

AGENDA
IRVINE RANCH WATER DISTRICT
WATER BANKING COMMITTEE
THURSDAY, MAY 21, 2015

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: Doug Reinhart _____

<u>ALSO PRESENT</u>	Paul Cook	_____	Kellie Welch	_____
	Rob Jacobson	_____	Patrick Sheilds	_____
	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. <u>WATER BANKING PROJECT FACILITIES AND CAPACITIES
OVERVIEW – JOHNSON/SANCHEZ/WEGHORST</u> | |
|---|--|

Recommendation: Receive and file.

ACTION

- | | |
|---|--|
| 6. <u>CONCEPTUAL TERMS FOR WATER BANKING EXCHANGES –
WELCH/SANCHEZ/WEGHORST</u> | |
|---|--|

Recommendation: That the Committee provide input on conceptual terms for one-for-one exchanges presented at the meeting.

ACTION - Continued

7. AMENDMENT NO. 1 TO DROUGHT RELIEF PROJECT COST SHARING AGREEMENT AND REQUEST FOR BUDGET INCREASE - WELCH/ SANCHEZ/WEGHORST

Recommendation: That the Board authorize the General Manager to execute Amendment No. 1 to the Cost Sharing Agreement subject to non-substantive changes; approve an increase to FY 2014-15 Capital Budget for Project 11812 (6023) in the amount of \$1,904,100 to fund IRWD's share of design, construction, project administration and inspection costs for equipping of six wells to be shared by IRWD and Castaic Lake Water Agency.

OTHER BUSINESS

8. A. Directors' Comments
- B. CLOSED SESSION: Conference with Real Property Negotiator
Government Code Section 54956.8).
Property: (Sections 4, Township 09S, Range 22E)
Negotiating Parties: Greg Lowther at First National Investment Properties
Agency Negotiator: Paul Cook, General Manager
Purpose of Negotiations: Price and Terms of Payment
- C. 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.

April 21, 2015

Prepared by: D. Johnson *DJ*

Submitted by: F. Sanchez / P. Weghorst *FW*

Approved by: Paul Cook *PC*

WATER BANKING COMMITTEE

WATER BANKING PROJECT FACILITIES AND CAPACITIES OVERVIEW

SUMMARY:

Staff has prepared a summary table of the storage, recharge and recovery capacities of existing and proposed IRWD water banking projects including capacities available to IRWD in the Kern Water Bank. This table is provided as Exhibit "A". Staff has also prepared a map depicting project wells and pipelines and a map showing Cross Valley Canal turn-out locations. These maps are provided as Exhibits "B" and "C", respectively. The three exhibits are provided for the Committee's reference.

The map of project wells in Exhibit "B" depicts the new location of the Superior No. 3 well site as part of the Drought Relief Project. The well was relocated because Rosedale-Rio Bravo Water Storage District (Rosedale) was unable to secure the land required for the original well location. Rosedale has been negotiating with another landowner to facilitate development of the Central Intake easement and to establish a new well site location. Rosedale is currently in escrow on the land for this easement and relocated well site.

At the Committee meeting staff will provide an update on Strand Ranch pump performance as part of the water banking project facilities overview.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Recharge, Storage and Recovery Capacities of Existing and Proposed Water Banking Projects

Exhibit "B" – Map of Water Banking Project Wells and Pipelines

Exhibit "C" – Map of Cross Valley Canal Turnouts

Exhibit "A"

TABLE 1
Current and Anticipated Water Banking Projects
Recharge, Storage and Recovery Capacities
May 14, 2015

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1 ST PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED	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 DESIGNED ¹	RECOVERY CAPACITY CURRENT STRAND CONDITIONS ²
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	28.4
Stockdale West	Yes	-	3	26,000	27,100	-	11,250	-	16.5	16.5
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-
IRWD Acquired Storage Account ³	No	-	-	50,000	-	-	-	-	-	-
Drought Relief Project Wells	No	-	3	-	-	-	-	-	16.5	16.5
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-
TOTALS		7	8	135,495	47,800	19,000	35,080	7,500	73.0	61.4
Partner Capacities ⁴				38,000	-	-	12,667	-	35.5	35.5
IRWD Capacities				97,495	-	-	22,413	-	37.5	25.9
IRWD's recovery <i>during</i> 6 month partner recovery period (AF)									13,500	9,324
IRWD's recovery <i>after</i> 6 month partner recovery period (AF)									8,913	13,089
TOTALS (AF)									22,413	22,413
Number of months needed to recover IRWD's total AF after partners' recovery (Assumes IRWD has use of total recovery capacity after partners' recovery)									10.1	12.0
¹ Based on designed Strand recovery capacity assuming 370' bgs. Assumes 5.5 cfs for each of the Stockdale West and Drought Relief well. Assumes partners' water is recovered over 6 months. ² Current Conditions for Strand at 415' bgs. Assumes 5.5 cfs for each Stockdale West and Drought Relief well. Assumes partners' water is recovered over 6 months. 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.										

Exhibit " B"

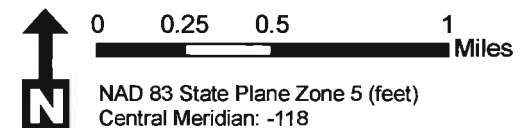


Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

MAP FEATURES

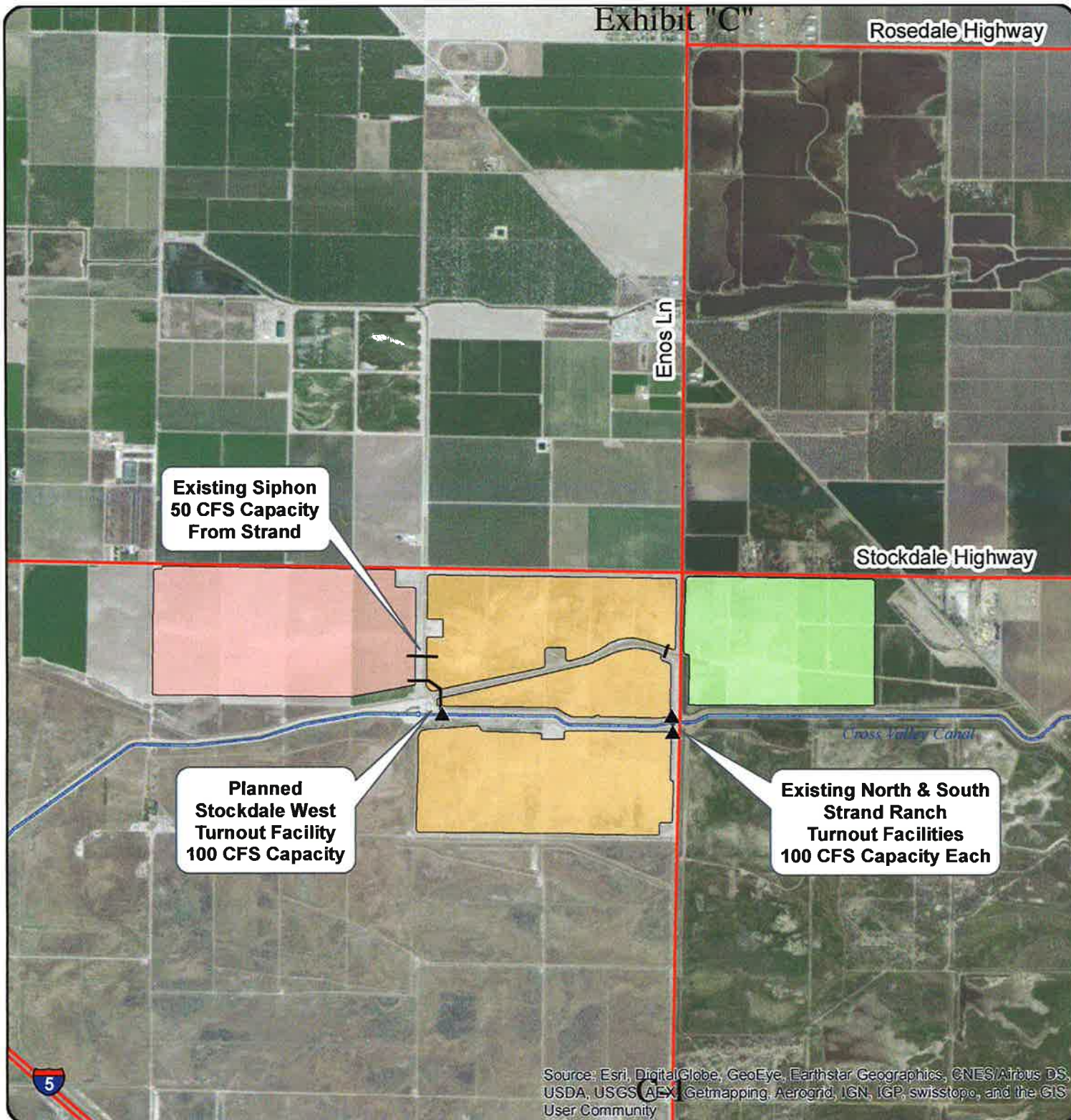
- Existing Extraction Well
- Planned Extraction Well
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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



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

B-1



**Location Map:
IRWD Water Banking Projects
Turnout Facilities**

MAP FEATURES

- ▲ Turnouts
- Stockdale East
- Stockdale West
- Strand Ranch

This figure shows the location of existing and anticipated pipelines and turnout facilities.



0 0.25 0.5 1
Miles
NAD 83 State Plane Zone 5 (feet)
Central Meridian: -118

May 21, 2015

Prepared by: K. Welch *KW*

Submitted by: F. Sanchez/P. Weghorst *PW*

Approved by: Paul Cook *PC*

WATER BANKING COMMITTEE

CONCEPTUAL TERMS FOR WATER BANKING EXCHANGES

SUMMARY:

In 2014, the District successfully completed one-for-one exchanges for 5,000 acre-feet (AF) with Metropolitan Water District of Southern California (Metropolitan) for the mutual benefit of both agencies. Staff has had recent discussions Metropolitan staff and other agencies in exploring other water transactions that would provide mutual benefits through exchanges of water. At the Committee meeting, staff will review conceptual terms for potential water exchanges.

BACKGROUND:

In 2014, IRWD and Metropolitan executed two mutually beneficial agreements involving exchanges of water recovered from the Strand Ranch. The first agreement for the “wheeling” of 1,000 AF of IRWD’s stored Kern River water to IRWD’s service area was approved by the Board in March 2014. The second agreement for a one-for-one exchange of up to 4,000 AF of Kern River water was approved by the Board in May 2014. The recovery of water from the Strand Ranch, pursuant to both agreements, was delivered on behalf of Metropolitan to Arvin-Edison Water Storage District (AEWSD). The deliveries made by IRWD to AEWSD were in exchange for equal amounts of Metropolitan’s State Water Project water.

IRWD has benefitted from the one-for-one exchanges with Metropolitan by eliminating any perceived exportability issues associated with the use of high-flow Kern River supplies by ensuring that the water was beneficially used in Kern County. The exchanges also freed up storage capacity in the Strand Ranch. Additional one-for-one exchanges with Metropolitan or others could result in the same benefits to IRWD. Staff has held conversations with Metropolitan and others about conceptual one-for-one exchange opportunities. At the Committee meeting, staff will present conceptual terms for potential exchanges that could provide benefits to IRWD. Staff recommends that the Committee provide input on the conceptual terms for one-for-one exchanges.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

None.

RECOMMENDATION:

That the Committee provide input on conceptual terms for one-for-one exchanges presented at the meeting.

LIST OF EXHIBITS:

None.

May 21, 2015

Prepared by: K. Welch/R. Bennett

Submitted by: F. Sanchez/P. Weghorst

Approved by: Paul Cook

WATER BANKING COMMITTEE

AMENDMENT NO. 1 TO DROUGHT RELIEF PROJECT COST SHARING AGREEMENT AND REQUEST FOR BUDGET INCREASE

SUMMARY:

The drilling and construction of wells for the Drought Relief Project is ongoing in the Rosedale-Rio Bravo Water Storage District service area. This project will allow IRWD, Rosedale-Rio Bravo Water Storage District (Rosedale) and Castaic Lake Water Agency (CLWA) to benefit from additional groundwater recovery and conveyance capacities that will supplement existing and new water banking and exchange programs. A Cost Sharing Agreement for the project was approved by the Board in February 2015. This agreement covered the drilling and construction of 6 wells that will be shared by IRWD and CLWA but did not cover equipping the wells. Amendment No. 1 to the Cost Sharing Agreement has been prepared to provide the terms for cost sharing the equipping of the 6 wells. Staff recommends that the Board:

- Authorize the General Manager to execute Amendment No. 1 to the Cost Sharing Agreement subject to non-substantive changes; and
- Approve an increase to the FY 2014-15 Capital Budget for Project 11812 (6023) in the amount of \$1,904,100 to fund IRWD's share of design, construction, project administration and inspection costs for equipping the 6 wells under construction for IRWD and CLWA.

BACKGROUND:

On February 9, 2015, the Board approved the Cost Sharing Agreement with Rosedale and CLWA to share in the costs of the design and construction of the Drought Relief Project facilities. This Project will include the construction of 11 wells and associated conveyance facilities within the Rosedale service area to provide additional groundwater recovery and conveyance capacities to IRWD, CLWA and Rosedale. The Drought Relief Project facilities are shown in the map provided as Exhibit "A".

The 6 wells in the Superior East and Superior West Well Fields will be shared equally by IRWD and CLWA. IRWD's capacity will be used in conjunction with the Strand Ranch Integrated Banking Project. The wells and wellhead facilities that will be constructed for IRWD and CLWA will meet IRWD specifications and the conveyance facilities to the CVC will be oversized to accommodate flows from at least four additional wells. The Cost Sharing Agreement did not provide for the equipping of the 6 wells to be shared by IRWD and CLWA.

On March 16, 2015, Rosedale executed a construction contract with Best Drilling for the drilling and construction and equipping of three wells within Rosedale's Western Well Field and the drilling and construction (but not equipping) of 6 wells within the Superior East and West Well

Fields. IRWD's approved budget for this portion of the project is \$4,229,500 which includes IRWD's share of the design, well drilling, well construction, project administration, and permitting costs.

Amendment No. 1:

Per the Cost Sharing Agreement, the equipping of the 6 wells being constructed for CLWA and IRWD shall be addressed under an amendment to the Cost Sharing Agreement. Staff and legal counsel have prepared Amendment No. 1 to the Cost Sharing Agreement that specifies that the costs of the design and equipping of the Superior East and West wells shall be shared equally by IRWD and CLWA. All other project administration, management, permitting and inspection costs for this work shall be split among Rosedale, IRWD and CLWA, with each paying 33 1/3% of the costs. Amendment No. 1 has been reviewed with both Rosedale and CLWA and is included as Exhibit "B".

Staff recommends that the Board approve Amendment No. 1 to the Cost Sharing Agreement. Upon execution of Amendment No. 1, staff will work with Rosedale and CLWA to finalize the designs, specifications and project manual for equipping the wells. Staff expects that Rosedale will go out to bid for the equipping of the Superior East and West wells in mid-to-late 2015.

Budget for Well Equipping:

Staff and CLWA have evaluated alternatives for equipping the 6 shared wells. Design consultants at URS have prepared designs and specifications that are consistent with IRWD's standards and will be incorporated into a new project manual for the well equipping project. Based on estimates provided by URS, IRWD's share of the cost of the design and construction to equip the Superior East and West wells will be approximately \$1,682,000. Staff recommends an increase to the FY 2014-15 Capital Budget for Project 11812 (6023) in the amount of \$1,904,100 to fund IRWD's share of the design and construction for equipping the 6 wells and associated project management, administration and inspection work. This budget request also includes IRWD staff time and contingency.

FISCAL IMPACTS:

IRWD's share of the estimated cost for the design and equipping the 6 wells to be shared with CLWA is approximately \$1,682,000. Staff requests an increase to the FY 2014-15 Capital Budget for Project 11812 (6023) in the amount of \$1,904,100 as shown below.

Project No.	Current Budget	Addition <Reduction>	Total Budget
11812(6023)	\$4,229,500	\$1,904,100	\$6,133,600

ENVIRONMENTAL COMPLIANCE:

The construction and operation of the 6 Superior East and West wells was included in the previously adopted Rosedale Master EIR and the Strand Ranch Integrated Banking Project EIR. Staff anticipates filing an Addendum to the Strand Ranch Integrated Banking Project EIR to clarify the use of the Drought Relief Project recovery facilities by IRWD to increase the instantaneous recovery capacity to fulfill the 17,500 AF annual recovery limit on Strand Ranch. The construction and operation of the remaining Drought Relief Project facilities including the Central Intake Pipeline and CVC Tie-in facilities have been analyzed in the Stockdale Integrated Banking Project Draft EIR by Rosedale as the Lead Agency and IRWD as a Responsible Agency. A contract for the construction of these facilities will not be awarded until after the Stockdale EIR is certified which is expected in August 2015. These environmental documents have been developed in compliance with the 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.

RECOMMENDATION:

That the Board authorize the General Manager to execute Amendment No. 1 to the Cost Sharing Agreement subject to non-substantive changes; and approve an increase to the FY 2014-15 Capital Budget for Project 11812 (6023) in the amount of \$1,904,100 to fund IRWD's share of design, construction, project administration and inspection costs for equipping of six wells to be shared by IRWD and CLWA.

EXHIBITS:

Exhibit "A" – Location Map: Drought Relief Project
Exhibit "B" – Amendment No. 1 to the Cost Sharing Agreement

Exhibit "A"

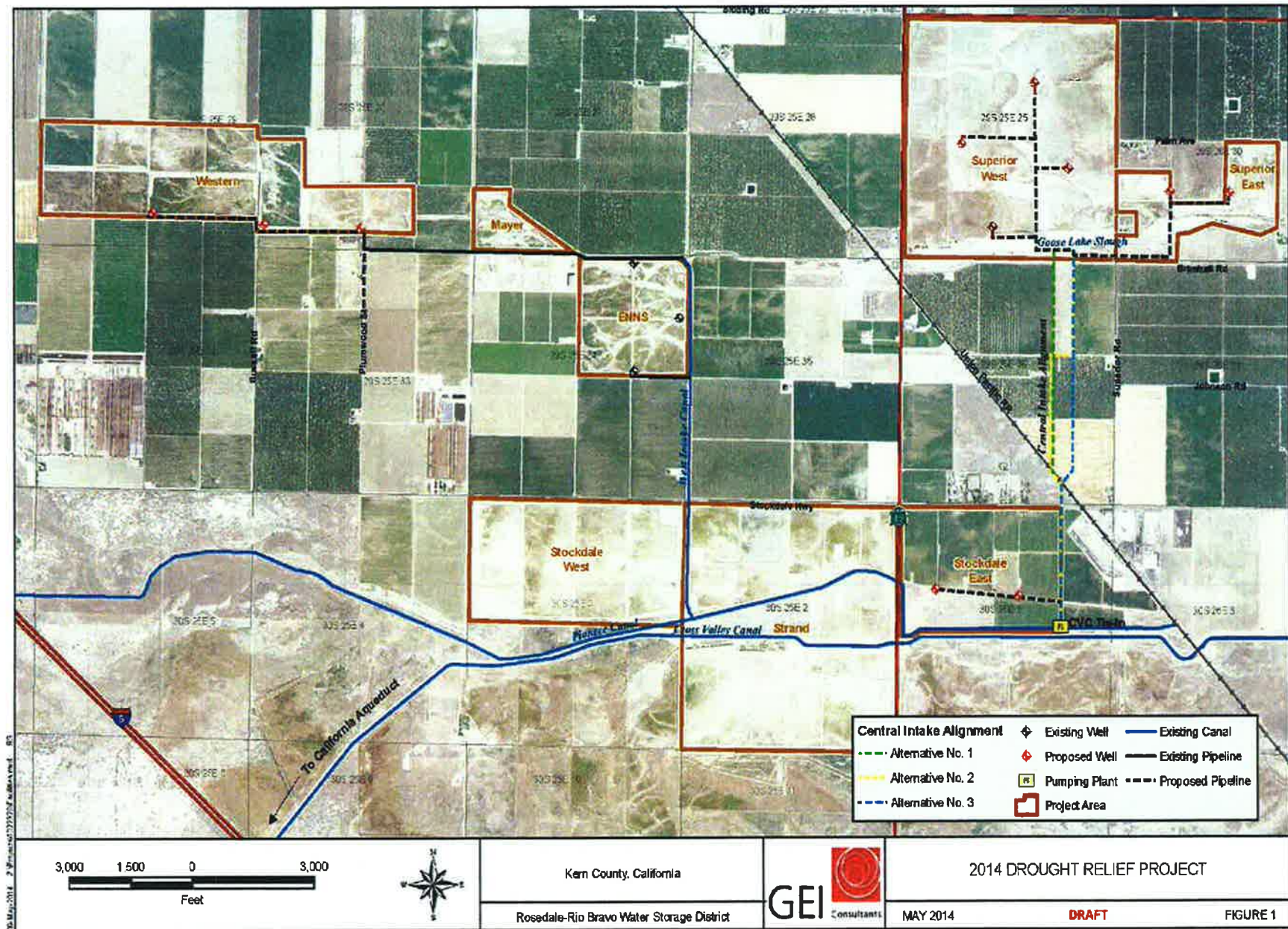


EXHIBIT "B"

05/13/15 Draft
AMENDMENT NO. 1
TO
DROUGHT RELIEF PROJECT
COST SHARING AGREEMENT

THIS AMENDMENT NO. 1 TO COST SHARING AGREEMENT ("Amendment") is made as of _____, 2015 ("Effective Date"), by and among the Rosedale-Rio Bravo Water Storage District, a California water storage district ("Rosedale"); Castaic Lake Water Agency, a special act public agency ("Castaic"); and Irvine Ranch Water District, a California water district ("Irvine") (each sometimes individually referred to as a "Party" and collectively as the "Parties").

RECITALS

The following recitals are a substantive portion of this Amendment:

- A. The Parties entered into the Drought Relief Project Cost Sharing Agreement (the "Original Agreement") as of March 9, 2015, to provide for coordination of the construction of the Project Wells and associated facilities and the sharing of the costs relating to the Project. All capitalized terms used in this Amendment and not otherwise defined herein shall have the meanings ascribed to them in the Original Agreement.
- B. Section 2.d(v) of the Original Agreement provides that equipping of the six (6) Wells to be constructed for Castaic and Irvine (the "Superior East and West Wells") shall be addressed under a separate cost share agreement or an amendment to the Original Agreement.
- C. The Parties desire to augment the provisions of the Original Agreement to provide for the equipping of the Superior East and West Wells.

AMENDMENT

NOW, THEREFORE, in consideration of the recitals, covenants, terms and conditions of this Amendment, all of which are incorporated into the following Amendment as if set forth fully therein, the Parties agree to amend the Original Agreement as follows:

1. Contracts For Equipping Wells.

- a. The equipping of the Superior East and West Wells shall be carried out by the Parties in accordance with the requirements and provisions of the Original Agreement, with the modifications set forth herein. All of the recitals, covenants, terms and conditions of the Original Agreement, other than those expressly limited in their application to the Central Intake Pipeline or the Project Well drilling, shall apply to and govern the equipping of the Superior East and West Wells, except as modified herein.

EXHIBIT "B"

- b. To facilitate Rosedale's preparation of the Plans and technical specifications for the equipping of the Superior East and West Wells, Castaic and Irvine shall identify revisions necessary to make the bid documents and contract documents that were prepared for the Project Well drilling contract suitable for use by Rosedale in the contract for equipping the Superior East and West Wells.
- c. To prepare the bid documents and contract documents for the equipping of the Superior East and West Wells, Rosedale shall use the Project Well drilling bid documents and contract documents, and shall incorporate therein the revisions identified by Castaic and Irvine as provided in paragraph b, above, and delete therefrom the provisions applicable only to Well drilling.
- d. The contract for the equipping of the Superior East and West Wells shall be separate from the contract(s) prepared by Rosedale for the equipping of the other Project Wells.
- e. In addition to the services that Rosedale shall provide or cause to be provided pursuant to Section 2 of the Original Agreement, Castaic and/or Irvine may, but shall not be obligated to, provide supplemental consulting services, at no cost to Rosedale, relating to the work under the contract for equipping the Superior East and West Wells.

2. **Cost Sharing.**

- a. All actual construction and design costs for the equipping of the Superior East and West Wells shall be allocated in accordance with Exhibit B to the Original Agreement, line items 2 and 3 (50% Irvine and 50% Castaic). The costs of actual project management, administrations, permitting and inspection costs for the equipping of the Superior East and West Wells shall be allocated in accordance with Exhibit B to the Original Agreement, line item specifying the allocation for project management, administration, permitting and inspection costs (33 1/3% Rosedale, 33 1/3% Irvine and 33 1/3% Castaic).

3. **Miscellaneous Provisions.**

- a. Counterparts. This Amendment may be signed in counterparts. When each Party has signed and delivered at least one such counterpart, each counterpart shall be deemed an original and, when taken together with other signed counterparts, shall constitute one agreement which shall be binding upon and effective as to all Parties.
- b. Captions. The captions used herein are for convenience only and are not a part of this Amendment and do not in any way limit or amplify the terms and provisions hereof.

[SIGNATURES ON NEXT PAGE]

EXHIBIT "B"

IN WITNESS WHEREOF, this Amendment has been executed and is effective as of the date first written above:

ROSEDALE

By: _____

Its: _____

CASTAIC

By: _____

Its: _____

IRVINE

By: _____

Its: _____