

AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, JULY 18, 2019

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

ATTENDANCE Committee Chair: Douglas Reinhart _____
Member: Mary Aileen Matheis _____

<u>ALSO PRESENT</u>	Paul Cook	_____	Kellie Welch	_____
	Rob Jacobson	_____	Christine Compton	_____
	Ray Bennett	_____	Paul Weghorst	_____
	Jo Ann Corey	_____	Dane Johnson	_____
	Fiona Sanchez	_____	_____	_____
	_____	_____	_____	_____

NOTICE

If you wish to address the Committee on any item, please file your name with the Committee. Forms are provided at the Committee meeting. Remarks are limited to three minutes per speaker on each subject.

COMMUNICATIONS

1. Notes: Weghorst
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted.
4. Determine which items may be approved without discussion.

INFORMATION

- | |
|---|
| 5. <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, AND PROGRAMS – JOHNSON / WELCH / SANCHEZ / WEGHORST</u> |
|---|

Recommendation: Receive and file.

ACTION

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

That the Board authorize the General Manager to execute the 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 subject to non-substantive changes and the General Manager's determination that reasonable assurances are in place that necessary agreements with the State of California related to the Kern Fan Project will be executed.

OTHER BUSINESS

7. Directors' Comments

8. Adjourn

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

July 18, 2019

Prepared by: D. Johnson / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook



SUPPLY RELIABILITY PROGRAMS COMMITTEE

WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS AND PROGRAMS

SUMMARY:

Staff has prepared information related to IRWD's water banking facilities, capacities, operations and exchange programs. 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. Staff will also provide an update on recharge operations, as well as efforts to secure additional water for recharge at IRWD's water banking projects.

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, storage, and exchange programs. The reference materials will be updated, as needed, to reflect changes to the projects, programs and operations. The following is an overview of the reference materials. At the Committee meeting, staff will provide an update on current recharge activities, as well as efforts to secure additional water for recharge at IRWD's water banking projects.

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. Updates to Exhibits "B" and "C" are indicated in red and include the increase in the 2019 State Water Project (SWP) allocation from 70% to 75%.

Exhibit "D" graphically depicts how storage of SWP and non-SWP water has changed in the Strand and Stockdale Integrated Banking Projects through time. The table provided as Exhibit "E" shows how capacities in the water banking projects have been dedicated to IRWD's existing and proposed exchange programs.

Project Maps:

To support the tables provided as Exhibits "A", "B", "C" and "E", as well as the figure provided as Exhibit "D", staff has prepared maps that depict project wells and pipelines, recharge basins

and Cross Valley Canal turnout locations, along with the most current recharge rates. These maps are provided as Exhibits “F”, “G” and “H”, respectively. Exhibit “H” has been updated to reflect the most recent estimated infiltration rate as of June 18, 2019. The facilities shown on the maps are associated with the Strand Ranch, Stockdale West, Stockdale East and Rosedale-Rio Bravo Water Storage District Drought Relief Projects.

Program Agreement Diagrams:

Schematic diagrams have been prepared that depict the IRWD water banking and exchange programs with Rosedale-Rio Bravo Water Storage District, Buena Vista Water Storage District, Dudley Ridge Water District and Metropolitan Water District. These diagrams are provided as Exhibits “I”, “J”, “K”, “L” and “M”, as described in the List of Exhibits.

Delivery of Water to the Water Banks:

Buena Vista delivered Kern River water to the Strand Ranch and Stockdale West projects from April 11 through June 30, 2019. Approximately 12,500 acre-feet (AF) was delivered in total, of which IRWD retains one-half, which is consistent with the terms of the existing long-term exchange program agreement with Buena Vista. All of the basins on Strand and Stockdale West were used and remained full through the end of June. All three turnouts from the Cross Valley Canal were used for these deliveries with a combined initial flow rate of 135 cubic feet per second (cfs), which reduced down to 40 cfs after recharge stabilized.

Starting on July 10, 2019, IRWD began taking delivery of its 1,408 AF of 2019 SWP supplies, associated with the Jackson Ranch in Dudley Ridge Water District. As a way to keep the basins as wet as possible to help control weed growth over the summer, Rosedale is controlling the initial flow rate at approximately 20 cfs.

Other Recharge Opportunities:

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

- Antelope Valley-East Kern Water Agency;
- Central Coast Water Authority;
- San Luis Obispo County Flood Control and Water Conservation District;
- Dudley Ridge Water District; and
- Other sources.

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” – Historic Water Storage in Strand and Stockdale Projects
- Exhibit “E” – Dedicated Capacities of Current Water Banking Projects
- Exhibit “F” – Map of Water Banking Project Wells and Pipelines
- Exhibit “G” – Map of Water Banking Recharge Basins and Cross Valley Canal Turnout Facilities
- Exhibit “H” – Map of Water Banking Recharge Rates
- Exhibit “I” – Diagram of IRWD-Rosedale Water Banking and Exchange Program Agreements
- Exhibit “J” – 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 “K” – Diagram of Unbalanced Exchange Program Diagram with DRWD
- Exhibit “L” – Diagram of Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan Water District
- Exhibit “M” – Diagram of Template Wheeling Agreement with Metropolitan Water District

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Project
Recharge, Storage and Recovery Capacities
 July 18, 2019

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1 ST PRIORITY RECOVERY CONDITIONS (CFS)		2 ND PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED OR UNDER CONST.	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 ST PRIORITY	ANNUAL RECHARGE 2 ND PRIORITY	ANNUAL RECOVERY 1 ST PRIORITY	ANNUAL RECOVERY 2 ND PRIORITY	RECOVERY CAPACITY AS PLANNED ¹	ESTIMATED RECOVERY CAPACITY (APR. 2019 CONDITIONS) ²	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	40.0	-	-
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	15.0	-	-
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
TOTALS		13	2	126,000	44,600	19,000	28,750	7,500	70.0	70.0	10.0	0.0
Partner Capacities ⁴				38,000	22,300	9,500	10,850	0	35.5	25.0	-	-
IRWD Capacities				88,000	22,300	9,500	17,900	7,500	34.5	25.0	-	-
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)									12,420	9,000	-	-
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)									5,480	6,733	-	-
TOTALS (AF)									17,900	15,733	-	-
Number of months needed to recover IRWD's total AF after partners' recovery (Assumes IRWD has use of total recovery capacity after partners' recovery)									8.6	10.2	-	-
Strand Ranch monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											4,518	
Stockdale West monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											2,331	

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

² 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.

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Exhibit "B"

TABLE 2
IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES
 July 18, 2019

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 2018 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System ⁴	8,349	-	-	-	1,174	10,047
Total Kern County	3,257	17,704	6,869	289	2,388	30,507
TOTAL STORED WATER (1/1/2018)	11,606	22,360	6,869	289	3,562	44,686
MWD Water to Jackson Ranch ⁵	-	-	-	-	(295)	(295)
(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 2018 TRANSACTIONS	310	-	(1,667)	-	310	(1,047)
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,349	-	-	-	879	9,228
Total Kern County	3,567	17,704	5,202	289	2,698	29,460
TOTAL STORED WATER (1/1/2019)	11,916	22,360	5,202	289	3,577	43,344
(RECOVERY) AND RECHARGE IN 2019 (AF)						
MWD Water to Jackson Ranch (estimated)	-	-	-	-	(295)	(295)
Kern Water Bank Deliveries	-	-	-	-	-	-
2019 SWP Allocation (75%) ³	704	-	-	-	704	1,408
Kern River water (estimated)	-	6,250	6,250	-	-	12,500
TOTAL ESTIMATED 2019 TRANSACTIONS	704	6,250	6,250	-	409	13,613
ESTIMATED WATER IN STORAGE 2019 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,349	-	-	-	879	9,228
Total Kern County	4,271	23,954	11,452	289	3,107	43,073
TOTAL ESTIMATED STORED WATER TO DATE	12,620	28,610	11,452	289	3,986	56,957

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 through 2019 SWP allocation water is 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.

⁵Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.

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Exhibit "C"

TABLE 3
IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES
 July 18, 2019

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 2018 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System ⁴	7,393	-	-	-	1,174	9,091
Total Kern County	2,782	15,564	6,199	246	2,131	26,921
TOTAL STORED WATER (1/1/2018)	10,175	19,797	6,199	246	3,305	39,721
MWD Water to Jackson Ranch ⁵	-	-	-	-	(295)	(295)
(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 2018 TRANSACTIONS	264	-	(1,667)	-	264	(1,139)
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,393	-	-	-	879	8,272
Total Kern County	3,046	15,564	(1,667)	246	2,395	19,584
TOTAL STORED WATER (1/1/2019)	10,439	19,797	4,532	246	3,274	38,288
(RECOVERY) AND RECHARGE IN 2019 (AF)						
MWD Water to Jackson Ranch (estimated)	-	-	-	-	(295)	(295)
Kern Water Bank Deliveries	-	-	-	-	-	-
2019 SWP Allocation (75%) ³	598	-	-	-	598	1,197
Kern River water (estimated)	-	5,313	5,625	-	-	10,938
TOTAL ESTIMATED 2019 TRANSACTIONS ⁶	598	5,313	5,625	-	303	11,839
ESTIMATED WATER IN STORAGE 2019 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,393	-	-	-	879	8,272
Total Kern County	3,645	20,877	10,157	246	2,698	37,622
TOTAL ESTIMATED STORED WATER TO DATE	11,038	25,110	10,157	246	3,577	50,127

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 through 2019 SWP allocation water is stored in Kern County.

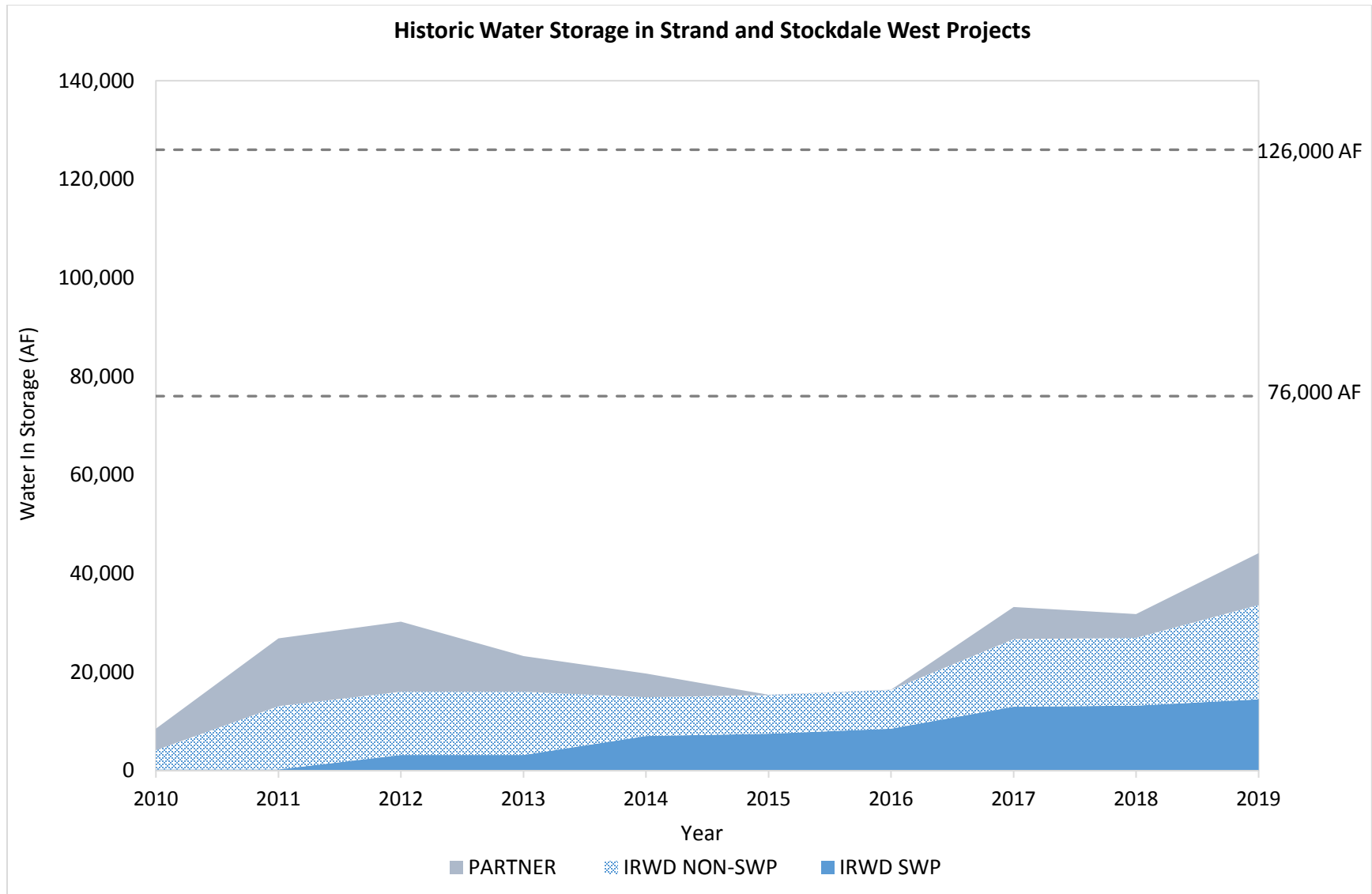
⁴ Beginning balance of water stored in MWD system includes (net of CVC losses): 3,920 AF of 2014 Exchange, 2,824 AF of 2014 borrowed SWP, 649 AF of IRWD's 2013-2016 SWP allocations through DRWD.

⁵ Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.

⁶ 2019 transactions may be adjusted for conveyance losses in CVC.

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Exhibit “D”



*After losses

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Exhibit "E"

Program	Dedicated Storage Capacity Strand Ranch (AF)	Dedicated Storage Capacity Stockdale West (AF)	Dedicated Storage Capacity Leased Storage Account (AF)	Kern Water Bank Storage Capacity (AF)
Total Capacity	50,000	26,000	50,000	9,495
BVWSD	40,000	-	-	-
DRWD	10,000	-	-	-
AVEK	-	20,000	-	-
CVWD	-	5,000	-	-
Total Dedicated	50,000	25,000	-	-
Total Remaining	-	1,000	50,000	9,495

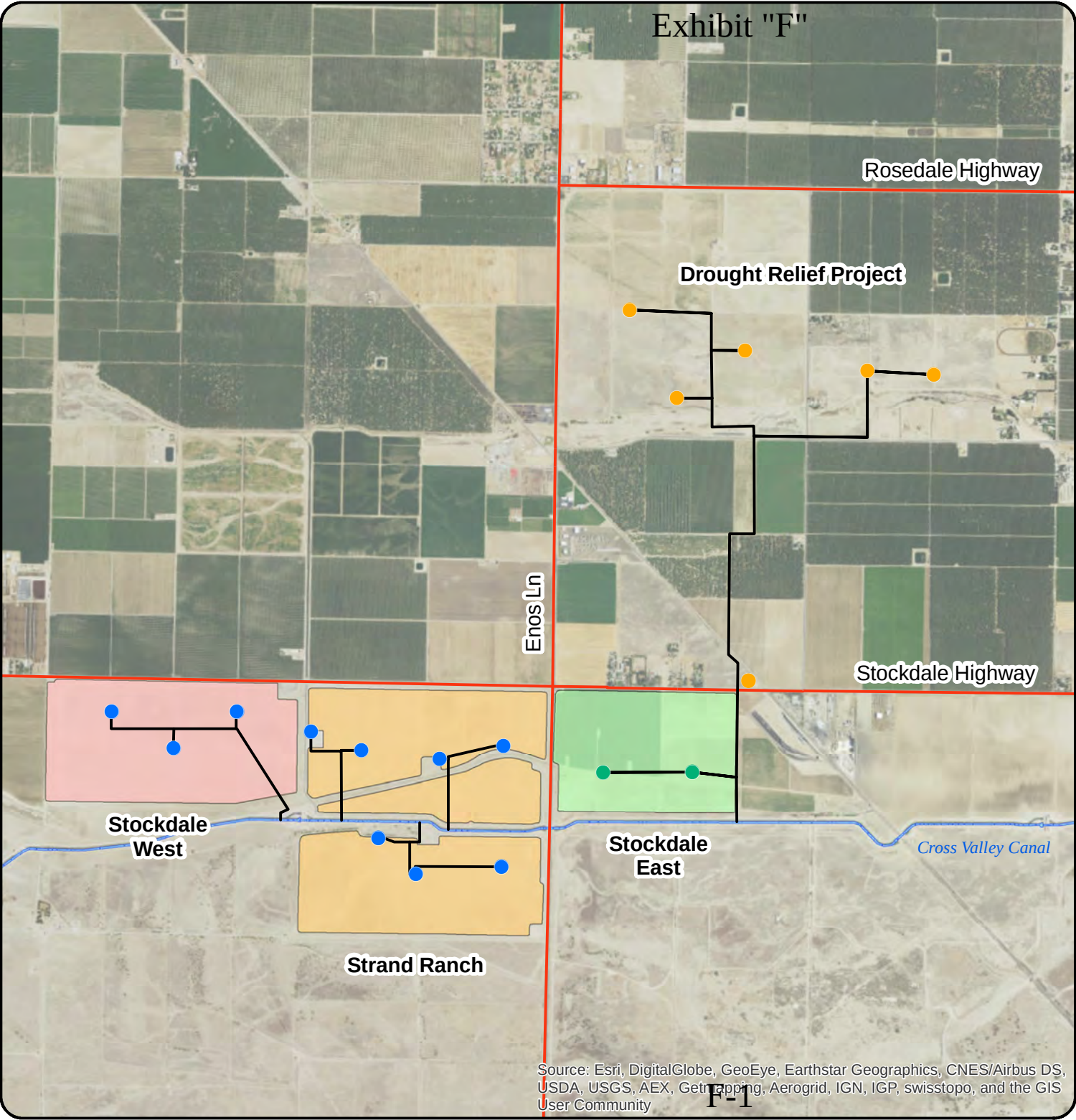
RECHARGE CAPACITY

Program	Dedicated Recharge Capacity Strand Ranch (AF)	Dedicated Recharge Capacity Stockdale West (AF)	Dedicated Recharge Capacity Leased Storage Account (AF)	Kern Water Bank Recharge Capacity (AF)
Total Capacity	17,500	27,100	-	3,200
BVWSD	17,500	-	-	-
DRWD	-	-	-	-
AVEK	-	20,000	-	-
CVWD	-	5,000	-	-
Total Dedicated	17,500	25,000	-	-
Total Remaining	-	2,100	-	3,200

RECOVERY CAPACITY

Program Partner	Dedicated Recovery Capacity Strand Ranch (AF)	Dedicated Recovery Capacity Stockdale West (AF)	Dedicated Recovery Capacity Leased Storage Account (AF)	Kern Water Bank Recovery Capacity (AF)
Total Capacity	17,500	11,250	-	6,330
BVWSD	6,667	-	-	-
DRWD	-	-	-	-
AVEK	-	3,333	-	-
CVWD	-	833	-	-
IRWD	10,833	7,084	-	6,330
Total Dedicated	17,500	11,250	-	6,330
Total Remaining	-	-	-	-

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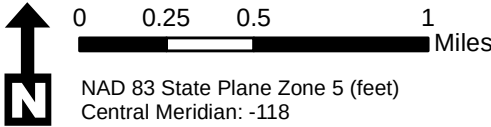


**Location Map:
IRWD Water Banking Projects
Wells and Return Pipelines**

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.



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Exhibit "G"

Rosedale Highway



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.

Existing Siphon
50 CFS Capacity
From Strand

Stockdale West
Turnout
100 CFS Capacity

Existing North & South
Strand Ranch
Turnout Facilities
100 CFS Capacity Each

Cross Valley Canal

Stockdale Highway

Enos Ln

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

G-1



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Miles

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

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

MAP FEATURES

- ▲ Turnouts
- Stockdale West
- Strand Ranch

This figure shows the location of recharge basins and their associated recharge rates as of June 18, 2019.

Stockdale West
0.11 feet/day
15 CFS

Strand Ranch North
0.29 feet/day
40 CFS

Strand Ranch South
0.13 feet/day
15 CFS

Stockdale Highway

Cross Valley Canal

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

H-1



0 0.25 0.5 1
Miles

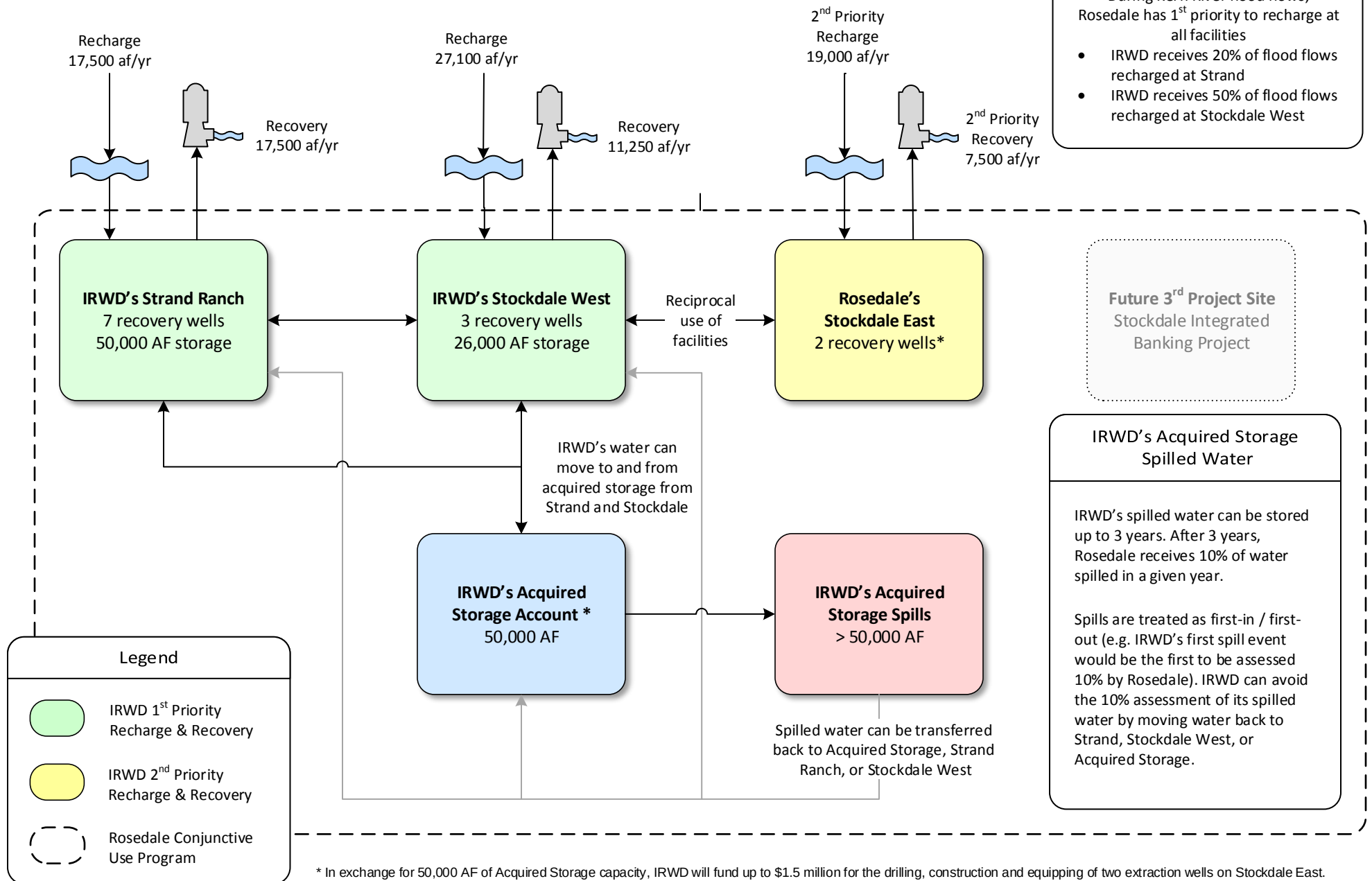
NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

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Exhibit "I"

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)

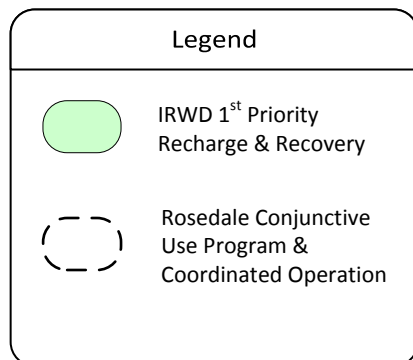
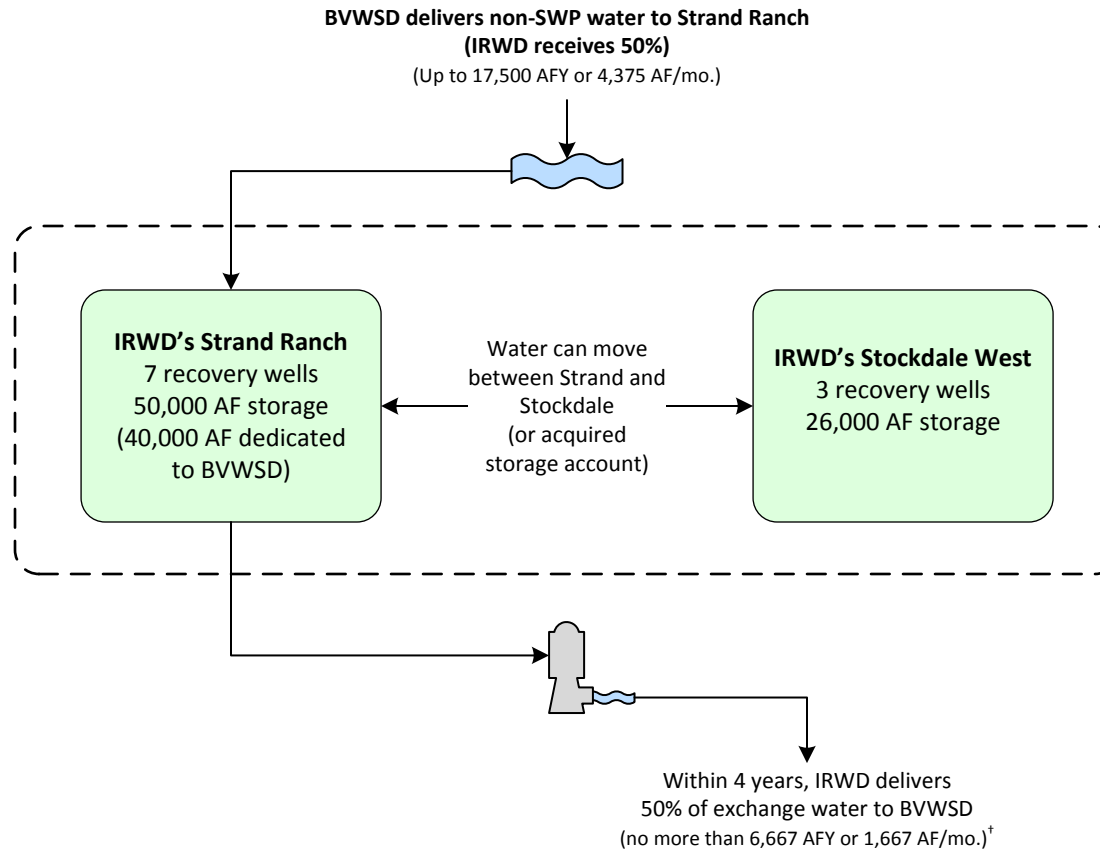


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Exhibit "J"

Buena Vista Water Storage District Long Term Water Exchange Program

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

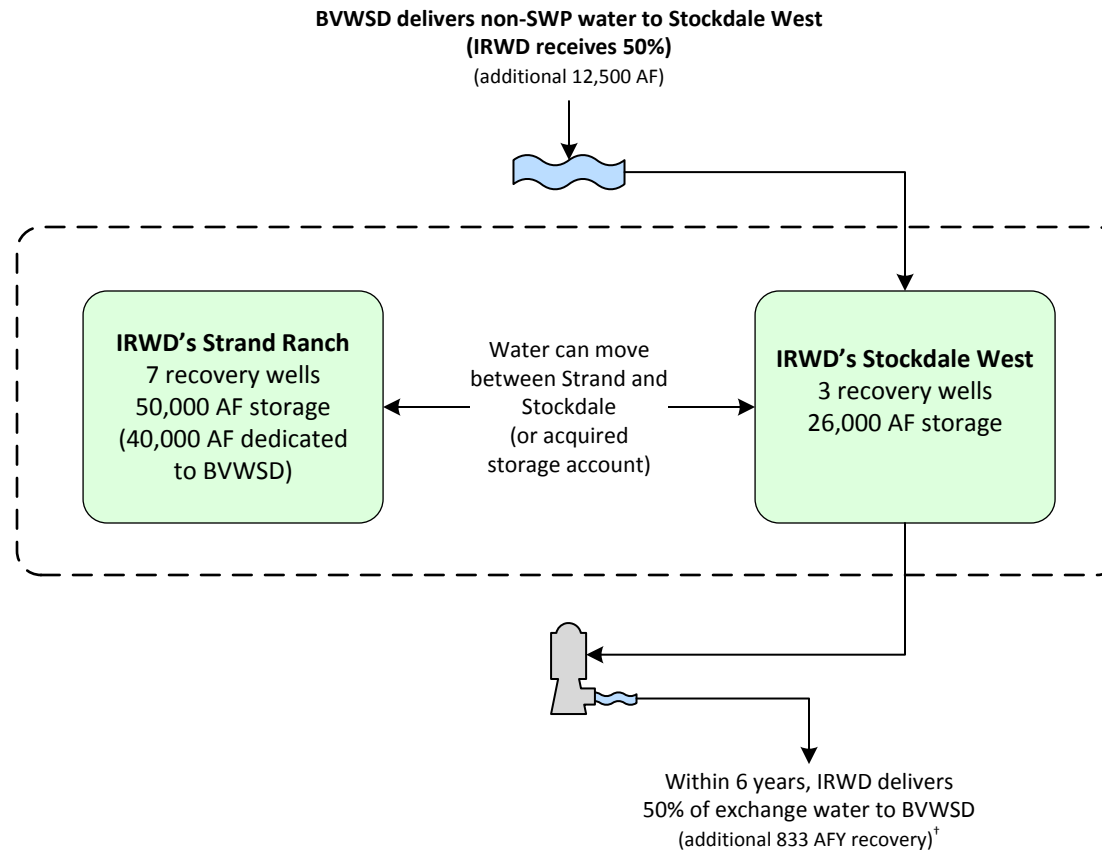


[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 4th year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch beyond the 4th year, in exchange for a greater percent being transferred to IRWD as compensation per the table shown to the right:

Year Following Recharge Event	Percent Transferred to IRWD	Percent Returned to BV During or Before Indicated Year
1	50%	50%
2	50%	50%
3	50%	50%
4	50%	50%
5	60%	40%
6	70%	30%
7	80%	20%
8	90%	10%
9	100%	0%

Buena Vista Water Storage District One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities

Effective 4/1/2017 through 3/30/2018



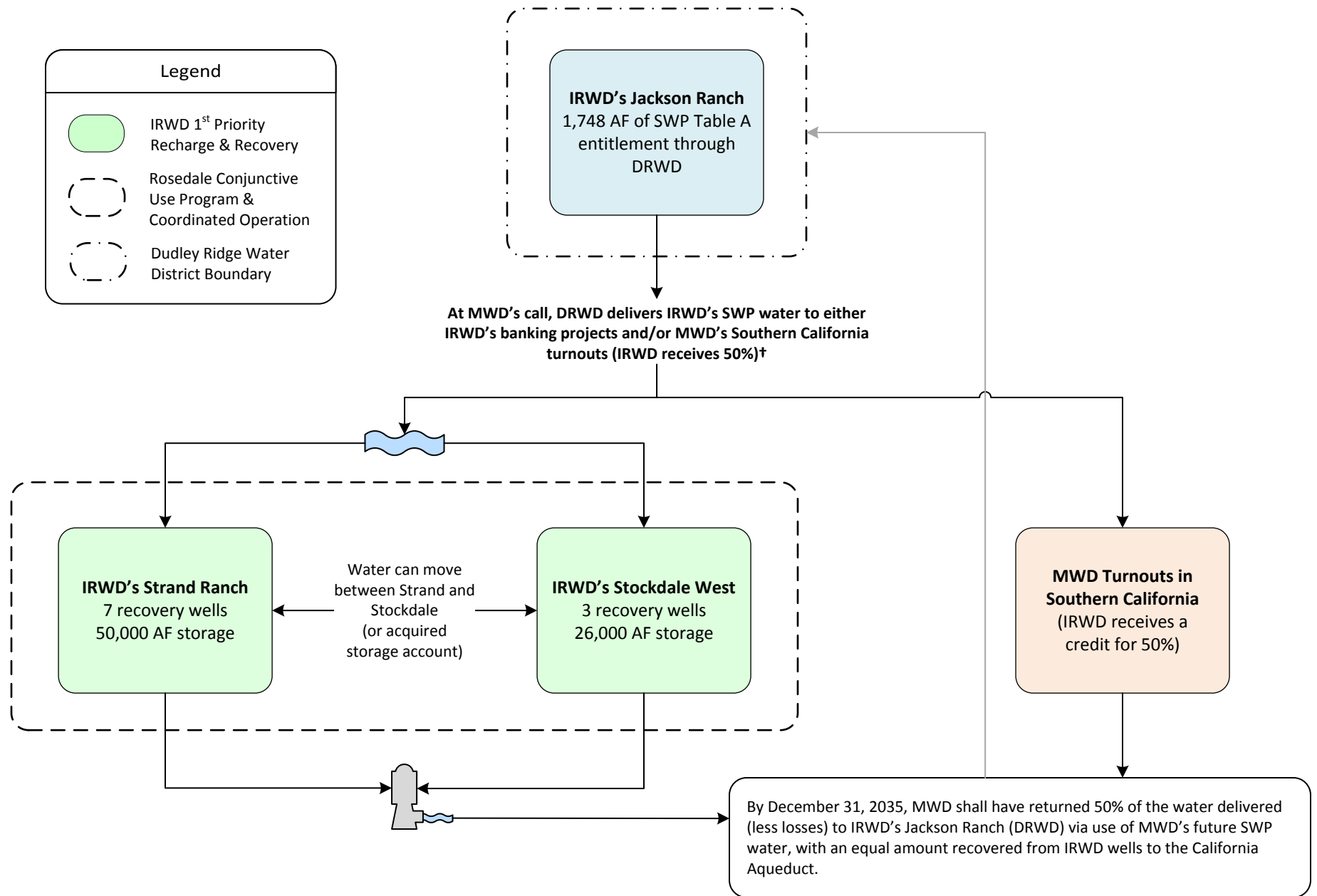
Legend	
	IRWD 1 st Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

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

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%

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Exhibit "K"
Dudley Ridge Water District (DRWD) Unbalanced Exchange Program
Up to 12,240 AF delivered from 6/7/2018 through 12/31/2027



†Consistent with IRWD-MWD coordinated operating agreement.

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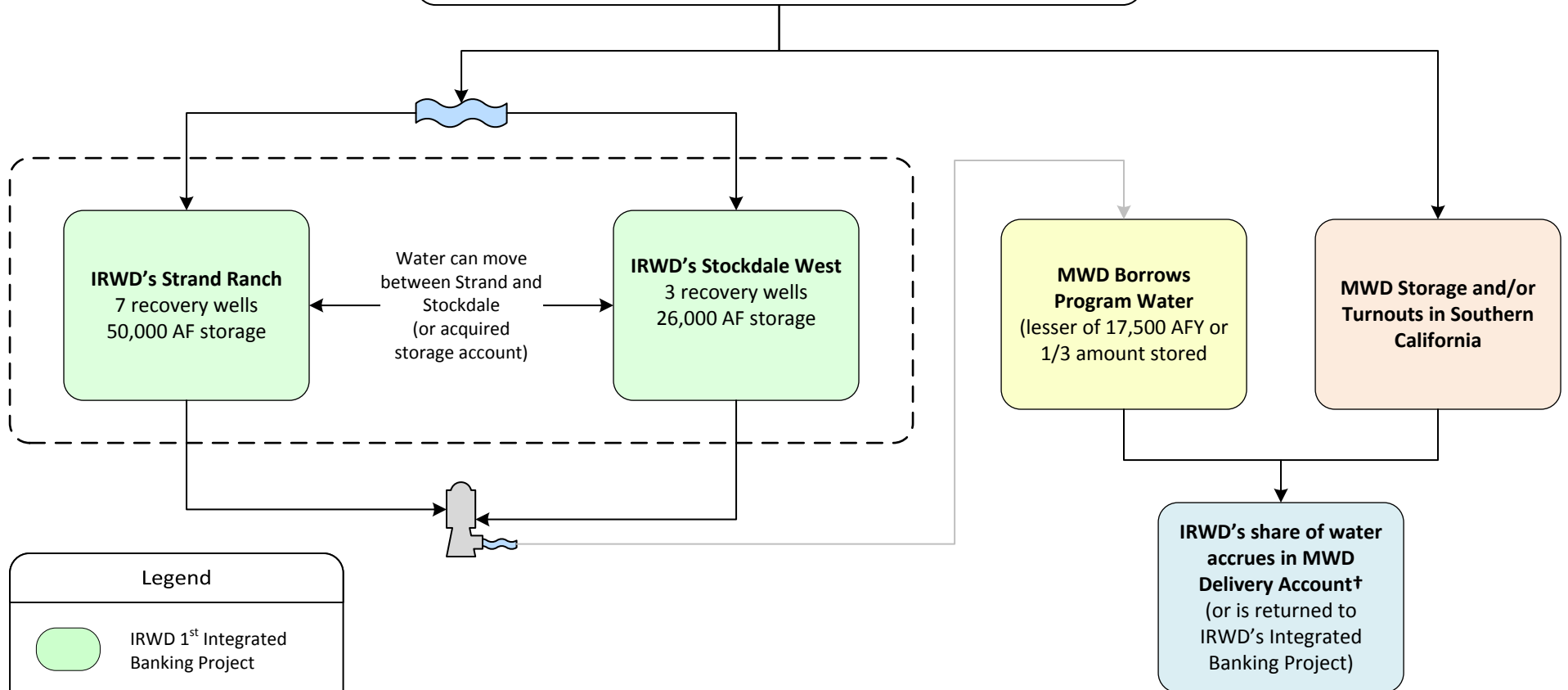
Exhibit "L"

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

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

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

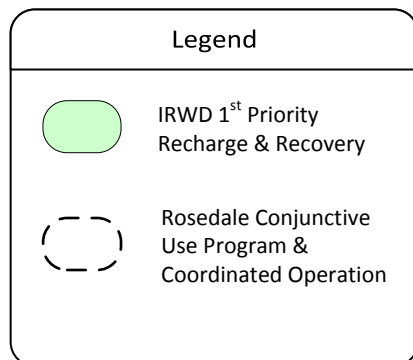
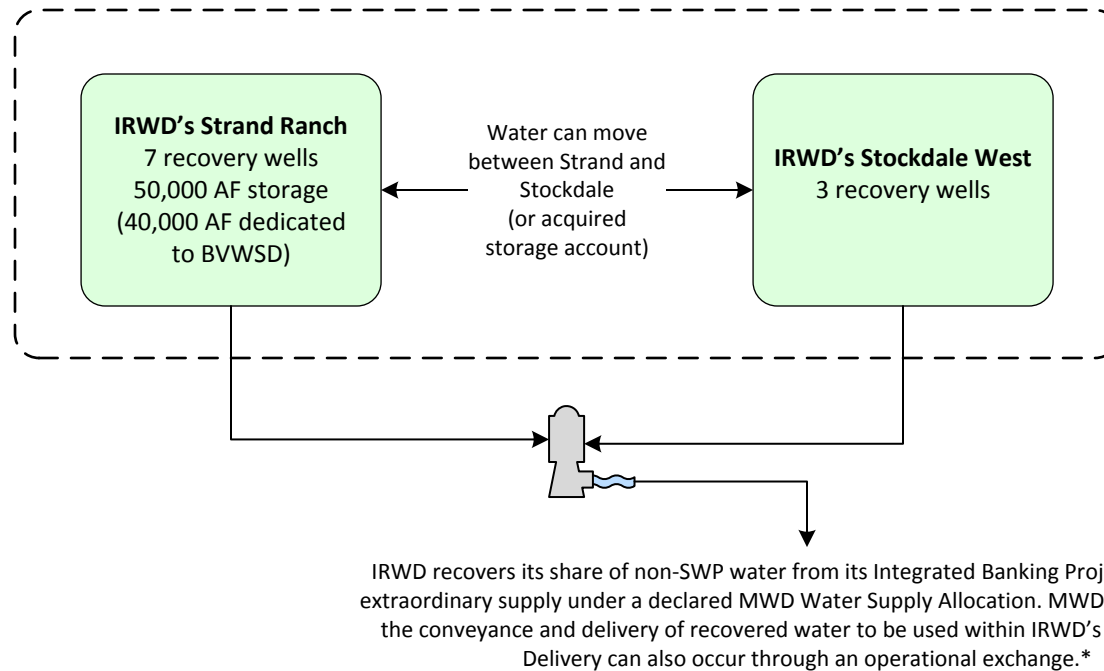
- Storage of water in IRWD's Integrated Banking Project
- Delivery to Southern California for immediate use and/or storage in MWD system
- Borrow a portion of Program water, with accrual in MWD Delivery Account



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

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



*The recovered water must be used within IRWD's service area. IRWD to pay MWD wheeling charges, including system access rate, water stewardship rate, and treatment surcharge (if applicable), for each acre foot of recovered water wheeled by MWD. IRWD will pay the actual costs of power incurred by MWD to convey recovered water in the California Aqueduct to IRWD delivery points.

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July 18, 2019

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul A. Cook



SUPPLY RELIABILITY PROGRAMS COMMITTEE

JOINT POWERS AUTHORITY AGREEMENT FOR THE KERN FAN GROUNDWATER STORAGE PROJECT

SUMMARY:

To facilitate the design, construction and operation of the Kern Fan Groundwater Storage Project (Kern Fan Project), IRWD and Rosedale-Rio Bravo Water Storage District intend to form the Kern Fan Joint Powers Authority (Authority). Staff and IRWD's special legal counsel have worked to finalize an agreement that would form the Authority. The agreement was developed with input from the Committee as well as Rosedale and its legal counsel. At the Committee meeting, staff will review the changes that have been made to the agreement since June 2019 when the agreement was last reviewed with the Committee. Staff recommends that the Board authorize the General Manager to execute the 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, subject to non-substantive changes and the General Manager's determination that reasonable assurances are in place that necessary agreements with the State of California related to the Kern Fan Project will be executed.

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 to the California Water Commission (CWC) for the proposed Kern Fan Project with a request for \$86 million in WSIP grant funding. In July 2018, the CWC conditionally awarded \$67.5 million in grant funding to the project. To facilitate land acquisition, environmental review, permitting, design, construction and operations associated with the Kern Fan Project, IRWD and Rosedale intend to form the Kern Fan Joint Powers Authority through the execution of the Joint Powers Agreement described below.

Joint Powers Agreement:

In August 2018, IRWD's special legal counsel and staff reviewed a draft Joint Powers Agreement with the Committee. Based on feedback from the Committee, staff worked with Rosedale and respective legal counsel to prepare an updated draft agreement that was reviewed with the Committee in April 2019. Staff worked with Rosedale to continue refining the agreement and outstanding issues were reviewed with the Committee in June. Since then, staff has worked with Rosedale and respective legal counsel to address the outstanding issues, incorporate input from the Committee and prepare the Joint Powers Agreement that is provided as Exhibit "A". At the Committee meeting, staff will review the following changes made to the agreement:

- 1) *Disposition of Property*: Rosedale determined that IRWD would not need to detach its share of project property from Rosedale's service area in the event that the parties decide to terminate the agreement, nor would IRWD be required to separate water from the property should IRWD decide to farm the property. IRWD would be treated in the same manner as any other property owner within Rosedale's service area. This change is reflected in Section 1B.
- 2) *Indemnification*: Indemnification is provided for on a pro-rata basis based on well pumping by IRWD and Rosedale. Costs would be allocated pursuant to the *Project Recovery Operations Plan Regarding Pioneer Project, Rosedale-Rio Bravo Water Storage District, and Kern Water Bank Authority Projects*. This change is reflected in Section 16 D.

FISCAL IMPACTS:

The CWC will provide \$67.5 million in WSIP funding through a grant agreement. IRWD and Rosedale will fund the remaining cost of the Kern Fan 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 Project 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 Board authorize the General Manager to execute the 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 subject to non-substantive changes and the General Manager's determination that reasonable assurances are in place that necessary agreements with the State of California related to the Kern Fan Project will be executed.

LIST OF EXHIBITS:

Exhibit "A" – 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

EXHIBIT "A"

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. 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. 1, 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 public benefits,

water supply public benefits during extended droughts or a Delta levee failure, and other non-public water supply benefits for RRB and IRWD water service customers. The Kern Fan Project proposes to use 25 percent (25%), up to 25,000 acre-feet, of the unallocated State Water Project ("SWP") Article 21 water stored pursuant to participation in the WSIP to provide public 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 3(C) of this agreement. Unallocated SWP Article 21 water is an interruptible water supply that the California Department of Water Resources ("DWR") periodically makes available to its long-term water service contractors under Article 21 of their contracts.

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 August 1, 2019 or upon the execution by the Parties ("Effective Date"), whichever is later, 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 WSIP or other grant funding requirements, whichever is longer, or until it is terminated early by either Party providing eighteen (18) months' advance written notice of intent to terminate. Prior to the expiration of the term of the JPA Agreement, the Parties shall work together to mutually extend this Agreement. If this Agreement is not extended, or if it is terminated early, 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 RRB shall have a first right to acquire IRWD's interest in all Kern Fan Project facilities, capacities and real or personal property held by the Authority. If this Agreement is terminated early, the Parties agree that the legal effectiveness of such termination shall be conditioned upon all then-existing grant obligations being met for the duration of such obligations.

B. ***Disposition of Kern Fan Project Property, Facilities and Other Assets Upon Termination.*** If this Agreement is terminated for any reason, then RRB's first right to acquire IRWD's interest in the Kern Fan Project facilities, land and easements shall be based upon the then-existing fair market value of the land and easements and upon the then-existing undepreciated fair market value of all such facilities. For

this purpose, IRWD's interest in Kern Fan Project facilities, land and easements shall be 50%, unless a Special Activities Agreement provides otherwise, and depreciation shall be calculated on a straight line basis and, (i) pumps and electrical improvements shall be deemed to have a useful life of twenty (20) years and all other improvements shall be deemed to have a useful life of fifty (50) years, (ii) each improvement's useful life shall be measured from its initial installation or most recent replacement or refurbishment, whichever is later, and (iii) cost shall be based on the amount of the documented cost of installation of the improvement being valued, prorated as necessary if the improvement was constructed with other improvements that are not part of the Kern Fan Project. Land and easements shall be valued at the fair market value at the time of termination. Land and easement valuation shall be "like for like" and shall be based upon comparable properties with consideration given to location, zoning, and land use. If RRB elects not to exercise its first right to acquire IRWD's interest in Kern Fan Project facilities, land and easements, IRWD may hold its interest or sell its interest to a mutually acceptable third party. Upon termination, and consistent with articles 3(C) and 3(F), RRB and IRWD each respectively shall retain their ownership of water stored in their respective shares of the Kern Fan Project's storage capacity, and each shall retain discretion to hold, recover or otherwise dispose of their water, including transferring stored water into another existing water banking project.

- (1) The Authority shall continue to exercise the powers described herein until the Parties terminate this Agreement.
- (2) 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 acquired as a result of the Authority's operations.
- (3) 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.) This requirement shall survive any withdrawal or termination of this Agreement.
- (4) 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 this article 1, 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.

- (5) In the event this Agreement is terminated prior to termination of the requirements of the WSIP grant or any other grant used to pay for the Kern Fan Project, the Parties shall be responsible for meeting all of the obligations of the WSIP and any other grants in proportion to their respective ownership of facilities post termination.

- C. **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 Authority shall 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. **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 for RRB's and IRWD's service areas, reduced dependence of RRB's and IRWD's service areas 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 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.

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 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 first 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 shall 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 ecosystem benefits.

Each Party shall submit to the other Party, prior to use of any unused second priority capacity, a preliminary schedule showing rates and quantities of water for recharge and/or recovery to be delivered in the second priority capacity. The Parties shall coordinate schedules and cooperate to avoid impacts to their respective first priority capacities. To the extent that the use of second priority capacity is deemed by the Parties to have resulted in a reduction of recharge or recovery capacity necessary to fully implement a water management program, the Parties shall meet and confer on the appropriate mitigation, which may include use of other recharge and/or recovery facilities not part of the Kern Fan Project.

Each Party may enter into a Special Activities Agreement with the Authority pursuant to article 3(D) describing and approving an independent operating program or project.

- D. ***Special Activities Agreements.*** A Party may enter into one or more 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 independent operating program or project with a third party. 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.

- E. **WSIP Water.** For purposes of participating in the WSIP to provide ecosystem public benefits and water supply public benefits during extended droughts or a Delta levee failure, the Kern Fan Project will be operated by recharging and storing unallocated SWP Article 21 water obtained by the Parties ("WSIP Water"). Unallocated SWP 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. Consistent with article 3(N) of this Agreement, WSIP Water delivered to the Kern Fan Project by each Party will be proportionately applied to each Party's respective storage account consistent with this Agreement's defined "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, subject to each Party's rights to use such capacities according to this Agreement, 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 to meet the Kern Fan Project objectives. The Authority shall own the water stored in the Kern Fan Project's ecosystem public benefit account for the benefit of the State's WSIP, while RRB and IRWD each shall own the water stored in their respective shares of the Kern Fan Project's remaining storage capacity.
- 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 or other 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. The Authority shall be responsible for any and all regulatory and permitting fees applicable to Kern Fan Project operations, including compliance with an anticipated Memorandum of Understanding regarding operation and monitoring of the Kern Fan Project and related Project Recovery Operations Plan, which governs groundwater banking within RRB.
- 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 Ecosystem Public Benefit Account.** At such times when unallocated SWP Article 21 water is available, the Parties shall equally fund the acquisition and recharge of such water for ecosystem public benefits until up to 25% of Kern Fan Project storage capacity, up to 25,000 acre-feet, is full (when the WSIP ecosystem public benefit account is full). Until the WSIP ecosystem public benefit account is full, all recharge of unallocated SWP Article 21 water shall be apportioned 25% to the WSIP ecosystem public benefit account, 37.5% to RRB's share of the Kern Fan Project's remaining storage capacity, and 37.5% to IRWD's share of the Kern Fan Project's remaining storage capacity. After the WSIP ecosystem public benefit account is full, RRB and IRWD may use their respective

capacities to recharge and store other available water, including Kern River Flood Water, to fill their respective water supply public benefits accounts, so long as such water may be used to provide water supply public benefits within the Parties' respective service areas.

- 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. The first 25% of Kern River Flood Water recharged into the Kern Fan Project shall be deemed owned by IRWD at no cost and the remainder of such stored water shall be deemed owned by RRB; provided that RRB may exercise its discretion to allow IRWD to acquire an additional 25% of such recharged Kern River Flood Water by paying RRB the average price for Kern River water over the preceding two (2) months or \$25 per AF, whichever is greater.. Beginning on January 1, 2020 and on January 1 of each year thereafter, the \$25 shall be increased in an amount equal to the percentage change, if any (but not less than zero) in the Consumer Price Index (All Urban Consumers, All Items) for Western Cities, Populations Less than 1.5 Million, published by the United States Department of Labor, Bureau of Labor Statistics. 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.

4. **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.
- K. Acquire property by eminent domain.
- L. Commission the design, permitting, construction, operation, and maintenance of any facilities required for the Kern Fan Project.
- M. Incur debts, liabilities, and other obligations.
- N. Bring suit and be sued in its own name.

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

5. **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. 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 (*e.g.*, as general manager or treasurer) 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 shall be adjourned by the member 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; provided, however, that nothing in this Agreement or the bylaws shall limit either Party's discretion to exercise its own independent judgment upon issues before the Authority in any manner.
- 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.

6. **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.

7. **Treasurer**

The Authority Board of Directors shall appoint a representative of IRWD to serve as Treasurer of the Authority, unless the Board of Directors elects to appoint another individual 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 depository and 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.

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

8. **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.

9. **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.

10. **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 6. 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 7. 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.

11. **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.

12. **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 3 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 4 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.

13. **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.

14. **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.

15. **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.

16. **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.

B. ***RRB.*** RRB shall at all times indemnify, defend and save IRWD and the Authority, 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 arising out of RRB's sole active negligence or willful misconduct in the performance of its responsibilities under this Agreement, 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 and the Authority, 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 arising out of IRWD's sole active negligence or willful misconduct in the performance of

its responsibilities 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. ***Mutual Indemnification.*** Except as set forth above, each Party shall indemnify, defend and save the other Party, 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 said other Party, its Board of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner arising out of specific Kern Fan Project operations undertaken on behalf of the indemnifying Party under this Agreement for any action. Without limiting the generality of the foregoing, and by way of example, IRWD shall indemnify, defend and save Rosedale free and harmless from claims of damages and expenses to neighboring water wells that result from recovery operations made on the behalf of IRWD, except to the extent caused by the sole active negligence or willful misconduct of Rosedale. Costs for any claim relating to Kern Fan Project operations that is made and administered pursuant to the *Project Recovery Operations Plan Regarding Pioneer Project, Rosedale-Rio Bravo Water Storage District, And Kern Water Bank Authority Projects* shall be allocated between the Parties in the same manner as claims paid by the parties to said *Project Recovery Operations Plan, a copy of which is attached as Exhibit A to this Agreement.*
- E. ***No Right of Contribution; Indemnification Agreement.*** The indemnification and hold-harmless provisions of article 16 shall apply in lieu of the right of contribution provisions at Government Code sections 895-895.8; the provisions of this article 16 are entered into pursuant to Government Code sections 895.4 and 895.6.

17. **Insurance**

- A. ***Authority.*** During the term of this Agreement, the Authority shall maintain general liability insurance 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.
- D. If a claim is made against one or the other Party's insurance policy as a result of Kern Fan Project operations, the Parties agree to each pay half of the deductible on each such claim.

18. **Modification**

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

19. **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
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: eaverett@rrbwsd.com

20. **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.

21. **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.

22. **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 Los Angeles County, California or in the United States District Court for the Central District of California.

23. **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. 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; provided, however, the other Party is not required to accept a request for arbitration. 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 23 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. Selection of Mediator

The Parties shall first attempt to mutually agree to a mediator. If the Parties fail to agree on the mediator, 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, the Parties shall select the Mediator. If each of the Parties selects the same Mediator, that person shall be the Mediator. 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. 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 unless there is a conflict of interest or the mediator cannot serve because of scheduling conflicts. In that case, the second name drawn shall be the Mediator. No Mediator 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 if the final two selected Mediators have any actual or perceived conflict of interest.

24. 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.

25. 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 shall not be deemed an assignment requiring prior written consent pursuant to article 25(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 25(a).

26. **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.

27. **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.

28. **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.

29. **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.

30. **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:

EXHIBIT A

PROJECT RECOVERY OPERATIONS PLAN REGARDING PIONEER PROJECT, ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT, AND KERN WATER BANK AUTHORITY PROJECTS

Purpose:

The Kern County Water Agency, on behalf of itself and the Pioneer Project Recovery Participants, Rosedale- Rio Bravo Water Storage District, and the Kern Water Bank Authority (the Parties) have developed this Operating Plan to designate measures, consistent with the MOUs¹ governing their respective projects, to “... *prevent, eliminate or mitigate significant adverse impacts*” resulting from project recovery operations. This plan applies to all recovery programs undertaken by any of the Parties’ projects that are governed by MOUs. Pioneer mitigation includes the Pioneer Project, Berrenda Mesa Banking Project and Improvement District No. 4’s Allen Road well field. This plan applies to landowners using groundwater for overlying agricultural or domestic uses as of the date this plan is executed. It does not apply to wells installed after the date of this plan that are installed to unsuitable depths based on historic water level fluctuations.

Plan Components:

1. Establish a Joint Operations Committee (JOC):

- a. Representatives from each of the Parties will participate in the JOC. Each Party will have equal representation on the JOC and an equal voice in its determinations, except that with respect to claims made to the JOC, only those parties contributing to mitigation will have a vote in determinations made on such claims.
- b. The JOC will meet as needed during years in which recovery operations are occurring (or expected to occur) to evaluate groundwater conditions, model results, landowner claims, and any other topics of concern. It is expected that the JOC will meet at least monthly during years when recovery operations are occurring.
- c. The JOC may establish a technical subcommittee to assist with compiling information to use in evaluating claims.
- d. The JOC will evaluate all claims with respect to model results and other appropriate information and the triggers established in Section 3, and approve or reject such claims. If claims are approved, appropriate mitigation will be determined as further described in Section 3. If mitigation is provided, the JOC will fund and/or contribute to the actions as described in Section 4.

¹ MOU refers to all of those MOUs executed by the parties that contain terms substantially similar to the *Memorandum of Understanding Regarding Operation and Monitoring of the Kern Water Bank Groundwater Banking Program* (dated October 26, 1995).

2. Evaluate Groundwater Conditions

- a. The Parties have developed groundwater models (AMEC and Harder) as a tool to evaluate With Project versus Without Project groundwater levels and predict potential groundwater impacts. The Parties shall mutually agree on the assumptions used for Without Project conditions, and for purposes of making determinations hereunder an average of the output for the two models shall be utilized. The Pioneer Without Project condition shall assume farming is continued on its footprint.
- b. The models will be updated regularly (at least annually) and compared to actual conditions during years in which recovery occurs. The Parties shall mutually cooperate to attain all data necessary for such updates. The Parties will utilize the water quality and water level monitoring data collected by the Kern Fan Monitoring Committee, and may conduct additional monitoring as needed. The Parties will report the results of the modeling to their respective Boards of Directors and shall publish on their respective websites maps and data showing current and projected water level information in the general area of the projects. As a matter of practice, the Parties will use the best and latest science and information available in all modeling and technical matters.
- c. Absent unanimous approval of the JOC, recovery in any calendar year beyond March 15 of that year shall not commence (or continue) until the Models have been run for the projected operations and the Committee has met to review the results.²
- d. The Models will be used to:
 - i. Forecast With Project and Without Project groundwater levels at the outset of recovery programs.
 - ii. Forecast any localized areas for special attention and/or monitoring.
 - iii. Attempt to identify domestic wells at risk of impacts.
 - iv. Determine if mitigation triggers have been met (See Section 3b).
- e. The Parties may, based on experience gained, select a mutually agreeable groundwater model capable of accurately predicting groundwater impacts resulting from project operations.
- f. In case of a dispute concerning a technical issue with a model, such as data inputs or the results based thereon, the Parties shall consult with a third party to resolve the matter.

3. Triggers and Actions

- a. These actions will not occur in years when average water levels (measured at the following wells: 29S/25E-25M1&2, 29S/26E-31H1&2, 29S/26E-34M1, and 29S/26E-35H) are less than 140 feet from the surface as measured on March 31 of a given year

² Model data for a preceding year becomes available at different times in the following year. Modeling at the beginning of any given year will necessitate estimating certain model input data for the preceding year (e.g. Kern River losses). These estimates will be replaced with actual data at regular intervals when the model is updated.

because it is expected that water levels will not decline during such year to an extent resulting in a mitigatable impact.

- b. The trigger for whether mitigation is considered shall be based upon an analysis and comparison of Model generated Without Project conditions to Model generated With Project conditions. When the With Project conditions are fifteen (15) or forty-five (45) feet deeper than the Without Project conditions at any operative domestic or agricultural well, respectively, and mechanical failure or other operational problems have occurred or are reasonably likely to occur due to declining water levels, mitigation will be provided as described below.
- c. To be eligible for mitigation as provided below, the affected landowner shall allow the JOC (or representatives thereof) to perform a field inspection as described in 3.d. below, and provide claim information concerning the condition of the well and casing and pumping equipment, as determined appropriate by the JOC. The JOC shall evaluate all submitted claims within forty-five (45) days of receipt, provided that the landowner cooperates with the collection of necessary information. All mitigation actions are contingent upon the claimant executing an appropriate release, the terms of which will depend upon the nature of the mitigation provided.
- d. For all claims, a field inspection will be conducted with the consent and coordination of the landowner to determine static depth to groundwater levels within the well and verify well construction information and pump setting information, if possible.
- e. Well construction information and pump setting information will be compared to Model projected pumping water levels to determine pump submergence levels and evaluate the necessity and feasibility of mitigation measures. Mitigation measures, if warranted, will include one or more of the following:
 - i. Providing a short-term emergency water supply to domestic well owners. Short-term emergency supplies shall be provided as soon as reasonably possible, but in all cases within 14 days of notification to the JOC of such needs;
 - ii. Providing funds to lower a well pump;
 - iii. Providing funds to complete a connection to an M&I water provider;
 - iv. Supplying an equivalent water supply from an alternate source;
 - v. Providing funds to replace the affected well with a deeper well that meets Kern County well ordinance standards;
 - vi. Reducing or adjusting recovery pumping as necessary to avoid the impact; or
 - vii. With the consent of the affected landowner, providing other acceptable mitigation.
- f. Mitigation will not be provided where it can be demonstrated that the affected well requires remediation for reasons other than temporary groundwater level declines resulting from Project operations (i.e., general overdraft conditions, lack of well maintenance, normal wear and tear, failure of well equipment, etc.).

4. Mitigation Funding

- a. It is the intent of the Parties to mitigate and/or compensate for legitimate Project impacts; it is not the intent of the Parties or the Plan to generate a windfall for landowners. Accordingly, adjustments will be made for depreciation of existing equipment and landowner contributions based on betterment for all mitigation measures. See Exhibit A for an example of such adjustments.
- b. All costs paid, water supplies provided, and/or pumping reductions used by the Parties to prevent, eliminate or mitigate claimed impacts at a well site shall be initially allocated among the parties according to their respective projects' proportionate contributions to the With Project water level as compared to Without Project water level, as determined by using an average of the most recent versions of the models. After years end, the models shall be updated with the actual operations data for that year and recalibrated, and the average of the results of such modeling shall be used for a final allocation of the projects' proportionate contributions levels. If appropriate, the parties shall exchange funds and/or water supplies among them in accordance with the final allocation. For administrative ease, only an initial and final allocation for a given year shall be required. This procedure shall apply to mitigation for both domestic and agricultural wells.
- c. All costs expended by any Party for equipment, water supplies or labor that is/are purchased or provided to address emergency health and safety concerns at domestic wells (exclusive of the costs described in 4.b. above) shall initially be allocated equally between the Parties. These costs shall be reallocated among the parties after years end per the procedure described in 4.b. above, provided that only those domestic wells for which emergency health and safety costs were incurred by a party shall be included in such reallocation, and further provided that the projects' proportionate contribution levels shall be based on the melded average of the results of the reallocation at all of the wells included in the reallocation.
- d. All costs expended by any JOC participant in the administration of the JOC on behalf of all participants (e.g., processing claim response letters, calls from claimants, postage, notary public services, etc.) shall initially be allocated equally between the Parties. These costs shall be reallocated after years end per the procedure described in 4.b. above.

5. Additional Actions and Miscellaneous.

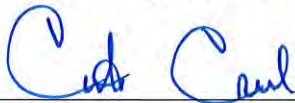
- a. The term of this Operations Plan shall commence on February 1, 2017, and shall terminate on January 31, 2019. The Parties may agree to extend this Operations Plan and will meet starting October 1, 2018 to discuss any extension.
- b. Modification language - This Operations Plan may not be altered, amended, or modified in any respect, except by unanimous consent of the Parties. Any modification to this Operations Plan must be made in writing and executed by all the Parties.

- c. Except as set forth below, in the event the Joint Operations Committee cannot agree on (1) the implementation of this agreement, or (2) the proper action in response to a landowner claim, such dispute shall be submitted to binding arbitration before a single neutral arbitrator appointed by the Parties, and in absence of such consent, appointed by the presiding judge of the Kern County Superior Court. Any arbitrator selected by the parties shall have experience arbitrating groundwater disputes. The arbitration shall be called and conducted in accordance with such rules as the Parties shall agree upon, and in the absence of such agreement, in accordance with the procedures set forth in California Code of Civil Procedure section 1282, et seq. Notwithstanding the foregoing, in any arbitration the Parties agree that discovery will be allowed pursuant to Code of Civil Procedure section 1283.05. The Parties shall attempt to jointly appoint the neutral arbitrator within ten (10) days after a dispute arises, and in the event the Parties cannot agree to a neutral arbitrator within said ten-day period, either Party may make a request to the presiding judge of the Kern County Superior Court immediately thereafter. In the event a landowner submits a claim and the Joint Operations Committee cannot agree on the proper action in response, the arbitration requirement shall be contingent upon the landowner's express written consent to proceed and be bound by arbitration and to pay his/her/its proportionate share of arbitrator fees and related costs. Absent such landowner consent, there shall be no obligation on the part of either Party to arbitrate any such dispute.
- d. With respect to the interpretation and enforcement of this Plan, and with respect to the resolution of any matter left for future determination or implementation, the Parties agree to carry out such duties and responsibilities in good faith and in cooperation with one another, to the end that the objectives and purposes of this agreement will be achieved and/or carried out to the greatest extent practicable.

APPROVED this ____ day of _____, 2017

“PARTIES”

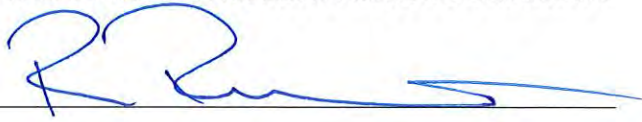
**KERN COUNTY WATER AGENCY, on behalf of itself and
the Pioneer Project Recovery Participants**

By: _____

KERN WATER BANK AUTHORITY

By: _____

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

By: _____

Joint Operations Committee
Well Cost Alternatives Worksheet

Date: October 13, 2015
Case No. 15-017
Name: Ross Johnson

A. Notes:

1. Pump was lowered in 2015.
2. Pump was pulled in October 2015 and found to be sanded up. (ME Beggs Invoice)
3. Bottom of well was tagged in October 2015 at 288 ft or 6 ft shallower than a year ago. (ME Beggs Invoice)
4. Casing is flaking off (ME Beggs Invoice)

B. Exhibit A Analysis:

i. Pump Capacity Analysis:

Required Pump Flow Rate (Estimated)				10 GPM
Measured Pump Flow Rate (Estimated)				0 GPM
Difference				10 GPM
Adequate Capacity	Yes	No	X	

ii. Pump Setting Analysis:

Depth of Casing				288 Ft
Depth to Water (Static)				222 Ft
Depth to Pumping Water Level (Estimated)				231.5 Ft
Drawdown				9.5 Ft
Pump Setting				284 Ft
Pump Submergence				52.5 Ft
Adequate Submergence	Yes	X	No	
Projected static depth to water level (From Study)				250 Ft
Drawdown				9.5
Required Submergence				50
Projected 10 Year Casing Setting				175
Modified Pump Setting				485 Ft
Existing Casing Depth				288 Ft
Modified Pump Setting				485 Ft
15 feet minimum pump clearance.				15 Ft
Required casing depth in ten years.				500 Ft
Existing Casing Depth below Required Casing Depth				(212) Ft
Adequate Clearance	Yes	No	X	

C. Well Replacement Analysis

Well Replacement Depreciation Analysis:

Existing well casing - Expected Life	50 Years
Existing well casing - Age	38
Existing well casing - Expected Remaining Life (Casing has failed)	0
Existing pump -- Expected Life	15 Years
Existing pump - (Pump replaced in July 2015)	0
Existing pump - Expected Remaining Life	15
<i>Note: In some cases, existing column, tube, shaft and motor should also be evaluated, or included with Existing pump.</i>	

Facility Remaining Replacement Cost Analysis:

	Cost	Cont. Amount	Total
Drilling and casing cost for new well.	90,000	9,000	\$99,000
Purchase and installation of new pumping equipment.	5,000	500	\$5,500
Salvage Value			\$0
Total:			\$104,500

Unit Well Replacement Cost	\$99,000 /	500 FT =	\$198 /FT
Existing Well - Replace Cost	\$198 /FT x	288 FT =	57,024
Existing Well - Depreciated Value			57,024
Existing Well - Remaining Value			0
New Well - Incremental Cost	\$198 /FT x	212 FT =	41,976
Action Fund Mitigation Cost			\$41,976

Unit Pump Replacement Cost	\$5,500 /	485 FT =	\$11 /FT
Existing Pump - Replace Cost	\$11 /FT x	284 FT =	3,224
Existing Pump - Depreciated Value			0
Existing Pump - Remaining Value			3,224
New Pump - Incremental Cost	\$11 /FT x	201 FT =	2,276
Action Fund Mitigation Cost			\$5,500

Facility Replacement Cost Summary:

Owner Cost for Facility Replacement	\$57,024
Action Fund Cost for Facility Replacement	\$47,476
Total Replacement Cost	\$104,500

D. Cost Alternative Summary:

1) Cost to drill new well to a depth of 495 ft.	\$99,000
2) Incremental cost to drill new well from 288 ft down to 495 ft.	\$41,976
3) Drill New Well & Provide Pump (Full Cost)	\$104,500

E. Action Fund Cost

Exhibit A - Incremental cost to drill new well from 288 ft down to 495 ft and lower pump from 284 ft to 485 ft.	\$47,476
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**AMENDMENT NO. 1
TO THE
PROJECT RECOVERY OPERATIONS PLAN REGARDING
PIONEER PROJECT, ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT,
AND KERN WATER BANK AUTHORITY PROJECTS**

This Amendment No. 1 to the Project Recovery Operations Plan Regarding Pioneer Project, Rosedale-Rio Bravo Water Storage District, and Kern Water Bank Authority Projects ("Amendment No. 1"), is made, entered into and effective as of January 31, 2019, by and between the Kern County Water Agency, on behalf of itself and the Pioneer Project Recovery Participants, Rosedale- Rio Bravo Water Storage District, and the Kern Water Bank Authority (the "Parties").

RECITALS

WHEREAS, the Parties have entered into an agreement titled *Project Recovery Operations Plan Regarding Pioneer Project, Rosedale-Rio Bravo Water Storage District, and Kern Water Bank Authority Projects* ("Operations Plan");

WHEREAS, the term of the Operations plan will terminate on January 31, 2019; and

WHEREAS, the Parties desire to extend the term of the Operations Plan for two years.

AGREEMENT

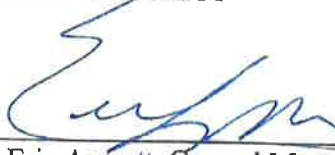
1. The term of the Operations Plan shall be extended from January 31, 2019 to January 31, 2021, and shall terminate on January 31, 2021, unless extended by mutual agreement of the Parties. The Parties may agree to extend the Operations Plan and will meet starting October 1, 2020 to discuss any extension.

2. Except as amended herein, all other terms and conditions of the Operations Plan shall remain unchanged and in full force and effect during the term of the Operation Plan as extended by this Amendment No. 1.

KERN COUNTY WATER AGENCY, on
behalf of itself and the Pioneer Project
Recovery Participants

By: 
Curtis Creel, General Manager

ROSEDALE-RIO BRAVO WATER
STORAGE DISTRICT

By: 
Eric Averett, General Manager

KERN WATER BANK AUTHORITY

By: 
Jon Parker, General Manager