### AGENDA IRVINE RANCH WATER DISTRICT SUPPLY RELIABILITY PROGRAMS COMMITTEE THURSDAY, JUNE 18, 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=n	n4a78abe2359993f3ee08cb38f87f29cc
Meeting Number (Access Code):	126 195 0812
Meeting Password:	abP7naQ349e

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.

# CALL TO ORDER 3:00 p.m.

<u>ATTENDANCE</u>	Committee Chair: Peer Swan Member: Douglas Reinhart	
<u>ALSO PRESENT</u>	Paul CookRob JacobsonKellie WelchRay BennettNatalie Palacio	Paul Weghorst     Fiona Sanchez     Christine Compton     Jo Ann Corey

# 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 before 12:00 p.m. on Thursday, June 18, 2020.

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

# 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.

### PRESENTATION

# 5. <u>OVERVIEW OF THE PROPOSED ROSEDALE-RIO BRAVO WATER</u> <u>STORAGE DISTRICT WATER MARKETING PROGRAM</u>

Mr. Eric Averett, General Manager of Rosedale-Rio Bravo Water Storage District, will provide an overview of Rosedale's Proposed Water Marketing Program to be implemented in compliance with the Sustainable Groundwater Management Act.

# INFORMATION

6. <u>KERN FAN GROUNDWATER STORAGE PROJECT PROPERTY REVIEW</u> <u>AND GEOPHYSICAL LAND SURVEY TOOLS – BENNETT / WELCH /</u> <u>SANCHEZ / WEGHORST</u>

Recommendation: Receive and file.

# **INFORMATION - Continued**

### 7. <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS</u> <u>AND PROGRAMS – PALACIO / WELCH / SANCHEZ / WEGHORST</u>

Recommendation: Receive and file.

### ACTION

8. <u>KERN FAN GROUNDWATER STORAGE PROJECT UPDATE AND</u> <u>APPOINTMENT OF GROUNDWATER BANKING AUTHORITY BOARD</u> <u>MEMBERS – SANCHEZ / WEGHORST</u>

Recommendation: That the Board appoint the members of the Supply Reliability Programs Committee, including the designated alternate to the Committee, as Board members and alternate Board member to the Groundwater Banking Authority.

# **OTHER BUSINESS**

9. CLOSED SESSION CONFERENCE WITH REAL PROPERTY NEGOTIATORS – Pursuant to Government Code Section 54956.8:

*Property:* Parcels 103-110-02; 103-110-04; 103-110-09; 103-120-14; 103-120-15; 103-120-16; 103-120-17; 103-130-01; 103-130-03; 103-130-05; 103-130-07; 103-140-02; 103-140-05; 103-140-06; 103-140-12; 103-140-15; 103-140-16; 103-140-17; 103-140-18; 103-140-19; 103-180-01; 103-180-05; 103-180-07; 103-190-13; 103-190-14; 103-200-23; 103-200-25; 103-200-26; 103-200-27; 103-200-28; 103-200-29, County of Kern

Agency negotiators: Paul Cook, General Manager, & Rob Jacobson, Treasurer/Director of Risk Management

Negotiating parties: Tech Ag Financial Group, Inc. and Rosedale-Rio Bravo Water Storage District

Under negotiation: Price and Terms of Payment

### **OTHER BUSINESS - Continued**

10. CONFERENCE WITH REAL PROPERTY NEGOTIATORS – Pursuant to Government Code Section 54956.8:

*Property:* Jackson Ranch (Portions of Sections 25, 26, 34, and 35 of T23S R19E MDB&M)

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

Negotiating parties: Dudley Ridge Water District

Under negotiation: Price and Terms of Payment

- 11. Open Session
- 12. Directors' Comments
- 13. 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 electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

June 18, 2020 Prepared by: R. Bennett / K. Welch Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

### SUPPLY RELIABILITY PROGRAMS COMMITTEE

### KERN FAN GROUNDWATER STORAGE PROJECT PROPERTY REVIEW AND GEOPHYSICAL LAND SURVEY TOOLS

### SUMMARY:

IRWD and Rosedale-Rio Bravo Water Storage District are jointly developing the Kern Fan Groundwater Storage Project that will provide water supply reliability, emergency response, and ecosystem benefits through the capture, storage and recovery of State Water Project (SWP) Article 21 water and other available water supplies. The Project requires the purchase of approximately 1,280 acres of land to be used for recharge. At the Committee meeting, staff will provide an overview of property ownership and recent land sales information in the Project area. Staff also will present an overview of Towed Transient Electromagnetic (tTEM) and Aerial Electromagnetic (AEM) survey technologies that may be helpful in siting future recharge land for the Project.

### BACKGROUND:

The proposed Kern Fan Groundwater Storage Project will develop a regional water bank in the Kern Fan area to capture, recharge, store, and recover Article 21 water and other supplies during wet hydrologic periods. The Project includes the development and construction of recharge basins on approximately 1,280 acres of land to be procured in the future. IRWD and Rosedale have been working to identify lands suitable for recharge that could be incorporated into the Project while taking into consideration the optimal location of the proposed new turnout from the California Aqueduct and the alignment of the project conveyance facilities. At the meeting, staff will present maps showing property ownership and land sales history data associated with Rosedale's service area. A summary of recent land sales within Rosedale's service area is provided as Exhibit "A".

The success of the Project will depend on securing properties that have good groundwater recharge potential. Use of ground-based and aerial geophysical survey technologies will provide valuable insights for evaluating recharge potential at different locations. In February 2020, Rosedale contracted with the Ramboll Group to perform a ground-based demonstration study on behalf of IRWD and Rosedale. The demonstration study evaluated the usefulness of tTEM geophysical survey technology to characterize the shallow (up to 200 feet below ground surface) geology and recharge potential of four test areas within Rosedale's service area. An alternative geophysical survey technology, AEM, had been utilized in 2017 and 2019 by the Marina Coast Water District to study the movement of saltwater intrusion into a groundwater basin. The following is an overview of the two methods and the studies described above that applied these methods. Also provided is a discussion of the suitability of each in evaluating the recharge potential of land to be considered for the Project.

Supply Reliability Programs Committee: Kern Fan Groundwater Storage Project Property Review and Geophysical Land Survey Tools June 18, 2020 Page 2

# Towed Transient Electromagnetic Survey Technology:

A tTEM survey provides a high-resolution representation of the variation in electrical resistivity along the paths where a utility-terrain vehicle pulls a sensor. Variations in the electrical resistivity reflect variations in geology that can be correlated with existing recharge sites and with borehole information to estimate a site's infiltration potential. A tTEM survey is well suited for relatively small areas (fewer than 5,000 acres) where access to the land is readily available and general recharge potential is understood, such as in the Kern Fan area.

# tTEM Demonstration Survey and Results:

As part of the Project, Rosedale contracted with the Ramboll Group to perform a tTEM geophysical survey to evaluate the lithology of the subsurface down to 200 feet below ground surface at four demonstration areas. The demonstration locations included portions of recharge areas on the Strand Ranch, Stockdale East Ranch, and the Stockdale West Ranch as well as one almond orchard located on the McCaslin property located at Martin Avenue (approximately one mile north of Stockdale Highway). The survey covered approximately 1,200 acres with close survey lines spaced approximately 100 feet apart. The survey took approximately three days to complete at a cost of approximately \$60,000. Exhibit "B" shows the location of test sites evaluated in the demonstration project.

A simplified illustration of the lateral variations in the sediments at the demonstration sites from the surface to a depth of approximately 200 feet, represented by resistivities measured with the tTEM technology, is shown in Exhibit "C". The highest resistivities correlate to relatively coarse sediments with the greatest infiltration potential. Of the three sites measured, the Stockdale East area showed the greatest infiltration potential and the Stockdale West area showed the lowest infiltration potential. Of the demonstration include:

- The tTEM modeled resistivities are influenced by water content and depth to the water table. Therefore, a comparison of the resistivities across a large depth interval must be interpreted with caution; and
- The tTEM geophysical results were compared to borehole lithology from groundwater wells with limited success. One explanation is that the boreholes appear to have been drilled with a focus on the deeper layers that resulted in the shallower geological observations being less detailed.

# Airborne Electromagnetic Survey Technology:

AEM technology, like the tTEM technology, measures the electrical resistivity variations in geology that can be correlated with borehole information to estimate site geology. AEM was originally developed for the mining industry for which it is typically used for large survey areas and relatively deep ground penetration. Subsequent technological innovations have adapted AEM systems to provide data at depths up to 900 feet. AEM surveys of shallow groundwater systems are typically conducted with a helicopter flying at an altitude of 100 feet to 150 feet with flight lines widely spaced approximately 750 feet apart. The technology is well suited to survey

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relatively large geographic areas (greater than 5,000 acres) where access to the land is not readily available and general recharge potential is not understood.

# Marina Coast Water District Seawater Intrusion Study Using AEM:

In 2017 and 2019, Marina Coast Water District performed two separate AEM surveys to assess the movement of seawater intruding into a groundwater basin at a cost of approximately \$250,000 for each survey. Each survey took approximately five days to complete. Results were correlated to geophysical logs and used to assess the movement of seawater intrusion and the volume of freshwater remaining within the survey bounds. The AEM technology was not used to demonstrate the ability to identify the suitability of land for recharge or to develop an understanding of lithology. AEM technology results in a courser understating of geologic conditions as compared to tTEM. Discussions with the study's author indicate AEM could be used to prepare a geological model of the top 200 feet of an area that might be usable in prioritizing the infiltration potential of proposed recharge sites.

### Comparative Analysis of Geophysical Survey Technologies:

The demonstration survey using the land-based tTEM geophysical technology indicated the technology can be utilized to prepare a detailed geological model of the top 200 feet of the Project area. The resulting data can then be used to evaluate the lithology of the subsurface up to 200 feet below ground surface to help locate and prioritize potential recharge areas. A tTEM survey is well suited for relatively small areas (fewer than 5,000 acres) where access to the land is readily available and general recharge potential is understood such as in the Kern Fan area. The cost of evaluating 1,280 acres was approximately \$60,000.

The aerial-based AEM technology was utilized by Marina Coast to assess the movement of saltwater intrusion into a groundwater basin. The AEM technology was not used to demonstrate the ability to identify the suitability of land for recharge or to develop an understanding of lithology. AEM technology is well suited to relatively large geographic areas (greater than 5,000 acres) where access to the land is not readily available and general recharge potential is not understood. The use of technology comes at a higher cost and provides coarser results than tTEM. The cost of evaluating approximately 50,000 acres was approximately \$250,000. If AEM was ever utilized to evaluate a large area within the Kern Fan, staff would recommend that a tTEM survey be conducted subsequently on any properties that would be considered for acquisition.

In areas where general knowledge about recharge rates already exists (such as the Project area), IRWD and Rosedale staff recommend forgoing the use of AEM technology and only use tTEM technology to assess recharge potential while confirming the characteristics of specific properties of interest.

# FISCAL IMPACTS:

None.

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### ENVIRONMENTAL COMPLIANCE:

Not applicable.

### **RECOMMENDATION:**

Receive and file.

### LIST OF EXHIBITS:

- Exhibit "A" Recent Property Sales in Rosedale Service Area
- Exhibit "B" Surveyed Areas for the tTEM Demonstration Project
- Exhibit "C" Mean Resistivity in the Interval from 0 to approximately 200 feet below ground surface

# Exhibit "A"

# Recent Property Sales in Rosedale-Rio Bravo WSD Service Area

Grantor	Grantee	Date	Acres	Price	\$/Acre	Land Use	Property Type
West Plant	Global Ag Props	1/24/2013	1,380.18	\$ 16,780,000	\$ 12,158	Open Farmland	Open Farmland
Mohamed Hugais	Johnson Farms	4/3/2013	69.29	\$ 1,732,250	\$ 25,000	Open Farmland	Open Farmland
Northwest Communities Development, LLC	Rodney T. Stiefvater	6/18/2013	79.09	\$ 1,465,000	\$ 18,523	Almonds	Almonds
Gontero Family Trust	Hinesley & Mauro	7/3/2013	74.55	\$ 1,750,500	\$ 23,481	Residential Vacant	Residential Vacant
Damon and Sondra Leeper	5 H Farms Inc.	8/20/2014	20.02	\$ 625,000	\$ 31,219	Almonds	Almonds
5 H Farms	Medina	2/2/2015	20.02	\$ 700,000	\$ 34,965	Almonds	Almonds
Joyce Andreotti Irrevocable Trust	Juan and Dolores Echeverria FP	9/30/2016	48.34	\$ 1,015,140	\$ 21,000	Row Crops	Open Farmland
Daryl C. Elrich, Successor Trustee	HB Ag Investments, LLC	2/13/2017	171.36	\$ 3,875,000	\$ 22,613	Almonds	Almonds
Daryl Elrich	HB Ag Investments, LLC	2/13/2017	193.64	\$ 3,842,500	\$ 19,844	Almond	Almonds
Jelmini	Schweikart	4/13/2017	117.59	\$ 2,880,000	\$ 24,492	Irrigated Field Cropland	Irrigated Cropland
Dalmatoff	Rosedale- Rio Bravo WSD	4/26/2019	40.00	\$ 1,120,000	\$ 28,000	Fallow	Open Farmland
The McCaslin Revocable Living Trust	Rosedale- Rio Bravo WSD	6/3/2019	112.25	\$ 3,367,500	\$ 30,000	Almonds (Old & Pulled)	Open Farmland
Borda Family Tr	V Lions Operations LP	10/1/2019	117.27	\$ 3,550,000	\$ 30,272	Irrigated Cropland	Cropland
				Average	\$ 24,736		

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# Exhibit "B"



Surveyed Areas for tTEM Demonstration Project <sup>(1)</sup>

(1) The surveyed areas in green represent data that have been accepted and used in the tTEM analysis. The surveyed areas in red represent the areas where the tTEM data have been rejected due to noise and during turns.

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# Exhibit "C"



# Mean Resistivity in the Interval from 0 to about 200 ft Below Ground <sup>(1)</sup>



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June 18, 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 recovered amount for Buena Vista Water Storage District through June, as well as the updated State Water Project (SWP) allocation of 20% for 2020.

Exhibit "D" graphically depicts how storage of State Water Project 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

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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 District, Dudley Ridge Water District, and Metropolitan Water District. These diagrams are provided as Exhibits "I", "J", "K", "L", "M" and "N", as described in the List of Exhibits.

# 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 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 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

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- 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 June 18, 2020

	OWNE	OWNERSHIP AND WELL INFO ALLOCATED CAPACITY (AF) 1 <sup>st</sup> PRIORITY RECOV		ALLOCATED CAPACITY (AF)			Y RECOVERY ONS (CFS)	2 <sup>nd</sup> PRIORIT CONDITI	Y RECOVERY ONS (CFS)			
WATER BANKING PROJECT	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	-	-	-	-	-
TOTALS		13	2	126,000	44,600	19,000	28,750	7,500	70.0	70.0	10.0	0.0
Partner Capa	cities <sup>4</sup>			38.000	22.300	9.500	10.850	0	35.5	25.0	-	-
IRWD Capac	cities			88,000	22,300	9,500	17,900	7,500	34.5	25.0	-	-
IB	WD's reco	verv <b>durina</b>	6 month par	tner recoverv	period (AF)				12,420	9.000	-	-
	RWD's reco	overy <i>after</i> (	6 month part	ner recovery	period (AF)				5,480	6,733	-	-
TOTALS (AF) 17,900 15,733							-	_				
(Assumes IRWD has use of total recovery capacity after partners' recovery) 8.6 10.2							-	-				
	Strand	Ranch mon	thy recharge	amount assur	ming 0.3 ft/da	ay average re	charge rate (	AF)			4,5	518
Stockdale West monthy recharge amount assuming 0.3 ft/day average recharge rate (AF)								2,3	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> SUP-1, SWEX-2, and SREX-6 are currently down.

<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

June 18, 2020

	WATER BANKING ENTITY					
TRANSACTIONS	101				DUDLEY RIDGE WATER	TOTAL BY WATER TYPE
TRANSACTIONS	IRV	WD	BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DISTRICT (DRWD) <sup>3</sup>	AND STORAGE LOCATION
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	
		•	BEGINNING WATER I	N 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 RE	CHARGE IN 2019 (AF)		
MWD Water to Jackson Ranch⁵	-	-	-	-	(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 RE	CHARGE IN 2020 (AF)		
MWD Water to Jackson Ranch (estimated)	-	-	-	-	-	-
Kern Water Bank Deliveries	-	-	-	-	-	-
2020 SWP Allocation (20 %) <sup>3</sup>	175	-	-	-	175	350
Kern River Water (estimated)	-	-	(7,251)	-	-	(7,251)
TOTAL ESTIMATED 2020 TRANSACTIONS	175	-	(7,251)	-	175	(6,901)
			ESTIMATED WATER I	N STORAGE 2020 (AF)		
Total Kern Water Bank	-	4,753	-	-	-	4,753
Total MWD System	8,349	-	-	-	439	8,788
Total Kern County	4,745	23,679	3,926	636	3,529	36,513
TOTAL ESTIMATED STORED WATER TO DATE	13,094	28,432	3,926	636	3,968	50,054

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

June 18, 2020

	WATER BANKING ENTITY					
	101	110			DUDLEY RIDGE WATER	TOTAL BY WATER TYPE
TRANSACTIONS	IKA	ND	BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DISTRICT (DRWD) <sup>3</sup>	AND STORAGE LOCATION
	SWP <sup>1</sup>	NON-SWP <sup>2</sup>	NON-SWP	SWP	SWP	
	1	-	BEGINNING WATER I	N 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 RE	CHARGE 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 RE	CHARGE IN 2020 (AF)		-
MWD Water to Jackson Ranch (estimated)	-	-	-	-	-	-
Kern Water Bank Deliveries	-	-	-	-	-	-
2020 SWP Allocation (20%) <sup>3</sup>	150	-	-	-	150	300
Kern River Water (estimated)	-	-	(7,251)	-	-	(7,251)
TOTAL ESTIMATED 2020 TRANSACTIONS	150	-	(7,251)	-	150	(6,951)
			ESTIMATED WATER I	N STORAGE 2020 (AF)		
Total Kern Water Bank	-	4,320	-	-	-	4,320
Total MWD System	7,393	-	-	-	439	7,832
Total Kern County	4,051	20,642	2,658	543	3,102	30,996
TOTAL ESTIMATED STORED WATER TO DATE	11,444	24,963	2,658	543	3,541	43,149

#### 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 1IRWD Dedicated Water Banking Capacities for<br/>Existing and Proposed Exchange Programs<br/>June 18, 2020

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	-	-	-	-





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



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







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

MAI	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.







Location Map: IRWD Water Banking Projects Recharge Rates



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





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



(no more than 6,667 AFY or 1,667 AF/mo.)<sup> $\dagger$ </sup>



<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	Percent Transferred to	Percent Returned to BV During or
Recharge Event	IRWD	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



<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%

(additional 833 AFY recovery)<sup>+</sup>

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

Legend IRWD's Jackson Ranch 1,748 AF of SWP Table A IRWD 1<sup>st</sup> Priority entitlement through Recharge & Recovery DRWD Rosedale Conjunctive Use Program & Coordinated Operation **Dudley Ridge Water District Boundary** At MWD's call, DRWD delivers IRWD's SWP water to either IRWD's banking projects and/or MWD's Southern California turnouts (IRWD receives 50%)† Water can move **MWD** Turnouts in **IRWD's Strand Ranch IRWD's Stockdale West** between Strand and Southern California 7 recovery wells 3 recovery wells Stockdale (IRWD receives a (or acquired 50,000 AF storage 26,000 AF storage credit for 50%) storage account) By December 31, 2035, MWD shall have returned 50% of the water delivered (less losses) to IRWD's Jackson Ranch (DRWD) via use of MWD's future SWP water, with an equal amount recovered from IRWD wells to the California Aqueduct.

<sup>+</sup>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



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



extraordinary supply under a declared MWD Water Supply Allocation. MWD will coordinate the conveyance and delivery of recovered water to be used within IRWD's Service Area. Delivery can also occur through an operational exchange.\*



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

# Exhibit "N"

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

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



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June 18, 2020 Prepared by: F. Sanchez Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

### SUPPLY RELIABILITY PROGRAMS COMMITTEE

### KERN FAN GROUNDWATER STORAGE PROJECT UPDATE AND APPOINTMENT OF GROUNDWATER BANKING AUTHORITY BOARD MEMBERS

### SUMMARY:

IRWD and Rosedale-Rio Bravo Water Storage District are forming the Groundwater Banking Authority, a Joint Powers Authority of the two agencies that will plan, design, construct and operate the Kern Fan Groundwater Storage Project (Kern Fan Project). Provided is an overview of the project and an update on the progress being made on important tasks in planning the project including the formation of the Authority. Staff recommends the Board appoint the members of the Supply Reliability Programs Committee, including the designated alternate to the Committee, as Board members and alternate Board member of the Authority.

### **BACKGROUND:**

The Water Quality, Supply and Infrastructure Improvement Act of 2014, also known as Proposition 1, provides \$2.7 billion for public benefits associated with water storage projects that will provide specific public and ecosystem benefits. These water storage projects will be funded through the Water Storage Investment Program (WSIP). The California Water Commission (CWC) is administering the grant funding for the planning, design, and construction of water storage projects through the WSIP. IRWD and Rosedale jointly submitted a WSIP grant application for the Kern Fan Project on August 14, 2017. In July 2018, the CWC awarded \$67.5 million in conditional funding for the project. Following is an overview of the Kern Fan Project, an update on important project tasks and recommendations for the appointment of IRWD Board members to the Groundwater Banking Authority being formed to plan, design, construct and operate the project.

### Kern Fan Project Overview:

The proposed Kern Fan Project will develop a regional water bank in the Kern Fan area to capture, recharge and store Article 21 water from the State Water Project (SWP) during wet hydrologic periods. The stored water would be extracted when needed to provide ecosystem, emergency supply, and water supply benefits to the State of California, IRWD and Rosedale. Project operations would be coordinated with the SWP through an exchange agreement with the California Department of Water Resources (DWR).

### Phased Construction:

The Kern Fan Project would be constructed in two phases. In Phase 1 of the project, IRWD and Rosedale will acquire up to 640 acres in the Kern Fan area and construct recharge and recovery facilities as necessary to develop a fully functioning water banking project. In addition, IRWD and Rosedale would construct a new dedicated conveyance canal from the California Aqueduct

to ensure the ability to convey flows from the SWP to the new recharge facilities. In Phase 2 of the Kern Fan Project, IRWD and Rosedale will acquire an additional 640 acres of land to construct additional water banking facilities. The overall project would consist of approximately 500 cubic feet per second (cfs) of canal capacity from the California Aqueduct, 100,000 acre-feet (AF) of storage capacity, up to 100,000 acre-feet per year (AFY) in recharge capacity and up to 70 cfs, or 50,000 AFY, of groundwater recovery capacity. The recharge and recovery capacities would be shared equally by IRWD and Rosedale. The preliminary Kern Fan Project location map is provided as Exhibit "A".

# Project Schedule:

The two phases of Kern Fan Project will require approximately six years to complete. Work on Phase 1 is expected to be complete in 2023. Phase 2 would be complete and operational in 2025. An overview of the project schedule showing the major project components is provided as Exhibit "B".

In order to remain eligible for a final funding award, the CWC requires that project applicants complete the following tasks by January 2022:

- Draft environmental documents for public review;
- Compete the Feasibility Study;
- Execute certain agreements with California Fish and Wildlife (CDFW) and DWR; and
- Obtain Federal, state and local permits subject to completion of the environmental review process.

The CWC is reviewing a request from all storage project applicants to provide additional access to early funding and to extend the January 2022 deadline to ameliorate economic challenges and schedule delays associated with the statewide COVID-19 response. The Commission is expected to take action related to the request in July 2020.

### Update on Important Kern Fan Project Tasks:

Following is an update on important project tasks that are structured to ensure that IRWD and Rosedale fulfill requirements for securing federal funding for the Kern Fan Project as well as meeting the CWC's requirements as described above:

# Securing Federal Funding:

In December 2019, staff submitted a feasibility study that is required for Reclamation to recommend the Kern Fan Project for federal funding through the Water Infrastructure Improvements for the Nation Act (WIIN Act). In April 2020, staff prepared and submitted an updated feasibility study that included a 30% Design Report and corresponding project costs prepared by Dee Jaspar and Associates.

Reclamation has conducted a policy review to assess whether the Kern Fan Project fully meets federal requirements. On June 5, Reclamation notified IRWD that the policy review was complete and that all the policy requirements have been satisfied. In addition, Reclamation has recently conducted a Design, Estimating and Construction (DEC) review to confirm that the project is technically feasible. The outcome of the DEC review is pending. Following completion of the DEC review and the development of findings, Reclamation will prepare a Joint Resolution Memo with a recommendation regarding federal funding for the Kern Fan Project.

# Development of Agreements with State Agencies:

To implement the Kern Fan Project, the Authority will need to develop and execute the following agreements with state agencies involved with the project:

- California Aqueduct Turnout Agreement with DWR;
- Exchange Agreement with DWR;
- Water Supply Public Benefits Agreement with DWR; and
- Ecosystem Public Benefits Agreement with CDFW.

The purpose of these agreements will be to coordinate construction and operation of the Kern Fan Project, and to provide the public benefits necessary for the Authority to receive \$67.5 million in WSIP funding.

Execution of the Aqueduct Turnout and Exchange Agreements are critical path items for the successful implementation of the Kern Fan Project. Principles for these critical agreements were finalized in May 2020. IRWD and Rosedale have requested that DWR execute a Letter of Concurrence on the principles for the Exchange Agreement that are provided as Exhibit "C" and the principles for the Aqueduct Turnout Agreement that are provided as Exhibit "D". Execution of the Letter of Concurrence is in progress and expected to be completed by the end of June 2020.

# Formation of Groundwater Banking Authority:

On July 22, 2019, an agreement between Rosedale and IRWD creating the Authority, which will plan, design and operate the Kern Fan Project, was approved by the Boards of Directors of Rosedale and IRWD. These approvals were subject to non-substantive changes and the determination that executing critical path agreements with DWR will be feasible. On April 8, 2020, the agreement forming the Authority was executed with an effective date of July 1, 2020, subject to the terms of a side letter agreement. The side agreement prevents the operation of the Authority until IRWD and Rosedale have received reasonable assurances that it will be feasible to execute the critical path turnout and exchange agreements as discussed above. The Letter of Concurrence with DWR will provide the reasonable assurances contemplated by the side agreement.

Within 30 days of the July 1 effective date or soon thereafter, IRWD and Rosedale must take the following actions to start up the Authority:

- File a Notice of a Joint Powers Agreement with the California Secretary of State;
- File a notice for the Authority formation with the Registry of Public Agencies; and
- File a copy of the Joint Powers Agreement with the State Controller.

# Preparation of Authority Bylaws:

In anticipation of the formation of the Authority, staff has been coordinating with Rosedale and special legal counsel to develop the Bylaws for the Authority that will set forth procedures for governing meetings, appointing officers, establishing committees and other matters. The updated Bylaws document is provided as Exhibit "E" in redline form and Exhibit "F" without redline notations. Staff and special legal counsel, with input from the Supply Reliability Programs Committee, expect to continue working with Rosedale to finalize the Bylaws prior to the first meeting of the Authority Board of Directors.

# Appointment of Authority Board Members:

Rosedale and IRWD will each have two representatives on the Authority Board of Directors. Staff recommends the IRWD Board appoint the members of the Supply Reliability Programs Committee, including the designated alternate to the Committee, as Board members and alternate Board member to the Authority. As per the Joint Powers Agreement, IRWD's two Board member representatives of the Authority combined will represent one vote in actions taken by the Authority. Rosedale will also have two Board members on the Authority that combined will also represent one vote. All actions taken by the Authority Board require a unanimous decision.

# Initial Actions of Authority Board:

At the first meeting of the Authority, its Board of Directors will need to:

- Adopt the Authority Bylaws;
- Set a time and place for regular meetings;
- Adopt banking resolutions;
- Establish initial funding requirements;
- Approve previous expenditures of IRWD and Rosedale on the Kern Fan Project;
- Adopt a Conflict of Interest Code for filing with the Fair Political Practices Commission;
- Appoint officers; and
- Establish Committee representatives.

At future near-term meetings of the Authority, the Board of Directors will need to, among other actions:

- Appoint a general counsel;
- Establish policies, procedures and delegations of authorities;
- Approve services agreements with IRWD and Rosedale; and
- Select an auditor.

# FISCAL IMPACTS:

The CWC has conditionally awarded \$67.5 million in WSIP grant funding for the Kern Fan Project. Staff has submitted a project feasibility report to Reclamation seeking \$60.6 million in federal funding. IRWD and Rosedale will fund the remaining cost of the Kern Fan 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 and public comments were received.

# **RECOMMENDATION:**

That the Board appoint the members of the Supply Reliability Programs Committee, including the designated alternate to the Committee, as Board members and alternate Board member to the Groundwater Banking Authority.

# LIST OF EXHIBITS:

- Exhibit "A" Kern Fan Project Location Map
- Exhibit "B" Kern Fan Project Schedule
- Exhibit "C" Principles for Exchange Agreement
- Exhibit "D" Principles for Aqueduct Turnout
- Exhibit "E" Draft Groundwater Banking Authority Bylaws (redline)
- Exhibit "F" Draft Groundwater Banking Authority Bylaws (no redline)

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# Kem Fan Groundwater Storage Project Figure 1 Regional Project Location

SOURCE: ESRI; Kern County

ESA



EXHIBIT "A"

A-1

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# Exhibit "B"

# KERN FAN GROUNDWATER STORAGE PROJECT SCHEDULE



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# Exhibit "C"

# Principles for Exchange Agreement Between the Groundwater Banking Joint Powers Authority and the California Department of Water Resources for the Kern Fan Groundwater Storage Project

# May12, 2020

# **GENERAL PRINICIPLES:**

- 1. Rosedale Rio-Bravo Water Storage District (RRB) and Irvine Ranch Water District (IRWD) intend to form the Groundwater Banking Joint Powers Authority (Authority) to develop and administer the Kern Fan Groundwater Storage Project (Kern Fan Project) funded in part through the Proposition 1 Water Storage Investment Program (WSIP) administered by the California Water Commission.
- 2. The California Department of Water Resources (DWR) owns, operates and maintains the State Water Project (SWP) in accordance with various permits and regulatory requirements. DWR will retain all of its associated authorities. DWR has water service contracts with 29 public agencies (SWP contractors) that specify the terms and conditions for the delivery of the water supply from SWP.
- 3. RRB is a member unit of the Kern County Water Agency (KCWA) and IRWD is a landowner in Dudley Ridge Water District (DRWD). KCWA and DRWD are two of the 29 SWP Contactors.
- 4. The proposed Kern Fan Project would develop a regional water bank in the Kern Fan area to capture, recharge, and store Article 21 water from the SWP during wet hydrologic periods and other supplies conveyed through the California Aqueduct (CA). Portions of the Article 21 water would be used to facilitate exchanges to create ecosystem benefits as described below.
- 5. The Kern Fan Project would be developed with 100,000 AF of storage capacity.
- 6. The Authority would reserve 25,000 AF of storage capacity in the Kern Fan Project designated as the "Ecosystem Storage Account". The remaining 75,000 AF of storage would be for use by IRWD and RRB.
- 7. Ecosystem benefits would be provided by the Kern Fan Project through 1-for-1 exchanges of water stored in Lake Oroville for Article 21water stored in the Ecosystem Storage Account within the Kern Fan Project when such exchanges could be made without impacting existing SWP obligations or concurrent Aqueduct repairs to restore capacity. DWR may need to limit years when exchanges are possible to avoid risk of impact to SWP carryover storage. There would be no modification of water rights or SWP contract rights for the 1-for-1 exchange of water. SWP carryover amounts and capacities would not be affected.
- 8. The California Department of Fish and Wildlife (CDFW) has been identified in statute to be the manager of ecosystem benefits for the environmental water facilitated by the

Proposition 1 WSIP. An agreement between CDFW and the Authority is required. To achieve the full benefits of pulse flow releases from Oroville Reservoir made after the 1-for-1exchanges of water, an instream flow dedication by changing a water right, as permitted by Water Code Section 1707 will be required. The parties to the water right proceeding will be identified as part of the State Water Resources Control Board process. CDFW interprets the benefits of the pulse flows in the Feather River and through the Delta described in the WSIP application to mean that those flows will exit the Delta as Delta Outflows. DWR and the Authority will cooperate and support the instream flow dedication process.

# EXCHANGE TERMS:

- 1. When available, IRWD/DRWD and RRB/KCWA would take delivery of Article 21 water that is both physically and contractually available at the proposed turnout and deliver it for recharge at the Kern Fan Project. The Article 21 water diverted for the Kern Fan Project will be part of the Article 21 allocation made to KCWA/DRWD.
  - a. 25% of the Article 21 water diverted for the Kern Fan Project, accounted for environmental commitments up to 25,000 AF, would be delivered into the Ecosystem Storage Account until the account is full. The Article 21 water, at some point will be converted to Project Water once the exchange takes place.
    - i. The water stored in the Ecosystem Storage Account, would be stored as SWP system water for ecosystem benefit purposes.
    - ii. The water stored in the Ecosystem Storage Account would be returned back to the DWR for storage in the SWP through 1-for-1 exchanges. The timing of the conversion of Article 21 water to project water will be determined in the Exchange Agreement.
  - b. The balance of the Article 21 water, diverted for the Kern Fan Project, will go into RRB and IRWD storage accounts.
- 2. On a mutually agreeable time between CDFW and DWR, when water is available in the Ecosystem Storage Account, CDFW could call for, and DWR could affect the 1-for-1 exchange of Table A water in the SWP that is allocated to DRWD and KCWA for water stored in the Ecosystem Storage Account.
  - a. The amount of water exchanged would be dependent on the quantity of Table A water allocated to DRWD and KCWA.
  - b. The exchange would result in the water stored in the Ecosystem Storage Account, being available to DWR in the SWP for release as environmental pulse flows.
  - c. Water stored in the Ecosystem Storage Account in the Kern Fan Project, after the exchange, would be available to IRWD/DRWD and RRB/KCWA. The Exchange Agreement will specify how this water will be classified and delivered. This water would be moved into separate IRWD/RRB storage accounts.

- d. Because of the regulated environment that the SWP operates in, an exchange to Lake Oroville may not be possible in all years desired by CDFW. The process for implementing the exchange, and any requirements or restrictions, will be specified in the Exchange Agreement. The term of the Exchange Agreement will match the funding requirements of the California Water Commission WSIP.
- 3. Avoided Delta carriage water losses to occur as a result of the exchanges would be accounted for in relation to the amounts of Article 21 water stored in the Ecosystem Storage Account. The exchange process results in changes in the quantity and timing of water movement throughout the SWP system. Operational and carriage water losses will be addressed in the Exchange Agreement.

### **OTHER TERMS:**

- 1. Authority environmental review under California Environmental Quality Act (CEQA) would provide coverage for the 1-for-1 exchanges. DWR has obligations under CEQA that need to be addressed in conjunction with the Authority's environmental reviews including consideration of cumulative impacts from other WISPs. DWR environmental review under CEQA would provide coverage for the pulse flow releases.
- 2. DWR will structure agreements to implement the Kern Fan Project to be consistent with SWP operations and SWP long term water supply contracts.
- 3. DWR, KCWA and the Authority agree to proceed in good faith to develop more detailed terms based upon these principles and conceptual terms with a goal of completing within 180 days from agreement on these Principles. Execution of the Exchange Agreement is contingent upon completion of negotiation of the Exchange Agreement and completion of all environmental and permitting processes. DWR will prepare a document showing expected timing of completion of tasks needed to compete the Exchange Agreement.

# DEVELOPMENT OF EXCHANGE AGREEMENT

### DWR will:

- 1. Continue to analyze how exchanged storage in Oroville Reservoir can be managed and used for environmental benefit consistent with WISP requirements, including considering the Chino Basin Conjunctive Use Project and the Willow Springs Water Bank Conjunctive Use Project.
- 2. Research charges for use of SWP facilities including financial impacts of any changes to the operation of the SWP
- 3. Research DWR CEQA compliance requirements in coordination with Authority and with KCWA and DRWD, if necessary
- 4. Review Authority submitted modeling studies and reports

- 5. Research costs to be paid by authority for processing the agreement and any other charges that may be associated with the operations of the project.
- 6. Establish teams to work on specific issues to develop this agreement and the Turnout Agreement.
- 7. Develop a timeline showing steps needed to complete the agreement.
- 8. Review permitting and environmental documents to ensure that California Aqueduct subsidence repairs are not inconsistent.
- 9. Review design and construction documents to facilitate California Aqueduct subsidence repairs.

# AUTHORITY will:

- 1. Be aware of the 2017 California Aqueduct Subsidence Study and the 2019 California Aqueduct Subsidence Study Supplemental Report that informs how subsidence impacts CA hydraulic conveyance capacity and operational flexibility.
- 2. Provide information about consistency with the Groundwater Sustainability Plan that is pertinent to the Authority and associated groundwater recharge and banking projects.
- 3. Continue to provide information to DWR to review this proposal
- 4. Continue to coordinate with Kern County Water Agency and Dudley Ridge Water District and any other materially affected parties

# Exhibit "D"

Principles for Turnout Construction Related Agreements Between the Kern County Water Agency, Groundwater Banking Authority and the California Department of Water Resources for the Kern Fan Groundwater Storage Project

May12, 2020

### **GENERAL PRINCIPLES:**

- 1. Rosedale Rio-Bravo Water Storage District (RRB) and Irvine Ranch Water District (IRWD) intend to form the Groundwater Banking Joint Powers Authority (Authority) to develop and administer the Kern Fan Groundwater Storage Project (Kern Fan Project) funded in part through the Proposition 1 Water Storage Investment Program.
- 2. The California Department of Water Resources (DWR) owns, operates and maintains the State Water Project (SWP) in accordance with various permits and regulatory requirements. DWR will retain all of its associated authorities. DWR has contracts with 29 public agencies (SWP contractors) for a water supply from the SWP that specify the terms and conditions for the delivery of the water supply. DWR is responsible to approve any encroachments to SWP facilities within the SWP right of way, including the subject turnout.
- 3. DWR and Kern County Water Agency (KCWA) have entered into a water supply contract, dated November 15, 1963, and subsequently amended, providing that DWR shall supply certain quantities of water to KCWA, providing that KCWA shall make certain payments to DWR, and setting forth the terms and conditions of such supply and payment (hereinafter "KCWA Water Supply Contract").
- 4. RRB is a member unit of the Kern County Water Agency (KCWA) and IRWD is a landowner in Dudley Ridge Water District (DRWD).
- 5. The proposed Kern Fan Project would develop a regional water bank in the Kern Fan area to capture, recharge, and store Article 21 water from the SWP requested through KCWA and DRWD during wet hydrologic periods conveyed through the California Aqueduct. The Kern Fan Turnout may be used for diversion of other water supplies consistent with approved agreements and policies.
- 6. The Kern Fan Project includes a proposed 500 cfs canal and corresponding lift stations to supply recharge basins and 100,000 AF of storage capacity.
- 7. Water would be diverted to the Kern Fan Project canal through a new 500 cfs turnout to be constructed at a Pool location to be determined in the California Aqueduct (Kern Fan Turnout). If approved, the turnout would be constructed at the expense of the Authority and operated through a SCADA system by DWR.
- 8. Currently, DWR is preparing designs for near-term, major repairs of the California Aqueduct in the vicinity of the Kern Fan Turnout. This DWR work and any other DWR maintenance or construction will take priority over construction of the Kern Fan Turnout. DWR will endeavor to coordinate work to facilitate the construction of the Kern Fan

Turnout. To this end, Kern Fan Turnout proponents will provide DWR permitting and design documents as soon as possible.

The following Terms are examples of terms that may be included in a Turnout Construction Agreement for the construction and operations of the Kern Fan Turnout. The examples are not a complete list of all required terms.

# GENERAL TERMS

- 1. All devices and equipment in the DWR right of way will be owned, operated and maintained by DWR.
- 2. DWR will structure agreements to implement the Kern Fan Project and the Turnout to be consistent with SWP operations and SWP water supply contracts.
- 3. Environmental clearance is required for all work

# PRE-CONSTRUCTION TERMS:

- 1. *Drawings, Specifications and Data:* To satisfy DWR's requirements for protection of the Aqueduct, and to accommodate DWR's near-term repairs in the vicinity of the Kern Fan Turnout, the Authority shall furnish permitting documents, contract drawings, specifications, data or calculations as requested by DWR as soon as possible. Authority shall not commence construction of any facilities on right of way that have not been approved by DWR.
- 2. *Subsidence Concerns:* The Authority shall provide any technical or operational studies deemed necessary by DWR to demonstrate that the location, construction and operation of the proposed Kern Fan Turnout does not adversely impact the California Aqueduct including, but not limited to: to subsidence impacts, reduced hydraulic conveyance capacity, deliveries of SWP water supplies, existing to other California Aqueduct turnouts or reduced operational flexibility.
- 3. *Timing:* DWR, KCWA and the Authority agree to proceed in good faith to develop an agreement with the goal of completing within ninety days after there is agreement on the location of the Kern Fan Turnout, to be executed upon certification of the Kern Fan Groundwater Storage Project Environmental Impact Report, and any CEQA or other regulatory requirements of DWR. The construction of the Kern Fan Turnout in the California Aqueduct will be under terms and conditions similar to previously constructed turnouts located within Kern County. DWR will prepare a document showing expected timing of completion of tasks needed to compete the Turnout Construction Agreement.

# CONSTRUCTION AND OPERATION TERMS:

- 1. *Insurance during Construction:* The Authority shall insure DWR and KCWA against all liability during construction of the Kern Fan Turnout.
- 2. *Standards of Construction:* All construction within DWR right of way shall conform to DWR standards for protection of the California Aqueduct and to requirements for DWR-approved flow measuring devices.
- 3. *Inspection and Acceptance:* All of the construction authorized by the turnout agreement shall be subject to inspection by DWR. The Authority shall provide inspection of the construction by a registered professional engineer.

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# Exhibit "E"

# TABLE 1IRWD Dedicated Water Banking Capacities for<br/>Existing and Proposed Exchange Programs<br/>June 18, 2020

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	-	-	-	-

Note: This page is intentionally left blank.

# Exhibit "F"

### BYLAWS OF THE GROUNDWATER BANKING JOINT POWERS AUTHORITY

### June 15, 2020 Draft

#### 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 or modified 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 Authority's governance and administration.

#### 3. 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").

### 4. BOARD OF DIRECTORS

#### a. Directors

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

#### b. 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.

#### 5. BOARD MEETINGS

#### a. Regular Meetings

The Board of Directors shall hold at least one Regular Meeting each 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.

### 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.

Members of the Board of Directors may participate in meetings by teleconference pursuant to the Ralph M. Brown Act ("Brown Act") (Government Code section 54950 et seq.).

### e. Notice and Agenda Procedures

The Board of Directors shall comply with the Brown Act for meeting agenda and notice requirements.

### 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

Action by the Board of Directors requires a unanimous vote consistent with Article 5(D) of the Groundwater Banking JPA Agreement.

### 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 Brown Act. 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.).

### 6. COMMITTEES

### 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 principles and guidelines 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.

c. To the extent that the Brown Act applies to Authority committees, committee members may participate in committee meetings by teleconference pursuant to the Brown Act.

### 7. 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.

### 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.

### 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.

### e. 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.

### 8. 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 one or more shared staff services agreement(s) with RRB and IRWD for planning, design, construction and operation of the Kern Fan Project.

### 9. 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.

### **10. 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 administer, design, construct and operate the Kern Fan Project and the Authority 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 5050 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, which shall have been submitted to and approved by the RRB and IRWD Boards of Directors, respectively, in advance of the Groundwater Banking JPA within JPA's first Board of Directors meeting. IRWD and RRB each shall make their initial financial contribution to the Groundwater Banking JPA within thirty (30)) 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, respectively, 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:**

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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.

### 11. 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 unanimous 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 and/or result in a Party achieving greater than 50 percent of the Kern Fan Project recharge, storage or recovery capacity upon implementation of the special activity. A Special Activities Agreement may provide for the creation of a committee under which a Party may exercise proportionally greater voting power over recommendations from the committee to the Groundwater Banking JPA Board of Directors regarding the approval and administration of the Special Activities Agreement.. The committee created by a Special Activities Agreement shall make recommendations to the Groundwater Banking JPA Board of Directors regarding the administration, planning, design, construction, construction management, and operation of the special activity. The Groundwater Banking JPA Board of Directors shall retain its full discretion to modify or reject any recommendation of a committee created by a Special Activities Agreement. No Special Activities Agreement may affect the requirement that all decisions of the Groundwater Banking JPA Board of Directors must be unanimous under Section 6(g) of these Bylaws and Article 5(D) of the Groundwater Banking JPA Agreement. No Special Activities Agreement may affect the provisions for resolving deadlock decisions of the JPA Board of Directors contained in Article 5(D) of Groundwater Banking JPA Agreement and such deadlock provisions would apply to decisions of the Groundwater Banking JPA Board of Directors related to special activities. RRB or IRWD each may carry out

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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.

### 12. INSURANCE

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.

### 13. PROJECT FACILITY 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 facilities and any facilities constructed under 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 other costs that are attributable to the use of Kern Fan Project facilities (including wear and tear) 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 costs on Kern Fan Project land or facilities that are incurred irrespective of use of such land or facilities, and shall be shared equally between the Parties, or as otherwise agreed in a Special Activities Agreement.
- 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. JPA insurance, audit and/or legal counsel costs attributable to a Special Activity shall be paid by the Special Activity participant(s) proportional to their respective percentage interest in the Special Activity, as defined in the relevant Special Activities Agreement.

### 14. TERMINATION

### a. 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.

- b. 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 180 days after providing any advance written notice of intent to terminate the Groundwater Banking JPA Agreement early, RRB shall deliver to IRWD either a notice exercising 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 or written confirmation that RRB elects not 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 Groundwater Banking JPA. Any RRB notice exercising its first right to acquire shall comply with the valuation rules specified in article 1(B) of the Groundwater Banking JPA Agreement.
  - ii. If RRB confirms in writing its election not 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, or fails to provide such written confirmation within the time constraints above, 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 120 days to deliver its approval or rejection of IRWD's proposal, unless the Parties mutually agree in writing to extend the 120-day period. If RRB fails to affirmatively approve or reject IRWD's proposal within 120 days or any mutually agreed time extension, IRWD's proposal shall be deemed approved by RRB.

### **15. 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.

### 16. 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 designated as such and may be reviewed subject to the execution of a non-disclosure agreement; the review of confidential documents by directors and designated representatives shall not act as a waiver of any applicable privileges.

### 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.

### **17. 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.