

AGENDA  
IRVINE RANCH WATER DISTRICT  
SUPPLY RELIABILITY PROGRAMS COMMITTEE  
THURSDAY, MAY 21, 2020

*Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act. Members of the public may not attend this meeting in person.*

Participation by members of the Committee will be from remote locations. Public access and participation will only be available telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online via Webex using the link and information below:

Via Web:

<https://irwd.my.webex.com/irwd.my/j.php?MTID=m031da39a3b45857815a32f52c6917f3a>

Meeting Number (Access Code):	625 391 077
Meeting Password:	iPnPsTJY539

After joining the meeting, in order to ensure all persons can participate and observe the meeting, please select the "Call in" option and use a telephone to access the audio for the meeting by using the call-in information and attendee identification number provided.

*As courtesy to the other participants, please mute your phone when you are not speaking.*

**PLEASE NOTE:** Participants joining the meeting will be placed into the Webex lobby when the Committee enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Committee once the closed session has concluded. Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

ATTENDANCE

Committee Chair: Peer Swan \_\_\_\_\_  
Member: Douglas Reinhart \_\_\_\_\_

ALSO PRESENT

Paul Cook	_____	Paul Weghorst	_____
Rob Jacobson	_____	Fiona Sanchez	_____
Kellie Welch	_____	Christine Compton	_____
Ray Bennett	_____	Jo Ann Corey	_____
Natalie Palacio	_____	_____	_____
_____	_____	_____	_____

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing [comments@irwd.com](mailto:comments@irwd.com) before 12:00 p.m. on Thursday, May 21, 2020.

**ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.**

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**COMMUNICATIONS**

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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.

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**INFORMATION**

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| <ol style="list-style-type: none"><li>5. <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS AND PROGRAMS – PALACIO / WELCH / SANCHEZ / WEGHORST</u><br/><br/>Recommendation: Receive and file.</li><li>6. <u>DRAFT BYLAWS FOR THE GROUNDWATER BANKING JOINT POWERS AUTHORITY – WELCH / SANCHEZ / WEGHORST</u><br/><br/>Recommendation: That the Committee provide input regarding the draft bylaws for the Groundwater Banking Joint Powers Authority.</li></ol> |
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## ACTION

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7. POTENTIAL KERN FAN GROUNDWATER STORAGE PROJECT  
EXCHANGE PROGRAM WITH DUDLEY RIDGE WATER DISTRICT –  
WELCH / SANCHEZ / WEGHORST

Recommendation: That the Committee provide input on the range of potential costs of water that could be offered to Dudley Ridge Water District from the Kern Fan Groundwater Storage Project.

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## OTHER BUSINESS

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8. Directors' Comments

9. Adjourn

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

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May 21, 2020

Prepared by: N. Palacio / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook



## SUPPLY RELIABILITY PROGRAMS COMMITTEE

### WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS AND PROGRAMS

#### SUMMARY:

Staff has prepared information related to IRWD's water banking facilities, capacities, operations and exchange programs. The information is regularly updated to reflect changes in the status of IRWD's projects, programs and operations. At the Committee meeting, staff will review this information and provide an update on efforts to secure additional water for recharge at IRWD's water banking projects.

#### BACKGROUND:

To facilitate the discussion with the Committee, staff has prepared reference materials in tabular, map and schematic formats to describe IRWD's water banking facilities, capacities, operations, storage and exchange programs. The reference materials are updated regularly to reflect changes in the status of the projects, programs and operations. The following is an overview of the reference materials.

#### 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 provided as Exhibit "A". Exhibits "B" and "C" provide an update on water banking recovery and recharge operations, as well as the balance of the water stored in the Kern Water Bank. Exhibit "B" provides before-loss estimates of water recharged 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. Changes shown in red on Exhibits "B" and "C" reflect the estimated amount of water recovered for Buena Vista Water Storage District through May 15.

Exhibit "D" graphically depicts how storage of State Water Project (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. The facilities shown on the maps

are associated with the Strand Ranch, Stockdale West, Stockdale East and Drought Relief Projects.

Program Agreement Diagrams:

Schematic diagrams have been prepared that depict IRWD water banking and exchange programs with Rosedale-Rio Bravo Water Storage District, Buena Vista Water Storage District, Dudley Ridge 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. A new schematic diagram for the 1-for-1 Exchange Program with Dudley Ridge is provided as Exhibit “N”.

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, Rosedale-Rio Bravo Water Storage 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 Buena Vista Water District and Diagram of One-year Program to Augment Recharge Using Stockdale West Recharge Facilities with Buena Vista.

Exhibit “K” – Diagram of Unbalanced Exchange Program Diagram with Dudley Ridge Water District

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 “N” – Diagram of Dudley Ridge Water District One-For-One Exchange

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# Exhibit "A"

**TABLE 1**  
**Current and Anticipated Water Banking Project**  
**Recharge, Storage and Recovery Capacities**  
**May 21, 2020**

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1 <sup>ST</sup> PRIORITY RECOVERY CONDITIONS (CFS)		2 <sup>ND</sup> PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED OR UNDER CONST.	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 <sup>ST</sup> PRIORITY	ANNUAL RECHARGE 2 <sup>ND</sup> PRIORITY	ANNUAL RECOVERY 1 <sup>ST</sup> PRIORITY	ANNUAL RECOVERY 2 <sup>ND</sup> PRIORITY	RECOVERY CAPACITY AS PLANNED <sup>1</sup>	ESTIMATED RECOVERY CAPACITY (APR. 2019 CONDITIONS) <sup>2</sup>	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 <sup>3</sup>	No	-	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells <sup>3</sup>	No	3	-	-	-	-	-	-	15.0	15.0	-	-
Kern Water Bank Storage Account <sup>5</sup>	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
<b>TOTALS</b>		13	2	126,000	44,600	19,000	28,750	7,500	70.0	70.0	10.0	0.0
Partner Capacities <sup>4</sup>				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	-	-
<b>TOTALS (AF)</b>									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	

<sup>1</sup> 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.

<sup>2</sup> Strand Ranch and Stockdale West wells currently idle.

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

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

<sup>5</sup> Kern Water Bank capacities based on 6.58% of Dudley Ridge Water District's 9.62% share of the Kern Water Bank. Annual recharge amount is based on an average of recharge rates for high and low groundwater level conditions. Not included in storage capacity, recharge, and recovery totals to match IRWD's Water Banking Policy Position Paper.

# Exhibit "B"

**TABLE 2**  
**IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES**  
 May 21, 2020

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) <sup>3</sup>	
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2019 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System <sup>4</sup>	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 <sup>5</sup>	-	-	-	-	(440)	(440)
Kern Water Bank Deliveries <sup>6</sup>		97				97
2019 SWP Allocation (75%) <sup>3</sup>	656	-	-	-	656	1,311
Kern River Water	-	5,975	5,975	-	-	11,949
SWP Table A (CCWA 2019 Exch.)	347			347	-	694
TOTAL 2019 TRANSACTIONS	1,003	6,072	5,975	347	216	13,611
Total Kern Water Bank	-	4,753	-	-	-	4,753
Total MWD System	8,349	-	-	-	439	8,788
Total Kern County	4,570	23,679	11,177	636	3,354	43,414
TOTAL STORED WATER (1/1/2020)	12,919	28,432	11,177	636	3,793	56,955
(RECOVERY) AND RECHARGE IN 2020 (AF)						
MWD Water to Jackson Ranch (estimated)	-	-	-	-	-	-
Kern Water Bank Deliveries	-	-	-	-	-	-
2020 SWP Allocation (15 %) <sup>3</sup>	131	-	-	-	131	262
Kern River Water (estimated)	-	-	(4,717)	-	-	(4,717)
TOTAL ESTIMATED 2020 TRANSACTIONS	131	-	(4,717)	-	131	(4,455)
ESTIMATED WATER IN STORAGE 2020 (AF)						
Total Kern Water Bank	-	4,753	-	-	-	4,753
Total MWD System	8,349	-	-	-	439	8,788
Total Kern County	4,701	23,679	6,460	636	3,485	38,959
TOTAL ESTIMATED STORED WATER TO DATE	13,050	28,432	6,460	636	3,924	52,500

**NOTES:**

-MWD = Metropolitan Water District of Southern California.

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

<sup>2</sup> IRWD's Non-SWP total includes 3,158 AF of Kern County Water Agency Article 21 Water.

<sup>3</sup> 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. It is assumed that IRWD's 2020 SWP allocation will be stored in Kern County.

<sup>4</sup> 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.

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

<sup>6</sup> A portion of IRWD's 2019 SWP deliveries from DRWD include 97 AF of Article 21 water, which was delivered to the Kern Water Bank.

# Exhibit "C"

**TABLE 3**  
**IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES**  
 May 21, 2020

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) <sup>3</sup>	
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2019 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System <sup>4</sup>	7,393	-	-	-	879	8,272
Total Kern County	3,046	15,564	4,532	246	2,395	25,783
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 <sup>5</sup>	-	-	-	-	(440)	(440)
Kern Water Bank Deliveries <sup>7</sup>	-	87	-	-	-	87
2019 SWP Allocation (75%) <sup>3</sup>	557	-	-	-	557	1,114
Kern River Water	-	5,078	5,377	-	-	10,455
SWP Table A (CCWA 2019 Exch.)	298	-	-	298	-	595
TOTAL 2019 TRANSACTIONS	855	5,166	5,377	298	117	11,812
Total Kern Water Bank	-	4,320	-	-	-	4,320
Total MWD System	7,393	-	-	-	439	7,832
Total Kern County	3,901	20,642	9,909	543	2,952	37,947
TOTAL STORED WATER (1/1/2020)	11,294	24,963	9,909	543	3,391	50,100
(RECOVERY) AND RECHARGE IN 2020 (AF)						
MWD Water to Jackson Ranch (estimated)	-	-	-	-	-	-
Kern Water Bank Deliveries	-	-	-	-	-	-
2020 SWP Allocation (15%) <sup>3</sup>	112	-	-	-	112	224
Kern River Water (estimated)	-	-	(4,717)	-	-	(4,717)
TOTAL ESTIMATED 2020 TRANSACTIONS <sup>6</sup>	112	-	(4,717)	-	112	(4,493)
ESTIMATED WATER IN STORAGE 2020 (AF)						
Total Kern Water Bank	-	4,320	-	-	-	4,320
Total MWD System	7,393	-	-	-	439	7,832
Total Kern County	4,013	20,642	5,192	543	3,064	33,454
TOTAL ESTIMATED STORED WATER TO DATE	11,406	24,963	5,192	543	3,503	45,607

**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.

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

<sup>2</sup> IRWD's Non-SWP total includes 2,842 AF of Kern County Water Agency Article 21 Water.

<sup>3</sup> 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. It is assumed that IRWD's 2020 SWP allocation will be stored in Kern County.

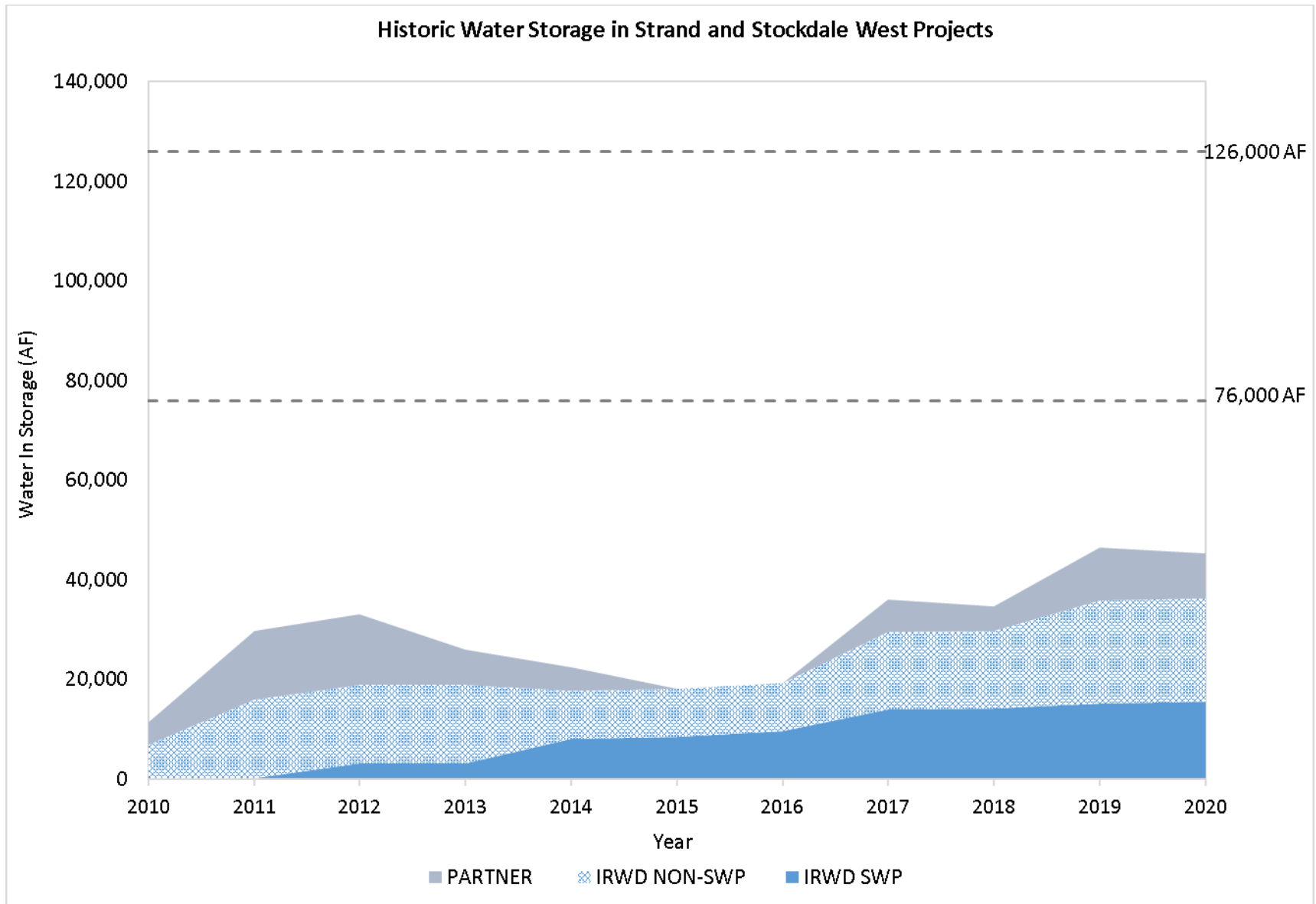
<sup>4</sup> Beginning balance of water stored in MWD system includes (net of CVC losses): 3,920 AF of 2014 Exchange, 2,824 AF of 2014 borrowed SWP, 649 AF of IRWD's 2013-2016 SWP allocations through DRWD.

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

<sup>6</sup> 2020 transactions may be adjusted for conveyance losses in CVC.

<sup>7</sup> A portion of IRWD's 2019 SWP deliveries from DRWD include 97 AF of Article 21 water, which was delivered to the Kern Water Bank.

## Exhibit “D”



\*After losses



# Exhibit "E"

**TABLE 1**  
**IRWD Dedicated Water Banking Capacities for**  
**Existing and Proposed Exchange Programs**  
**May 21, 2020**

<b>Program</b>	<b>Dedicated Storage Capacity Strand Ranch (AF)</b>	<b>Dedicated Storage Capacity Stockdale West (AF)</b>	<b>Dedicated Storage Capacity Leased Storage Account (AF)</b>	<b>Kern Water Bank Storage Capacity (AF)</b>
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

<b>Program</b>	<b>Dedicated Recharge Capacity Strand Ranch (AF)</b>	<b>Dedicated Recharge Capacity Stockdale West (AF)</b>	<b>Dedicated Recharge Capacity Leased Storage Account (AF)</b>	<b>Kern Water Bank Recharge Capacity (AF)</b>
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

<b>Program Partner</b>	<b>Dedicated Recovery Capacity Strand Ranch (AF)</b>	<b>Dedicated Recovery Capacity Stockdale West (AF)</b>	<b>Dedicated Recovery Capacity Leased Storage Account (AF)</b>	<b>Kern Water Bank Recovery Capacity (AF)</b>
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	-	-	-	-

# Exhibit "F"



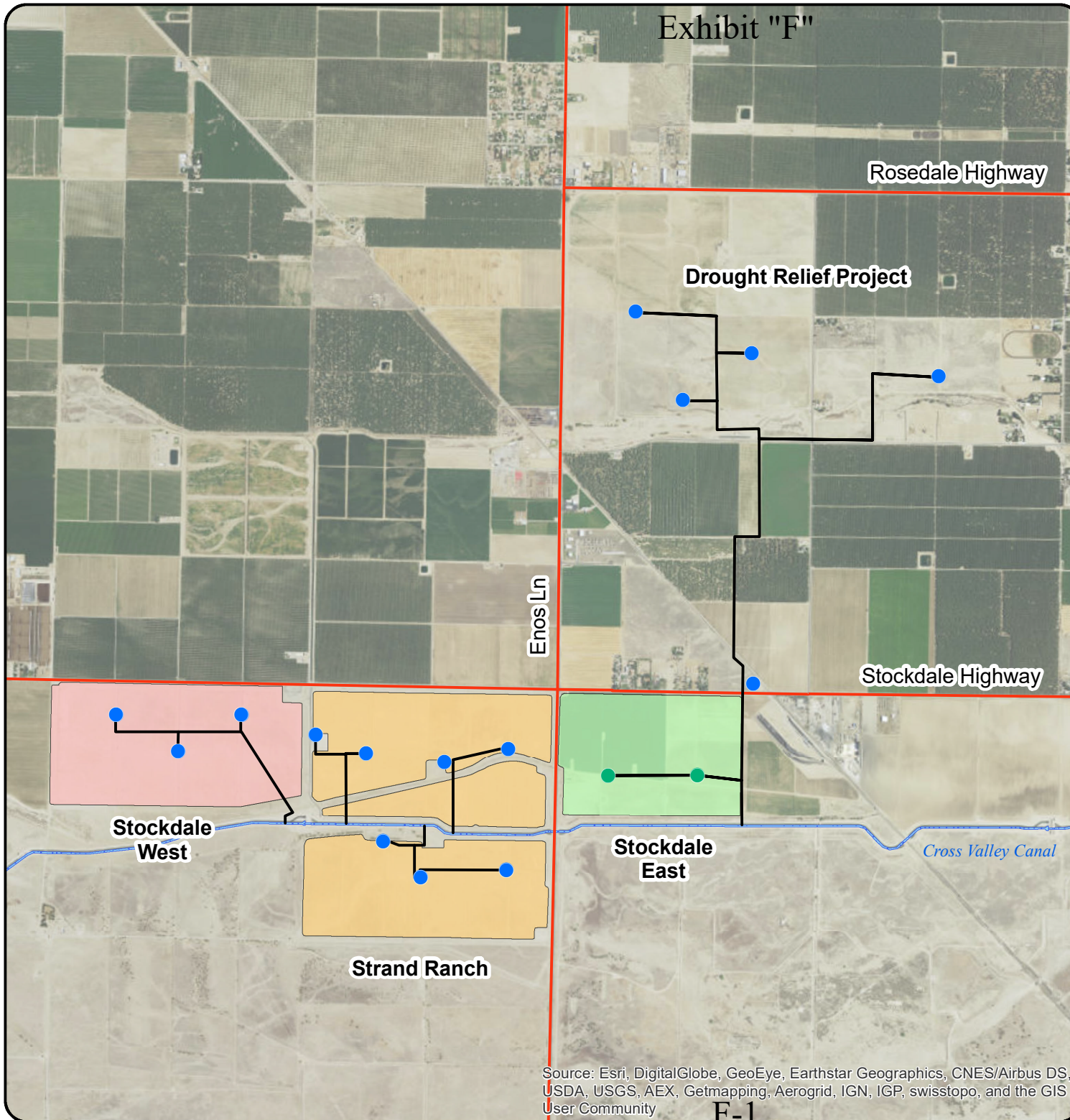
Irvine Ranch  
WATER DISTRICT

## Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

### MAP FEATURES

- Existing Extraction Well
- Planned Extraction Well
- 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.



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



0 0.25 0.5 1 Miles

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



# 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



0 0.25 0.5 1  
Miles

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



# Exhibit "H"

Rosedale Highway



## 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



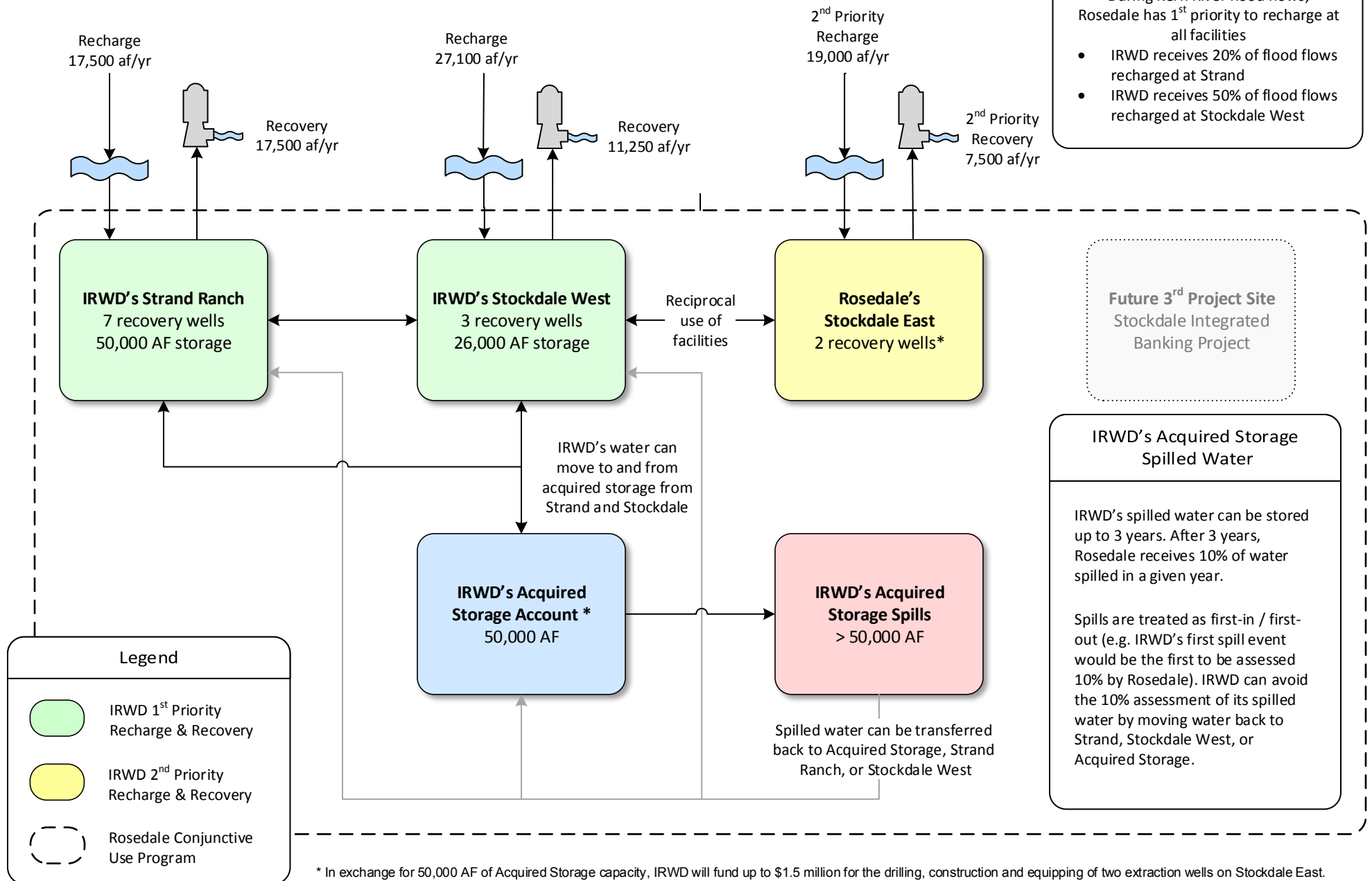
0 0.25 0.5 1  
Miles

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

# Exhibit "I"

## IRWD-Rosedale Water Banking and Exchange Program Agreements

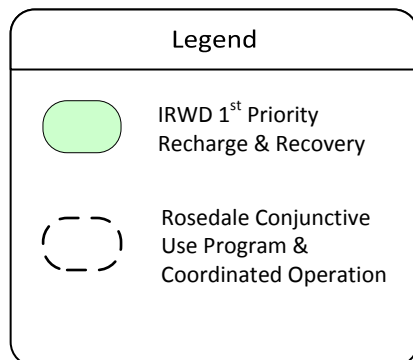
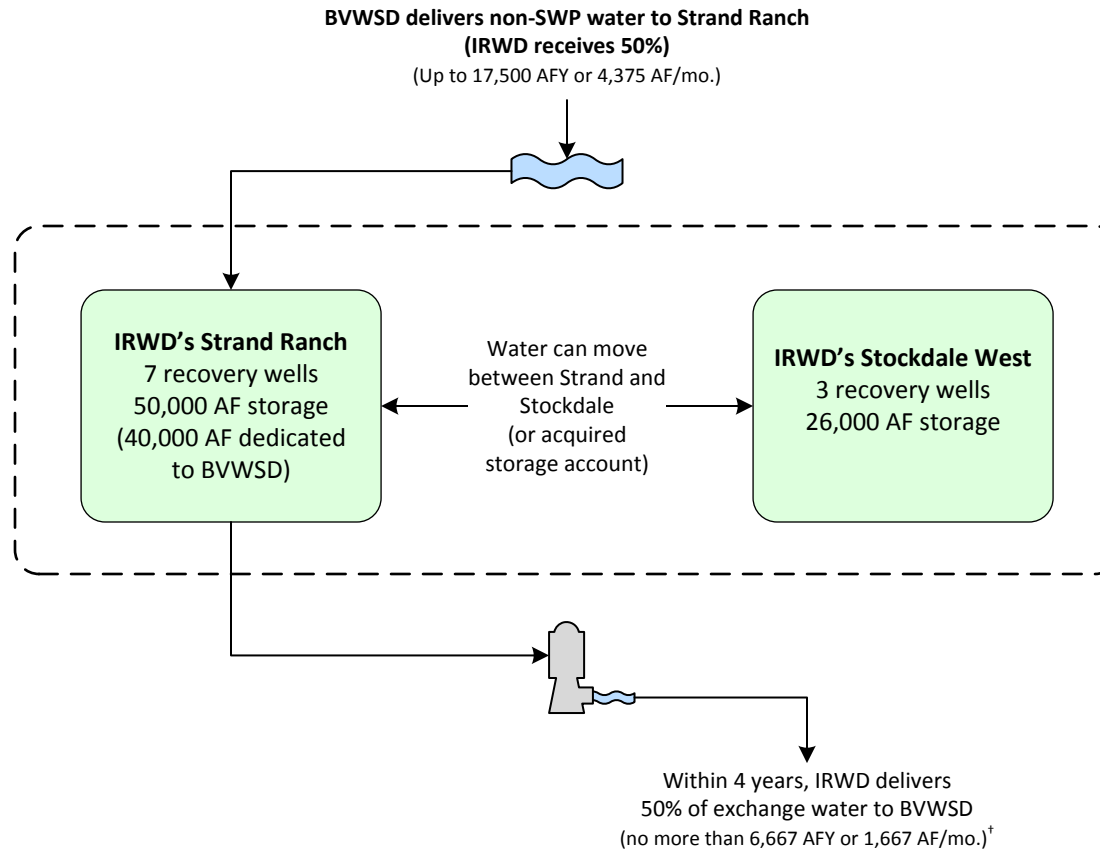
Effective 1/12/2009 through 1/12/2039 (Strand Ranch)  
2/4/2016 through 1/12/2039 (Stockdale West)



# Exhibit "J"

## Buena Vista Water Storage District Long Term Water Exchange Program

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

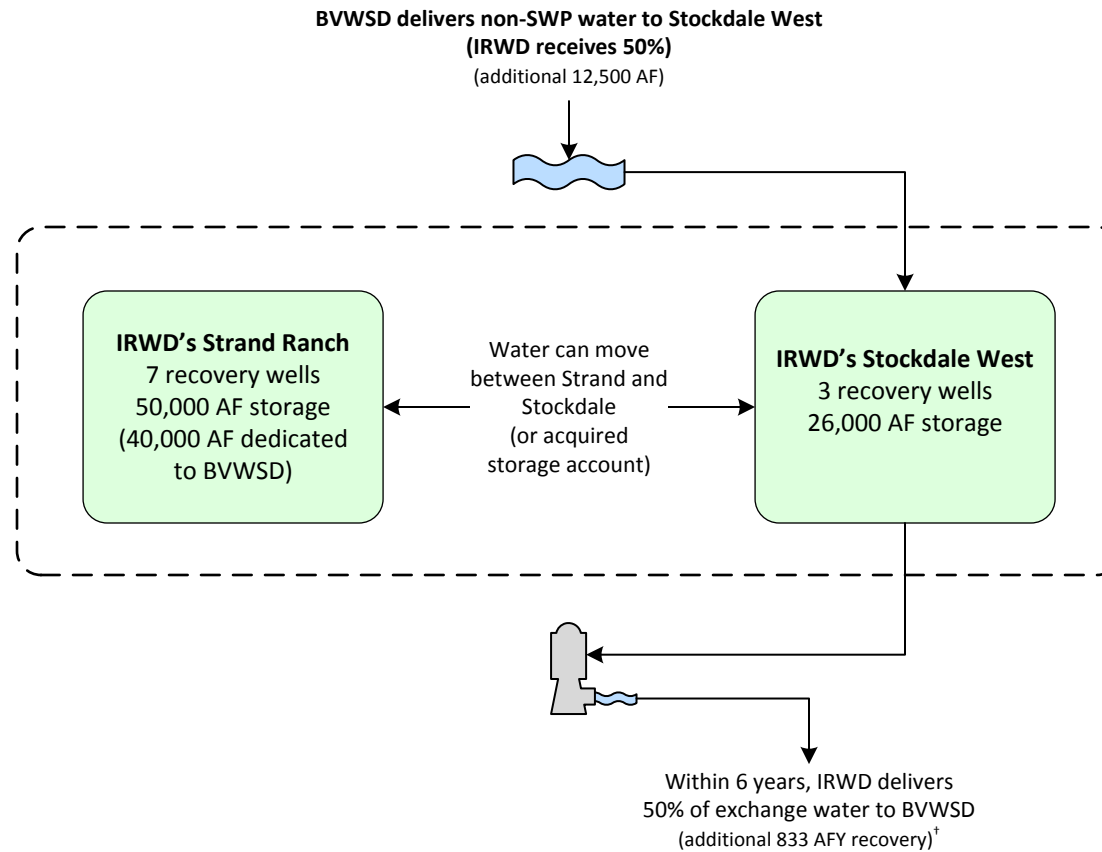




<sup>†</sup>IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31<sup>st</sup> of the 4<sup>th</sup> year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain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

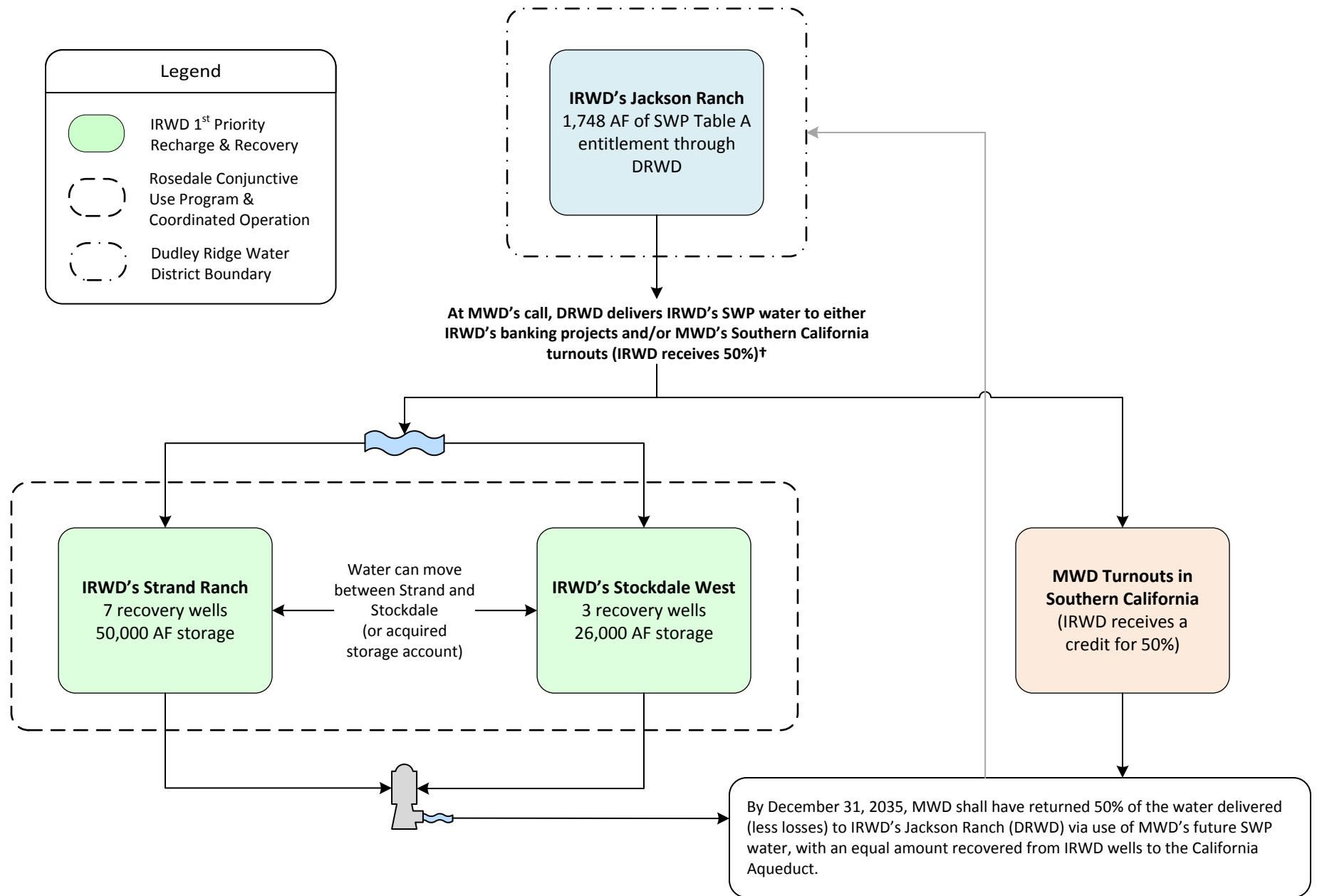


Legend	
	IRWD 1 <sup>st</sup> Priority Recharge & Recovery
	Rosedale Conjunctive Use Program & Coordinated Operation

<sup>†</sup>IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31<sup>st</sup> of the 6<sup>th</sup> 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 6<sup>th</sup> 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%

**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.



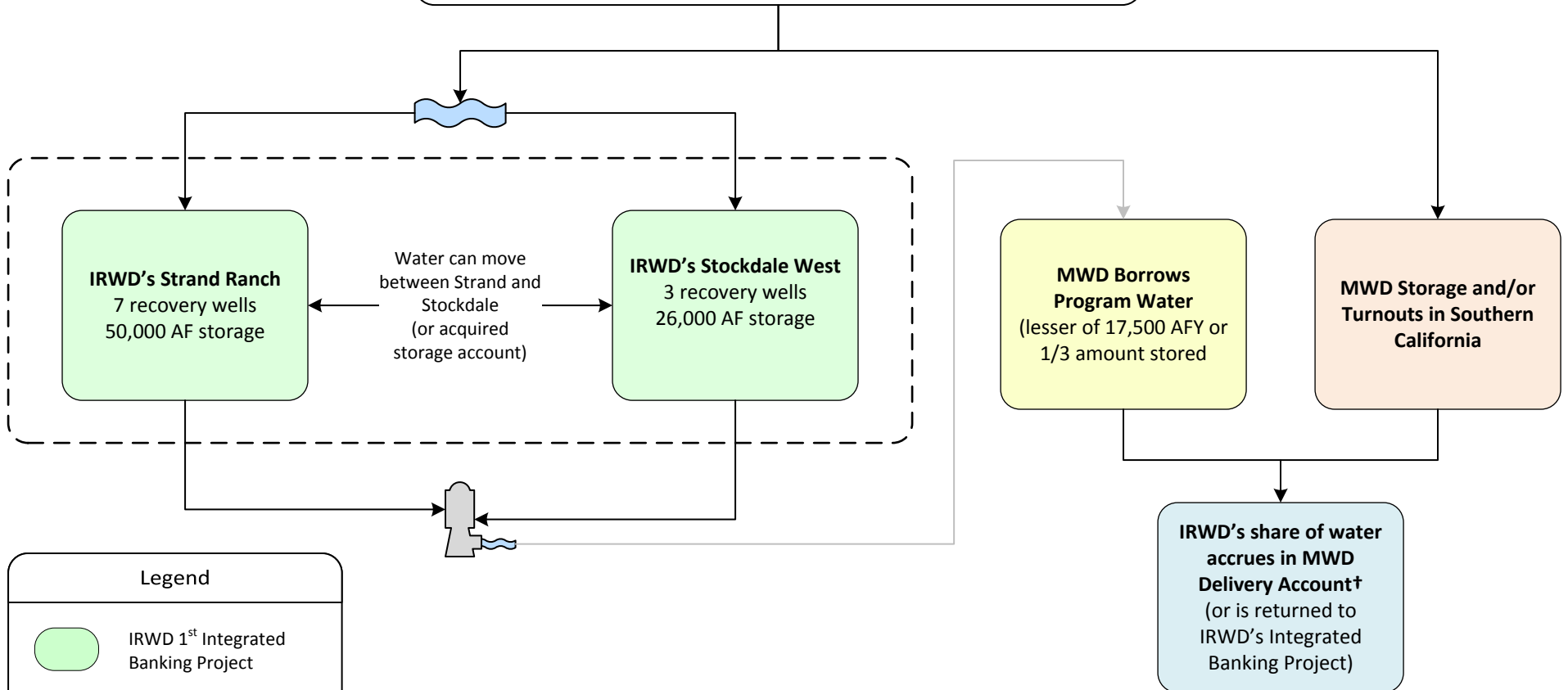
# Exhibit "L"

## 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

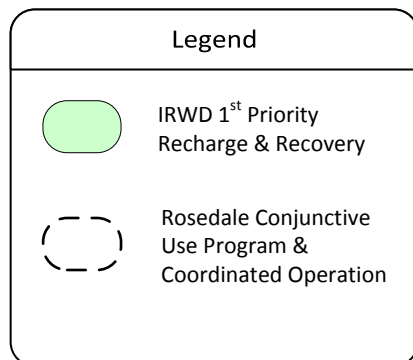
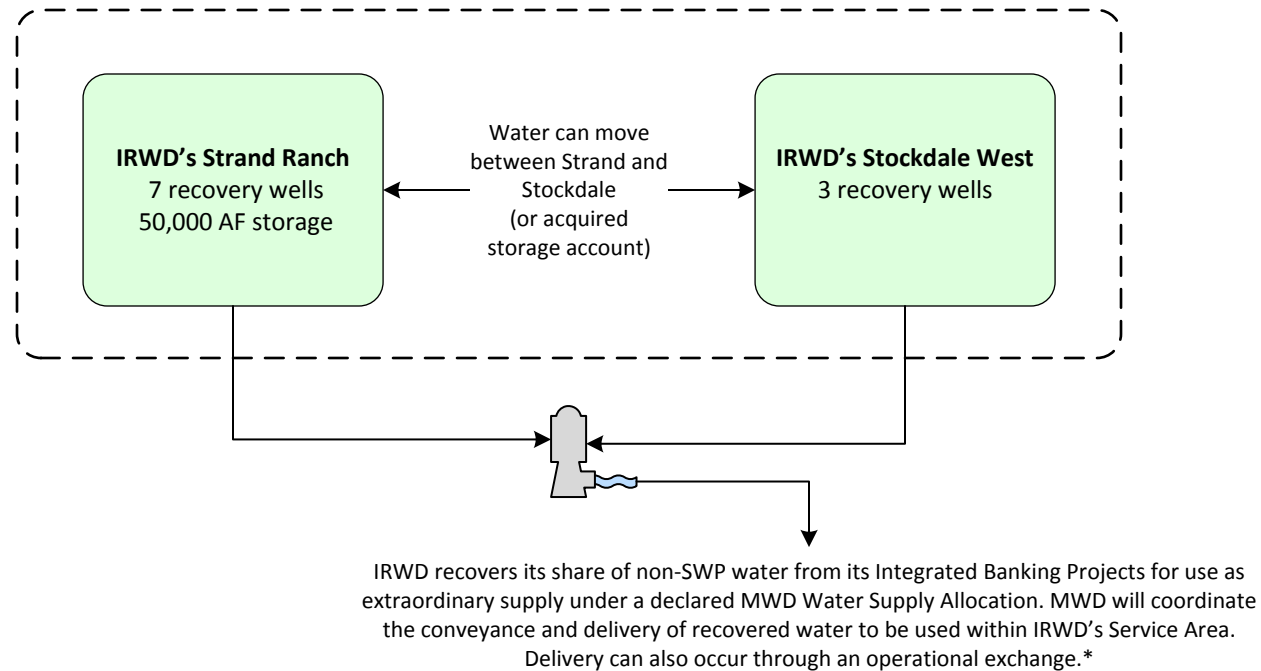
MWD has three options for the use and storage of Program Water:

- 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.

**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.

# EXHIBIT "N"

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

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

### Scenario A

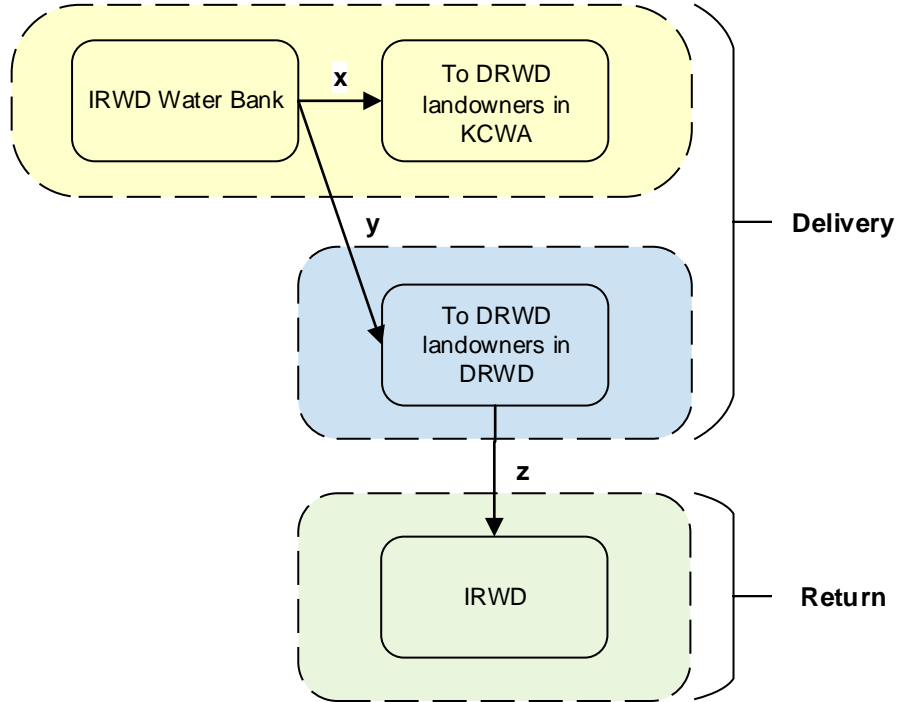
(Per Sections 2, 3, 4.1.1, and 4.1.3)

x= Non-Project Water required to stay in Kern County

y= Non-Project Water allowed to leave Kern County

z= DRWD Table A Water equal to x+y less applicable losses, if any

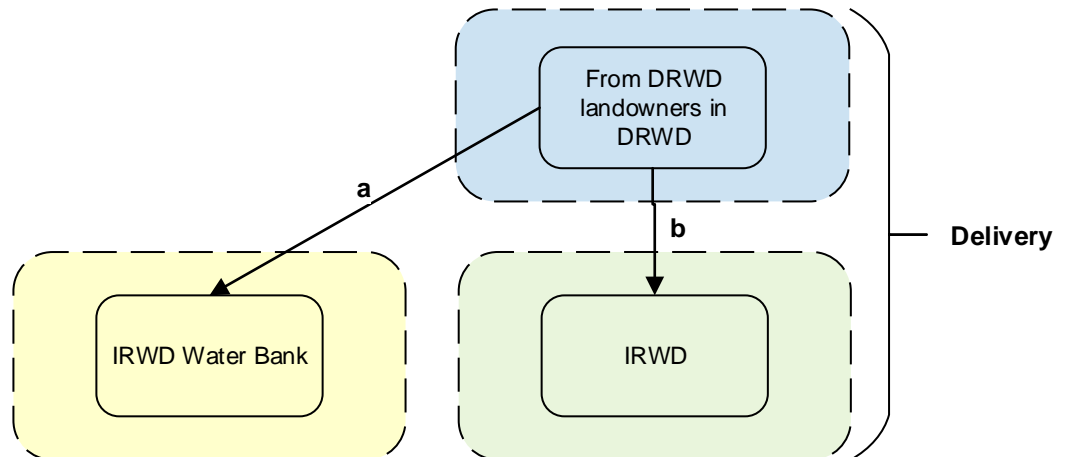
Per Section 4.1.3, z can be delivered to IRWD via in-ground transfer to IRWD, SWP delivery to IRWD banking facilities, or SWP delivery to MWDSC



### Scenario B

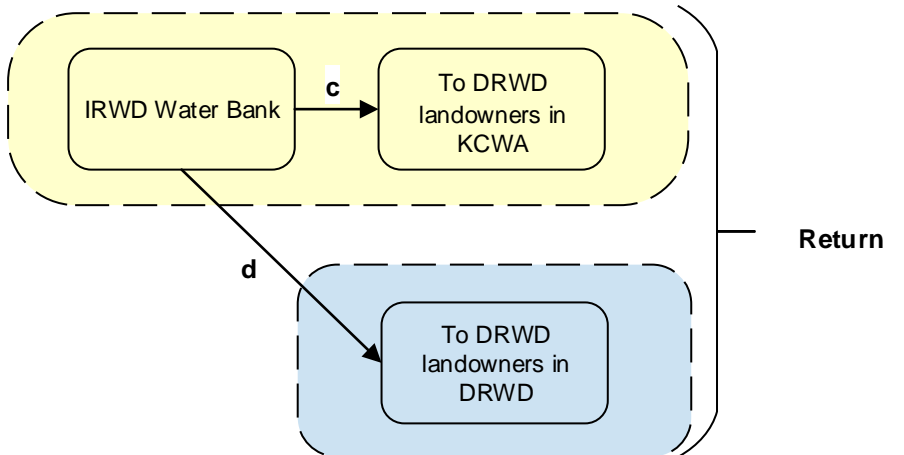
(Per Sections 2, 3, and 4.1.2)

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



### Legend

	KCWA Service Area
	DRWD Service Area
	IRWD Service Area



Note: This page is intentionally left blank.

May 21, 2020

Prepared by: K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook

*P. A. Cook*

## SUPPLY RELIABILITY PROGRAMS COMMITTEE

### DRAFT BYLAWS FOR THE GROUNDWATER BANKING JOINT POWERS AUTHORITY

#### 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 have executed an agreement to form the Groundwater Banking Joint Powers Authority (Authority), effective July 1, 2020. Staff has worked with legal counsel and Rosedale to prepare draft bylaws for the Authority. Staff recommends the Board approve the draft bylaws as revised based on input received from the Supply Reliability Programs Committee and subject to substantive changes approved by IRWD's legal counsel.

#### 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 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 formed the Authority through the execution of a Joint Powers Agreement. The Authority will become effective on July 1, 2020. Bylaws will set forth the specific duties and responsibilities of the Authority.

#### Bylaws for the Groundwater Banking Authority:

The Authority will carry out functions necessary to implement the Kern Fan Project. The day-to-day operations of the Authority will be governed by bylaws as well as policies and procedures adopted by the Authority's Board of Directors. The purpose of the bylaws is to describe the processes for governance and administration of the Authority.

Staff has worked with IRWD's legal counsel and Rosedale to prepare draft bylaws consistent with the Joint Powers Agreement. The draft of the bylaws for the Authority is provided as Exhibit "A". The document clarifies certain provisions of the Joint Powers Agreement, including:

- Procedures for administration of the Authority;
- Board of Director's roles and responsibilities;
- Officer and staff roles within the Authority;

- Establishment of Project and Finance Committees;
- Member agency funding and cost-sharing for the Project;
- Use of Special Activities Agreements; and
- Termination provisions and distribution of assets.

At the Committee meeting, staff will present an overview of the draft bylaws for the Authority. Staff recommends the Board approve the draft bylaws as revised based on input received from the Supply Reliability Programs Committee and subject to substantive changes approved by IRWD's legal counsel.

This information has not been presented to Rosedale's Board yet. Rosedale staff plans to take this item to its Board in the coming weeks. IRWD staff expects to bring the final bylaws to this Committee at its next meeting in June 2020.

#### FISCAL IMPACTS:

The Kern Fan Groundwater Storage Project is included in Fiscal Year 2020-21 Capital Budget. The CWC will provide \$67.5 million in WSIP funding through a grant agreement. Up to \$50.2 million in Federal funding may be available to the Project in the future. IRWD and Rosedale will fund the remaining cost of the Project.

#### ENVIRONMENTAL COMPLIANCE:

An 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, which could include portions of Phase 1 of the Kern Fan Project. A new EIR is being prepared for the construction and operation of Kern Fan Project Phase 1 and Phase 2 facilities. A Notice of Preparation of an EIR for the Kern Fan Project was released on April 7, 2020.

#### RECOMMENDATION:

That the Board approve the bylaws for the Groundwater Banking Joint Powers Authority subject to substantive changes approved by IRWD's legal counsel.

#### LIST OF EXHIBITS:

Exhibit "A" – Draft Bylaws for the Groundwater Banking Joint Powers Authority



## EXHIBIT "A"

400 Capitol Mall, 27th Floor  
Sacramento, CA 95814

T 916.321.4500  
F 916.321.4555

# CONFIDENTIAL MEMORANDUM

## ATTORNEY-CLIENT PRIVILEGE AND ATTORNEY WORK PRODUCT PROTECTED BY THE COMMON-INTEREST DOCTRINE

TO: Irvine Ranch Water District and Rosedale-Rio Bravo Water Storage District

FROM: Eric Robinson

DATE: March 27, 2020

RE: Draft Kern Fan Joint Powers Authority Bylaws

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Below is an outline of the suggested sections that should be contained in the Bylaws for Groundwater Banking Joint Powers Authority. Some sections are more critical than others and some may require more negotiation between the members to determine the scope of coverage that should go into the Bylaws versus Groundwater Banking Joint Powers Authority Agreement ("Groundwater Banking JPA Agreement"). Comments are inserted in *blue italics* while regular text represents proposed Bylaws language.

### BYLAWS OF THE KERN FAN JOINT POWERS AUTHORITY

#### PREAMBLE

These Bylaws are provided pursuant to Article 5(E) of the Joint Powers Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Groundwater Banking Joint Powers Authority to Develop and Administer A Kern Fan Groundwater Storage Project, effective as of July 1, 2020, as such agreement may be amended from time to time.

#### 1. NAME

The name of this joint powers authority formed pursuant to the Joint Exercise of Powers Act (Government Code section 6500 et seq.) is the Groundwater Banking Joint Powers Authority ("Authority" or "JPA").

#### 2. PURPOSE

The purpose of these bylaws is to describe the processes and procedures of the Kern Fan Joint Powers Authority's governance and administration.

### **3. DEFINITIONS**

*Bylaws can include a definitions section though not all bylaws do.*

### **4. MEMBER ENTITIES**

The contracting parties to the Groundwater Banking Joint Powers Authority Agreement ("Groundwater Banking JPA Agreement") dated [date] are the member entities of the Groundwater Banking JPA. The contracting parties to the Groundwater Banking JPA Agreement are the Irvine Ranch Water District ("IRWD") and the Rosedale-Rio Bravo Water Storage District ("RRB").

### **5. BOARD OF DIRECTORS**

#### **a. Authority**

*This section should describe the general powers of the Directors, including a necessary and proper clause as well as references to the appropriate sections in the JPA agreement. If there are any very specific subject areas or specific matters over which the Directors shall not have authority, those should be specifically enumerated.*

#### **b. Directors**

Directors shall be appointed to the Board of Directors in the manner described in Article 5.A. of the Groundwater Banking JPA Agreement.

#### **c. Alternates**

Alternates shall be appointed to serve on the Board of Directors in the manner described in Article 5.A. of the Groundwater Banking JPA Agreement.

*This section and the section on vacancies (immediately below) should include language on how long an alternate should fill in for an unavailable Director before the unavailable Director's seat is deemed to be vacant.*

#### **d. Vacancies**

*This section should describe the timeline and process for filling vacancies on the Board of Directors. While each member should retain the authority to fill vacancies, this section should impose requirements on notice to the JPA whenever a seat on the Board of Directors is vacated and timelines for filling such vacancies.*

### **6. BOARD MEETINGS**

#### **a. Regular Meetings**





The Board of Directors shall hold at least one Regular Meeting each quarter of the Fiscal Year. The date and time of such Regular Meetings shall be set by resolution or ordinance of the Board of Directors at the first meeting of the Board of Directors.

*Additional language pointing to JPA Agreement meeting requirements may be included here.*

**b. Special Meetings**

The Board of Directors may hold Special Meetings upon providing at least 24 hours' notice.

**c. Adjourned Meetings**

The Board of Directors may adjourn any regular meeting, adjourned regular meeting, special meeting, or adjourned special meeting at any time and to any time and place permissible by law. Adjournment shall not require a quorum of the Board of Directors. If no Director is present at a noticed meeting of the Board of Directors, the [secretary? / General Manager] shall have the authority to adjourn the meeting.

The date, time, and location of the adjourned meeting shall be included on the Notice of Adjournment of any regular meeting, adjourned regular meeting, special meeting, or adjourned special meeting.

**d. Meeting Locations**

Meetings of the Board of Directors shall take place at the main office of RRB, 849 Allen Road, Bakersfield, CA 93390 or IRWD, 15600 Sand Canyon Avenue, Irvine CA 92618, unless otherwise stated on the public notice of the meeting.

**e. Notice and Agenda Procedures**

*The Board of Directors can implement specific requirements for the structure and timing of meeting agendas and packets so long as those requirements do not conflict with the Brown Act.*

**f. Quorum**

A quorum of the Board of Directors shall be determined in the manner described in Article 5(C) of the Groundwater Banking JPA Agreement.

**g. Rules of Order**

*The Board of Directors may wish to implement specific rules of order for their meetings, though this is not strictly required. Potential rules may include: how Directors are to address one another; time limits for public comments; order of discussing agenda items.*



**h. Minutes**

Minutes of each meeting of the Board of Directors shall be prepared by the Secretary.

**i. Delegation of Powers**

The Board of Directors may delegate any of its powers except as prohibited in the Groundwater Banking JPA Agreement, these Bylaws, or by law.

**j. Transparency**

All meetings of the Board of Directors shall be conducted in accordance with the Ralph M. Brown Act ("Brown Act") (Government Code section 54950 et seq.). While meetings of the Board of Directors are generally open to any member of the public, the Board of Directors may meet in closed session for those reasons expressly allowed under the Brown Act.

The Groundwater Banking JPA shall be subject to the California Public Records Act (Government Code section 6250 et seq.).

*Language regarding the review of public records under the Public Records Act may be included here. Alternatively, such language can be included in the section on records, below.*

**7. COMMITTEES**

*While these sections are not strictly necessary, best practice would be to provide the rubric for how committees are formed, how their meeting schedule is to be set (in the case of standing committees), and how membership is selected.*

**a. Standing Committees**

The Groundwater Banking JPA Board of Directors shall appoint members of standing committees as follows:

- i. Project Committee.** There shall be a standing Project Committee to assist the Board of Directors in overseeing the planning, design, construction, construction management, and operation of the Kern Fan Project. The Project Committee shall comprise one Groundwater Banking JPA Board member and one other member appointed by RRB and one Groundwater Banking JPA Board member and one other member appointed by IRWD, plus the Groundwater Banking JPA's General Manager and its Treasurer. The Project Committee shall recommend to the Groundwater Banking JPA Board of Directors principles and guidelines for the planning, design, construction, construction management, and operation of the Kern Fan Project. The Groundwater Banking JPA Board of Directors may adopt such



policies after considering the Project Committee's recommendation and retains its full discretion to modify or reject such recommended policies.

- ii. **Finance Committee.** There shall be a Finance Committee to assist the Groundwater Banking JPA Board of Directors in overseeing the financing of the Kern Fan Project. The Finance Committee shall comprise one Groundwater Banking JPA Board member appointed by RRB and one Groundwater Banking JPA Board member appointed by IRWD, plus the Groundwater Banking JPA's General Manager and its Treasurer. The Finance Committee shall work with the Treasurer to recommend to the Groundwater Banking JPA Board of Directors policies addressing financial issues, including but not limited to: (a) purchase orders/invoices; (b) construction contracts; (c) professional services agreements; (d) change orders/variances; (e) liability/property settlements; (f) acquisition of land and easements; (g) disposition of property; (h) check-signing authority; (i) claims settlements; (j) investment policy; and (k) capitalization. The Groundwater Banking JPA Board of Directors may adopt such policies after considering the Finance Committee's recommendation and retains its full discretion to modify or reject such recommended policies.

b. **Ad Hoc Committees**

The Groundwater Banking JPA Board of Directors may appoint one or more ad hoc committees.

8. **OFFICERS**

a. **General Manager**

The General Manager shall be appointed by the Board of Directors in the manner described in Article 6 of the Groundwater Banking JPA Agreement. The General Manager and any designees shall administer planning, construction and operation of the Kern Fan Project.

The Kern Fan JPA Board of Directors shall adopt one or more policies delegating certain authority to the General Manager.

*This section could include any specific duties, powers, or obligations of the General Manager.*

b. **Treasurer**

The Treasurer shall be appointed by the Board of Directors in the manner described in Article 7 of the Groundwater Banking JPA Agreement. The Treasurer and any designees shall administer the Groundwater Banking JPA's financial management function.



The Groundwater Banking JPA Board of Directors shall adopt one or more policies delegating certain authority to the Treasurer.

*This section could include any specific duties, powers, or obligations of the Treasurer.*

**c. Legal Counsel**

The Legal Counsel shall be appointed by the Board of Directors in the manner described in Article 9 of the Groundwater Banking JPA Agreement.

**d. Secretary**

The Legal Counsel shall serve as Secretary pursuant to Article 9 of the Groundwater Banking JPA Agreement. The Secretary or any designees shall maintain the official records of the Groundwater Banking JPA, including Board meeting minutes.

**c. Resignation of Officers**

Officers may resign from their position at any time by providing the Board of Directors with written notice of their intention to resign. Such written notice should include an effective date of the resignation. The effectiveness of resignation shall not require written notice.

*Since the officers will be employees of the members, their contracts with their member agency may need to be adjusted to reflect these additional duties and termination provisions in those contracts may necessitate making adjustments to this section since their positions within their member agency are the basis for their position in the JPA.*

**d. Compensation**

*If any compensation from the JPA is contemplated for its officers, that could be described here.*

**9. STAFF**

Pursuant to Article 10 of the Groundwater Banking JPA Agreement, upon formation of the Groundwater Banking JPA, the Board of Directors shall negotiate shared staff services agreements with RRB and IRWD specifying the hourly rates at which RRB or IRWD staff will provide services to the Groundwater Banking JPA. The Board of Directors shall approve and enter into a shared staff services agreement with RRB and IRWD for planning, design and construction of the Kern Fan Project. The Board of Directors also shall approve and enter into a shared staff services agreement with RRB and IRWD for operation of the Kern Fan Project.



*While the Groundwater Banking JPA Agreement commits RRB and IRWD to provide staff for the JPA, should there be a contingency plan for what happens if the staffing level ends up being insufficient? Should the Bylaws expressly provide for the Board of Directors to hire third-party contractors where that may become necessary?*

## **10. PROFESSIONAL SERVICES**

### **a. Legal Services**

The Board of Directors shall have the sole authority to enter into contracts for legal services on behalf of the Groundwater Banking JPA. This power may not be delegated, regardless of the amount of the contract and any spending authority vested in any Officer [or Staff] of the Groundwater Banking JPA.

### **b. Audit Services**

The Board of Directors shall select an Auditor in the manner provided by law.

## **11. FINANCE**

### **a. Grant Compliance**

The Board of Directors shall delegate responsibility for monitoring compliance with all applicable grant funding obligations to a compliance officer. The compliance officer may be a member of RRB or IRWD staff.

### **b. Member Funding**

#### **(1) Equal Funding Principle**

The general principle governing member funding of the Groundwater Banking JPA is that RRB and IRWD shall fund equally (50-50) the costs to form the Groundwater Banking JPA, the costs to apply for and to obtain grant funding for the Kern Fan Project, and the costs to design, construct and operate the Kern Fan Project to meet all of its objectives, including all obligations arising from acceptance of grant funding for the Kern Fan Project.

#### **(2) Exceptions By Special Activities Agreements**

The only exception to the general principle of 50-50 cost-share may arise from the Groundwater Banking JPA Board of Directors' approving one or more Special Activities Agreements that provide for RRB or IRWD to participate in or to add a component of the Kern Fan Project pursuant to article 3(d) of the Groundwater Banking JPA Agreement. Any Special Activities Agreement deviating from the 50-50 cost-share principle shall specify how costs associated with the special activities deviate from the 50-



50 cost-share principle, including but not limited to any one-time costs and any ongoing costs.

(3) **Initial Member Funding Contributions**

***Funding to open bank accounts:*** Upon formation of the Groundwater Banking JPA, RRB and IRWD each shall contribute \$2,500 to the Groundwater Banking JPA, for a total of \$5,000, to provide a basis for opening one or more bank accounts for the Groundwater Banking JPA.

***Main initial funding to start up Groundwater Banking JPA operations:*** At the Groundwater Banking JPA's first Board of Directors meeting, the Board of Directors shall adopt a resolution specifying the initial funding contributions to be made by RRB and IRWD to start operating the Groundwater Banking JPA. IRWD and RRB each shall make their initial financial contribution to the Groundwater Banking JPA within seven (7) days after the adoption of the resolution specifying the initial funding contributions.

The initial funding contributions approved by the Board of Directors shall account for costs previously incurred by RRB and IRWD in connection with the Kern Fan Project. Specifically, prior to formation of the Groundwater Banking JPA, IRWD and RRB each incurred costs to apply for and to obtain grant funding for the Kern Fan Project, to initiate California Environmental Quality Act ("CEQA") review, to conduct studies on the feasibility of constructing and operating Kern Fan Project components, like a new turnout on the Cross Valley Canal, and to complete other tasks facilitating the Kern Fan Project. Such costs were governed by the Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District for Cost Sharing Early Planning Activities for the Kern Fan Groundwater Storage Project ("Early Cost-Share Agreement"). IRWD and RRB each shall provide an accounting of their respective costs incurred under the Early Cost-Share Agreement, any reimbursement received from the other member, and their resulting net costs incurred.

IRWD and RRB each shall provide equal initial financial contributions to fund the operation of the Groundwater Banking JPA. To the extent that net costs incurred by IRWD or RRB under the Early Cost-Share Agreement are not equal (50-50), the Groundwater Banking JPA member who paid more net costs shall receive a credit equal to the dollar amount by which its net costs exceeded those of the other member. Such credit shall be applied to reduce that member's initial financial contribution to fund the operation of the Groundwater Banking JPA. The net-costs credit plus the initial financial contribution of such member shall be equaled by the initial financial contribution of the other member.

(4) ***Ongoing funding for Groundwater Banking JPA operations:***



The Board of Directors shall annually adopt a budget encompassing the reasonably anticipated costs for implementing the Kern Fan Project, plus prudent reserves. The Board of Directors shall require ongoing financial contributions from RRB and IRWD to maintain adequate bank account balances to meet the reasonably anticipated costs for implementing the Kern Fan Project and prudent reserves, after accounting for grant funding. The Board of Directors shall determine the amount and timing of such contributions by resolution.

**c. Audit Interval**

Audits of the Groundwater Banking JPA's finances shall be prepared in the manner described in Article 13 of the Groundwater Banking JPA Agreement. The cost to complete the annual audit of the Groundwater Banking JPA's finances shall be allocated half (50 percent) to RRB and half (50 percent) to IRWD.

*If there is any preferred structure or reporting format of annual audits—such as a presentation to the Board of Directors by the auditor—those details could be included here.*

**12. SPECIAL ACTIVITIES AGREEMENTS**

- a. Pursuant to article 3(D) of the Groundwater Banking JPA Agreement, either of the Parties may enter into Special Activities Agreements with the Groundwater Banking JPA providing for their independent choices whether to participate in or to add a component of the Kern Fan Project or to allow use of a Party's capacity in the Kern Fan Project to implement an independent operating program or project with a third party.
- b. No Special Activities Agreement may become legally effective without prior approval of the Groundwater Banking JPA Board of Directors.
- c. A Special Activities Agreement may result in a Party having a larger capital investment in Kern Fan Project recharge, storage, recovery or conveyance capacity than the other Party. A Party that would achieve greater than 50 percent of Kern Fan Project recharge, storage or recovery capacity as a result of implementing a proposed Special Activities Agreement shall exercise proportionally greater voting power over approval and administration of the Special Activities Agreement by the Groundwater Banking JPA Board of Directors. For example, if a Special Activities Agreement would result in IRWD's controlling 60 percent of the Kern Fan Project's recovery capacity, then IRWD's two representatives on the Groundwater Banking JPA's Board of Directors would exercise 60 percent voting power over whether to approve the Special Activities Agreement and over any future Groundwater Banking JPA Board of Directors actions concerning implementation or administration of this Special Activities Agreement. RRB or IRWD each may carry out their own projects to help integrate the Kern Fan Project with their other projects, including interties with the Stockdale East Project, the Stockdale West Project, and the Strand Ranch Project. Such





integration projects do not require a Special Activities Agreement with the Groundwater Banking JPA.

### **13. INSURANCE**

*This section should reference the officer bonding requirement contained in the JPA agreement. These Bylaws should also contain some details about the types of policies that the Board of Directors deems necessary at all times during the life of the JPA, minimum coverage amounts, and preferences on carrier types.*

The Finance Committee shall recommend to the Groundwater Banking JPA Board of Directors one or more policies on insurance coverage that shall be maintained for the Groundwater Banking JPA. The Groundwater Banking JPA Board of Directors shall adopt one or more such policies after considering the Finance Committee's recommendation and retains its full discretion to modify or reject such recommended policies.

### **14. PROJECT 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 follows:

- a. Variable OME&R costs include, but are not limited to, energy costs and shall be paid pro rata based on actual use of Kern Fan Project facilities by RRB or IRWD.
- b. Fixed OME&R costs include, but are not limited to, any debt service on Kern Fan Project land or facilities and shall be paid pro rata based on proportional actual use where possible or divided equally where not.
- c. RRB and IRWD shall equally split the OME&R costs associated with the public benefits or ecosystem account associated with participating in the WSIP that are not grant-funded.

RRB and IRWD shall each pay half of the Groundwater Banking JPA's costs for its insurance coverage, its annual financial audit, and its use of legal counsel.

### **15. TERMINATION**

*Some of these items are already addressed in the JPA Agreement but these Bylaws could contain additional details, if the Board of Directors deems it necessary to provide for termination in further detail. In this case, termination of the JPA Agreement is already dealt with in a relatively detailed manner in the JPA Agreement so this is not strictly necessary.*

- a. **Grounds for Termination**
- b. **Time for Notice of Termination**





**c. Continuing Obligations**

**d. Distribution of Assets**

To implement article 1(A) of the Groundwater Banking JPA Agreement, the Parties shall meet and confer prior to one year before expiration of the Agreement's initial term to determine whether the Agreement will be extended. The Parties may continue to meet and confer during the last year of the Agreement's initial term. If within six (6) months before expiration of the Agreement's initial term the Parties have failed to reach agreement on extending the Agreement's initial term or integrating the Kern Fan Project facilities into one or more other existing water storage and recovery programs or projects, then the Parties shall implement the Groundwater Banking JPA Agreement's provisions for Disposition of Kern Fan Project Property, Facilities and Other Assets Upon Termination.

To implement articles 1(A) and 1(B) of the Groundwater Banking JPA Agreement, the Parties shall comply with the following rules:

- i. At least 12 months before expiration of the Groundwater Banking JPA Agreement's term, and within 30 days after providing any advance written notice of intent to terminate the Groundwater Banking JPA Agreement early, RRB shall deliver to IRWD any offer to exercise RRB's first right to acquire IRWD's interest in all Kern Fan Project facilities, capacities and real or personal property held by the Groundwater Banking JPA. Any such RRB offer shall comply with the valuation rules specified in article 1(B) of the Groundwater Banking JPA Agreement.
- ii. If RRB fails to timely deliver an offer to exercise its first right to acquire IRWD's interest in all Kern Fan Project facilities, capacities and real or personal property held by the Authority, then article 1(B) of the Groundwater Banking JPA Agreement provides that IRWD may hold its interest or sell its interest to a mutually acceptable third party. Upon IRWD notifying RRB of a proposed third-party buyer for IRWD's interest in the Kern Fan Project, RRB shall have 30 days to deliver its approval or rejection of IRWD's proposal, unless the Parties mutually agree in writing to extend the 30-day period. If RRB fails to affirmatively approve or reject IRWD's proposal within 30 days or any mutually agreed time extension, IRWD's proposal shall be deemed approved by RRB.

**16. AMENDMENTS**

The Board of Directors may adopt, amend, or repeal any section of these Bylaws, except insofar as such a change would conflict with the Groundwater Banking JPA Agreement.

*The Bylaws should describe the process for making changes to the Bylaws, including specifying that whether such changes should require input from a committee or be subject to a first and second reading.*



## **17. RECORDS AND REPORTS**

### **a. Maintenance of Records**

Records of the Groundwater Banking JPA shall be maintained at the principal places of business of the member agencies, Kern Fan Project facilities, and any other facility designated by the Board of Directors, Officers, or Staff. In addition to maintaining financial accounting and other records, the Groundwater Banking JPA shall maintain at least the following water accounting records for the Kern Fan Project:

- i. Amount of water delivered for recharge by each Party and the source of all water delivered for recharge;
- ii. Amount of stored water to provide ecosystem public benefits;
- iii. Amount of IRWD stored water; and
- iv. Amount of RRB stored water.

### **b. Public Records**

Requests for the inspection of any public record maintained by the Groundwater Banking JPA shall be handled in accordance with the California Public Records Act (Government Code section 6250 et seq.).

### **c. Inspection Rights of Directors and Members**

Directors and designated representatives of the member agencies shall have an absolute right to inspect the records of the Groundwater Banking JPA with reasonable notice to the Groundwater Banking JPA. Any records determined to be confidential by the Groundwater Banking JPA, in consultation with its Legal Counsel, may be withheld from such review.

*This section may benefit from stating what amount of notice is necessary and how to handle the inspection of any records that may be determined to be confidential.*

### **d. Fiscal Year**

The Fiscal Year of the Groundwater Banking JPA shall begin on July 1<sup>st</sup> of each calendar year and close on June 30<sup>th</sup> of each calendar year.

## **18. CONSTRUCTION**

Any section of these Bylaws that is determined to be inconsistent with any term of the Groundwater Banking JPA Agreement or any applicable law shall be deemed to be ineffective for so long as the conflicting term of the Groundwater Banking JPA Agreement



or applicable law remain in effect. Such construction shall not affect the applicability of any other section of these Bylaws.



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May 21, 2020

Prepared by: K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook



## SUPPLY RELIABILITY PROGRAMS COMMITTEE

### POTENTIAL KERN FAN GROUNDWATER STORAGE PROJECT EXCHANGE PROGRAM WITH DUDLEY RIDGE WATER DISTRICT

#### SUMMARY:

For IRWD to fully benefit from the Kern Fan Groundwater Storage Project (Kern Fan Project), Dudley Ridge Water District would need to exchange the Article 21 water that IRWD diverts into storage at the project for State Water Project (SWP) Table A water. In return for facilitating the exchanges of water, Dudley Ridge has expressed interest in an option to buy the Article 21 water that must be returned to Dudley Ridge consistent with the SWP Contract and future amendments. The price that Dudley Ridge would pay for the water would be based on the range of operation, maintenance and replacement (OM&R), as well as the expected capital costs for the Kern Fan Project. At the Committee meeting, staff will present an overview of these costs, as well as estimates for the ranges in cost of water that may be offered to Dudley Ridge. Staff recommends the Committee provide input on the range of potential costs of water that could be offered to Dudley Ridge from the Kern Fan Project.

#### BACKGROUND:

In August 2017, IRWD and Rosedale-Rio Bravo Water Storage District jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Project. In July 2018, the CWC conditionally awarded \$67.5 million for the project from Proposition 1 funds available through the CWC's Water Storage Investment Program (WSIP). The project is eligible for additional WSIP funding, up to \$85.7 million, should more funding become available as other projects fail to move forward as planned. The public benefits that must be provided in return for the award of funding will rely upon the diversion of SWP Article 21 water that is recharged and stored at the project.

In October 2019, Rosedale and IRWD submitted a Feasibility Study to the Bureau of Reclamation that will allow the Kern Fan Project to be considered for additional funding under the Water Infrastructure for Improvements to the Nation (WIIN) Act. A maximum of \$50.2 million in Federal funding could be realized for the project. The funds received from both the CWC and the Federal Government would offset the capital cost of the project to IRWD and Rosedale.

#### Diverting Article 21 Water:

IRWD as a landowner in Dudley Ridge, and Rosedale as a member unit of the Kern County Water Agency, will be able to order Article 21 water for delivery to the Kern Fan Project. Currently the SWP Contract requires that all Article 21 water that is stored outside of a Contractor's service area be returned to that Contractor's service area for later use. Furthermore, the SWP Contract does not allow for either balanced or unbalanced exchanges of water that

result in Article 21 water being used inside another Contractor's service area. To facilitate IRWD's use of the Article 21 water that it diverts to the Kern Fan Project, IRWD will need to enter into a mutually beneficial exchange program with Dudley Ridge.

Potential Exchange Program:

Since the beginning stages of planning for the Kern Fan Project, staff has regularly briefed Dudley Ridge on the status of the Project, how it would operate, and the potential water supply benefits that could result from the Project. Dudley Ridge supported IRWD and Rosedale in securing WSIP funding for the Project by submitting a letter of support to the CWC.

It has always been recognized that for IRWD to fully benefit from the Kern Fan Project, Dudley Ridge would need to exchange the Article 21 that IRWD diverts into storage at the project for SWP Table A water. It has also been recognized that upon such an exchange, IRWD would be limited by the SWP Contract to making use of 50% of the supply in IRWD's service area. These deliveries to IRWD would be in accordance with IRWD's Coordinated, Operating and Exchange Agreement with Metropolitan Water District. The California Department of Water Resources recently circulated an Environmental Impact Report (EIR) that could facilitate an amendment to the SWP Contract that would allow IRWD to make use of more than 50% of the exchanged water in IRWD's service area. Any portion of the water not deliverable to IRWD would need to be returned to Dudley Ridge for use on IRWD-owned lands.

*Potential Project Benefits to Dudley Ridge:*

Recently, Dudley Ridge expressed that in return for facilitating the exchanges of Article 21 water for Table A water, on behalf of IRWD, it would seek to develop a mutually beneficial program where Dudley Ridge would have the option to buy any Article 21 water that must be returned to Dudley Ridge. Such a program would allow Dudley Ridge to improve its water supply reliability during dry years. The price that Dudley Ridge would pay for the water would be based on the range of OM&R and capital costs that are expected for the Kern Fan Project, provided as Exhibit "A". At the Committee meeting, staff will present an overview of these costs as well as estimates for the ranges in cost of water that may be offered to Dudley Ridge. Staff recommends the Committee provide input on the costs discussed at the meeting.

*Next Steps:*

Upon receiving input from the Committee, IRWD will work with Dudley Ridge to prepare conceptual terms for a mutually beneficial exchange agreement that would give Dudley Ridge the opportunity to purchase water that must be returned to Dudley Ridge from the Kern Fan Project at the range of costs presented at the meeting. Staff expects to review draft conceptual draft terms for the exchange program in June.

FISCAL IMPACTS:

The Kern Fan Groundwater Storage Project is included in Fiscal Year 2020-21 Capital Budget. The CWC will provide \$67.5 million in WSIP funding through a grant agreement. Up to \$50.2

million in Federal funding may be available to the project in the future. IRWD and Rosedale will fund the remaining cost of the project.

ENVIRONMENTAL COMPLIANCE:

An 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, which could include portions of Phase 1 of the Kern Fan Project. A new EIR is being prepared for the construction and operation of Kern Fan Project Phase 1 and Phase 2 facilities. A Notice of Preparation of an EIR for the Kern Fan Project was released on April 7, 2020.

RECOMMENDATION:

That the Committee provide input on the range of potential costs of water that could be offered to Dudley Ridge Water District from the Kern Fan Groundwater Storage Project.

LIST OF EXHIBITS:

Exhibit “A” – Ranges of Capital and O&M Costs Expected from the Kern Fan Groundwater Storage Project.

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# EXHIBIT "A"

## Kern Fan Groundwater Storage Project Range of Capital Costs with Varying Grant Funding

### Estimated Low, Mid, and High Grant Funding Awards

Low Grant Funding (CWC CFA* no WIIN award)	\$	67,537,315
Mid Grant Funding (CWC CFA + one-half WIIN award)	\$	92,613,357
High Grant Funding (Maximum CWC award + full WIIN award)	\$	135,813,014

### Estimated Capital Costs Less Residual Land & Facilities Value

Estimated Capital Costs (2018 \$)	\$	225,073,822
PV of residual land value (2018 \$)	\$	30,117,647
PV of residual facility value (canal, turnout, earthwork and basins) (\$2018)	\$	10,984,159
Estimated Capital less residual land and facility values	\$	183,972,016

### Range of Capital Costs Based on Level of Grant Funding Awards

### IRWD's Share

Estimated Capital Costs with Low Grant Funding	\$	116,434,701	\$	58,217,350
Estimated Capital Costs with Mid Grant Funding	\$	91,358,659	\$	45,679,329
Estimated Capital Costs with High Grant Funding	\$	48,159,001	\$	24,079,501

### Operations, Maintenance & Replacement Costs

(Based on 50 years of operations)

PV O&M costs (in 2018\$)	\$	31,400,398	\$	15,700,199
PV replacement costs (in 2018\$)	\$	17,530,096	\$	8,765,048

\*CFA = California Water Commission's Conditional Funding Award

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