

AGENDA
IRVINE RANCH WATER DISTRICT
SUPPLY RELIABILITY PROGRAMS COMMITTEE
THURSDAY, AUGUST 16, 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.

OTHER BUSINESS

5. CLOSED SESSION

- A. CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Sec. 54956.8). Related to Price Terms of Payment for an Irvine Lake Emergency Water Storage Exchange Pilot Program.

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

Negotiating parties: Serrano Water District and Baker Water Treatment Plant Partners.

Under negotiation: Price and terms of payment of acquisition of rights to water.

OTHER BUSINESS (Continued)

B. CONFERENCE WITH REAL PROPERTY NEGOTIATORS (Government Code Sec. 54956.8).

Property Parcels: 815-180-018, 827-120-010, 827-130-005, 827-140-001, 830-050-004, 830-050-008, 830-50-010, 827-040-005, 827-040-004, 827-072-001, 827-072-002, 827-072-003, 827-072-004, 827-072-005, 827-072-010, 827-120-002, 827-120-001, 827-040-006, 827-050-003, 827-050-007, 827-050-005, 827-050-001, 827-020-002, 827-030-003, 827-020-004, 827-020-001, 827-020-018, 827-040-003, 827-050-002, 827-020-003, 815-180-011, 815-180-006, 815-180-003, 827-120-003, 827-120-004, 827-120-005, 827-120-007, 827-120-006, 827-120-008, 827-120-009, 827-120-011, 827-130-012, 827-040-001, 830-030-004, County of Riverside – Lease.

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

Negotiating parties: E & S Farming, LLC.

Under negotiation: Price and terms of payment.

ACTION

6. UPDATE ON IRWD PROPERTY IN PALO VERDE IRRIGATION DISTRICT – WEGHORST

Recommendation: That the Board authorize the General Manager to vote either by absentee ballot or in person in the upcoming Palo Verde Irrigation District Board of Directors election.

7. ADDITION OF THE KERN FAN GROUNDWATER STORAGE PROJECT TO THE FISCAL YEAR 2018-19 CAPITAL BUDGET – SANCHEZ/WEGHORST

Recommendation: That the Board authorize the addition of the Kern Fan Groundwater Storage Project, Project 10854, in the amount of \$185,976,000, to the Fiscal Year 2018-19 Capital Budget.

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

Recommendation: That the Committee provide input on the Joint Powers Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project and authorize staff and special legal counsel to work with Rosedale-Rio Bravo Water Storage District and its legal counsel to finalize the agreement for consideration by IRWD's full Board of Directors.

INFORMATION

- | | |
|---|--|
| 9. <u>WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS,
AND PROGRAMS OVERVIEW – JOHNSON/WELCH/SANCHEZ/
WEGHORST</u> | |
|---|--|

Recommendation: Receive and file.

OTHER BUSINESS (Continued)

10. Directors' Comments
11. 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.

August 16, 2018

Prepared and

Submitted by: P. Weghorst

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

UPDATE ON IRWD PROPERTY IN PALO VERDE IRRIGATION DISTRICT

SUMMARY:

IRWD owns 3,099 acres of land in the Palo Verde Irrigation District (PVID), of which 2,845 are water toll acres. IRWD's near-term plan for the land is to continue farming through tenant farm leases and contract farming arrangements. At the Committee meeting, staff will provide an update on IRWD's current farm leases and contract arrangements. Staff will also provide an update on the upcoming PVID Board of Directors election. Staff recommends that the Board authorize the General Manager or his designee to vote, either by absentee ballot or in person, in future PVID elections.

BACKGROUND:

Since 2016, IRWD has acquired 3,099 acres in PVID with an associated 2,845 water toll acres. The location of IRWD's properties are depicted on Exhibit "A". PVID is located in Riverside and Imperial Counties adjacent to the Colorado River, and has the highest priority rights to water from the Colorado River in California. PVID provides approximately 450,000 acre-feet (AF) of water per year to 91,400 acres of productive farm land on a first priority basis. Additional water is provided on a third priority basis to 16,000 acres of land located in the adjacent mesa area. All of IRWD's properties are enrolled in the Palo Verde Land Management, Crop Rotation, and Water Supply Program (Fallowing Program).

Near-Term Operations Plan:

As discussed with the Board in December 2015, short-term operations of IRWD's lands in the PVID service area are centered on maintaining farm leases with tenant farmers and implementing contract farming arrangements. IRWD receives rental payments, contract farm payments, as well as water toll payments on its lands. IRWD also receives payments on the fallowed areas through the Fallowing Program.

Update on Farm Leases:

IRWD currently has farm leases with four different lessees. A total of 180 acres are farmed under month-to-month contract farming arrangements with local firms. Exhibit "B" includes a table of the status of IRWD's current farming leases and contract farming arrangements. At the Committee meeting, staff will provide additional information related to the leases and contract arrangements which are all expected to end by 2022. Prior to the end of the existing leases, staff will recommend soliciting proposals from all interested and qualified parties in order to maximize lease revenue and other benefits.

Upcoming PVID Board Election:

On September 18, 2018, PVID will hold an election among its land owners to elect two members of its Board of Directors. There are two incumbents that are expected to seek re-election and others are expected to compete for the two seats. Each land owner gets one vote for each acre of land owned. Accordingly, IRWD is allowed to place 3,099 votes. At the Committee meeting, staff will provide additional details related to the upcoming election. Staff recommends that the Board authorize the General Manager or his designee to vote either by absentee ballot or in person in future PVID Board of Directors elections.

FISCAL IMPACTS:

IRWD receives rental payments, contract farm payments as well as water toll payments on its lands owned in PVID. IRWD also receives payments on the fallowed areas through the Fallowing Program. These payments are applied as offsets to IRWD's cost of water.

ENVIRONMENTAL COMPLIANCE:

The District is not presently contemplating any changes in the existing use of the lands being leased for farming purposes in PVID. Therefore, no environmental review is necessary. IRWD specifically conditions any proposed future change in use of the properties to future environmental review in compliance with the California Environmental Quality Act.

RECOMMENDATION:

That the Board authorize the General Manager to vote either by absentee ballot or in person in the upcoming PVID Board of Directors election.

LIST OF EXHIBITS:

Exhibit "A" – Location map of IRWD owned lands in PVID

Exhibit "B" – Status of IRWD Farm Leases and Contract Arrangements

Exhibit "A"

IRWD Owned Properties in PVID

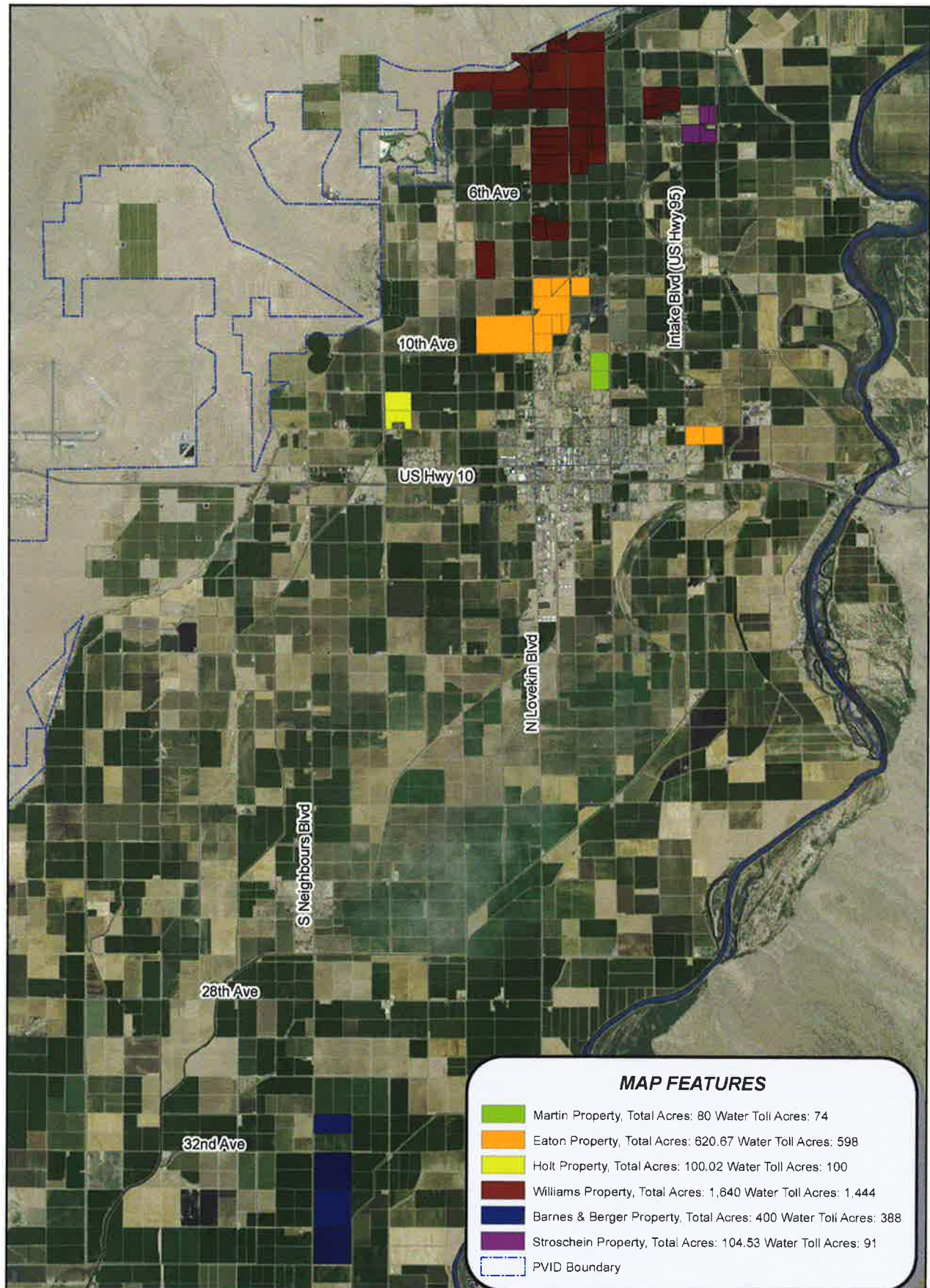


Exhibit "B"

Status of IRWD's Property Leases and Contract Farming Arrangements in PVID

Property	Gross Acres	Water Toll Acres	Lease or Contract Farming	Lease Status
Eaton	621	598	Lease rate of \$275/acre	Lease Date: 8/24/16 to 08/31/21
Martin	80	74	Contract Farming	Month to Month
Holt	100	100	Contract Farming	Month to Month
Williams	1,641	1,444	Current lease rate of \$250/acre;	Current Lease Date: 9/1/17 to 10/31/18; Considering new 3-year lease proposals
Barnes & Berger	553	538	Lease rate of \$250/acre	Lease Date: 3/30/17 renewable in 4 one year terms until 12/31/21
Strochein	105	91	Lease Rates: Year 1: \$120/acre; Year 2: \$250/acre Year 3: \$260/acre Year 4: \$270/acre Year 5: \$280/acre	Lease Date: 1/8/18 to 12/31/22
Total	3,099	2,845		

August 16, 2018

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul A. Cook



SUPPLY RELIABILITY PROGRAMS COMMITTEE

ADDITION OF THE KERN FAN GROUNDWATER STORAGE PROJECT TO THE FISCAL YEAR 2018-19 CAPITAL BUDGET

SUMMARY:

In August 2017, IRWD and Rosedale-Rio Bravo Water Storage District jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Groundwater Storage Project. The application sought Proposition 1 funds that are available from the CWC through the Water Storage Investment Program (WSIP). At its July 2018 meeting, the CWC awarded maximum conditional eligible funding to eight WSIP projects, including \$67.5 million for the Kern Fan Project. At the meeting, staff will present a summary of the WSIP conditional funding awards and the cost-share implications associated with the Kern Fan Project. Staff will also review the proposed next steps necessary to secure the CWC funding, which is conditioned on completion of certain project tasks by the year 2022.

In order to start work on the project and to complete CWC required tasks while conforming with CWC financial reporting and tracking requirements, staff recommends that the Board authorize the addition of the Kern Fan Groundwater Storage Project, Project 10854, in the amount of \$185,976,000, to the Fiscal Year (FY) 2018-19 Capital Budget. The CWC will reimburse IRWD at least \$67.5 million through a WSIP grant funding agreement, and Rosedale will provide up to \$58.3 million through a separate agreement with IRWD. IRWD's expected cost share would be up to \$60 million.

BACKGROUND:

The CWC is administering 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 to be distributed by the CWC through the WSIP. IRWD and Rosedale jointly submitted a WSIP grant application for the Kern Fan Project on August 14, 2017.

Kern Fan Groundwater Storage 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 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. Project operations would be coordinated with the SWP through an agreement with the California Department of Water Resources.

Phased Construction:

The Kern Fan Project would be constructed in two phases. The first phase would be the development of the proposed third project site as contemplated in the Stockdale Integrated Banking Project Environmental Impact Report (EIR). IRWD and Rosedale would jointly 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.

The second phase of the Kern Fan Project would involve IRWD and Rosedale acquiring an additional 640 acres of land and the expansion of the 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 recovery capacity. A preliminary project location map is provided as Exhibit "A". The recharge and recovery capacities would be shared equally by IRWD and Rosedale. Storage capacity in the project would be allocated to IRWD, Rosedale and the WSIP as shown in the following table:

Kern Fan Project Storage Allocations

Project Participant	Storage (AF)
Irvine Ranch Water District	37,500
Rosedale-Rio Bravo Water Storage District	37,500
California Water Commission WSIP	25,000
TOTAL:	100,000

Cost Effectiveness of the Kern Fan Project:

Engineers at Dee Jaspar and Associates (DJA) prepared a planning level cost estimate for the Kern Fan Project at approximately \$171.3 million. Approximately half of the costs are attributable to the construction of the dedicated canal and lift stations to convey water to the project. In comparison, the economic value of the benefits of the project are estimated at \$178 million. Approximately \$112 million of these benefits would accrue to IRWD and Rosedale as water supply and emergency response benefits with about \$66 million accruing to the WSIP as fish and wildlife related public benefits. The benefits to IRWD and Rosedale are considered non-public benefits. The CWC has determined the public and non-public benefits exceed the costs of the Project and has deemed it to be cost effective.

Water Supply Benefits:

The total water supply benefits to IRWD from participating in the WSIP and other programs will be about 2,700 AFY over 50 years of project operations. IRWD's total costs would result in a net cost of Extraordinary Supply delivered to IRWD's service area that would be substantially

less than penalty surcharges assessed by Metropolitan Water District of Southern California during declared Water Supply Allocation periods.

Need for Project:

IRWD's share of the Kern Fan Project would be used in conjunction with the Strand and Stockdale Integrated Banking Projects to meet IRWD's contingency storage needs at build-out, which is currently expected to be up to 105,000 AF. This need is based on the goal of being able to backfill the loss of imported supplies for three years in a row. IRWD's Strand and Stockdale Integrated Banking Projects will fulfill about 85,000 AF of these storage needs (after consideration of storage allocated to IRWD's unbalanced exchange partners). The Kern Fan Project would provide the remaining 20,000 AF of contingency storage needed by IRWD while providing an additional 17,500 AF of storage that could be used to facilitate mutually beneficial partnerships that do not financially affect IRWD's customers and keep IRWD financially whole.

WSIP Conditional Funding Awards:

Following a rigorous review process, eight projects were deemed eligible by the CWC for WSIP funding. The total funding requested by the eight projects was \$2.72 billion, which resulted in a shortfall of \$146 million in available funding. The CWC ranked the eligible projects based on the level of public benefits to be provided and grouped them into three predetermined tiers based on project scores. No projects were ranked in Tier 1. Five projects were ranked in Tier 2, all of which were awarded full conditional funding. Three projects, including the Kern Fan Project, were ranked in Tier 3. The CWC proportionately allocated the funding shortfall of \$146 million to the Tier 3 projects based upon the applicant scores and public benefits. The Kern Fan Project was conditionally awarded \$67.5 million by the CWC. A summary of the CWC conditional funding awards for all of the projects is provided as Exhibit "B". In order to receive final funding awards from the CWC, all project applicants must meet certain requirements by January 2022.

The estimated project cost, grant funding and cost shares for the Kern Fan Project based on the original grant application, and based on the conditional funding award is provided in Exhibit "C". With an award of \$67.5 million, and based on DJA's planning level cost estimate, IRWD and Rosedale would then each provide \$52 million in funding for the project.

Future Availability of Additional Funding:

If other WSIP projects fail to progress or are unable to complete CWC requirements by January 2022, the project applicants could lose their conditional funding award, unless the CWC approves a time extension. At its September 2018 meeting, the CWC will consider how to reallocate any funding that may become available if a project does not progress as expected. Staff anticipates that the CWC would first consider allocating such unused funding to the Tier 3 projects to address any funding shortfalls. Accordingly, it is possible that after January 2022, the Kern Fan Project could receive additional grant funding up to its maximum eligible amount of \$87.5 million.

Project Schedule:

The two phases of Kern Fan Project will require approximately six years to complete, beginning in September 2018. An overview of the project schedule is provided as Exhibit “D”. The first phase is expected to be completed in 2023, and the second phase would be completed and operational in 2025. The major components of the schedule include:

- Land Acquisition;
- Executing Project Agreements;
- Environmental Documentation and Permitting;
- Preliminary Design;
- Final Design;
- Canal Right-of-Way Acquisition; and
- Bid Phase and Construction.

Tasks to Secure CWC Funding:

The proposed tasks in the project that will ensure that all CWC requirements are met by January 2022 are described in the following:

1. *Form of a Joint Powers Authority:*

In order to cost-share the design, construction, and operation the Kern Fan Project, IRWD and Rosedale will form a Joint Powers Authority (JPA). This JPA formation is the subject of another item on the agenda of this Committee meeting.

2. *Determine Optimal Location of Project Facilities:*

IRWD and Rosedale will jointly determine preliminary alignments for the canal and location of the new turnout from the California Aqueduct. A hydraulic study will be performed to verify that the turn-out location will not impact operations of the Cross-Valley Canal. IRWD and Rosedale will schedule state-of-the-art geophysical surveys to help identify lands within its service area that have high infiltration capabilities. These surveys will help inform the JPA’s purchase of land for the project.

3. *Complete the Feasibility Study:*

Once the preferred alignment and facility locations have been determined, work will begin on a preliminary design report and updated project costs that will satisfy the CWC’s feasibility study requirements.

4. *Develop Agreements with State Agencies:*

The JPA will need to execute agreements with the California Department of Water Resources and the California Department of Fish and Wildlife to coordinate operations of the Kern Fan Project and for the JPA to receive \$67.5 million in grant funding to provide the corresponding public benefits.

5. Procure Environmental Documentation and Permitting:

IRWD and Rosedale will prepare and issue a Request for Proposals for consultants to assist the JPA in preparing the necessary environmental documentation and to secure permits for the project by January 2022.

Budget Request:

In order to start work on the project and to move forward with the necessary steps to secure the \$67.5 million in funding from the CWC, while tracking project costs in conformance with CWC requirements, staff recommends that Project 10854 be added to the FY 2018-19 Capital Budget in the amount of \$185,976,000 million. The total project cost proposed in the capital budget has been revised to provide for unlisted items that were not included in DJA's planning level cost estimate for the project, as well as to provide funds for IRWD staff time and legal costs. It is estimated that IRWD's share of the total estimated project cost will be \$60 million after receiving \$67.5 million in reimbursements from the CWC and \$58.3 million from Rosedale.

FISCAL IMPACTS:

Staff requests the addition of Project 10854, "Kern Fan Groundwater Storage Project," in the amount of \$185,976,215, to the FY 2018-19 Capital Budget as shown in the following table.

Project No.	Current Budget	Addition <Reduction>	Total Budget
10854	\$ -0-	\$185,976,000	\$185,976,000

The CWC will provide \$67.5 million in WSIP funding through a grant agreement, Rosedale will reimburse IRWD for \$58.3 million through the JPA, and \$60 million will be funded by IRWD.

ENVIRONMENTAL COMPLIANCE:

A Final 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. When a third Stockdale project site is identified, subsequent project-level environmental review will be necessary prior to implementation of phase one of the Kern Fan Project. It is expected that a new EIR will be required for the construction and operation of the second phase facilities contemplated in the proposed Kern Fan Project.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF THE KERN FAN GROUNDWATER STORAGE PROJECT, PROJECT 10854, IN THE AMOUNT OF \$185,976,000, TO THE FISCAL YEAR 2018-19 CAPITAL BUDGET.

LIST OF EXHIBITS:

- Exhibit "A" – Kern Fan Project Location Map
- Exhibit "B" – Summary of California Water Commission Conditional Funding Awards
- Exhibit "C" – Kern Fan Project Funding and Cost Shares
- Exhibit "D" – Kern Fan Project Schedule

Exhibit "A"

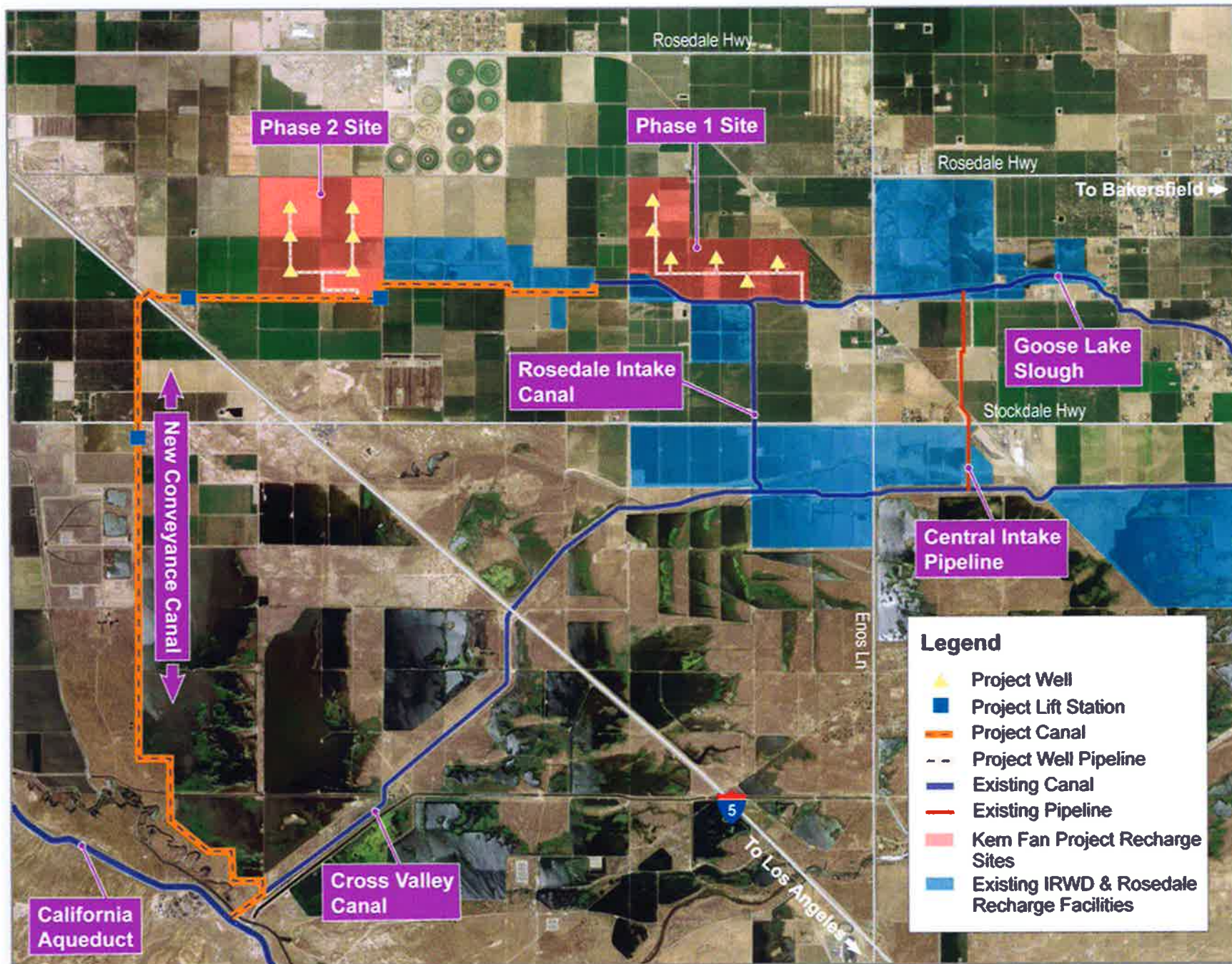


EXHIBIT “B”

Summary of California Water Commission Conditional Funding Awards

	Project Funding Request \$ in Millions	Conditional Funding Award \$ in Millions
Pacheco Reservoir Project	\$484.5	\$484.6
South County Ag Program	\$280.5	\$280.5
Los Vaqueros Reservoir Project	\$459.0	\$459.0
Temperance Flat Reservoir Project	\$171.3	\$171.3
Chino Basin Conjunctive Use Program	\$206.9	\$206.9
Sites Project	\$916.6	\$816.4
Kern Fan Groundwater Storage Project	\$85.6	\$67.5
Willow Springs Water Bank	\$123.3	\$95.4

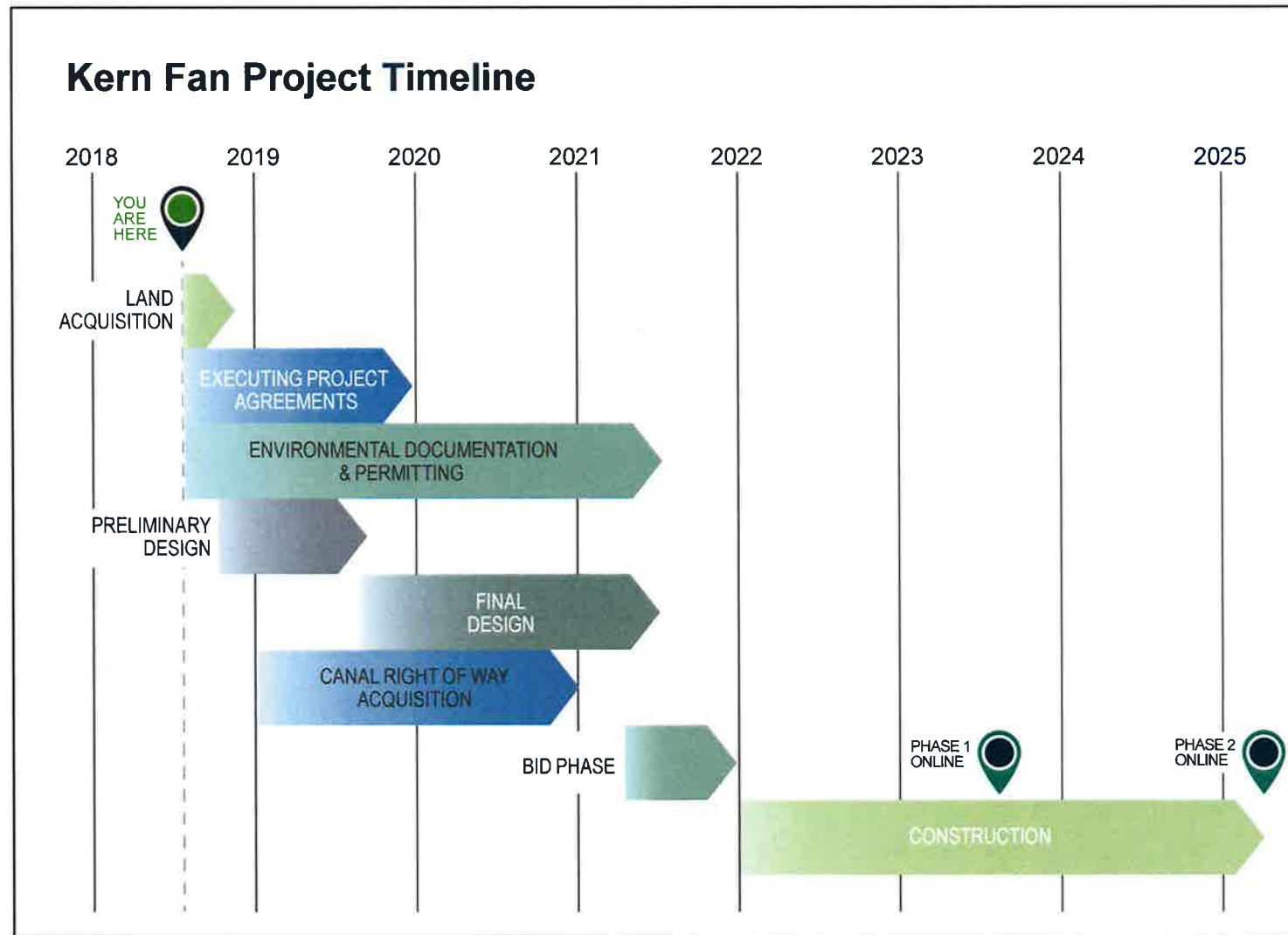
EXHIBIT “C”

Kern Fan Project Funding and Cost Shares

	Estimated Project Cost*	Maximum Conditional Funding Eligibility	Grant Funding Requested or Awarded	IRWD Cost Share	Rosedale Cost Share
Original Application	\$171.3 million	\$85.7 million	\$85.7 million	\$42.8 million	\$42.8 million
Conditional Funding Award	\$171.3 million	\$85.7 million	\$65.7 million	\$51.9 million	\$51.9 million

*Estimated preliminary project cost. Will be revised based on completed feasibility study. Does not include staff time.

Exhibit "D"



August 16, 2018

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul A. Cook 

SUPPLY RELIABILITY PROGRAMS COMMITTEE

JOINT POWERS AUTHORITY AGREEMENT FOR THE KERN FAN GROUNDWATER STORAGE PROJECT

SUMMARY:

In August 2017, IRWD and Rosedale-Rio Bravo Water Storage District jointly submitted to the California Water Commission (CWC) a grant application for the proposed Kern Fan Groundwater Storage Project. In July 2018, the CWC conditionally awarded \$67.5 million for the Kern Fan Project. In order to facilitate the design, construct and operation of the project, IRWD and Rosedale intend to form a Joint Powers Authority (JPA). Staff has worked with legal counsel to prepare an agreement to form the Kern Fan Project JPA. Staff recommends that the Committee provide input on the agreement and authorize staff to work with Rosedale and special legal counsel to finalize the agreement for consideration by the full IRWD Board of Directors.

BACKGROUND:

Proposition 1, also known as the Water Quality, Supply and Infrastructure Improvement Act of 2014, dedicated \$2.7 billion for investments in new water storage projects through the Water Storage Investment Program (WSIP). In August 2017, IRWD and Rosedale jointly submitted an application for the proposed Kern Fan Project with a request for \$86 million in WSIP grant funding. This amount equals 50% of the total estimated capital cost of the project. In July 2018, the CWC conditionally awarded \$67.5 million in grant funding to the Kern Fan Project. Additional WSIP grant funding may become available in 2022 that would increase funding for the project up to the full requested \$86 million.

Terms for the Joint Powers Authority:

In order to secure the conditional funding from the CWC, certain project planning and feasibility related tasks need to be completed by January 2022. In anticipation of fulfilling these requirements, staff, with input from the Committee, worked with Rosedale to prepare initial terms for the Kern Fan Project JPA agreement. Terms for the agreement were reviewed with the Rosedale Board of Directors and with the Committee in December 2017. In May 2017, staff returned to the Committee with a draft agreement based on these terms. This approach was adopted to allow for the appropriate time to form the JPA.

The JPA would carry out functions necessary to implement the Kern Fan Project including land acquisition, environmental review, permitting, planning, design, construction and operations. It appears that IRWD and Rosedale would be able to execute a JPA Agreement in a shorter time frame, and that the prior draft agreement reviewed with the Committee in May is no longer necessary. IRWD special legal counsel and staff have prepared a draft Kern Fan Project JPA Agreement consistent with the draft terms previously reviewed with the Committee. The draft JPA agreement is provided as Exhibit "A".

At the Committee meeting, staff will present an overview of the draft Kern Fan JPA Agreement. 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 full IRWD Board of Directors.

FISCAL IMPACTS:

In a separate item, staff will request the addition of a new capital project to the Fiscal Year 2018-19 Capital Budget for the Kern Fan Project. IRWD's share of the cost of the project is expected to be \$60 million after contributions from the CWC and Rosedale.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

That the Committee provide input on the Joint Powers Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District Creating the Kern Fan Joint Powers Authority to Develop and Administer a Kern Fan Groundwater Storage Project and authorize staff and special legal counsel to work with Rosedale-Rio Bravo Water Storage District and its legal counsel to finalize the agreement for consideration by IRWD's full Board of Directors.

LIST OF EXHIBITS:

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

EXHIBIT "A"

**DRAFT
JOINT POWERS AGREEMENT
BETWEEN
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
AND
IRVINE RANCH WATER DISTRICT
CREATING THE KERN FAN JOINT POWERS AUTHORITY
TO DEVELOP AND ADMINISTER
A KERN FAN GROUNDWATER STORAGE PROJECT**

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DRAFT
JOINT POWERS AGREEMENT
BETWEEN
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
AND
IRVINE RANCH WATER DISTRICT
CREATING THE KERN FAN JOINT POWERS AUTHORITY
TO DEVELOP AND ADMINISTER
A KERN FAN GROUNDWATER STORAGE PROJECT

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

RECITALS

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

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

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

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

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

E. In 2004, IRWD acquired 611 acres of real property in Kern County, California, sometimes referred to as the "Strand Ranch property," lying adjacent to the southerly boundary of RRB. On January 13, 2009, RRB and IRWD entered into an "Agreement For A Water Banking and Exchange Program," as amended by Amendment No. 1, entered into on or about February 27, 2015 (collectively, "Strand Ranch Agreement") providing for the development and operation of a groundwater banking program on IRWD's Strand Ranch property, and the operation and integration of such program within the RRB Conjunctive Use Program ("Strand Ranch Integrated Banking Project").

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

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

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

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

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

J. In July 2018, the Commission conditionally approved \$67,537,315 in conditional WSIP grant funding for the Kern Fan Project.

K. The parties are forming the JPA to achieve the above-described objectives of the Kern Fan Project, and this Agreement helps to define a stable and finite project description that will facilitate completion of California Environmental Quality Act ("CEQA") review pursuant to Cal. Pub. Res. Code section 21000 et seq.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

I. Effective Date, Term and CEQA Compliance

- A. ***Effective Date and Term.*** This Agreement shall be effective upon the execution by the Parties ("Effective Date") but shall be subject to article I(B). This Agreement shall remain effective for thirty (30) years from the Effective Date or until requirements to operate the Kern Fan Project as part of the Water Supply Investment Program expire, whichever is longer or until it is terminated pursuant to article XIX. Prior to the termination of the JPA Agreement, the Parties shall work together to mutually extend this Agreement; provided that if this Agreement is not extended, the Parties shall agree to negotiate in good faith to integrate the Kern Fan Project facilities into one or more other existing water storage and recovery programs or projects; provided further that if the Parties fail to reach agreement on such integration, then all Kern Fan Project facilities, capacities and real or personal property shall be divided equally between the Parties, with each Party holding a right of first offer to purchase the Kern Fan Project facilities, capacities and real or personal property held by the other Party.
- B. ***CEQA Compliance.*** Formation of this Agreement helps to define a stable and finite project description, which will facilitate completion of CEQA review for the proposed Kern Fan Project. The Parties shall each complete CEQA review for the proposed Kern Fan Project prior to approving, constructing or operating the proposed project. Any real property acquired for the proposed project prior to completion of CEQA review shall be conditioned on completing CEQA review before changing the existing use of the real property. If the performance of CEQA review identifies any significant adverse environmental effects, the Parties each retain their full discretion to terminate this Agreement or to revise this Agreement as necessary to implement any feasible mitigation measures or alternatives that

would avoid or reduce such significant effects as provided by CEQA; provided that each Party's discretion to terminate or revise this Agreement under this Article I(B) shall be limited to responding to any significant adverse environmental effects.

II. **Authority for Joint Powers Agreement**

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

III. **Jurisdictional Boundaries**

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

IV. **Purposes**

- A. ***Creation of Separate Entity.*** The purpose of this Agreement is to create a joint powers authority called the "Kern Fan Project Joint Powers Authority" to plan, design, construct, operate and otherwise implement the Kern Fan Project. The JPA shall be a separate legal entity from its member agencies. The purpose of the JPA is to implement the Kern Fan Project, as described in the Recitals, above, which are incorporated herein by this reference.
- B. ***Project Benefits.*** The benefits of the Kern Fan Project include, but are not limited to, enhanced water supply reliability, reduced dependence on imported water from northern California, endangered species preservation through reduced dependence on such imported water, and the establishment of temporary wetlands through recharge activity.
- C. ***Allocation of Capacities Provided by Kern Fan Project.*** The primary objective of the Kern Fan Project is to provide 100,000 acre-feet per year ("AFY") of groundwater recharge capacity, 100,000 acre-feet ("AF") of storage capacity for the Parties to capture and recover unallocated State Water Project ("SWP") Article 21 water, with up to 50,000 AF per year of recovery capacity and up to 500 cubic feet per second of additional conveyance capacity in a Kern Fan Project aqueduct for participation in the WSIP.

The water storage capacity developed under the Kern Fan Project shall be allocated as follows:

25% to the WSIP Public or Ecosystem Account
37.5% to RRB
37.5% to IRWD

The water recharge, recovery, and additional conveyance capacity developed under the Kern Fan Project shall be allocated as follows:

50% to RRB
50% to IRWD

RRB and IRWD shall each have priority access to their respective shares of capacities in the Kern Fan Project to recharge, store and recover other water supplies, including SWP water, for the independent benefit of each Party. The Parties would have second priority use of each other's unused recharge and recovery capacities. RRB and IRWD may use such capacities in coordination with other independent operating programs and projects integrated with RRB's Conjunctive Use Program.

- D. ***Project Water.*** For purposes of participating in the WSIP, the Kern Fan Project will be operated by recharging and storing unallocated SWP Article 21 water available to the Parties ("Project Water"). Unallocated Article 21 water deliveries would be made on behalf of IRWD as a landowner in Dudley Ridge Water District ("DRWD") and on behalf of RRB as a sub-unit of the Kern County Water Agency ("KCWA") or any other SWP Contractor acting on behalf of either or both Parties. Project Water delivered to the Kern Fan Project will be proportionately applied to each respective storage account as defined under "Allocation of Capacities Provided by Kern Fan Project."
- E. ***Ownership.*** The JPA will 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 or use property outside of the Kern Fan Project area and designated existing and/or new project areas/recharge for purpose of meeting the Kern Fan Project objectives.
- F. ***Hydrogeologic Evaluations.*** RRB and IRWD will equally fund hydrogeologic studies needed to determine the recharge, storage and recovery capacities and limitations of the Kern Fan Project designated properties.
- G. ***CEQA Compliance Cost and Roles.*** RRB and IRWD will equally fund the preparation of an Environmental Impact Report ("EIR") for the construction and operation of the Kern Fan Project, including all technical studies necessary to support the EIR. RRB will play the role of lead agency, while IRWD will play the role of responsible agency
- H. ***Other Regulatory Permitting Costs.*** The JPA will fund all regulatory and permitting fees and costs associated with construction of the Kern Fan Project.
- I. ***Project Costs.*** Any and all WSIP grant funds awarded for the Kern Fan Project shall be applied to the planning, design and construction costs of the Kern Fan Project, and the JPA will fund all remaining associated costs. RRB and IRWD shall each pay half of Kern Fan Project planning, design and construction costs that are not paid by awarded WSIP grant funds.
- J. ***Project Operation.*** RRB shall operate, maintain and repair the Kern Fan Project facilities, subject to approval by the JPA's Board of Directors. RRB shall maintain

WSIP records accounting for each Party's water recharge, storage and recovery activities pursuant to all applicable WSIP regulations.

K. ***Operation Costs.*** RRB and IRWD shall pay operations, maintenance, energy and replacement ("OME&R") costs as follows:

1. Variable OME&R costs include, but are not limited to, energy costs and shall be paid pro rata based on actual use of Kern Fan Project facilities by RRB or IRWD.
2. Fixed OME&R costs include, but are not limited to, any debt service on Kern Fan Project land or facilities and shall be paid pro rata based on actual use where possible or divided equally where not.
3. 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 funded by the State.

L. ***Kern River Regulated High Flows.*** At such times when Project Water and other water are available simultaneously, Project Water will be recharged until the public benefit and ecosystem account is at full capacity. Once that objective is met, RRB and IRWD may each use their respective capacities for all available water, including Project Water.

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

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

V. **Powers**

The JPA is hereby authorized to perform all powers and functions set out in this Agreement, including all powers granted to California water storage districts pursuant to the California Water Storage District Law (Division 14, commencing with § 39000 of the California

Water Code) and California water districts pursuant to the California Water District Law (Division 13, commencing with § 34000 of the California Water Code), as amended, and any applicable regulations.

The JPA shall administer this Agreement. Pursuant to Government Code section 6509, the JPA shall exercise its powers in administering this Agreement subject to the restrictions applicable to IRWD. The JPA is hereby further authorized to:

- A. Negotiate with, apply for, contract for, and receive monies from federal, state, county, city, and special district governments, and other public and private entities and agencies to carry out the purposes of this Agreement, and shall disburse and account for funds so received.
- B. Allocate all funds, including discretionary and special purpose funds, received by the JPA as equitably as practicable, based upon the applicable terms of the funding application, fund source requirements, Agency policy, or vote of the Board of Directors, as described in Section 6 of this Agreement.
- C. Monitor, evaluate, and take corrective action concerning performance specified in any agreement, and contracts or agreements the JPA has entered into.
- D. Establish performance objectives for subcontractors.
- E. Evaluate the effectiveness of programs undertaken by the JPA.
- F. Maintain financial and statistical records to satisfy federal, state, and other laws and regulations, and provide necessary information for effective program management.
- G. Adopt, promulgate, and enforce such bylaws, rules, and regulations as the Board of Directors deems necessary for operation and management of the JPA and implementation of the purposes of this Agreement.
- H. Negotiate and enter into agreements and contracts.
- I. Employ agents and employees.
- J. Acquire, lease, rent, construct, manage, maintain, hold, and dispose of real and personal property with title to such property being held by the JPA.
- K. Commission the design, permitting, construction, operation, and maintenance of any facilities required for the Kern Fan Project.
- L. Incur debts, liabilities, and other obligations.
- M. Bring suit and be sued in its own name.

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

VI. **Governance**

- A. **Board of Directors.** The Board of Directors of the JPA shall consist of four (4) members constituting two (2) members from each Party's legislative body. The president of each Party's legislative body shall be a member of the JPA's Board of Directors. The president of each Party's legislative body shall assign first and second alternates to serve on the JPA's Board of Directors to provide continuity in the event one or both of a Party's representatives cannot participate in one or more meetings of the JPA's Board of Directors. Such alternates must be a member of either RRB's or IRWD's legislative body.
- B. **Meetings.** All meetings of the Board of Directors shall be subject to the provisions of the Ralph M. Brown Act (Chapter 3.5 of Division 7, commencing with § 6250 of the California Government Code) and shall be held at a regularly scheduled time. At its first meeting, the Board of Directors shall, by resolution, determine the schedule for its regular meetings.
- C. **Quorum.** A quorum of any meeting of the Board of Directors shall require the attendance of at least one member of the Board of Directors from each of the Parties. In the absence of a quorum, any meeting of the Board of Directors may be adjourned by a vote of a simple majority of the members of the Board of Directors present. In the absence of any members of the Board of Directors, the Clerk of the Board shall adjourn any meeting of the Board of Directors. Vacant positions on the Board of Directors shall not be considered for purposes of determining quorum.
- D. **Voting and Affirmative Decisions.** Voting by the Board of Directors shall be conducted on the basis of one-vote-per-Party. The vote representing each Party may be cast by either of that Party's two members of the JPA's Board of Directors or their alternates. All decisions of the Board of Directors shall require an affirmative and unanimous vote; provided that if the JPA Board of Directors is deadlocked on a proposed action, then RRB and IRWD shall conduct a joint meeting of their respective boards of directors to resolve the deadlock; and provided further that if such joint meeting fails to resolve the deadlock, then the Parties shall participate in mediation to resolve the deadline; and provided finally that if such mediation fails to resolve the deadlock, either Party may initiate litigation to resolve the deadlock subject to any defenses raised in response to such litigation.
- E. **Bylaws.** The Board of Directors shall adopt bylaws detailing how the Board of Directors' business is to be conducted. Those bylaws shall not conflict with the provisions of this Agreement or any law.

VII. **General Manager**

The Board of Directors shall assign either the General Manager of RRB, the General Manager of IRWD or any other employee of RRB or IRWD to serve as the General Manager of the JPA. The General Manager shall not be employed by the same Party as the Treasurer, so that if the General Manager were employed by RRB, then the Treasurer would have to be employed by IRWD or vice versa. Such assignments shall not be construed to be permanent, and the General Manager shall serve at the pleasure of the JPA's

Board of Directors and may be appointed or removed at a time of choosing of the Board of Directors.

VIII. Staff

The staff of the Parties shall serve as the staff of the JPA. The primary responsibility for providing adequate staff support for the operation of the Kern Fan Project shall belong to RRB. The primary responsibilities for the financial accounting of the JPA shall belong to IRWD. The JPA Board shall negotiate rates of reimbursement and payment schedules with the Parties for staff time and incorporate such requirements into the bylaws of the JPA.

IX. Treasurer

The Board of Directors shall assign either the chief financial officer of IRWD, the chief financial officer of RRB, or any other employee of IRWD or RRB to serve as the Treasurer of the JPA. The Treasurer shall not be employed by the same party that employs the General Manager, so that if the Treasurer were employed by IRWD, then the General Manager would have to be employed by RRB or vice versa. IRWD shall be the depository and have custody of all monies received by the JPA and shall maintain all monies under the oversight and direction of the Treasurer. Furthermore, the Treasurer shall:

- A. Receive and receipt all funds of the JPA and place them in the separate accounts maintained for the JPA.
- B. Be responsible, upon his or her official bond, for safekeeping and disbursement of all money of the JPA so held.
- C. Pay, when due, out of the JPA's funds so held, all sums payable on outstanding bonds and coupons of the JPA.
- D. Pay, when due, out of the JPA's funds so held, all sums due from the JPA only upon warrants of the public officer performing the functions of auditor or controller as identified in section X (Auditor) of this Agreement.
- E. Verify and report to the JPA and the Parties, in writing, on the first day of July, October, January, and April of each fiscal year the amount of money held for the JPA, the amount of receipts since the last report, and the amount paid out since the last report.

X. Auditor

The Auditor-Controller-County Clerk for the County of Kern shall serve as the Auditor of the JPA. The Auditor shall draw warrants to pay demands against the JPA when the demands have been approved by the JPA. The Auditor-Controller shall make or contract with a certified public accountant or public accountant to conduct an annual audit of the accounts and records of the JPA. Such audits shall be consistent with the provisions of California Government Code section 6505.

XI. **Official Bonds**

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

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

- A. ***Funds and Accounts.*** The JPA shall establish and maintain such funds and accounts as may be required by the California Government Code, other applicable laws, the Governmental Accounting Standards Board, good accounting practice, this Agreement, and any ordinance, resolution, or policy of the Board of Directors.
- B. ***Funding.*** The JPA's accounts shall be funded with the WSIP grant funding awarded by the Commission for the Kern Fan Project and with such additional funding that each Party contributes to enable the JPA to successfully implement the Kern Fan Project pursuant to this Agreement; subject to the Parties' respective financial obligations under article IV of this Agreement.
- C. ***Fiscal Year.*** For the purposes of this Agreement, the JPA shall have such fiscal year from July 1 to and including the following June 30.
- D. ***Annual Budget.*** An annual budget shall be prepared or caused to be prepared by the General Manager and presented to the Board of Directors for its adoption or amendment, pursuant to the power set forth at Article V, above, not later than May 1 of each fiscal year. The budget shall establish rates, capital expenditures, and charges to be paid for operation and maintenance activities and such other matters as shall be determined by the Board of Directors.

XIII. **Records and Reports; Audit**

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

XIV. **Debts, Liabilities, and Obligations**

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

XV. Privileges and Immunities

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

XVI. Indemnification

- 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 attorneys' fees and costs, that IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner relating to RRB's performance under this Agreement, 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, agents and 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 attorneys' fees and costs, that RRB, its Board of Directors, officers, representatives, consultants, contractors, agents, and/or employees may sustain or incur in any manner relating to IRWD's performance under this Agreement, 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 agents and employees.

XVII. Insurance

During the term of this Agreement, the JPA shall maintain general liability insurance coverage, as well as errors and omissions coverage, in a sum not less than five million dollars (\$5,000,000) per occurrence. The insurance shall also contain a written endorsement to such policy or policies which names each of the Parties as an additional insured.

XVIII. Modification

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

XIX. Termination; Disposition of Assets

- A. ***Termination.*** Termination except as provided for in article I shall require written notice evidencing either Party's intent to terminate. Such written notice shall be provided to the other Party not less than six (18) months prior to the effective date therein specified. The JPA shall continue to exercise the powers described herein until the Parties terminate this Agreement.
1. Upon termination, the JPA shall continue to exercise only such powers as to enable it to pay and discharge all costs, expenses, and charges legally incurred hereunder, and to dispose of, divide, and distribute any property required as a result of the JPA's operations.
 2. Upon termination, the JPA shall continue to be responsible for the payment of any expenses, liabilities, or obligations between the Parties to this Agreement incurred prior to withdrawal. (Solely by way of example, this provision would require payment for rights and obligations incurred pursuant to Government Code section 6504, or payment where the withdrawal of any Party to this Agreement shall cause a disproportionate liability to the parties for benefits of current and retired JPA employees.) This requirement shall survive any withdrawal or termination of this Agreement.
- B. ***Disposition of Assets on Termination.*** Upon termination of this Agreement, all costs, expenses, and charges legally incurred by the JPA shall be paid and discharged by the JPA. After the disposition of Kern Fan Project facilities, capacities and real or personal property under article I, the JPA shall sell any remaining property as may be necessary and shall distribute to the federal or state government such property and funds as are lawfully required; the balance of such property and any surplus money on hand shall be distributed or returned in proportion to contributions made by the affected Parties except to the extent otherwise agreed upon by the affected Parties.

XX. Notice

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

Notice to IRWD shall be made to:

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, California 92619-7000

Attn: General Manager
Telephone: (940) 453-5300
Facsimile: (949) 453-1228
Electronic Mail: cook@irwd.com

Notice to RRB shall be made to:

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

XXI. Severability

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

XXII. 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.

XXIII. Choice of Law; Venue

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

XXIV. Assignment; Delegation

Except as otherwise provided in this Agreement, the JPA and the Parties shall not assign any rights or delegate any duties arising from this Agreement without the written consent of all other member counties. Any attempt at such an assignment or delegation shall be null and void.

XXV. Hierarchy of Documents

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

XXVI. Entire Agreement

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

XXVII. 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.

XXVIII. Counterparts and Effective Date

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

XXIX. Headings

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

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

Irvine Ranch Water District

Rosedale-Rio Bravo Water Storage District

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Date: _____

Approved as to Form: _____

Title _____

Date: _____

Approved as to Form: _____

August 16, 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 the Committee meeting. The information is presented in a format that can be updated as necessary to reflect changes in IRWD's projects, programs, and operations. At the Committee meeting, staff will review this information and provide an update on ongoing efforts to secure additional water for recharge at IRWD's water banking projects 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" to 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; and
- Mohave Water Agency.

2018 Recovery Operations:

In May 2018, Rosedale-Rio Bravo Water Storage District (Rosedale) recovered and delivered 1,667 acre feet (AF) to Buena Vista Water Storage District (BVWSD), as requested by BVWSD. BVWSD has a remaining balance of 4,532 AF in storage.

Project Maps:

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

Program Agreement Diagrams:

Schematic diagrams have been prepared that depict the IRWD water banking and exchange programs with Rosedale, BVWSD, DRWD, and Metropolitan Water District of Southern California. 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

Supply Reliability Programs Committee: Water Banking Project Facilities, Capacities,
Operations, and Programs Overview

August 16, 2018

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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
August 16, 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 ²	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	35.0	-	-
Stockdale West	Yes	3	-	26,000	27,100	-	11,250	-	15.0	15.0	-	-
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-	10.0	-
IRWD Acquired Storage Account ³	No	-	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells ³	No	-	3	-	-	-	-	-	15.0	-	-	-
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
TOTALS		10	5	126,000	44,600	19,000	28,750	7,500	70.0	50.0	10.0	0.0
Partner Capacities ⁴				36,000	22,300	9,500	12,000	0	35.5	25.0	-	-
IRWD Capacities				90,000	22,300	9,500	16,750	7,500	34.5	25.0	-	-
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)									12,420	9,000	-	-
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)									4,330	6,733	-	-
TOTALS (AF)									16,750	15,733	-	-
Number of months needed to recover IRWD's total AF after partners' recovery (Assumes IRWD has use of total recovery capacity after partners' recovery)									8.1	9.7	-	-
Strand Ranch 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	

¹Based 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.

²Strand Ranch wells currently idle.

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

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

⁵Kern 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
 August 16, 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 (35%) ³	310	-	-	-	310	620
High Flow Kern River	-	-	(1,667)	-	-	(1,667)
TOTAL ESTIMATED 2018 TRANSACTIONS	310	-	(1,667)	-	310	(1,047)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,656	-	-	-	4,656
Total MWD System	8,873	-	-	-	1,174	10,047
Total Kern County	3,567	17,704	5,202	289	2,698	29,460
TOTAL ESTIMATED STORED WATER TO DATE	12,440	22,360	5,202	289	3,872	44,163

NOTES:

-MWD = Metropolitan Water District of Southern California.

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

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

³ DRWD water supply will be returned by MWD or IRWD's Strand Ranch to IRWD's Jackson Ranch. IRWD's 2013-2016 SWP allocation amounts are stored in the MWD system. IRWD's 2017 SWP allocation water is stored in Kern County; assumes 2018 SWP water will be stored in Kern County.

⁴ Beginning balance of water stored in MWD system includes 4,494 AF 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
 August 16, 2018

TRANSACTIONS	WATER BANKING ENTITY					TOTAL BY WATER TYPE AND STORAGE LOCATION
	IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER DISTRICT (DRWD) ³	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
BEGINNING WATER IN STORAGE 2017 (AF)						
Total Kern Water Bank	-	4,165	-	-	-	4,165
Total MWD System ⁴	7,917	-	-	-	1,174	9,091
Total Kern County	389	9,675	-	-	-	10,064
TOTAL STORED WATER (1/1/2017)	8,306	13,840	-	-	1,174	23,320
(RECOVERY) AND RECHARGE IN 2017 (AF)						
Kern Water Bank Deliveries	-	68	-	-	-	68
2017 SWP Allocation (85%) ³	669	-	-	-	708	1,377
2017 SWP Article 21 ⁵	1,479	-	-	-	1,566	3,044
SWP Table A (CCWA 2017 Exch.)	246	-	-	246	-	491
High Flow Kern River	-	5,889	6,199	-	-	12,088
MWD Water to Jackson Ranch ⁶	-	-	-	-	(143)	(143)
TOTAL 2017 TRANSACTIONS	2,393	5,957	6,199	246	2,131	16,925
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	2,782	15,564	6,199	246	2,131	26,921
TOTAL STORED WATER (1/1/2018)	10,699	19,797	6,199	246	3,305	40,245
(RECOVERY) AND RECHARGE IN 2018 (AF)						
Kern Water Bank Deliveries	-	-	-	-	-	-
2018 SWP Allocation (35%) ³	264	-	-	-	264	528
High Flow Kern River	-	-	(1,667)	-	-	(1,667)
TOTAL ESTIMATED 2018 TRANSACTIONS ⁷	264	-	(1,667)	-	264	(1,139)
ESTIMATED WATER IN STORAGE 2018 (AF)						
Total Kern Water Bank	-	4,233	-	-	-	4,233
Total MWD System	7,917	-	-	-	1,174	9,091
Total Kern County	3,046	15,564	-	246	2,395	21,250
TOTAL ESTIMATED STORED WATER TO DATE	10,963	19,797	4,532	246	3,569	39,106

NOTES:

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

-MWD = Metropolitan Water District of Southern California.

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

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

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

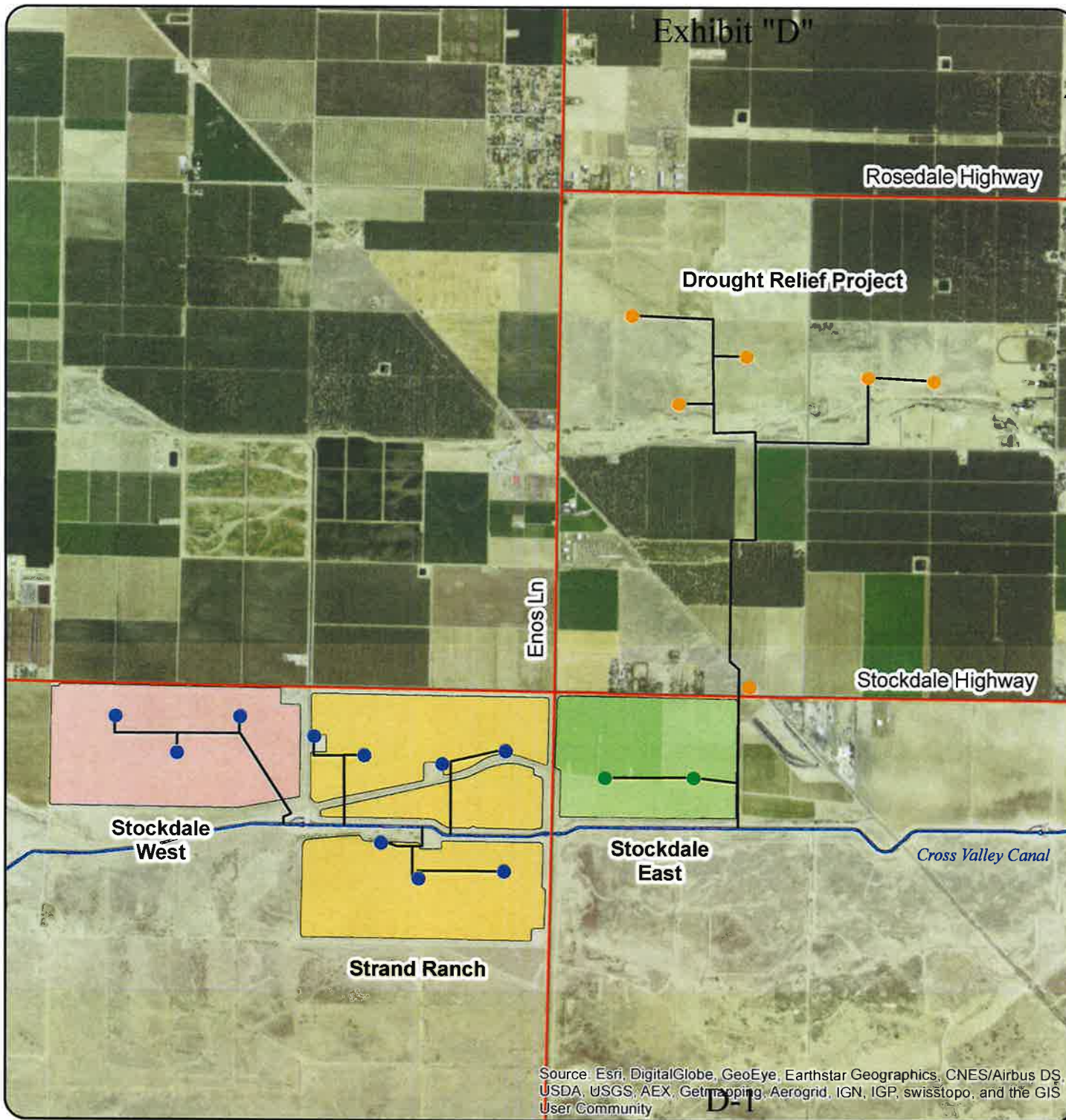
IRWD's 2017 SWP allocation water is stored in Kern County; assumes 2018 SWP water will be stored in Kern County.

⁴ Beginning balance of water stored in MWD system includes (net of CVC losses) 3,920 AF 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

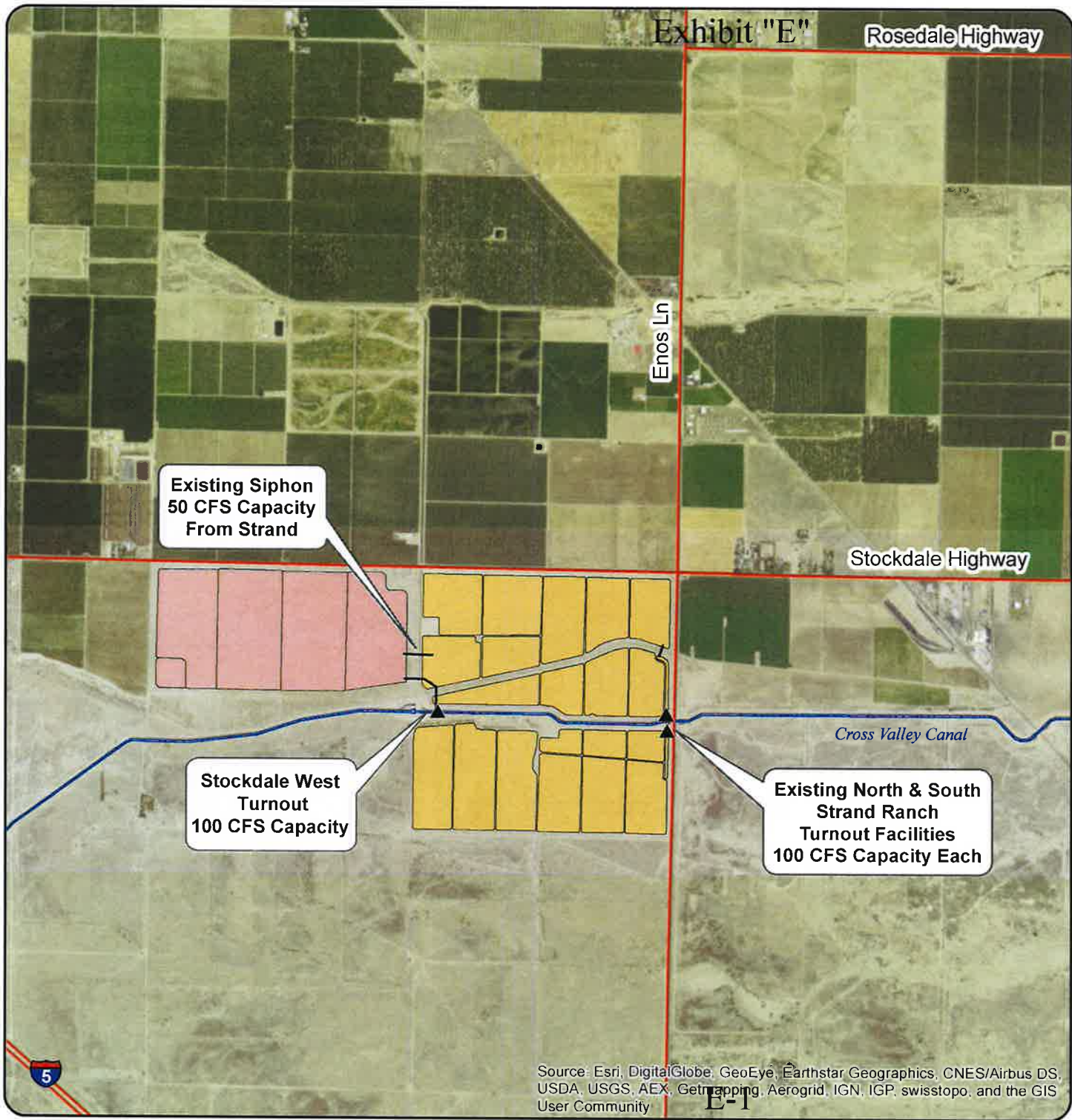
- Existing Extraction Well
- Planned Extraction Well
- Well Under Construction
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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

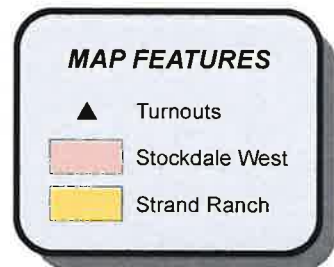


0 0.25 0.5 1 Miles

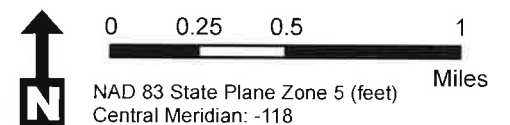
NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

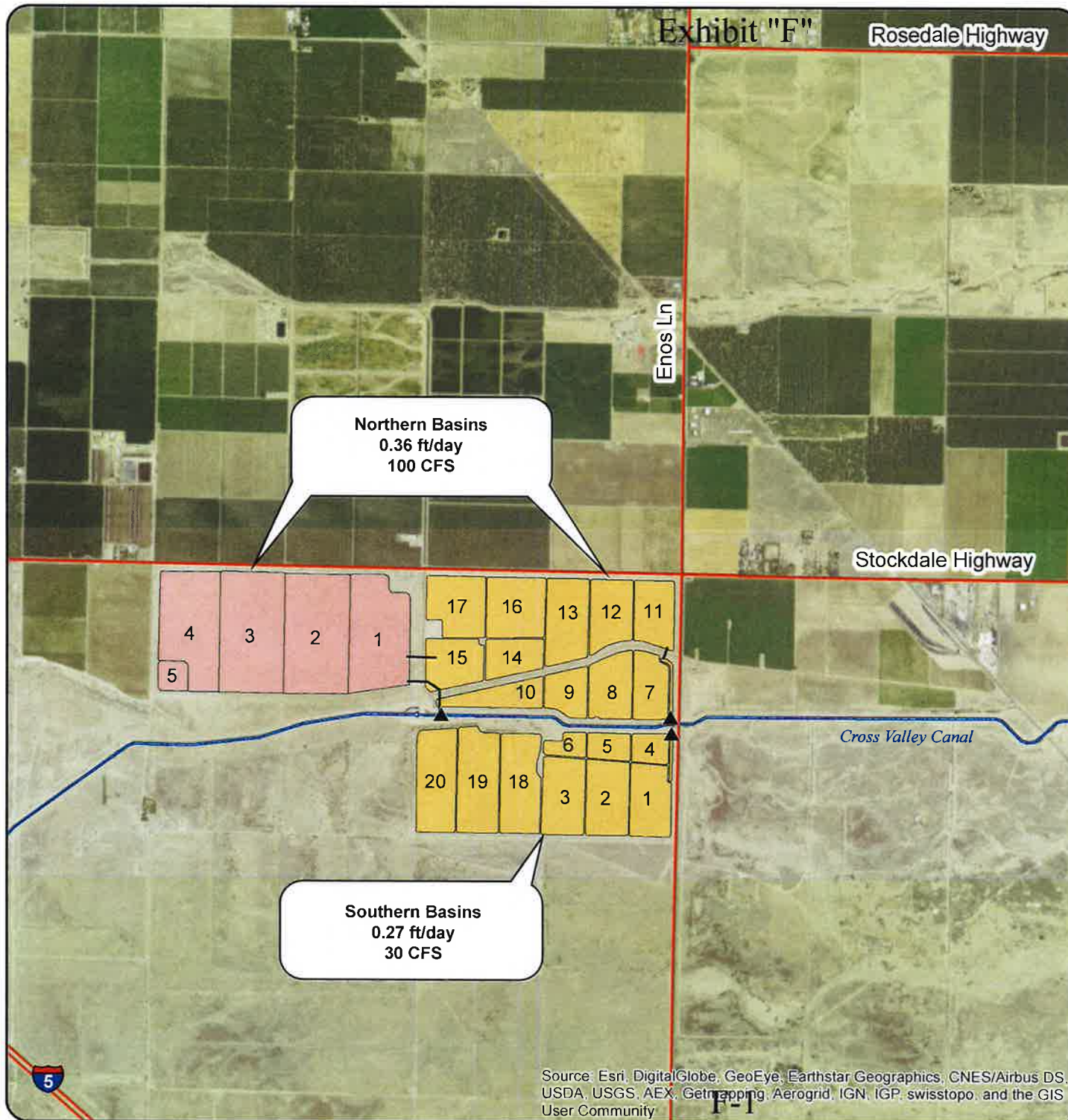


**Location Map:
IRWD Water Banking Projects
Recharge Basins & Turnout
Facilities**



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

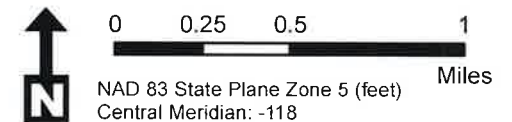


Exhibit "G"

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)

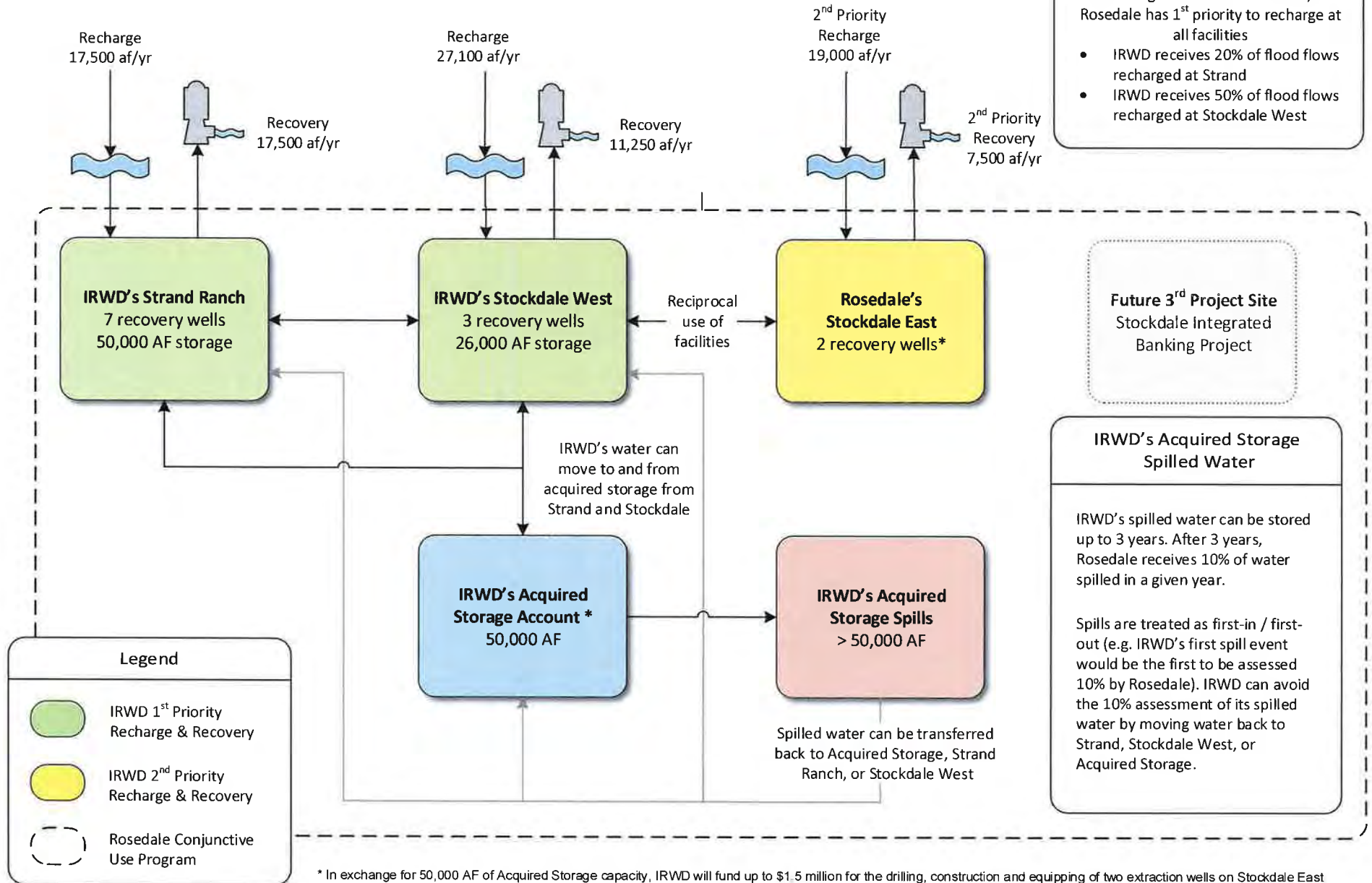
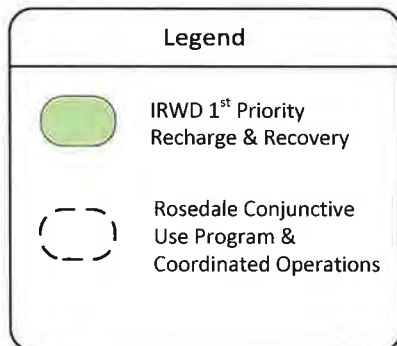
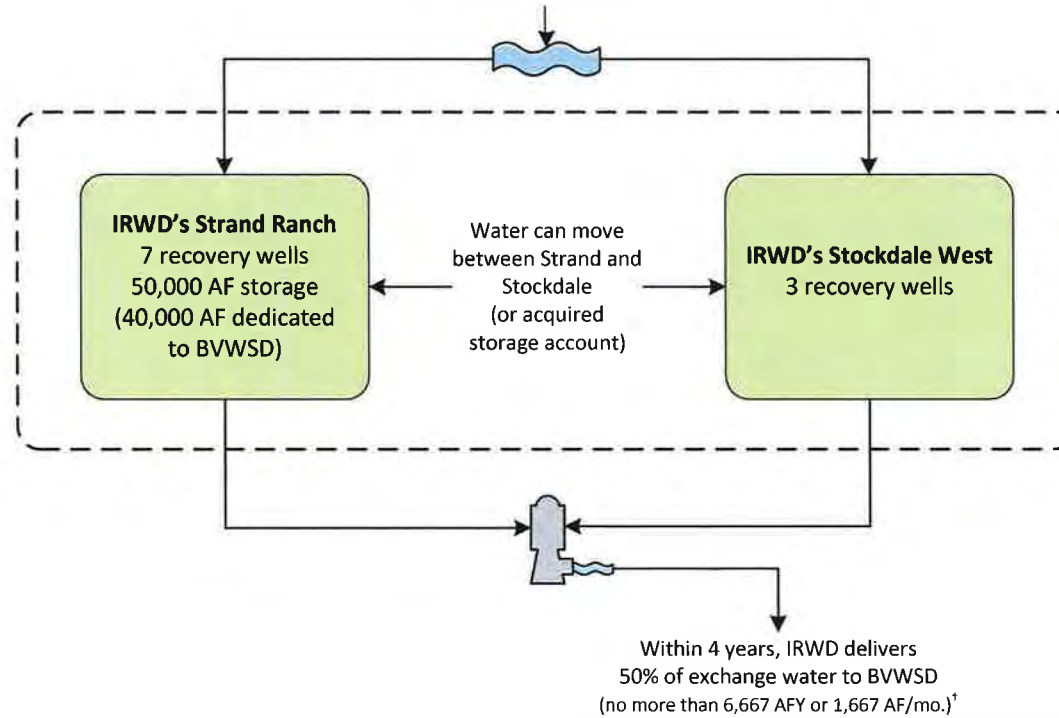


Exhibit "H"

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

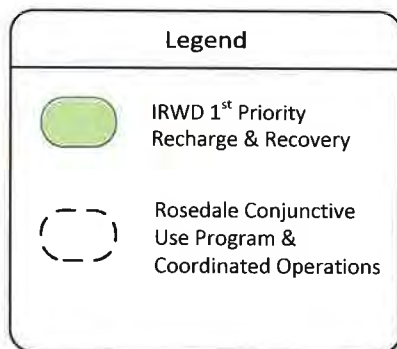
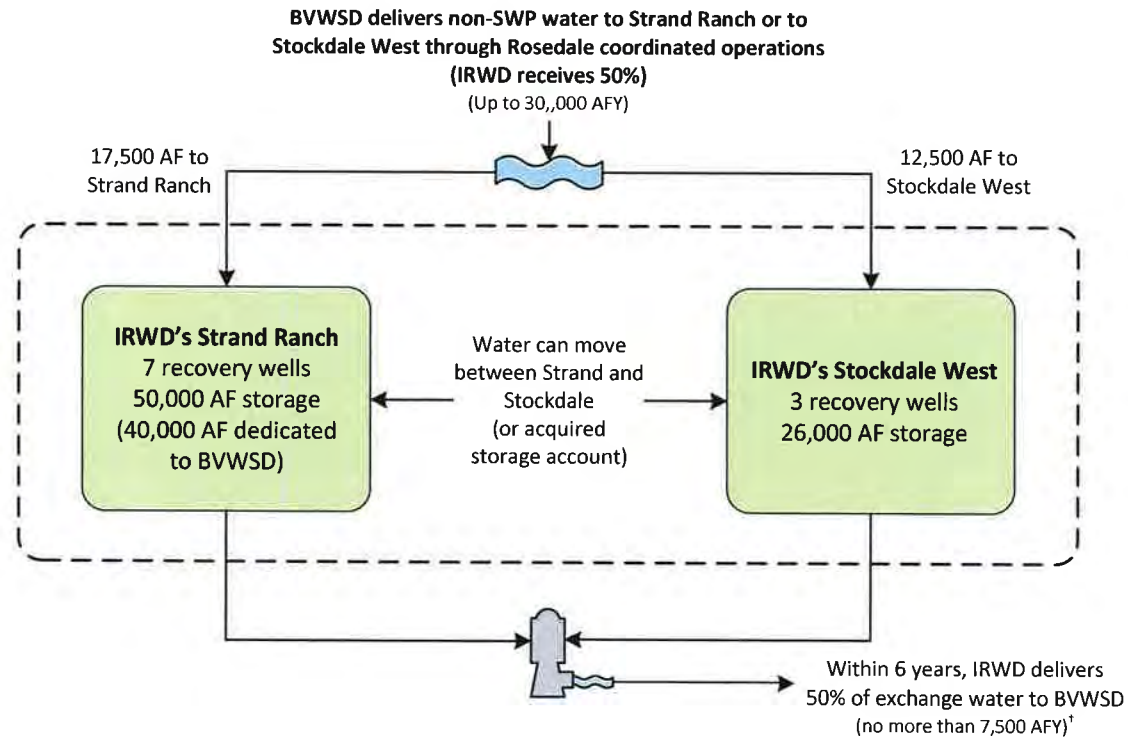
BVWSD delivers non-SWP water to Strand Ranch or to Stockdale West through Rosedale coordinated operations
(IRWD receives 50%)
(Up to 17,500 AFY or 4,375 AF/mo.)



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

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

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



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

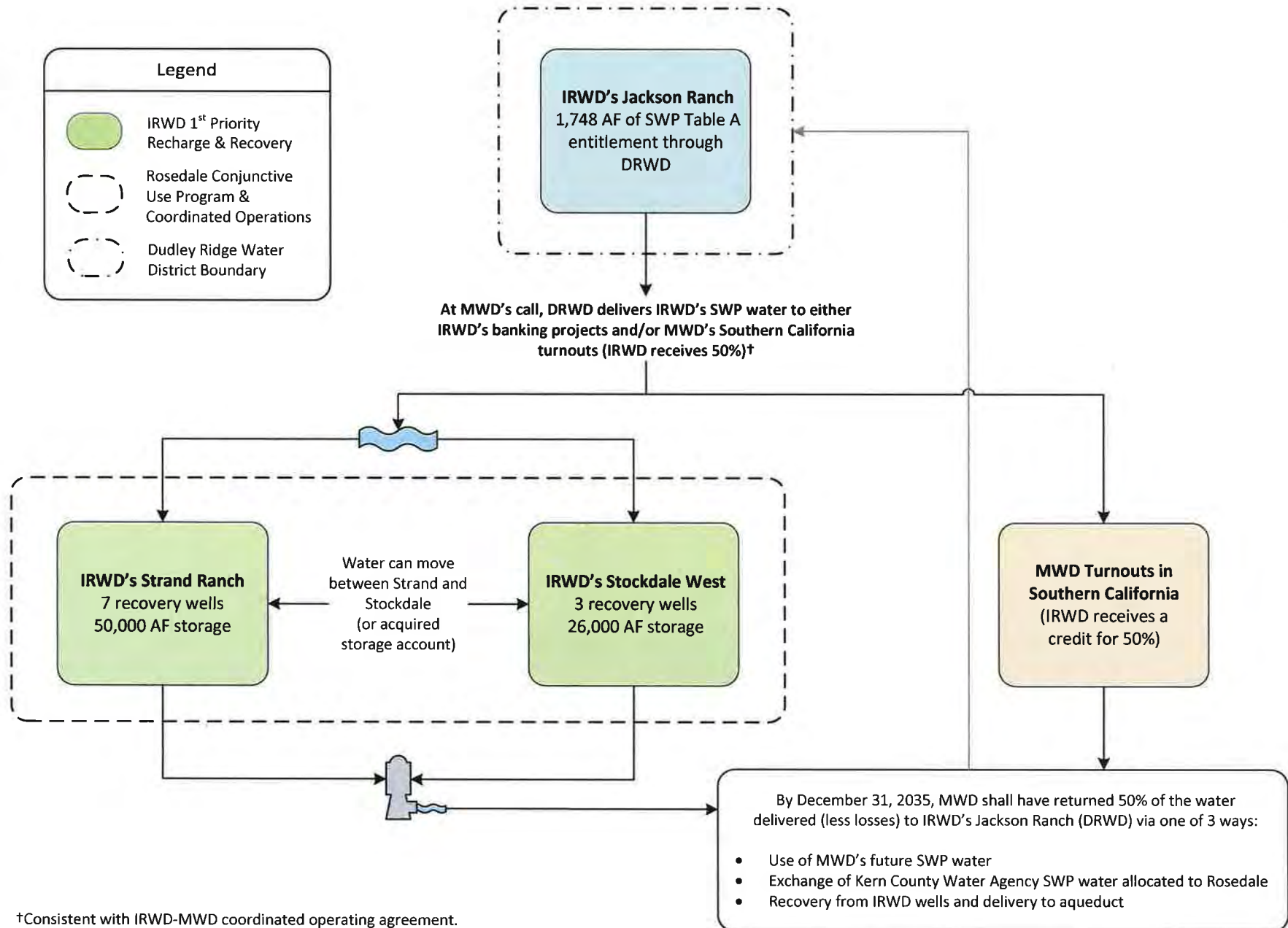
Modified for 1-Year Recharge Program Only

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

Exhibit "I"

Dudley Ridge Water District (DRWD) Unbalanced Exchange Program

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



†Consistent with IRWD-MWD coordinated operating agreement.

Exhibit "J"

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

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

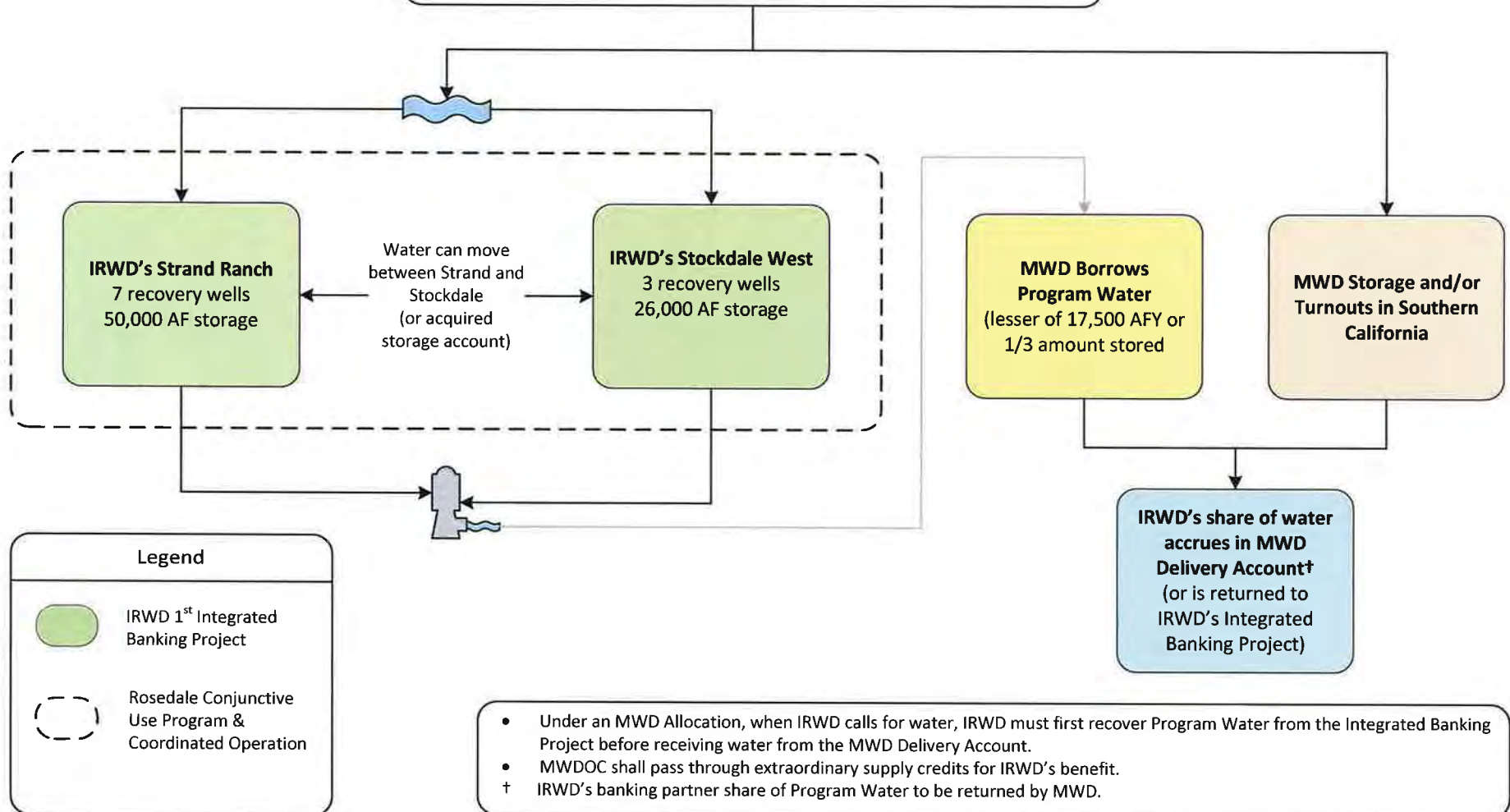
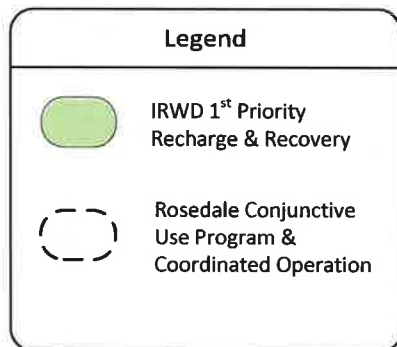
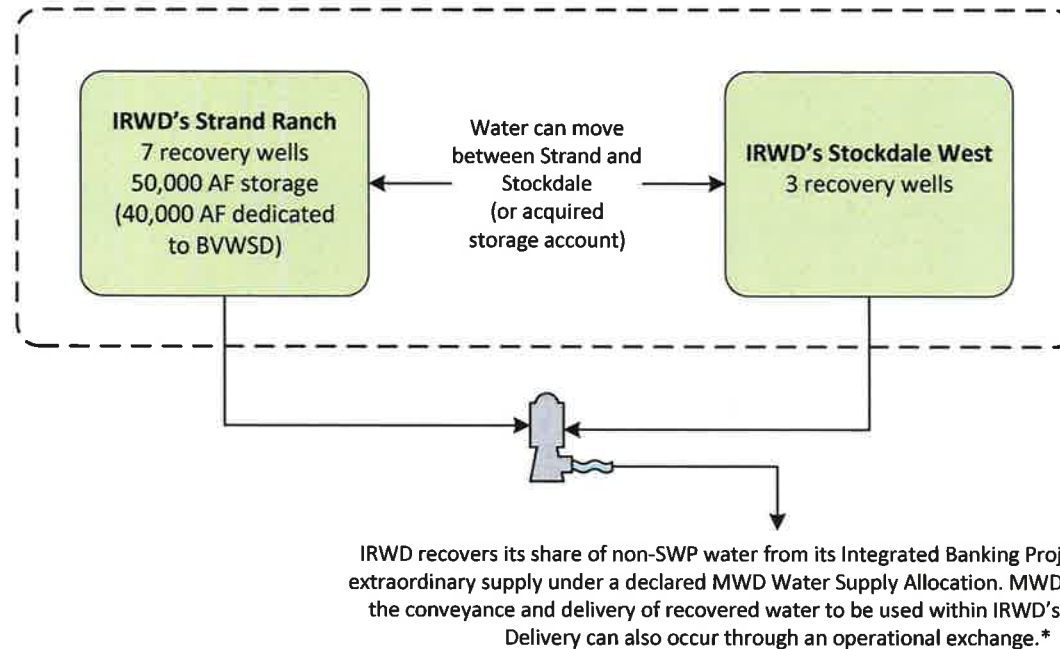


Exhibit "K"
Agreement for Conveyance of Water Between MWD, MWDOC, and IRWD (Wheeling Agreement)
Template for future agreements



*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.