AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, OCTOBER 18, 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	____		
ALSO PRESENT	Paul Cook	____	Cheryl Clary	____
	Rob Jacobson	____	Wendy Chambers	____
	Ray Bennett	____	Paul Weghorst	____
	Jo Ann Corey	____	Kellie Welch	____
	Fiona Sanchez	____	Dane Johnson	____
	Natalie Palacio	____	Christine Compton	____
	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. WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, AND PROGRAMS – JOHNSON / WELCH / SANCHEZ / WEGHORST

   Recommendation: Receive and file.

ACTION

6. UPDATE ON THE KERN FAN GROUNDWATER STORAGE PROJECT AND JOINT POWERS AUTHORITY AGREEMENT – SANCHEZ / WEGHORST

   Recommendation: That the Committee provide input on the Joint Powers Authority Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project.

ACTION (Continued)

7. REVISED TERMS FOR IRVINE LAKE EMERGENCY WATER SUPPLY PROGRAM – CLARY / WEGHORST

   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.

8. REVISED CONCEPTUAL TERMS FOR A STORAGE AND EXCHANGE PROGRAM WITH METROPOLITAN WATER DISTRICT – WELCH / SANCHEZ / WEGHORST

   Recommendation: That the Committee provide input on the revised Conceptual Terms for a Storage and Exchange Program with Metropolitan Water District of Southern California and authorize staff to work with Metropolitan to finalize the terms.

9. IRWD COMMENTS ON MUNICIPAL WATER DISTRICT OF ORANGE COUNTY'S 2018 WATER SUPPLY RELIABILITY STUDY UPDATE – WEGHORST

   Recommendation: That the Board approve the letter to the Municipal Water District of Orange County providing comments on its 2018 Water Supply Reliability Study Update, as revised based on input received from the Committee.

OTHER BUSINESS

10. Directors' Comments

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 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.

October 18, 2018
Prepared by: D. Johnson / K. Welch
Submitted by: F. Sanchez / P. Weghorst PW
Approved by: Paul A. Cook P. 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 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.

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.

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. There have been no changes to any of the capacity and operations tables since they were reviewed last month with the Committee.

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 (MWD). These diagrams are provided as Exhibits "G", "H", "I", "J" and "K" as described in the List of Exhibits.

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 BVWSD and Diagram of One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities with BVWSD

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 "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
October 18, 2018

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1st PRIORITY RECOVERY CONDITIONS (CFS)		2nd PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED OR UNDER CONST.	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1ST PRIORITY	ANNUAL RECHARGE 2ND PRIORITY	ANNUAL RECOVERY 1ST PRIORITY	ANNUAL RECOVERY 2ND 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 ***during*** 6 month partner recovery period (AF)	12,420	9,000	-	-
IRWD's recovery ***after*** 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 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] 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
October 18, 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 deliverd 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
October 18, 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.

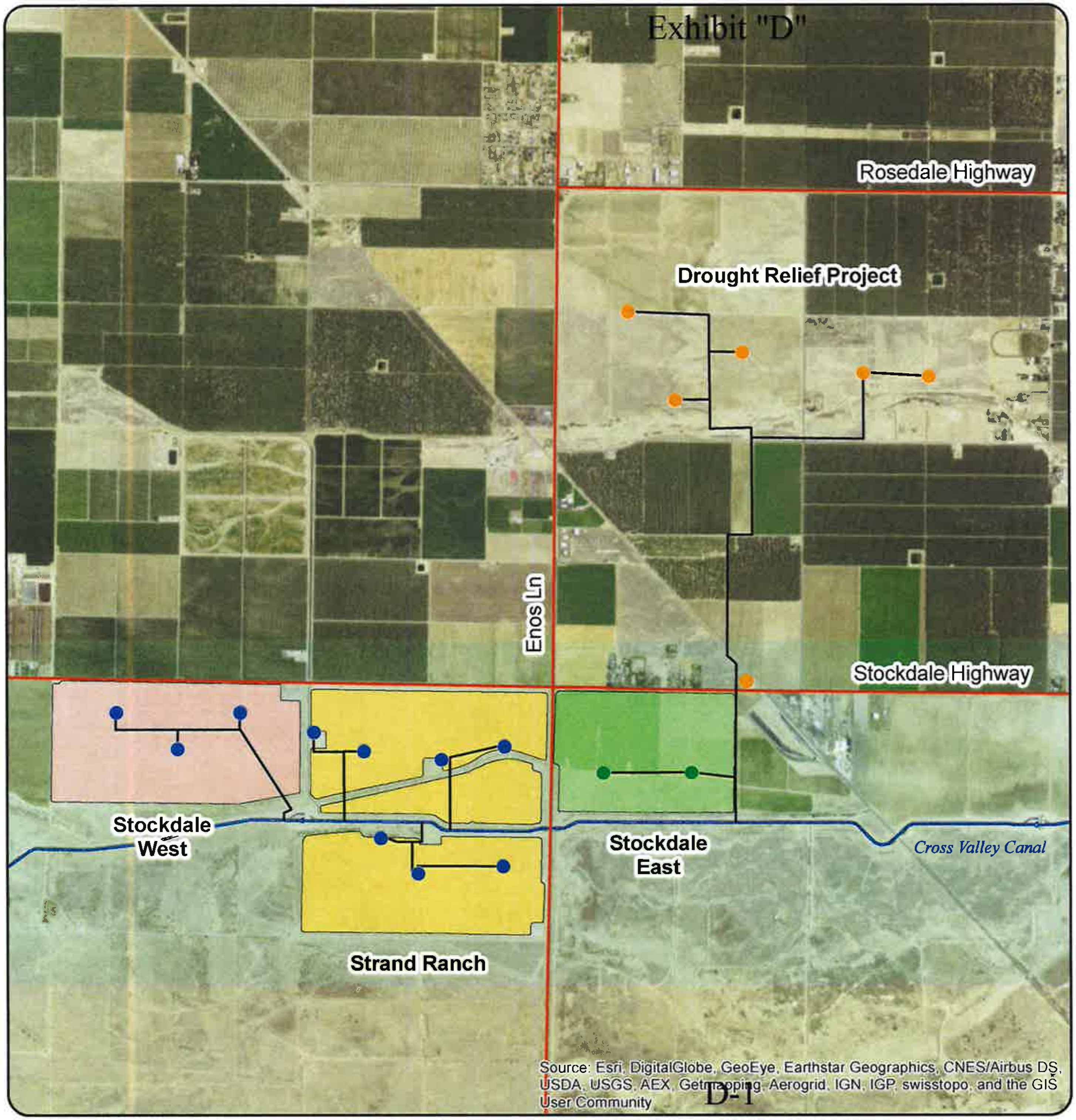
[4] Beginning balance of water stored in MWD system includes (net of CVC losses): 3,920 AF of 2014 Exchange, 2,824 AF of 2014 borrowed SWP, 649 AF of IRWD's 2013-2016 SWP allocations through DRWD.

[5]Article 21 was deliverd 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.

Exhibit "D"



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

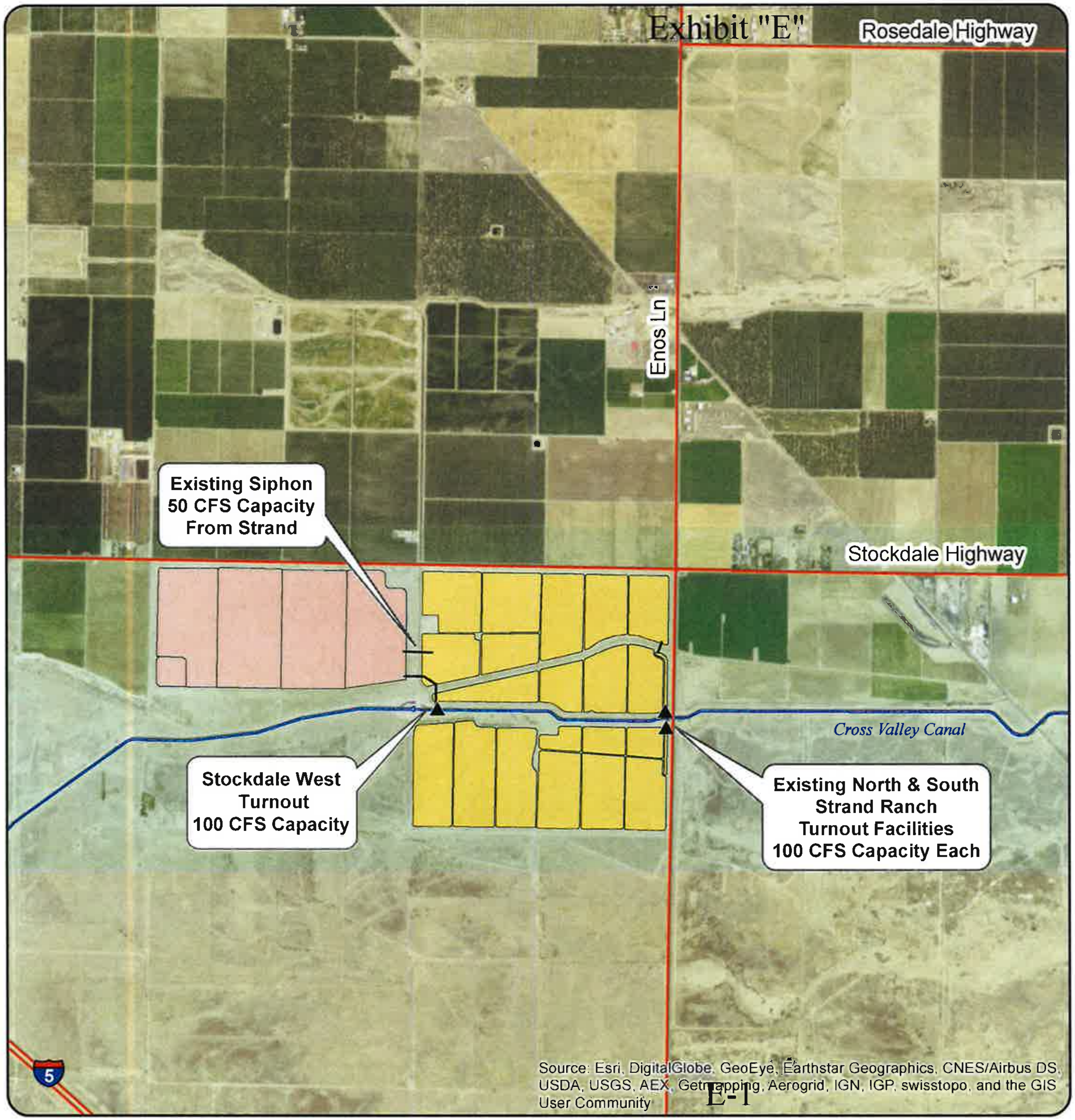
This figure shows the location of IRWD's water banking project sites as well as existing and proposed extraction wells.

N

0 0.25 0.5 1 Miles

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

Exhibit "E"



Irvine Ranch
WATER DISTRICT

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

MAP FEATURES

- ▲ Turnouts
- Stockdale West
- Strand Ranch

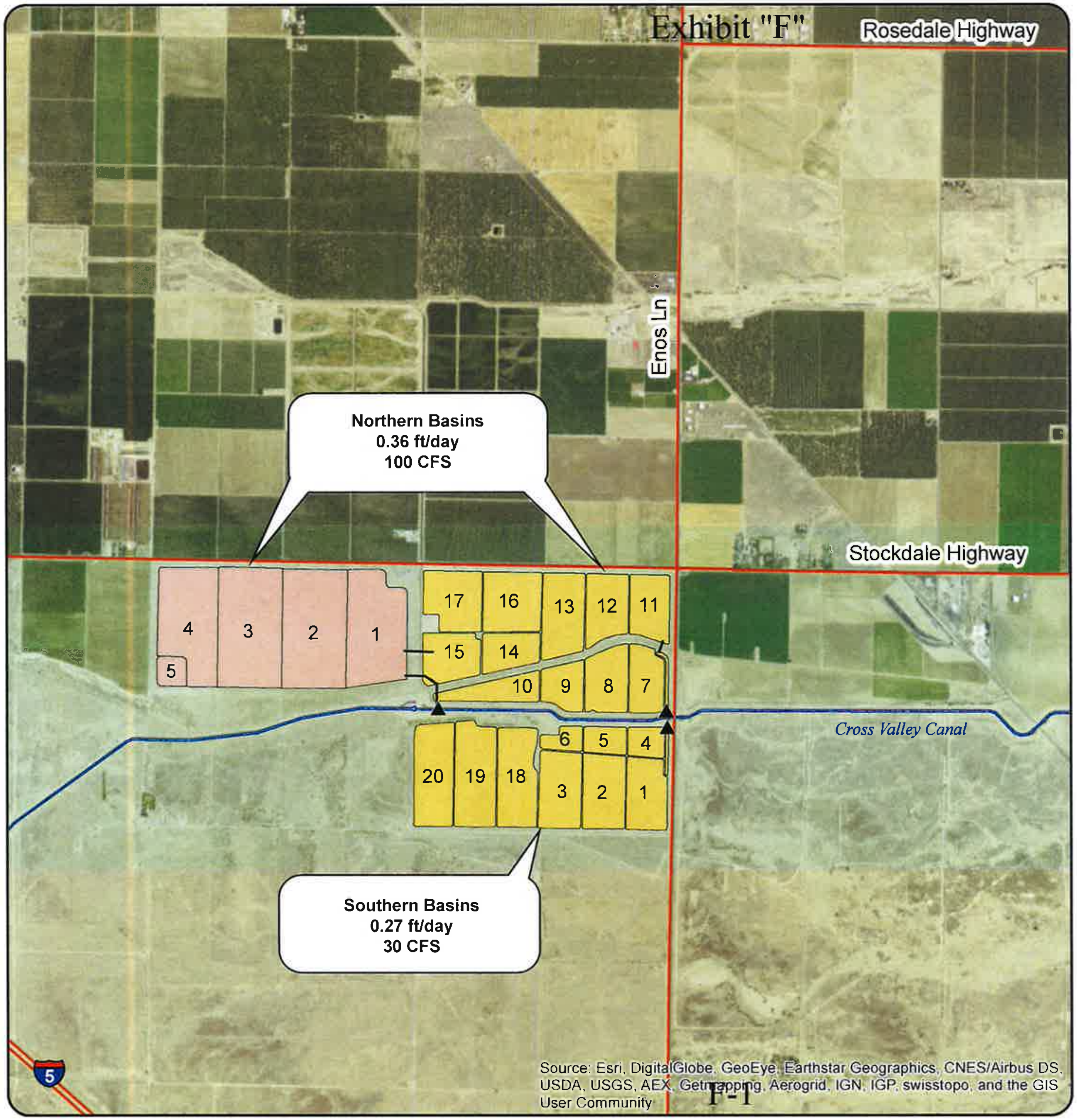
This figure shows the location of recharge basins as well as existing and anticipated pipelines and turnout facilities.

N

0 0.25 0.5 1
Miles

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

Exhibit "F"



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 December 2017. Recharge rates will be updated if rates change in 2018.

N

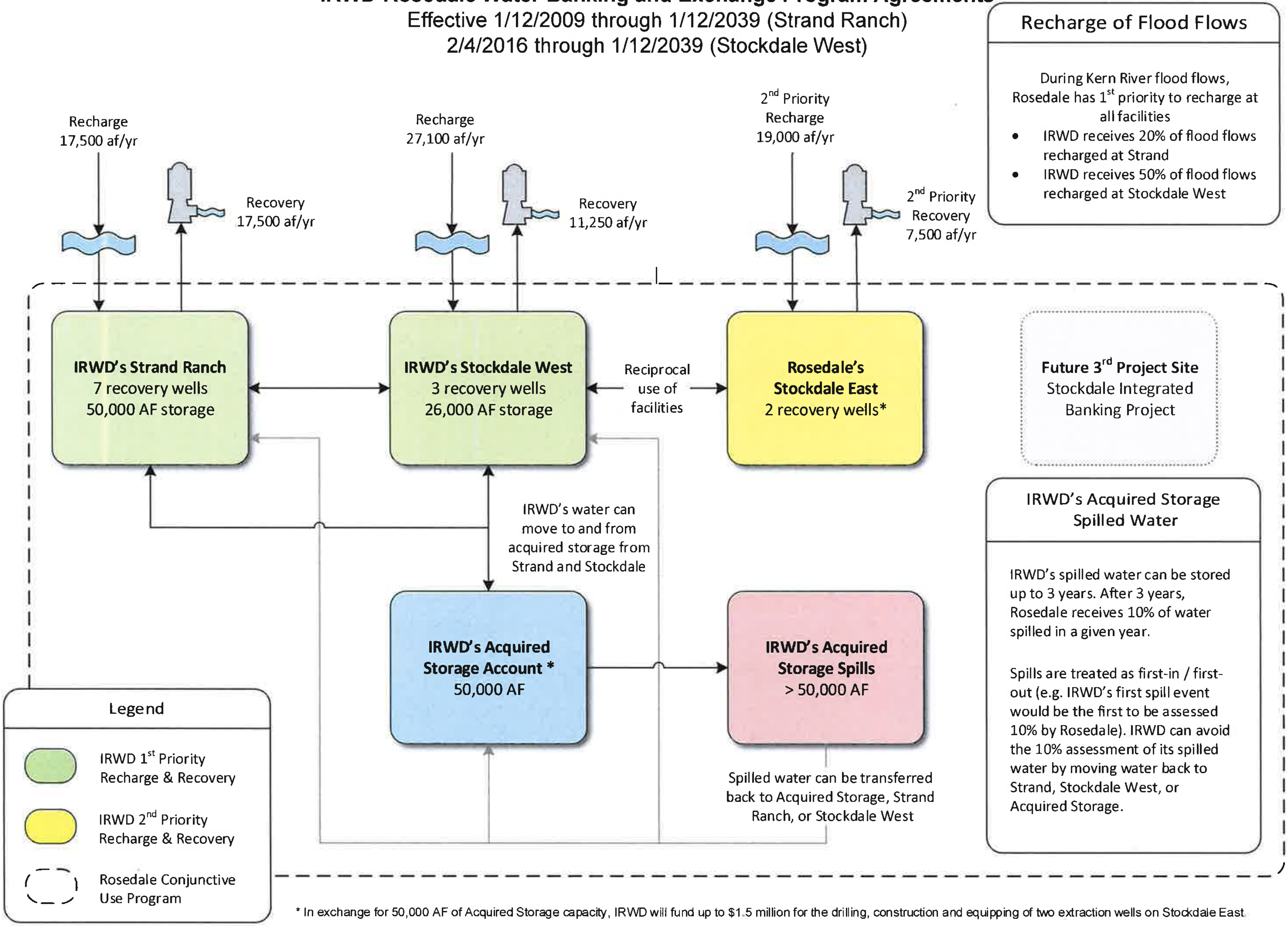
0 0.25 0.5 1
Miles

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

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)

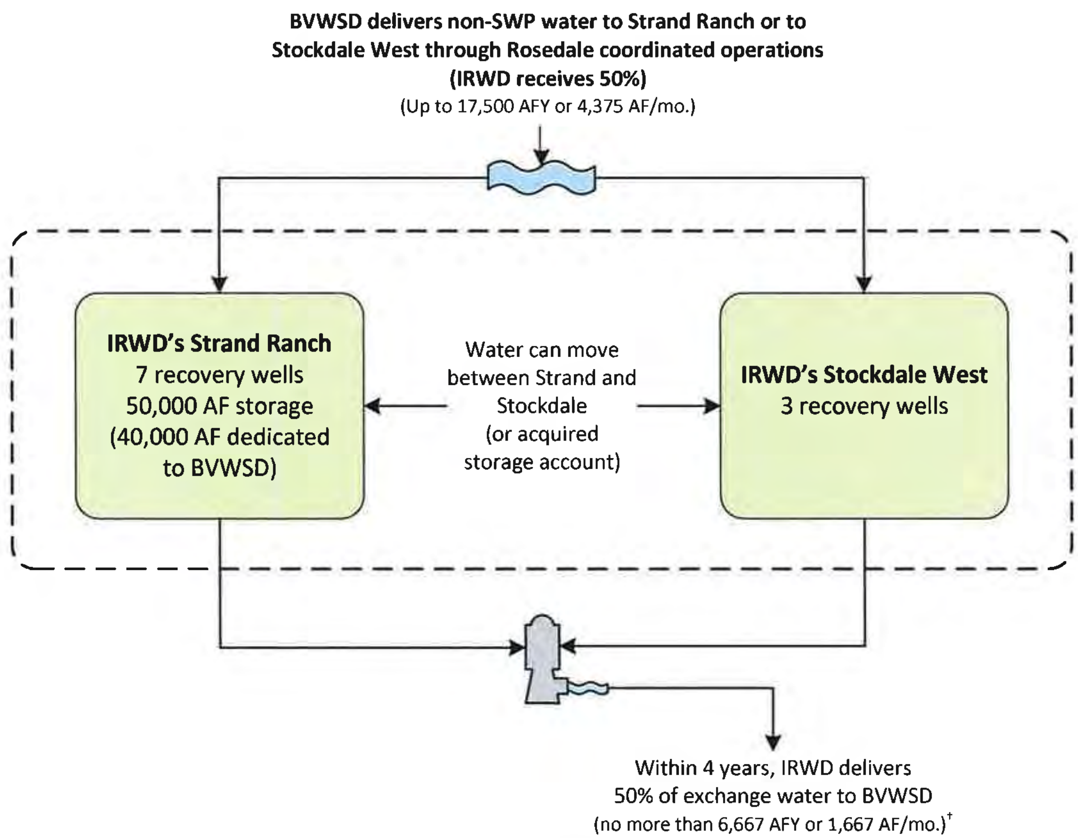


* In exchange for 50,000 AF of Acquired Storage capacity, IRWD will fund up to $1.5 million for the drilling, construction and equipping of two extraction wells on Stockdale East

Exhibit "H"

Buena Vista Water Storage District Long Term Water Exchange Program

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



Legend

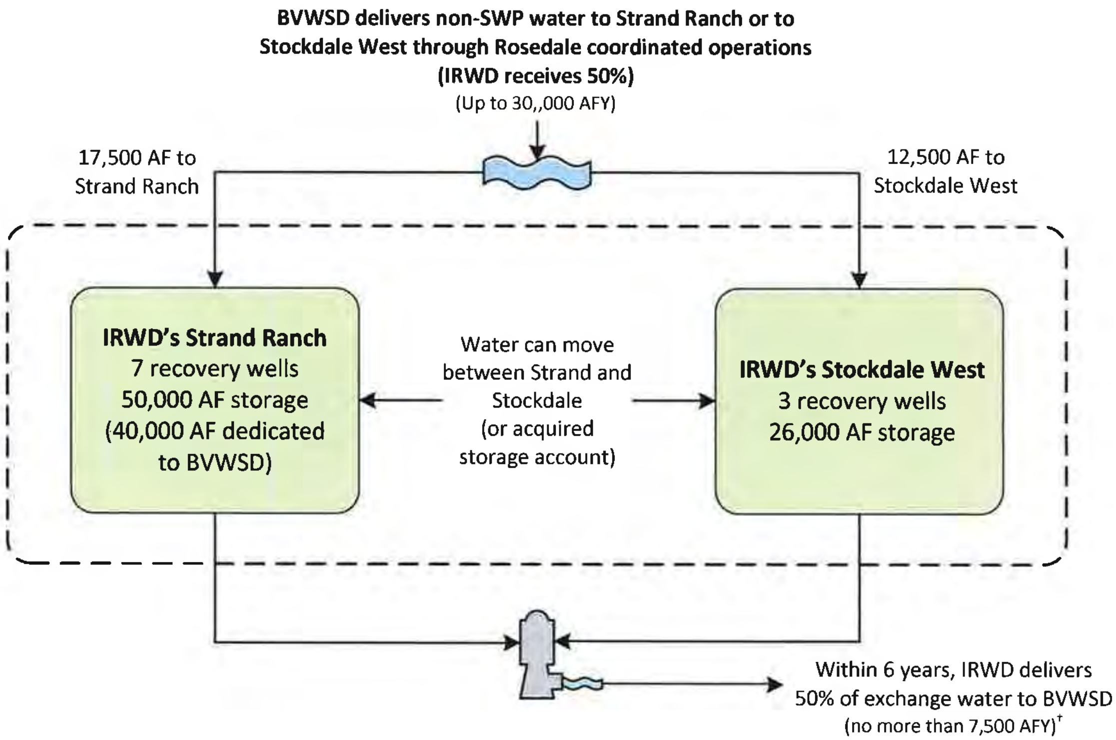
- IRWD 1st Priority Recharge & Recovery
- Rosedale Conjunctive Use Program & Coordinated Operations

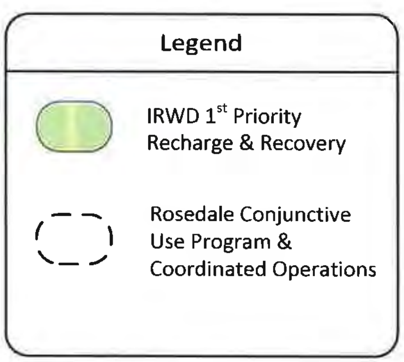
†IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 4th year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch beyond 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:

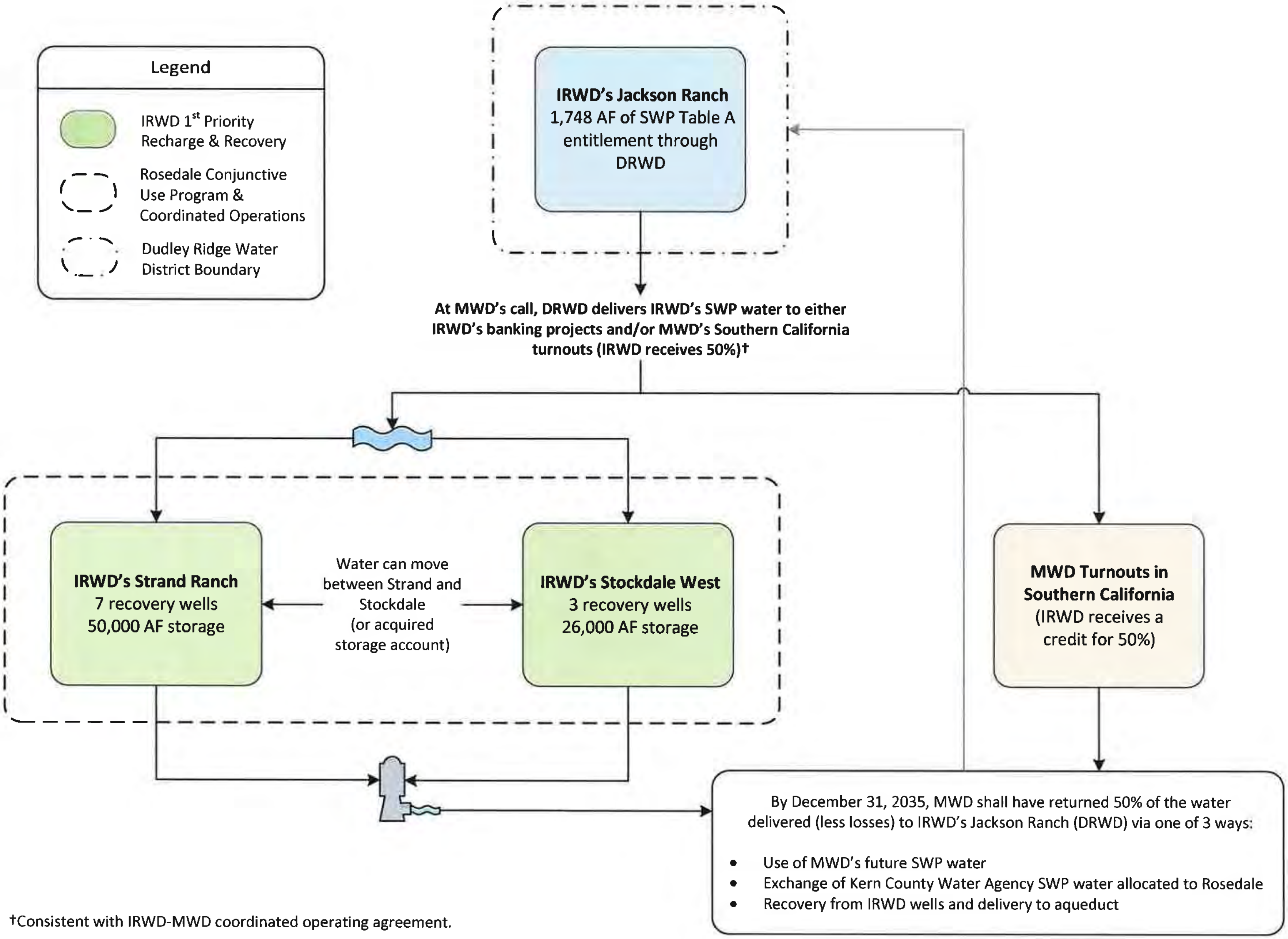
Modified for 1-Year Recharge Program Only

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



†Consistent with IRWD-MWD coordinated operating agreement.

Exhibit "J"

Coordinated Operating, Water Storage, Exchange and Delivery Agreement Between MWD, MWDOC and IRWD

Effective 5/1/2011 through 11/4/2035

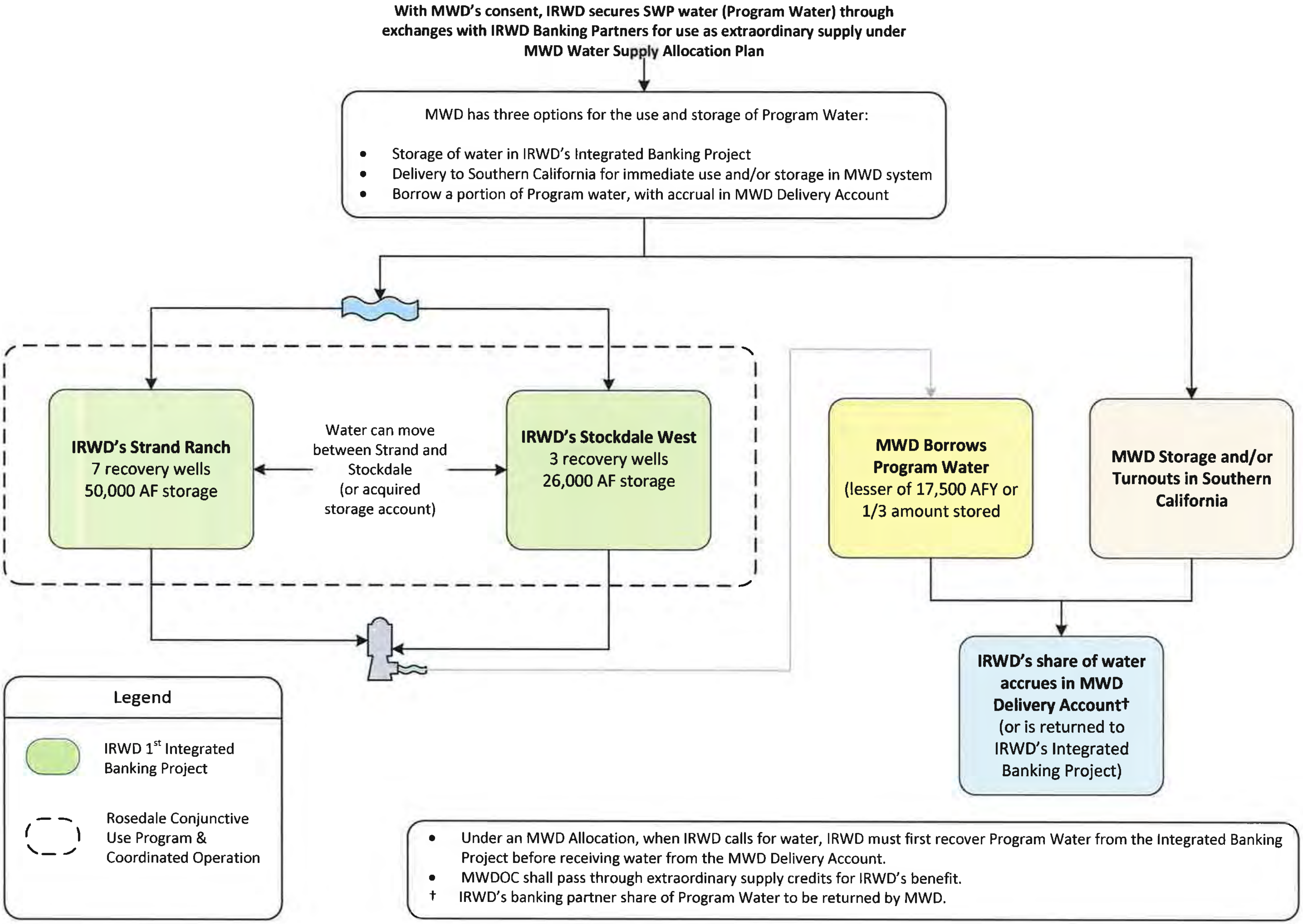
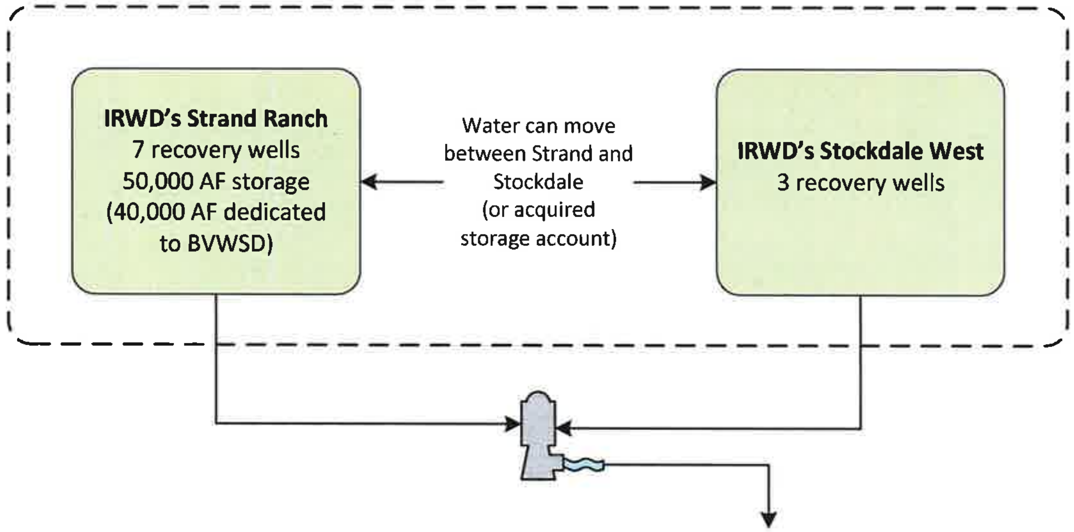


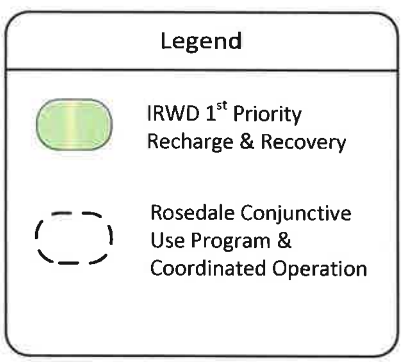
Exhibit "K"

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.

October 18, 2018
Prepared by: F. Sanchez
Submitted by: P. Weghorst PW
Approved by: Paul A. Cook P.W.C.

SUPPLY RELIABILITY PROGRAMS COMMITTEE

UPDATE ON THE KERN FAN GROUNDWATER STORAGE PROJECT AND JOINT POWERS AUTHORITY AGREEMENT

SUMMARY:

In August 2017, IRWD and Rosedale-Rio Bravo Water Storage District jointly submitted to the California Water Commission (CWC) a grant application for the proposed Kern Fan Groundwater Storage Project. In July 2018, the CWC conditionally awarded $67.5 million for the Kern Fan Project. At the meeting, staff will review the status of some of the early planning activities that must be completed in order to secure the conditional funding.

To facilitate the design, construction and operation of the project, IRWD and Rosedale intend to form a Joint Powers Authority (JPA). Staff worked with legal counsel to prepare an initial draft JPA Agreement to create the Kern Fan Project Authority (a.k.a., "the JPA") that was reviewed with the Committee in August 2018. Staff and legal counsel have incorporated Committee feedback and input from Rosedale into a revised draft JPA Agreement, which will be reviewed with the Committee at the meeting. Staff recommends the Committee provide input on "The JPA Agreement Between Rosedale and IRWD Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project".

BACKGROUND:

Proposition 1, also known as the Water Quality, Supply and Infrastructure Improvement Act of 2014, dedicated $2.7 billion for investments in new water storage projects through the Water Storage Investment Program (WSIP). In August 2017, IRWD and Rosedale jointly submitted an application for the proposed Kern Fan Project with a request for $86 million in WSIP grant funding. This amount equals 50% of the total estimated capital cost of the project. In July 2018, the CWC conditionally awarded $67.5 million in grant funding to the Kern Fan Project. In order to fulfill the CWC funding requirements and to facilitate the design, construction, operation of the project, IRWD and Rosedale intend to develop and execute a JPA Agreement creating the Kern Fan Project Authority.

Early Project Planning Activities:

During the time that the JPA Agreement is being developed, it was determined that certain early planning activities were needed. On October 8, 2018, the Board authorized the General Manager to execute a cost share agreement between IRWD and Rosedale to initiate these early project planning activities. At the meeting, staff will provide an update on the status of the early planning studies and tasks that are being undertaken including the following:

- Geophysical investigation of potential recharge properties;
- Hydraulic assessment of the new California Aqueduct turnout; and
- Alignment study for the new conveyance.

Staff will review the updated project schedule, which is provided as Exhibit "A" and the anticipated major milestones in the next quarter.

Kern Fan Project Authority JPA Agreement:

In August 2018, staff reviewed with the Committee a draft JPA Agreement creating the Kern Fan Project Authority. Under this agreement, the proposed Kern Fan Project Authority would carry out functions necessary to implement the Kern Fan Project including land acquisition, environmental review, permitting, planning, design, construction and operations. Staff has worked with legal counsel to incorporate input from the Committee and Rosedale into a revised draft JPA Agreement, provided as Exhibit "B", which includes tracked changes so that new concepts can be easily identified.

At the Committee meeting, staff will present an overview of the revised draft JPA Agreement. Staff recommends that the Committee provide input on the revised draft "JPA Agreement Between Rosedale and IRWD Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project".

FISCAL IMPACTS:

On August 27, 2018, the Board approved the addition of the Kern Fan Groundwater Storage Project, Project 10854, to the Fiscal Year 2018-19 Capital Budget with initial expenditures limited to $5 million. The CWC will provide $67.5 million in WSIP funding through a grant agreement. Rosedale and IRWD will split the costs for the balance of the project.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (EIR) for the Stockdale Integrated Banking Project was prepared, certified and approved in compliance with California Environmental Quality Act (CEQA) of 1970 as amended, codified at California Public Resources Code Sections 21000 et seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3. Rosedale, as lead agency, filed a Notice of Determination for the Stockdale Integrated Banking Projects with the County of Kern. IRWD, as a responsible agency, filed Notices of Determination with the County of Orange and with the County of Kern. The EIR includes a program-level analysis of impacts of a third project site. This third project site is contemplated to be incorporated into phase one of the Kern Fan Project. When the third project site is identified, subsequent project-level environmental review will be necessary prior to implementation of phase one of the Kern Fan Project. It is expected that a new EIR will be required for the construction and operation of the second phase facilities contemplated in the proposed Kern Fan Project.

RECOMMENDATION:

That the Committee provide input on the Joint Powers Authority Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project.

LIST OF EXHIBITS:

Exhibit "A" – Kern Fan Project Schedule
Exhibit "B" – Draft Joint Powers Authority Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Kern Fan Joint Project Authority to Develop and Administer a Kern Fan Groundwater Storage Project

Exhibit "A"

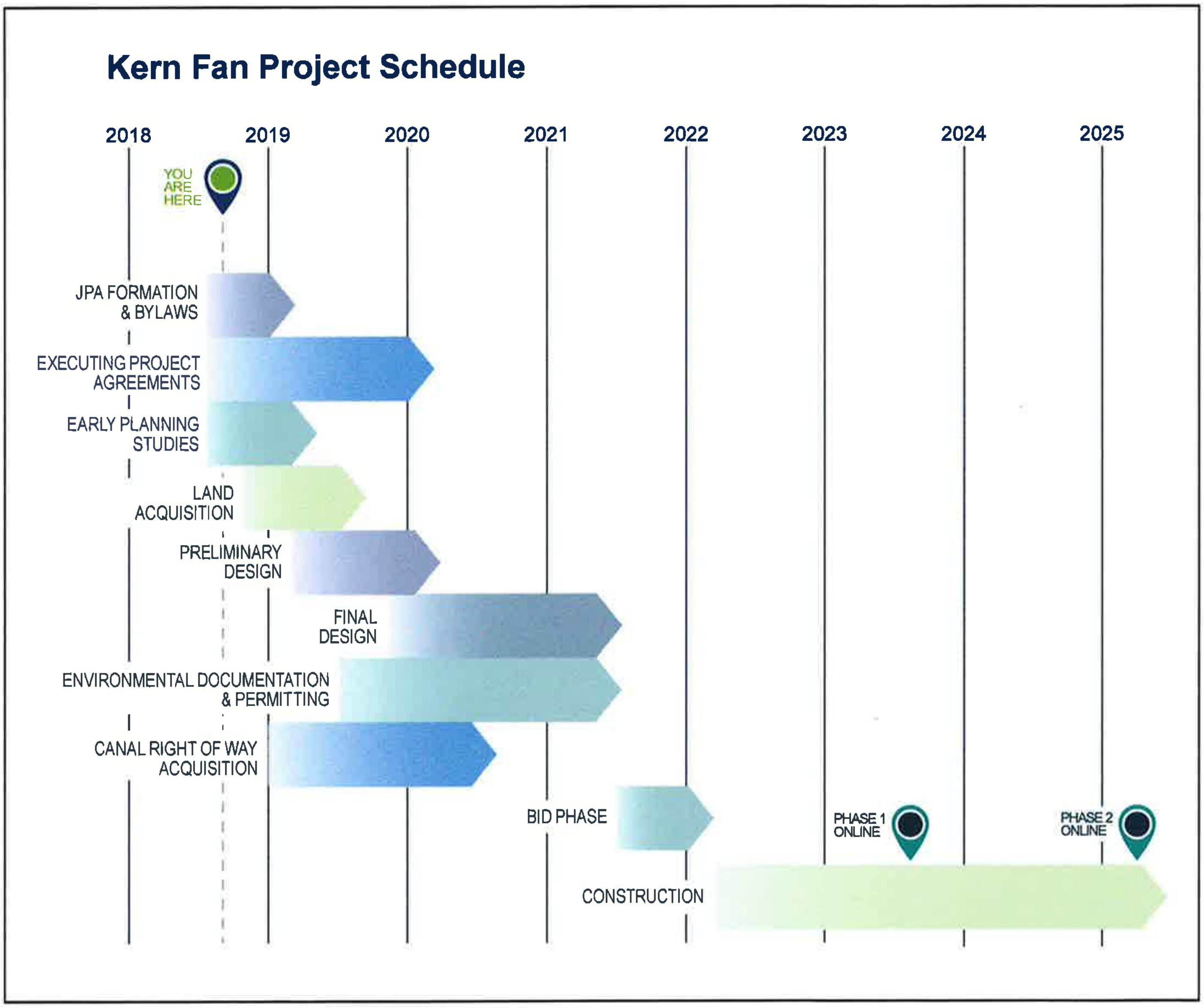

Kern Fan Project Schedule
2018
2019
2020
2021
2022
2023
2024
2025
YOU ARE HERE
JPA FORMATION & BYLAWS
EXECUTING PROJECT AGREEMENTS
EARLY PLANNING STUDIES
LAND ACQUISITION
PRELIMINARY DESIGN
FINAL DESIGN
ENVIRONMENTAL DOCUMENTATION & PERMITTING
CANAL RIGHT OF WAY ACQUISITION
BID PHASE
PHASE 1 ONLINE
PHASE 2 ONLINE
CONSTRUCTION

EXHIBIT "B"

DRAFT

JOINT POWERS AGREEMENT

BETWEEN

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

AND

IRVINE RANCH WATER DISTRICT

CREATING THE KERN FAN JOINT POWERS AUTHORITY

TO DEVELOP AND ADMINISTER

A KERN FAN GROUNDWATER STORAGE PROJECT

DRAFT

JOINT POWERS AGREEMENT

BETWEEN

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

AND

IRVINE RANCH WATER DISTRICT

CREATING THE KERN FAN JOINT POWERS AUTHORITY

TO DEVELOP AND ADMINISTER

A KERN FAN GROUNDWATER STORAGE PROJECT

THIS JOINT POWERS AGREEMENT ("Agreement") is made and entered into as of the Effective Date by and between the ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT ("RRB") and the IRVINE RANCH WATER DISTRICT ("IRWD") to form the KERN FAN JOINT POWERS AUTHORITY ("Authority") pursuant to the Joint Exercise of Powers Act of 1980 (Division 7, commencing with § 6500 of the California Government Code). RRB and IRWD are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

A. RRB is a public agency organized in accordance with the California Water Storage District Law (Division 14, commencing with § 39000 of the California Water Code) for the purpose of acquiring, storing, distributing, and replenishing water supplies within its boundaries in Kern County, California.

B. IRWD is a public agency organized in accordance with the California Water District Law (Division 13, commencing with § 34000 of the California Water Code) to provide water services and certain other services. IRWD's powers and purposes include the acquisition within or outside the district in the State of all necessary property, water, and water rights for the production, storage, transmission, and distribution of water for irrigation, domestic, industrial, and municipal purposes and to provide and sell such water at wholesale and retail to customers within its boundaries in Orange County, California.

C. In 1959, RRB was formed to develop a groundwater recharge program to offset overdraft. The construction of the initial phases of the recharge program was completed in early 1962, and the facilities placed in operation shortly thereafter. Additional improvements to program recharge facilities have since been made, and RRB has acquired fee title to the properties on which the program facilities are located. The physical features of the recharge program include facilities to divert waters from the Kern River and the Cross Valley Canal facilities ("CVC") and RRB properties into the Goose Lake Slough and adjacent recharge basins.

D. To improve its water supplies, generate increased recharge capability and to provide operational flexibility, RRB has developed a program for the banking, storage, exchange, and direct delivery of water pursuant to the exercise of its powers ("RRB Conjunctive Use

Program"). The RRB Conjunctive Use Program involves the banking of imported water by customers ("RRB Program Participants") in the Kern County Sub-Basin of the San Joaquin Valley Groundwater Basin ("Groundwater Basin") for later delivery to said customers by way of exchange delivery through State Water Project ("SWP") facilities for RRB's rights to SWP water or by way of extraction delivery of banked water through the CVC to the SWP facilities at its junction with an intake and turnout facility near the town of Tupman, California ("Tupman Turnout"). RRB has developed and approved the RRB Conjunctive Use Program through various agreements and documents including, without limitation, an environmental impact report ("EIR") certified by RRB on July 17, 2001, and subsequent addenda thereto, pursuant to the California Environmental Quality Act ("CEQA"), Public Resource Code section 21000 et seq.

E. In 2004, IRWD acquired 611 acres of real property in Kern County, California, sometimes referred to as the "Strand Ranch property," lying adjacent to the southerly boundary of RRB. On January 13, 2009, RRB and IRWD entered into an "Agreement For A Water Banking and Exchange Program," as amended by Amendment No. l, entered into on or about February 27, 2015 (collectively, "Strand Ranch Agreement") providing for the development and operation of a groundwater banking program on IRWD's Strand Ranch property, and the operation and integration of such program within the RRB Conjunctive Use Program ("Strand Ranch Integrated Banking Project").

F. Since 2004, RRB acquired an additional 230 acres of real property lying adjacent to the easterly boundary of the Strand Ranch property ("Stockdale East property"), and IRWD acquired an additional 323 acres of real property lying adjacent to the westerly boundary of the Strand Ranch property ("Stockdale West property"). On or about February 4, 2016, RRB and IRWD entered into an "Agreement for A Water Banking, Recovery and Exchange Program," as amended by Amendment No. 1, entered into on or about January 16, 2018 (collectively, "Stockdale Integrated Banking Project").

G. CEQA compliance for the Stockdale Integrated Banking Project has been completed. On December 8, 2015, RRB certified an EIR for the Stockdale Integrated Banking Project ("Stockdale Integrated Banking Project EIR"), and on December 14, 2015, IRWD approved the Stockdale Integrated Banking Project EIR as a responsible agency. The Stockdale Integrated Banking Project EIR provides a project-level effects analysis for the Stockdale Integrated Banking Project and provides a program-level analysis for a third project site of up to 640 acres within a 12,300-acre site radius analyzed in the Stockdale Integrated Banking Project EIR.

H. The up to 640-acre third project site analyzed in the Stockdale Integrated Banking Project EIR would constitute Phase 1 of a proposed Kern Fan Groundwater Storage Project ("Kern Fan Project") for which RRB and IRWD have jointly applied for grant funding through the California Water Commission's ("Commission") Water Storage Investment Program ("WSIP") authorized by California voters' approval of Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014. A second up to 640-acre project site would constitute Phase 2 of the Kern Fan Project.

I. Through the Kern Fan Project, the Parties seek to develop a regional water bank in the Kern County Groundwater Sub-basin of the San Joaquin Valley Groundwater Basin in Kern

County. The Kern Fan Project would recharge and store up to 100,000 acre-feet of water during periods when surface water is abundant. Water stored by the Kern Fan Project pursuant to participation in the WSIP would be recovered when needed to provide ecosystem, emergency supply, and water supply benefits. The Kern Fan Project proposes to use 25 percent (25%) of the water stored pursuant to participation in the WSIP to provide ecosystem benefits, with the remainder for use by IRWD and RRB. IRWD and RRB would have access to Kern Fan Project facilities and capacities to store water pursuant to other programs to generate additional water supply benefits as described in article 4(C) of this agreement.

J. In July 2018, the Commission conditionally approved $67,537,315 in conditional WSIP grant funding for the Kern Fan Project, which may be increased by the Commission in the future. The Parties may seek additional state or federal grant funding in the future

K. The Parties are forming the Authority to achieve the above-described objectives of the Kern Fan Project, and this Agreement helps to define a stable and finite project description that will facilitate completion of CEQA review pursuant to Cal. Pub. Res. Code section 21000 et seq.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

1. **Effective Date, Term and CEQA Compliance**

A. ***Effective Date and Term.*** This Agreement shall be effective upon the execution by the Parties ("Effective Date") but shall be subject to article 1(B). This Agreement shall remain effective for thirty (30) years from the Effective Date or until expiration of any requirements to operate the Kern Fan Project as part of the Water Supply Investment Program or other grant funding requirements, whichever is longer or until it is terminated pursuant to article 20. Prior to the termination of the JPA Agreement, the Parties shall work together to mutually extend this Agreement; provided that if this Agreement is not extended, the Parties shall agree to negotiate in good faith to integrate the Kern Fan Project facilities into one or more other existing water storage and recovery programs or projects; provided further that if the Parties fail to reach agreement on such integration, then all Kern Fan Project facilities, capacities and real or personal property held by the Authority shall be divided proportionally to each of the Parties' capital contributions to the Kern Fan Project and taking into consideration any Special Activities Agreements governing the Parties' independent choices whether to participate in or to add a component of the Kern Fan Project, with each Party holding a right of first offer and a right of first refusal in the event the first offer is rejected and a third-party offer to purchase the Kern Fan Project facilities, capacities and real or personal property held by the other Party is received.

B. ***CEQA Compliance.*** Formation of this Agreement helps to define a stable and finite project description, which will facilitate completion of CEQA review for the proposed Kern Fan Project. The Parties shall each complete CEQA review for the proposed Kern Fan Project prior to approving, constructing or operating the proposed project. Any real property acquired for the proposed project prior to completion of CEQA review shall be conditioned on completing CEQA review before changing the existing use of the real property. If the performance of CEQA review identifies any significant adverse environmental effects, the Parties each retain their full discretion to terminate this Agreement or to jointly revise this Agreement as necessary to implement any feasible mitigation measures or alternatives that would avoid or reduce such significant effects as provided by CEQA; provided that each Party's discretion to terminate or to jointly revise this Agreement under this Article 1(B) shall be limited to responding to any significant adverse environmental effects.

2. **Authority for Joint Powers Agreement**

This Agreement is made pursuant to Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California (commencing with Section 6500) relating to the joint exercise of power common to the counties and public agencies. The Parties are each empowered by the laws of the State of California to exercise, in their respective jurisdictions, the powers which will be jointly exercised as set forth herein.

3. **Jurisdictional Boundaries**

The jurisdictional boundary of the Authority shall be coterminous with the jurisdictional boundaries of the Parties.

4. **Purposes**

A. ***Creation of Separate Entity***. The purpose of this Agreement is to create a joint powers authority called the "Kern Fan Project Authority" to plan, design, construct, operate and otherwise implement the Kern Fan Project. The Authority shall be a separate legal entity from its member agencies. The purpose of the Authority is to implement the Kern Fan Project, as described in the Recitals, above, which are incorporated herein by this reference.

B. ***Project Benefits***. The benefits of the Kern Fan Project include, but are not limited to, benefits to the water levels in the Kern County Groundwater Subbasin, enhanced water supply reliability, reduced dependence on existing imported water supplies from northern California, endangered species preservation through reduced demands on such imported water, and the establishment of temporary wetlands through recharge activity.

C. ***Allocation of Capacities Provided by Kern Fan Project***. The primary objective of the Kern Fan Project is to provide 100,000 acre-feet per year ("AFY") of groundwater recharge capacity, 100,000 acre-feet ("AF") of storage capacity for the Parties to capture and recover unallocated State Water Project ("SWP") Article 21 water, with up to 50,000 AF per year of recovery capacity and up to 500 cubic feet per second of additional conveyance capacity in a Kern Fan Project aqueduct for participation in the WSIP.

The water storage capacity developed under the Kern Fan Project when fully implemented is planned to be 100,000 AF and shall be allocated as follows:

> 25% of storage capacity up to 25,000 AF to the WSIP Public or Ecosystem Account
> 50% of remaining storage capacity to RRB
> 50% of remaining storage capacity to IRWD

The water recharge, recovery, and additional conveyance capacity developed under the Kern Fan Project shall be allocated equally between RRB and IRWD subject to any Special Activities Agreements governing the Parties' independent choices whether to participate in or to add a component of the Kern Fan Project.

RRB and IRWD shall each have priority access to their own respective shares of capacities in the Kern Fan Project to recharge, store and recover other water supplies, including SWP water, for the independent benefit of each Party. The Parties would have second-priority access to use each other's unused recharge and recovery capacities. RRB and IRWD may use their respective capacities to implement other independent operating programs or projects with third parties, so long as such use does not impair the ability to provide the WSIP public and ecosystem benefits and either is temporary and completed within one year, proven not to impact the other Party, or RRB and IRWD enter into a Special Activities Agreement pursuant to article 4(D) describing and approving an ~~longer~~ independent operating program or project.

D. ***Special Activities Agreements.*** A Party may enter into one or more~~a~~ written Special Activities Agreements with the Authority providing for its independent choice whether to participate in or to add a component of the Kern Fan Project or to allow use of a its capacity in the Kern Fan Project to implement an ~~non-temporary~~ independent operating program or project with a third party~~ that is not performed within one year~~. For example, IRWD may enter into a Special Activities Agreement providing for installation of additional Kern Fan Project wells to increase recovery capacity for the benefit of IRWD, or RRB may enter into a Special Activities Agreement providing for RRB to reduce its recovery capacity by foregoing the installation of Kern Fan Project wells. The Authority's Board of Directors shall adopt bylaws providing for Special Activities Agreements~~, and the bylaws may provide for changes in the respective voting power of IRWD's and RRB's representatives on the Authority Board of Directors.~~[RE1]

E. ***WSIP Water.*** For purposes of participating in the WSIP, the Kern Fan Project will be operated by recharging and storing unallocated SWP Article 21 water or other water obtained at the discretion~~available to~~of the Parties ("WSIP Water"); provided that any such other water shall be available upon recovery to~~-~~ provide WSIP public and ecosystem benefits. Unallocated Article 21 water deliveries would be made on behalf of IRWD as a landowner in Dudley Ridge Water District ("DRWD") and on behalf of RRB as a sub-unit of the Kern County Water Agency ("KCWA") or any other SWP Contractor acting on behalf of either or both Parties. WSIP Water delivered to the Kern Fan Project by each Party will be proportionately applied to each Party's respective storage account ~~as defined~~consistent with this Agreement's defined ~~under~~ "Allocation of Capacities Provided by Kern Fan Project."

F. ***Ownership.*** The Authority plans to acquire, own, and use up to approximately 1,280 acres of land within the Kern Fan Project designated project area. The Authority will own all property, facilities and capacities of the Kern Fan Project, unless otherwise provided for through a Special Activities Agreement. The Authority may acquire or use property outside of the Kern Fan Project area and designated existing and/or new project areas/recharge for purpose of meeting the Kern Fan Project objectives.

G. ***Hydrogeologic Evaluations.*** RRB and IRWD will equally fund or reimburse through the Authority hydrogeologic studies needed to determine the recharge, storage and recovery capacities and limitations of the Kern Fan Project designated properties.

H. ***CEQA Compliance Cost and Roles.*** RRB and IRWD will equally fund or reimburse through the Authority the preparation of an Environmental Impact Report ("EIR") for the construction and operation of the Kern Fan Project, including all technical studies necessary to support the EIR. The Authority shall play the role of lead agency, while RRB and IRWD will each play the role of a responsible agency with respect to any discretionary decisions each Party makes in connection with implementing the Kern Fan Project.

I. ***Other Regulatory Permitting Costs.*** RRB and IRWD will equally fund or reimburse through the Authority all regulatory and permitting fees and costs associated with construction of the Kern Fan Project.

J. ***Project Costs.*** Any and all WSIP or other grant funds awarded for the Kern Fan Project shall be applied to all eligible capital costs, including, but not limited to, the planning, design and construction costs of the Kern Fan Project, and the Authority will fund all remaining associated costs. RRB and IRWD shall each pay through the Authority half of Kern Fan Project planning, design and construction costs that are not paid by awarded WSIP grant funds except as otherwise provided by any Special Activities Agreements governing the Parties' mutually agreeable independent choices whether to participate in or to add a component of the Kern Fan Project.

K. ***Project Construction***. Board of Directors shall adopt bylaws describing the procedures, team and requirements for any planning, design, construction and construction management associated with the Kern Fan Project.

L. ***Project Operation.*** RRB shall operate, maintain and repair the Kern Fan Project facilities, subject to approval by the Board of Directors. RRB shall maintain WSIP records accounting for each Party's water recharge, storage and recovery activities pursuant to all applicable WSIP regulations and as further described in bylaws adopted by Board of Directors.

M. ***Operation Costs.*** RRB and IRWD shall pay operations, maintenance, energy and replacement ("OME&R") costs consistent with their respective proportional use of the Kern Fan Project and any Special Activities Agreements governing the Parties' independent choices whether to participate in or to add a component of the Kern Fan Project as described in bylaws adopted by the Board of Directors.

N. ***Mutual Obligation to Recharge Public Benefit and Ecosystem Account.*** At such times when WSIP Water is available, the Parties shall equally fund the acquisition and recharge of WSIP Water for the WSIP Public Benefit and Ecosystem account until this account reaches full capacity. Once that objective is met, RRB and IRWD may each use their respective capacities for ~~WSIP Water or~~ other available water.

O. ***Kern River Flood Water.*** During times that Kern River Flood Water is available (i.e., when the Kern River Watermaster offers water to all takers willing to sign a "Notice/Order", or the Kern River Watermaster offers water to the California Aqueduct/Kern River Intertie, such water is expected to flood farmed acreage in Buena Vista Lake or is expected to be delivered into the Kern River Flood Channel for delivery out-of-county), this water would follow delivery of WSIP Water, if simultaneously available. Following any such delivery of WSIP Water, RRB shall have first priority to use all Kern Fan Project facilities for recharge of Kern River Flood Water; provided that ownership of all such Kern River Flood Water stored in the Kern Fan Project shall be split equally between RRB and IRWD. As compensation for actual use of any RRB facilities used to convey the water to the Kern Fan Project facilities, IRWD shall pay $25 per AF to RRB[RE2] for any Kern River Flood Water delivered to the Kern Fan Project on behalf of IRWD. Operational exchanges of water would be allowed to provide flexibility in delivering water into storage.

P. ***Water Quality.*** The quality of water to be recharged, stored and recovered at the Kern Fan Project shall be consistent, including through blending with other water, with applicable pump-in requirements specified by DWR for the California Aqueduct, as such requirements may be amended from time to time.

5. **Powers**

The Authority is hereby authorized to perform all powers and functions set out in this Agreement, including all powers granted to California water storage districts pursuant to the California Water Storage District Law (Division 14, commencing with § 39000 of the California Water Code) and California water districts pursuant to the California Water District Law (Division 13, commencing with § 34000 of the California Water Code), as amended, and any applicable regulations.

The Authority shall administer this Agreement. Pursuant to Government Code section 6509 and shall undertake all further actions necessary to carry out the purposes of the Authority, the Authority shall exercise its powers in administering this Agreement subject to the restrictions applicable to IRWD. The Authority is hereby further authorized to:

A. Negotiate with, apply for, contract for, and receive monies from federal, state, county, city, and special district governments, and other public and private entities and agencies to carry out the purposes of this Agreement, and shall disburse and account for funds so received.

B. Allocate all funds, including discretionary and special purpose funds, received by the Authority as equitably as practicable, based upon the applicable terms of the funding application, fund source requirements, Agency policy, or vote of the Board of Directors, as described in Section 6 of this Agreement.

C. Monitor, evaluate, and take corrective action concerning performance specified in any agreement, and contracts or agreements the Authority has entered into.

D. Establish performance objectives for subcontractors.

E. Evaluate the effectiveness of programs undertaken by the Authority.

F. Maintain financial and statistical records to satisfy federal, state, and other laws and regulations, and provide necessary information for effective program management.

G. Adopt, promulgate, and enforce such bylaws, rules, and regulations as the Board of Directors deems necessary for operation and management of the Authority and implementation of the purposes of this Agreement.

H. Negotiate and enter into agreements and contracts.

I. Employ agents and employees.

J. Acquire, lease, rent, construct, manage, maintain, hold, and dispose of real and personal property with title to such property being held by the Authority.

~~J.~~K. ~~,~~Acquire property by eminent domain.

~~K.~~L. Commission the design, permitting, construction, operation, and maintenance of any facilities required for the Kern Fan Project.

~~L.~~M. Incur debts, liabilities, and other obligations.

~~M.~~N. Bring suit and be sued in its own name.

Undertake all further actions necessary to carry out the purposes of the Authority.

6. **Governance**

A. ***Board of Directors***. The Board of Directors of the Authority shall consist of four (4) members constituting two (2) members appointed by each Party~~'s~~. Of the two members appointed by each Party, one must be a member of that Party's legislative body and neither appointee may serve as an officer of the Authority while also serving on the Authority's Board of Directors. Each Party's legislative body shall designate an alternate to serve on the Authority's Board of Directors to provide continuity in the event one of a Party's representatives cannot participate in one or more meetings of the Authority's Board of Directors. Such alternates shall be members of either RRB's or IRWD's legislative body or designees and shall not serve as an officer of the Authority while also serving as an alternate on the Authority's Board of Directors.

B. ***Meetings***. All meetings of the Board of Directors shall be subject to the provisions of the Ralph M. Brown Act (Chapter 3.5 of Division 7, commencing with § 6250 of the California Government Code) and shall be held at a regularly scheduled time. At its first meeting, the Board of Directors shall, by resolution, determine the schedule for its regular meetings.

C. ***Quorum***. A quorum of any meeting of the Board of Directors shall require the attendance of at least one member of the Board of Directors from each of the Parties. In the absence of a quorum, any meeting of the Board of Directors may be adjourned by a vote of a simple majority of the members of the Board of Directors present. In the absence of any members of the Board of Directors, the Clerk of the Board shall adjourn any meeting of the Board of Directors. Vacant positions on the Board of Directors shall not be considered for purposes of determining quorum.

D. ***Voting and Affirmative Decisions***. Voting by the Board of Directors shall be conducted on a one-vote-per-Party basis, meaning that the two RRB directors together may cast one vote and the two IRWD directors may together cast one vote. The vote representing each Party may be cast by either of that Party's two members of the Authority's Board of Directors or their alternates. All decisions of the Board of Directors shall require an affirmative and unanimous vote, meaning that the Board of Directors may not make a decision unless both the RRB directors' vote and IRWD directors' vote are in favor of making a decision; provided that voting on actions related to administration of a previously approved Special Activities Agreement shall be weighted as determined by each Special Activities Agreement.

In the event the Authority Board of Directors is deadlocked on a proposed action, then RRB and IRWD shall conduct a joint meeting of their legislative bodies to resolve the deadlock. In the event that such a joint meeting does not resolve the deadlock, then the Parties shall participate in mediation to resolve the deadlock. Finally, in the event mediation fails to resolve the deadlock, either Party may initiate litigation to resolve the deadlock subject to any defenses raised in response to such litigation. This process of resolving deadlocks of proposed actions can be further defined in bylaws adopted by Board of Directors.

E. ***Bylaws***. The Board of Directors shall adopt bylaws detailing how the Board of Directors' business is to be conducted. Those bylaws shall not conflict with the provisions of this Agreement or any law.

7. **General Manager**

The Authority Board of Directors shall appoint a representative of RRB to serve as General Manager of the Authority, unless the Board of Directors elects to appoint another individual to serve as the General Manager of the Authority. The General Manager shall not be an employee or independent contractor of the same Party as the Treasurer. An assignment to serve as the General Manager of the Authority shall not be construed to be permanent. The General Manager shall serve at the pleasure of the Board of Directors and may be appointed or removed at a time of choosing of the Board of Directors.

8. **Treasurer**

The Authority Board of Directors shall appoint a representative of IRWD to serve as ~~the~~ Treasurer of the Authority, unless the Board of Directors elects to appoint~~s~~ another individual ~~representative of RRB~~ to serve as the Treasurer of the Authority. The Treasurer shall not be an employee or independent contractor of the same Party that employs the General Manager. The Treasurer shall serve at the pleasure of the Board of Directors and may be appointed or removed at a time of choosing of the Board of Directors. IRWD shall be the depositary and ~~have~~ manage custody of all monies of the Authority and maintain all monies under the oversight and direction of the Treasurer. Furthermore, the Treasurer shall:

A. Receive and receipt all funds of the Authority and place them in the separate accounts established and maintained for the Authority.

B. Receive and invest funds and be responsible for the safekeeping of all funds of the Authority.

C. Pay, when due, out of the Authority's funds, all properly approved disbursements due by the Authority including amounts due on outstanding bonds and coupons.

D. Verify and report to the Authority and the Parties, in writing, on a monthly basis, the amount of money held for the Authority, the amount of receipts since the last report, and disbursements since the last report.

~~D.~~ Treasurer may designate other individuals, as approved by the Board of Directors, necessary to carry out the Treasury function."

9. **Accounting and Financial Reporting**

The Treasurer shall have overall responsibility to maintain the accounting books and records of the Authority. This includes maintenance of the accounting records, monthly report preparation of all receipts and disbursement activities and grant administration and compliance. Such reporting activity shall be provided to each of the Authority parties.

10. **Legal Counsel**

Legal Counsel for the Authority shall be selected by the Board of Directors. Legal Counsel shall also serve as the Secretary of the Authority. The Legal Counsel and Secretary shall serve at the pleasure of the Board of Directors.

11. **Staff**

The staff of the Parties shall serve as the staff of the Authority. The primary responsibility for providing adequate staff support for the operation of the Kern Fan Project shall belong to RRB, unless the Board of Directors appoints a IRWD representative as General Manager pursuant to article 7. The primary responsibility for the treasury function and financial accounting of the Authority shall belong to IRWD, unless the Board of Directors appoints a RRB representative as Treasurer pursuant to article 8. The Authority Board shall negotiate rates of reimbursement and payment schedules with the Parties for staff time and incorporate such requirements into the bylaws of the Authority.

12. **Official Bonds**

The General Manager and the Treasurer are designated as public officers or persons who have charge of, handle, or have access to any property of the Authority, and each such officer or person shall obtain, maintain, and file an official bond. Alternatively, a government crime insurance policy or employee dishonesty insurance policy, including faithful performance, shall be obtained and maintained, with the Authority so long as such insurance policy is in conformance with Government Code section 1463.

13. **Funds and Accounts; Fiscal Year; Annual Budgets**

A. ***Funds and Accounts***. The Authority shall establish and maintain such funds and accounts as may be required by the California Government Code, other applicable laws, the Governmental Accounting Standards Board, good accounting practice, this Agreement, and any ordinance, resolution, or policy of the Board of Directors.

B. ***Funding***. The Authority's accounts shall be funded with the WSIP grant funding awarded by the Commission or any other grant funding that may be awarded for the Kern Fan Project and with such additional funding that each Party contributes to enable the Authority to successfully implement the Kern Fan Project pursuant to this Agreement; subject to the Parties' respective financial obligations under article 4 of this Agreement.

C. ***Fiscal Year***. For the purposes of this Agreement, the Authority shall have such fiscal year from July 1 to and including the following June 30.

D. ***Annual Budget***. An annual capital and operating budget shall be prepared or caused to be prepared by the General Manager and presented to the Board of Directors for its adoption or amendment, pursuant to the Authority's article 5 powers, above, not later than May 1 of each fiscal year. The budget shall establish any necessary rates, capital expenditures, and charges to be paid for operation and maintenance activities and such other matters as shall be determined by the Board of Directors.

14. **Records and Reports; Audit**

The Board of Directors shall establish reporting requirements and direct staff to maintain such reports. All books and records of the Authority shall be open to inspection at all reasonable times by any party to this Agreement or its representatives. Annual audits of the Authority's accounts and records shall be made by an independent certified public accountant or firm of independent certified public accountants selected by the Board of Directors, and reports of such audits shall be filed in the manner provided in Section 6505 of the Government Code.

15. **Debts, Liabilities, and Obligations**

The debts, liabilities, and obligations of the Authority shall not, constitute debts, liabilities or obligations incurred by any party under this Agreement.

16. **Privileges and Immunities**

All of the privileges and immunities from liability, exemptions from law, ordinances, and rules, all pension, relief, disability, worker's compensation, and other benefits which apply to the activity of officers, agents or employees of any Party when performing their respective functions within their territorial limits, shall apply to them to the same degree and extent while engaged in the performance of any of their functions and duties extraterritorially.

17. **Indemnification**

~~A.~~ ***Authority***. The Authority Board of Directors, officers, representatives, consultants, contractors and agents shall be entitled to defense and indemnification by the Authority as provided under Government Code sections 825 et seq. and section 995 et seq. The Authority shall at all times indemnify, defend and save the Parties from, and pay in full, any and all claims, demands, losses, damages or expenses, including reasonable attorneys' fees and costs, that the Parties, their Boards of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner relating to the Authority's performance under this Agreement for any action.

A.

B. ***RRB.*** RRB shall at all times indemnify, defend and save IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents, and employees free and harmless from, and pay in full, any and all claims, demands, losses, damages or expenses, including reasonable attorneys' fees and costs, that IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner relating to RRB's performance under this Agreement for any action, excepting any loss, damage or expense and claims for loss, damage or expense resulting in any manner from the negligent or willful act or acts of IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents and employees.

C. ***IRWD.*** IRWD shall at all times indemnify, defend and save RRB, its Board of Directors, officers, representatives, consultants, contractors, agents, and employees free and harmless from, and pay in full, any and all claims, demands, losses, damages or expenses, including reasonable attorneys' fees and costs, that RRB, its Board of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner relating to IRWD's performance under this Agreement for any action, excepting any loss, damage or expense and claims for loss, damage or expense resulting in any manner from the negligent or willful act or acts of RRB, its Board of Directors, officers, representatives, consultants, contractors agents and employees.

~~D. ***Authority Not Liable for Operation Beyond Point of Delivery.*** The Authority and its Board of Directors, officers, representatives, consultants, contractors and agents shall not be liable for the control, carriage, handling, use, disposal, or distribution of water supplied to a Party after the Authority has delivered such water to the Party's Point of Delivery, nor for claim of damage of any nature whatsoever, including by not limited to property damage, personal injury or death, arising out of or connected with the control, carriage, handling, use, disposal or distribution of such water beyond that point of delivery; and each Party shall indemnity and hold harmless the Authority pursuant to article 17(A)-(B) from any such damages, claims or liability. Upon the Authority's delivery of water from the Kern Fan~~

~~Project to a Party's Point of Delivery, the Authority shall have no right, title or interest in such delivered water.~~[RE3]

~~(0) RRB's Point of Delivery shall be ________________.~~

~~(0) IRWD's Point of Delivery shall be ________________.~~[RE4]

~~G.~~D. The indemnification and hold-harmless provisions of article 17 shall apply in lieu of the right of contribution provisions at Government Code sections 895-895.8.

18. **Insurance**

A. ***Authority.*** During the term of this Agreement, the Authority shall maintain general liability insurance coverage, as well as errors and omissions coverage, in a sum not less than five million dollars ($5,000,000) per occurrence. The insurance shall also contain a written endorsement to such policy or policies which names each of the Parties as an additional insured. RRB and IRWD will equally fund through the Authority the general liability insurance coverage premium and any deductible.

B. ***RRB.*** RRB shall name the Authority as an additional insured covered by RRB's general liability insurance policy, premises liability insurance policy, and automobile insurance policy.

C. ***IRWD.*** IRWD shall name the Authority as an additional insured covered by IRWD's general liability insurance policy, premises liability insurance policy, and automobile insurance policy.

19. **Modification**

This Agreement may only be amended by the written agreement signed by authorized representatives of the Parties.

20. **Termination; Disposition of Assets**

A. ***Termination***. Termination except as provided for in article 1 shall require written notice evidencing either Party's intent to terminate and shall occur only pursuant to a written termination plan approved by the Board of Directors. ~~Such written notice shall be provided to the other Party not less than eighteen (18) months prior to the effective date therein specified.~~ [RE5]The Authority shall continue to exercise the powers described herein until the Parties terminate this Agreement.

(1) Upon termination, the Authority shall continue to exercise only such powers as to enable it to pay and discharge all costs, expenses, and charges legally incurred hereunder, and to dispose of, divide, and distribute any property required as a result of the Authority's operations.

(2) Upon termination, the Authority shall continue to be responsible for the payment of any expenses, liabilities, or obligations between the Parties to

this Agreement incurred prior to withdrawal. (Solely by way of example, this provision would require payment for rights and obligations incurred pursuant to Government Code section 6504~~, or payment where the withdrawal of any Party to this Agreement shall cause a disproportionate liability to the parties for benefits of current and retired Authority employees~~[RE6].) This requirement shall survive any withdrawal or termination of this Agreement.

B. ***Disposition of Assets on Termination***. Upon termination of this Agreement, all costs, expenses, and charges legally incurred by the Authority shall be paid and discharged by the Authority. After the disposition of Kern Fan Project facilities, capacities and real or personal property under article 1 or a termination plan approved under article 20(A), the Authority shall sell any remaining property as may be necessary and shall distribute to the federal or state government such property and funds as are lawfully required; the balance of such property and any surplus money on hand shall be distributed or returned in proportion to contributions made by the affected Parties except to the extent otherwise agreed upon by the affected Parties.

21. **Notice**

Notice under this Agreement shall be made by: (1) overnight courier or (2) certified mail, return receipt requested. Additionally, notice under this Agreement shall be made by electronic mail. All such notices shall be deemed delivered upon actual receipt from (1) overnight courier or (2) certified mail, return receipt requested (or upon first attempt at delivery pursuant to either of the two methods specified herein if the intended recipient refuses to accept delivery).

Notice to IRWD shall be made to:

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618~~9-7000~~
Attn: General Manager
Telephone: (940) 453-5300
Facsimile: (949) 453-1228
Electronic Mail: cook@irwd.com

Notice to RRB shall be made to:

Rosedale-Rio Bravo Water Storage District
P.O. Box 867
Bakersfield, California 93302-0867
Attn: General Manager
Telephone: (661) 589-6045
Facsimile: (661) 589-1867
Electronic Mail: ____________________________

22. **Severability**

Should any part, term, or provision of this Agreement be adjudged by a court of competent jurisdiction to be illegal or in conflict with any law of the State of California, or otherwise be rendered unenforceable or ineffectual, the remaining portions of this Agreement shall remain in full force and effect.

23. **Representations**

Each Party represents and warrants to the other Party that it is a duly organized or constituted entity, with all requisite power to carry out its obligations under this Agreement, and that the execution, delivery, and performance of this Agreement have been duly authorized by all necessary action of the board of directors or other governing body of such Party, and shall not result in a violation of such Party's organizational documents or any agreement to which it is a party or to which it is otherwise subject or bound. Each Party further represents and warrants to the other Party that, to its knowledge at the time it executed this Agreement, there is no pending or threatened litigation involving such representing Party that will affect this Agreement. The Parties have relied on the forgoing representations as a material inducement to execute this Agreement, and should any representation not be correct or true in any material respect, it shall constitute a material breach of this Agreement.

24. **Choice of Law; Venue**

This Agreement shall be construed and enforced in accordance with the laws of the State of California. Venue over any and all disputes arising from this Agreement shall be proper in ~~Kern~~ Los Angeles County, California or in the United States District Court for the ~~Eastern~~ Central District of California.

25. **Dispute Resolution**

For matters involving a dispute under this Agreement, the following provisions shall apply:

A. **Mediation**

The Parties agree that any and all disputes, claims or controversies arising under this Agreement, whether for breach, enforcement, or interpretation thereof, shall be submitted to mediation in a mutually agreeable venue and if the matter is not resolved through mediation, then it may be submitted for final and binding arbitration as provided in article 25(B) below. Either Party may commence mediation by providing to the other Party a written request for mediation, setting forth the subject of the dispute and the relief requested. The Parties shall cooperate with one another in selecting a mediator and in scheduling the mediation proceedings. The Parties covenant that they shall participate in the mediation in good faith, and that they shall share equally in costs charged by the mediator. All offers, promises, conduct and statements, whether oral or written, made in the course of the mediation by any Party, its agents, employees, experts or attorneys, or by the mediator or any of the mediator's employees, are confidential, privileged and inadmissible for any purpose, including impeachment, in any arbitration or other proceeding involving the Parties, provided that evidence that is otherwise admissible or discoverable shall not be rendered inadmissible or non-discoverable as a result of its use in the mediation. A Party may request arbitration with respect to the matters submitted to mediation by filing a written request for arbitration at any time following the initial mediation session or 45 days after the date of filing the written request for mediation, whichever occurs first. The mediation may continue after the commencement of arbitration if the Parties so desire. Unless otherwise agreed by the Parties, the mediator shall be disqualified from serving as arbitrator in the case. The provisions of this article 25 may be enforced by any Court of competent jurisdiction, and the Party seeking such enforcement shall be entitled to an award of all costs, fees and expenses, including attorneys' fees, to be paid by the Party against whom such enforcement is ordered.

~~B. **Arbitration**~~

~~Any dispute, claim or controversy or controversy arising under this Agreement, whether for breach, enforcement, or interpretation thereof, including the determination of the scope or applicability of this Agreement to arbitrate, which could not be resolved through the mediation process set forth above, may be determined by arbitration and, with the agreement of both Parties, shall be determined by arbitration before a sole arbitrator, in accordance with the laws of the State of California for agreements made in and to be performed in that State. Judgment on the award may be entered in any court having jurisdiction. The arbitrator shall, in the award, allocate all of the costs of the arbitration (and the mediation, if applicable), including the fees of the arbitrator and the reasonable attorneys' fees of the prevailing Party, against the Party who did not prevail.~~

~~C.~~B. **Selection of Mediator~~/Arbitrator~~**

The Parties shall first attempt to mutually agree to a mediator~~ or arbitrator~~. If the Parties fail to agree on the mediator~~ or arbitrator~~, the Parties shall each nominate and exchange with each other the names of three persons to resolve the dispute. From this group of nominated mediators~~ or arbitrators~~, the Parties shall select the Mediator~~ or Arbitrator~~. If each of the Parties selects the same Mediator~~ or Arbitrator~~, that person shall be the Mediator~~ or Arbitrator~~. In the event two or more same persons are selected by the Parties, the person whose name precedes the other alphabetically shall be the Mediator~~ or Arbitrator~~. If the Parties do not select the same person, then each Party shall eliminate two of the other's selection and the remaining names shall be randomly drawn in order by either Party. The first drawn shall be the Mediator ~~or Arbitrator~~ unless there is a conflict of interest or the mediator ~~or arbitrator~~ cannot serve because of scheduling conflicts. In that case, the second name drawn shall be the Mediator~~ or Arbitrator~~. No Mediator ~~or Arbitrator~~ shall be nominated or selected if they have any actual or perceived conflict of interest. If necessary, this process can be repeated to nominate or select a mediator ~~or arbitrator~~ if the final two selected Mediators ~~or Arbitrators~~ have any actual or perceived conflict of interest.

26. **Force Majeure**

All obligations of the Parties, other than payment of accrued monetary obligations, shall be suspended for so long as and to the extent the performance thereof is prevented, directly or indirectly, by earthquakes, fires, tornadoes, facility failures, floods, strikes, other casualties, acts of God, orders of court or governmental agencies having competent jurisdiction, compliance with applicable statutes, regulations, ordinances, laws or other events, conditions or causes beyond the control of the nonperforming Party. In no event shall any liability accrue against a non-performing Party, its officers, agents or employees, for any claim of damage arising out of or connected with a suspension of performance pursuant hereto.

27. **Assignment; Delegation**

A. ***Prior Written Consent***. Except as otherwise provided in this Agreement, the Authority and the Parties shall not assign any rights or delegate any duties or obligations arising from this Agreement without the written consent of the Parties. Any attempt at such an assignment or delegation shall be null and void. Any assignment or delegation shall be in writing and shall expressly provide that the assignee or delegatee accepts all rights and duties or obligations of the assignor or delegator, including but not limited to any obligations imposed as a condition of outside funding of the Kern Fan Project.

B. ***Temporary Use of Kern Fan Project Capacity.*** Each Party's use of its respective Kern Fan Project capacity to implement another independent operating program or project with a third party ~~that is temporary and will be completed within one year~~ shall not be deemed an assignment requiring prior written consent pursuant to article 27(A). The Parties agree that any agreement each might enter with a third party to provide recharge, storage or recovery operations for the third party shall be characterized as providing a recharge, storage or recovery service and not as an assignment, unless an assignment proposed by one Party is approved in writing by the other Party under article 27(a)~~The undertaking of such a program or project with a third party for more than one year would constitute an assignment for which the required Special Activities Agreement would provide prior written consent pursuant to article 27(A)~~.

28. **Hierarchy of Documents**

This Agreement, as may be amended from time to time, shall govern over all other Authority documents and agreements, including the Bylaws of the Board of Directors.

29. **Entire Agreement**

This Agreement contains the entire agreement between the Parties and supersedes all prior understanding between them with respect to the subject matter of this Agreement. There are no promises, terms, conditions or obligations, oral or written, between or among the Parties relating to the subject matter of this Agreement that are not fully expressed in this Agreement. Modifications, changes or supplements shall not be effective unless in conformance with section XVIII of this Agreement. Termination of this Agreement shall not be effective unless in conformance with section XIX of this Agreement.

30. **Joint Drafting and Negotiation**

This Agreement has been jointly negotiated and drafted. The language of this Agreement shall be construed as a whole according to its fair meaning and without regard to or aid of Civil Code section 1654 or similar judicial rules of construction. Each Party acknowledges that it has had the opportunity to seek the advice of experts and legal counsel prior to executing this Agreement and that it is fully aware of and understands all of its terms and the legal consequences thereof.

31. **Counterparts and Effective Date**

This Agreement may be executed in counterparts and be as valid and binding as if each Party signed the same copy. A faxed copy of the executed signature page shall be sufficient to cause the terms of this Agreement to become fully operative.

32. **Headings**

Article and section headings contained herein are for convenience only. Such headings shall not control or affect the meaning or construction of this Agreement.

IN WITNESS WHEREOF, each Party has executed this Agreement on the date set forth below its signature.

Irvine Ranch Water District		**Rosedale-Rio Bravo Water Storage District**	
By:	______________________	By:	______________________
	______________________		______________________
Name:	______________________	Name:	______________________
	______________________		______________________
Title:	______________________	Title	______________________
	______________________		______________________
Date:	______________________	Date:	______________________
	______________________		______________________

Approved as to Form:

Approved as to Form:

October 18, 2018
Prepared by: C. Smithson
Submitted by: C. Clary / P. Weghorst PAW
Approved by: Paul A. Cook P. 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 untreated water delivery 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. The revised terms were presented at the September Supply Reliability Programs Committee and the Committee requested that staff provide:

- A simplified formula by consolidating the capital and O & M components;
- An allocation of the cost over the life of the contract, spreading the expense for Emergency Supply to all Baker Water Treatment Plant water acquired during the timeline; and
- Additional alternatives for funding evaporation of the dead pool.

Staff recommends that the Committee provide input on the updated 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 reserved for this purpose. IRWD and SWD, as co-owners of Irvine Lake, are developing ways through which the two agencies could collaboratively provide emergency water from Irvine Lake to the Baker Plant participants.

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 prepared revised draft price and payments terms for an Irvine Lake Emergency Supply Pilot Program that were simpler to implement and based on cost-of-service deliveries of water rather than exchanges. These revised terms were reviewed with the Committee in September. At the meeting, staff will address the specific questions raised at the September Committee meeting.

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.

October 18, 2018
Prepared by: K. Welch
Submitted by: F. Sanchez / P. Weghorst PKW
Approved by: Paul A. Cook

SUPPLY RELIABILITY PROGRAMS COMMITTEE

REVISED CONCEPTUAL TERMS FOR A STORAGE AND EXCHANGE PROGRAM WITH METROPOLITAN WATER DISTRICT

SUMMARY:

In October 2017, staff reviewed with the Committee terms for a Storage and Exchange Program with Metropolitan Water District of Southern California (Metropolitan) which would allow Metropolitan to pre-deliver water to IRWD's Strand and Stockdale Integrated Banking Projects (IRWD Water Bank) that would otherwise be lost to the ocean. The purpose of the pre-deliveries would be for Metropolitan to fulfill future return obligations that it incurs through IRWD's unbalanced exchange programs.

Based on discussions with Metropolitan, staff has prepared revised conceptual terms that would allow IRWD to charge Metropolitan for storage until such a time when an IRWD program delivers water to Metropolitan in exchange for the pre-delivered water. At the Committee meeting, staff will provide an overview of the revised conceptual terms and the benefits of the proposed program. Staff recommends that the Committee provide input on the revised conceptual terms for a storage and exchange program with Metropolitan and authorize staff to work with Metropolitan to finalize terms.

BACKGROUND:

In April 2011, IRWD entered into the Coordinated Operating, Water Storage, Exchange and Delivery Agreement (Coordinated Agreement) with Metropolitan and the Municipal Water District of Orange County. This agreement allows IRWD to secure State Water Project (SWP) supplies through unbalanced exchanges with other SWP Contractors to which Metropolitan provides its written consent. In implementing these exchanges, Metropolitan incurs obligations to return unbalanced amounts of water to the originating SWP Contractors.

2017 Storage and Exchange Program Terms:

During the wet winter of 2016-17, staff held discussions with Metropolitan related to providing opportunities for Metropolitan to store water in the IRWD Water Bank during periods when it has excess SWP water supplies that would otherwise be lost to the ocean. In October 2017, staff reviewed with the Committee proposed terms for a storage and exchange program between IRWD and Metropolitan that were prepared as a result of the discussions with Metropolitan. The proposed program would allow Metropolitan to pre-deliver SWP water in wet years to the IRWD Water Bank for the purpose of fulfilling future return obligations incurred by Metropolitan resulting from IRWD's unbalanced exchange programs with other SWP Contractors. In the future, IRWD would recover an appropriate amount of water from the ground to be used in meeting Metropolitan's obligations pursuant to the unbalanced exchanges. The following is a summary of key terms of the October 2017 proposal:

- IRWD, in its sole discretion, could allow Metropolitan to deliver SWP water to IRWD in its Water Bank;
- The stored water would serve to fulfill future obligations incurred by Metropolitan to other SWP Contractors as a result of the implementation of IRWD's unbalanced exchange programs;
- The amount that IRWD would allow Metropolitan to store shall not impede IRWD's abilities to meet its own water supply reliability needs or impede IRWD's ability to fulfill obligations associated with its existing and future programs; and
- The costs associated with the implementation of the program would be assessed to IRWD and Metropolitan pursuant to the Coordinated Agreement.

Revised Program Terms:

Since October 2017, staff has held discussions with Metropolitan related to the proposed terms. Over the course of these discussions, it was determined that the pre-delivered water could only qualify as Extraordinary Supply for IRWD's use after an exchange occurred where Metropolitan took delivery of another SWP Contractor's water in the California Aqueduct that was made available through an IRWD exchange program. To ensure a mutually beneficial program, staff has continued to work with Metropolitan to refine the proposed terms such that IRWD would receive a financial benefit during the time that Metropolitan's pre-delivered water is stored in the IRWD Water Bank in advance of IRWD exchange program water being available to Metropolitan in the California Aqueduct. Based on these discussions, staff has prepared the revised conceptual terms for a storage and exchange program with Metropolitan that are provided as Exhibit "A".

Staff believes these terms are competitive with other Kern County water banking programs in which Metropolitan currently participates. At the Committee meeting, staff will provide an overview of the revised terms and the associated benefits. Staff recommends that the Committee provide input on the revised terms.

FISCAL IMPACTS:

The costs associated with the implementation of the proposed revised Storage and Exchange Program would be paid by IRWD and Metropolitan consistent with the terms of the Coordinated Agreement and the terms of IRWD's unbalanced exchange programs to which Metropolitan has incurred future obligations. Metropolitan would also pay storage fees to IRWD in accordance with the attached storage and exchange program terms.

ENVIRONMENTAL COMPLIANCE:

In compliance with the California Environmental Quality Act (CEQA), the California Public Resources Code Section 21000 et. seq., and per CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3, Rosedale as a lead agency, filed Notices of Determination (NODs) with the County of Kern and with the California State Clearinghouse for the Strand

Ranch Integrated Banking Project Final Environmental Impact Report (EIR) and the Stockdale Integrated Banking Project Final EIR. IRWD, as a Responsible Agency, filed NODs with the Counties of Orange and Kern and with the California State Clearinghouse for both the Strand Ranch and Stockdale Integrated Banking Projects Final EIRs.

RECOMMENDATION:

That the Committee provide input on the revised Conceptual Terms for a Storage and Exchange Program with Metropolitan Water District of Southern California and authorize staff to work with Metropolitan to finalize the terms.

LIST OF EXHIBITS:

Exhibit "A" – Revised Conceptual Terms for Storage and Exchange Program Between IRWD and Metropolitan

EXHIBIT "A"

Revised Conceptual Terms for Storage and Exchange Program Between IRWD and Metropolitan

Parties	Irvine Ranch Water District (IRWD) and Metropolitan Water District of Southern California (Metropolitan).
Purpose	IRWD and Metropolitan seek to establish a Storage and Exchange Program (Program) for the benefit of both agencies using IRWD's Strand and Stockdale Water Banking Projects (IRWD Water Bank). The Program will provide a) improved water management during periods when Metropolitan has excess supplies and b) better use of IRWD's Water Bank capacities.
Program Overview	At IRWD's sole discretion, Metropolitan may deliver excess State Water Project (SWP) water to IRWD's Water Bank for the purposes of: 1) Pre-delivering water to fulfill future obligations incurred by Metropolitan through IRWD's unbalanced exchange programs with other SWP Contractors, pursuant to the Coordinated Operating, Water Storage, Exchange and Delivery Agreement (Coordinated Agreement); and/or 2) Providing storage of Metropolitan's water for up to five years.
Program Benefits	The Program will benefit Metropolitan by providing improved water management of its excess wet year supplies. The water can be stored on a short-term basis for Metropolitan's use and also used to fulfill future return obligations incurred by Metropolitan through IRWD's unbalanced exchange programs. The Program will allow IRWD to generate storage revenue in advance of Exchange Water qualifying as Extraordinary Supply under the Coordinated Agreement. IRWD will have the flexibility to request that Metropolitan vacate its water if capacity is needed for other IRWD water supply programs.
Exchange Water	Exchange Water delivered into storage by Metropolitan may be exchanged for other SWP Contractors' water in the California Aqueduct, secured by IRWD through unbalanced exchange programs, for Metropolitan's use in its service area. In the future, IRWD will recover from the ground an appropriate amount of water, after consideration of losses, to be used in meeting Metropolitan's return obligations incurred through IRWD unbalanced exchange programs. IRWD's share of the water resulting from the unbalanced exchange would qualify as Extraordinary Supply pursuant to the Coordinated Agreement. Metropolitan would have the option to request that IRWD recover the stored Exchange Water for delivery to Metropolitan's service area.

Revised Conceptual Terms for Storage and Exchange Program Between IRWD and Metropolitan (continued)

Losses	Metropolitan shall assume the losses on Exchange Water delivered to the IRWD Water Bank based on the Kern County loss provisions, which are currently 15% for evaporation, migration, and out-of-county use. Following an exchange for other SWP Contractors' water in the California Aqueduct, the appropriate amount of losses would be assessed to the other SWP Contractors' shares of the Exchange Water. Metropolitan shall assume losses for IRWD's share of the Exchange Water such that IRWD maintains 100% of its share of banked water from its unbalanced exchanges with other SWP Contractors.
Costs to Metropolitan	Metropolitan shall pay Department of Water Resources Variable OMP&R charges for the delivery of Exchange Water to the IRWD Water Bank and for delivery of Program Water to Metropolitan's service area pursuant to the Coordinated Agreement. Metropolitan shall pay to IRWD an annual storage fee in the amount of $87 per acre-foot for the use of IRWD's Water Bank. Storage fees will be assessed based on the gross amount of Exchange Water delivered to the IRWD Water Bank. Storage fees paid by Metropolitan may be prorated during years when Metropolitan's stored water is exchanged for water delivered to Metropolitan as a result of an IRWD unbalanced exchange program. When Metropolitan requests recovery of stored Exchange Water for its use, Metropolitan shall reimburse IRWD for actual costs of recharge and recovery of the water.
Length of Program:	Through 2035 coterminous with the Coordinated Agreement

October 18, 2018
Prepared and
Submitted by: P. Weghorst PAW
Approved by: Paul A. Cook P. Cook.

SUPPLY RELIABILITY PROGRAMS COMMITTEE

IRWD COMMENTS ON MUNICIPAL WATER DISTRICT OF ORANGE COUNTY'S 2018 WATER SUPPLY RELIABILITY STUDY UPDATE

SUMMARY:

The Municipal Water District of Orange County (MWDOC) has recently completed a draft update to the Orange County Water Supply Reliability Study that it initially prepared in 2016. MWDOC has invited its member agencies to provide written comments on the update by October 26, 2018. Staff has prepared a draft IRWD comment letter for the Board's consideration. Staff recommends that the Board approve the draft letter, as revised based on input received from the Committee.

BACKGROUND:

In 2016, MWDOC completed a comprehensive evaluation of future water supply reliability in Orange County. Throughout the study, MWDOC engaged in collaborative workshops with its member agencies to develop future demand forecasts, to identify feasible future scenarios, and to characterize potential regional and local projects; IRWD staff was an active participant in these workshops. The study included detailed modeling to determine water supply gaps and made qualitative comparisons of the ability of the projects to fill the gaps. The study concluded with a portfolio of projects to consider for further analysis. The study made no recommendations as to which local projects should be implemented by MWDOC's member agencies.

Over the past year, MWDOC worked with its consultants to further evaluate the portfolio of projects identified in the 2016 Study. The evaluations have included the application of a project comparison metric, similar in nature to a benefit/cost analysis. The results of these evaluations have recently been shared at a workshop with MWDOC's member agencies, at the MWDOC Planning and Operations Committee, and at the Water Advisory Committee of Orange County (WACO). Like the original 2016 study, the update makes no recommendations as to which local projects should be implemented by MWDOC's member agencies. MWDOC has invited its member agencies to provide written comments on the draft 2018 Update to the Water Supply Reliability Study by October 26, 2018.

Proposed IRWD Comments on 2018 Update:

In response to MWDOC's request for comments on the 2018 Update to the Water Supply Reliability Study, staff has prepared the draft letter attached as Exhibit "A". At the Committee meeting, staff will provide an overview of the study update and the draft IRWD comment letter. Staff recommends that the Board approve the letter to MWDOC, as revised based on input received from the Committee.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board approve the letter to the Municipal Water District of Orange County providing comments on its 2018 Water Supply Reliability Study Update, as revised based on input received from the Committee.

LIST OF EXHIBITS:

Exhibit "A" – Draft IRWD Comment Letter on the MWDOC 2018 Water Supply Reliability Study Update.

EXHIBIT "A"

Irvine Ranch
WATER DISTRICT

October XX, 2018

DRAFT

Mr. Rob Hunter
General Manager
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708

Subject: Comments on 2018 Update to Orange County Water Supply Reliability Study

Rob:

The Municipal Water District of Orange County (MWDOC) has recently completed its draft 2018 Update to the Orange County Water Supply Reliability Study (2018 Study). This study is an important, objective, and comprehensive evaluation of how gaps in future water supplies can be met with different local and regional water supply projects. Irvine Ranch Water District (IRWD) appreciates the hard work that MWDOC staff and consultants have put into this study and compliments the team for objectively comparing project alternatives. We also commend MWDOC staff for encouraging and incorporating input received from its member agencies. The purpose of the letter is to provide the following IRWD comments on the study.

IRWD's comments, which have been reviewed with and approved by the IRWD Board of Directors, are as follows:

1. The future demand forecasts that were developed for the initial Supply Reliability Study (completed in 2016), with the input of MWDOC's member agencies, are reasonable. These demands adequately reflect the expected impacts of the State imposing water budgets on retail water agencies throughout the County. The study adequately demonstrates that water demands are not likely to increase in Orange County in the future.

2. The project evaluation metrics that are used in the updated 2018 Study provide a good method of comparing the benefits and costs of the projects. IRWD supports the comparison of the projects based on the metrics used in the study. Comparing the benefits and costs of alternatives is an essential component of water supply reliability planning. Even though not all the potential indirect benefits of the projects have been identified, IRWD supports MWDOC's efforts is applying this water supply reliability planning method.

3. The study should include the objective evaluation and comparison of the extension of the existing South County Interconnect Agreement between MWDOC, OCWD, IRWD and other South County Agencies. Evaluation of the extension of this agreement should take into consideration the results of MWDOC's ongoing hydraulic evaluation of the affected facilities in coordination with input provided by IRWD engineers. This common sense alternative needs to be included for the consideration of those agencies that deem it important, regardless of potential changes to a new South County Interconnect Agreement. Without consideration of this alternative, the 2018 Study is incomplete.

4. The 2018 Study references only briefly that the water supply reliability of the Orange County Groundwater Basin (Basin) area could be improved by changing the way that the Basin is managed. The study should be expanded to include an objective evaluation of implementing basin management improvements including expanded purchases of available supplies from Metropolitan Water District of Southern California (Metropolitan) for direct or in-lieu recharge in the Basin. It needs to be recognized that optimizing the purchases and recharge of water available from Metropolitan is likely the least expensive alternative for improving the water supply reliability of areas reliant on the Basin. Without consideration of this alternative, the 2018 Study is incomplete. IRWD encourages MWDOC and OCWD to work together on developing this evaluation.

5. It is our understanding that the study incorporates, as a baseline, the use of water supplies from Irvine Lake to provide system reliability improvements to the capacity owners in the Baker Water Treatment Plant. The 2018 Study should include a description of the assumptions included in this baseline project. IRWD and the other partners in the Baker Plant have recently initiated discussions whereby Irvine Lake could supply up to 60 days of emergency water for the Baker Plant. IRWD and the other Baker Plant partners are willing to confer with MWDOC to assist in finalizing its baseline study assumptions for this use of Irvine Lake.

6. The study should incorporate an analysis of the potential improvements in water supply reliability that might be achieved in Orange County should Los Angeles Department of Water and Power and the San Diego County Water Authority succeed in becoming less reliant on supplies from Metropolitan. Such efforts by these agencies to become more self-reliant could reduce the need to invest in future local water supply projects in Orange County.

7. Recently, other MWDOC member agencies have commented on the importance of each agency having the ability to opt out of participation in specific projects evaluated in the 2018 Study. IRWD agrees with this principle when any of the following are expected to occur as a result of a project:

    a. Significant financial impacts with no improvement in water supply reliability;
    b. Detrimental impacts to water quality;
    c. Impacts to investments in other infrastructure;
    d. System integration issues;

e. Operational challenges;
f. Infringements on capacity rights;
g. Requirements for an agency to give up existing supplies; or
h. MWDOC member agencies subsidizing the cost of supplies available to other Metropolitan member agencies.

IRWD recommends that MWDOC include in its 2018 Study a discussion of the importance of agencies being able to opt out of a project under any of the conditions listed above.

IRWD greatly appreciates the opportunity to provide the comments listed above. We request that you provide a copy of this letter to each of your Board members in advance of MWDOC's November 13, 2018 Planning and Operations Committee meeting. Please contact me at (949) 453-5590 if you have any questions or if you would like to meet to discuss these comments further.

Sincerely,

Paul A. Cook
General Manager

Enclosure

cc: MWDOC Board of Directors