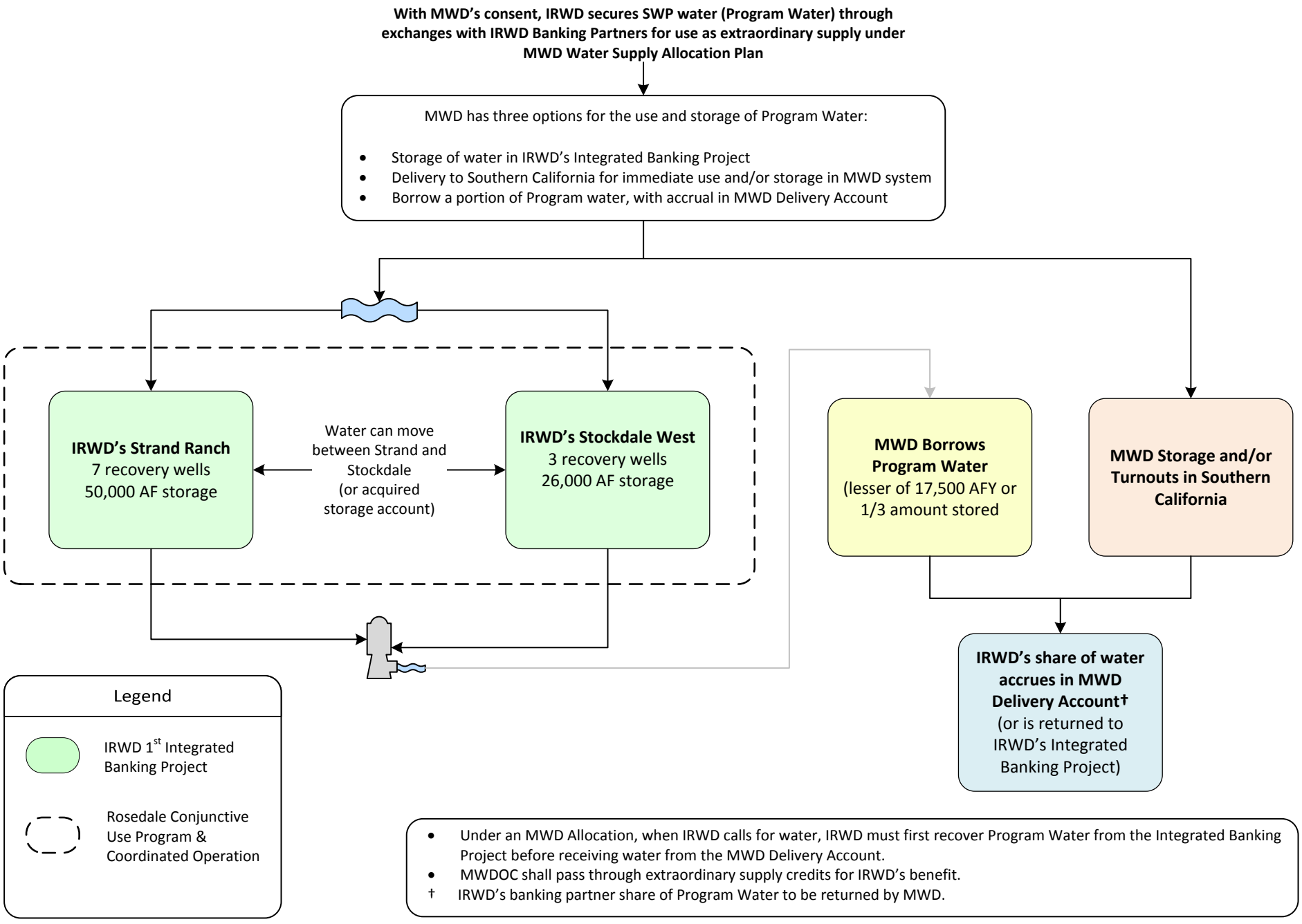

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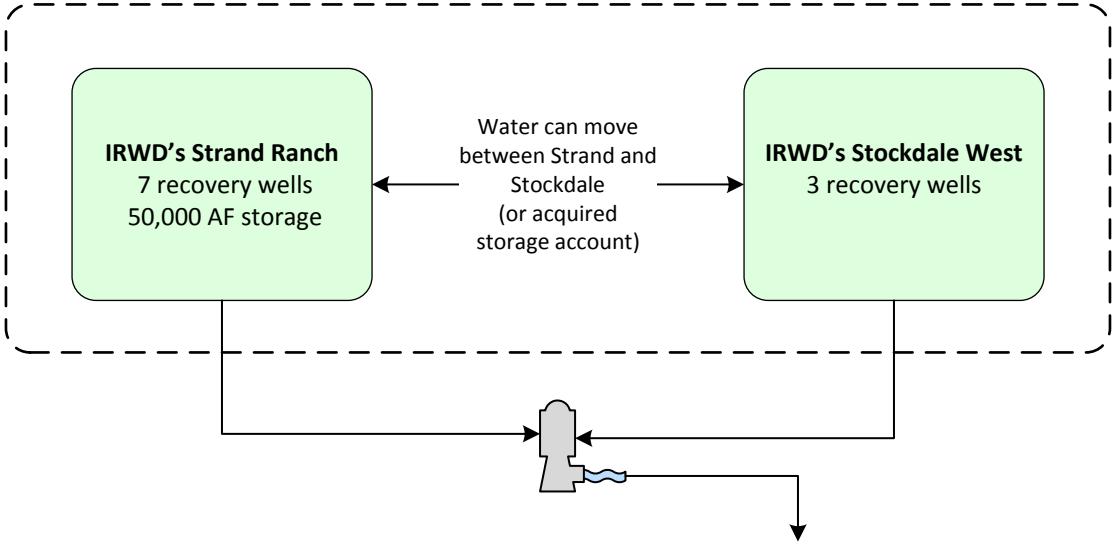
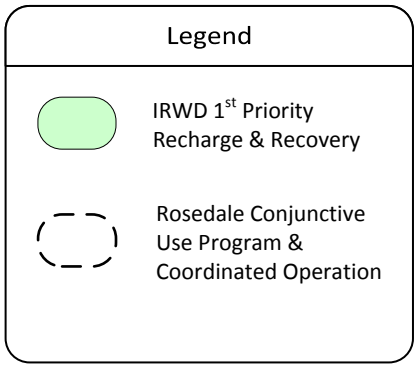
Exhibit "N"

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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Exhibit "O"

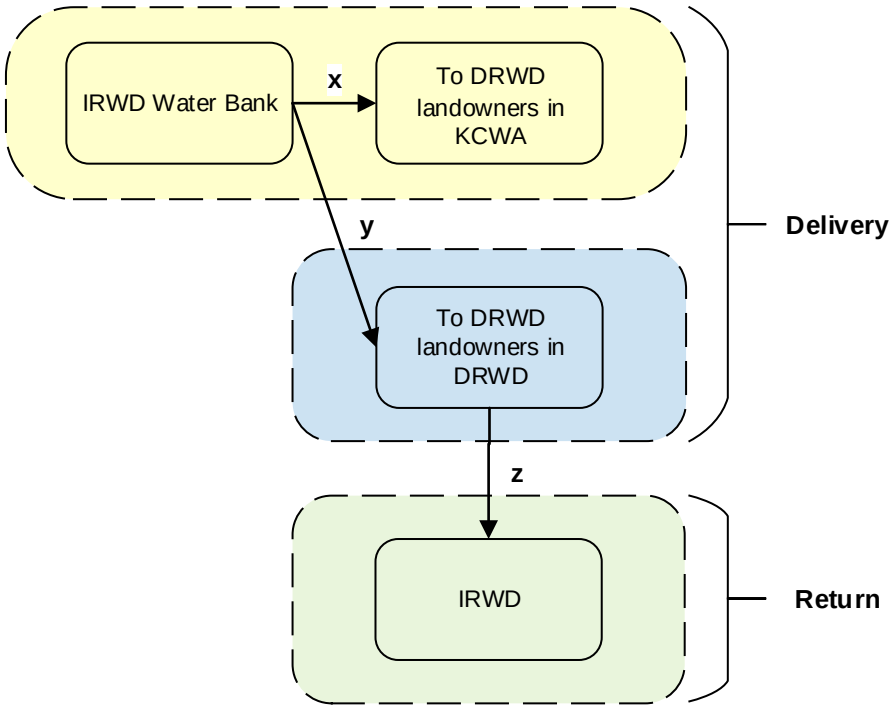
Dudley Ridge Water District Long Term 1-for-1 Water Exchange Program

Effective 5/31/2017 through 11/4/2035

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

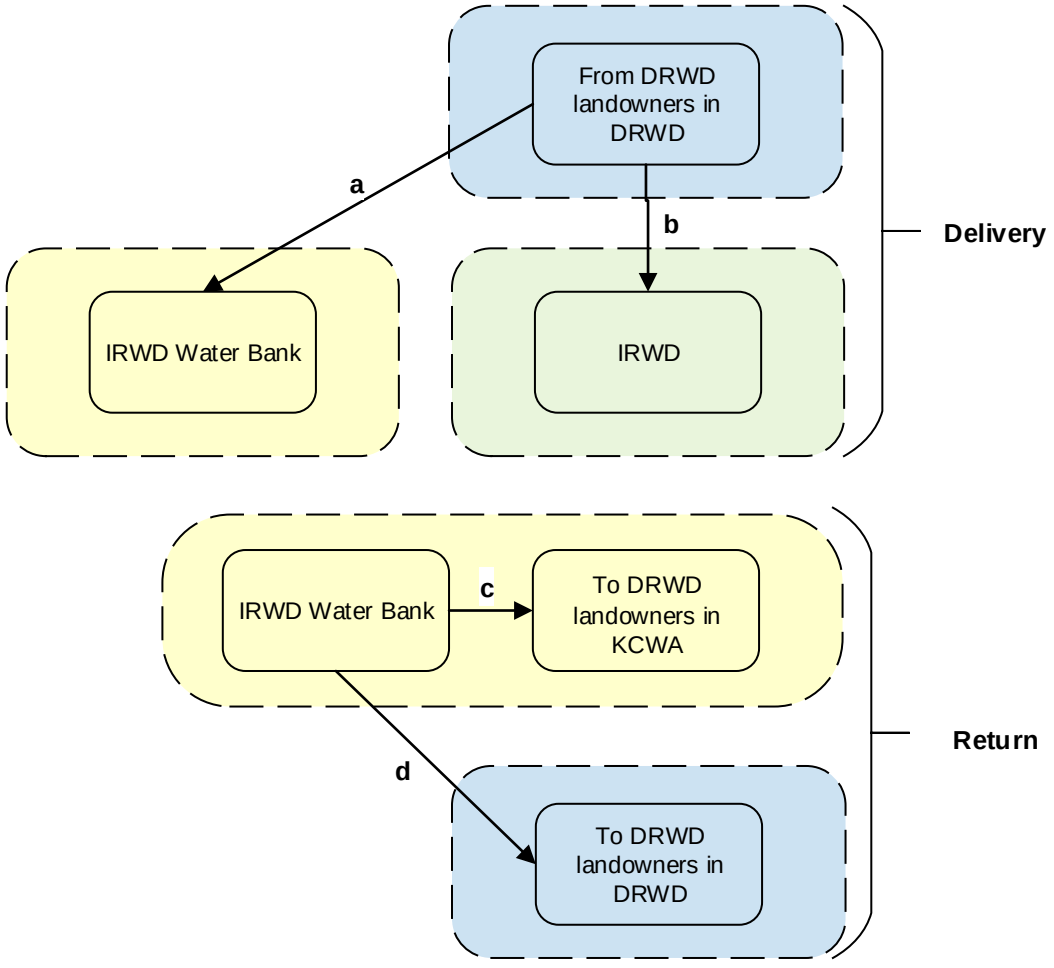
x= Non-Project Water required to stay in Kern County
y= Non-Project Water allowed to leave Kern County
z= DRWD Table A Water equal to x+y less applicable losses, if any

Per Section 4.1.3, z can be delivered to IRWD via in-ground transfer to IRWD, SWP delivery to IRWD banking facilitites, 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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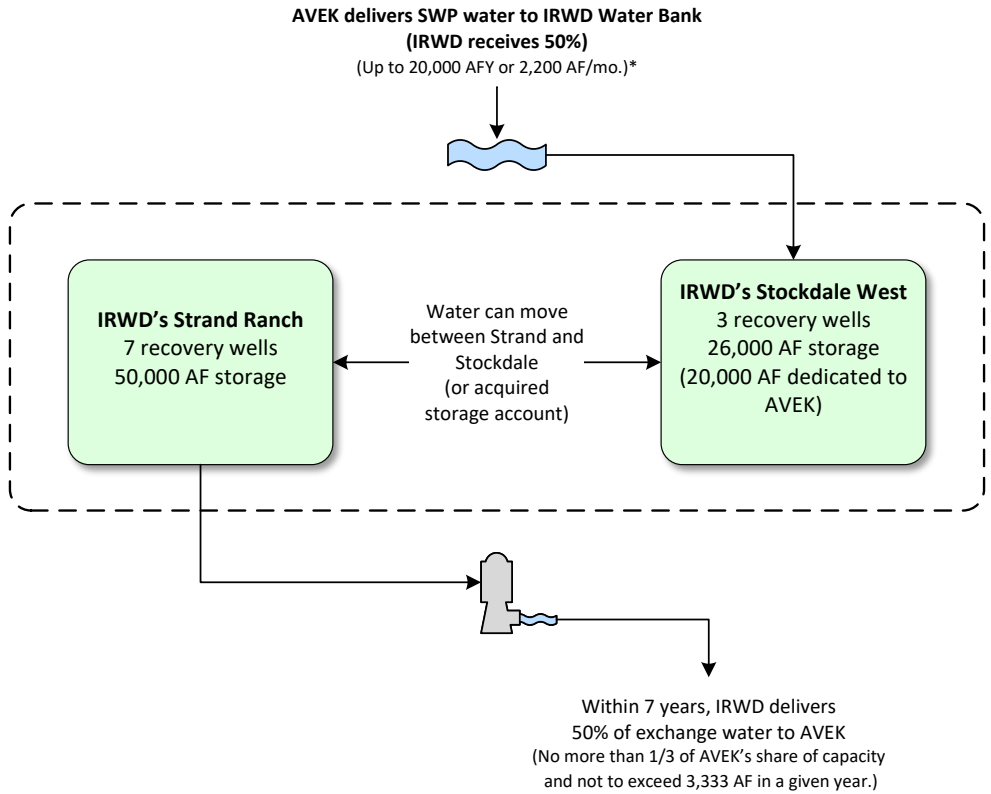
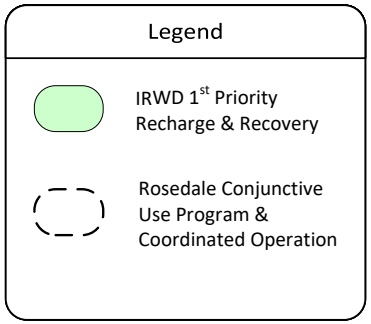
Antelope Valle-East Kern Water Agency (AVEK) Long Term Water Exchange Program

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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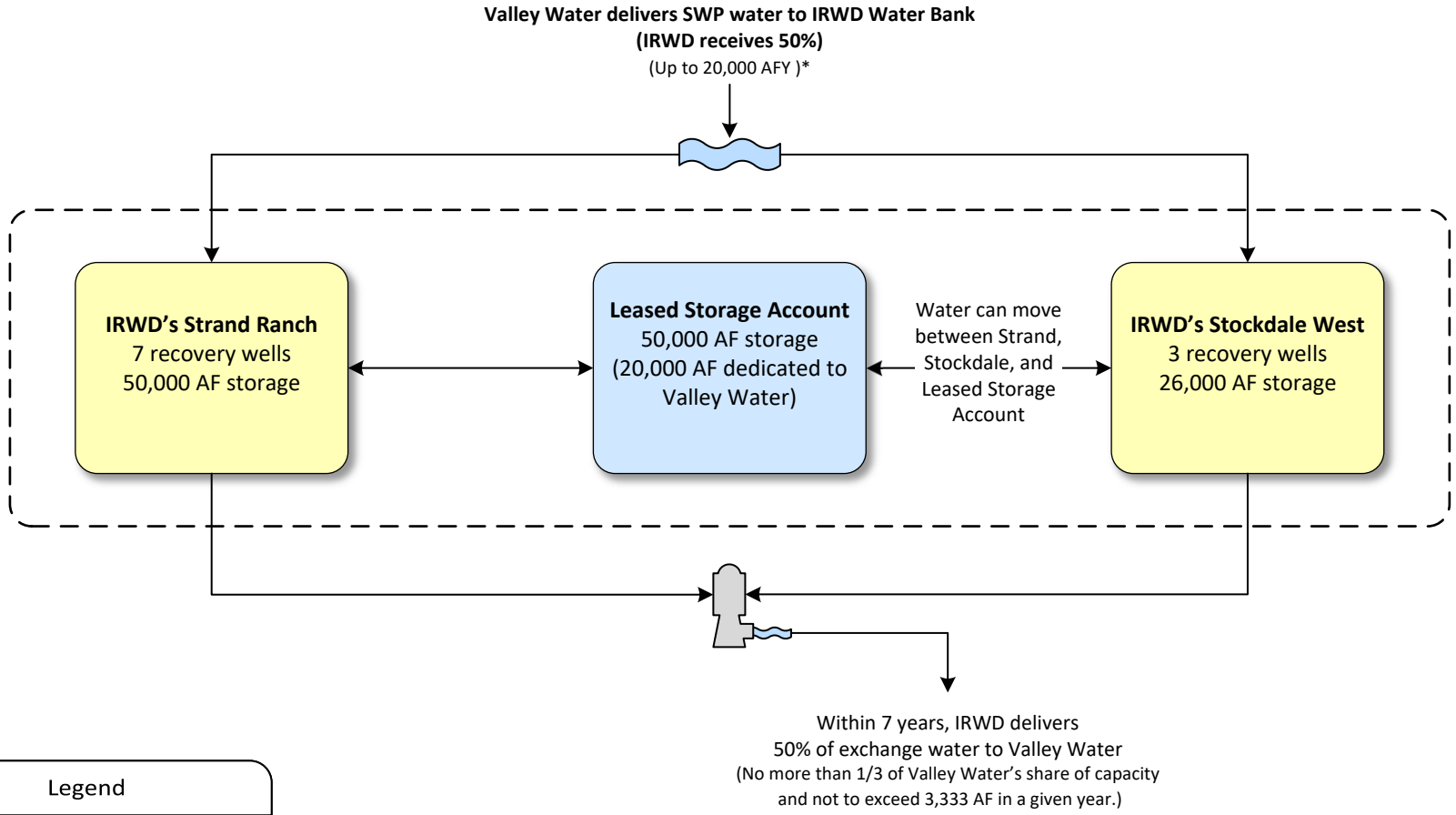
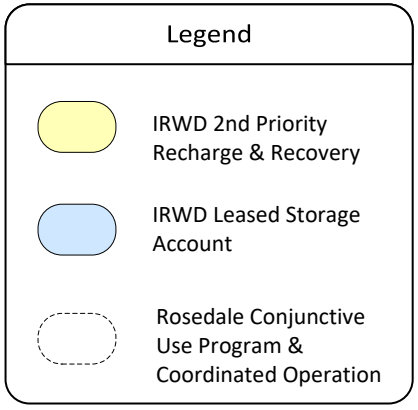
Exhibit "Q"

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 16, 2026

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)	2026 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	$ 985	$1,338
	2011 Short Term	Table A	-	$219	$130	$ 985	$1,334
Buena Vista	2010 Short Term	Kern River	-	$225	$130	$ 985	$1,340
	2011 Long Term	Kern River	10,772	$230	$130	$ 985	$1,345
	2023 Short Term	Kern River	1,923	*Pending*	$130	$ 985	*Pending*
AVEK	2011 Short Term	Table A	-	$220	$130	$ 985	$1,335
	2023 Long Term	Table A	3,032	*Pending*	$130	$ 985	*Pending*
Metropolitan	2014 Short Term	Table A	-	$227	$130	$ 985	*$1,342*
Central Coast	2017 Short Term	Table A	-	$249	$130	$ 985	$1,364
	2019 Short Term	Table A	25	$239	$130	$ 985	$1,354
	2023 Short Term	Table A	193	*Pending*	$130	$ 985	*Pending*
DRWD	2013 Long Term	Table A, Article 21	-	*Pending*	$130	$ 985	*Pending*
	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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Exhibit "S"

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 19, 2025)

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 (estimated $130/AF[1]).
6. IRWD pays Metropolitan's melded system power rate – currently $179/AF, not DWR's current power costs of $223/AF[2] ($44/AF savings).
7. Deliveries are on-demand to IRWD at its service connections in Orange County, which are not subject to lower priorities for wheeling.
8. Metropolitan pays all SWP costs, including variable OMP&R supply costs, associated with SWP water secured by IRWD[3].
9. IRWD pays Metropolitan's Full-Service Tier-1 Untreated Rate, which is currently $984/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 $313/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 2024-25 and 2025-26 Biennial Budget Report and 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 2026 Recharge Operations- BEFORE LOSSES

April 16, 2026

Forecasted Amounts:

Month	IRWD Table A (AF)	DRWD 1:1 (AF)	DRWD 1:1 Pre-delivery (AF)	MWD (AF)	Homer (AF)	Valley Water (AF)	Total (AF)	Status	Expected Recharge[1] (AF)	Expected Recharge Rate (CFS)
January	-	-	-	-	-	-	-	prelim	-	130
February	-	-	-	-	-	-	-	prelim	-	130
March	-	-	-	-	-	-	-	prelim	-	130
April	-	-	-	-	-	-	-	prelim	-	130
	-	-	-	-	-	-	-			
May	-	-	-	-	-	-	-		-	130
June	-	-	-	-	-	-	-		-	130
July	-	-	-	-	-	-	-		-	130
August	-	-	-	-	1,854	-	1,854		1,854	130
September	-	-	-	-	-	3,000	3,000		3,000	130
October	526	-	-	-	-	2,000	2,526		2,526	100
November	-	-	-	79	-	-	79		79	80
December	-	-	-	-	-	-	-		-	80
Total	526	-	-	79	1,854	5,000	7,459		7,459	
Recharge goal:	526	-	-	79	1,854	5,000	7,459			

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

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April 16, 2026
Prepared and
Submitted by: P. Weghorst
Approved by: Paul A. Cook

SUPPLY RELIABILITY PROGRAMS COMMITTEE

SITES RESERVOIR – DRAFT WATER RIGHTS DECISION AND PERMIT

SUMMARY:

Last month, a draft water right decision and permit was released by the State Water Resources Control Board for the Sites Reservoir Project. Comments to the documents are due in May 2026, and a final decision and permit is expected September 1, 2026. The draft decision proposes conditional permit terms and conditions for the appropriation and diversion of water from the Sacramento River that are different than what was expected in the Sites Project Authority application to the State Board. At the Committee meeting, special legal counsel from Kronick Moskovitz Tiedemann & Girard will provide an overview of the water right decision and permit.

BACKGROUND:

On March 21, 2026, the State Board Administrative Hearings Office (AHO) released the *Draft Decision Conditionally Approving the Water Right Application for the Sites Reservoir Project and Denying Assignment of State-Filed Application and Release from Priority of State-Filed Applications* (Draft Decision) as well as the associated *Draft Water Right Permit to Divert and Use Water* (Draft Permit). The lengthy Draft Decision is available at the following link. The Draft Permit is provided as Exhibit "A". The release of the documents initiates the final process for issuing a water rights permit for the Sites Reservoir Project.

The Sites Authority and its special legal counsel are reviewing the Draft Decision and Draft Permit and preparing written comments that are due May 22, 2026. Staff and special legal counsel are coordinating the preparation of joint comments through common interests with Metropolitan Water District of Southern California, San Bernardino Valley Municipal Water District, Santa Clara Valley Water District, and Zone 7 Water Agency. These agencies are also participating in the planning and permitting of the Sites Reservoir Project. The AHO is expected to release a revised draft decision and permit in mid-July. The Sites Authority will then submit further written comments by Mid-August. It is expected that the State Board will consider a final decision and permit on or about September 1, 2026.

Overview of Decision and Permit:

The Draft Decision proposes to conditionally approve the Sites Authority's water right application with a priority date of May 11, 2022, and to appropriate up to 986,000 AF of water per year from the Sacramento River. The Draft Permit would allow for the diversion into storage of 4,190 cfs during the period November 1 to June 14. Terms and conditions are intended to prevent injury to other legal users of water and avoid unreasonable impacts to fish, wildlife, and other instream beneficial uses. It is expected that the permit would further prevent impacts to public trust resources, protect water quality, conserve the public interest, and ensure the beneficial and reasonable use of water.

Differences to Water Right Application:

The Draft Permit was released with significant differences than requested in the Sites Authority's water right application. Differences exist in the following elements of the water right:

- Delta outflow quantity and quality requirements;
- Bypass requirements;
- Consideration of Healthy Rivers and Landscapes initiatives;
- Diversion criteria;
- Rights to intervening creek flows;
- Delta water surface elevations;
- Pulse flow protection;
- Priority date; and
- Time and rates of diversion.

At the Committee meeting, special legal counsel from Kronick Moskovitz Tiedemann & Girard will provide an overview of the Draft Decision and Draft Permit.

FISCAL IMPACTS:

The conditions of the Draft Permit will affect the price and terms of payment for IRWD's participation in the Sites Reservoir Project.

ENVIRONMENTAL COMPLIANCE:

The Sites Project Authority certified a Final Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the Sites Reservoir Project in November 2023. On January 23, 2026, the Bureau of Reclamation issued a Record of Decision for the Sites Reservoir Project that certifies that the project meets all aspects of the National Environmental Policy Act. IRWD would need to adopt the Final EIR/EIS as a responsible agency prior to committing to participation in the construction and operation of the Site Reservoir Project.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Draft Sites Reservoir Water Right Permit to Divert and Use Water

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

[DRAFT] PERMIT TO DIVERT AND USE WATER

APPLICATION 33534 PERMIT 21487

Permittee: Sites Project Authority
P.O. Box 517
Maxwell, CA 95955

The State Water Resources Control Board (State Water Board or Board) authorizes the diversion and use of water by the Permittee in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this Permit dates from **May 11, 2022.** This Permit is issued at the direction of the State Water Board pursuant to Decision XXXX.

The State Water Board finds that the State Water Board and/or the Applicant have met the following requirements for permit issuance: (a) demonstrated the availability of unappropriated water; (b) resolved protests in compliance with Water Code section 1330 et seq. and included appropriate permit conditions; (c) demonstrated that the water will be diverted and used without injury to any lawful user of water; (d) demonstrated that the intended use is beneficial; and (e) demonstrated that the requirements of the California Environmental Quality Act (CEQA) have been met or that the project is exempt from CEQA.

The State Water Board has complied with its independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.)

No water shall be diverted or used under this Permit unless in compliance with the terms and conditions herein. The terms “diversion” and “rediversion” in this Permit refer only to diversions or rediversions of water under this Permit, unless otherwise specified.

1. The source of water under this Permit is:

   (1) Sacramento River in Tehama County and (2) Sacramento River in Glenn County

   tributary to **Suisun Bay.**

2. The **POINTS OF DIVERSION (POD), POINTS OF REDIVERSION,** AND **PLACES OF STORAGE** of such water are located at:

   POD 1, **Tehama-Colusa Canal, AKA Red Bluff POD (Sacramento River)**
   By California Coordinate System of 1983, Zone 1, North 1,940,053 feet and East 6,502,708 feet, being within Northeast quarter of Northwest quarter of Section 33, Township 27 North, Range 3 West, Mount Diablo Base and Meridian.

   POD 2, **Glenn-Colusa Main Canal, AKA Hamilton City POD (Sacramento River)**
   By California Coordinate System of 1983, Zone 1, North 2,413,589 feet and East 6,547,497 feet, being within Southeast quarter of Northeast quarter of Section 2, Township 22 North, Range 2 West, Mount Diablo Base and Meridian.

   Place of Storage, **Sites Reservoir**
   By California Coordinate System of 1983, Zone 2, North American Datum 1983, within portions of Townships 16, 17, and 18 North, Range 4 and 5 West, Mount Diablo Base and Meridian, as shown on map filed on May 11, 2022 with the State Water Board.

   Points of Rediversion and Restorage, **54 locations**
   As described in Attachment 2 of this Permit.

3. The appropriation is for the purposes of **Municipal, Domestic, Industrial, Irrigation, Recreational, Stockwatering, Frost Protection, Fish and Wildlife Preservation and Enhancement, and Incidental Power** uses.

4. The **PLACE OF USE** of such water is located:

   Municipal, Domestic, Industrial, Irrigation, Stockwatering, Recreational, Fish and Wildlife Preservation and Enhancement, and Incidental Power uses within a gross area of 32,691,036 acres within portions of Alameda, Colusa, Contra Costa, Fresno, Glenn, Imperial, Kern, Kings, Los Angeles, Madera, Merced, Monterey, Napa, Orange, Riverside, Sacramento, San Benito, San Bernadino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Stanislaus, Sutter, Tulare, Ventura, Yolo and Yuba counties.

Within the area described above, the place of use for the following beneficial use is as follows:

a. Fish and Wildlife Preservation and Enhancement is authorized in:

i. the Yolo Bypass,

ii. the Sacramento National Wildlife Refuge Complex and national wildlife refuges, state wildlife areas, and privately managed wetlands receiving Incremental Level 4 Refuge Water under the Central Valley Project Improvement Act.

The places of use are shown on a map filed on May 11, 2022 with the State Water Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 986,000 acre-feet per year by storage to be collected from November 1 of each year to June 14 of the succeeding year.

(Term Code: 0000005C)

6. No water shall be collected to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose.

(Term Code: 0000005I)

7. The maximum rate of diversion to offstream storage shall not exceed 2,120 cubic feet per second (cfs) at Tehama Colusa Canal POD and 2,070 cfs at Glenn-Colusa Main Canal POD. The maximum rate of diversion to offstream storage shall not exceed 4,190 cfs.

(Term Code: 0000005J)

8. The capacity of the reservoir where water is authorized to be stored under this Permit (Sites Reservoir) shall not exceed 1,500,000 acre-feet.

(Term Code: 0000005N)

9. Construction work shall be completed by December 31, 2050. Complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 2071.

(Term Code: 0000009)

10. If it is determined that the as-built conditions of the project are not correctly represented by the map(s) prepared to accompany the application, Permittee shall, at its expense, have the subject map(s) updated or replaced with equivalent as-built

map(s). Said revision(s) or new map(s) shall be prepared by a civil engineer or land surveyor licensed in the State of California and shall meet the requirements prescribed in California Code of Regulations, title 23, section 715 et seq. Said revision(s) or map(s) shall be furnished upon request of the Deputy Director for Water Rights (Deputy Director).

(Term Code: 0000030)

11. The reservoir shall be kept open to the public for recreational use, subject to a reasonable charge for any services or facilities that are provided by Permittee and required closure to protect human health and safety. Failure to allow public access may result in revocation of the permit or reduction in the amount of water that may be stored.

(Term Code: 0030045)

12. Unless otherwise specified, all annual submittals required by this Permit shall be included as an attachment to the Permittee's annual Progress Report of Permittee (herein, Annual Report) and due at the same time as the Annual Report.

(Term Code: 9990999)

13. In accordance with the requirements of Water Code Section 1393, Permittee shall clear the site of the proposed reservoir of all structures, trees, and other vegetation, which would interfere with recreation and water storage in the inundated area of the reservoir.

(Term Code: 0120050A)

14. Nothing in this water right authorizes or guarantees the use of, or makes a determination of necessity regarding access to, any lands or facilities not owned by the Permittee. Permittee is solely responsible for obtaining any necessary land rights or land access agreements. In addition, Permittee is solely responsible for obtaining any necessary facility use agreements with the owner of the facility intended for use.

(Term Code: 9990999)

15. No diversion is authorized that would adversely affect the operation of the Central Valley Project (CVP) or State Water Project (SWP) under the existing water rights for those projects in effect on the date of issuance of this Permit and as such existing water rights may be modified. No diversion is authorized at any time the United States Bureau of Reclamation (Reclamation) and the Department of Water Resources (DWR) have declared the Delta to be in balanced conditions under the Coordinated Operation Agreement. An adverse effect shall include but not be limited to any time that such diversion would directly or indirectly require the CVP or the SWP to release water from storage or to reduce their diversion or rediversion of water from the Delta to provide or assure flow in the Delta required to meet any

applicable provision of state or federal law. All diversions shall also comply with the provisions of any operations agreement among DWR, Reclamation, and the Permittee, as may be amended from time to time. Any amendments to the agreement shall be submitted to the Deputy Director with the next Annual Report.

(Term Code: 0350800)

16. All diversions shall be consistent with the provisions of the June 7, 2024, settlement agreement among the Sites Project Authority, the State Water Contractors, and DWR, and any amendments thereto. Any amendments to the agreement shall be submitted to the Deputy Director with the next Annual Report.

(Term Code: 0450300)

17. Diversions to storage under this Permit shall not include the diversion or rediversion of Trinity River water (water diverted by Reclamation from the Trinity River watershed into the Sacramento River watershed pursuant to its water rights). Furthermore, diversions to storage under this Permit shall not negatively impact current or future Trinity River obligations of Reclamation, including but not limited to those obligations specified in the 1959 Contract between the United States and Humboldt County, the Trinity River Mainstem Fishery Restoration Record of Decision, and the Long-Term Plan to Protect Adult Salmon in the Lower Klamath River, and related obligations in Reclamation's water right Permits 11966, 11967, 11968, 11969, 11970, 11971, 11972, and 11973.

(Term Code: 0570800)

18. All diversions shall be consistent with the provisions of the December 20, 2023 "Agreement Between the Sites Reservoir Joint Powers Authority and Contra Costa Water District to Coordinate in the Operations of the Sites Reservoir Project," and any amendments thereto. Any amendments to the agreement shall be submitted to the Deputy Director with the next Annual Report.

(Term Code: 0450300)

19. Permittee shall install and maintain outlet structures through or around Golden Gate Dam and Sites Dam of adequate capacity to release water entering the reservoir that is not authorized for appropriation under this Permit. Permittee shall develop operating criteria to ensure that any water entering the reservoir that is not authorized for appropriation under this Permit is released within a reasonable time, and any temporary impoundment will not injure other legal users of water or unreasonably impact fish and wildlife or other public trust resources. The operating criteria shall include criteria to prevent the release of harmful algal blooms (HABs) into Funks and Stone Corral Creek based on the results of monitoring required by Term 35. These operating criteria shall be submitted to the Deputy Director for approval. Permittee shall operate the reservoir and release water in accordance with the approved criteria. This term may be modified or removed by the Deputy Director

if Permittee obtains a water right permit that authorizes diversion to storage from Funks Creek at Golden Gate Dam and from Stone Corral Creek at Sites Dam.

(Term Code: 0050043)

20. To comply with section 5937 of the Fish and Game Code, Permittee shall allow sufficient water at all times to pass through a fishway or, in the absence of a fishway, allow sufficient water to pass over, around, or through the dams to keep in good condition any fish that may be planted or exist below the dams. If it is impracticable or detrimental to pass the water through a fishway during a period of low flow in the stream, this requirement will be satisfied if, with the concurrence of the California Department of Fish and Wildlife (CDFW), sufficient water is passed through a culvert, waste gate, or over or around the dam to keep in good condition any fish that may be planted or exist below the dam. This provision shall not require the passage or release of water at a greater rate than the unimpaired natural inflow into the reservoir.

    Permittee shall submit to the Deputy Director a Technical Studies Plan and Creeks Operations Plan, as described in Application 25517X01, that demonstrates Permittee will release water in a manner and rate that keeps fish in good condition below the dams to comply with Fish and Game Code section 5937. Permittee shall post the draft Technical Studies Plan and Creeks Operations Plan on its website and offer a 30-day period for public review and comment. Permittee shall consider and respond to any comments in writing, and shall submit the Plan, comments, and responses to the Division of Water Rights. No water may be stored in Sites Reservoir unless and until the Deputy Director approves these plans. Permittee shall operate the reservoir and release water in accordance with the approved plan.

    This term may be modified by the Deputy Director to be consistent with any water right permit issued to Permittee that authorizes diversion to storage from Funks Creek at Golden Gate Dam or from Stone Corral Creek at Sites Dam.

    (Term Code: 0140069)

21. No water shall be diverted under this right unless the operator of the Red Bluff Pumping Plant and Hamilton City Pump Station operates those water diversion facilities with fish screens that are in good condition and designed and maintained in accordance with the screening criteria of CDFW to protect species of fish listed as endangered or threatened under the California Endangered Species Act (Fish and Game Code sections 2050 to 2098) or the federal Endangered Species Act (16 U.S.C. sections 1531 to 1544), as determined by the Deputy Director. Permittee shall provide evidence that demonstrates that the fish screens are in good condition with the Annual Report and whenever requested by the Division of Water Rights.

    (Term Code: 0600300)

22. No diversion under this right is authorized unless Permittee is operating in compliance with Incidental Take Permit No. 2081-2023-051-00 for operation of the Sites Reservoir Project issued by CDFW on October 24, 2024 (2024 ITP). Permittee shall comply with all applicable diversion requirements specified in the 2024 ITP, including but not limited to Conditions of Approval 9.4, and 9.8 through 9.14, which are also listed in Attachment 1 of this Permit.

    Permittee shall continue to comply with the diversion requirements in the 2024 ITP unless and until this term is amended. Within 30 days of issuance of a new or modified ITP for operations of the Sites Reservoir Project, Permittee shall submit to the Executive Director the new or modified ITP and a summary of any changes relative to the 2024 ITP. The Executive Director may amend this term and Attachment 1 without a petition for change by the Permittee to be consistent with the new or modified ITP if, after notice and opportunity for public comment, the Executive Director determines and CDFW concurs in writing that the amendments to this Term and Attachment 1 would be equally or more protective of fish and wildlife.

    (Term Code: 0450300)

23. The following requirements shall apply to diversions at the Tehama-Colusa Canal POD (also referred to as the Red Bluff POD) and Glenn-Colusa Irrigation District POD (also referred to as the Hamilton City POD) in addition to the requirements of Term 22.

    a. The Flow-Dependent Diversion requirements for the Red Bluff POD specified in the 2024 ITP for the period from March 1 to June 14, as identified in Attachment 1, shall also apply to diversions at the Red Bluff POD from January 1 to February 28 of each year.

    b. No diversions are authorized during the first seven days of qualified precipitation-generated pulse flow events (pulse protection). The pulse protection shall be initiated when three-day forecasted average flow at Bend Bridge, as measured at USGS Gage No. USGS-11377100 (Sacramento R AB Bend Bridge NR Red Bluff CA), is greater than 8,000 cfs, and the three-day forecasted average combined tributary flow (as determined by summing the flow in Cow Creek near Millville, Cottonwood Creek near Cottonwood, and Battle Creek below Coleman Fish Hatchery) is greater than 2,500 cfs. The pulse protection shall remain in effect for seven consecutive days upon initiation. If the average daily flow at Bend Bridge exceeds 29,000 cfs, the pulse protection may be terminated before seven days and diversions may resume, provided that flow remains above 25,000 cfs at Bend Bridge during the remainder of the seven-day period. After completion of the pulse protection, resetting criteria must occur before another pulse protection may go into effect. The resetting criteria are met when the three-day moving average flow in the Sacramento River above Bend Bridge is below 7,500 cfs for

seven consecutive days and the above-referenced three-day moving average tributary flow is below 2,500 cfs for seven consecutive days.

c. No diversions shall occur if the flow in the Sacramento River at Wilkins Slough, as measured at USGS station 11390500, is below 14,125 cfs, or the diversion will cause the flow in the Sacramento River at Wilkins Slough, as measured at USGS station 11390500, to fall below 14,125 cfs, from December 1 to April 30, inclusive.

d. The Executive Director may amend this term at the request of Permittee based on new information if, after notice and opportunity for public comment, the Executive Director determines and CDFW concurs in writing that the amended term will prevent unreasonable effects on fish and wildlife, including listed species under the California Endangered Species Act (CESA) and non-CESA listed species.

(Term Code: 0560900)

24. Within five working days of determining that a streamflow measurement station used to establish diversion criteria is not in operation or data from that station is not available in real-time, Permittee shall: (1) report the flow monitoring station to the Deputy Director; and (2) submit to the Deputy Director for review and approval an alternative streamflow measurement method that enables measurement of the applicable diversion-related criteria. No diversions shall occur until the Deputy Director has approved the alternate measurement location or method.

(Term Code: 0350400)

25. The State Water Board adopts and incorporates into this Permit the mitigation measures in the Permittee's Monitoring, Measurement, and Reporting Plan of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for construction and operation of the Sites Reservoir Project dated November 2023, as listed in Attachment 3. Permittee must implement these requirements to mitigate significant impacts to environmental and biological resources as identified in the EIR/EIS. Permittee shall submit to the Deputy Director a report describing the status and compliance with required mitigation and monitoring on an annual basis. Upon commencement of diversion, reports shall be included with Permittee's Annual Report.

(Term Code: 0450500)

26. This permit is subject to prior rights. During some years, water will not be available for diversion during portions or all of the season authorized herein. Permittee shall not divert under this Permit when available supplies are insufficient to satisfy the demands of water rights senior to the priority date of this Permit, including any federal reserved rights, whether or not those senior rights are adjudicated. Permittee

shall comply with any regulation or order issued by the Board that curtails diversions under this right.

(Term Code: 0350800)

27. Appropriation of water under this Permit for export from the Sacramento River or the Sacramento-San Joaquin River Delta is subject to the rights of water users within said systems to all of the water reasonably required to adequately supply the beneficial needs within said systems, regardless of when such use is initiated.

(Term Code: 0000095)

28. No diversion is authorized by this Permit when satisfaction of in-basin entitlements requires release of supplemental Project water by the Central Valley Project or the State Water Project (the Projects).

a. In-basin entitlements are defined as all rights to divert water from streams tributary to the Sacramento-San Joaquin Delta or the Delta for use within the respective basins of origin or the Legal Delta, unavoidable natural requirements for riparian habitat and conveyance losses, and flows required by the State Water Resources Control Board for maintenance of water quality and fish and wildlife. Export diversions and Project carriage water are specifically excluded from the definition of in-basin entitlements.

b. Supplemental Project water is defined as that water imported to the basin by the Projects plus water released from Project storage that is in excess of export diversions, Project carriage water, and Project in-basin deliveries.

The State Water Resources Control Board shall notify Permittee of curtailment of diversion under this term after it finds that supplemental Project water has been released or will be released. The Board will advise Permittee of the probability of imminent curtailment of diversion as far in advance as practicable based on anticipated requirements for supplemental Project water provided by the Project operators.

(Term Code: 0000091)

29. No diversion is authorized when any of the numeric Sacramento River inflow, Sacramento River salinity, or Delta outflow, including salinity-based Delta outflow, objectives of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan) and any future amendments thereto, are not being met.

(Term Code: 9990800)

30. The following requirements apply to diversions under this Permit:

a. Except as provided in part (d), diversions are not authorized when Delta outflow is less than 55 percent of unimpaired Delta outflow calculated as a

seven-day running average or if diversion would reduce Delta outflow below 55 percent of unimpaired Delta outflow calculated as a seven-day running average.

b. The methodology and data sources in Attachment 4 shall be used to calculate the requirements of part (a) of this term. The Executive Director may amend Attachment 4 either at their election or upon request of the Permittee or any interested party to improve accuracy of the methodology or data sources. Notice of any change to Attachment 4 will be provided by the Board's email distribution list for Bay-Delta-related matters and to the Permittee and posted on the State Water Board's website at least 60 days in advance of any decision to amend Attachment 4 by the Executive Director.

c. If the Board updates the Bay-Delta Plan to include Sacramento River inflow and inflow-based Delta outflow requirements based on a percentage of unimpaired flow applicable to this Permit, and the Board takes regulatory actions to implement those requirements, then Permittee shall comply with those regulatory requirements in lieu of the requirements of parts (a) and (b). Applicable Sacramento River inflow and Delta outflow requirements do not include water supply adjustments unless this Permit is identified as qualifying for water supply adjustments in the Bay-Delta Plan or this term is modified pursuant to the Board's reservation of authority in Term 57.

d. The conditions on diversion in this Term shall be subject to the following exception:

    i. If Term 23 prohibits or limits diversions when all other conditions for diversion are met, the Permittee may quantify the additional volume of water it would have been able to divert absent the requirements of Term 23. The methodology for quantifying the volume shall take into consideration all relevant factors, including infrastructure capacity, and must be approved by the Executive Director.

    ii. If, in the same water year, Term 30(a) prohibits or limits diversions but all other conditions for diversion are met, including but not limited to Term 23, the Permittee may divert up to the additional volume of water quantified under part (i). The Executive Director may suspend application of this part upon finding that the diversions authorized by this part would have an unreasonable effect on fish or other instream beneficial uses.

iii. If the Bay-Delta Plan is updated to include adaptive implementation provisions such as flow shaping, and the Board takes regulatory actions applicable to this Permit to implement Delta outflow requirements, then the procedures described in the Bay-Delta Plan shall apply in lieu of part (ii).

iv. Annually, the Permittee shall report to the Board the volume of water quantified under part (i) of this Term, the dates water was diverted under part (ii) of this Term, and the volume of water diverted under part (ii) of this Term.

(Term Code: 0350800)

31. If the Board updates the Bay-Delta Plan to include a VA Pathway, diversions under this Permit shall not interfere with the intended benefits to fish and wildlife beneficial uses of flow and non-flow commitments provided pursuant to the VA Pathway. At a minimum, the following conditions apply:

a. No diversion is authorized on any day when flow commitments provided pursuant to the VA Pathway are present in the mainstem of the Sacramento River.

b. No diversion is authorized on any day in which flow commitments provided pursuant to the VA Pathway are contributing to Delta outflow and Delta outflow remains below the sum of the Delta outflow requirement for diversion under Term 30 and the amount of VA Pathway flow commitments contributing to Delta outflow.

c. The accounting methodology in the Bay-Delta Plan shall be used to determine when flow commitments are present in the mainstem of the Sacramento River, and the presence and amount of flow commitments contributing to Delta outflow. During those years when flow commitments are provided pursuant to the VA Pathway, Permittee shall provide reports to the Deputy Director to substantiate Permittee's compliance with this term on a schedule that the Deputy Director determines is consistent with other reporting requirements in the Bay-Delta Plan.

d. The Board reserves the authority to modify this term, following notice and opportunity for public comment, to ensure consistency with the Bay-Delta Plan and approved VAs.

(Term Code: 0350800)

32. Prior to construction of Sites Reservoir, Permittee shall prepare and submit to the Executive Director, in consultation with the State Water Board and the Central Valley

Regional Water Quality Control Board, a feasibility assessment of actions that may be taken prior to construction and technologies that may be installed during and after construction to (1) control cyanobacteria or cyanotoxins production in Sites Reservoir and (2) prevent or mitigate elevated levels of methylmercury in Sites Reservoir and in water released from Sites Reservoir that will be conveyed in the Colusa Basin Drain, Yolo Bypass, or Sacramento River. The feasibility assessment should include consideration of pilot programs to evaluate the feasibility of innovative techniques or technologies.

(Term Code: 0390800)

33. Prior to construction of Sites Reservoir, Permittee shall conduct pre-construction total mercury sediment screening, sediment coring, and other actions to identify areas that may have higher concentrations of mercury within the inundation area. Permittee shall identify to the Executive Director any actions that will be taken prior to construction to address any areas that may have increased concentrations of mercury.

(Term Code: 0390800)

34. Permittee shall consolidate the applicable requirements of Terms 35 through 43 into a Water Quality Portfolio for review and approval by the State Water Board. The Water Quality Portfolio shall include the Reservoir Management Plan (Sites RMP) described in Appendix 2D of the EIS/EIR, and any additional actions or plans under Terms 35 through 43. No diversions or rediversions shall occur unless the Water Quality Portfolio is approved and the actions described by the approved Water Quality Portfolio are conducted in accordance with the deadlines described in the Water Quality Portfolio.

    Permittee shall post a draft of the Water Quality Portfolio and drafts of any subsequent updates to the Water Quality Portfolio on its website and offer a 30-day period for public review and comment. Permittee shall consider and respond to any comments in writing, and shall submit the Portfolio, comments, and responses to the State Water Board.

    Permittee shall consult with the Central Valley Water Quality Control Board, CDFW, and any California Native American Tribe requesting consultation prior to submitting the initial Water Quality Portfolio to the State Water Board for its consideration and prior to submitting any update to the Water Quality Portfolio. Permittee shall develop a notification list of representatives of California Native American Tribes by submitting requests to the Native American Heritage Commission (NAHC) for a search of the Sacred Lands Inventory and the NAHC Contact List for Tribal Consultation, to identify Tribes with current or ancestral lands in any county that overlies either the Delta, as defined by Water Code section 12220, or the Sacramento River watershed. The notification list of Tribes shall also include all Tribes that have requested, in writing, notification of the opportunity to consult and

all Tribes that participated as parties in the hearing for Decision XXXX. Permittee shall update this list and notify Tribal representatives on the list of the opportunity to consult at least 180 days prior to submission of the Water Quality Portfolio to the State Water Board and 180 days prior to submission of updates to the Water Quality Portfolio.

Permittee shall submit updates to the Water Quality Portfolio at least every five years following initial approval by the State Water Board. Updates to the Water Quality Portfolio shall identify actions implemented during the prior five years, the impact of those actions on water quality in waterbodies affected by project operations, and any proposed changes or additions to actions in the Water Quality Portfolio. Proposed updates to the Water Quality Portfolio may include revised criteria for prohibitions of releases to the Colusa Basin Drain, Yolo Bypass, or the Sacramento River based on changes to applicable water quality control plans, including changes to water quality objectives or programs of implementation provisions, or other new information relevant to the protection of beneficial uses or public health. Approval of the Water Quality Portfolio and subsequent updates shall expire six years after their respective approval dates. Updates to the Water Quality Portfolio shall become effective upon approval by the Executive Director and may include unchanged components of prior Water Quality Portfolios.

(Term Code: 9990800)

35. Permittee shall include a monitoring plan for cyanobacteria and cyanotoxins in the Water Quality Portfolio. The plan shall include:

    a. Locations and frequency of monitoring for cyanobacteria and cyanotoxins in Sites Reservoir.

    b. Locations and frequency of monitoring for cyanobacteria and cyanotoxins in the Colusa Basin Drain, Yolo Bypass, Sacramento River, and Delta that is coordinated with and supplements existing monitoring for harmful algal blooms (HABs) under other programs, including the Bay-Delta Monitoring and Evaluation Program.

    The five-year updates to the Water Quality Portfolio shall include the following information:

    c. Whether HABs increased or decreased in duration, intensity, or frequency at any of the monitoring locations;

    d. Whether detections of cyanobacteria or cyanotoxins occurred, and the timing of these occurrences in relation to diversions under this Permit and HABs drivers such as flow, temperature, or nutrient conditions in the water body where cyanobacteria or cyanotoxins occurred;

e. The varieties of cyanobacteria or cyanotoxins that were detected using methods consistent with the Bay Delta Monitoring and Evaluation Program, including monitoring discrete physical and chemical water quality parameters, conducting discrete phytoplankton and algal pigment analysis, using visual indices, and cyanotoxin analysis, and whether varieties detected downstream of the reservoir were of the same variety as those occurring in the reservoir.

(Term Code: 0390500)

36. Permittee may include a HABs Prevention and Mitigation Strategy (HABs Strategy) in the Water Quality Portfolio to prevent or reduce HABs in Sites Reservoir and limit the release of cyanobacteria or cyanotoxins from the reservoir. The plan should address the results of the feasibility assessment required by Term 32 and incorporate appropriate technology or other actions identified by that assessment. Upon approval of the Water Quality Portfolio, the requirements in the HABs Strategy shall supersede the requirements of Term 37. The HABs Strategy shall include:

a. Any technology to be installed and other actions to be taken to prevent or reduce HABs in Sites Reservoir and limit the release of cyanobacteria or cyanotoxins from the reservoir.

b. Cyanobacteria or cyanotoxin levels at each monitoring location that trigger operational changes or other actions to prevent or reduce HABs in the reservoir and limit the release of cyanobacteria or cyanotoxins from the reservoir to protect human health and other beneficial uses.

c. Operational changes and other actions to be taken by Permittee if monitoring indicates the presence or threat of HABs in the reservoir or a threat of release of cyanobacteria or cyanotoxins from the reservoir.

d. Pilot studies or other ongoing feasibility assessment of technology, methods, and actions to prevent or mitigate the production or release of cyanobacteria and cyanotoxins.

(Term Code: 0400800)

37. If an approved Water Quality Portfolio does not include a HABs Strategy developed pursuant to Term 36, then no water shall be released from Sites Reservoir when cyanobacteria or cyanotoxin levels in the released water are above California's Cyanobacteria and Harmful Algal Bloom Network Caution Level as demonstrated by the monitoring procedures described in the Sites RMP. If an applicable water quality objective for cyanobacteria or cyanotoxin is adopted, that objective will be substituted for the Cyanobacteria and Harmful Algal Bloom Network Caution Level in this term. Permittee shall describe the effectiveness of any HABs management practices used within the reservoir as part of each five-year update to the Water Quality Portfolio.

(Term Code: 0400800)

38. Permittee shall include in the Water Quality Portfolio a plan to prevent or mitigate elevated levels of methylmercury in Sites Reservoir and in water released from Sites Reservoir to be conveyed in the Colusa Basin Drain, Yolo Bypass, or the Sacramento River (Methylmercury Mitigation Plan). The plan shall be developed in consultation with the Central Valley Regional Water Quality Control Board, Office of Environmental Health Hazard Assessment, and State Water Board, and shall be consistent with applicable methylmercury water quality objectives in the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWBE) and the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins (Central Valley Basin Plans). The plan shall include the following components:

    a. A description of how Mitigation Measure WQ-1.1 will be implemented, including the specific sampling locations, frequency, and procedures, and actions to be taken.

    b. Monitoring and sampling of the sediment, water column, and fish tissues within the reservoir to determine the extent of methylmercury in the reservoir and the quantity of methylmercury being released from Sites Reservoir.

    c. Actions that will be taken to reduce to the maximum feasible extent the methylation of mercury during the initial filling of the reservoir, such as installation of hypolimnetic oxygenation systems, oxidant addition, or in-reservoir sediment removal or encapsulation.

    d. A load allocation for methylmercury discharges from the reservoir that is consistent with the methylmercury objectives and Delta Mercury Control Program in the Central Valley Basin Plans and the ISWBE sport fishing objectives.

e. Actions, including operational changes and other actions that will be taken to mitigate methylmercury in the reservoir and ensure releases are within the identified methylmercury load allocation.

f. Thresholds at monitoring locations that will trigger the identified operational changes or other actions.

g. Alternative compliance actions the Permittee shall take if reservoir releases cannot meet the identified methylmercury load allocation through mitigation measures and operational changes, as determined by the Executive Director. Alternative compliance might include mitigating or offsetting existing contributors of mercury outside of the reservoir footprint.

h. Pilot studies or other ongoing feasibility assessments of technology, methods, and management actions to reduce methylmercury production and bioaccumulation in the reservoir and concentrations of methylmercury in releases from the reservoir.

(Term Code: 0390500)

39. Releases from Sites Reservoir shall comply with the load allocation for methylmercury discharges from the reservoir identified in the Methylmercury Mitigation Plan, except that the Executive Director may approve an alternate method of compliance by implementation of the alternative compliance actions identified by the Permittee in the Methylmercury Mitigation Plan.

(Term Code: 0300800)

40. Temperature monitoring shall be continuous starting at least one week prior to the release of water from Sites Reservoir for conveyance in the Sacramento River (Sacramento River Conveyance Water) and continuing until at least one week after releases cease. Monitoring locations shall include: (1) the point of release from Sites Reservoir, (2) the point of release from Funks Reservoir, (3) the point of release from the Dunnigan Pipeline, (4) the point of release from the Colusa Basin Drain to the Sacramento River, (5) upstream of the confluence with the Colusa Basin Drain in the Sacramento River, and (6) downstream of the confluence with the Colusa Basin Drain in the Sacramento River. Amendment or removal of points (1) through (3) may be modified by the Executive Director as part of updating the Water Quality Portfolio.

(Term Code: 0300800)

41. Permittee may develop a Sacramento River Temperature Strategy (Temperature Strategy) to address impacts to fisheries from temperature changes in the Sacramento River caused by release of Sacramento River Conveyance Water to be included in the Water Quality Portfolio. Permittee shall receive concurrence from CDFW that the Temperature Strategy will avoid temperature-related detrimental

effects on fisheries in the Sacramento River prior to submitting the Temperature Strategy to the State Water Board. Upon approval of the Water Quality Portfolio, the requirements in the Temperature Strategy shall supersede the numeric requirements of Term 42. The Temperature Strategy must include:

a. Monitoring sufficient to support development and validation of modeling to accurately quantify and forecast temperature changes in the Colusa Basin Drain and the Sacramento River that will be caused by releases of water from Sites Reservoir.

b. Integration of the operation of Sites Reservoir with other reservoir operations affecting temperature in the Sacramento River downstream of Shasta Dam to avoid temperature impacts to fisheries. Specific actions to be evaluated include exchanges between Sites Reservoir and Shasta Reservoir to increase cold-water pool available in Shasta Reservoir for temperature management, or other actions to offset temperature increases that may result from the release of Sacramento River Conveyance Water.

c. Temperature thresholds at which releases of Sacramento River Conveyance Water will cease or be reduced to avoid detrimental impacts to fisheries, and the conditions under which each threshold applies.

d. If the temperature thresholds would allow releases of Sacramento River Conveyance Water when such releases may cause or contribute to temperature increases in the Sacramento River above 68 degrees Fahrenheit (F), a description and supporting documentation of conditions under which temperature increases above 68 degrees F between Hamilton City and the I Street Bridge will not be detrimental to fisheries. For salmonids, the determination of whether a temperature impact would be detrimental may take into account the broader condition of the fishery.

(Term Code: 0390800)

42. If an approved Water Quality Portfolio does not include a Temperature Strategy developed pursuant to Term 41, then no water shall be released from Sites Reservoir and conveyed in the Sacramento River unless the water, when released from the Colusa Basin Drain into the Sacramento River, is (a) cooler than the Sacramento River or (b) less than 68 degrees F. Temperatures shall be measured and compared on an instantaneous basis.

(Term Code: 0390500)

43. All monitoring data and applicable laboratory reports resulting from the Water Quality Portfolio shall be submitted electronically at least annually to the California Environmental Data Exchange Network (CEDEN), if currently accepted by CEDEN.

Submittals shall use the applicable current CEDEN templates and conform to the template instructions for each parameter. Continuous temperature data collected by the Permittee shall be made available at a 15-minute resolution on the California Data Exchange Center (CDEC) on a real-time basis. Any other data and reports not currently accepted by CEDEN, unless otherwise specified by the Deputy Director, shall be submitted in a machine-readable format as an attachment to the Annual Report for the Permit. Data shall be collected in conformance with current best practices for quality assurance, which shall be documented in a Quality Assurance Project Plan. Monitoring data resulting from the Water Quality Portfolio shall be made available to the Deputy Director upon request. The Deputy Director may adjust the frequency of submittals to CEDEN or CDEC under this term.

(Term Code: 0300800)

44. No water shall be released from Sites Reservoir in exchange for water to be diverted or rediverted through the Clifton Court Forebay or the Jones Pumping Plant (collectively, the Export Facilities) unless the diversion or rediversion of the exchanged water at the Export Facilities complies with Terms 45, 46, 48, 49, and 50.

(Term Code: 0350999)

45. Rediversion of water at the Export Facilities shall only occur from July 1 through November 30 of each year.

(Term Code: 0350700)

46. No rediversion of water at the Export Facilities shall occur unless the numeric water quality objectives in the Bay-Delta Plan, as it may be amended, are met.

(Term Code: 0350800)

47. Rediversion at the Export Facilities of water stored under this Permit shall not exceed the amounts released from Sites Reservoir into the Sacramento River, after accounting for travel time, channel depletions, and carriage losses.

(Term Code: 0350900)

48. No rediversion of water at the Export Facilities shall occur unless all regulatory requirements for the protection of fish, wildlife, and other instream beneficial uses that apply at or to operations of the Export Facilities are being met, including but not limited to biological opinions; court orders; and incidental take permits.

(Term Code:0350900)

49. No rediversion of water at the Export Facilities shall occur when water depths in Delta channels are not adequate to support diversions by reasonable methods pursuant to any valid water right with a priority date senior to this Permit. The Executive Director may approve, after notice and opportunity for public comment:

a. Water depths at specific measurement locations developed by the Permittee in consultation with South Delta Water Agency (SDWA) that demonstrate adequate water depths to prevent injury to senior right holders; or

b. A physical solution to prevent injury to senior right holders that is submitted by the Permittee with written concurrence from SDWA.

Upon approval by the Executive Director, water may be rediverted at the Export Facilities if (a) the approved water depths are met, or (b) the physical solution is implemented to prevent injury.

In the alternative to the above conditions on rediversion, the Executive Director may approve, after notice and opportunity for public comment, a regulatory program that comprehensively manages operation of the Export Facilities to prevent injury to right holders from inadequate water depths in Delta channels. Such a regulatory program may include but is not limited to a regulation implementing the Bay-Delta Plan or an approved comprehensive plan to address water depths in the southern Delta pursuant to a federal or state-issued permit, license, or other approval. The Executive Director shall find that the regulatory method applies to rediversions under this Permit or amend this term to require Permittee to comply with the regulatory program. Upon approval by the Executive Director, water may be rediverted at the Export Facilities in compliance with the approved regulatory program.

(Term Code: 0350999)

50. Permittee shall maintain and post on a publicly available website in a machine-readable format, a list of the amounts of water exchanged between the Permittee and other water right holders. An exchange shall include any water released or delivered by the Permittee pursuant to an agreement between the right holders, in lieu of water being released or delivered pursuant to another water right or bypassed to satisfy downstream demands. Permittee shall not start releases pursuant to an exchange until the following information about the exchange has been listed on the website, disaggregated for each water right involved in the exchange: the water right permit, license, or statement number; the amounts to be exchanged; and, if applicable, where water involved in the exchange will be stored. The website shall be updated to reflect the cumulative volume of exchanged water remaining in storage following release of exchanged water and the dates when those releases occurred. A list of all exchanges that occurred during the water year, along with the above information, shall be included with the Annual Report.

(Term Code: 9990999)

51. No water shall be released from Sites Reservoir in exchange for water diverted by either DWR as part of the SWP or Reclamation as part of the CVP, if that exchange

results in DWR or Reclamation violating any law, regulation, biological opinion, incidental take permit, or court order applicable to the operation of the SWP or CVP.

(Term Code: 9990999)

52. Prior to commencing diversions, Permittee shall develop and submit to the Deputy Director for approval a groundwater monitoring program prepared by a professional hydrogeologist to identify whether diversions under this Permit are causing or threatening to cause injury to groundwater right holders. The Permittee may rely on and incorporate existing monitoring locations, protocols, and thresholds being implemented pursuant to the Sustainable Groundwater Management Act. The program shall identify monitoring locations, sampling frequencies, and explanation of how the monitoring will be sufficient to identify changes in groundwater conditions potentially caused by the diversions. For each monitoring location, the program shall identify water elevation thresholds at which the Permittee shall conduct analyses to determine whether diversions under the Permit are contributing to groundwater level declines or other adverse effects to groundwater conditions that may injure groundwater right holders. In the absence of existing monitoring activities that are sufficient to monitor the potential effects of diversions, Permittee shall conduct its own groundwater elevation monitoring. Any data collected by the Permittee pursuant to this term shall be submitted to DWR's Water Data Library or another publicly accessible data system approved by the Deputy Director.

    If a groundwater level reaches a monitoring threshold at any location identified in the program, Permittee shall consult with the relevant groundwater sustainability agency and shall analyze the extent to which diversions under the Permit, either during that year or as a cumulative effect, have contributed to groundwater elevation declines. The analysis and any supporting information, including any actions by the Permittee to address the effects of diversions on groundwater conditions, shall be included in the Permittee's next Annual Report. Upon receipt of evidence that diversions authorized by this Permit may cause or threaten to cause injury to groundwater right holders in subbasins adjacent to the Sacramento River downstream of the points of diversion, the State Water Board reserves the authority to modify the terms and conditions of this Permit if, after notice to interested parties and opportunity for a hearing, the Permittee fails to demonstrate that operations under this Permit will not cause injury.

    (Term Code: 0350500)

53. Permittee shall meet the requirements in Mitigation Measure GHG 1.1 in Attachment 3 of this Permit. Every five years after issuance of this Permit, the Permittee shall review and update its accounting of Greenhouse Gas (GHG) emissions using best available science and tools, to ensure the Authority achieves its goal of net-zero GHG emissions. Permittee shall submit any update to its accounting of GHG emissions to the Deputy Director as an attachment to the Annual Report for the year when the review and update occurred. This term may be modified or removed by the

Deputy Director upon request by the Permittee if GHG emissions resulting from operation of the Project are subject to the regulatory authority of another state agency.

(Term Code: 0400500)

54. Permittee shall submit a report to the Deputy Director describing any changes to the contracts with the Permittee to receive delivery of water under this Permit (Storage Partners). The report shall be submitted within 30 days of any changes to the contractual allocations of storage space and shall include any associated changes to the intended purposes and places of use by each Storage Partner and the percentages of Sites Reservoir storage space allocated among the Storage Partners. If the Deputy Director determines based on the report that there is a significant and material change to the Storage Partners and associated beneficial uses that was not anticipated by the State Water Board in the Decision approving the application for this Permit, then the Board shall reconsider whether the water authorized for diversion under this Permit will be put to reasonable beneficial use in the public interest. The requirements in this term shall no longer apply upon completion of actual beneficial use of water under this Permit.

(Term Code: 9990999)

55. No water shall be diverted under this Permit unless Permittee is operating in accordance with a compliance plan approved by the Deputy Director. The compliance plan shall specify how the right holder will comply with the Terms 5, 7, 22, 23, 30, 31, 47, Term F, and Term G of this Permit. The compliance plan shall identify the data to be submitted with the Annual Reports to demonstrate compliance, including, where applicable, stream gauge flow data. The Deputy Director may require amendments of the compliance plan to address any additional terms and conditions of this Permit. Permittee shall be allowed at least 90 days to submit required amendments to the compliance plan. The compliance plan may incorporate by reference other submittals by the Permittee to the State Water Board, such as methodologies submitted pursuant to the reporting requirements of chapter 2.7, title 23, California Code of Regulations.

(Term Code: 0360999)

56. Any approval by the Board, Executive Director, or Deputy Director of a plan or other submission required by a term or condition in this Permit, may be approved in whole or in part, denied in whole or in part, or approved with conditions deemed necessary and appropriate to achieve the intended purposes.

(Term Code:9990999)

57. The State Water Board reserves the authority, following notice to interested parties and opportunity for a hearing, to add, amend, revise, supplement, or delete terms and conditions in this Permit to protect vested rights, fish, wildlife, and other instream beneficial uses and public trust resources, and to otherwise best develop, conserve,

and utilize the state's water resources in the public interest. The circumstances under which this reservation of authority may be exercised include but are not limited to the following:

a. Upon receipt of new information demonstrating a reasonable likelihood that operations authorized by this Permit have caused or may cause unreasonable harm to fish, wildlife, or other instream beneficial uses, including Tribal beneficial uses, or injury to senior right holders.

b. Relevant water quality control plans are amended such that the terms and conditions of this Permit are no longer consistent with the plan or sufficient to achieve water quality objectives or reasonably protect beneficial uses. Such changes may include new or revised water quality objectives or implementation plans for HABs, methylmercury, temperature, flow, or other water quality objectives or implementation plans to protect designated Tribal Beneficial Uses.

c. Upon receipt of new information concerning the amount of water available for diversion under the Permit, to ensure the terms and conditions of this Permit best develop and utilize the state's water resources in the public interest while reasonably protecting fish, wildlife, and other instream beneficial uses and public trust resources.

d. To change the season of diversion to conform to later findings of the State Water Board concerning availability of water and instream flows necessary for the reasonable protection of beneficial uses of water in the Sacramento-San Joaquin Delta.

(Term Code: 9990600)

THIS PERMIT IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

A. Permittee is on notice that: (1) failure to timely commence or complete construction work or beneficial use of water with due diligence, (2) cessation or partial cessation of beneficial use of water, or (3) failure to observe any of the terms or conditions of this Permit, may be cause for the State Water Board to consider revocation (including partial revocation) of this Permit. (Cal. Code Regs., tit. 23, § 850.)

(Term Code: 0000016)

B. Permittee is on notice that when the State Water Board determines that any person is violating, or threatening to violate, any term or condition of a water right, the State Water Board may issue an order to that person to cease and desist from that violation. (Wat. Code, § 1831.) Civil liability may be imposed administratively by the State Water Board pursuant to Wat. Code, § 1055, or may be imposed by the superior court. The Attorney General, upon the request of the Board, shall petition the superior court to impose, assess, and recover those sums. (Wat. Code, § 1846.)

(Term Code: 0000017)

C. Permittee is not authorized to make any modifications to the location of diversion facilities, place of use or purposes of use, or make other changes to the project that do not conform with the terms and conditions of this Permit, prior to submitting a change petition and obtaining approval of the State Water Board.

(Term Code: 0000018)

D. Once the time to develop beneficial use of water ends under this Permit, Permittee is not authorized to increase diversions beyond the maximum annual amount diverted or used during the authorized development schedule prior to submitting a time extension petition and obtaining approval of the State Water Board.

(Term Code: 0000019)

E. The amount of water for consideration when issuing a license shall be limited to only the amount of water diverted and applied to beneficial use in compliance with the terms and conditions of this Permit, as determined by the State Water Board. (Wat. Code, § 1610.)

(Term Code: 0000006)

F. Permittee shall measure the amount of water beneficially used under this Permit using devices and/or methods satisfactory to the Deputy Director. In order to demonstrate compliance with the beneficial use monitoring requirements of this Permit, Permittee shall provide evidence that the devices and/or methods are functioning properly, in a manner satisfactory to the Deputy Director, within 30 days of first use of the device and/or method, with the reports required by chapter 2.7, title 23, California Code of Regulations, and whenever requested by the Division of Water Rights.

(Term Code: 0000015)

G. Permittee shall comply with the reporting requirements as specified in the terms of this Permit or any reporting requirements by statute, order, policy, regulation, decision, judgment or probationary designation. The more stringent requirement shall control in each instance where there is conflict or inconsistency between the requirements.

Permittee shall comply with the reporting requirements of chapter 2.7, title 23, California Code of Regulations.

Permittee shall promptly submit any reports, data, or other information that may reasonably be required by the State Water Board, including but not limited to documentation of water diversion and beneficial use under this Permit.

(Term Code: 0000010)

H. Permittee shall grant, or secure authorization through Permittee's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:

1. Entry upon property where water is being diverted, stored or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this Permit;

2. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by State Water Board;

3. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this Permit; and,

4. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by State Water Board, or as otherwise authorized by the Water Code.

(Term Code: 0000011)

I. This Permit shall not be construed as conferring a right of access to any lands or facilities not owned by Permittee.

(Term Code: 0000022)

J. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.

(Term Code: 0000025)

K. This Permit does not authorize diversion of water dedicated by other right holders under a senior right for purposes of preserving or enhancing wetlands, habitat, fish and wildlife resources, or recreation in, or on, the water. (Wat. Code, § 1707.) The Division of Water Rights maintains information about these dedications. It is the Permittee's responsibility to be aware of any dedications that may preclude diversion under this Permit.

(Term Code: 0000212)

L. No water shall be diverted or used under this Permit, and no construction related to such diversion shall commence, unless Permittee has obtained and is in compliance with all necessary permits or other approvals required by other agencies. If an amended Permit is issued, no new facilities shall be utilized, nor shall the amount of water diverted or used increase beyond the maximum amount diverted or used during the previously authorized development schedule, unless Permittee has obtained and is in compliance with all necessary requirements, including but not limited to the permits and approvals listed in this term.

Within 90 days of the issuance of this Permit or any subsequent amendment, Permittee shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, Permittee shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish & G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002); (3) Regional Water Quality Control Board Waste

Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344); and (5) local grading permits.

Permittee shall, within 30 days of issuance of any permits, approvals or waivers, transmit copies to the Division of Water Rights.

(Term Code: 0000203)

M. Urban water suppliers shall comply with the Urban Water Management Planning Act (Wat. Code, § 10610 et seq.). All Urban Retail Water Suppliers shall comply with the provisions of Division 6, Part 2.55 (commencing with Chapter 9, section 10609.20) and Part 2.6 (commencing with Chapter 3, section 10608.34) of the Water Code. An “urban retail water supplier” means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

Agricultural water users and suppliers shall comply with the provision of Division 6, Part 2.55 of the Water Code and the Agricultural Water Management Planning Act (Water Code, § 10800 et seq.). An “agricultural water supplier” means a supplier, either publicly or privately owned, providing water (excluding recycled water) to 10,000 or more irrigated acres, including a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers.

(Term Code: 0000029D)

N. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this Permit, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this Permit with a view to eliminating waste of water and to meeting the reasonable water requirements of Permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5)

controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this Permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by Permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution, article X, section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

(Term Code: 0000012)

O. The quantity of water diverted under this Permit is subject to modification by the State Water Board if, after notice to Permittee and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

(Term Code: 0000013)

P. This Permit does not authorize any act which results in the taking of a candidate, threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). If a "take" will result from any act authorized under this Permit, Permittee shall obtain any required authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this Permit.

(Term Code: 0000014)

This Permit is issued and Permittee is subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

STATE WATER RESOURCES CONTROL BOARD

Juliet Christian-Smith, Deputy Director
Division of Water Rights

Dated:

Attachment 1

2024 Incidental Take Permit Requirements

Condition Number	Condition of Approval
9.4: Maximum Total Diversions	Permittee shall not exceed the maximum total annual diversion of 986 TAF combined at the Red Bluff POD and Hamilton City POD diversion facilities. The Permittee shall not divert water at the Red Bluff POD and Hamilton City POD above the maximum annual diversion volumes of 660 TAF and 421 TAF, respectively, for each location, while still remaining below the maximum total annual diversion of 986 TAF at the diversion facilities for the Project.
9.8: Diversions During Excess Conditions	Permittee shall only divert when the Delta has been determined by DWR and Reclamation to be in excess conditions and in initiating diversions, Net Delta Outflow Index has increased by an additional 3,000 cfs after the determination of the excess conditions.
9.9: Temporary Urgency Change Order for Delta Water Quality Objectives	Permittee shall not divert water to storage during times when Bay-Delta Water Quality Control Plan requirements for Delta Outflow, X2 (Spring), Rio Vista, Emmaton, Jersey Point, and Delta Export to Inflow (E:I) ratio are modified by a Temporary Urgency Change Petition/Order and the CVP or SWP are operating to the modified conditions.
9.10: Sacramento River Bypass Flow Criteria at Red Bluff Pumping Plant	Permittee shall not divert water until the Sacramento River flow at Red Bluff POD is at or above 3,250 cfs. Diversions shall not result in Sacramento River flow at Red Bluff POD to be less than 3,250 cfs at all times. Diversions shall cease once Sacramento River flow at Red Bluff POD drop below 3,250 cfs. Sacramento River flow shall be determined by California Data Exchange (CDEC) Station at Bend Bridge (BND) minus Permittee and non-Permittee diversions at the Red Bluff POD diversion facility.
9.11: Sacramento River Bypass Flow Criteria at Hamilton City Pump Station	Permittee shall not divert water until the Sacramento River flow at Hamilton City POD is at or above 4,000 cfs. Diversions shall not result in Sacramento River flow at Hamilton City POD to be less than 4,000 cfs at all times. Diversions shall cease once Sacramento River flow at Hamilton City POD drops below 4,000 cfs. Sacramento River flow shall be determined by CDEC Station at Hamilton City (HMC).
9.12: Sacramento River Bypass Flow Criteria at Wilkins Slough.	Permittee shall not divert water if the flow in the Sacramento River at Wilkins Slough will decline below 10,930 cfs as indicated by United States Geological Survey (USGS) Station 11390500 - Sacramento R BL Wilkins Slough NR Grimes CA. This will be determined using the following criteria: • The Real-Time flow at USGS Station 11390500 exceeds 10,930 cubic feet per second (cfs). • The California Nevada River Forecast Center (CNRFC) forecasted flow at station WLKC1 exceeds 10,930 cfs for the subsequent seventy-two hours following the estimated start time of any diversion event. • The forecasted flow continues to exceed 10,930 cfs at CNRFC station WLKC1 for seventy-two hours after the diversion event is scheduled to end.

	• The forecasted flow at CNRFC station WLKC1 shall be re-evaluated for the duration of the diversion event, a minimum of every twenty-four hours by the Permittee to ensure the projected forecast has not changed and the forecasted flow continues to exceed 10,930 cfs. • Forecasting of the seventy-two-hour travel time between the diversions facilities and Wilkins Slough may be modified based on best available science and with approval from CDFW.
9.13: Allowable Diversions During Simultaneous Use at Red Bluff Pumping Plant and Hamilton City Pump Station	If Permittee and non-Permittee diversions occur simultaneously at the Red Bluff POD or Hamilton City POD, the Permittee shall continue to maintain USGS Station 11390500 and CNRFC Station WLKC1 above 10,930 cfs while accounting for the additional non-Permittee diversions. The total allowable diversions shall be determined by the following equation: *Available Flow for Permittee Diversion(cfs) = WLK(72hrforecast)-[10,930 + RB(NonPermitteeDiv) + HC(NonPermitteeDiv)]* Where: • *WLK(72hrforecast)* is the CNRFC 72-hour forecast • *RB(NonPermitteeDiv)* is non-Permittee diversions at Red Bluff to the extent these diversions are not already accounted for in *WLK(72hrforecast).* • *HC(NonPermitteeDiv)* is non-Permittee diversions at Hamilton City to the extent these diversions are not already accounted for in *WLK(72hrforecast).*
9.14: Flow Dependent Diversion.	Permittee shall divert no more than a specified amount of Sacramento River flow at the Red Bluff POD and Hamilton City POD under the following criteria for Flow Dependent Diversion (FDD) to minimize impacts to CHNWR, CHNSR, and WS from near-field effects at the Red Bluff POD and Hamilton City POD fish screens and to minimize the effects of reduced flow in the Sacramento River. The requirements specified in this Condition of Approval shall be adhered to in addition to all other applicable diversion requirements specified in this ITP. Permittee shall not initiate diversions at the Red Bluff POD from January 1 to February 28 (Feb. 29 in leap years) until Sacramento River flow at Bend Bridge exceeds 4,800 cfs. Permittee shall not initiate diversions at the Red Bluff POD from September 1 to December 31 and March 1 to June 14 until Sacramento River flow at Bend Bridge exceeds 6,295 cfs. Permittee shall not initiate diversions at Hamilton City POD from September 1 to June 14 until Sacramento River flow at Hamilton City POD exceeds 10,500 cfs. Permittee shall determine river flow at Red Bluff POD utilizing real-time observations at CDEC Station Bend Bridge (BND). Permittee shall determine river flow at Hamilton City POD by adding the real-time observations at CDEC Station Hamilton City (HMC) to the current Hamilton City POD diversion rate for Permittee and non-Permittee diversions, as CDEC Station HMC is downstream of Hamilton City POD. Adjustments to diversions shall be required once

<table>
<tr><td></td><td>per day as needed. However, Permittee may elect to adjust diversions more frequently than once per day.</td></tr>
<tr><td>9.14.1: Flow Dependent Diversion Requirements at the Red Bluff Pumping Plant</td><td>Permittee shall divert no more than the maximum allowable diversion rate (cfs) from January 1 to February 28 (Feb. 29 in leap years) as specified in Table 2 for the Red Bluff POD. From January 1 to February 28, if real-time flow at Bend Bridge (BND) is within the range given in Table 2 but is other than the values given in Table 2, Permittee shall determine the maximum allowable diversion rate at Red Bluff POD by linear interpolation between the values in Table 2.

Table 2. Flow Dependent Diversion Requirements at Red Bluff POD (Jan. 1 to Feb 28/29).
<table>
<tr><th>Real Time Flow at Bend Bridge (BND) in (cfs)</th><th>Maximum Diversion (cfs)</th></tr>
<tr><td>4,800</td><td>0</td></tr>
<tr><td>5,000</td><td>130</td></tr>
<tr><td>6,000</td><td>230</td></tr>
<tr><td>7,000</td><td>360</td></tr>
<tr><td>8,000</td><td>520</td></tr>
<tr><td>9,000</td><td>710</td></tr>
<tr><td>10,000</td><td>930</td></tr>
<tr><td>11,000</td><td>1,180</td></tr>
<tr><td>12,000</td><td>1,450</td></tr>
<tr><td>13,000</td><td>1,760</td></tr>
<tr><td>14,000</td><td>2,100</td></tr>
<tr><td>14,100</td><td>2,120</td></tr>
<tr><td>>14,000</td><td>2,120</td></tr>
</table>
Permittee shall divert no more than the maximum allowable diversion rate (cfs) from March 1 to June 14 and September 1 to December 31 as specified in Table 3 for the Red Bluff POD. From March 1 to June 14 and from September 1 to December 31, if real-time flow at Bend Bridge (BND) is within the range given in Table 3 but is other than the values given in Table 3, Permittee shall determine the maximum allowable diversion rate at Red Bluff POD by linear interpolation between the values in Table 3.</td></tr>
</table>

Table 3. Flow Dependent Diversion Requirements at Red Bluff Pumping Plant (March 1 to June 14 and Sep.1 to Dec. 31)

Real Time Flow at Bend Bridge (BND) in (cfs)	Maximum Diversion (cfs)
6,300	0
7,000	120
8,000	220
9,000	340
10,000	480
11,000	640
12,000	810
13,000	1,010
14,000	1,220
15,000	1,460
16,000	1,710
17,000	1,980
17,500	2,120

9.14.2: Flow Dependent Diversion Requirements at the Hamilton City Pump Station

Permittee shall divert no more than the maximum allowable diversion rate (cfs) from September 1 to June 14 as specified in Table 4 at the Hamilton City POD. From September 1 to June 14, if real-time flow at Hamilton City (HMC) is within the range given in Table 4 but is other than the values given in Table 4, Permittee shall determine the maximum allowable diversion rate at Red Bluff POD by linear interpolation between the values in Table 4.

Table 4. Flow Dependent Diversion Requirements at Hamilton City POD (Full Diversion Period: Sep. 1 to June 14).

Real Time Flow at Hamilton City (HMS) in (cfs)	Maximum Diversion (cfs)
10,500	0
11,500	280
12,500	370
13,500	480
14,500	590
15,500	720
16,500	850
17,500	980
18,500	1,130
19,500	1,290
20,500	1,450
21,500	1,620
22,500	1,800
23,500	1,990
24,500	2,200
>24,500	2,200

Attachment 2

Points of Rediversion and Restorage

The authorized **POINTS OF REDIVERSION (PORD)** and **Places of Restorage (PORS)** for Permit 21487 are located at:

(PORD 1, **Golden Gate Dam**)
By California Coordinate System of 1983, Zone 2, North 2,250,718 feet and East 6,471,642 feet, being within Northeast quarter of Southeast quarter of Section 9, Township 17 North, Range 4 West, Mount Diablo Base and Meridian.

(PORD 2, **Sites Dam**)
By California Coordinate System of 1983, Zone 2, North 2,238,160 feet and East 6,468,808 feet, being within Southeast quarter of Southeast quarter of Section 20, Township 17 North, Range 4 West, Mount Diablo Base and Meridian.

(PORD 3, **Riggs Ranch Diversion**)
By California Coordinate System of 1983, Zone 2, North 2,119,966 feet and East 6,576,831 feet, being within Northeast quarter of Northwest quarter of Section 14, Township 13 North, Range 1 West, Mount Diablo Base and Meridian.

(PORD 4, **Jacobs Point Diversion**)
By California Coordinate System of 1983, Zone 2, North 2,061,521 feet and East 6,619,459 feet, being within Northeast quarter of Northwest quarter of Section 7, Township 11 North, Range 3 East, Mount Diablo Base and Meridian.

(PORD 5, **Woodland-Davis Clean Water Agency**)
By California Coordinate System of 1983, Zone 2, North 2,008,200 feet and East 6,667,300 feet, being within Northeast quarter of Northwest quarter of Section 34, Township 10 North, Range 3 East, Mount Diablo Base and Meridian.

(PORD 6, **City of Sacramento Water Treatment Plant**)
By California Coordinate System of 1983, Zone 2, North 1,978,388 feet and East 6,702,598 feet, being within Southeast quarter of Northeast quarter of Section 35, Township 9 North, Range 4 East, Mount Diablo Base and Meridian.

(PORD 7, **Freeport Regional Water Intake**)

By California Coordinate System of 1983, Zone 2, North 1,934,251 feet and East 6,702,930 feet, being within Northwest quarter of Southeast quarter of Section 11, Township 7 North, Range 4 East, Mount Diablo Base and Meridian.

(PORD 8, **Barker Slough Pumping Plant**)

By California Coordinate System of 1983, Zone 2, North 1,862,472 feet and East 6,619,931 feet, being within Northeast quarter of Southwest quarter of Section 18, Township 5 North, Range 2 East, Mount Diablo Base and Meridian.

(PORD 9, **Delta Cross Channel**)

By California Coordinate System of 1983, Zone 2, North 1,852,089 feet and East 6,702,158 feet, being within Northwest quarter of Northeast quarter of Section 35, Township 5 North, Range 4 East, Mount Diablo Base and Meridian.

(PORD 10, **Contra Costa Canal**)

By California Coordinate System of 1983, Zone 3, North 2,179,898 feet and East 6,232,805 feet, being within Southeast quarter of Northeast quarter of Section 33, Township 2 North, Range 3 East, Mount Diablo Base and Meridian.

(PORD 11, **Contra Costa Water District Old River Intake**)

By California Coordinate System of 1983, Zone 3, North 2,147,455 feet and East 6,250,918 feet, being within Northwest quarter of Southeast quarter of Section 31, Township 1 North, Range 4 East, Mount Diablo Base and Meridian.

(PORD 12, **Contra Costa Water District Victoria Canal Intake**)

By California Coordinate System of 1983, Zone 3, North 2,139,610 feet and East 6,259,970 feet, being within Northeast quarter of Northwest quarter of Section 9, Township 1South, Range 4 East, Mount Diablo Base and Meridian.

(PORD 13, **California Aqueduct Intake**)

By California Coordinate System of 1983, Zone 3, North 2,129,435 feet and East 6,245,773 feet, being within Northwest quarter of Northeast quarter of Section 24, Township 1 South, Range 3 East, Mount Diablo Base and Meridian.

(PORD 14, **Clifton Court Forebay**)

By California Coordinate System of 1983, Zone 3, North 2,126,440 feet and East 6,256,425 feet, being within Northwest quarter of Southwest quarter of Section 20, Township 1 South, Range 4 East, Mount Diablo Base and Meridian.

(PORD 15, **Delta-Mendota Canal (Pilot Canal Intake)**)

By California Coordinate System of 1983, Zone 3, North 2,121,619 feet and East 6,256,083 feet, being within Northeast quarter of Southwest quarter of Section 29, Township 1 South, Range 4 East, Mount Diablo Base and Meridian.

(PORD 16, **State Water Project Banks Pumping Plant**)

By California Coordinate System of 1983, Zone 3, North 2,115,990 feet and East 6,237,838 feet, being within Southwest quarter of Section 35, Township 1 South, Range 3 East, Mount Diablo Base and Meridian.

(PORD 17, **Central Valley Project Jones Pumping Plant**)

By California Coordinate System of 1983, Zone 3, North 2,114,400 feet and East 6,248,073 feet, being within Southwest quarter of Southwest quarter of Section 31, Township 1 South, Range 4 East, Mount Diablo Base and Meridian.

(PORD 18, **Delta-Mendota Canal (Lined Canal)**)

By California Coordinate System of 1983, Zone 3, North 2,109,504 feet and East 6,246,391 feet, being within Southeast quarter of Southeast quarter of Section 1, Township 2 South, Range 3 East, Mount Diablo Base and Meridian.

(PORD 19 and PORS, **Los Vaqueros Dam**)

By California Coordinate System of 1983, Zone 3, North 2,129,590 feet and East 6,207,073 feet, being within Northwest quarter of Northwest quarter of Section 23, Township 1 South, Range 2 East, Mount Diablo Base and Meridian.

(PORD 20, **Arroyo del Valle Diversion Structure**)

By California Coordinate System of 1983, Zone 3, North 2,060,458 feet and East 6,187,996 feet, being within Township 3 South, Range 2 East, Mount Diablo Base and Meridian.

(PORD 21 and PORS, **Del Valle Dam**)

By California Coordinate System of 1983, Zone 3, North 2,048,842 feet and East 6,200,731 feet, being within Northeast quarter of Southwest quarter of Section 3, Township 4 South, Range 2 East, Mount Diablo Base and Meridian.

(PORD 22, **Eastside Bypass at East Bear Creek**)
By California Coordinate System of 1983, Zone 3, North 1,914,452 feet and East 6,480,299 feet, being within Northeast quarter of Section 8, Township 8 South, Range 11 East, Mount Diablo Base and Meridian.

(PORD 23, **Intake at Mariposa Bypass Control Structure**)
By California Coordinate System of 1983, Zone 3, North 1,895,936 feet and East 6,505,198 feet, being within Southeast quarter of Section 30, Township 8 South, Range 12 East, Mount Diablo Base and Meridian.

(PORD 24, **Eastside Bypass at Lone Tree Unit**)
By California Coordinate System of 1983, Zone 3, North 1,883,703 feet and East 6,523,784 feet, being within Northwest quarter of Section 11, Township 9 South, Range 12 East, Mount Diablo Base and Meridian.

(PORD 25, **Sand Slough Control Structure**)
By California Coordinate System of 1983, Zone 3, North 1,863,358 feet and East 6,535,858 feet, being within Northeast quarter of Section 31, Township 9 South, Range 13 East, Mount Diablo Base and Meridian.

(PORD 26 and PORS, **San Luis Forebay Dam**)
By California Coordinate System of 1983, Zone 3, North 1,857,203 feet and East 6,402,469 feet, being within Southeast quarter of Northwest quarter of Section 1, Township 10 South, Range 8 East, Mount Diablo Base and Meridian.

(PORD 27 and PORS, **San Luis Dam**)
By California Coordinate System of 1983, Zone 3, North 1,844,598 feet and East 6,394,093 feet, being within Southwest quarter of Southeast quarter of Section 15, Township 10 South, Range 8 East, Mount Diablo Base and Meridian.

(PORD 28, **Temple Slough (Arroyo Canal) Intake**)
By California Coordinate System of 1983, Zone 4, North 1,816,307 feet and East 6,561,446 feet, being within Southwest quarter of Section 12, Township 11 South, Range 13 East, Mount Diablo Base and Meridian.

(PORD 29, **Mendota Pool Dam**)

By California Coordinate System of 1983, Zone 3, North 1,745,375 feet and East 6,598,943 feet, being within Southeast quarter of Northeast quarter of Section 19, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 30, **Helm Ditch**)

By California Coordinate System of 1983, Zone 3, North 1,745,022 feet and East 6,589,787 feet, being within Northeast quarter of Section 19, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 31, **Main Canal**)

By California Coordinate System of 1983, Zone 3, North 1,744,396 feet and East 6,598,937 feet, being within Northeast quarter of Section 19, Township 13 South, Range 15East, Mount Diablo Base and Meridian.

(PORD 32, **Firebaugh Water District Canal**)

By California Coordinate System of 1983, Zone 3, North 1,741,821 feet and East 6,599,844feet, being within Southeast quarter of Section 19, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 33, **Outside Canal**)

By California Coordinate System of 1983, Zone 3, North 1,741,896 feet and East 6,599,689 feet, being within Southeast quarter of Section 19, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 34, **Columbia Canal**)

By California Coordinate System of 1983, Zone 3, North 1,746,420 feet and East 6,605,595 feet, being within Northeast quarter of Section 20, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 35, **Mowry Inlet**)

By California Coordinate System of 1983, Zone 4, North 2,171,207 feet and East 6,167,526 feet, being within Southwest quarter of Section 21, Township 13 South, Range 15 East, Mount Diablo Base and Meridian.

(PORD 36, **Kern River Canal Headworks**)
By California Coordinate System of 1983, Zone 5, North 2,320,300 feet and East 6,236,461 feet, being within Southwest quarter of Northwest quarter of Section 33, Township 29 South, Range 27 East, Mount Diablo Base and Meridian.

(PORD 37, **Rosedale-Rio Bravo Water Storage District Kern River Headworks**)
By California Coordinate System of 1983, Zone 5, North 2,317,022 feet and East 6,224,713 feet, being within Northeast quarter of Northeast quarter of Section 1, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 38, **Kern River Pioneer Inlet to Cross Valley Canal**)
By California Coordinate System of 1983, Zone 5, North 2,316,855 feet and East 6,224,653 feet, being within Northeast quarter of Northeast quarter of Section 1, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 39, **Berrenda Mesa Headworks – Kern River**)
By California Coordinate System of 1983, Zone 5, North 2,316,823 feet and East 6,224,709 feet, being within Northeast quarter of Northeast quarter of Section 1, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 40, **City of Bakersfield – 2800 Acres Basin 8 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,314,255 feet and East 6,213,406 feet, being within Northwest quarter of Southeast quarter of Section 3, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 41, **City of Bakersfield – 2800 Acres Basin 9 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,311,578 feet and East 6,208,788 feet, being within Northeast quarter of Northeast quarter of Section 9, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 42, **City of Bakersfield – 2800 Acres Basin 10 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,310,759 feet and East 6,207,771 feet, being within Southwest quarter of Northeast quarter of Section 9, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 43, **City of Bakersfield – 2800 Acres Basin 11 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,310,138 feet and East 6,207,883 feet, being within Southwest quarter of Northeast quarter of Section 9, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 44, **City of Bakersfield – 2800 Acres Basin 2 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,309,264 feet and East 6,208,729 feet, being within Northeast quarter of Southeast quarter of Section 9, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 45, **City of Bakersfield – 2800 Acres Basin 1 Turnout**)
By California Coordinate System of 1983, Zone 5, North 2,309,422 feet and East 6,210,652 feet, being within Southwest quarter of Northwest quarter of Section 10, Township 30 South, Range 26 East, Mount Diablo Base and Meridian.

(PORD 46, **Kern Water Bank Headworks – Kern River**)
By California Coordinate System of 1983, Zone 5, North 2,300,049 feet and East 6,189,544 feet, being within Southeast quarter of Northwest quarter of Section 24, Township 30 South, Range 25 East, Mount Diablo Base and Meridian.

(PORD 47, **Terminus – Kern River**)
By California Coordinate System of 1983, Zone 5, North 2,299,728 feet and East 6,189,866 feet, being within Southeast quarter of Northwest quarter of Section 24, Township 30 South, Range 25 East, Mount Diablo Base and Meridian.

(PORD 48, **Main Canal Intake – Kern River**)
By California Coordinate System of 1983, Zone 5, North 2,298,695 feet and East 6,185,781 feet, being within Northwest quarter of Southeast quarter of Section 23, Township 30 South, Range 25 East, Mount Diablo Base and Meridian.

(PORD 49, **B1 Intake – Kern River**)
By California Coordinate System of 1983, Zone 5, North 2,298,924 feet and East 6,184,174 feet, being within Northeast quarter of Southwest quarter of Section 23, Township 30 South, Range 25 East, Mount Diablo Base and Meridian.

(PORD 50, **L1 Intake – Kern River**)

By California Coordinate System of 1983, Zone 5, North 2,298,274 feet and East 6,184,781 feet, being within Northeast quarter of Southwest quarter of Section 23, Township 30 South, Range 25 East, Mount Diablo Base and Meridian.

(PORD 51 and PORS, **Pyramid Dam**)

By California Coordinate System of 1983, Zone 5, North 2,057,610 feet and East 6,331,915 feet, being within Southwest quarter of Northwest quarter of Section 2, Township 6 North, Range 18 West, San Bernadino Base and Meridian.

(PORD 52 and PORS, **Castaic Dam**)

By California Coordinate System of 1983, Zone 5, North 2,012,136 feet and East 6,379,087 feet, being within Southwest quarter of Northwest quarter of Section 18, Township 5 North, Range 16 West, Mount Diablo Base and Meridian.

(PORD 53 and PORS, **Cedar Springs Dam**)

By California Coordinate System of 1983, Zone 5, North 1,933,945 feet and East 6,768,922 feet, being within Southeast quarter of Northeast quarter of Section 32, Township 3 North, Range 4 West, San Bernadino Base and Meridian.

(PORD 54 and PORS, **Perris Dam**)

By California Coordinate System of 1983, Zone 6, North 2,255,077 feet and East 6,275,414 feet, being within the North half of the Southeast quarter of Section 4, Township 4 South, Range 3 West, San Bernadino Base and Meridian.

Attachment 3

Mitigation Monitoring and Reporting Program

Attachment 4

Calculation of Daily Unimpaired Delta Outflow, Daily Delta Outflow, and Percent of Unimpaired Delta Outflow

Methods and data sources that shall be used to calculate compliance with term 30(a) are described in this Attachment. The following sections describe methods and data sources for calculating (1) daily unimpaired Sacramento-San Joaquin Delta watershed outflow (daily Unimpaired Delta Outflow), (2) impaired daily Delta Outflow (daily Delta Outflow), and (3) the percentage of daily Unimpaired Delta Outflow that is present in the system.

A.4.1. Daily Unimpaired Delta Outflow

Daily Unimpaired Delta Outflow shall be calculated using the sum of daily unimpaired flows of tributaries to the Delta, as set forth below. Daily Unimpaired Delta Outflow estimates are summed over seven days and averaged to produce a seven-day average. A three-day lag shall be applied to the seven-day average calculation of daily Unimpaired Delta Outflow (seven-day average daily Unimpaired Delta Outflow$_{\text{3-day lag}}$) to ensure that all daily unimpaired Delta outflow data are available to complete the necessary calculations. The three-day lag is applied retrospectively such that a seven-day average flow calculation completed on the current day includes flows values that range from four through 10 days prior to the current day. The seven-day average daily Unimpaired Delta Outflow$_{\text{3-day lag}}$ shall be updated daily to produce a “running” average.

A.4.1.1. Equation

Unimpaired Delta Outflow (UDO) is the sum of unimpaired Delta inflow (UDI) plus in-Delta accretions (IDA), calculated as follows:

UDO = UDI + IDA, where:

- UDO = Unimpaired Delta Outflow;
- UDI = Unimpaired Delta Inflow; and
- IDA = In-Delta Accretions

Unimpaired Delta Inflow (UDI) is equal to the sum of unimpaired flow, as reported by the California Data Exchange Center (CDEC) and the California Nevada River Forecast Center (CNRFC), for stations on Sacramento River tributaries (Sac UF), major eastside Delta tributaries (East UF), and San Joaquin River tributaries (SJR UF), plus additional unimpaired flows that are calculated for accretions downstream of and not included at other unimpaired flow stations (MISC UF), using the following equation.

UDI = (Sac UF + East UF + SJR UF) + Misc UF, where each value is the sum of flows at the following locations:

- Sac UF = Sacramento River above Bend Bridge + Feather River at Oroville + Yuba River at Smartsville + American River at Nimbus;

- East UF = Consumnes River at Michigan Bar + Mokelumne River at Pardee Dam + Calaveras River at New Hogan Reservoir;

- SJR UF = Stanislaus River at Goodwin + Tuolumne River at La Grange Dam + Merced River near Merced Falls + San Joaquin River below Friant Dam; and

- Misc UF = Fresno River at Hensley Lake + Chowchilla River at Buchanan Reservoir + Mariposa Creek at Mariposa Reservoir + Owens Creek at Owens Reservoir + Stony Creek at Black Butte + Cache Creek above Rumsey + Bear River near Wheatland + Putah Creek near Winters + Sacramento Valley West Side Minor Streams + Sacramento Valley East Side Minor Streams + San Joaquin Valley West Side Minor Streams + San Joaquin Valley East Side Minor Streams

Specific data sources and calculations for the unimpaired flow locations listed above are described in the next section. In-Delta Accretions (IDA) are equal to the PREC term, as defined in the Bay Delta Plan Figure 3: “Real-time Delta precipitation runoff for the previous day estimated from stations within the Delta.” In-Delta accretions are calculated by multiplying the area of the Delta, 682,230 acres, by precipitation recorded at the Stockton Fire Station No. 4 precipitation gage (STK), available at: https://cdec.water.ca.gov/dynamicapp/QueryMonthly?s=STK

A.4.1.2. Data Sources

Table 1 identifies data sources of daily unimpaired flow for each river tributary location in the Delta watershed. Daily unimpaired flows from these data sources represent flows that occurred at least one day prior to the current day. CNRFC estimates of daily unimpaired flow are immediately published to the CNRFC website, while Department of Water Resources (DWR) methods for estimating daily unimpaired flow may include an availability lag of one to three days, assuming flow gage instruments are operating properly. Some river or tributary locations in Table 1 do not have an estimate of daily unimpaired flow from CNRFC or DWR. For these river and tributary locations, Table 1 identifies a data source on a different tributary and a flow coefficient from Table 3 that, when multiplied by the daily unimpaired flow source data, reasonably approximates daily unimpaired flow on that tributary. Certain locations require an adjustment factor to estimate the unimpaired flows at that location; Table 1 identifies which locations require an adjustment factor and Table 2 provides the factor. When summing flows from river and tributary locations identified in Table 1, include any negative values as reported and use the greater of the seven-day average or zero.

Table 1.
Sources of unimpaired flow data

River/Tributary Location (Station ID)	Data Source and Adjustment (if applicable)
Sacramento River above Bend Bridge (SBB) Feather River at Oroville (FTO) Yuba River near Smartsville (YRS) American River at Nimbus Dam (AMF) Cosumnes River at Michigan Bar (CSN) Mokelumne River at Pardee Dam (MKM)	Daily full natural flow (FNF), in cfs, reported with 1-3 day lag in availability at: https://cdec.water.ca.gov/reportapp/javareports?name=FNF

River/Tributary Location (Station ID)	Data Source and Adjustment (if applicable)
Stanislaus River at Goodwin (SNS) Tuolumne River at La Grange Dam (TLG) Merced River near Merced Falls (MRC) San Joaquin River below Friant Dam (SJF)	
Calaveras River a New Hogan Reservoir (NHGC1) Fresno River at Hensley Lake (HIDC1) Chowchilla River at Buchanan Reservoir (BHNC1) Mariposa Creek at Mariposa Reservoir (MPAC1) Owens Creek at Owens Reservoir (OWCC1)	Daily FNF, reported as "Raw Daily Observation (kaf)", on same day at: https://www.cnrfc.noaa.gov/ensembleProductTabular.php?id=[station]&prodID=9 Replace [station] with the 5-digit Station ID associated with each river or creek, listed to the left. Select appropriate Water Year and convert values from thousand acre-feet (kaf) to cfs. When summing, include negative values as reported and use the greater of the 7-day average or zero.
Stony Creek at Black Butte	Estimated based on Stony Creek at East Park Reservoir (EPRC1) daily FNF, reported as "Raw Daily Observation (kaf)," on same day at: https://www.cnrfc.noaa.gov/ensembleProductTabular.php?id=EPRC1&prodID=9 Select appropriate Water Year and convert values from thousand acre-feet to cfs. When summing, include negative values as reported and use the greater of the 7-day average or zero. Multiply 7-day average EPRC1 value by the Stony Increase Factor (SIF) in Table **2** for the appropriate time period.
Cache Creek above Rumsey	Estimated based on Stony Creek at Black Butte (EPRC1*SIF) value.

River/Tributary Location (Station ID)	Data Source and Adjustment (if applicable)
	Multiply 7-day average Stony Creek value by the Cache-Stony Ratio (CSR) in Table 3 for the appropriate time period.
Bear River near Wheatland	Estimated based on Yuba River near Smartsville (YRS) value. Multiply 7-day average Yuba River value by the Bear-Yuba Ratio (BYR) in Table 3 for the appropriate time period.
Putah Creek near Winters	Estimated based on Stony Creek at Black Butte (EPRC1*SIF) value. Multiply 7-day average Stony Creek value by the Putah-Stony Ratio (PSR) in Table 3 for the appropriate time period.
Sacramento Valley West Side Minor Streams	Estimated based on Elder Creek at Paskenta (EDCC1) and Thomes Creek at Paskenta (TCRC1) daily FNF, reported as “Raw Daily Observation (kaf),” on same day at: https://www.cnrfc.noaa.gov/ensembleProductTabular.php?id=[station]&prodID=9 Replace [station] with the 5-digit Station ID associated with each creek, listed above. Select appropriate Water Year and convert values from thousand acre-feet to cfs. When summing, include negative values as reported and use the greater of the 7-day average or zero. Multiply 7-day average (EDCC1 + TCRC1) value by the Elder-Thomes Increase Factor (ETIF) in Table 2 for the appropriate time period.
Sacramento Valley East Side Minor Streams	Estimated based on Mill Creek at Los Molinos (MLMC1), Deer Creek at Vina (DCVC1), and Butte Creek at Chico (BKCC1) daily FNF, reported as “Raw Daily Observation (kaf),” on same day at: https://www.cnrfc.noaa.gov/ensembleProductTabular.php?id=[station]&prodID=9 Replace [station] with the 5-digit Station ID associated with each creek, listed above. Select appropriate Water Year and convert values from thousand acre-feet to cfs. When

River/Tributary Location (Station ID)	Data Source and Adjustment (if applicable)
	summing, include negative values as reported and use the greater of the 7-day average or zero. Multiply 7-day average (MLMC1 + DCVC1 + BKCC1) value by the Mill-Deer-Butte Increase Factor (MDBIF) in Table 2 for the appropriate time period.
San Joaquin Valley West Side Minor Streams	Estimated based on Stanislaus River at Goodwin (SNS), Tuolumne River at La Grange Dam (TLG), Merced River near Merced Falls (MRC), and San Joaquin River below Friant Dam (SBF) values. Multiply 7-day average (SNS + TLG + MRC + SBF) value by the San Joaquin Valley Ratio (SJVR) in Table 3 for the appropriate time period.
San Joaquin Valley East Side Minor Streams	Estimated based on Mokelumne River at Pardee Dam (MKM) and Cosumnes River at Michigan Bar (CSN) values. Multiply 7-day average (MKM + CSN) value by the San Joaquin-Mokelumne-Cosumnes Ratio (SJMCR) in Table 3 for the appropriate time period.

Table 2.

Factors used to estimate small tributary unimpaired flows by increasing existing gage values

Month	Stony Increase Factor (SIF)	Elder-Thomes Increase Factor (ETIF)	Mill-Deer-Butte Increase Factor (MDBIF)
Jan	4.412	1.078	1.458
Feb	2.315	2.833	1.524
Mar	4.290	1.212	1.573
Apr	3.089	1.270	1.572
May	1.282	1.483	1.714
Jun	1.000	5.252	1.639
Jul	1.000	9.216	1.530
Aug	1.000	22.222	1.515
Sep	1.000	1.000	1.587
Oct	1.000	3.227	1.635
Nov	3.831	1.714	1.495
Dec	3.631	1.320	1.506

Table 3.
Factors used to estimate small tributary unimpaired flows based on other streams

Month	Cache-Stony Ratio (CSR)	Bear-Yuba Ratio (BYR)	Putah-Stony Ratio (PSR)	San Joaquin Valley Ratio (SJVR)	San Joaquin-Mokelumne-Cosumnes Ratio (SJMCR)
Jan	1.085	0.222	0.926	0.004	0.516
Feb	1.351	0.225	1.044	0.003	0.605
Mar	1.347	0.180	0.840	0.002	0.447
Apr	1.449	0.094	0.592	0.001	0.207
May	1.998	0.043	0.559	0.000	0.061
Jun	3.377	0.047	0.584	0.000	0.035
Jul	5.479	0.076	0.565	0.000	0.035
Aug	4.250	0.066	0.700	0.000	0.051
Sep	6.258	0.089	0.359	0.000	0.073
Oct	3.971	0.117	0.362	0.001	0.072
Nov	1.413	0.135	0.656	0.001	0.179
Dec	1.031	0.211	0.838	0.002	0.317

In the event that data sources identified in Table 1 are unavailable, Table 4 identifies alternative sources of unimpaired flow data.

Table 4.

Alternate sources of unimpaired flow data

River/Tributary Location (Station ID)	Alternate Data Source
Sacramento River - Bend Bridge (BDBC1) Feather River - Lake Oroville (ORDC1) Yuba River - Englebright Reservoir (HLEC1) American River - Folsom Lake (FOLC1) Cosumnes River - Michigan Bar (MHBC1) Mokelumne River - Pardee Dam (CMPC1) Stanislaus River - New Melones Reservoir (NMSC1) Tuolumne River - New Don Pedro Reservoir (NDPC1) Merced River - Exchequer Reservoir (EXQC1) San Joaquin River - Millerton Reservoir (FRAC1)	Daily FNF, reported as "Raw Daily Observation (kaf)," on same day at: https://www.cnrfc.noaa.gov/ensembleProductTabular.php?id=[station]&prodID=9 Replace [station] with the 5-digit Station ID associated with each river or creek, listed to the left. Select appropriate Water Year and convert values from thousand acre-feet to cfs. When summing, include negative values as reported and use the greater of the 7-day average or zero.

A.4.2. Daily Delta Outflow

Daily Delta Outflow shall be calculated as the Net Delta Outflow Index (NDOI), as set forth in State Water Board Revised Water Right Decision 1641, Figure 3. Daily Delta Outflow estimates are summed over seven days and averaged to produce a seven-day average. A three-day lag shall be applied to the seven-day average calculation of daily

Delta Outflow (seven-day average daily Delta Outflow$_{3\text{-day lag}}$) to ensure that all daily Delta Outflow data are available to complete the necessary calculations. The seven-day average daily Delta Outflow$_{3\text{-day lag}}$ is updated daily to produce a "running" average.

A.4.3. Delta Outflow as a Percent of Unimpaired Flow

The percentage of daily Unimpaired Delta Outflow shall be calculated using the following equation:

*Percent of Daily Unimpaired Delta Outflow = (7-day average daily Delta Outflow$_{3\text{-day lag}}$ / 7-day average daily Unimpaired Delta Outflow$_{3\text{-day lag}}$) * 100*

Percent of Daily Unimpaired Delta Outflow = (seven-day average daily Delta Outflow$_{3\text{-day lag}}$ / seven-day average daily Unimpaired Delta Outflow$_{3\text{-day lag}}$) * 100

The percent of daily unimpaired Delta outflow as a seven-day average, with a three-day lag, shall be calculated as a running average that is updated daily.

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