

AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, SEPTEMBER 27, 2018

CALL TO ORDER 3:00 p.m., Committee Room, Second Floor, District Office
15600 Sand Canyon Avenue, Irvine, California

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

<u>ALSO PRESENT</u>	Paul Cook	_____	Cheryl Clary	_____
	Rob Jacobson	_____	Wendy Chambers	_____
	Ray Bennett	_____	Paul Weghorst	_____
	Jo Ann Corey	_____	Kellie Welch	_____
	Fiona Sanchez	_____	Dane Johnson	_____
	Claire Collins	_____	_____	_____

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. | <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, PROGRAMS, AND CENTENNIAL CORRIDOR PROJECT OVERVIEW – JOHNSON / WELCH / SANCHEZ / WEGHORST</u> | |
|----|--|--|

Recommendation: Receive and file.

ACTION

- | | | |
|----|--|--|
| 6. | <u>REVISED TERMS FOR IRVINE LAKE EMERGENCY WATER SUPPLY PROGRAM – CLARY / WEGHORST</u> | |
|----|--|--|

Recommendation: That the Committee provide input on the draft terms for an Irvine Lake Emergency Supply Pilot Program that are presented at the Committee meeting.

OTHER BUSINESS

7. CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Sec. 54956.8).

Property Parcels: 048-210-030, 048-210-031, 048-210-033, 048-210-036, 048-210-042, 048-210-007, 048-210-021, 048-210-040, County of Kings.

IRWD negotiators: Paul Cook, General Manager and Paul Weghorst, Executive Director of Water Policy.

Negotiating parties: Sandridge Partners.

Under negotiation: Lease price and terms of payment.

8. Directors' Comments

9. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance of the meeting room at the District Office. The Irvine Ranch Water District Committee Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in an alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

September 27, 2018

Prepared by: D. Johnson / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, PROGRAMS, AND CENTENNIAL CORRIDOR PROJECT OVERVIEW

SUMMARY:

Staff has prepared information related to IRWD's water banking facilities, capacities, operations, and exchange programs that may serve as reference during the Committee meeting. The information is presented in a format that can be updated as necessary to reflect changes in IRWD's projects, programs, and operations. At the Committee meeting, staff will review this information and provide an update on ongoing efforts to secure additional water for recharge at IRWD's water banking projects and expected recovery operations for the year. Additionally, staff will provide an update on the Centennial Corridor Project in Kern County and discuss any potential impacts to IRWD's Strand and Stockdale West properties.

BACKGROUND:

To assist with the facilitation of Committee meeting discussions, staff has prepared reference materials in tabular, map, and schematic formats that describe IRWD's water banking facilities, capacities, operations, and exchange programs. The reference materials will be updated, as needed, to reflect changes to the projects, programs, and operations. Following is an overview of the reference materials provided as well as information regarding IRWD's 2018 water banking operations. In addition, an update is provided on the Centennial Corridor Project in Kern County including any potential impacts to IRWD's Strand and Stockdale West properties.

Capacity and Operations Tables:

A table presenting storage, recharge and recovery capacities of existing and planned IRWD water banking projects, including capacities available to IRWD in the Kern Water Bank, is attached 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 at the water banking projects, and Exhibit "C" provides after-loss estimates of water recharged at the projects. Both Exhibits "B" and "C" include a column that provides totals for each water type and storage location.

2018 Recharge Opportunities:

Staff has been pursuing additional opportunities to secure recharge water for 2018. At the Committee meeting, staff will provide an update on efforts to secure water from:

- Dudley Ridge Water District (DRWD);
- Antelope Valley-East Kern Water Agency; and
- Mojave Water Agency.

2018 Recovery Operations:

In May 2018, Rosedale-Rio Bravo Water Storage District (Rosedale) recovered and delivered 1,667 acre feet (AF) to Buena Vista Water Storage District (BVWSD), as requested by BVWSD. BVWSD has a remaining balance of 4,532 AF in storage, after losses.

Project Maps:

To support the tables provided as Exhibits “A”, “B”, and “C”, staff has prepared maps that depict project wells and pipelines, recharge basins and Cross Valley Canal turnout locations, along with the most recent recharge rates. These maps are provided as Exhibits “D”, “E”, and “F”, respectively. The facilities shown on these maps are associated with the Strand Ranch, Stockdale West, Stockdale East, and Rosedale Drought Relief Projects.

Program Agreement Diagrams:

Schematic diagrams have been prepared that depict the IRWD water banking and exchange programs with Rosedale, BVWSD, DRWD, and Metropolitan Water District of Southern California. These diagrams are provided as Exhibits “G”, “H”, “I”, “J”, and “K” as described in the List of Exhibits.

Centennial Corridor Project:

The City of Bakersfield, in cooperation with the County of Kern and the California Department of Transportation (Caltrans), is constructing the Centennial Corridor Project (Project) that will provide a new alignment for State Route 58 and a continuous route from State Route 99 to Interstate 5. The Project is needed to provide route continuity and associated traffic congestion relief. The preferred alignment for the proposed Project was selected as the result of screening 19 alternatives and is being constructed in three segments (Caltrans, December 2015). A Final Environmental Impact Report (FEIR) for the Project was certified in 2015. Exhibit “L” shows each of the Project’s three segments along with the location of the District’s Strand Ranch and Stockdale West properties. A brief description of the segments is as follows:

1. Segment 1 of the Project will connect the existing State Route 58 (East) freeway near State Route 99 to the recently completed Westside Parkway. The FEIR for the Project evaluated three alternative alignments for Segment 1 and identified Alternative B as the preferred alternative.
2. Segment 2 is an upgrade to the Westside Parkway that will connect Segment 1 to Stockdale Highway and become the new State Route 58 (West). The Rosedale Highway, which is the current State Route 58 (West), will be relinquished from the state system to local jurisdiction.
3. Segment 3 will link Stockdale Highway to the Westside Parkway to allow a continuous route to Interstate 5 using the existing Stockdale Highway with one traffic lane in each direction. These improvements include a roundabout at the intersection of Stockdale Highway and Enos Lane that is being constructed at the same time as the Segment 1 improvements.

Project Roundabout:

Construction of the Project's roundabout at the intersection of Stockdale Highway and Enos Lane requires approximately 1.46 acres of the Strand Ranch and a temporary construction easement of 0.3 acres. To mitigate potential impacts on water banking activities, a 395-foot long wall will be constructed. On August 13, 2018, the Board authorized the General Manager to execute a purchase and sale agreement with the City of Bakersfield that facilitates the sale of the land, granting of an easement, construction of the wall, and reimbursement of IRWD's costs.

Other Future Improvements:

The Project FEIR proposed no other improvements within Segment 3. Additional environmental review would be needed for the construction of any additional proposed improvements to Segment 3. The need for such improvements is not expected until the year 2038 and beyond. Future impacts to the IRWD's Strand Ranch and Stockdale West properties that could occur as a result of any future improvements to Stockdale Highway (Segment 3) are not known. Staff will monitor the Centennial Corridor Project activities and provide periodic updates to the Committee as needed.

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" – Map of Water Banking Project Wells and Pipelines
- Exhibit "E" – Map of Water Banking Recharge Basins and Cross Valley Canal Turnout Facilities
- Exhibit "F" – Map of Water Banking Recharge Rates
- Exhibit "G" – Diagram of IRWD-Rosedale Water Banking and Exchange Program Agreements
- Exhibit "H" – 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 "I" – Diagram of Unbalanced Exchange Program Diagram with DRWD
- Exhibit "J" – Diagram of Coordinated Operating, Water Storage, Exchange and Delivery Agreement with MWD

Exhibit “K” – Diagram of Template Wheeling Agreement with MWD
Exhibit “L” – Centennial Corridor Project Segment Location

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
 September 27, 2018

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1 ST PRIORITY RECOVERY CONDITIONS (CFS)		2 ND PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED OR UNDER CONST.	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 ST PRIORITY	ANNUAL RECHARGE 2 ND PRIORITY	ANNUAL RECOVERY 1 ST PRIORITY	ANNUAL RECOVERY 2 ND PRIORITY	RECOVERY CAPACITY AS PLANNED ¹	ESTIMATED RECOVERY CAPACITY (DEC. 2016 CONDITIONS) ²	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	35.0	-	-
Stockdale West	Yes	3	-	26,000	27,100	-	11,250	-	15.0	15.0	-	-
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-	10.0	-
IRWD Acquired Storage Account ³	No	-	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells ³	No	-	3	-	-	-	-	-	15.0	-	-	-
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
TOTALS		10	5	126,000	44,600	19,000	28,750	7,500	70.0	50.0	10.0	0.0
Partner Capacities ⁴				36,000	22,300	9,500	12,000	0	35.5	25.0	-	-
IRWD Capacities				90,000	22,300	9,500	16,750	7,500	34.5	25.0	-	-
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)									12,420	9,000	-	-
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)									4,330	6,733	-	-
TOTALS (AF)									16,750	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)									8.1	9.7	-	-
Strand Ranch monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											4,518	
Stockdale West monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											2,331	

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

² Strand Ranch and Stockdale West wells currently idle.

³ IRWD has use of Acquired Storage and Drought Relief Project wells until January 12, 2039, unless the term of the agreement is extended.

⁴ One half of storage capacity at Stockdale West and Strand Ranch will be allocated for partners.

⁵ 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. Not included in storage capacity, recharge, and recovery totals to match IRWD's Water Banking Policy Position Paper.

Exhibit "B"

TABLE 2
IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES
September 27, 2018

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2017 (AF)						
Total Kern Water Bank	-	4,581	-	-	-	4,581
Total MWD System ⁴	8,873	-	-	-	1,174	10,047
Total Kern County	437	10,835	-	-	-	11,272
TOTAL STORED WATER (1/1/2017)	9,310	15,416	-	-	1,174	25,900
(RECOVERY) AND RECHARGE IN 2017 (AF)						
Kern Water Bank Deliveries	-	75	-	-	-	75
2017 SWP Allocation (85%) ³	787	-	-	-	787	1,574
2017 SWP Article 21 ⁵	1,744	-	-	-	1,744	3,488
SWP Table A (CCWA 2017 Exch.)	289	-	-	289	-	578
High Flow Kern River	-	6,869	6,869	-	-	13,738
MWD Water to Jackson Ranch ⁶	-	-	-	-	(143)	(143)
TOTAL 2017 TRANSACTIONS	2,820	6,944	6,869	289	2,388	19,310
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,873	-	-	-	1,174	10,047
Total Kern County	3,257	17,704	6,869	289	2,388	30,507
TOTAL STORED WATER (1/1/2018)	12,130	22,360	6,869	289	3,562	45,210
(RECOVERY) AND RECHARGE IN 2018 (AF)						
Kern Water Bank Deliveries	-	-	-	-	-	-
2018 SWP Allocation (35%) ³	310	-	-	-	310	620
High Flow Kern River	-	-	(1,667)	-	-	(1,667)
TOTAL ESTIMATED 2018 TRANSACTIONS	310	-	(1,667)	-	310	(1,047)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,873	-	-	-	1,174	10,047
Total Kern County	3,567	17,704	5,202	289	2,698	29,460
TOTAL ESTIMATED STORED WATER TO DATE	12,440	22,360	5,202	289	3,872	44,163

NOTES:

-MWD = Metropolitan Water District of Southern California.

¹ IRWD's SWP includes 437 AF from CVWD that stays in Kern County.

² IRWD's Non-SWP total includes 3,158 AF 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. IRWD's 2013-2016 SWP allocation amounts are stored in the MWD system. IRWD's 2017 SWP allocation water is stored in Kern County; assumes 2018 SWP water will be stored in Kern County.

⁴ Beginning balance of water stored in MWD system includes: 4,494 AF from 2014 Exchange, 3,206 AF of 2014 borrowed SWP, 649 AF of IRWD's 2013-2016 SWP allocations through DRWD.

⁵ Article 21 was delivered to Strand Ranch/Stockdale West from 3/8/17 - 3/22/17. Deliveries made pursuant to the DRWD/MWD Unbalanced Exchange Program.

⁶ Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.

Exhibit "C"

TABLE 3
IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES
September 27, 2018

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2017 (AF)						
Total Kern Water Bank	-	4,165	-	-	-	4,165
Total MWD System ⁴	7,917	-	-	-	1,174	9,091
Total Kern County	389	9,675	-	-	-	10,064
TOTAL STORED WATER (1/1/2017)	8,306	13,840	-	-	1,174	23,320
(RECOVERY) AND RECHARGE IN 2017 (AF)						
Kern Water Bank Deliveries	-	68	-	-	-	68
2017 SWP Allocation (85%) ³	669	-	-	-	708	1,377
2017 SWP Article 21 ⁵	1,479	-	-	-	1,566	3,044
SWP Table A (CCWA 2017 Exch.)	246	-	-	246	-	491
High Flow Kern River	-	5,889	6,199	-	-	12,088
MWD Water to Jackson Ranch ⁶	-	-	-	-	(143)	(143)
TOTAL 2017 TRANSACTIONS	2,393	5,957	6,199	246	2,131	16,925
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	2,782	15,564	6,199	246	2,131	26,921
TOTAL STORED WATER (1/1/2018)	10,699	19,797	6,199	246	3,305	40,245
(RECOVERY) AND RECHARGE IN 2018 (AF)						
Kern Water Bank Deliveries	-	-	-	-	-	-
2018 SWP Allocation (35%) ³	264	-	-	-	264	528
High Flow Kern River	-	-	(1,667)	-	-	(1,667)
TOTAL ESTIMATED 2018 TRANSACTIONS ⁷	264	-	(1,667)	-	264	(1,139)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	3,046	15,564	-	246	2,395	21,250
TOTAL ESTIMATED STORED WATER TO DATE	10,963	19,797	4,532	246	3,569	39,106

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 DRWD and BVWSD in Kern County is adjusted 10% (6% for surface loss and 4% for reserve loss); KWB losses are 10%; no losses for water directly delivered to MWD system.

-MWD = Metropolitan Water District of Southern California.

¹ IRWD's SWP includes 389 AF from CVWD that stays in Kern County.

² IRWD's Non-SWP total includes 2,842 AF 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. IRWD's 2013-2016 SWP allocation amounts are stored in the MWD system.

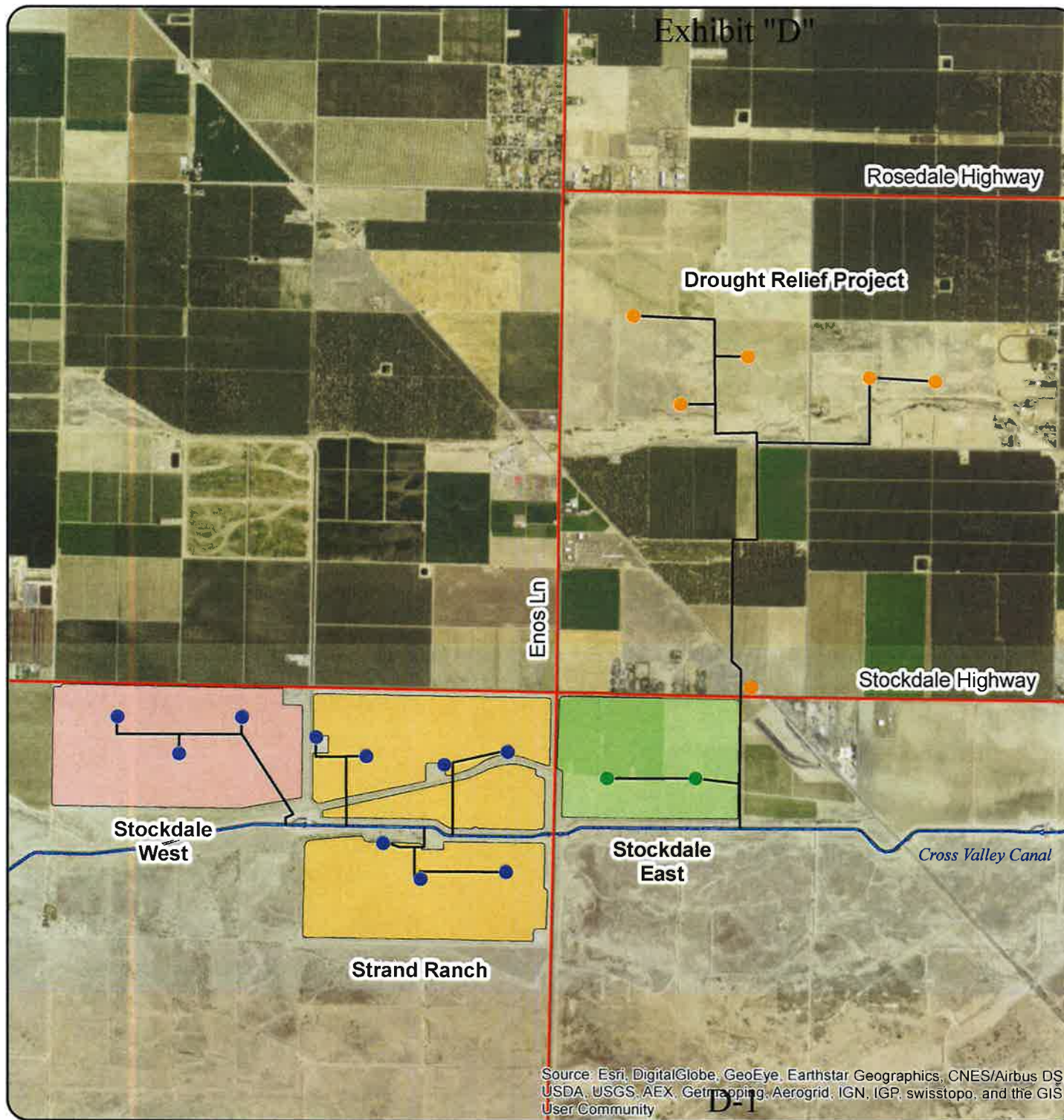
IRWD's 2017 SWP allocation water is stored in Kern County; assumes 2018 SWP water will be stored in Kern County.

⁴ Beginning balance of water stored in MWD system includes (net of CVC losses): 3,920 AF of 2014 Exchange, 2,824 AF of 2014 borrowed SWP, 649 AF of IRWD's 2013-2016 SWP allocations through DRWD.

⁵ Article 21 was delivered to Strand Ranch/Stockdale West from 3/8/17 - 3/22/17. Deliveries made pursuant to the DRWD/MWD Unbalanced Exchange Program. 9 AF of additional CVC losses, split among IRWD and DRWD, are reflected in these amounts.

⁶ Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.

⁷ 2018 transactions may be adjusted for conveyance losses in CVC.



Irvine Ranch
WATER DISTRICT

Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

MAP FEATURES

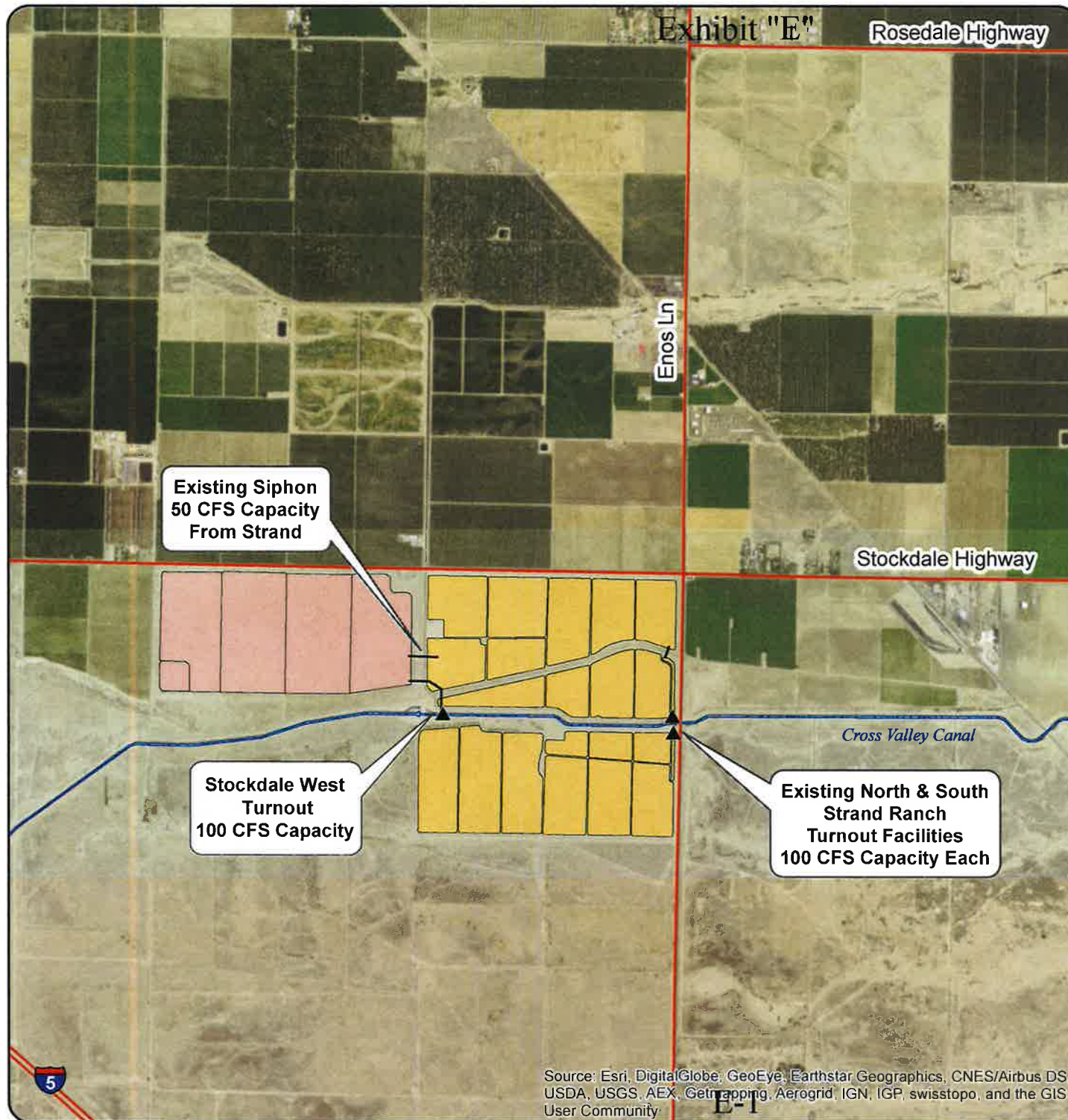
- Existing Extraction Well
- Planned Extraction Well
- Well Under Construction
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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

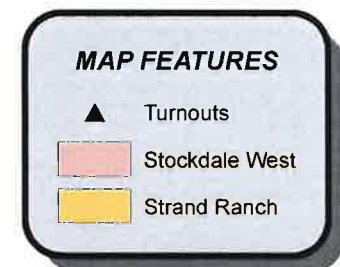


0 0.25 0.5 1 Miles

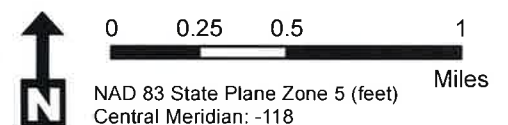
NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

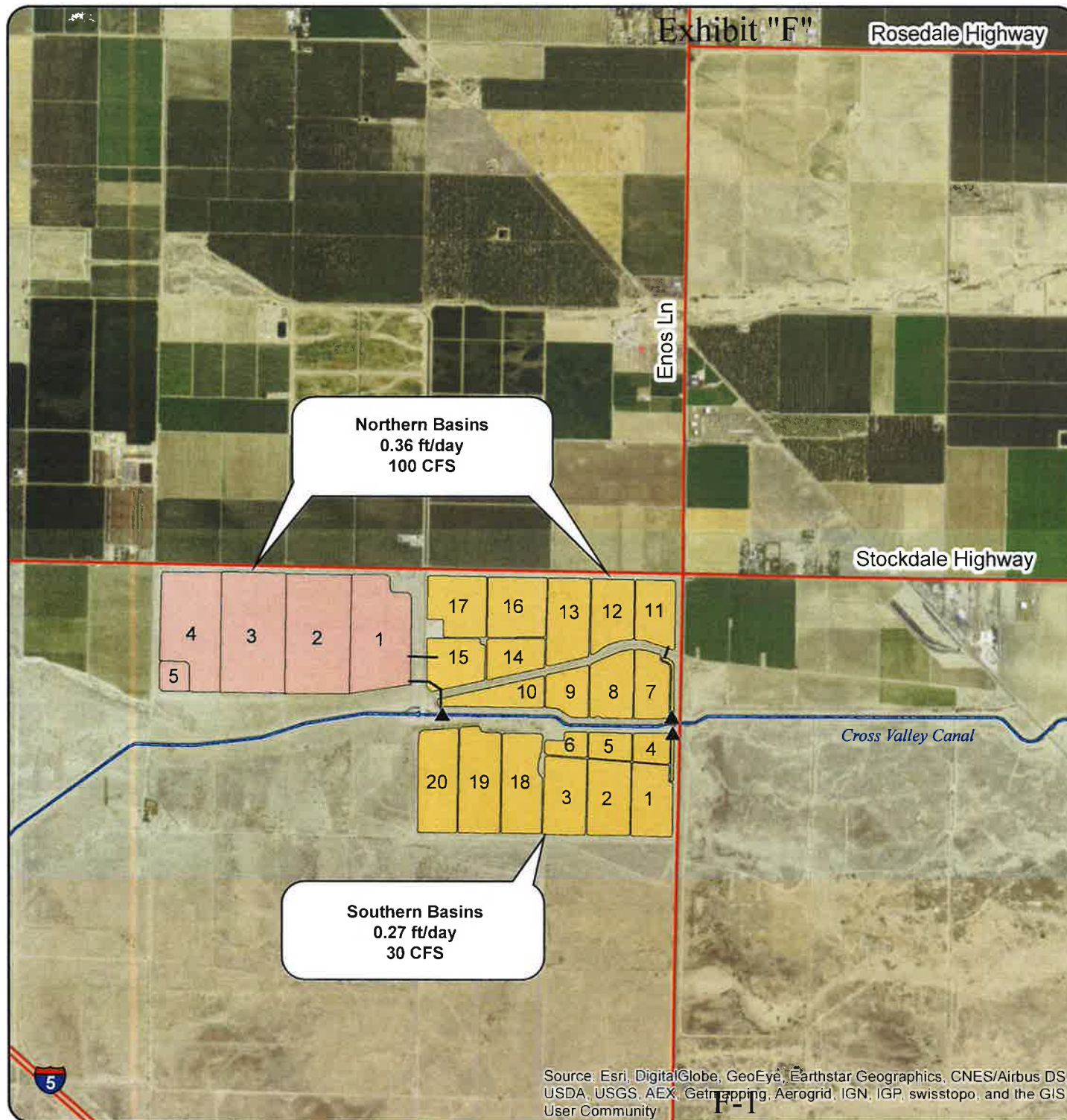


**Location Map:
IRWD Water Banking Projects
Recharge Basins & Turnout
Facilities**

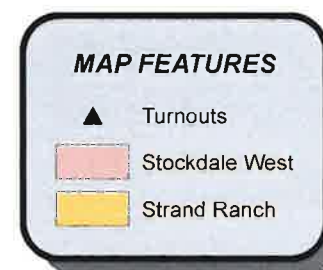


This figure shows the location of recharge basins as well as existing and anticipated pipelines and turnout facilities.





Location Map: IRWD Water Banking Projects Recharge Rates



This figure shows the location of recharge basins and their associated recharge rates as of December 2017. Recharge rates will be updated if rates change in 2018.

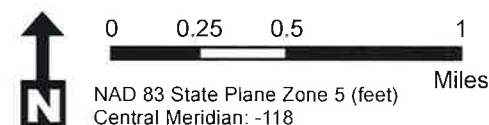


Exhibit "G"

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)

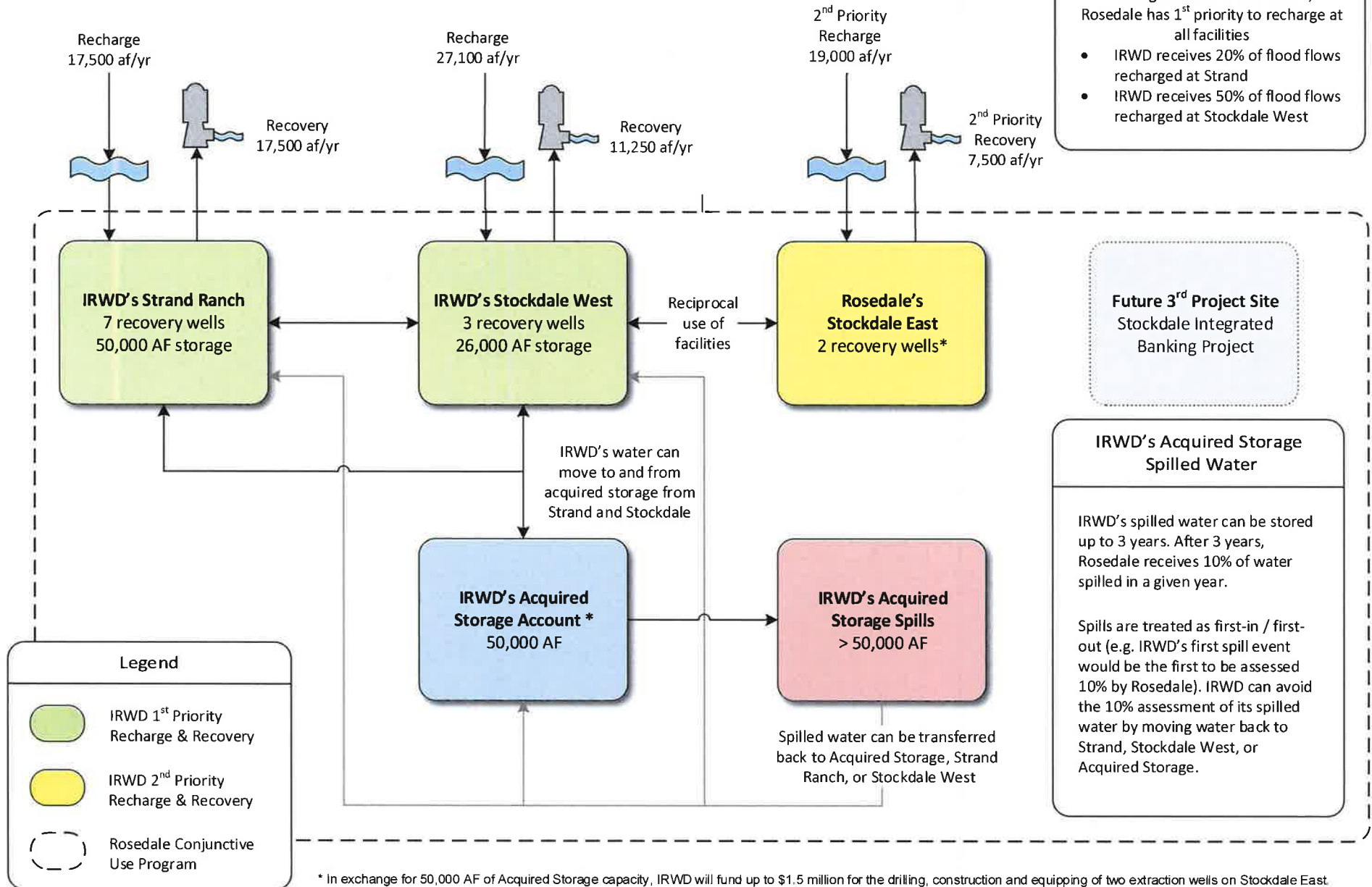
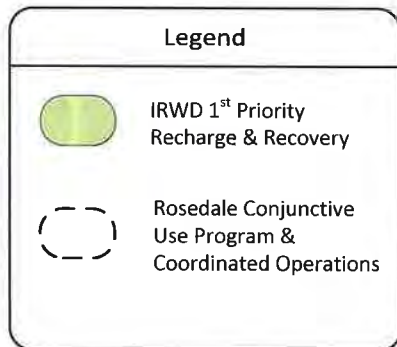
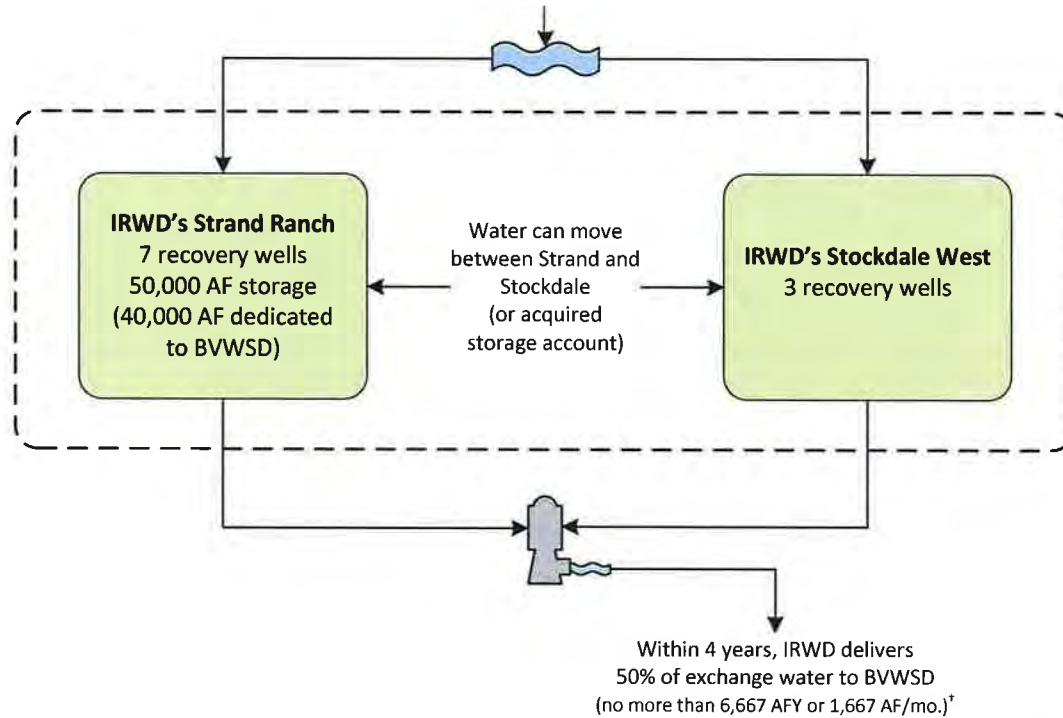


Exhibit "H"

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

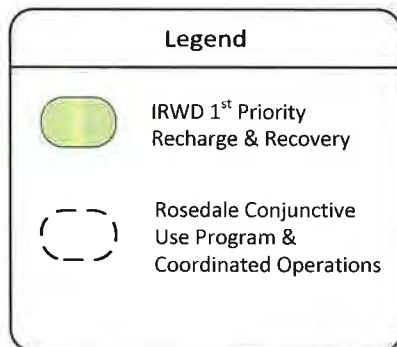
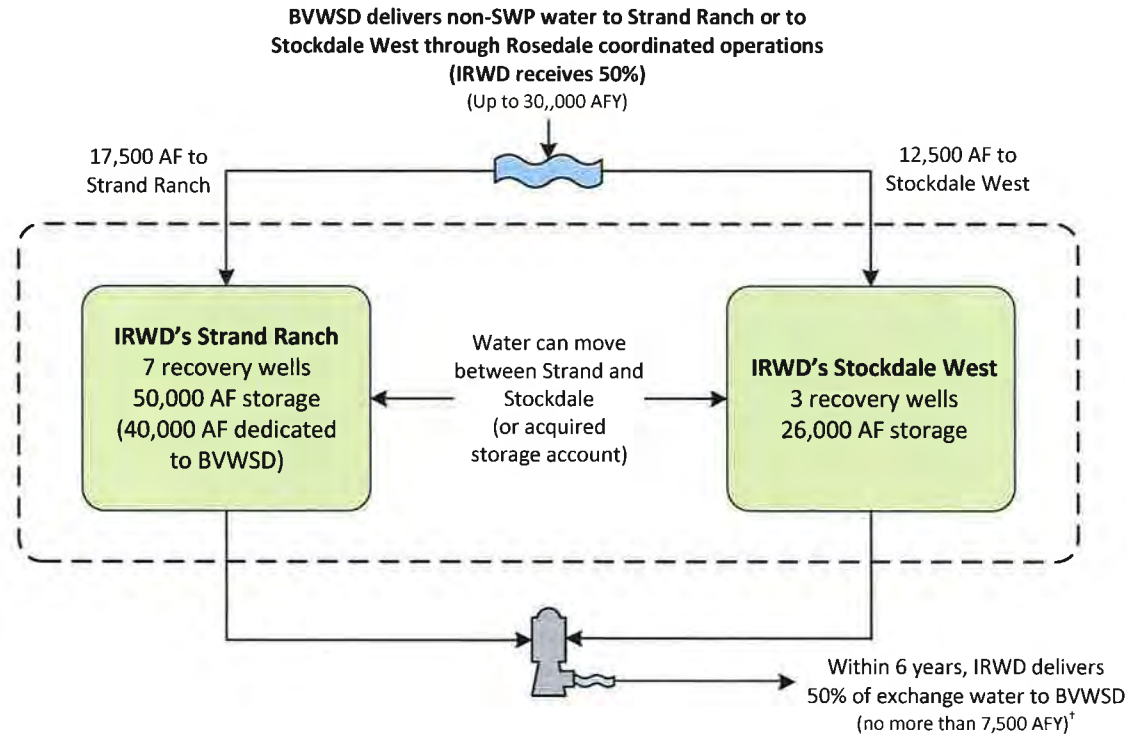
BVWSD delivers non-SWP water to Strand Ranch or to
Stockdale West through Rosedale coordinated operations
(IRWD receives 50%)
(Up to 17,500 AFY or 4,375 AF/mo.)



[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 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 4/1/2017 through 3/20/2018



*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 6th 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 6th year, in exchange for a greater percent being transferred to IRWD as compensation per the table shown to the right:

Modified for 1-Year Recharge Program Only

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	50%	50%
6	50%	50%
7	75%	25%
8	100%	0%
9	100%	0%

Exhibit "I"

Dudley Ridge Water District (DRWD) Unbalanced Exchange Program

Up to 12,240 AF delivered from 2/15/2018 through 12/31/2027

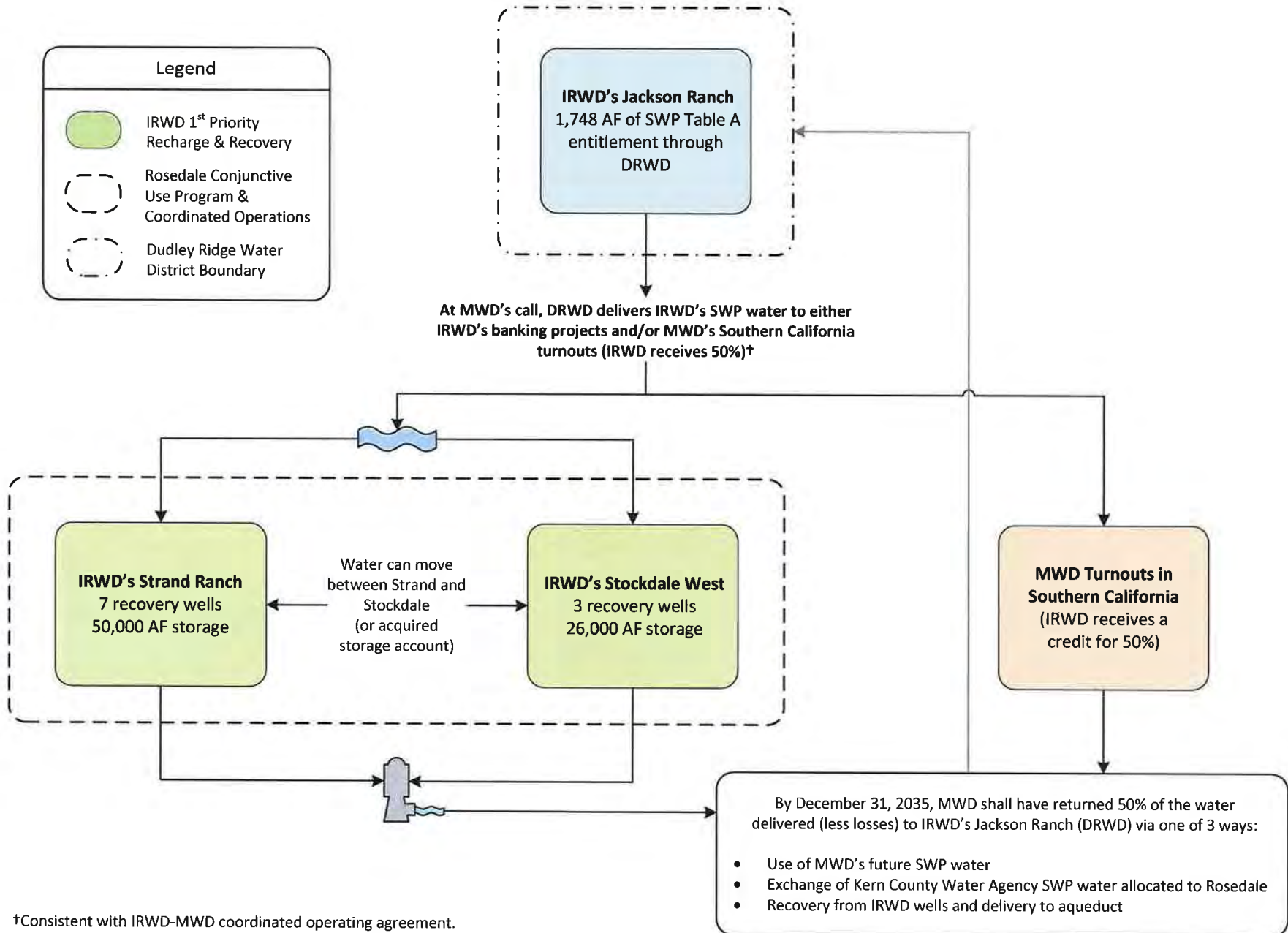


Exhibit "J"

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

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

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

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

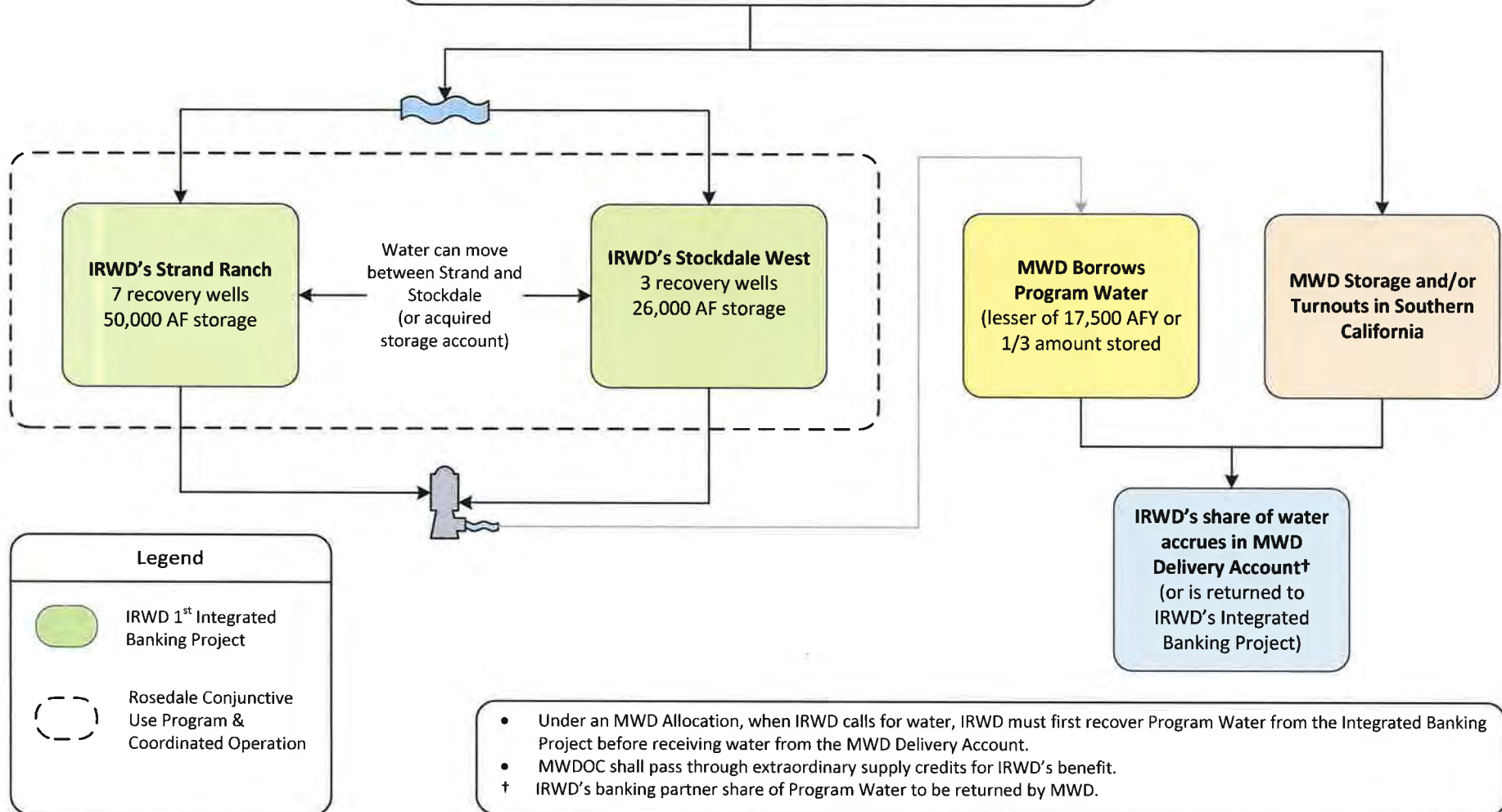
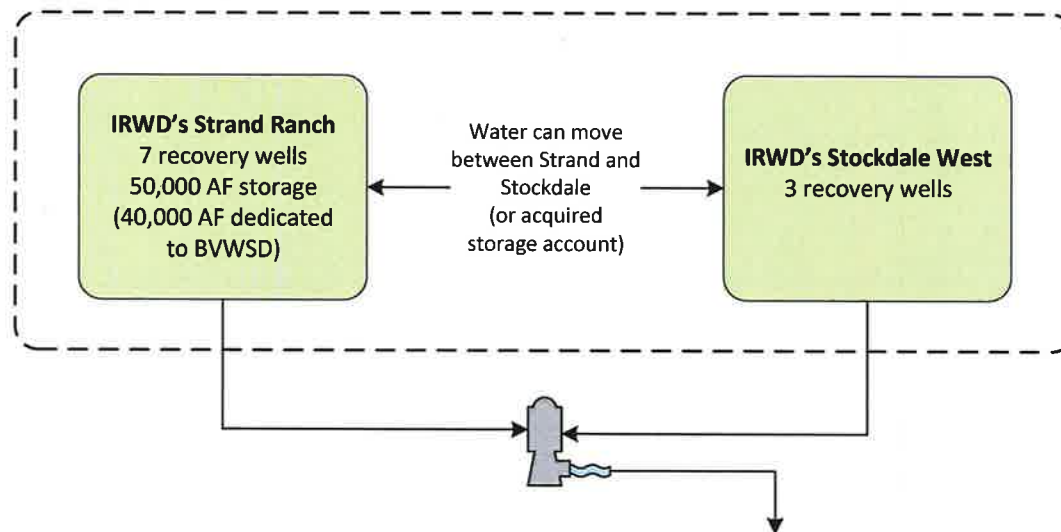
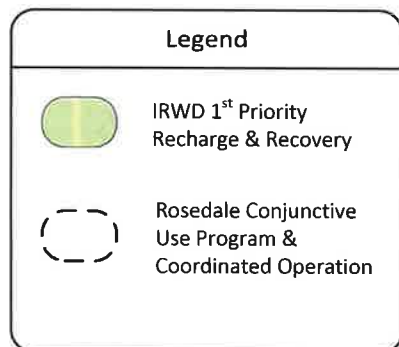


Exhibit "K"
Agreement for Conveyance of Water Between MWD, MWDOC, and IRWD (Wheeling Agreement)
Template for future agreements



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.

September 27, 2018

Prepared and

Submitted by: C. Clary / P. Weghorst

Approved by: Paul A. Cook



SUPPLY RELIABILITY PROGRAMS COMMITTEE

REVISED TERMS FOR IRVINE LAKE EMERGENCY WATER SUPPLY PROGRAM

SUMMARY:

The Baker Water Treatment Plant participants have expressed interest in obtaining a supply of water from Irvine Lake during emergencies. This water could be delivered and treated at the Baker Plant in the event of an outage in Metropolitan Water District of Southern California's system or during other emergencies. In August 2018, staff presented draft price and payment terms for an Irvine Lake Emergency Pilot Exchange Program that could be mutually beneficial to the Baker Plant participants, IRWD, and Serrano Water District (SWD). As a result of discussions with the Baker Plant participants, staff has prepared revised terms for an Irvine Lake Emergency Supply Pilot Program that would be simpler to implement. These revised terms will be presented at the Committee meeting. Staff recommends that the Committee provide input on the revised draft price and payment terms.

BACKGROUND:

In 2016, Municipal Water District of Orange County (MWDOC) completed the *Orange County Water Reliability Study* which concluded that south Orange County retail water agencies have a need for access to emergency water that could be available in the event of a 60-day outage of Metropolitan's system or during other emergencies. Consistent with these conclusions, the Baker Plant participants have expressed interest in improving their system reliability by having access to emergency supplies from Irvine Lake. It is anticipated that IRWD and SWD (as co-owners of Irvine Lake) could collaborate to provide emergency water to the participants from Irvine Lake.

In August 2018, staff reviewed with the Committee draft price and payment terms for an Irvine Lake Emergency Pilot Exchange Program that were based on 2-for-1 unbalanced exchanges of water. At the request of the Committee, staff discussed the opportunities for an emergency program with the Baker Plant participants. As a result of these discussions, staff has prepared revised draft price and payments terms for an Irvine Lake Emergency Supply Pilot Program that would be simpler to implement while being based on cost-of-service deliveries of water rather than exchanges. At the Committee meeting, staff will present the revised draft terms as well as details related to the cost elements. Staff recommends that the Committee provide input on the revised price and payment terms.

FISCAL IMPACTS:

The price and payment terms associated with the proposed Irvine Lake Emergency Supply Pilot Program will be presented at the Committee meeting. Consistent with these terms, IRWD (and SWD) would be reimbursed for a pro-rata share of operating and maintenance costs, evaporative losses and capital investments.

ENVIRONMENTAL COMPLIANCE:

The implementation of the proposed Irvine Lake Emergency Supply Pilot Program may be subject to environmental review consistent with the California Environmental Quality Act. Staff will return to the Committee in the future with any necessary recommendations for environmental review associated with the program.

RECOMMENDATION:

That the Committee provide input on the draft terms for an Irvine Lake Emergency Supply Pilot Program that are presented at the Committee meeting.

LIST OF EXHIBITS:

None.