

AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, MAY 17, 2018

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

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

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

COMMUNICATIONS

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

INFORMATION

5. WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS, AND PROGRAMS OVERVIEW – JOHNSON/WELCH/SANCHEZ/ WEGHORST

Recommendation: Receive and file.

6. KERN FAN GROUNDWATER STORAGE PROJECT UPDATE – SANCHEZ/WEGHORST

Recommendation: Receive and file.

ACTION

7. KERN FAN GROUNDWATER STORAGE PROJECT AGREEMENT –
WELCH/SANCHEZ/WEGHORST

Recommendation: That the Committee provide input on the Kern Fan Groundwater Storage Project Agreement and authorize staff and special legal counsel to work with Rosedale-Rio Bravo Water Storage District to finalize the agreement for consideration by IRWD's full Board of Directors.

OTHER BUSINESS

8. Directors' Comments

9. Adjourn

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

May 17, 2018

Prepared by: D. Johnson/K. Welch

Submitted by: F. Sanchez/P. Weghorst 

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

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

SUMMARY:

Staff has prepared information related to IRWD's water banking facilities, capacities, operations and exchange programs that may serve as reference during Committee meetings. The information is presented in a format that can be updated as necessary to reflect changes in IRWD's projects, programs and operations. At the Committee meeting, staff will review this information and provide an update on ongoing efforts to secure additional water for recharge at IRWD's water banking projects as well as expected recovery operations for the year.

BACKGROUND:

To assist with the facilitation of Committee meeting discussions, staff has prepared reference materials in tabular, map, and schematic formats that describe IRWD's water banking facilities, capacities, operations and exchange programs. The reference materials will be updated, as needed, to reflect changes to the projects, programs and operations. Following is an overview of the reference materials provided. Information is also provided regarding IRWD's 2018 water banking operations.

Capacity and Operations Tables:

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

2018 Recharge Opportunities:

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

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

2018 Recovery Operations:

Buena Vista Water Storage District (BVWSD) has requested recovery of its 6,182 acre-feet (AF) of water that was stored at the Strand and Stockdale Integrated Banking Projects in 2017. On May 4, 2018, Rosedale-Rio Bravo Water Storage District began utilizing the Strand and Stockdale wells to recover BVWSD's water. Per the long-term exchange agreement between IRWD and BVWSD, IRWD will return water to BVWSD at a rate of 1,667 AF per month. Based on this recovery rate, BVWSD should have all of its water recovered and delivered before the end of August 2018.

Project Maps:

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

Program Agreement Diagrams:

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

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

- Exhibit "A" – Recharge, Storage and Recovery Capacities of Current and Anticipated Water Banking Projects
- Exhibit "B" – Water Banking Storage, Recharge and Recovery Operations before Losses
- Exhibit "C" – Water Banking Storage, Recharge and Recovery Operations after Losses
- Exhibit "D" – Map of Water Banking Project Wells and Pipelines
- Exhibit "E" – Map of Water Banking Recharge Basins and Cross Valley Canal Turnout Facilities
- Exhibit "F" – Map of Water Banking Recharge Rates
- Exhibit "G" – Diagram of IRWD-Rosedale Water Banking and Exchange Program Agreements

- Exhibit “H” – Diagram of Long-Term Water Exchange Program with Buena Vista Water Storage District and Diagram of One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities with Buena Vista Water Storage District
- Exhibit “I” – Diagram of Unbalanced Exchange Program Diagram with DRWD
- Exhibit “J” – Diagram of Coordinated Operating, Water Storage, Exchange and Delivery Agreement with MWD
- Exhibit “K” – Diagram of Template Wheeling Agreement with MWD

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
May 17, 2018

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1 ST PRIORITY RECOVERY CONDITIONS (CFS)		2 ND PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED OR UNDER CONST.	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1 ST PRIORITY	ANNUAL RECHARGE 2 ND PRIORITY	ANNUAL RECOVERY 1 ST PRIORITY	ANNUAL RECOVERY 2 ND PRIORITY	RECOVERY CAPACITY AS PLANNED ¹	ESTIMATED RECOVERY CAPACITY (DEC. 2016 CONDITIONS) ²	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	27.0	-	-
Stockdale West	Yes	3	-	26,000	27,100	-	11,250	-	15.0	-	-	-
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-	10.0	-
IRWD Acquired Storage Account ³	No	-	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells ³	No	-	3	-	-	-	-	-	15.0	-	-	-
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
TOTALS		10	5	126,000	44,600	19,000	28,750	7,500	70.0	27.0	10.0	0.0
Partner Capacities ⁴				36,000	22,300	9,500	12,000	0	35.5	27.0	-	-
IRWD Capacities				90,000	22,300	9,500	16,750	7,500	34.5	0.0	-	-
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)									12,420	0.0	-	-
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)									4,330	6,733	-	-
TOTALS (AF)									16,750	6,733	-	-
Number of months needed to recover IRWD's total AF after partners' recovery (Assumes IRWD has use of total recovery capacity after partners' recovery)									8.1	14.0	-	-
Strand Ranch monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											4,518	
Stockdale West monthly recharge amount assuming 0.3 ft/day average recharge rate (AF)											2,331	

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

² Strand Ranch wells currently idle.

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

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

⁵ Kern Water Bank capacities based on 6.58% of Dudley Ridge Water District's 9.62% share of the Kern Water Bank. Annual recharge amount is based on an average of recharge rates for high and low groundwater level conditions. Not included in storage capacity, recharge, and recovery totals to match IRWD's Water Banking Policy Position Paper (10/26/2015).

Exhibit "B"

TABLE 2
IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES
May 17, 2018

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2017 (AF)						
Total Kern Water Bank	-	4,581	-	-	-	4,581
Total MWD System ⁴	8,873	-	-	-	1,174	10,047
Total Kern County	437	10,835	-	-	-	11,272
TOTAL STORED WATER (1/1/2016)	9,310	15,416	-	-	1,174	25,900
(RECOVERY) AND RECHARGE IN 2017 (AF)						
Kern Water Bank Deliveries	-	75	-	-	-	75
2017 SWP Allocation (85%) ³	787	-	-	-	787	1,574
2017 SWP Article 21 ⁵	1,744	-	-	-	1,744	3,488
SWP Table A (CCWA 2017 Exch.)	289	-	-	289	-	578
High Flow Kern River	-	6,869	6,869	-	-	13,738
MWD Water to Jackson Ranch ⁶	-	-	-	-	(143)	(143)
TOTAL 2016 TRANSACTIONS	2,820	6,944	6,869	289	2,388	19,310
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,873	-	-	-	1,174	10,047
Total Kern County	3,257	17,704	6,869	289	2,388	30,507
TOTAL STORED WATER (1/1/2018)	12,130	22,360	6,869	289	3,562	45,210
(RECOVERY) AND RECHARGE IN 2018 (AF)						
Kern Water Bank Deliveries	-	-	-	-	-	-
2018 SWP Allocation (30%) ³	262	-	-	-	262	524
High Flow Kern River	-	-	(6,869)	-	-	(6,869)
TOTAL ESTIMATED 2018 TRANSACTIONS	262	-	(6,869)	-	262	(6,345)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,873	-	-	-	1,174	10,047
Total Kern County	3,519	17,704	-	289	2,650	24,162
TOTAL ESTIMATED STORED WATER TO DATE	12,392	22,360	-	289	3,824	38,865

NOTES:

-MWD = Metropolitan Water District of Southern California.

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

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

³ DRWD water supply will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch. IRWD's 2013-2016 SWP allocation amounts are stored in the MWD system.

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

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

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

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

Exhibit "C"

TABLE 3
IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES
 May 17, 2018

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2017 (AF)						
Total Kern Water Bank	-	4,165	-	-	-	4,165
Total MWD System ⁴	7,917	-	-	-	1,174	9,091
Total Kern County	389	9,675	-	-	-	10,064
TOTAL STORED WATER (1/1/2017)	8,306	13,840	-	-	1,174	23,320
(RECOVERY) AND RECHARGE IN 2017 (AF)						
Kern Water Bank Deliveries	-	68	-	-	-	68
2017 SWP Allocation (85%) ³	669	-	-	-	708	1,377
2017 SWP Article 21 ⁵	1,479	-	-	-	1,566	3,044
SWP Table A (CCWA 2017 Exch.)	246	-	-	246	-	491
High Flow Kern River	-	5,839	6,182	-	-	12,021
MWD Water to Jackson Ranch ⁶	-	-	-	-	(143)	(143)
TOTAL 2017 TRANSACTIONS	2,393	5,907	6,182	246	2,131	16,858
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	2,782	15,514	6,182	246	2,131	26,854
TOTAL STORED WATER (1/1/2018)	10,699	19,747	6,182	246	3,305	40,178
(RECOVERY) AND RECHARGE IN 2018 (AF)						
Kern Water Bank Deliveries	-	-	-	-	-	-
2018 SWP Allocation (30%) ³	223	-	-	-	223	446
High Flow Kern River	-	-	(6,182)	-	-	(6,182)
TOTAL ESTIMATED 2018 TRANSACTIONS ⁷	223	-	(6,182)	-	223	(5,736)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	3,005	15,514	-	246	2,354	21,118
TOTAL ESTIMATED STORED WATER TO DATE	10,922	19,747	-	246	3,528	34,442

NOTES:

-Water in storage has been adjusted to account for losses. IRWD's water stored in Kern County is adjusted 15% for losses (5% for out of county loss, 6% surface loss, and 4% reserve loss); Water stored for DRWD and BVWSD in Kern County is adjusted 10% (6% for surface loss and 4% for reserve loss); KWB losses are 10%; no losses for water directly delivered to MWD system.

-MWD = Metropolitan Water District of Southern California.

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

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

³ DRWD water supply will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch. IRWD's 2013-2016 SWP allocation amounts are stored in the MWD system.

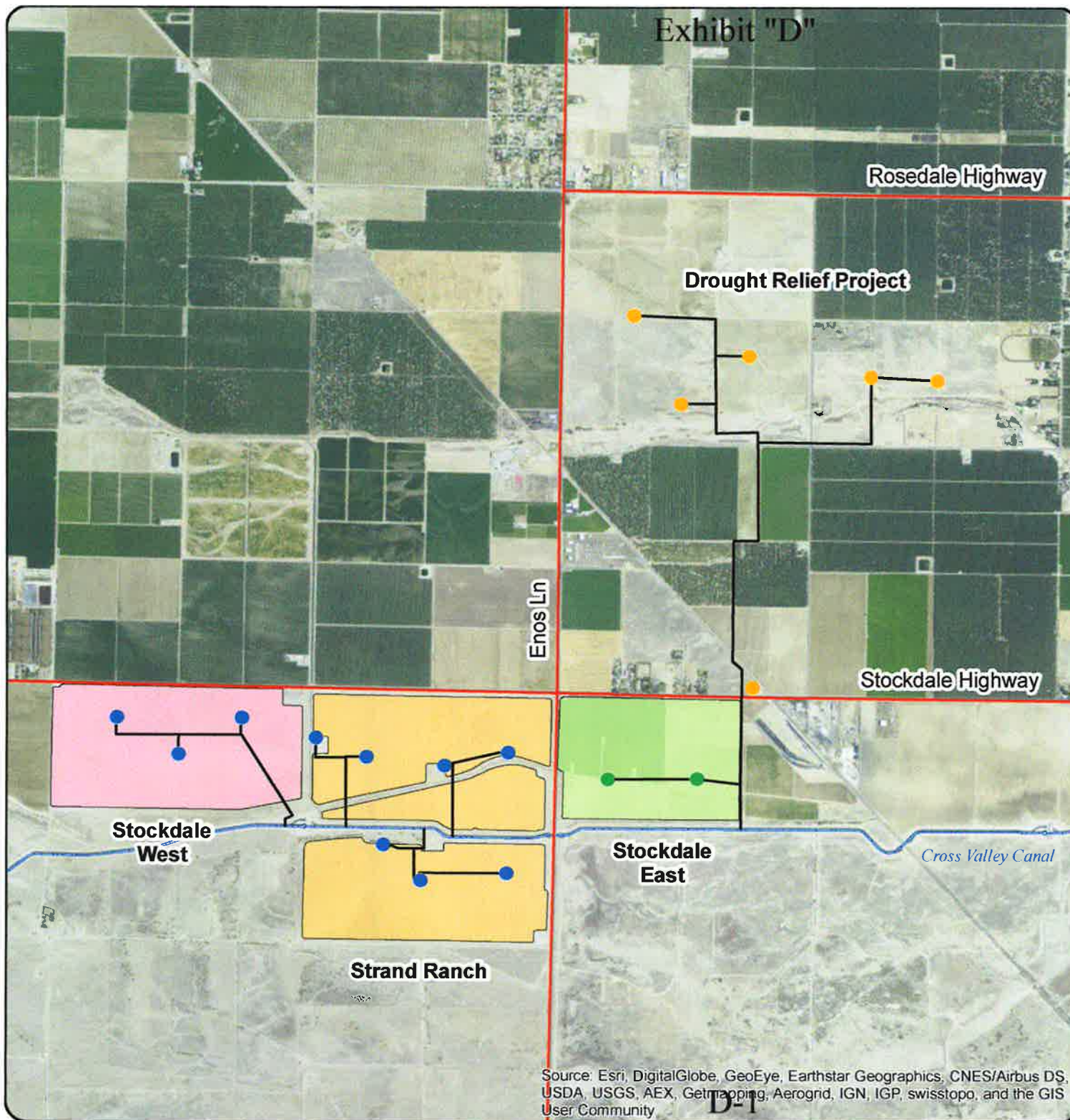
IRWD's 2017 SWP allocation water is stored in Kern County; assumes 2018 SWP water will be stored in Kern County.

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

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

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

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



Irvine Ranch
WATER DISTRICT

Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

MAP FEATURES

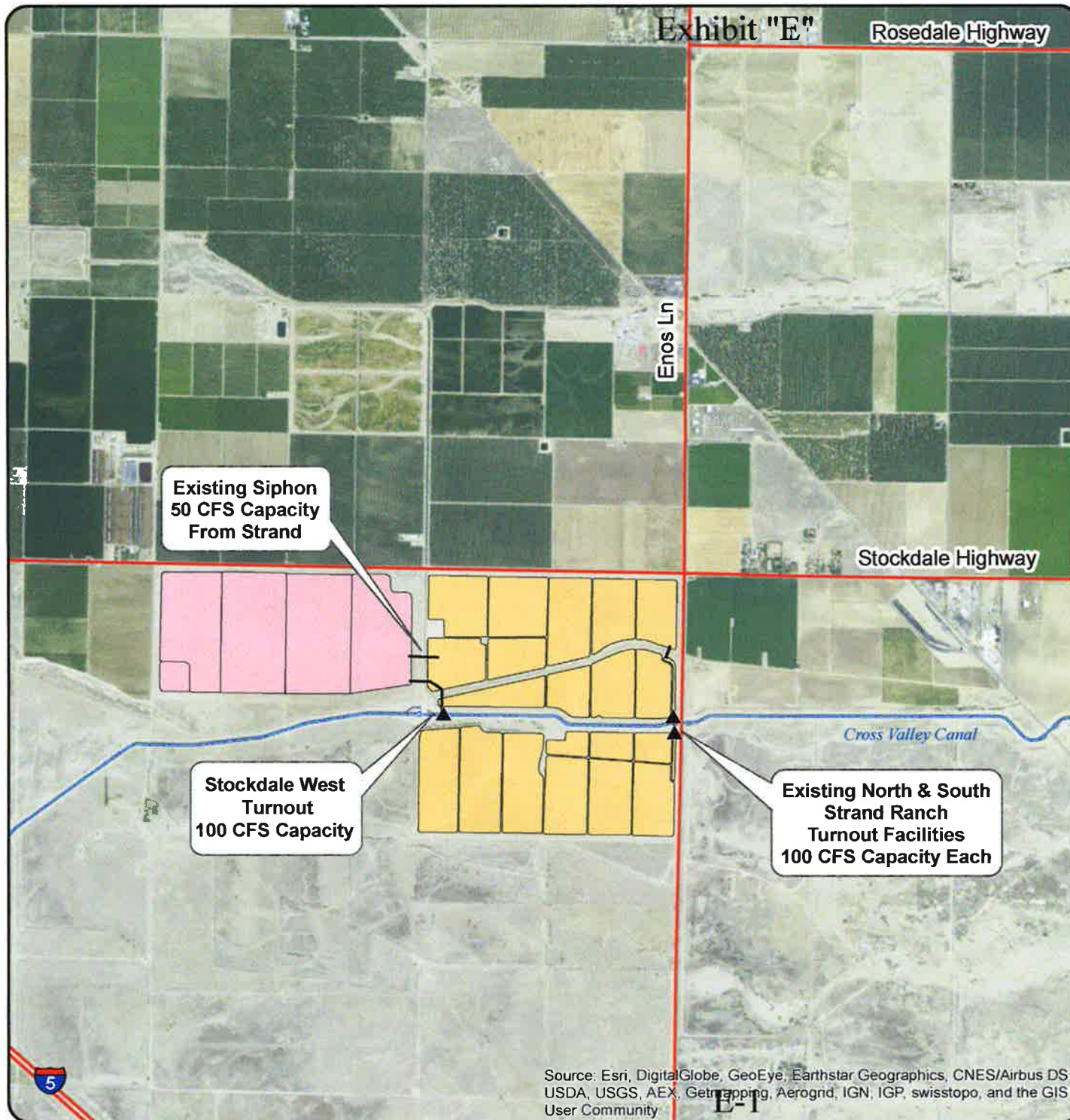
- Existing Extraction Well
- Planned Extraction Well
- Well Under Construction
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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

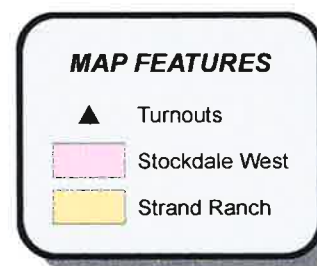


0 0.25 0.5 1 Miles

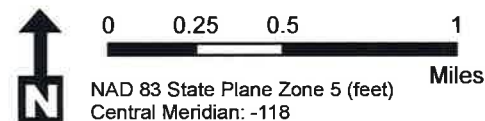
NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

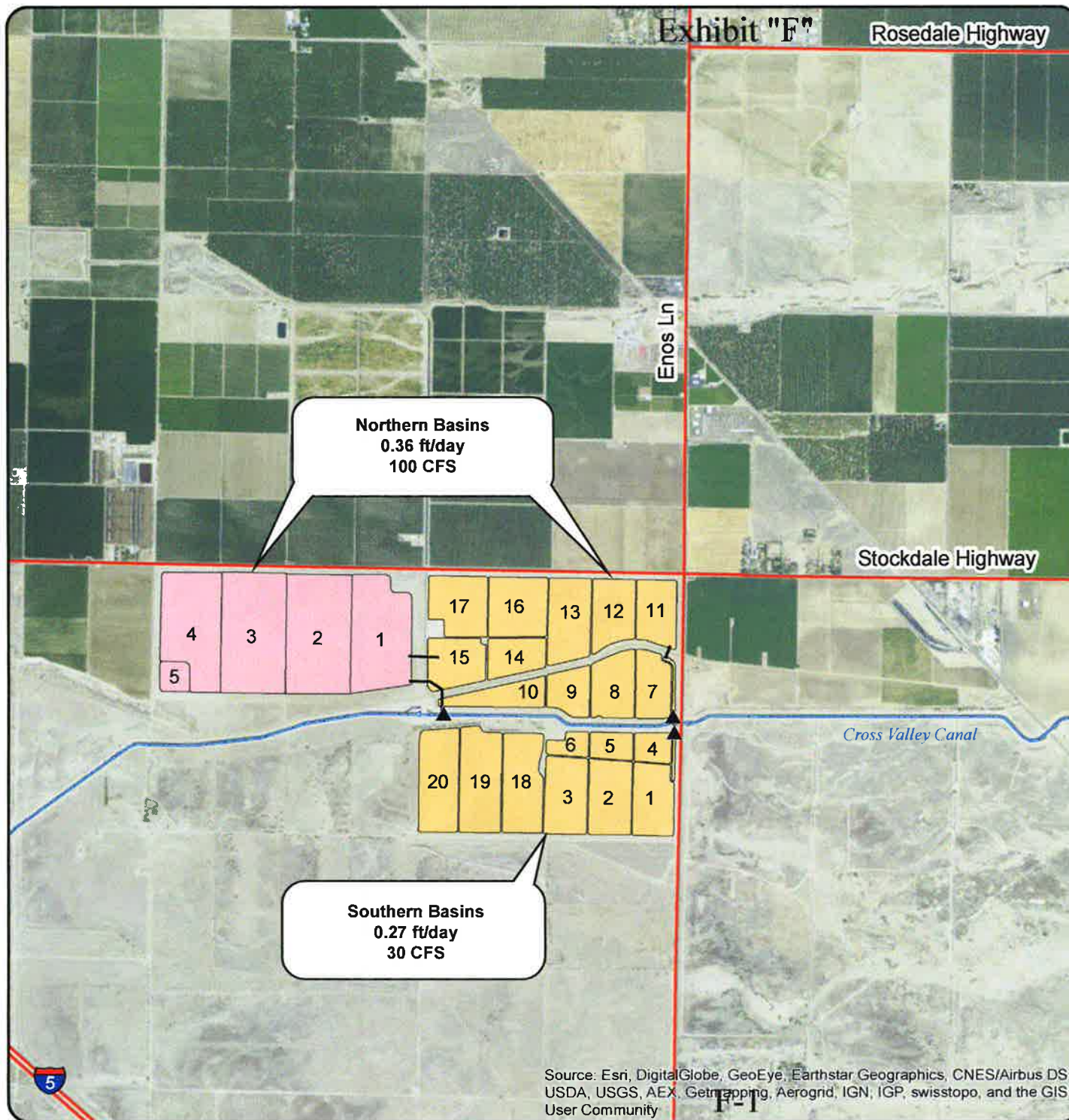


**Location Map:
IRWD Water Banking Projects
Recharge Basins & Turnout
Facilities**

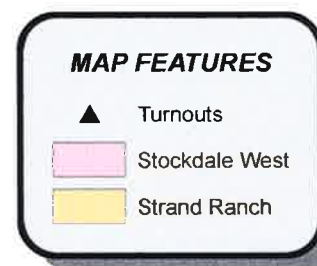


This figure shows the location of recharge basins as well as existing and anticipated pipelines and turnout facilities.





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



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

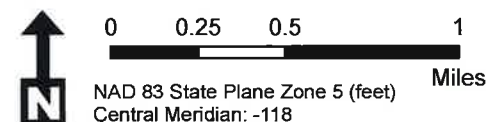


Exhibit "G"

IRWD-Rosedale Water Banking and Exchange Program Agreements

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

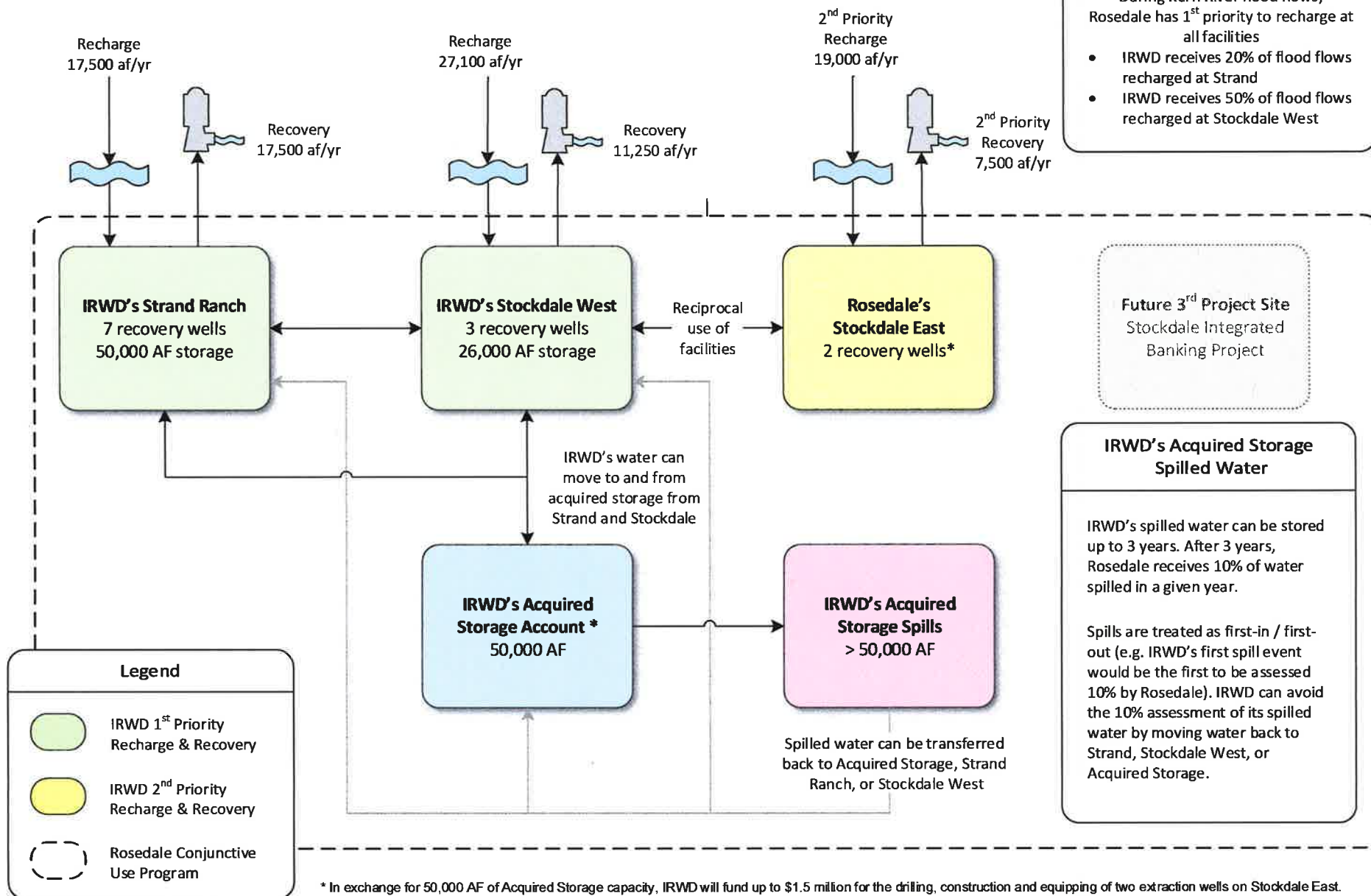
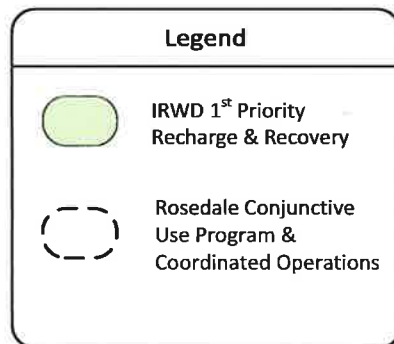
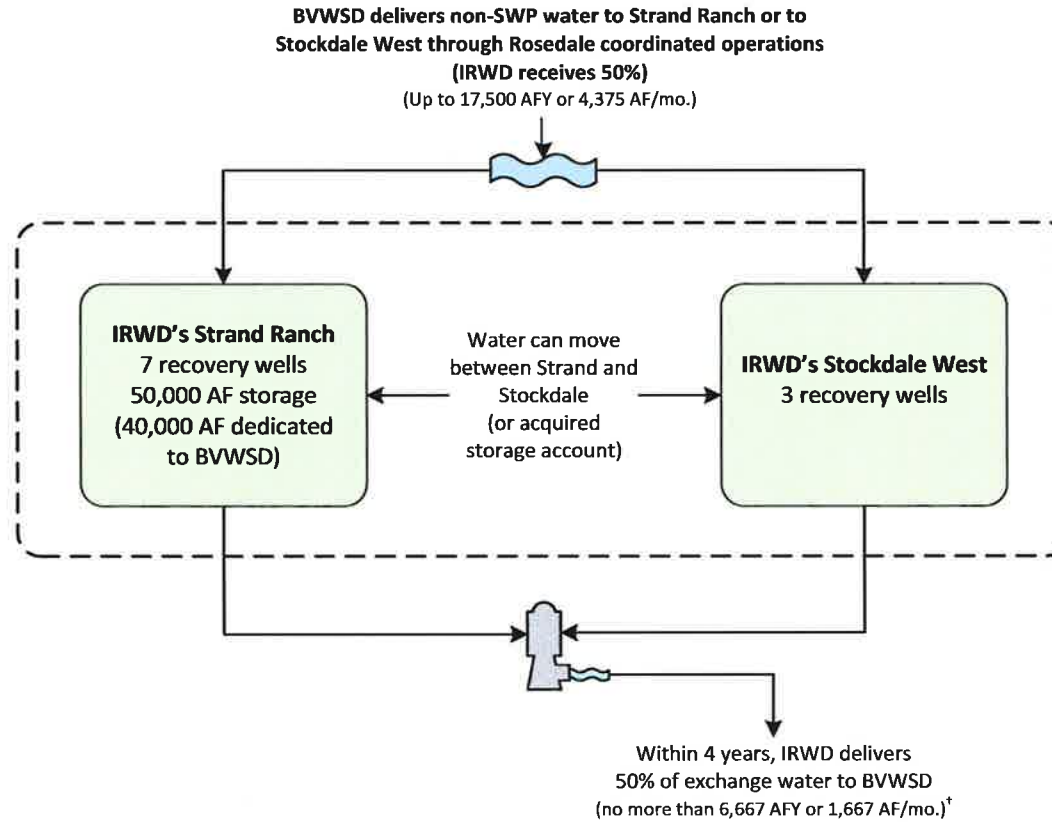


Exhibit "H"

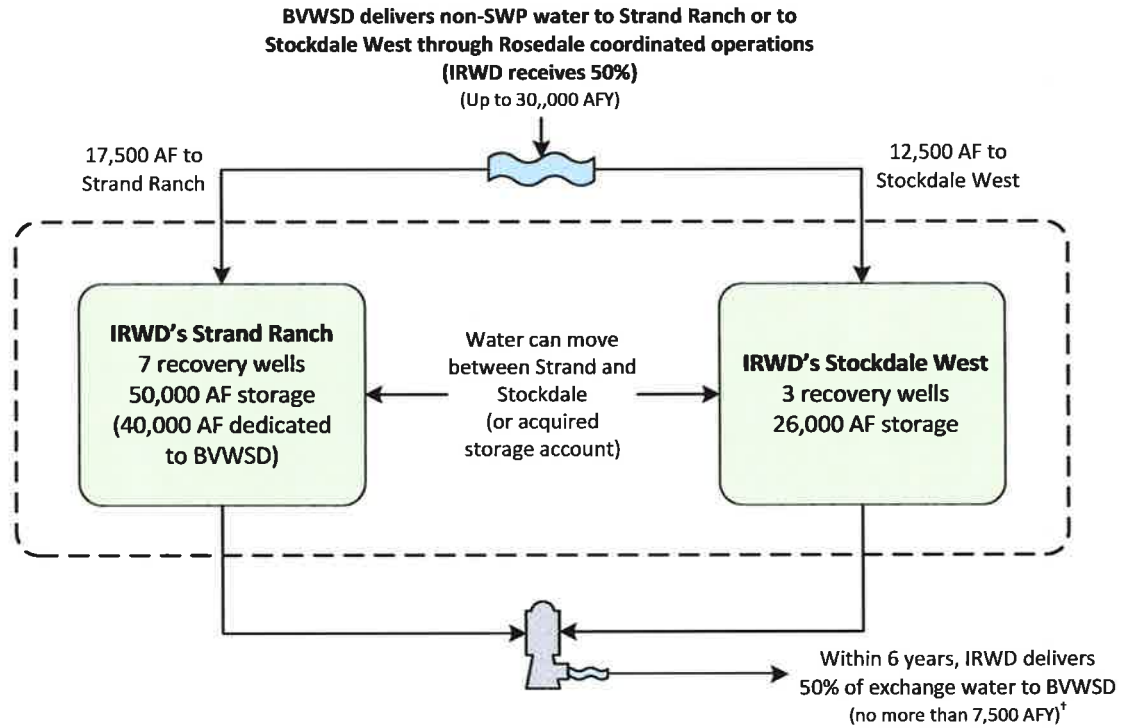
Buena Vista Water Storage District Long Term Water Exchange Program Effective 1/1/2011 through 1/12/2039



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

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

**Buena Vista Water Storage District One-Year Program to Augment
Recharge Using Stockdale West Recharge Facilities**
Effective 4/1/2017 through 3/20/2018



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

[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 6th year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch beyond the 6th year, in exchange for a greater percent being transferred to IRWD as compensation per the table shown to the right:

Modified for 1-Year Recharge Program Only

Year Following Recharge Event	Percent Transferred to IRWD	Percent Returned to BV During or Before Indicated Year
1	50%	50%
2	50%	50%
3	50%	50%
4	50%	50%
5	50%	50%
6	50%	50%
7	75%	25%
8	100%	0%
9	100%	0%

Exhibit "I"

Dudley Ridge Water District (DRWD) Unbalanced Exchange Program

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

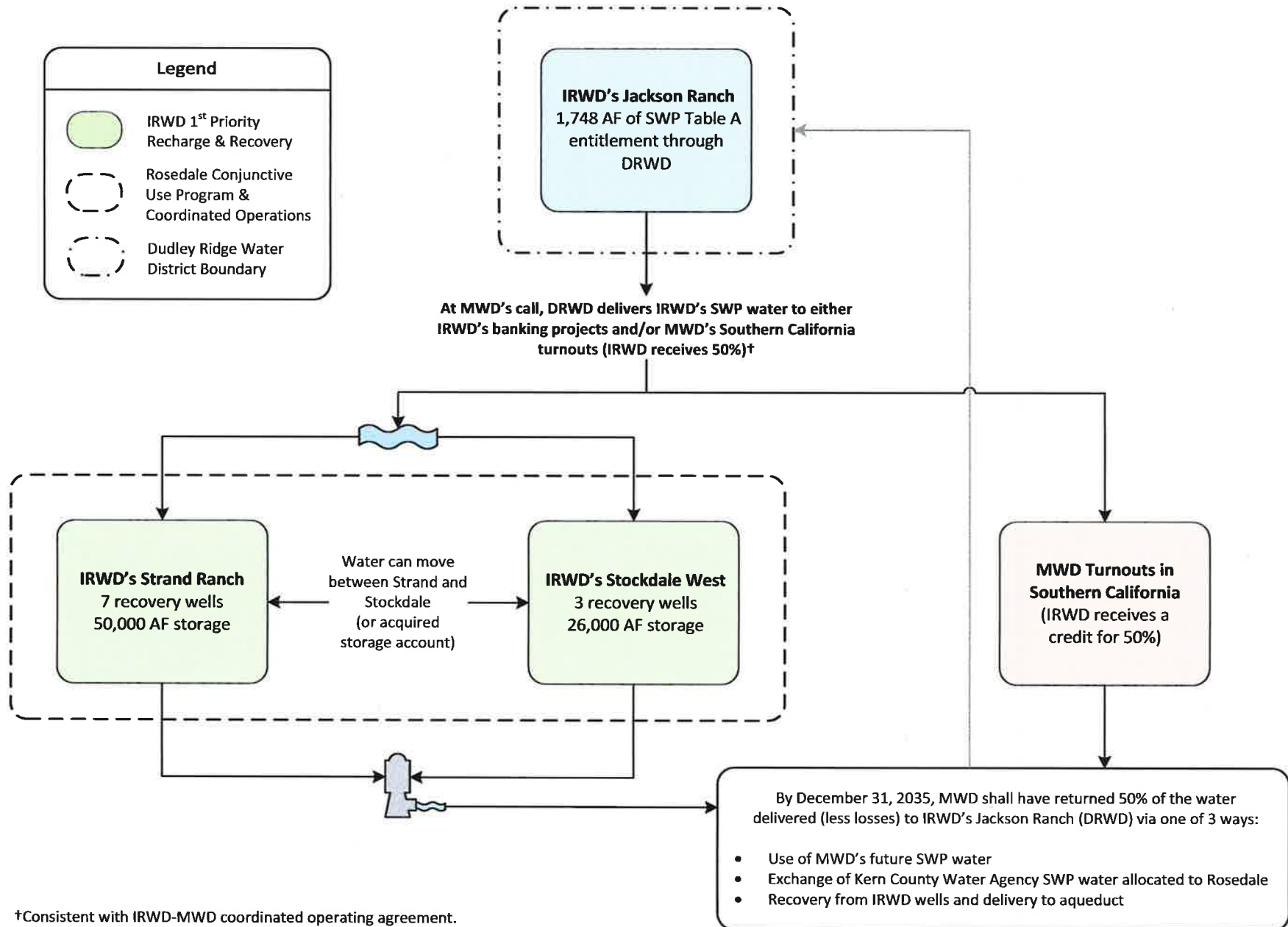


Exhibit "J"

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

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

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

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

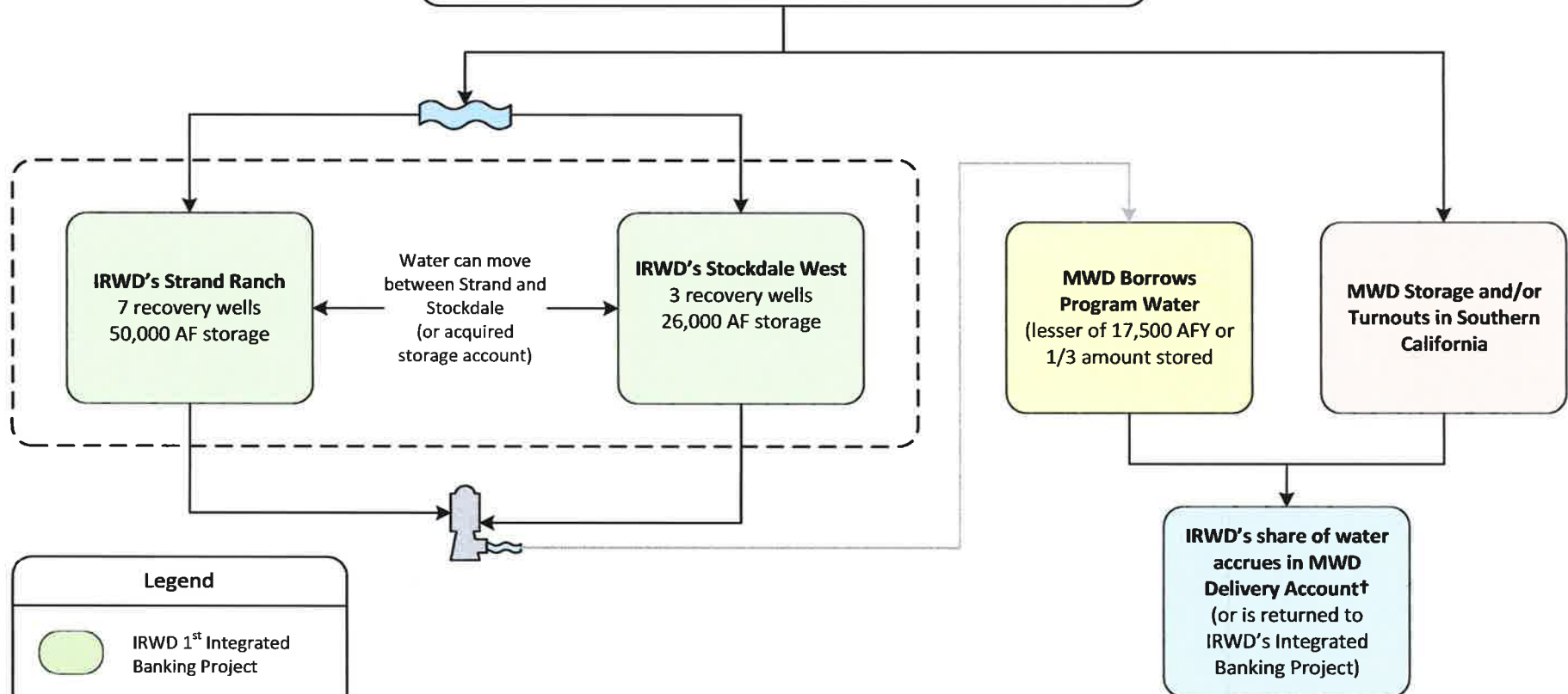
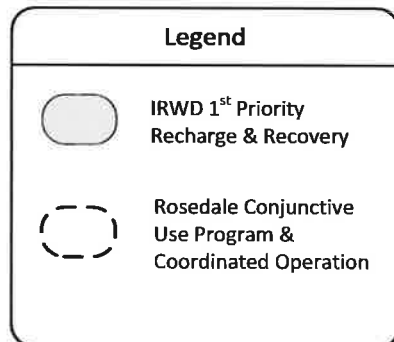
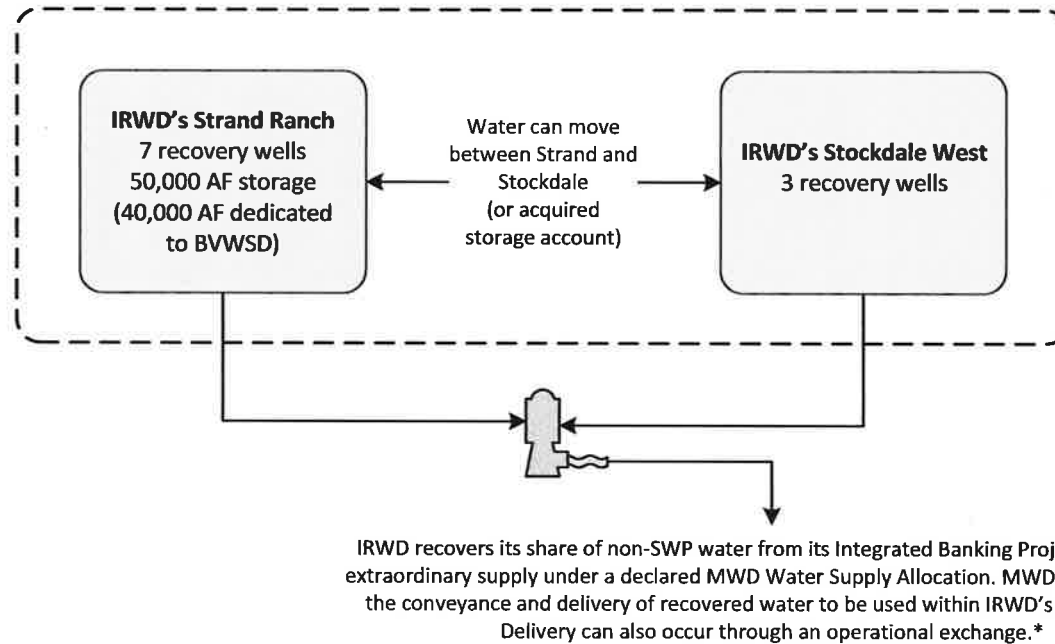


Exhibit "K"
Agreement for Conveyance of Water Between MWD, MWDOC, and IRWD (Wheeling Agreement)
Template for future agreements



*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.

May 17, 2018

Prepared by: F. Sanchez

Submitted by: P. Weghorst *PW*

Approved by: Paul A. Cook *PA Cook*

SUPPLY RELIABILITY PROGRAMS COMMITTEE

KERN FAN GROUNDWATER STORAGE PROJECT UPDATE

SUMMARY:

On August 14, 2017, IRWD and Rosedale-Rio Bravo Water Storage District (Rosedale) jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Groundwater Storage Project (Kern Fan Project). The application seeks Proposition 1 funds that are available from the CWC through the Water Storage Investment Program (WSIP). The CWC received applications for 12 projects, of which 11 were qualified. On May 3, 2018, the CWC determined the final value of the public benefits to be provided by each project. Following is an overview the CWC's decisions related to the public benefits associated with the Kern Fan Project and the other WSIP projects. Also provided is an overview of the next steps in the process of the CWC awarding WSIP funding.

BACKGROUND:

The CWC is currently considering the award of WSIP grant funding for the planning, design, and construction of water storage projects that would provide specific public and ecosystem benefits. The funding source for the WSIP is Proposition 1, also known as the Water Quality, Supply and Infrastructure Improvement Act of 2014. The Act provides \$2.7 billion for public benefits associated with water storage projects. Of the \$2.7 billion, 2% is set aside for bond financing, and 2.5% is set aside for administrative costs, resulting in \$2.58 billion in project funding being available for storage projects. In August 2017, the CWC received 12 grant applications for WSIP funding.

IRWD and Rosedale jointly submitted a WSIP grant application for the Kern Fan Project, which was the only application received by the CWC in the groundwater storage category. The 11 other applications were submitted for five conjunctive use projects, two local surface storage projects, one regional surface storage project and three large surface storage projects that were identified in the Cal Fed process.

Kern Fan Project Overview:

The proposed Kern Fan Project would develop a regional water bank in the Kern Fan area to capture, recharge and store unallocated Article 21 water during wet hydrologic periods. The stored water would be extracted when needed to provide ecosystem, emergency supply and water supply benefits. Project operations would be coordinated with the State Water Project through the California Department of Water Resources and could be integrated with the operations of other projects, such as Sites Reservoir.

Within the joint project grant application, IRWD and Rosedale requested \$86 million in WSIP funding, which is 50% of the estimated total capital cost of \$172 million for the project. If

awarded grant funding in the requested amount, IRWD and Rosedale will each fund \$43 million for the balance of the project's capital costs.

Project Eligibility and Public Benefits:

Pursuant to the WSIP regulations, CWC staff reviewed the 12 grant applications for completeness and initial eligibility. During this review, 11 of 12 projects were determined to meet the initial eligibility criteria to be considered for WSIP funding. Recently, the CWC completed a technical review and evaluation of the public benefits associated with each project. The CWC is required by regulation to evaluate the basis and rationale for the claimed public benefits and the monetary value of the benefits. The ratio of the value of the public benefits to the requested funding amount is defined as the Public Benefit Ratio (PBR).

Final Public Benefit Ratios:

In February 2018, CWC staff provided each project applicant with a preliminary PBR based on their review and evaluation of the expected public benefits of each project. Applicants were given the opportunity to appeal the preliminary PBRs. On May 3, 2018, the CWC considered information contained in the appeals and voted on final PBRs. The CWC's final public benefits for the Kern Fan Project, as compared to those claimed in the project grant application, are summarized in the following table:

Kern Fan Project Final Public Benefits

Item	As Submitted in Grant Application	Final Public Benefits Determined by the CWC on May 3, 2018
Total Public Benefits	\$125.8 million	\$89.8 million
Public Benefit Ratio	1.47	1.05
Program Funding Request	\$85.7 million	

The final PBRs for all of the projects are provided in Exhibit "A". The public benefits for three of the projects were determined to be zero; those projects were deemed ineligible for WSIP funding.

Next Steps:

The final PBRs will be used to calculate one-third of the overall application score for each project. On May 25, 2018, the CWC will release recommendations for the remaining component scores: relative environmental value, resiliency and implementation risk. The CWC will meet in June 2018 to determine the final application scores and rankings for each project. The CWC is expected to announce preliminary maximum conditional funding amounts for each project in July 2018.

FISCAL IMPACTS:

If the CWC awards WSIP funding to IRWD and Rosedale for the Kern Fan Project, a request for funding of the District's cost share for the project will be included in the proposed FY 2018-19 Capital Budget.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (EIR) for the Stockdale Integrated Banking Project was prepared, certified, and approved in compliance with California Environmental Quality Act (CEQA) of 1970 (as amended), codified at California Public Resources Code Sections 21000 et. seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3. Rosedale, as lead agency, filed a Notice of Determination for the Stockdale Integrated Banking Project with the County of Kern. IRWD, as a responsible agency, filed Notices of Determination with the County of Orange and with the County of Kern. The EIR includes a program-level analysis of impacts of a third project site which will make up phase 1 of the Kern Fan Project. When the third Stockdale project site is identified, subsequent project-level environmental review will be necessary prior to implementation of the phase one project. It is expected that a new EIR will be required for the construction and operation of the second phase facilities contemplated in the proposed Kern Fan Project.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Summary of Proposition 1 WSIP CWC Determinations of Final Public Benefit Ratios

Summary of Commission Determinations for Public Benefit Ratios
As of May 10, 2018

Project	Applicant	Type of Project	Total Cost	Staff Recommended Eligible Amount	Commission Approved Eligible Amount	Commission Determined Public Benefit Value	Funding Requested	Commission Final PBR
Centennial Water Supply Project	Nevada Irrigation District	Surface Storage	\$324 M	\$0	Deemed ineligible	-	-	-
Chino Basin Conjunctive Use Environmental Water Storage/Exchange Program	Inland Empire Utilities Agency	Conjunctive Use	\$480 M	\$153.7 M	\$206.90 M	\$368.07 M	\$206.90 M	1.78
Kern Fan Groundwater Storage Project	Irvine Ranch Water District/Rosedale-Rio Bravo Water Storage District	Groundwater Storage	\$171 M	\$72.5 M	\$85.66 M	\$89.82 M	\$85.70 M	1.05
Los Vaqueros Reservoir Expansion Project	Contra Costa Water District	Surface Storage	\$795 M	\$422.6 M	\$459.00 M	\$832.68 M	\$459.00 M	1.81
Pacheco Reservoir Expansion Project	Santa Clara Valley Water District	Surface Storage	\$969 M	\$484.5 M	\$484.55 M	\$980.66 M	\$484.55 M	2.02
Pure Water San Diego Program North City Phase 1	City of San Diego - Public Utilities Department	Surface Storage	\$1,210 M	\$0	Deemed ineligible	-	-	-
Sites Project	Sites Project Authority	Surface Storage	\$5,176 M	\$933.3 M	\$1,008.28 M	\$1,008.28 M	\$916.62 M	1.10
South Sacramento County Agriculture & Habitat Lands Recycled Water, Groundwater Storage, and Conjunctive Use Program (South County Ag Program)	Sacramento Regional County Sanitation District (Regional San)	Conjunctive Use	\$373 M	\$244.3 M	\$280.53 M	\$293.91 M	\$280.50 M	1.05
Temperance Flat Reservoir Project	San Joaquin Valley Water Infrastructure Authority	Surface Storage	\$2,661 M	\$171.3 M	\$171.33 M	\$500.67 M	\$171.33 M	2.92
The Tulare Lake Storage and Floodwater Protection Project	Semitropic Water Storage District	Conjunctive Use	\$603 M	\$0	Deemed ineligible	-	-	-
Willow Springs Water Bank Conjunctive Use Project	Southern California Water Bank Authority	Conjunctive Use	\$343 M	\$105.3 M	\$123.29 M	\$123.29 M	\$123.29 M	1.00
Total Requested Funding				\$2,587.5 M	\$2,819.54 M		\$2,727.89 M	

Total Cost – Total cost as provided in the original application.

Staff Recommended Eligible Amount – Post-Appeal \$ amount staff estimated based on staff adjustments to benefits and value, per Proposition 1 requirements. (April 20, 2018)

Commission Approved Eligible Amount – \$ amount Commission approved based on benefits and value, per Proposition 1 requirements. (May 1-3, 2018)

Commission Determined Public Benefit Value – \$ amount of public benefits determined at the May 1-3, 2018 Commission meeting.

Funding Requested – \$ amount confirmed by applicants. (May 9, 2018)

Commission Final PBR – Ratio of revised value of public benefits divided by funding requested.

May 17, 2018

Prepared by: K. Welch

Submitted by: F. Sanchez/P. Weghorst

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

KERN FAN GROUNDWATER STORAGE PROJECT AGREEMENT

SUMMARY:

In August 2017, Irvine Ranch Water District and Rosedale-Rio Bravo Water Storage District jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Groundwater Storage Project (Kern Fan Project). Grant funds will be awarded by the CWC to qualified projects through its Water Storage Investment Program. In anticipation of IRWD and Rosedale being awarded grant funding for the Kern Fan Project, staff has worked with legal counsel to prepare an agreement that would provide for early project planning activities. The agreement would also establish the terms for the formation of a Joint Powers Authority (JPA). Staff recommends that the Committee provide input on the Kern Fan Groundwater Storage Project Agreement and authorize staff to work with Rosedale and special legal counsel to finalize the agreement for consideration by the IRWD Board of Directors.

BACKGROUND:

Proposition 1 (Prop 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. In August 2017, IRWD and Rosedale jointly submitted an application for the proposed Kern Fan Project with a request for \$86 million in Prop 1 grant funding. This amount equates to 50% of the total estimated \$172 million capital cost for the project. The CWC plans to release its final project funding decisions in July 2018.

In anticipation of IRWD and Rosedale being awarded grant funding for the Kern Fan Project, staff, with input from the Committee, worked with Rosedale to prepare terms for an agreement that would provide for early project planning activities and that would establish the basis for the formation of the Kern Fan Project Joint Powers Authority. The JPA would carry out functions necessary to implement the Kern Fan Project including land acquisition and ownership, environmental review, permitting, planning, design, construction and operations.

Kern Fan Project Agreement:

Staff has worked with special legal counsel at Kronick Moskowitz to prepare a draft agreement based on the terms reviewed with Rosedale's Board of Directors on December 18, 2017 and last reviewed with the Committee on December 21, 2017. The draft Agreement is provided as Exhibit "A". At the time the term sheet was reviewed with the Committee, there were still outstanding concepts related to the formation of the JPA that needed to be developed. Since that time, staff has worked with legal counsel to flush out the needed concepts. The resulting term sheet, which is incorporated into the agreement provided as Exhibit "A", includes tracked changes so that the new concepts can be easily identified.

At the Committee meeting, staff will review the draft agreement with the Committee. Staff recommends that the Committee provide input on the agreement and authorize staff and special legal counsel to work with Rosedale to finalize the agreement for consideration by the IRWD Board of Directors.

FISCAL IMPACTS:

If the CWC awards a grant to IRWD and Rosedale for the Kern Fan Project, staff will request funding of the District's estimated \$43 million cost share for the project to be included in the proposed FY 2018-19 Capital Budget.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

That the Committee provide input on the Kern Fan Groundwater Storage Project Agreement and authorize staff and special legal counsel to work with Rosedale-Rio Bravo Water Storage District to finalize the agreement for consideration by IRWD's full Board of Directors.

LIST OF EXHIBITS:

Exhibit "A" – Draft Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District for Kern Fan Groundwater Storage Project

EXHIBIT "A"

DRAFT

AGREEMENT

BETWEEN

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

AND

IRVINE RANCH WATER DISTRICT

FOR

A KERN FAN GROUNDWATER STORAGE PROJECT

THIS AGREEMENT ("Agreement") is made and entered into as of the Effective Date by and between the ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT ("RRB") and the IRVINE RANCH WATER DISTRICT ("IRWD"). RRB and IRWD are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

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

B. IRWD is a public agency organized in accordance with the California Water District Law (Division 13, commencing with section 34000 of the California Water Code) to provide water services and certain other services. IRWD's powers and purposes include the acquisition within or without the district in the State of all necessary property, water and water rights for the production, storage, transmission and distribution of water for irrigation, domestic, industrial and municipal purposes and to provide and sell such water at wholesale and retail to customers within its boundaries in Orange County, California.

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

D. To improve its water supplies, generate increased recharge capability and to provide operational flexibility, RRB has developed a program for the banking, storage, exchange, and direct delivery of water pursuant to the exercise of its powers (the "RRB Conjunctive Use Program"). The RRB Conjunctive Use Program involves the banking of imported water by customers ("RRB Program Participants") in the Kern County Sub-Basin of the San Joaquin Valley Groundwater Basin ("Groundwater Basin") for later delivery to said customers by way of exchange delivery through State Water Project ("SWP") facilities for RRB's rights to SWP water or by way of extraction delivery of banked water through the CVC to the SWP facilities at its junction with an intake and turnout facility near the town of Tupman, California ("Tupman Turnout"). RRB has developed and approved the RRB Conjunctive Use Program through various agreements and documents including, without limitation, an environmental impact report ("EIR") certified by RRB on July 17, 2001, and subsequent addenda thereto, pursuant to the California Environmental Quality Act ("CEQA").

E. In 2004, IRWD acquired 611 acres of real property in Kern County, California, sometimes referred to as the "Strand Ranch property," lying adjacent to the southerly boundary of RRB. On January

13, 2009, RRB and IRWD entered into an "Agreement For A Water Banking and Exchange Program," as amended by Amendment No. 1, entered into on or about February 27, 2015 (collectively, the "Strand Ranch Agreement") providing for the development and operation of a groundwater banking program on IRWD's Strand Ranch property, and the operation and integration of such program within the RRB Conjunctive Use Program (the "Strand Ranch Integrated Banking Project").

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

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

H. The 640-acre third project site analyzed in the Stockdale Integrated Banking Project EIR would constitute Phase 1 of a proposed Kern Fan Groundwater Storage Project ("Kern Fan Project") for which IRWD and RRB have jointly applied for grant funding through the California Water Commission's ("Commission") Water Storage Investment Program ("WSIP") authorized by California voters' approval of Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014. A second 640-acre project site would constitute Phase 2 of the Kern Fan Project. The Commission is expected to make grant approval decisions in July 2018.

I. Through the Kern Fan Project, the Parties seek to develop a regional water bank in the Kern County Groundwater Sub-basin of the San Joaquin Valley Groundwater Basin in Kern County. The proposed Kern Fan Project would recharge and store up to 100,000 acre-feet of water during periods when surface water is abundant. Water stored by the Kern Fan Project would be recovered when needed to provide ecosystem, emergency supply, and water supply benefits. The Kern Fan Project proposes to use 25 percent of the stored water to provide ecosystem benefits, with the remainder for use by IRWD and RRB.

J. To achieve the above-described objectives of the proposed Kern Fan Project, the Parties ultimately intend to create a separate legal entity through a joint powers agreement ("JPA Agreement") to implement the Kern Fan Project.

K. Prior to forming the new JPA Agreement entity, IRWD and RRB anticipate the need to undertake certain early planning activities related to securing the requested WSIP grant and preliminary planning for the proposed Kern Fan Project. The Parties acknowledge that implementation of the Kern Fan Project will require sequential effort, and through this agreement, the Parties desire to agree to a summary of the principal terms of their overall transaction to implement the project.

L. The Parties acknowledge that they are carrying out certain actions in parallel with the preparation of a JPA Agreement and to facilitate CEQA compliance and other requirements. The Parties wish to make provision for the payment of costs associated with early planning activities and CEQA

compliance and for the disposition of any assets acquired or constructed for the proposed Kern Fan Project pending formation and implementation of the JPA Agreement.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

1. Effective Date and Term.

This Agreement shall be effective upon the date when both Parties have signed this Agreement (the "Effective Date"). Pursuant to Section 10, this Agreement shall remain effective from the Effective Date until such time as the Parties execute the JPA Agreement to implement the Kern Fan Project or otherwise elect to terminate this Agreement, whichever occurs first.

2. Early Planning Activities.

A. Anticipated Early Planning Activities. IRWD and RRB anticipate carrying out Early Planning Activities, including, but not limited to, the following:

- (1) Additional consultant work to support the Parties' application for a WSIP grant from the Commission;
- (2) preparing and executing any agreement(s) with the Commission to secure the requested WSIP grant;
- (3) performing due diligence evaluations for land identified for purchase for the Kern Fan Project;
- (4) performing hydrogeological investigations; and
- (5) completing CEQA review.

B. Cost-sharing for Early Planning Activities. IRWD and RRB shall each pay half (fifty [50] percent) of the costs of Early Planning Activities jointly authorized by IRWD and RRB, unless a different cost-share is agreed to in writing (including by electronic mail).

- (1) An Early Planning Activity cost is jointly authorized if the General Manager of IRWD, or his assignee, and the General Manager of RRB, or his assignee, each approve the same cost in a writing delivered to the other Party (e.g., electronic mail).
- (2) An Early Planning Activity cost may be jointly authorized after it has been incurred by IRWD or RRB, so long as the General Manager of IRWD, or his assignee, and the General Manager of RRB, or his assignee, each approve the same cost in a writing delivered to the other Party (e.g., electronic mail); provided that the Parties shall use their best efforts to obtain joint authorization prior to such cost being incurred.

3. Principal JPA Agreement Terms.

The Parties agree to all of the terms and provisions set forth in Attachment "A" hereto, which is incorporated herein by this reference, and agree to cooperate in good faith with each other to prepare a JPA Agreement incorporating these terms and provisions, and to deliver such further documents and to perform

such other acts as are necessary or appropriate to consummate and to carry into effect all of the terms and provisions summarized in Attachment "A."

4. Preparation of Final JPA Agreement.

A. Sequential Effort; Binding Effect. Each of the Parties acknowledges that in reliance upon this Agreement, each Party will participate in the preparation of detailed terms of a final JPA Agreement to effectuate the terms and provisions contained in Attachment "A," and that some portions of this transaction may be initiated and pursued before others. Subject to Section 4 hereof, this Agreement is intended to be a binding agreement as to the basic terms contained in Attachment "A." The final JPA Agreement to be developed as set forth herein may add to, expand upon or clarify these basic terms but will not contradict or be inconsistent therewith, except by further agreement of the Parties.

B. JPA Agreement Negotiations. The Parties shall each be responsible for paying their own costs associated with negotiating and documenting the JPA Agreement, including legal fees, due diligence expenditures, and any other costs associated with representing each Party's individual interests in developing the JPA Agreement. No reimbursements for such costs will be made out of JPA funds following the JPA formation.

5. CEQA.

A. Early Planning Activities. The Early Planning Activities anticipated by the Parties are necessary to define a stable and finite project description that will facilitate completion of further CEQA review for the proposed Kern Fan Project and do not, individually or collectively, constitute a "project" requiring prior completion of further CEQA review.

B. Proposed Future Kern Fan Project Approval and Implementation. The Parties shall complete further CEQA review prior to approving and implementing the proposed Kern Fan Project.

(1) RRB shall perform the role of lead agency, and IRWD shall perform the role of responsible agency, in completing further CEQA review for the proposed Kern Fan Project.

(2) Certain actions by the Parties to implement the provisions set forth under the heading "GENERAL TERMS – CEQA Compliance" in Attachment "A" will be carried out in parallel with the development of the final JPA Agreement, with the objective of taking appropriate and sufficient proceedings under CEQA in advance of any discretionary actions of the Parties approving the final JPA Agreement. The Parties will use their best efforts to complete such CEQA proceedings and to execute the final JPA Agreement within one year from the Effective Date of this Agreement, unless otherwise agreed to by the Parties.

6. Due Diligence.

The Parties will, in parallel with the development of the final JPA Agreement, conduct such due diligence as they deem necessary. For example, the Parties anticipate conducting a financial feasibility analysis of the proposed future Kern Fan Project and due diligence studies of parcels of land suitable for implementation of the Kern Fan Project, based on the outcome of the Parties' WSIP grant application. If the Parties or either of them determines, based on the results of the due diligence, that the costs and benefits of the transactions contemplated in this Agreement are materially different from those contemplated in Attachment "A" at the time of entering into this Agreement, or significant environmental impacts have been identified that cannot be reasonably avoided pursuant to the proceedings conducted under Section 5, each Party reserves the right to decline to enter into the final JPA Agreement or to negotiate such changes in the

terms and provisions as will conform the transaction to such intent or otherwise make it mutually acceptable.

7. Rights if Final JPA Agreement is Not Formed.

In the event either Party notifies the other that it is declining to enter into a final JPA Agreement pursuant to Section 6 hereof, each of the Parties will retain ownership and rights to use of any and all information jointly or independently prepared in connection with the WSIP grant application and related efforts to define and assess the feasibility of the proposed future Kern Fan Project, and each Party will retain full and unconditional rights to negotiate and implement other water banking and exchange agreements with other persons or entities, and shall have no further obligation under this Agreement.

8. Amendment.

No amendment of this Agreement shall be binding upon the Parties unless it is made in writing and executed by both of the Parties.

9. Assignment.

Neither Party shall assign or otherwise transfer any right or obligation under this Agreement, in whole or in part, to any non-Party without the prior written consent of the other Party. All covenants and agreements shall bind and inure to the benefit of the Parties' respective successors and permitted assigns.

10. Termination.

A. This Agreement shall terminate upon execution of the JPA Agreement.

B. This Agreement may be terminated early by either Party with ninety (90) calendar days' notice or by mutual agreement of the Parties; provided that ownership and use of any information acquired or constructed pursuant to this Agreement shall be governed by Section 7 hereof.

11. Notice.

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

Notice to IRWD shall be made to:

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, California 92619-7000
Attn: General Manager
Telephone No. (949) 453-5300
Fax No. (949) 453-1228
Electronic Mail: genmanager@irwd.com

Notice to Rosedale shall be made to:

Rosedale-Rio Bravo Water Storage District
P.O. Box 867
Bakersfield, California 93302-0867
Attn: General Manager
Telephone No. (661) 589-6045
Fax No. (661) 589-1867
Electronic Mail: _____

12. Indemnity.

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

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

13. Representations.

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

14. Joint Drafting and Negotiation.

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

15. Governing Law.

This Agreement shall be construed and enforced in accordance with the laws of the State of California.

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

Irvine Ranch Water District

By: _____

Title: _____

Date: _____

Rosedale-Rio Bravo Water Storage District

By: _____

Title: _____

Date: _____

EXHIBIT "A"

DRAFT

**Rosedale-Rio Bravo Water Storage District and
Irvine Ranch Water District**

**Summary of Conceptual Terms for an
~~Interim Joint Powers Authority~~ Agreement
~~f~~For Implementation of the
Kern Fan Groundwater Storage Project
(~~December 14, 2017~~ May 9, 2018)**

GENERAL TERMS

Parties:	Rosedale-Rio Bravo Water Storage District ("Rosedale") and Irvine Ranch Water District ("IRWD").
Description:	Rosedale and IRWD seek to develop the Kern Fan Groundwater Storage Project ("Kern Fan Project") that will recharge and store up to 100,000 acre-feet (AF) of State Water Project water during wet periods in the Kern County Groundwater Basin. The water would be available for subsequent recovery and use for public and non-public benefits consistent with the requirements of the California Water Commission (CWC) and the Water Storage Investment Program ("WSIP"). The Kern Fan Project facilities shall also be available to the Parties for the implementation of programs that are independent of the WSIP related aspects of the Kern Fan Project.
Joint Powers Authority:	Rosedale and IRWD intend to create a Joint Powers Authority ("JPA"), as a separate, legal public entity to govern the Kern Fan Project. The purpose of the JPA would be to combine the individual powers of Rosedale and IRWD to plan, design, construct and operate the Kern Fan Project. The JPA would be established through a joint powers agreement ("JPA Agreement"). The JPA Agreement shall be based on the agreed upon terms and conditions set forth in the Interim Agreement.
Governance:	To be determined <u>The JPA shall be governed by a Board of Directors ("Board") comprising two directors. Rosedale's Board shall appoint its</u>

president or his designee to serve on the JPA's Board, and IRWD's Board shall appoint its president or his designee to serve on the JPA's Board. Unanimous approval is required for the JPA Board to take action on any and all matters. If the JPA Board is deadlocked on a proposed action, then Rosedale and IRWD shall conduct a joint Board meeting to resolve the deadlock. If the joint Board meeting fails to resolve the deadlock, the Parties shall participate in mediation to resolve the deadlock. If mediation fails to resolve the deadlock, either Party may initiate a lawsuit in response to the deadlock.

~~Interim~~

~~Agreement: An Interim Agreement is needed to facilitate Early Planning Activities (described below) that are contemplated by the Parties prior to execution of the JPA Agreement. The Conceptual Terms provide the basis for the development of the Interim Agreement.~~

Authority of the JPA:

The JPA will be authorized to carry out the functions necessary to implement the Kern Fan Project including: acquisition and ownership of land, easements, facilities and capacities as well as the environmental review, permitting, design, construction, operation, maintenance and replacement of facilities. The JPA would administer the project; execute and administer grant agreements with the CWC and others; and execute and administer any required agreements related to the operation of the project including any agreements with the California Department of Water Resources (DWR) and other state resource agencies.

Elements of Project Management

~~And Ownership: To be determined JPA will to hold title to real property acquired for Kern Fan Project as well as ownership of all Kern Fan Project facilities.~~

~~JPA will to delegate to IRWD responsibility for preparing engineering designs and constructing the turn-out from the California Aqueduct, the for Kern Fan Project aqueduct and lift stations facilities, subject to approval by JPA Board. JPA to delegate to IRWD responsibility for construction of aqueduct and lift stations. JPA will to delegate to Rosedale responsibility for construction preparing Preparing engineering desiagns designs designing and constructing the Kern Fan Project recharge of recharge basins, and wells, pipelines and Asa well as aqueduct Kern Fan Project aqueduct turn-ins and turn-outs subject to approval of JPA Board. JPA will to delegate to Rosedale responsibility for operation and maintenance of all Kern Fan Project facilities subject to approval of JPA Board.~~

~~Interim~~ ~~Agreement~~

~~Effective Date: The date of execution of the Interim Agreement shall be determined by and subject to the award of grant funding to IRWD and Rosedale for the proposed Kern Fan Project.~~

~~Interim
Agreement~~

~~Term: The Interim Agreement shall terminate upon execution of the JPA Agreement or earlier as mutually agreed upon by the Parties.~~

JPA Agreement

Effective Date: The date of execution of the JPA Agreement, which shall be subject to the certification of a Final Environmental Impact Report (FEIR) for the Kern Fan Project and approval of the project.

JPA Agreement

Term: The term of the JPA Agreement would commence on the JPA Agreement Effective Date and would terminate 30 years or as otherwise required for participation in the WSIP. The term of the JPA Agreement could be extended upon mutual written agreement of the parties. Prior to termination of the JPA Agreement, the parties would work together to mutually extend the JPA Agreement. Should the agreement not be extended, the parties would agree to negotiate in good faith to integrate the Kern Fan Project facilities into another existing program(s). If integration is not successful, the project facilities, capacities and property would be divided equally between the parties, with each party holding a right of first offer to purchase the project property, facilities and capacities held by the other party.

Non-Binding

Effect: This Term Sheet is intended to be a non-binding statement of the conceptual terms of the proposed transaction. It is subject to the negotiation, execution and delivery of a ~~JPA~~ ~~Interim~~ Agreement consistent with the basic terms and conditions set forth herein.

Grant Funding: Rosedale and IRWD submitted an application for grant funding through the WSIP to receive up to \$86 million in grant funding for the planning, design and construction of the Kern Fan Project facilities. The CWC is

expected to announce the award of funding to qualified projects by
~~July~~ ne 2018. The Parties would agree to cooperate in pursuing other
grant opportunities.

Rosedale and IRWD

Funding: Rosedale and IRWD shall each contribute up to \$43 million to the JPA for funding the planning, design and construction of the Kern Fan Project facilities, assuming \$86 million is awarded to the Kern Fan Project under the WSIP. If less than \$86 million is awarded to the Kern Fan Project, then Rosedale and IRWD shall either agree to proportionally scale down the project or equally share in any shortage in the award amount provided by the CWC.

~~Early Planning~~

~~**Activities:** Rosedale and IRWD have identified certain activities related to securing the WSIP grant and project planning that would need to be completed prior to the potential formation of the JPA. These planning activities may include additional consultant work and analyses associated with securing a grant, preparing and executing an agreement with CWC, securing land purchase options, due diligence activities, performing hydrogeologic evaluations, and environmental compliance. Rosedale and IRWD would equally fund the cost of the identified Early Planning Activities.~~

Allocation of Capacities:

For the Kern Fan Project, Rosedale and IRWD intend to develop up to 100,000 AF of storage and recharge capacity, up to 50,000 AF per year of recovery and up to 500 cubic feet per second (cfs) of additional conveyance capacity in a Kern Fan Project aqueduct. Storage capacity developed under the Kern Fan Project will be allocated as follows:

25% to the WSIP Public or Ecosystem account
37.5% to the Rosedale account
37.5% to the IRWD account

Recharge, recovery and additional conveyance capacities developed under the Kern Fan Project will be allocated as follows:

50% to Rosedale
50% to IRWD

The Parties would jointly use their recharge, recovery and conveyance capacities to fulfill public ecosystem requirements as may be required in any grant funding or operations agreements that are entered into by the JPA with the CWC, DWR and other state resource agencies pursuant to the WSIP.

Project Water: For the purposes of participation in the WSIP, the Kern Fan Project will be operated by recharging and storing water supplied by the State Water Project (SWP) during periods of unallocated SWP water under the Article 21 Program (Project Water). These deliveries would be made on behalf of IRWD as a landowner in Dudley Ridge Water District (DRWD) and Rosedale as a sub-unit of the Kern County Water Agency (KCWA) or any other SWP ContraterContractor acting on behalf of either or both Parties. – Project Water delivered to the Kern Fan Project will be proportionately applied to each respective storage account as defined under “Allocation of Capacities”.

Ownership: The JPA would acquire and own up to 1,280 acres of land within the Kern Fan Project designated project area. The JPA will own all property, facilities and capacities of the Kern Fan Project. The JPA may acquire property outside of the Kern Fan Project area and designated existing project areas/recharge for purposes of meeting the Kern Fan Project requirements.

Hydrogeologic Evaluations: Rosedale and IRWD would equally fund hydrogeologic studies needed to determine the recharge, storage and recovery capacities and limitations of the Kern Fan Project designated properties.

CEQA Compliance: Rosedale and IRWD would comply with CEQA and would equally fund the preparation of an Environmental Impact Report (EIR) for the construction and operation of the Kern Fan Project facilities including all technical studies necessary to support the EIR. Rosedale would be the lead agency with respect to CEQA compliance. IRWD would be a responsible agency. Rosedale and IRWD would equally fund any litigation expenses associated with the CEQA compliance work for the Kern Fan Project.

General

Expenses: Each Party would be responsible for its own fees and expenses arising out of the negotiation and execution of the ~~Interim and~~ JPA Agreements, obtaining necessary approvals and the like.

Permit Costs: The JPA would fund all regulatory and permitting fees and costs associated with the construction of Kern Fan Project facilities.

Project Costs: The WSIP grant funds would be applied to the planning, design and construction costs of the Kern Fan Project and the JPA would fund all remaining associated costs.

Project

Operation: The JPA Agreement would specify Rosedale as the operator of the Kern Fan Project facilities as well as performing maintenance activities, subject to approval of the JPA Board.

Operation Costs: The JPA Agreement would specify Rosedale and IRWD payment of operations, maintenance, energy and replacement (OME&R) costs. Costs would be defined as either variable OME&R and paid pro rata based on actual use of facilities ~~and/or~~ fixed OME&R to be pro rata to actual use where possible and/or ~~and~~ divided equally where not. Rosedale and IRWD will equally split the OME&R costs associated with the public benefits or ecosystem account associated with participation in the WSIP that are not funded by the State.

Unused

Capacities: Rosedale and IRWD shall have equal priority and access to use of any unused available capacities in the Kern Fan Project. Rosedale and IRWD may use such unused capacity in coordination with other independent operating program and projects integrated in Rosedale's Conjunctive Use Program. Rosedale and IRWD will have the ability to transfer water stored in the Kern Fan Project to respective storage accounts in other programs or projects.

Kern River Regulated

- High Flows: At such times when Project Water and other water are available simultaneously, Project Water will be utilized until the public benefit and ecosystem account is at full capacity. Once this is met, Rosedale and IRWD may each use their respective capacities for all available water including Project Water.
- Kern River
Flood Water: During times that the "Kern River Flood Water" is available (e.g. when the Kern River Watermaster offers water to all takers willing to sign a "Notice/Order", or the Kern River Watermaster offers water to the California Aqueduct/Kern River Intertie, such water is expected to flood farmed acreage in Buena Vista Lake, or is expected to be delivered into the Kern River Flood Channel for delivery out-of-county), this water would follow delivery of Project Water, if simultaneously available. Rosedale would have a first priority to use all Kern Fan Project facilities for recharge of Kern River Flood Water. **[Rosedale Position:]** For every five (5) acre-feet of Kern River Flood Water delivered to the Project Facilities, four (4) shall be accounted to Rosedale and one (1) shall be accounted to IRWD. ^[A1] **[IRWD Position:]** All Kern River Flood Water banked using the Kern Fan Project facilities would be shared between Rosedale and IRWD on an equal basis. ^[A2]
- Water Quality: The quality of water to be recharged and recovered at the Kern Fan Project would be consistent with the pump-in requirements of the California Aqueduct.