AGENDA
IRVINE RANCH WATER DISTRICT
WATER BANKING COMMITTEE
THURSDAY, SEPTEMBER 17, 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: Douglas Reinhart _____

ALSO PRESENT

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. WATER BANKING PROJECT FACILITIES AND CAPACITIES OVERVIEW – JOHNSON/WELCH/SANCHEZ/WEGHORST

   Recommendation: Receive and file.

6. WATER BANKING PROGRAM UPDATE – SANCHEZ/WEGHORST

   Recommendation: Receive and file.

7. STOCKDALE INTEGRATED BANKING PROJECT EIR UPDATE – WELCH/SANCHEZ/WEGHORST

   Recommendation: Receive and file.

ACTION

8. ROSEDALE DROUGHT RELIEF PROJECT PIPELINE LETTER AGREEMENT AND BUDGET INCREASE – BENNETT/WELCH/SANCHEZ/WEGHORST

Recommendation: That the Board authorize the General Manager to execute the letter agreement, subject to non-substantive changes, for constructing the Superior East and West Pipelines, and approve an increase to the FY 2015-16 capital budget for Project 11812 (6023) in the amount of $507,600 to fund IRWD's share of the construction of the Superior East and West Pipelines as well as consulting services to be provided by Dee Jaspar and Associates for design review and construction oversight assistance.

9. TERMS FOR LONG-TERM EXCHANGE PROGRAM WITH DUDLEY RIDGE WATER DISTRICT – WELCH/SANCHEZ/WEGHORST

Recommendation: That the Committee provide input on proposed terms for a long-term exchange program with Dudley Ridge Water District and authorize staff to work with Dudley Ridge Water District, Kern County Water Agency and Metropolitan Water District of Southern California to refine the terms to be presented to the Committee for further consideration.

OTHER BUSINESS

10. A. Directors' Comments

B. Adjourn

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Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available 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.

September 17, 2015
Prepared by: D. Johnson / K. Welch
Submitted by: F. Sanchez / P. Weghorst
Approved by: Paul Cook

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 planned IRWD water banking projects including capacities available to IRWD in the Kern Water Bank. A table that provides a quarterly update on Strand Ranch recovery and recharge operations, and the balance of the stored water in the Kern Water Bank has also been prepared. These tables are provided as Exhibits "A" and "B", respectively. In addition, staff has prepared a map depicting project wells and pipelines and a map showing Cross Valley Canal turn-out locations. These maps are provided as Exhibits "C" and "D", respectively. The four exhibits are provided for the Committee's reference.

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" – Strand Ranch Storage, Recharge and Recovery Operations Update
Exhibit "C" – Map of Water Banking Project Wells and Pipelines
Exhibit "D" – Map of Cross Valley Canal Turnouts

Exhibit "A"

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

WATER BANKING PROJECT	OWNERSHIP AND WELL INFO			ALLOCATED CAPACITY (AF)					1st PRIORITY RECOVERY CONDITIONS (CFS)		2nd PRIORITY RECOVERY CONDITIONS (CFS)	
	IRWD OWNED	WELLS EXISTING	WELLS PROPOSED	TOTAL STORAGE CAPACITY	ANNUAL RECHARGE 1ST PRIORITY	ANNUAL RECHARGE 2ND PRIORITY	ANNUAL RECOVERY 1ST PRIORITY	ANNUAL RECOVERY 2ND PRIORITY	RECOVERY CAPACITY AS DESIGNED[1]	RECOVERY CAPACITY CURRENT CONDITIONS[2]	RECOVERY CAPACITY AS DESIGNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	23.0	-	-
Stockdale West	Yes	-	3	26,000	27,100	-	11,250	-	16.5	-	-	-
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-	10.0	-
IRWD Acquired Storage Account[3]	No	-	-	50,000	-	-	-	-	-	-	-	-
Drought Relief Project Wells	No	-	3	-	-	-	-	-	16.5	-	-	-
Kern Water Bank Storage Account[5]	No	-	-	9,495	3,200	-	6,330	-	8.7	-	-	-
TOTALS		**7**	**8**	135,495	47,800	19,000	35,080	7,500	81.7	23.0	10.0	0.0
Partner Capacities[4]				38,000	-	-	12,667	-	35.5	35.5	-	-
IRWD Capacities				97,495	-	-	22,413	-	46.2	0.0	-	-
IRWD's recovery ***during*** 6 month partner recovery period (AF)									16,646	0.0	-	-
IRWD's recovery ***after*** 6 month partner recovery period (AF)									5,767	22,413	-	-
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)									8.4	15.1	-	-

[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 430' bgs.
[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

Exhibit "B"

IRWD's Water Banking Storage, Recharge and Recovery Update 9/10/2015

Water Banking Recovery and Recharge Operations

	Water Banking Entity					
	IRWD		Buena Vista (BVWSD)	Carpinteria Valley Water (CVWD)	Antelope Valley-East Kern (AVEK)	Dudley Ridge Water District [3]
Water Bank	SWP[1]	Non-SWP[2]	Non-SWP	SWP	SWP	SWP
	Beginning Water in Storage 2014 (AF)					
Strand Ranch	3,082	13,761	2,326	621	2,229	-
Strand - Stockdale Pilot	-	1,401	1,475	-	-	-
Stored Water at 1/1/14	3,082	15,162	3,801	621	2,229	-
	(Recovery) and Recharge in 2014 (AF)					
CVWD	-	-	-	(208)	-	-
AVEK	-	-	-	-	(2,229)	-
IRWD/Diamond Farming	-	(1,000)	-	-	-	-
IRWD/MWD Wheeling[4]	-	(1,000)	-	-	-	-
IRWD/MWD Exchange[5]		(4,000)	-	-	-	-
MWD Borrowing SWP[6]	(2,853)	-	-	-	-	
SWP Allocation (2013)[7]	423					423
Available Reserve Water end 2014[8]	20	513	540			
Total 2014 transactions	(2,410)	(5,487)	540	(208)	(2,229)	423
Total Held in MWD System[4,5]	5,423	-	-	-	-	423
Total Held in Kern County	3,102	9,675	4,341	413	-	-
Stored Water at 1/1/15	8,525	9,675	4,341	413	-	423
	Estimated (Recovery) and Recharge in 2015 (AF)					
CVWD	-	-	-	(413)	-	-
BVWSD	-	-	(4,341)	-	-	-
SWP Allocation (2014)[7]	51	-	-	-	-	51
SWP Allocation (2015)[7]	175					175
Total Estimated 2015 transactions	226	-	(4,341)	(413)	-	226
	Estimated End of Year Stored Water (Kern County and MWD System) 2015 (AF)					
Total Held in Kern Water Bank	-	4,188.00				
Total Held in MWD System	5,649.00	-	-	-	-	649
Total Held in Kern County	3,102.00	9,674.50	-	-	-	-
Total Estimated Stored Water	8,751.00	13,862.50	-	-	-	649

Water in Storage has been adjusted to account for losses
MWD (Metropolitan Water District of Southern California)

(1) IRWD's SWP includes 229 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 to IRWD's Jackson Ranch

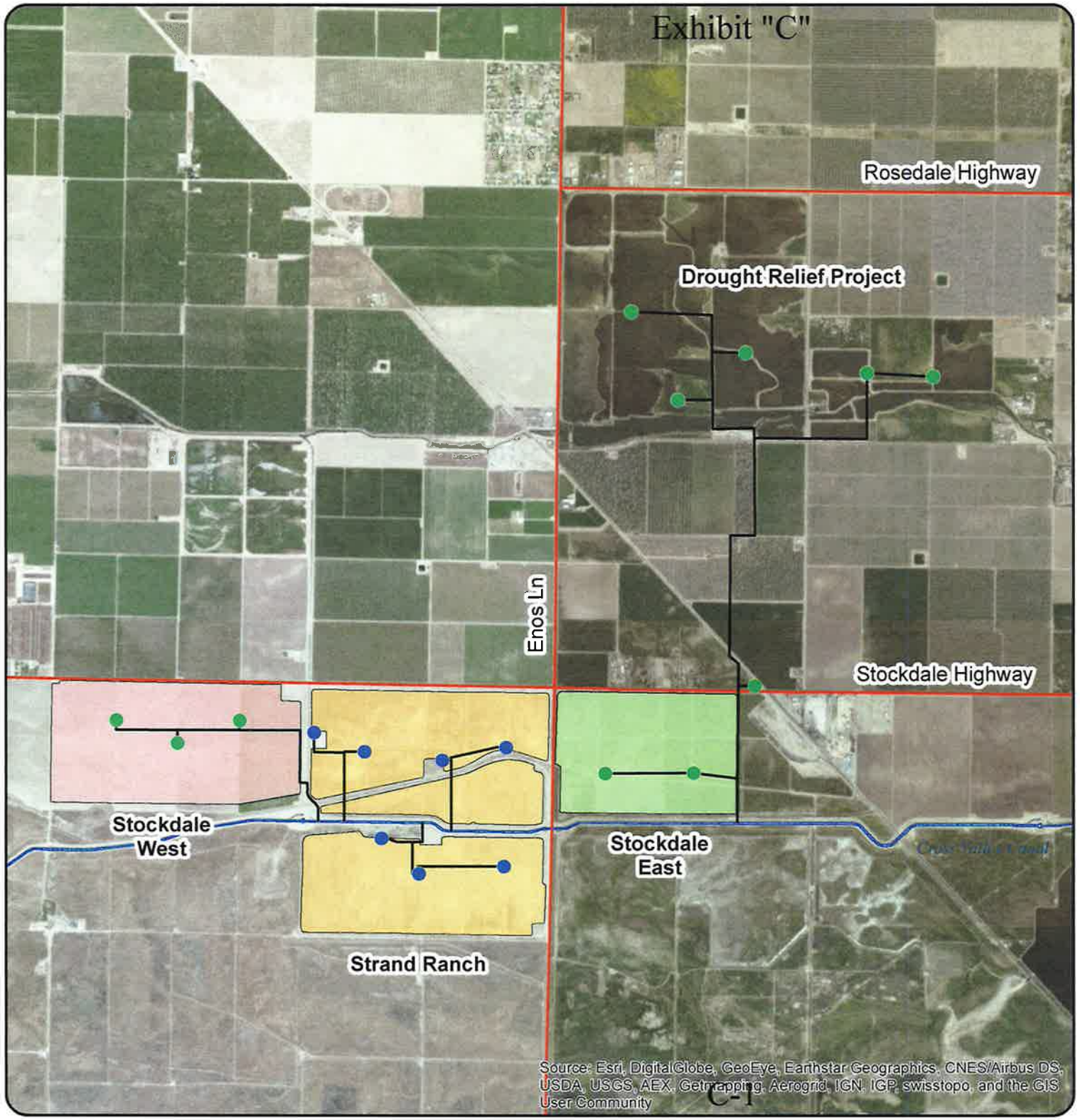
(4) IRWD will reserve a portion of the wheeled water as extraordinary supply and consumptively use the remainder in 2015

(5) MWD will return the exchanged water as SWP to IRWD within 10 years

(6) MWD borrowed IRWD's SWP supplies and will replace it with an equivalent amount of MWD's stored water in Kern County.

(7) MWD storing 2013 SWP allocation and assumes MWD will store 2014 and 2015 SWP allocation amounts in MWD's system and not Strand Ranch

(8) 4% of banked water is placed into a reserve to account for actual or potential losses. This reserve water may be purchased within 3 years following the end of the calendar year in which the water was banked. If the water is not purchased at the end of 3 years, it is made available for recovery.



IRVINE RANCH WATER DISTRICT

Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines

MAP FEATURES

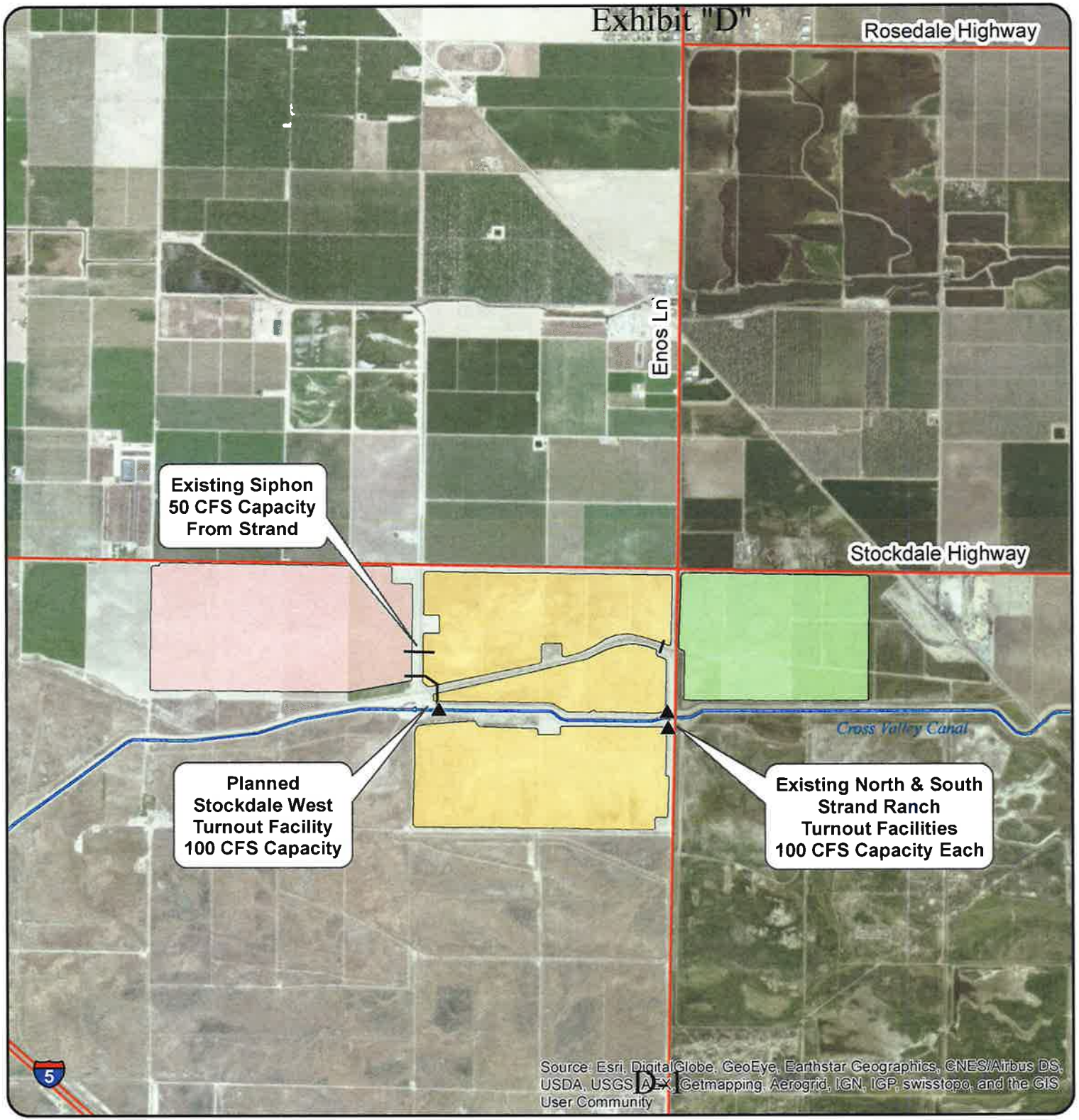
- Existing Extraction Well
- Planned Extraction Well
- Well Discharge Pipelines
- Stockdale East
- Stockdale West
- Strand Ranch

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

N

0 0.25 0.5 1 Miles

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



IRVINE RANCH WATER DISTRICT

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.

N

0 0.25 0.5 1 Miles

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

September 17, 2015
Prepared by: F. Sanchez
Submitted by: P. Weghorst
Approved by: Paul Cook

WATER BANKING COMMITTEE

WATER BANKING PROGRAM UPDATE

SUMMARY:

Staff will provide an update to the Water Banking Committee on recharge basin maintenance activities at the Strand and Stockdale Ranch properties in Kern County. Staff will also update the Committee on potential long-term unbalanced exchange programs and other potential water supply opportunities.

BACKGROUND:

Following is an update on recharge basin maintenance activities at the Strand and Stockdale Ranches and an update on long-term unbalanced exchange and other water supply opportunities.

Recharge Basin Maintenance Activities:

In anticipation of a wet winter, staff has confirmed with Rosedale-Rio Bravo Water Storage District that all maintenance to prepare the recharge basins on the Strand and Stockdale West properties have been or are currently being performed. Rosedale has reported that the grazing program has kept the tumbleweeds low and that it currently has a contractor shredding the weeds on the perimeter of the properties. Rosedale's staff is in the process of inspecting all of the water transfer structures. The inspections include removing any excess material from the base of the structures, checking the integrity of the steel and replacing the flash boards, if necessary, to ensure the facilities are ready to operate. Bait stations were set earlier in the year to help control rodents. Rosedale has checked the levees and all are in good condition. This maintenance work will ensure that the basins are in a condition that will maximize recharge capabilities in the event flood flows are available this winter and spring through Rosedale or high Kern River flows are available through Buena Vista Water Storage District (BVWSD). Staff was informed by BVWSD that it is highly probable that it will divert flows to the Strand Ranch if high-flow Kern River water is available this winter and spring.

Long-Term Unbalanced Exchange Opportunities:

Staff continues to pursue the development of long-term unbalanced exchange partnerships with State Water Project Contractors. Recently, staff has had conversations with previous and existing IRWD partners about establishing long-term programs. Each of the agencies has expressed continued interest in partnering with IRWD, but for the following reasons is not ready to pursue long-term programs this year:

- Antelope Valley-East Kern Water Agency (AVEK) is currently expanding its own water banking program and has indicated it would not pursue a long-term program with IRWD this year, although it remains open to partnering with IRWD in the future. AVEK is a previous IRWD pilot exchange program partner;

- Castaic Lake Water Agency (CLWA) has expressed interest in a long-term partnership with IRWD and in December 2014, staff presented draft terms to CLWA for its consideration. Recent and planned retirements of key CLWA staff are currently delaying CLWA's ability to engage in the negotiation of a water banking and exchange partnership with IRWD. Staff is currently working with CLWA staff on coordinating the design and construction of Rosedale's Drought Relief Project. As a result of this ongoing working relationship, staff will be able to monitor progress that CLWA makes in replacing key personnel and will contact them at the appropriate time to establish interest in negotiating terms for a long-term program; and

- Carpinteria Valley Water District (CVWD) has previously participated in two pilot unbalanced exchange programs with IRWD. Recent discussions with the General Manager at CVWD have resulted in the understanding that CVWD's immediate plans are to optimize use of available storage in Lake Cachuma and San Luis Reservoir. Storage in those facilities is a better option for CVWD in the coming year. CVWD has communicated that it remains interested in developing a long-term agreement with IRWD for use in future years. As a result, staff has resubmitted proposed terms to CVWD for a long-term unbalanced exchange program and will periodically contact CVWD to establish such a program.

Staff will contact other potential exchange partners including the Central Coast Water Authority to solicit interest in participating in unbalanced exchange programs with IRWD. Staff will update the Committee as potential opportunities are identified.

Other Water Supply Opportunities:

Staff continues to investigate water supply opportunities suitable to further enhance the District's water banking programs and long-term water supply reliability. Staff will provide the Committee with a verbal update on potential water supply opportunities for IRWD.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

None.

September 17, 2015
Prepared by: K. Welch
Submitted by: F. Sanchez/P. Weghorst
Approved by: Paul Cook

WATER BANKING COMMITTEE

STOCKDALE INTEGRATED BANKING PROJECT EIR UPDATE

SUMMARY:

Staff will provide an update to the Water Banking Committee on the preparation of responses to comments that were received on the Draft Environmental Impact Report (DEIR) for the Stockdale Integrated Banking Project.

BACKGROUND:

The DEIR for the Stockdale Integrated Banking Project was released for public review on April 28, 2015. The public review period ended on June 12, 2015. At the Committee meeting, staff will present an overview of the responses to comments that are being prepared for incorporation into the Final Environmental Impact Report (FEIR) for the project. Staff expects to present the FEIR together with findings to the Board for its consideration in November 2015.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

The preparation of an EIR is necessary for the implementation of the proposed Stockdale Integrated Banking Project 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. Environmental compliance in accordance with the National Environmental Policy Act is required to receive federal grant funding for the project from the U. S. Bureau of Reclamation under the WaterSMART Program.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

None.

September 17, 2015
Prepared by: R. Bennett/ K. Welch
Submitted by: F. Sanchez/P. Weghorst
Approved by: Paul Cook

WATER BANKING COMMITTEE

ROSEDALE DROUGHT RELIEF PROJECT
PIPELINE LETTER AGREEMENT AND BUDGET INCREASE

SUMMARY:

The Drought Relief Project (DRP) will allow IRWD, Rosedale and Castaic Lake Water Agency (CLWA) to benefit from additional groundwater recovery and conveyance capacities that will supplement existing banking and exchange programs. The Board approved the Cost Sharing Agreement for the project in February 2015, which covers the design and construction of the DRP facilities. In order to expedite the project and reduce costs, Rosedale has prepared a letter agreement that will allow Rosedale to directly contract for the construction of the Superior East and West Pipelines and that will indicate concurrence with the selected contractor's pipeline construction bid proposal. Staff recommends that the Board:

- Authorize the General Manager to execute the letter agreement, subject to non-substantive changes, allowing Rosedale to directly contract for the construction of the Superior East and West Pipelines and indicating concurrence with the pipeline construction bid proposal, and
- Approve an increase to the FY 2015-16 Capital Budget for Project 11812 (6023) in the amount of $507,600 to fund IRWD's share of the construction of Superior East and West Pipelines and for design review and construction oversight services to be provided by Dee Jaspar and Associates (DJA).

BACKGROUND:

The DRP includes the design and construction of 11 wells and associated conveyance facilities within the Rosedale service area that will provide additional groundwater recovery and conveyance capacities to IRWD, CLWA and Rosedale. The DRP facilities are shown on the location map provided as Exhibit "A". The six wells at 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.

On February 9, 2015, the Board approved the Agreement with Rosedale and CLWA to share in the cost of the design and construction of DRP facilities including project administration and securing rights of ways and easements. On May 21, 2015, the Board approved Amendment 1 to the Agreement which provided for the cost-sharing of the equipping the six Superior wells. On July 27, 2015, the Board approved IRWD's share of change order work related to drilling deeper pilot holes and performing additional water quality zone testing.

To facilitate the construction of the Superior East and West Pipelines, Rosedale has requested approval of a letter agreement and costs as described below.

Letter Agreement for Pipeline Construction:

On August 20, 2015, Rosedale provided staff a bid proposal to construct the Superior East and West Pipelines from Nicholas Construction Inc. (NCI) for $822,808. IRWD's share of these costs would be $411,404. The bid provides for the installation of approximately 12,000 feet of PVC pipe and all associated pipe fittings, air vacuums, turnouts, valves, cutoff walls, thrust blocks, traffic control and asphalt work.

Rosedale previously contracted directly with NCI for the construction of its West Basin Pipelines which resulted in quality work and substantially reduced costs. In the interest of expediting completion of the DRP and reducing costs, Rosedale proposes to initiate a direct contract with NCI to construct the Superior East and West Pipelines. NCI's proposal for this work is 10% less than the engineers' estimate. Directly contracting with NCI is a deviation from the bidding process required under the Agreement. To facilitate approvals, Rosedale has prepared a letter agreement through which IRWD and CLWA can concur with Rosedale contracting directly with NCI for the pipeline work and concurring with NCI's cost proposal for the work. This letter agreement is provided as Exhibit "B". Staff recommends that the Board authorize the General Manager to execute the letter agreement and approve a budget increase for IRWD's $411,404 share in the cost of constructing the pipelines.

Design Review and Construction Oversight Assistance:

At staff's request, DJA provided a Scope of Work, budget and schedule to assist in the project management, design review and construction oversight for IRWD's participation in the DRP. The requested services include:

1. Attendance at bi-weekly progress meetings and well construction review meetings expected to occur for approximately 23 months;
2. Participation in well design conference calls for six wells;
3. Review of project plans and specifications for the well equipping contract prepared by Rosedale; and
4. Construction oversight, monitoring and reporting of the well drilling and construction phase which is expected to last approximately five months.

Staff recommends that the Board approve a budget increase to cover the cost of the services to be provided by DJA. A Professional Services Agreement for the work by DJA was executed under the authority of staff in the amount of $49,882.

FISCAL IMPACTS:

An increase to the FY 2015-16 Capital Budget for Project 11812 (6023) in the amount of $507,600 is requested as shown below. These funds will cover IRWD's share of the estimated cost to construct the Superior East and West Pipelines in the amount of $411,404 and the outside design review and construction oversight services to be provided by DJA in the amount of

$49,882. As reported to the Board on February 9, 2015, IRWD's share in the estimated cost of the DRP is expected to be $7.8 million.

Project No.	Current Budget	Addition <Reduction>	Total Budget
11812(6023)	$6,133,600	$507,600	$6,641,200

ENVIRONMENTAL COMPLIANCE:

The construction and operation of the six Superior wells was included in the previously-adopted Rosedale Master Environmental Impact Report (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 and to increase the instantaneous recovery capacity to fulfill the 17,500 acre-feet annual recovery limit on Strand Ranch. The construction and operation of the remaining DRP 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 November 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 the letter agreement, subject to non-substantive changes, for constructing the Superior East and West Pipelines, and approve an increase to the FY 2015-16 Capital Budget for Project 11812 (6023) in the amount of $507,600 to fund IRWD's share of the construction of the Superior East and West Pipelines as well as consulting services to be provided by Dee Jaspar and Associates for design review and construction oversight assistance.

LIST OF EXHIBITS:

Exhibit "A" – Location Map: Drought Relief Project
Exhibit "B" – Letter Agreement: 2014 Drought Relief Project - Constructing the Superior East and West Pipelines

Exhibit "A"

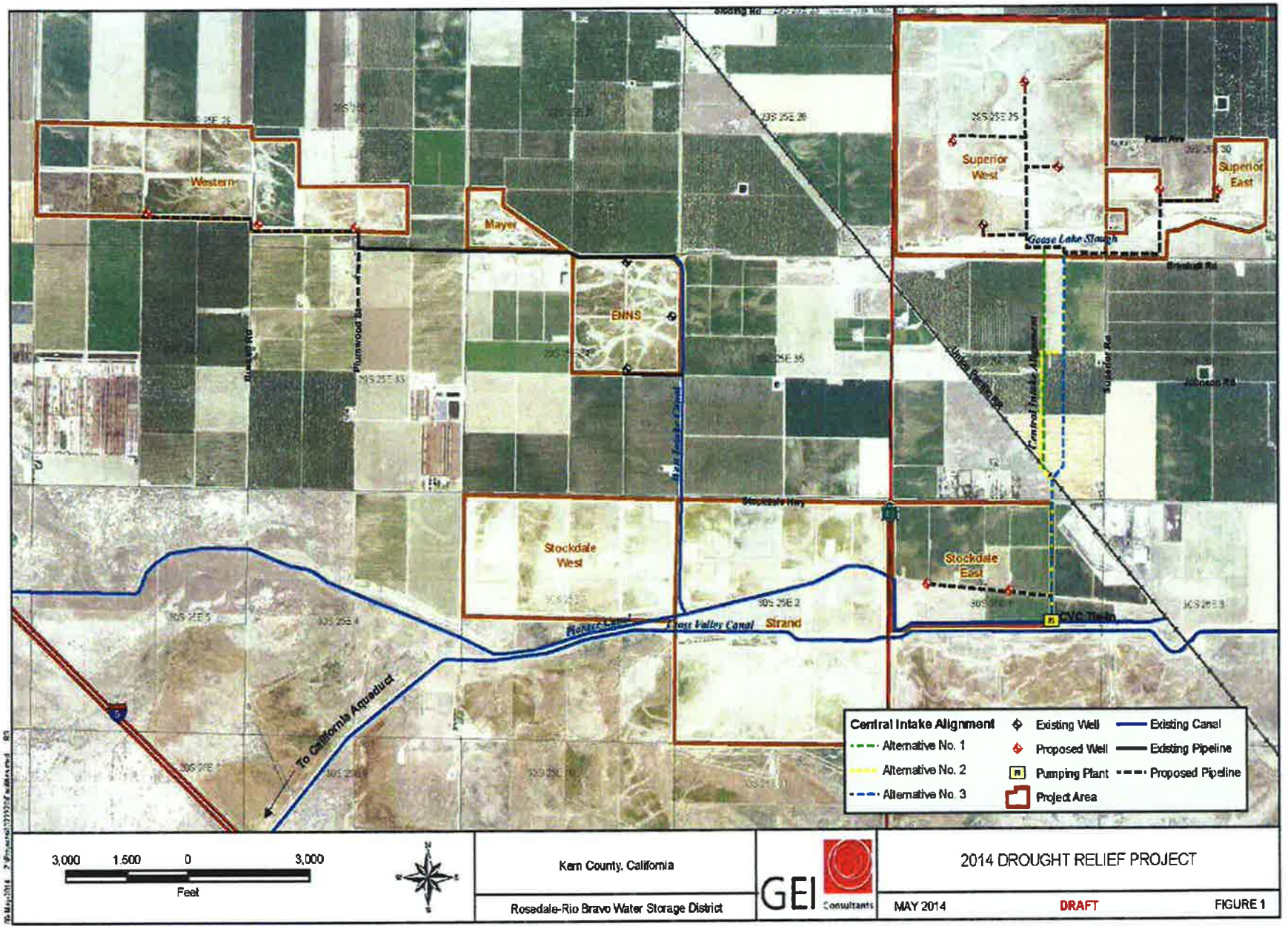

Western
Mayer
ENNS
Superior West
Superior East
Goose Lake Slough
Stockdale West
Stockdale East
Strand
Friant Valley Canal
To California Aqueduct
Central Intake Alignment
Alternative No. 1
Alternative No. 2
Alternative No. 3
Existing Well
Proposed Well
Pumping Plant
Project Area
Existing Canal
Existing Pipeline
Proposed Pipeline
3,000 1,500 0 3,000
Feet
Kern County, California
Rosedale-Rio Bravo Water Storage District
GEI Consultants
2014 DROUGHT RELIEF PROJECT
MAY 2014
DRAFT
FIGURE 1

EXHIBIT "B"

TO: Dan Masnada, Castaic Lake Water Agency (CLWA)
Paul Cook, Irvine Ranch Water District (IRWD)

FROM: Dan Bartel, Rosedale-Rio Bravo Water Storage District (RRBWSD)

DATE: August 17, 2015

RE: 2014 Drought Relief Project – Constructing of Superior East and West Pipelines

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RRBWSD has directly contracted for construction of the West Basin Pipelines, which expedited projection completion and resulted in a savings on engineering and administrative costs. RRBWSD is proposing the same method of contracting and completing the Superior Pipelines. This would represent a deviation from the project bidding and construction process described in section 2.d.i. of the Cost Sharing Agreement. This memo documents the Contractor provided pricing of $822,808, which is 10% less than the engineer's estimate. If you concur with the proposal and approve of the deviation from section 2.d.i. for this portion of the project, please sign below and return a signed copy of this memo. Plans, draft contract documents, and the Contractor's bid proposal are attached hereto.

CLWA _____ Date: _____
(Signature)

IRWD _____ Date: _____
(Signature)

NICHOLAS CONSTRUCTION, INC.
251 CARSEN WAY
SHAFTER, CA 93263
CA#843461
DIR#10000020047

BID#150720

SUPERIOR WELLFIELD- EAST AND WEST

PIP100 PIPE AND PIP125 FITTINGS	UNIT	QUAN.	MAT. U. PRICE	TOTAL	INST. U. PRICE	TOTAL	GRAND TOTAL
MOB/DEMOB	LS				$7,500.00	$7,500	$7,500.00
DEVELOP WATER SUPPLY	LS				$12,000.00	$12,000.00	$12,000.00
PIPE AND FITTINGS							
30 PVC PIPE 100# PIP GASKET	FT	1540	$51.74	$79,679.60	$16.00	$24,640.00	$104,319.60
27 PVC PIPE 100# PIP GASKET	FT	4740	$39.21	$185,855.40	$16.00	$75,840.00	$261,695.40
21 PVC PIPE 100# PIP GASKET	FT	2260	$24.77	$55,980.20	$16.00	$36,160.00	$92,140.20
15 PVC PIPE 100# PIP GASKET	FT	3240	$11.46	$37,130.40	$16.00	$51,840.00	$88,970.40
14 PVC PIPE 100# PIP GASKET	FT	60	$18.42	$1,105.20	$16.00	$960.00	$2,065.20
METALLIC LOCATER TAPE	FT	12000					
21 PVC 90 ELBOW 125# PIP	EA	1	$557.49	$557.49	$725.00	$725.00	$1,282.49
21 PVC 45 ELBOW 125# PIP (GAS)	EA	4	$296.39	$1,185.56	$725.00	$2,900.00	$4,085.56
30 PVC 90 ELBOW 125# PIP	EA	2	$3,986.36	$7,972.72	$725.00	$1,450.00	$9,422.72
30 PVC 45 ELBOW 125# PIP (GAS)	EA	8	$2,557.87	$20,462.96	$725.00	$5,800.00	$26,262.96
27 PVC 90 ELBOW 125# PIP	EA	1	$1,169.64	$1,169.64	$725.00	$725.00	$1,894.64
15 PVC 45 ELBOW 125# PIP (GAS)	EA	4	$108.87	$435.48	$225.00	$900.00	$1,335.48
15 11.25 PVC ELBOW 125# PIP	EA	1	$93.29	$93.29	$225.00	$225.00	$318.29
30x27 PVC TEE 125# PIP	EA	1	$1,748.19	$1,748.19	$725.00	$725.00	$2,473.19
27x21 PVC TEE	EA	1	$950.83	$950.83	$725.00	$725.00	$1,675.83
27x15 PVC TEE 125# PIP	EA	2	$788.70	$1,577.40	$725.00	$1,450.00	$3,027.40
21x15 PVC TEE 125# PIP	EA	2	$514.72	$1,029.44	$725.00	$1,450.00	$2,479.44
15x15 PVC TEE 125# PIP	EA	1	$277.05	$277.05	$725.00	$725.00	$1,002.05
30x15 PVC REDUCER 125# PIP	EA	1	$1,517.00	$1,517.00	$225.00	$225.00	$1,742.00
27X21 PVC REDUCER 125# PIP	EA	1	$632.60	$632.60	$225.00	$225.00	$857.60
27x15 PVC REDUCER 125# PIP	EA	1	$884.31	$884.31	$225.00	$225.00	$1,109.31
15x12 PVC REDUCER 125# PIP	EA	5	$73.53	$367.65	$125.00	$625.00	$992.65
15x14 GHEEN FLGxWEDGE ADP	EA	3	$234.57	$703.71	$125.00	$375.00	$1,078.71
21 PVC CAP 125# PIP	EA	2	$213.41	$426.82	$525.00	$1,050.00	$1,476.82
AIR VACS	EA	8			$3,200.00	$25,600.00	$25,600.00
ALL AIR VACS HAVE 12" STEEL TEES							
30X12 WEDGE X FLG TEE W/SST N&B EPOXY	EA	2	$3,895.89	$7,791.78			$7,791.78
27X12 WEDGE X FLG TEE W/SST N&B EPOXY	EA	2	$2,896.34	$5,792.68			$5,792.68
21X12 WEDGE X FLG TEE W/SST N&B EPOXY	EA	2	$1,756.81	$3,513.62			$3,513.62
15X12 WEDGE X FLG TEE W/SST N&B EPOXY	EA	2	$686.73	$1,373.46			$1,373.46
4" CR-101 AIR/VAC RELIEF VALVE	EA	8	$260.79	$2,086.32			$2,086.32
12 BLD FLG W/4"TAP 150#	EA	8	$210.15	$1,681.20			$1,681.20
12 NBG SET W/SST	EA	8	$146.37	$1,170.96			$1,170.96
4 GALV CLOSE NPL	EA	8	$9.08	$72.64			$72.64
4 PVC SCH80 90 THREAD X SOCKET	EA	16	$76.00	$1,216.00			$1,216.00
4 PVC SCH80 90 ELBOW	EA	8	$27.00	$216.00			$216.00
4 PVC SCH80 PIPE	LF	160	$4.19	$670.40			$670.40
4 GALV NIPPLE 72" LONG THREADED	EA	8	$86.35	$690.80			$690.80
4" X 100' 10MIL PIPE WRAP TAPE	EA	40	$5.65	$226.00			$226.00
TURNOUTS	EA	3			$4,200.00	$12,600.00	$12,600.00
14 EBAA 2100 FLG X COUPLER	EA	3	$1,156.88	$3,470.64			$3,470.64
14 ELBOW W/60" RISER FLGxPE CL150 EPOXY	EA	3	$983.59	$2,950.77			$2,950.77
14X12 LONG SPOOL FLG CL150 EPOXY	EA	3	$267.54	$802.62			$802.62
14X6 LONG SPOOL FLGxVIC CL150 EPOXY	EA	3	$2,351.23	$7,053.69			$7,053.69
14" VF-30 W/S METER CFS X AF	EA	3	$4,410.94	$13,232.82			$13,232.82
14" 8500 GRAYLINE VALVE W/SST N&B'S	EA	3	$781.21	$2,343.63			$2,343.63
48" X 24" CONCRETE RISER	EA	3	$163.18	$489.54			$489.54
VALVES	EA	6			$725.00		$4,350.00
NO 27" VALVE AVAILABLE, WENT 30"							
30 GRAYLINE VALVE W/SST N&B'S	EA	2	$9,393.02	$18,786.04			$18,786.04
30x27 GRAYLINE VALVE W/SST N&B'S	EA	0					
27 FLGxWEDGE ADP W/SST N&B'S	EA	0					
30 FLGxWEDGE ADP w/SST N&B's	EA	3	$3,467.68	$10,403.04			$10,403.04
15 GRAYLINE VALVE W/SST N&B'S	EA	4	$1,167.04	$4,668.16			$4,668.16
14 FLGxWEDGE ADP w/SST N&B's	EA	8	$487.08	$3,896.64			$3,896.64
4X72 LONG SCH40 STEEL PIPE	EA	12	$56.29	$675.48			$675.48
ALL VALVES TO HAVE 72" RISERS							
MISCELLANEOUS							
CONCRETE CUTOFF WALLS	EA	13			$2,500.00	$32,500.00	$32,500.00

READYMIX	CY	103	$125.00	$12,875.00			$12,875.00
THRUST BLOCKS	EA	17					
READYMIX	CY	34	$125.00	$4,250.00			
SUPERIOR ROAD CROSSING							
TRAFFIC CONTROL	LS	1			$2,500.00	$2,500.00	$2,500.00
ASPHALT PATCH BACK	SF	240	25.00			$6,000.00	$6,000.00
TOTAL BID				$514,142.87		$308,665.00	**$822,807.87**

September 17, 2015
Prepared by: K. Welch
Submitted by: F. Sanchez / P. Weghorst
Approved by: Paul Cook

WATER BANKING COMMITTEE

TERMS FOR LONG-TERM EXCHANGE PROGRAM
WITH DUDLEY RIDGE WATER DISTRICT

SUMMARY:

Staff will present to the Committee conceptual terms for a mutually beneficial long-term exchange program with Dudley Ridge Water District (DRWD). This program would allow IRWD to exchange on a one-for-one its previously stored non-State Water Project (SWP) supplies for DRWD SWP Table A supplies until the year 2035. Staff recommends the Committee provide input on the proposed program terms and authorize staff to work with DRWD, Kern County Water Agency (KCWA), and Metropolitan Water District of Southern California (Metropolitan) to refine the terms to be presented to the Committee for further consideration.

BACKGROUND:

In May 2015, staff reviewed with the Committee an overview of a potential short-term exchange program involving IRWD, DRWD, KCWA and Metropolitan. The exchange concept would allow IRWD to provide drought assistance to DRWD landowners through a one-for-one exchange of IRWD's stored high-flow Kern River water for SWP Table A water from DRWD. IRWD would benefit from the exchange by making use of its high-flow Kern River supplies in Kern County and in DRWD while providing increased dry year water supply reliability to IRWD's service area. The exchange water would be available to IRWD through the existing Coordinated Operating, Water Storage, Exchange and Delivery Agreement (Coordinated Agreement) with Metropolitan.

Terms for the proposed short-term exchange were developed based on input from the Committee and submitted to DRWD for review in June 2015. Staff and DRWD held discussions with KCWA and Metropolitan to obtain concurrence with the program. KCWA expressed its support for the exchange and stated that it would allow 20 percent of the high-flow Kern River water that would have flowed out of the county (if it had not been diverted into the Strand Ranch recharge basins) to be transferred outside of Kern County for use inside the boundaries of DRWD. The remainder of the water could be used by DRWD landowners with irrigation demands in Kern County. Metropolitan staff also expressed its support for the short-term program. Staff returned to the Committee in August 2015 with revised terms for the exchange based on the feedback received from KCWA.

Request for Long-Term Program:

At the end of August, staff provided DRWD with the further revised draft terms based on input from the Committee. The DRWD Board expressed interest in the proposal, but with the farming season coming to an end, the Board expressed concern that landowners would not have a high demand for the water during the proposed 2015-16 timeframe. As an alternative, DRWD

requested that IRWD work to develop terms for a mutually beneficial long-term exchange program that would provide flexibility with greater amounts of water over the next 20 years. When developing terms for a long-term program, DRWD requested that IRWD give DRWD greater than three years to complete returns of water. They also requested that IRWD consider a balanced approach to costs that DRWD would be required to pay while also considering the significant costs of DRWD's SWP Table water.

Revised Terms for a Long-Term Program:

Based on the described discussions with DRWD, staff has prepared draft terms for a long-term exchange program between IRWD and DRWD that would provide for use of water consistent with recommendations from KCWA. The terms for the program will be presented at the Committee meeting. In general, the program would extend to the end of the current SWP contract, which ends in 2035, and would include a limit on the quantity of water that could be exchanged over a 20-year period. The proposed program terms would equitably allocate the costs and benefits of the program.

Required Agreements and Approvals:

A long-term exchange program would require approval by the Department of Water Resources (DWR), Metropolitan, and KCWA. Similar to IRWD's existing Unbalanced Exchange Program with DRWD, an Exchange and Point of Delivery Agreement among DWR, DRWD, Metropolitan and KCWA would be developed and executed that would allow for a multi-year exchange of non-SWP water for SWP water. To initiate the process for developing this agreement, DRWD would prepare a letter to the DWR specifying program terms which would require the signed concurrence of IRWD and the consent of Metropolitan. Metropolitan's consent is required for IRWD to secure SWP water as specified in the Coordinated Agreement.

Staff recommends the Committee provide input on the proposed terms for a long-term exchange program with DRWD and authorize staff to work with DRWD, Metropolitan and KCWA to refine the terms for further consideration by the Committee.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (EIR) for the Strand Ranch Integrated Water Banking Project has been prepared, certified and the project approved, and a Final EIR for the Buena Vista Water Management Program has been prepared and certified. An Initial Study/Negative Declaration for the IRWD Jackson Ranch Water Allocation Project was prepared and circulated for public review. A Notice of Determination for the final Negative Declaration for the Project was filed by IRWD on January 14, 2010, and by DRWD on January 20, 2010. All projects were approved in compliance with the California Environmental Quality Act 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 Committee provide input on proposed terms for a long-term exchange program with Dudley Ridge Water District and authorize staff to work with Dudley Ridge Water District, Kern County Water Agency and Metropolitan Water District of Southern California to refine the terms to be presented to the Committee for further consideration.

LIST OF EXHIBITS:

None.