AGENDA IRVINE RANCH WATER DISTRICT SUPPLY RELIABILITY PROGRAMS COMMITTEE THURSDAY, FEBRUARY 18, 2021

Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act. Members of the public may not attend this meeting in person.

Participation by members of the Committee will be from remote locations. Public access and participation will only be available telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online via Webex using the link and information below:

Via Web: https://irwd.webex.com/irwd/j.php?MTID=ma450dc5b2e1da5552f4eb0df2df8c2be

Meeting Number (Access Code): 146 995 0796

Meeting Password: j3A3hrJ7HdZ

After joining the meeting, in order to ensure all persons can participate and observe the meeting, please select the "Call in" option and use a telephone to access the audio for the meeting by using the call-in information and attendee identification number provided.

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the Webex lobby when the Committee enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Committee once the closed session has concluded. Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

·	ommittee Chair: Dor ember: Peer Swan	uglas Reinhart		
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Ro Ke Ra	aul Cook ob Jacobson ellie Welch ay Bennett atalie Palacio		Paul Weghorst Fiona Sanchez Christine Compton Jo Ann Corey Marina Lindsay	

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 12:00 p.m. on Thursday, February 18, 2021.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.

COMMUNICATIONS

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

INFORMATION

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

Recommendation: Receive and file.

6. <u>STATE WATER PROJECT CONTRACT AMENDMENT FOR ENHANCED</u> <u>WATER MANAGEMENT – WELCH / SANCHEZ / WEGHORST</u>

Recommendation: Receive and file.

OTHER BUSINESS

- 7. Directors' Comments
- 8. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

February 18, 2021

Prepared by: N. Palacio / K. Welch Submitted by: F. Sanchez / P. Weghorst

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Approved by: Paul A. Cook

SUPPLY RELIABILITY PROGRAMS COMMITTEE

WATER BANKING PROJECT FACILITIES, CAPACITIES, OPERATIONS AND PROGRAMS

SUMMARY:

Staff has prepared information related to IRWD's water banking facilities, capacities, operations and exchange programs. The information is regularly updated to reflect changes in the status of IRWD's projects, programs and operations. At the Committee meeting, staff will review this information and provide an update on efforts to secure additional water for recharge at IRWD's water banking projects.

BACKGROUND:

To facilitate the discussion with the Committee, staff has prepared reference materials in tabular, map and schematic formats to describe IRWD's water banking facilities, capacities, operations, storage and exchange programs. The reference materials are updated regularly to reflect changes in the status of the projects, programs and operations. The following is an overview of the reference materials.

Capacity and Operations Tables:

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

- Unpurchased migration (reserve) water from 2017 credited back to IRWD and its water banking partners' accounts;
- Finalized Metropolitan Water District water deliveries to IRWD's lessee on the Jackson Ranch in 2020;
- The initial State Water Project (SWP) allocation of 10% for 2021;
- Recovery of 2,681 acre-feet (AF) of water for Buena Vista Water Storage District in 2021; and
- Adjustment of totals under the "Beginning Water in Storage 2020 (AF)" section to reconcile losses consistent with Rosedale-Rio Bravo Water Storage District accounting.

At the Committee meeting, staff will further describe the changes made to Exhibits "B" and "C".

Supply Reliability Programs Committee: Water Banking Project Facilities, Capacities, **Operations and Programs** February 18, 2021 Page 2

Exhibit "D" graphically depicts how storage of SWP and non-SWP water has changed in the Strand and Stockdale Integrated Banking Projects through time. The table provided as Exhibit "E" shows how capacities in the water banking projects have been dedicated to IRWD's existing and proposed exchange programs.

Project Maps:

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

Program Agreement Diagrams:

Schematic diagrams have been prepared that depict IRWD's water banking and exchange programs with Rosedale, Buena Vista, Dudley Ridge Water District and Metropolitan. These diagrams are provided as Exhibits "I", "J", "K", "L", "M" and "N", as described in the List of Exhibits.

Other Recharge Opportunities:

IRWD has been pursuing additional opportunities to secure water for recharge. At the Committee meeting, staff will provide an update on efforts to secure water from Antelope Valley-East Kern Water Agency, Santa Clara Valley Water District, and other sources.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" - Recharge, Storage and Recovery Capacities of Current and Anticipated Water **Banking Projects**

Exhibit "B" – Water Banking Storage, Recharge and Recovery Operations before Losses Exhibit "C" – Water Banking Storage, Recharge and Recovery Operations after Losses

Exhibit "D" – Historic Water Storage in Strand and Stockdale Projects

Supply Reliability Programs Committee: Water Banking Project Facilities, Capacities, Operations and Programs
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- Exhibit "E" Dedicated Capacities of Current Water Banking Projects
- Exhibit "F" Map of Water Banking Project Wells and Pipelines
- Exhibit "G" Map of Water Banking Recharge Basins and Cross Valley Canal Turnout Facilities
- Exhibit "H" Map of Water Banking Recharge Rates
- Exhibit "I" Diagram of IRWD-Rosedale Water Banking and Exchange Program Agreements
- Exhibit "J" Diagram of Long-Term Water Exchange Program with BVWSD and Diagram of One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities with BVWSD
- Exhibit "K" Diagram of Unbalanced Exchange Program Diagram with Dudley Ridge Water District
- Exhibit "L" Diagram of Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan Water District of Southern California
- Exhibit "M" Diagram of Template Wheeling Agreement with Metropolitan Water District of Southern California
- Exhibit "N" Diagram of Dudley Ridge Water District One-For-One Exchange

Exhibit "A"

TABLE 1 Current and Anticipated Water Banking Project Recharge, Storage and Recovery Capacities February 18, 2021

	OWNERSHIP AND WELL INFO		O ALLOCATED CAPACITY (AF)			1 st PRIORITY RECOVERY CONDITIONS (CFS)		2 nd PRIORITY RECOVERY CONDITIONS (CFS)				
WATER BANKING PROJECT	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 (APR. 2019 CONDITIONS) ²	RECOVERY CAPACITY AS PLANNED	RECOVERY CAPACITY CURRENT CONDITIONS
Strand Ranch	Yes	7	-	50,000	17,500	-	17,500	-	40.0	40.0	-	-
Stockdale West	Yes	3	-	26,000	27,100	-	11,250	-	15.0	15.0	-	-
Stockdale East	No	-	2	-	-	19,000	-	7,500	-	-	10.0	-
IRWD Acquired Storage Account ³	No	-	-	50,000	-	-	-	-	ı	-	-	-
Drought Relief Project Wells ³	No	3	-	-	-	-	-	-	15.0	15.0	-	-
Kern Water Bank Storage Account ⁵	No	-	-	9,495	3,200	-	6,330	-	-	-	-	-
TOTALS		13	2	126,000	44,600	19,000	28,750	7,500	70.0	70.0	10.0	0.0
Partner Capa	Partner Capacities ⁴ 38,000 22,300 9,500 10,850 0						0	35.5	25.0	-	-	
	IRWD Capacities				22,300	9,500	17,900	7,500	34.5	25.0	-	-
IR	WD's reco	very <i>during</i>	6 month part	ner recovery	period (AF)				12,420	9,000	-	-
II	RWD's reco	overy <i>after</i> (6 month parti	ner recovery p	period (AF)				5,480	6,733	-	-
TOTALS (AF) 17,900 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) 8.6							-	-			
	Strand Ranch monthy recharge amount assuming 0.3 ft/day average recharge rate (AF) Stockdale West monthy recharge amount assuming 0.3 ft/day average recharge rate (AF)						*	518 331				

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

² SUP-1, SWEX-2, and SREX-6 are currently down.

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.

Exhibit "B"

TABLE 2

IRWD's Water Banking Storage, Recharge and Recovery Operations - BEFORE LOSSES

February 18, 2021

	WATER BANKING ENTITY					
TD A NIC A CTIONIC	TRANSACTIONS IRWD		BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER	TOTAL BY WATER TYPE
TRANSACTIONS	IKVV	ט	BUENA VISTA (BVWSD) CENTRAL COAST (CCWA)		DISTRICT (DRWD) ³	AND STORAGE LOCATION
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP	
			BEGINNING WATER IN	STORAGE 2020 (AF)		•
Total Kern Water Bank (estimated)	-	4,683	-	-	-	4,683
Total MWD System ⁴	8,039	-	-	-	308	8,347
Total Kern County	4,929	24,596	11,177	636	3,491	44,828
TOTAL STORED WATER (1/1/2020)	12,968	29,279	11,177	636	3,799	57,858
			(RECOVERY) AND REC	CHARGE IN 2020 (AF)		
MWD Water to Jackson Ranch ⁵	-	-	-	-	(96)	(96)
Kern Water Bank Deliveries ⁶						-
2020 SWP Allocation (20%) ³	175	-		-	175	350
Kern River Water	-		(7,500)	-	-	(7,500)
SWP Table A					-	-
2017 Reserve Water	106	258	258	11	95	728
TOTAL 2020 TRANSACTIONS	281	258	(7,242)	11	174	(6,518)
Total Kern Water Bank	-	4,683	-	-	-	4,683
Total MWD System	8,039	-	-	-	212	8,251
Total Kern County	5,210	24,855	3,935	647	3,761	38,406
TOTAL STORED WATER (1/1/2021)	13,249	29,538	3,935	647	3,973	51,340
			(RECOVERY) AND REC	HARGE IN 2021 (AF)		
MWD Water to Jackson Ranch (estimated)	-	-	-	-	-	-
Kern Water Bank Deliveries	-	-	-	-	-	-
2021 SWP Allocation (10 %) ³	87		-	-	87	175
Kern River Water (estimated)	-	-	(2,681)	-	-	(2,681)
TOTAL ESTIMATED 2021 TRANSACTIONS	87	-	(2,681)	-	87	(2,506)
			ESTIMATED WATER IN	I STORAGE 2021 (AF)		
Total Kern Water Bank	-	4,683	-	-	-	4,683
Total MWD System	8,039	-	-	-	212	8,251
Total Kern County	5,297	24,855	1,254	647	3,848	35,900
TOTAL ESTIMATED STORED WATER TO DATE	13,336	29,538	1,254	647	4,060	48,834

NOTES:

- -MWD = Metropolitan Water District of Southern California.
- ¹ IRWD's SWP includes 437 295 AF from CVWD that stays in Kern County.
- ² IRWD's Non-SWP total includes 3,158 2,842 AF, net of losses, 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 through 2019 SWP allocation water is stored in Kern County. It is assumed that IRWD's 2021 SWP allocation will be stored in Kern County.
- ⁴ Beginning balance of water stored in MWD system includes: 4,494 4,000 AF from 2014 Exchange, 3,206 2,853 AF of 2014 borrowed SWP, 649 1,186 AF of IRWD's 2013-2016 SWP allocations through DRWD.
- ⁵Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.
- ⁶A portion of IRWD's 2019 SWP deliveries from DRWD include 97 AF of Article 21 water, which was delivered to the Kern Water Bank.

Exhibit "C"

TABLE 3

IRWD's Water Banking Storage, Recharge and Recovery Operations - AFTER LOSSES

February 18, 2021

	WATER BANKING ENTITY						
TRANSACTIONS	IRW	j	BUENA VISTA (BVWSD)	CENTRAL COAST (CCWA)	DUDLEY RIDGE WATER	TOTAL BY WATER TYPE	
TRANSACTIONS	III.WB		DUEINA VISTA (DV WSD)	CENTRAL COAST (CCWA)	DISTRICT (DRWD) ³	AND STORAGE LOCATION	
	SWP ¹	NON-SWP ²	NON-SWP	SWP	SWP		
	•		BEGINNING WATER IN	I STORAGE 2020 (AF)			
Total Kern Water Bank	-	4,215	-	-	-	4,215	
Total MWD System ⁴	8,039	-	-	-	308	8,347	
Total Kern County	3,926	20,685	9,923	545	2,992	38,072	
TOTAL STORED WATER (1/1/2020)	11,965	24,900	9,923	545	3,300	50,634	
			(RECOVERY) AND REC	HARGE IN 2020 (AF)			
MWD Water to Jackson Ranch ⁵	-	-	-	-	(96)	(96)	
Kern Water Bank Deliveries ⁷			-	-	-	-	
2020 SWP Allocation (20%) ³	150	-	-	-	150	300	
Kern River Water	-	-	(7,500)	-	-	(7,500)	
SWP Table A	1		-	-	-	-	
2017 Reserve Water	101	245	258	10	90	705	
TOTAL 2020 TRANSACTIONS	251	245	(7,242)	10	144	(6,591)	
Total Kern Water Bank		4,215	-	-	-	4,215	
Total MWD System	8,039	-	-	-	212	8,251	
Total Kern County	4,177	20,931	2,681	556	3,233	31,577	
TOTAL STORED WATER (1/1/2021)	12,216	25,145	2,681	556	3,445	44,043	
			(RECOVERY) AND REC	HARGE IN 2021 (AF)			
MWD Water to Jackson Ranch (estimated)		-	-	-	-	-	
Kern Water Bank Deliveries	-	-	-	-	-	-	
2021 SWP Allocation (10%) ³	75	_	_	-	75	150	
Kern River Water (estimated)	-	-	(2,681)	-	-	(2,681)	
TOTAL ESTIMATED 2021 TRANSACTIONS ⁶	75	-	(2,681)	-	75	(2,531)	
	ESTIMATED WATER IN STORAGE 2021 (AF)						
Total Kern Water Bank	-	4,215	-	-	-	4,215	
Total MWD System	8,039	-	-	-	212	8,251	
Total Kern County	4,252	20,931	0	556	3,308	29,046	
TOTAL ESTIMATED STORED WATER TO DATE	12,291	25,145	0	556	3,520	41,512	

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 389 251 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 through 2019 2020 SWP allocation water is stored in Kern County. It is assumed that IRWD's 2021 SWP allocation will be stored in Kern County.

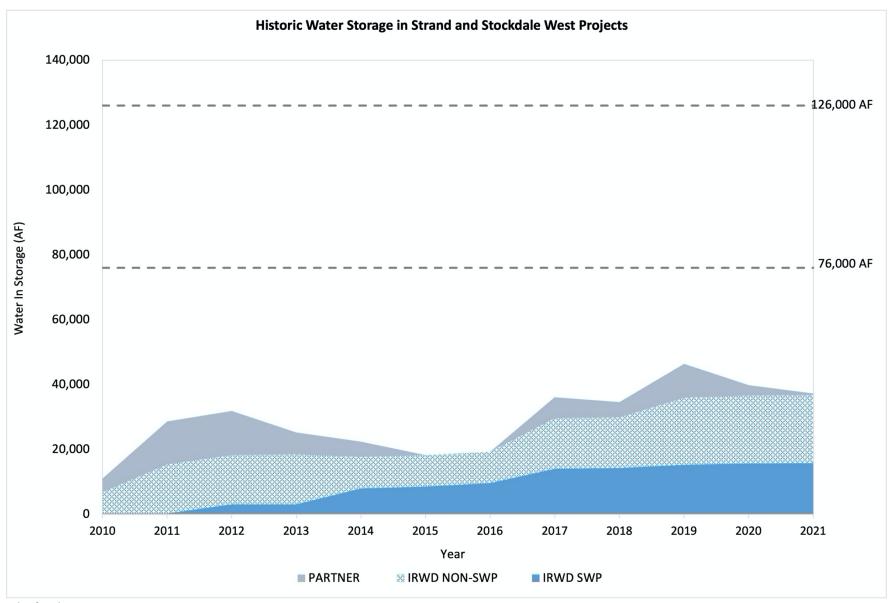
⁴ Beginning balance of water stored in MWD system includes (net of CVC losses): 3,920 4,000 AF of 2014 Exchange, 2,824 2,853 AF of 2014 borrowed SWP, 649 1,186 AF of IRWD's 2013-2016 SWP allocations through DRWD.

⁵Water returned to DRWD by MWD for use on IRWD's Jackson Ranch.

⁶2020 2021 transactions may be adjusted for conveyance losses in CVC.

⁷A portion of IRWD's 2019 SWP deliveries from DRWD include 97 AF of Article 21 water, which was delivered to the Kern Water Bank.

Exhibit "D"



^{*}After losses

Exhibit "E"

TABLE 1
IRWD Dedicated Water Banking Capacities for Existing and Proposed Exchange Programs February 18, 2021

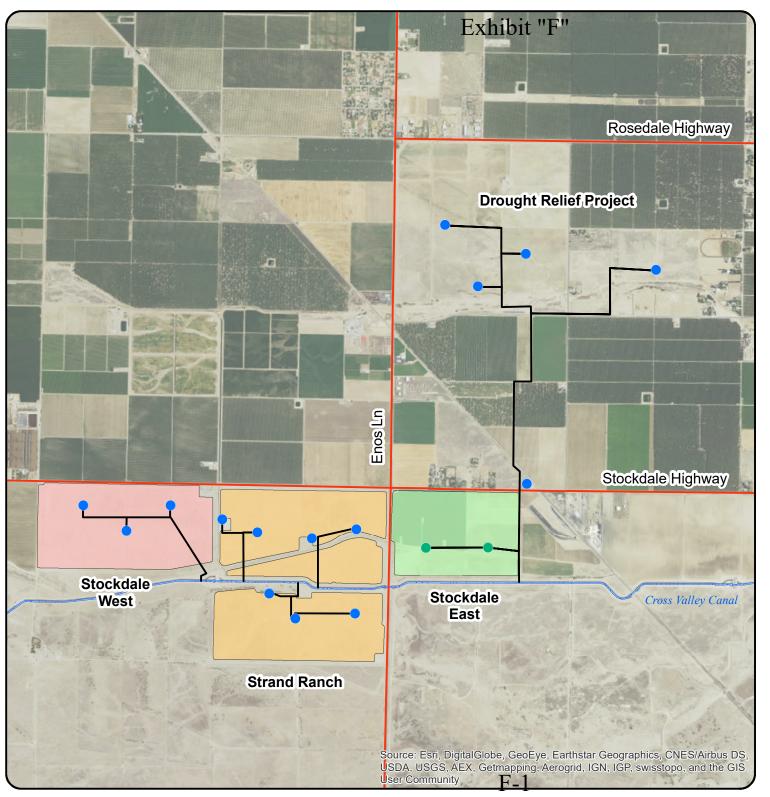
Program	Dedicated Storage Capacity Strand Ranch (AF)	Dedicated Storage Capacity Stockdale West (AF)	Dedicated Storage Capacity Leased Storage Account (AF)	Kern Water Bank Storage Capacity (AF)
Total Capacity	50,000	26,000	50,000	9,495
BVWSD	40,000	-	-	-
DRWD	10,000	-	-	-
AVEK	-	20,000	-	-
CVWD	-	5,000	-	-
Total Dedicated	50,000	25,000	=	-
Total Remaining	-	1,000	50,000	9,495

RECHARGE CAPACITY

Program	Dedicated Recharge Capacity Strand Ranch (AF)	Dedicated Recharge Capacity Stockdale West (AF)	Dedicated Recharge Capacity Leased Storage Account (AF)	Kern Water Bank Recharge Capacity (AF)
Total Capacity	17,500	27,100	-	3,200
D) #4/CD	47.500			
BVWSD	17,500	-	-	-
DRWD	-	-	-	-
AVEK	-	20,000	-	-
CVWD	-	5,000	-	-
Total Dedicated	17,500	25,000	-	-
Total Remaining	-	2,100	-	3,200

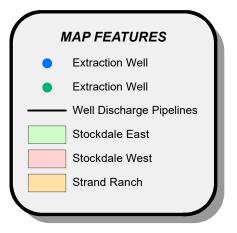
RECOVERY CAPACITY

Program Partner	Dedicated Recovery Capacity Strand Ranch (AF)	Dedicated Recovery Capacity Stockdale West (AF)	Dedicated Recovery Capacity Leased Storage Account (AF)	Kern Water Bank Recovery Capacity (AF)
Total Capacity	17,500	11,250	-	6,330
BVWSD	6,667	-	-	-
DRWD	-	-	ī	ı
AVEK	-	3,333	ī	•
CVWD	-	833	=	-
IRWD	10,833	7,084	-	6,330
Total Dedicated	17,500	11,250	-	6,330
Total Remaining	-	-	=	-

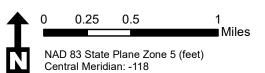


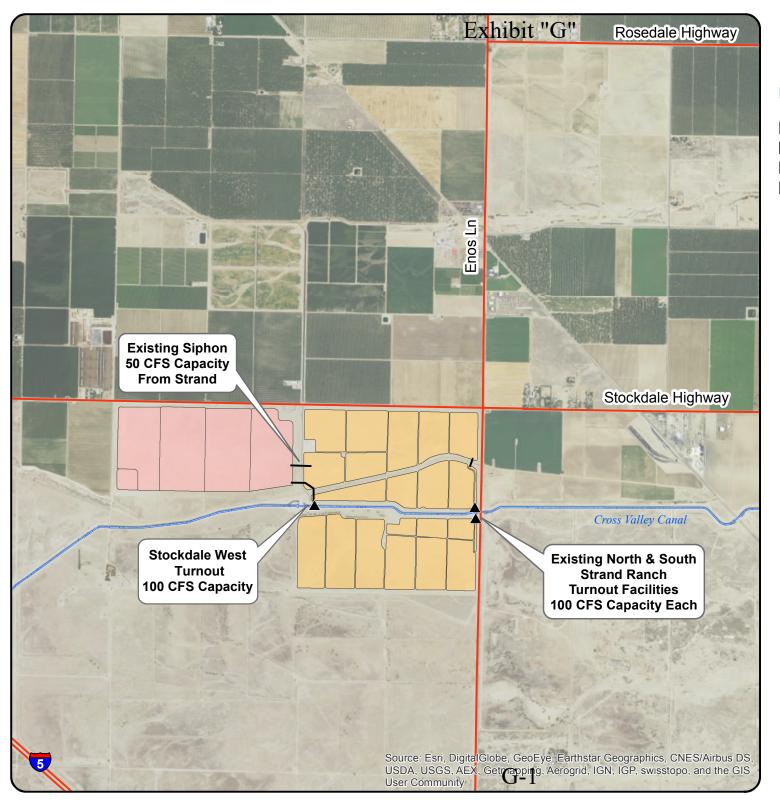


Location Map: IRWD Water Banking Projects Wells and Turnin Pipelines



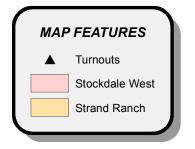
This figure shows the location of IRWD's water banking project sites and extraction wells.



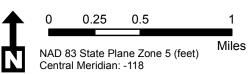


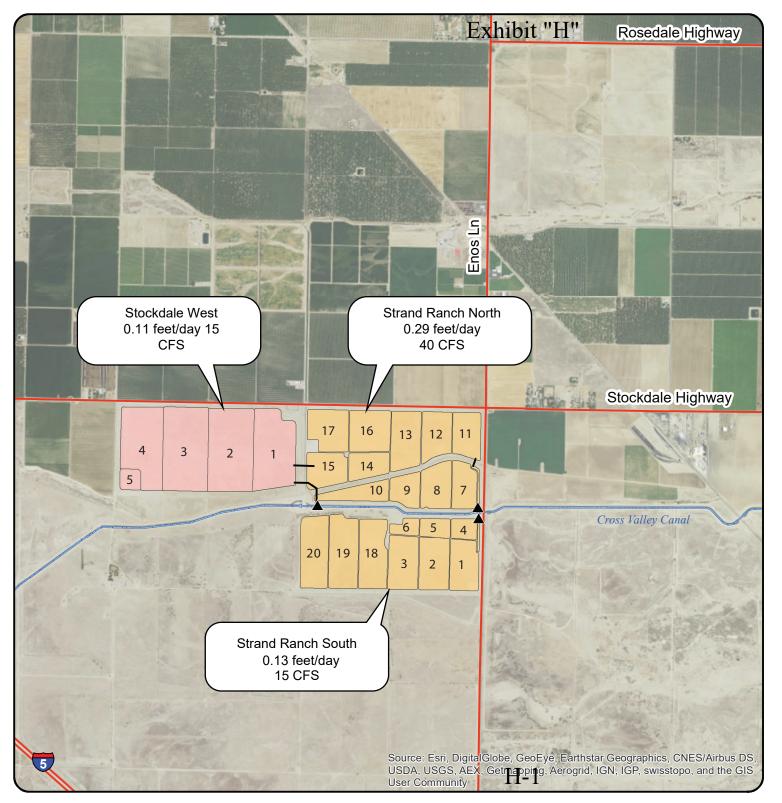


Location Map: IRWD Water Banking Projects Recharge Basins &Turnout Facilities



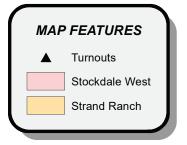
This figure shows the location of recharge basins, pipelines and turnout facilities.







Location Map: IRWD Water Banking Projects Recharge Rates



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

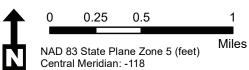


Exhibit "I"

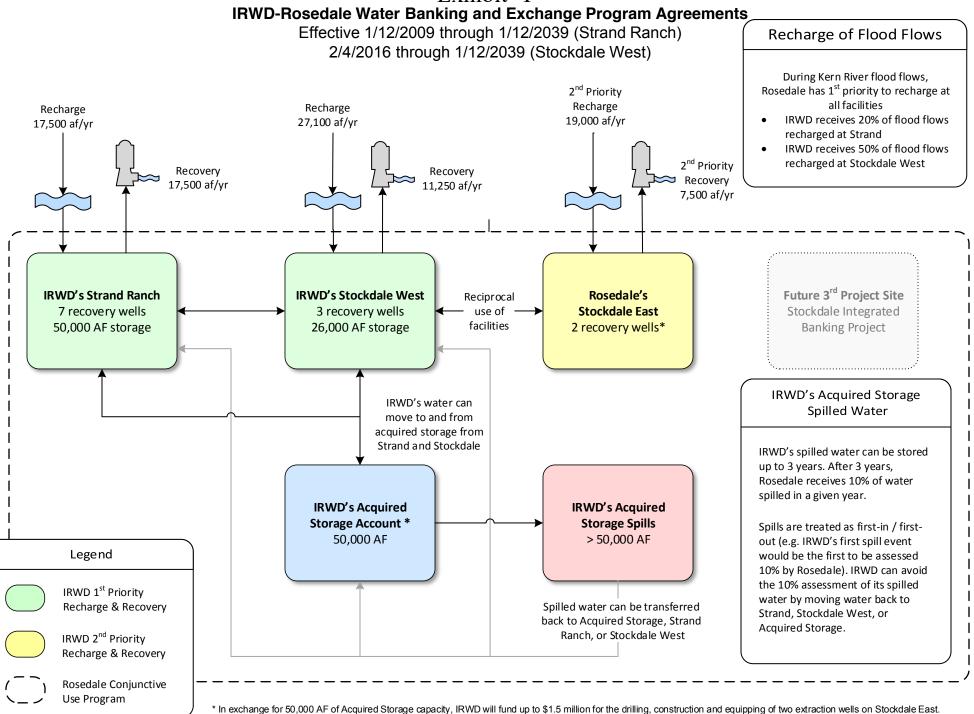
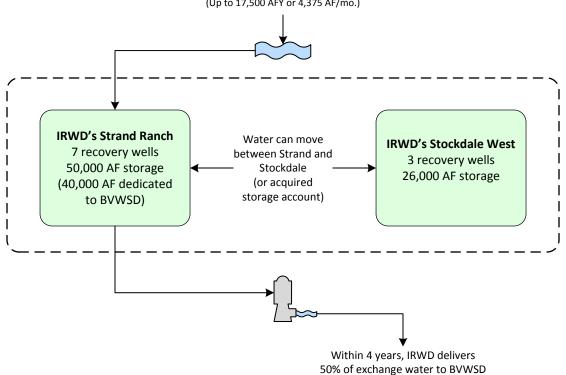


Exhibit "J" **Buena Vista Water Storage District Long Term Water Exchange Program**

Effective 1/1/2011 through 1/12/2039

BVWSD delivers non-SWP water to Strand Ranch (IRWD receives 50%)

(Up to 17,500 AFY or 4,375 AF/mo.)



Legend

IRWD 1st Priority Recharge & Recovery

Rosedale Conjunctive Use Program & Coordinated Operation

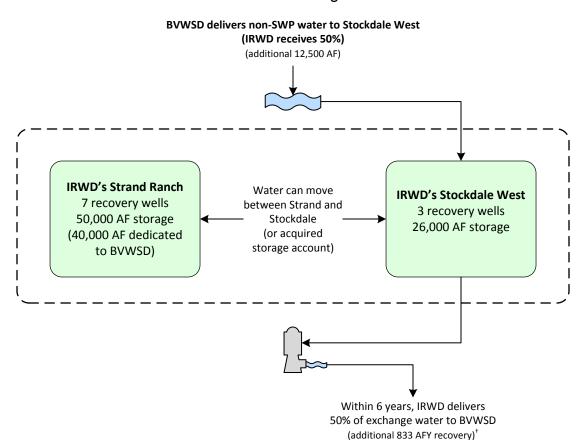
[†]IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 4th year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch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

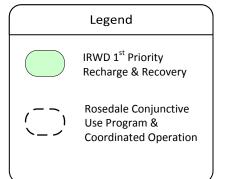
Year Following Recharge Event	Percent Transferred to IRWD	Percent Returned to BV During or Before Indicated Year
1	50%	50%
2	50%	50%
3	50%	50%
4	50%	50%
5	60%	40%
6	70%	30%
7	80%	20%
8	90%	10%
9	100%	0%

(no more than 6,667 AFY or 1,667 AF/mo.)[†]

Buena Vista Water Storage District One-Year Program to Augment Recharge Using Stockdale West Recharge Facilities

Effective 4/1/2017 through 3/30/2018



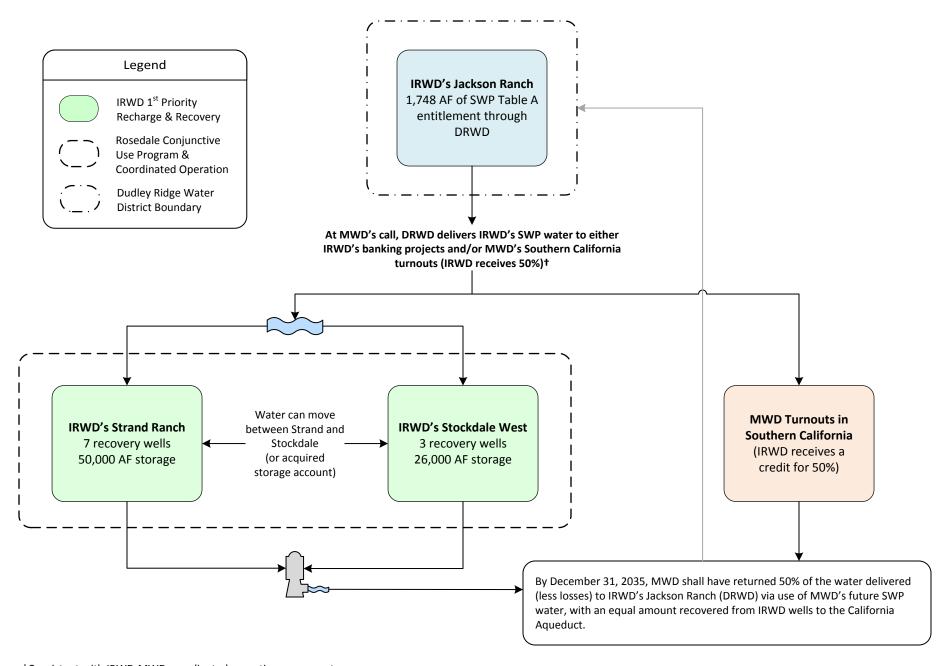


†IRWD shall remit one-half of the exchanged supply less one-half of reasonable losses back to BV no later than December 31st of the 6th year following the associated recharge event. IRWD pays for recovery of water returned to BV. Water to be remitted back to BV may remain in storage at Strand Ranch beyond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

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%	

$Exhibit \ "K" \\$ Dudley Ridge Water District (DRWD) Unbalanced Exchange Program

Up to 12,240 AF delivered from 6/7/2018 through 12/31/2027



[†]Consistent with IRWD-MWD coordinated operating agreement.

Exhibit "L"

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

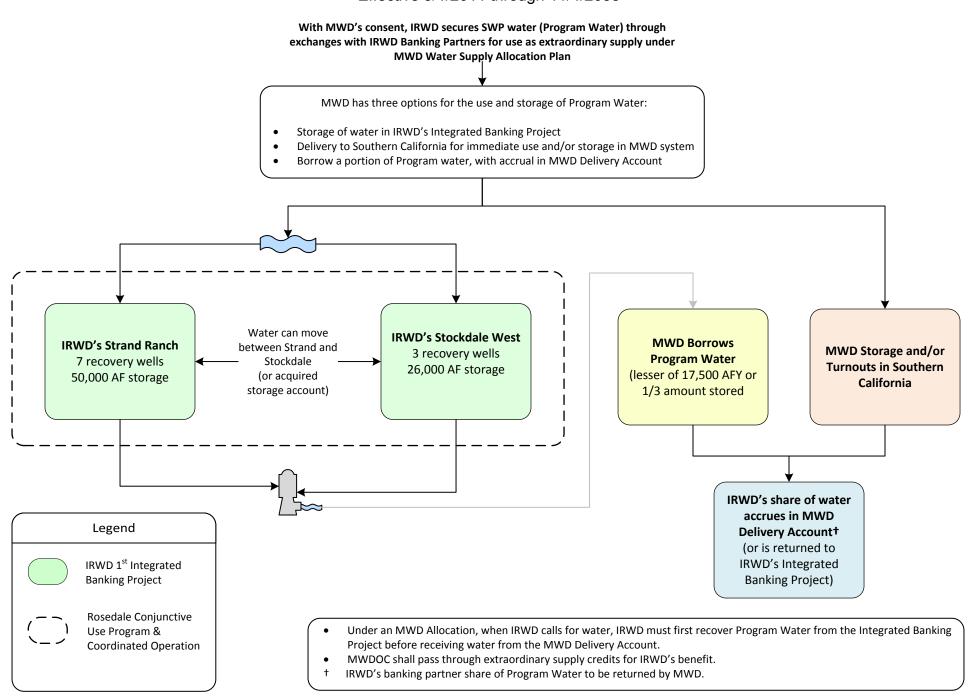
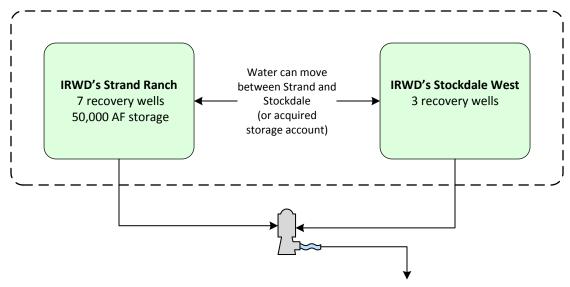


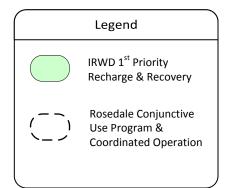
Exhibit "M"

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



IRWD recovers its share of non-SWP water from its Integrated Banking Projects for use as extraordinary supply under a declared MWD Water Supply Allocation. MWD will coordinate the conveyance and delivery of recovered water to be used within IRWD's Service Area.

Delivery can also occur through an operational exchange.*



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

Exhibit "N"

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

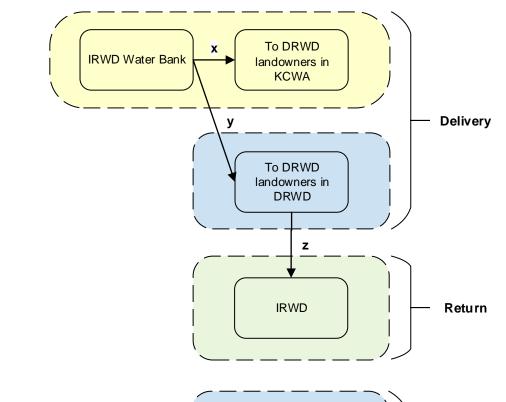
Effective 5/31/2017 through 11/4/2035



(Per Sections 2, 3, 4.1.1, and 4.1.3)

- x= Non-Project Water required to stay in Kern County
- y= Non-Project Water allowed to leave Kern County
- z= DRWD Table A Water equal to x+y less applicable losses, if any

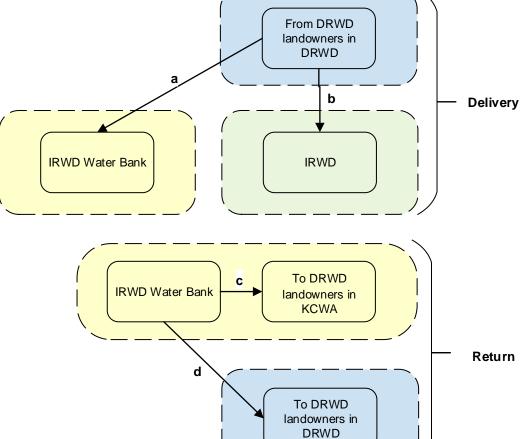
Per Section 4.1.3, z can be delivered to IRWD via in-ground transfer to IRWD, SWP delivery to IRWD banking facilitites, or SWP delivery to MWDSC

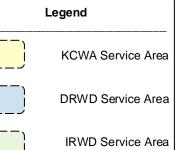


Scenario B

(Per Sections 2, 3, and 4.1.2)

a + b = c + d(less applicable losses, if any)





N-1 †The cost of water exchanged between IRWD and DRWD will be equalized

February 18, 2021

Prepared by: Kellie Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook

SUPPLY RELIABILITY PROGRAMS COMMITTEE

STATE WATER PROJECT CONTRACT AMENDMENT FOR ENHANCED WATER MANAGEMENT

SUMMARY:

The State Water Project (SWP) Contractors and the California Department of Water Resources (DWR) have developed an amendment to the existing SWP Water Supply Contracts (SWP Contracts) that will provide greater flexibility in implementing transfers and exchanges of SWP supplies while providing for improved water management. A total of 24 SWP Contractors have approved the amendment. DWR is expected to sign the amendment in February, making the amendment effective on February 28, 2021. Following is an overview of existing SWP Contract provisions related to transfers and exchanges and a description of how the amendment will provide increased flexibility.

BACKGROUND:

There are 29 SWP Contractors that each hold a long-term SWP Contract with DWR for the delivery of water from the SWP. These agreements govern how the SWP Contractors can manage their SWP water supplies by implementing water transfers and exchanges.

In 2010, IRWD purchased the 883-acre Jackson Ranch for the purpose of providing an SWP water supply to IRWD's Strand and Stockdale Integrated Banking Projects (IRWD Water Bank) located in Kern County. Jackson Ranch is located within the service area of Dudley Ridge Water District, which is an SWP Contractor located in Kings County. Through Dudley Ridge, IRWD has the right to receive delivery of up to 1,749 acre-feet per year of SWP Table A water and to receive Article 21 water when it is available.

DWR and the SWP Contractors have development an amendment to the existing SWP Contracts that would provide greater flexibility in implementing transfers and exchanges of SWP supplies, which will provide for improved water management. As a landowner within Dudley Ridge, IRWD will have the opportunity to benefit from the amendment to Dudley Ridge's long-term SWP Contract.

Following is an overview of how the existing SWP Contracts provide for transfers and exchanges, the need for improved water management and an overview of key provisions of the amendment that would provide for improved water management.

Transactions Allowed Under Existing SWP Contracts:

Under the existing SWP Contracts, outright water sales are not allowed. Instead, limited non-permanent water transfers and exchanges are allowed as described below.

Supply Reliability Programs Committee: State Water Project Contract Amendment for Enhanced Water Management February 18, 2021 Page 2

Existing Transfers:

Transfers of SWP Table A water are allowed through the use of the Turn-Back Pool. The Turn-Back Pool program allows an SWP Contractor to sell unused Table A water for a set price that is either 50% or 25% of the Delta Water Rate for that year. The use of the Turn-Back Pool has diminished through time and DWR and the SWP Contractors have been exploring alternative methods of transfers. Between 2013 and 2016, DWR administered a multi-year demonstration program that allowed Contractors to participate as either a buyer or seller, for a two-year period, with greater compensation for the water than allowed under the Turn-Back Pool Program. DWR is allowing transfers of Table A water among two SWP Contractors with the same landowners in their respective service areas. These common landowner transfers involve no compensation.

Existing Exchanges:

The current SWP Contracts allow exchanges of Table A water but only with repayment of water in future water years. DWR's specific protocols and parameters for water exchanges are not well defined, which has often led to inconsistent interpretations of SWP Contract language and DWR guidance. IRWD has implemented unbalanced exchanges whereby SWP Contractors have delivered water into storage at the IRWD Water Bank with 50 percent of the water being returned to the Contractors and the remainder of the water being left behind for the benefit of IRWD and Metropolitan Water District.

All transfer and exchange requests between SWP Contractors are reviewed by DWR on a case-by-case basis. As a result of DWR's long review process, contractors often cannot obtain timely approval to effectively manage supplies in the short term.

Need for Improved Water Management:

Due to changing hydrology as well as environmental and regulatory constraints, the SWP is not nearly as reliable as originally envisioned when the SWP Contractors first entered into the Water Supply Contracts with DWR. While each agency holds a contract for a specified amount of Table A water, DWR is rarely able to provide full Table A contractual amounts in any given year. Within the last 10 years, annual Table A allocations have been highly variable thus creating challenges for SWP Contractors to plan and manage their supplies. SWP Contractors must assume they will only receive a fraction of their full Table A allocation in any given year. When excess water is available during a wet year, Contractors often are unable to fully use or store the water they are allocated and contractually obligated to purchase.

For many years, SWP Contractors have recognized the need to amend the long-term SWP Contracts to allow more flexibility in the management of Contractor SWP supplies. Such flexibility would increase the effective reliability and affordability of SWP water supplies.

Agreement in Principle for Contract Amendment:

To improve water management, the SWP Contractors participated in public meetings with DWR to reach consensus on concepts to amend the SWP Contracts to clarify and enhance SWP

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Contract provisions for transfers and exchanges. These concepts are referred to as Water Management Tools. In 2018, the Contractors and DWR agreed upon an Agreement in Principle (AIP) for an SWP Contract amendment which included cost allocations for the California WaterFix project as well as enhanced provisions related to water transfers and exchanges.

Environmental Review Process:

In 2018, DWR circulated and approved an Environmental Impact Report (EIR) for the AIP, with DWR as lead agency and the SWP Contractors as responsible agencies. In May 2019, DWR withdrew approval of the AIP following Governor Newsom's decision not to proceed with the California WaterFix. DWR and the SWP Contractors worked to remove the California WaterFix provisions and retain the water management provisions in the AIP. The revised AIP was finalized, and in February 2020, DWR issued a Partially Recirculated Draft EIR. On August 25, 2020, DWR certified the Final EIR for the project.

The adequacy of DWR's EIR currently is being challenged in court. A total of 24 SWP Contractors have approved the amendment, which is required by the amendment. Metropolitan's Board approved the amendment on February 8, 2021. The SWP Contractors will be able to utilize these tools during the ongoing litigation unless there is a final court order prohibiting implementation. DWR is expected to sign the amendments soon, making the amendment effective February 28, 2021. The SWP Contract amendment language is provided as Exhibit "A".

Overview of SWP Contract Amendment:

The SWP Contract amendment will provide Water Management Tools related to transfers and exchanges. These tools will provide the Contractors with increased flexibility for short-term and long-term planning and management of SWP water supplies. Following is an overview of key provisions related to transfer and exchanges.

Transfer Provisions:

The amended transfer provisions will facilitate the SWP Contractor's ability to:

- Transfer SWP water for multiple years and between multiple parties without permanently relinquishing that portion of their annual Table A amounts;
- Negotiate cost compensation and duration among the Contractors on a willing sellerwilling buyer basis for water transfers;
- Store and transfer water in the same year;
- Transfer up to 50% of carryover water in San Luis Reservoir in a single-year transfer;
- Transfer SWP water stored outside of the transferring contractor's service area to a receiving contractor's service area; and
- Allow SWP Contractors to be both a buyer and seller in the same year.

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Exchange Provisions:

The amended exchange provisions will facilitate the SWP Contractors' ability to:

- Exchange water based on established return ratios up to 5 to 1 based on the SWP allocation in effect at the time the agreement among the contractors is executed;
- Establish compensation based on the Contractors' SWP fixed costs divided by their allocation;
- Allow exchange of 50% of a contractor's carryover water stored in San Luis Reservoir in a single year; and
- Allow exchanges to be carried out over a 10-year period (water returned over 10 years).

The amendment requires that certain conditions be met to avoid harm to the SWP and other Contractors and provides a dispute resolution process for non-participating Contractors who believe they may be adversely impacted by a transfer. DWR approval of each transaction will continue to be required. A comparison of the key provisions of the existing SWP Contract and the SWP Contract amendment is provided as Exhibit "B". At the meeting, staff will review the comparison with the Committee.

Benefits of Contract Amendment to IRWD:

IRWD has been in discussions with other SWP Contactors regarding utilizing the Water Management Tools provided by the SWP Contract amendment to provide opportunities for the IRWD Water Bank. At an upcoming Supply Reliability Programs Committee meeting, staff will present an overview of such opportunities and strategies for optimizing IRWD's SWP supplies allocated to its Jackson Ranch property through Dudley Ridge.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act, Code of Regulations, Title 14, Chapter 3, Section 15378.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – State Water Project Contract Amendment (Water Management)

Exhibit "B" – Comparison of Key Provisions in Existing SWP Contract and Water Management Amendment

EXHIBIT "A"

STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

AMENDMENT NO. «Amendment_No_WMT» (THE WATER MANAGEMENT AMENDMENT)

TO WATER SUPPLY CONTRACT

BETWEEN

THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

AND

«CONTRACTOR_up»

THIS AMENDMENT to the Water Supply Contract is made this	day of
, 20 pursuant to the provisions of the California W	/ater
Resources Development Bond Act, the Central Valley Project Act, and oth	er applicable
laws of the State of California, between the State of California, acting by a	nd through its
Department of Water Resources, herein referred to as the "State," and «Co	ontractor_lc»,
herein referred to as the "«DistrictAgency1»."	_

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RECITALS

- A. The State and the "DistrictAgency1" entered into and subsequently amended a water supply contract (the "contract"), dated "WSC_Execution_Date", providing that the State shall supply certain quantities of water to the "DistrictAgency1" and providing that the "DistrictAgency1" shall make certain payments to the State, and setting forth the terms and conditions of such supply and such payments; and
- B. The State and the «DistrictAgency1», in an effort to manage water supplies in a changing environment, explored non-structural solutions to provide greater flexibility in managing State Water Project (SWP) water supplies; and
- C. The State and the «DistrictAgency1», in an effort to support the achievement of the coequal goals for the Delta set forth in the Delta Reform Act, sought solutions to develop water supply management practices to enhance flexibility and reliability of SWP water supplies while the «DistrictAgency1» is also demonstrating its commitment to expand its water supply portfolio by investing in local water supplies; and
- D. The State and the «DistrictAgency1», in response to the Governor's Water Resiliency Portfolio, wish to maintain and diversify water supplies while protecting and enhancing natural systems without changing the way in which the SWP operates; and
- E. The State and the "DistrictAgency1" sought to create a programmatic solution through transfers or exchanges of SWP water supplies that encourages regional approaches among water users sharing watersheds and strengthening partnerships with local water agencies, irrigation districts, and other stakeholders; and
- F. The State and the «DistrictAgency1», in an effort to comply with the Open and Transparent Water Data Platform Act (Assembly Bill 1755), sought means to create greater transparency in water transfers and exchanges; and
- G. The State, the "DistrictAgency1" and representatives of certain other SWP Contractors have negotiated and agreed upon a document (dated May 20, 2019), the subject of which is "Draft Agreement in Principle for the SWP Water Supply Contract Amendment for Water Management" (the "Agreement in Principle"); and
- H. The Agreement in Principle describes that the SWP Water Supply Contract Amendment for Water Management "supplements and clarifies terms of the SWP water supply contract that will provide greater water management regarding transfers and exchanges of SWP water within the SWP service area"; the principles agreed to achieve this without relying upon increased SWP diversions

- or changing the way in which the SWP operates, and are consistent with all applicable contract and regulatory requirements; and
- I. The State, the "DistrictAgency1" and those Contractors intending to be subject to the contract amendments contemplated by the Agreement in Principle subsequently prepared an amendment to their respective Contracts to implement the provisions of the Agreement in Principle, and such amendment was named the "SWP Water Supply Contract Amendment for Water Management"; and
- J. The State and the "DistrictAgency1" desire to implement continued service through the contract and under the terms and conditions of this "SWP Water Supply Contract Amendment for Water Management";

NOW, THEREFORE, IT IS MUTUALLY AGREED that the following changes and additions are hereby made to the "DistrictAgency1" swater supply contract with that State:

AMENDED CONTRACT TEXT

ARTICLE 1 IS AMENDED TO ADD THE FOLLOWING DEFINITIONS, PROVIDED THAT IF THIS WATER MANAGEMENT AMENDMENT TAKES EFFECT BEFORE THE CONTRACT EXTENSION AMENDMENT TAKES EFFECT, THE ADDITIONS HEREIN SHALL CONTINUE IN EFFECT AFTER THE CONTRACT EXTENSION AMENDMENT TAKES EFFECT NOTWITHSTANDING THE CONTRACT EXTENSION AMENDMENT'S DELETION AND REPLACEMENT OF ARTICLE 1 IN ITS ENTIRETY:

1. Definitions

(au) "Article 56 Carryover Water" shall mean water that the District elects to store under Article 56 in project surface conservation facilities for delivery in a subsequent year or years.

ARTICLES 21 and 56 ARE DELETED IN THEIR ENTIRETY AND REPLACED WITH THE FOLLOWING TEXT:

21. Interruptible Water Service

(a) Allocation of Interruptible Water

Each year from water sources available to the project, the State shall make available and allocate interruptible water to contractors in accordance with the procedure in Article 18(a). Allocations of interruptible water in any one year may not be carried over for delivery in a subsequent year, nor shall the delivery of interruptible water in any year impact the «DistrictAgency1»'s approved deliveries of Annual Table A Amount or the «DistrictAgency1»'s allocation of water for the next year. Deliveries of interruptible water in excess of the «DistrictAgency1»'s Annual Table A Amount may be made if the deliveries do not adversely affect the State's delivery of Annual Table A Amount to other contractors or adversely affect project operations. Any amounts of water owed to the «DistrictAgency1» as of the date of this amendment pursuant to former Article 12(d), any contract provisions or letter agreements relating to wet weather water, and any Article 14(b) balances accumulated prior to 1995, are canceled. The State shall hereafter use its best efforts, in a manner that causes no adverse impacts upon other contractors or the project, to avoid adverse economic

impacts due to the «DistrictAgency1»'s inability to take water during wet weather.

(b) Notice and Process for Obtaining Interruptible Water

The State shall periodically prepare and publish a notice to contractors describing the availability of interruptible water under this Article. To obtain a supply of interruptible water, including a supply from a transfer of interruptible water, the "DistrictAgency1" shall execute a further agreement with the State. The State will timely process such requests for scheduling the delivery of the interruptible water.

(c) Rates

For any interruptible water delivered pursuant to this Article, the "DistrictAgency1" shall pay the State the same (including adjustments) for power resources (including on-aqueduct, off-aqueduct, and any other power) incurred in the transportation of such water as if such interruptible water were Table A Amount water, as well as all incremental operation, maintenance, and replacement costs, and any other incremental costs, as determined by the State. The State shall not include any administrative or contract preparation charge. Incremental costs shall mean those nonpower costs which would not be incurred if interruptible water were not scheduled for or delivered to the "DistrictAgency1". Only those contractors not participating in the repayment of the capital costs of a reach shall be required to pay any use of facilities charge for the delivery of interruptible water through that reach.

(d) Transfers of Interruptible Water

- (1) Tulare Lake Basin Water Storage District, Empire West-Side Irrigation District, Oak Flat Water District, and County of Kings may transfer to other contractors a portion of interruptible water allocated to them under subdivision (a) when the State determines that interruptible water is available.
- (2) The State may approve the transfer of a portion of interruptible water allocated under subdivision (a) to contractors other than those listed in (d)(1) if the contractor acquiring the water can demonstrate a special need for the transfer of interruptible water.

(3) The contractors participating in the transfer shall determine the cost compensation for the transfers of interruptible water. The transfers of interruptible water shall be consistent with Articles 56(d) and 57.

56. Use, Storage-of Project Water Outside of Service Area and Article 56 Carryover Water

(a) State Consent to Use of Project Water Outside of Service Area

Notwithstanding the provisions of Article 15(a), the State hereby consents to the "DistrictAgency1" storing Project Water in a groundwater storage program, project surface conservation facilities and in nonproject surface storage facilities located outside its service area for later use by the "DistrictAgency1" within its service area and to the "DistrictAgency1" transferring or exchanging Project Water outside its service area consistent with agreements executed under this contract.

(b) Groundwater Storage Programs

The "DistrictAgency1" shall cooperate with other contractors in the development and establishment of groundwater storage programs. The "DistrictAgency1" may elect to store Project Water in a groundwater storage program outside its service area for later use within its service area. There shall be no limit on the amount of Project Water the "DistrictAgency1" can store outside its service area during any year in a then existing and operational groundwater storage program.

(1) Transfers of Annual Table A Amount stored in a groundwater storage program outside a contractor's service area.

In accordance with applicable water rights law and the terms of this Article, the "DistrictAgency1" may transfer any Annual Table A Amount stored on or after the effective date of the Water Management Amendment in a groundwater storage program outside its service area to another contractor for use in that contractor's service area. These transfers must comply with the requirements of Articles 56(c)(4)(i)-(v), (6) and (7), and Article 57. The "DistrictAgency1" will include these transfers in its preliminary water delivery schedule required in Article 12(a).

(2) Exchanges of any Annual Table A Amount stored in a groundwater storage program outside a contractor's service area.

In accordance with applicable water rights law and the terms of this Article, the "DistrictAgency1" may exchange any Annual Table A Amount stored on or after the effective date of the Water Management Amendment in a groundwater storage program outside its service area with another contractor for use in that contractor's service area. These exchanges must comply with the requirements in Article 56(c)(4)(i)-(v). The "DistrictAgency1" shall include these exchanges in its preliminary water delivery schedule pursuant to Article 12(a).

(c) Article 56 Carryover Water and Transfers or Exchanges of Article 56 Carryover Water

(1) In accordance with any applicable water rights laws, the «DistrictAgency1» may elect to use Article 56 Carryover Water within its service area, or transfer or exchange Article 56 Carryover Water to another contractor for use in that contractor's service area in accordance with the provisions of subdivision (c)(4) of this Article. The «DistrictAgency1» shall submit to the State a preliminary water delivery schedule on or before October 1 of each year pursuant to Article 12(a), the quantity of water it wishes to store as Article 56 Carryover Water in the next succeeding year, and the quantity of Article 56 Carryover Water it wishes to transfer or exchange with another contractor in the next succeeding year. The amount of Project Water the «DistrictAgency1» can add to storage in project surface conservation facilities and in nonproject surface storage facilities located outside the «DistrictAgency1»'s service area each year shall be limited to the lesser of the percent of the «DistrictAgency1»'s Annual Table A Amount shown in column 2 or the acre-feet shown in column 3 of the following table, depending on the State's final Table A water supply allocation percentage as shown in column 1. For the purpose of determining the amount of Project Water the «DistrictAgency1» can store, the final water supply allocation percentage shown in column 1 of the table below shall apply to the "DistrictAgency1". However, there shall be no limit to storage in nonproject facilities in a year in which the State's final water supply allocation percentage is one hundred

percent. These limits shall not apply to water stored pursuant to Articles 12(e) and 14(b).

1. Final Water Supply Allocation Percentage	2. Maximum Percentage of «DistrictAgency1»'s Annual Table A Amount That Can Be Stored	3. Maximum Acre-Feet That Can Be Stored
50% or less	25%	100,000
51%	26%	104,000
52%	27%	108,000
53%	28%	112,000
54%	29%	116,000
55%	30%	120,000
56%	31%	124,000
57%	32%	128,000
58%	33%	132,000
59%	34%	136,000
60%	35%	140,000
61%	36%	144,000
62%	37%	148,000
63%	38%	152,000
64%	39%	156,000
65%	40%	160,000
66%	41%	164,000
67%	42%	168,000
68%	43%	172,000
69%	44%	176,000
70%	45%	180,000
71%	46%	184,000
72%	47%	188,000
73%	48%	192,000
74%	49%	196,000
75% or more	50%	200,000

(2) Storage capacity in project surface conservation facilities at any time in excess of that needed for project operations shall be made available to requesting contractors for storage of project and Nonproject Water. If such storage requests exceed the available storage capacity, the available capacity shall be allocated among contractors requesting storage in proportion to their Annual Table A Amounts for that year. The «DistrictAgency1» may store water in excess of its allocated share of capacity as long as capacity is available for such storage.

(3) If the State determines that a reallocation of excess storage capacity is needed as a result of project operations or because of the exercise of a contractor's storage right, the available capacity shall be reallocated among contractors requesting storage in proportion to their respective Annual Table A Amounts for that year. If such reallocation results in the need to displace water from the storage balance for any contractor or noncontractor, the water to be displaced shall be displaced in the following order of priority:

First, water, if any, stored for noncontractors;

Second, water stored for a contractor that previously was in excess of that contractor's allocation of storage capacity; and

Third, water stored for a contractor that previously was within that contractor's allocated storage capacity.

The State shall determine whether water stored in a project surface water conservation facility is subject to displacement and give as much notice as feasible of a potential displacement. If the "DistrictAgency1" transfers or exchanges Article 56 Carryover Water pursuant to this subdivision to another contractor for storage in such facility, the State shall recalculate the amount of water that is subject to potential displacement for both contractors participating in the transfer or exchange. The State's recalculation shall be made pursuant to subdivision (4) of this Article.

(4) Transfers or Exchanges of Article 56 Carryover Water

The «DistrictAgency1» may transfer or exchange its Article 56 Carryover Water as provided in this subdivision under a transfer or an exchange agreement with another contractor. Water stored pursuant to Articles 12(e) and 14(b) and Nonproject Water shall not be transferred or exchanged. Transfers or exchanges of Article 56 Carryover Water under this subdivision shall comply with subdivision (f) of this Article and Article 57 as applicable, which shall constitute the exclusive means to transfer or exchange Article 56 Carryover Water.

On or around January 15 of each year, the State shall determine the maximum amount of Article 56 Carryover

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Water as of January 1 that will be available for transfers or exchanges during that year. The State's determination shall be consistent with subdivisions (c)(1) and (c)(2) of this Article.

The State shall timely process requests for transfers or exchanges of Article 56 Carryover Water by participating contractors. After execution of the transfer or exchange agreement between the State and the contractors participating in the transfer or exchange, the State shall recalculate each contractor's storage amounts for the contractors participating in the transfer or exchange. The State's recalculation shall result in an increase by an amount of water within the storage amounts for the contractor receiving the water and a decrease by the same amount of water for the contractor transferring or exchanging water. The State's recalculation shall be based on the criteria set forth in the State's transfer or exchange agreement with the participating contractors. The State's calculations shall also apply when a contractor uses Article 56 Carryover Water to complete an exchange.

Transfers and exchanges of Article 56 Carryover Water shall meet all of the following criteria:

- (i) Transfers or exchanges of Article 56 Carryover Water are limited to a single-year. Project Water returned as part of an exchange under subdivision (c)(4) may be returned over multiple years.
- (ii) The «DistrictAgency1» may transfer or exchange an amount up to fifty percent (50%) of its Article 56 Carryover Water to another contractor for use in that contractor's service area.
- (iii) Subject to approval of the State, the "DistrictAgency1" may transfer or exchange an amount greater than 50% of its Article 56 Carryover Water to another contractor for use in that contractor's service area. The "DistrictAgency1" seeking to transfer or exchange greater than 50% of its Article 56 Carryover Water shall submit a written request to the State for approval. The

- "DistrictAgency1" making such a request shall demonstrate to the State how it will continue to meet its critical water needs in the current year of the transfer or exchange and in the following year.
- (iv) The contractor receiving the water transferred or exchanged under subdivisions (4)(i) or (ii) above shall confirm in writing to the State its need for the water that year and shall take delivery of the water transferred or exchanged in the same year.
- (v) Subject to the approval of the State, the «DistrictAgency1» may seek an exception to the requirements of subdivisions (4)(i), (ii), and (iii) above. The «DistrictAgency1» seeking an exception shall submit a written request to the State demonstrating to the State the need for 1) using project surface conservation facilities as the transfer or exchange point for Article 56 Carryover Water if the receiving contractor cannot take delivery of the transfer or exchange water in that same year, 2) using project surface conservation facilities for the transfer or exchange of one contractor's Article 56 Carryover Water to another contractor to reduce the risk of the water being displaced, or 3) for some other need.
- (5) The restrictions on storage of Project Water outside a "DistrictAgency1" is service area provided for in this subdivision (c), shall not apply to storage in any project off-stream storage facilities constructed south of the Delta after the date of the Monterey Amendment.
- (6) For any Project Water stored outside its service area pursuant to subdivisions (b) and (c), the "DistrictAgency1" shall pay the State the same (including adjustments) for power resources (including on-aqueduct, off-aqueduct, and any other power) incurred in the transportation of such water as the "DistrictAgency1" pays for the transportation of Annual Table A Amount to the reach of the project transportation facility from which the water is delivered to storage. If Table A Amount is stored, the Delta Water

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Charge shall be charged only in the year of delivery to interim storage. For any stored water returned to a project transportation facility for final delivery to its service area, the «DistrictAgency1» shall pay the State the same for power resources (including on-aqueduct, off-aqueduct, and any other power) incurred in the transportation of such water calculated from the point of return to the aqueduct to the turn-out in the «DistrictAgency1»'s service area. In addition, the «DistrictAgency1» shall pay all incremental operation, maintenance, and replacement costs, and any other incremental costs, as determined by the State, which shall not include any administrative or contract preparation charge. Incremental costs shall mean those nonpower costs which would not be incurred if such water were scheduled for or delivered to the «DistrictAgency1»'s service area instead of to interim storage outside the service area. Only those contractors not participating in the repayment of a reach shall be required to pay a use of facilities charge for use of a reach for the delivery of water to, or return of water from, interim storage.

(7) A "DistrictAgency1" electing to store Project Water in a nonproject facility within the service area of another contractor shall execute a contract with that other contractor prior to storing such water which shall be in conformity with this Article and will include at least provisions concerning the point of delivery and the time and method for transporting such water.

(d) Non-Permanent Water Transfers of Project Water

Notwithstanding the provisions of Article 15(a), the State hereby consents to the "DistrictAgency1" transferring Project Water outside its service area in accordance with the following:

- (1) The participating contractors shall determine the duration and compensation for all water transfers, including single-year transfers, Transfer Packages and multi-year transfers.
- (2) The duration of a multi-year transfer shall be determined by the participating contractors to the transfer, but the term of the transfer agreement shall not extend beyond the term of the Contract with the earliest term.
- (3) A Transfer Package shall be comprised of two or more water transfer agreements between the same contractors. The

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State shall consider each proposed water transfer within the package at the same time and shall apply the transfer criteria pursuant to Article 57 in the review and approval of each transfer. The State shall not consider a Transfer Package as an exchange.

(e) Continuance of Article 12(e) Carry-over Provisions

The provisions of this Article are in addition to the provisions of Article 12(e), and nothing in this Article shall be construed to modify or amend the provisions of Article 12(e). Any contractor electing to transfer or exchange Project Water during any year in accordance with the provisions of subdivision (c) of this Article, shall not be precluded from using the provisions of Article 12(e) for carrying over water from the last three months of that year into the first three months of the succeeding year.

(f) Bona Fide Exchanges Permitted

Notwithstanding the provisions of Article 15(a), the State hereby consents to the «DistrictAgency1» exchanging Project Water outside its service area consistent with this Article. Nothing in this Article shall prevent the «DistrictAgency1» from entering into bona fide exchanges of Project Water for use outside the «DistrictAgency1»'s service area with other parties for Project Water or Nonproject Water if the State consents to the use of the Project Water outside the «DistrictAgency1»'s service area. Also, nothing in this Article shall prevent the "DistrictAgency1" from continuing those exchange or sale arrangements entered into prior to September 1, 1995. Nothing in this Article shall prevent the «DistrictAgency1» from continuing those exchange or sale arrangements entered into prior to the effective date of this Amendment which had previously received any required State approvals. The State recognizes that the hydrology in any given year is an important factor in exchanges. A "bona fide exchange" shall mean an exchange of water involving the «DistrictAgency1» and another party where the primary consideration for one party furnishing water to another party is the return of a substantially similar amount of water, after giving due consideration to the hydrology, the length of time during which the water will be returned, and reasonable payment for costs incurred. In addition, the State shall consider reasonable deductions based on expected storage or transportation losses that may be made from water delivered. The State may also consider any other nonfinancial conditions of the return. A "bona fide exchange" shall not involve a significant payment unrelated to costs incurred in effectuating the

exchange. The State, in consultation with the contractors, shall have authority to determine whether a proposed exchange of water constitutes a "bona fide exchange" within the meaning of this paragraph and not a disguised sale.

(g) Exchanges of Project Water

Exchanges of Project Water shall be consistent with Article 57. In addition, the State shall apply the following criteria to its review of each exchange of Project Water as set forth below:

(1) Exchange Ratio

Exchange ratio shall mean the amount of water delivered from a contractor's project supply in a year to another contractor compared to the amount of water returned to the first contactor in a subsequent year by the other contactor. All exchanges shall be subject to the applicable exchange ratio in this Article as determined by the allocation of available supply for the Annual Table A Amount at the time the exchange transaction between the contractors is executed.

- (a) For allocations greater than or equal to 50%, the exchange ratio shall be no greater than 2 to 1.
- (b) For allocations greater than 25% and less than 50%, the exchange ratio shall be no greater than 3 to 1.
- (c) For allocations greater than 15% and less than or equal to 25%, the exchange ratio shall be no greater than 4 to 1.
- (d) For allocations less than or equal to 15%, the exchange ratio shall be no greater than 5 to 1.

(2) Cost Compensation

The State shall determine the maximum cost compensation calculation using the following formula:

The numerator shall be the exchanging contractor's conservation minimum and capital and transportation minimum and capital charges, including capital surcharges. DWR will set the denominator using the

State Water Project allocation which incorporates the May 1 monthly Bulletin 120 runoff forecast.

If the "DistrictAgency1" submits a request for approval of an exchange prior to May 1, the State shall provide timely approval with the obligation of the contractors to meet the requirement of the maximum compensation. If the maximum compensation is exceeded because the agreement between the contractors is executed prior to the State Water Project allocation as defined in (c)(2) above, the contractors will revisit the agreement between the two contractors and make any necessary adjustments to the compensation. If the contractors make any adjustments to the compensation, they shall notify the State.

(3) Period During Which the Water May Be Returned:

The period for the water to be returned shall not be greater than 10 years and shall not go beyond the expiration date of this Contract. If the return of the exchange water cannot be completed within 10 years, the State may approve a request for an extension of time.

(h) Other Transfers

Nothing in this Article shall modify or amend the provisions of Articles 15(a), 18(a) or Article 41, except as expressly provided for in subdivisions (c) and (d) of this Article and in subdivision (d) of Article 21.

NEW CONTRACT ARTICLES

ARTICLE 57 IS ADDED TO THE CONTRACT AS A NEW ARTICLE AS FOLLOWS:

- 57. Provisions Applicable to Both Transfers and Exchanges of Project Water
 - (a) Nothing in this Article modifies or limits Article 18 (a).
 - (b) Transfers and exchanges shall not have the protection of Article 14(b).
 - (b) The "DistrictAgency1" may be both a buyer and seller in the same year and enter into multiple transfers and exchanges within the same year.
 - (d) Subject to the State's review and approval, all transfers and exchanges shall satisfy the following criteria:
 - (1) Transfers and exchanges shall comply with all applicable laws and regulations.
 - (2) Transfers and exchanges shall not impact the financial integrity of the State Water Project, Transfers and exchange agreements shall include provisions to cover all costs to the State for the movement of water such as power costs and use of facility charge.
 - (3) Transfers and exchanges shall be transparent, including compliance with subdivisions (g) and (h) of this Article.
 - (4) Transfers and exchanges shall not harm other contractors not participating in the transfer or exchange.
 - (5) Transfers and exchanges shall not create significant adverse impacts to the service area of each contractor participating in the transfer or exchange.
 - (6) Transfers and exchanges shall not adversely impact State Water Project operations.
 - (e) The «DistrictAgency1» may petition the State and the State shall have discretion to approve an exception to the criteria set forth in subdivision (d) in the following cases:
 - (1) When a transfer or an exchange does not meet the criteria, but the "DistrictAgency1" has determined that there is a compelling need to proceed with the transfer or exchange.

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- (2) When the "DistrictAgency1" has received water in a transfer or an exchange and cannot take all of the water identified in the transaction in the same year, the "DistrictAgency1" may request to store its water consistent with Article 56(c), including in San Luis Reservoir.
- (f) The State will timely process such requests for scheduling the delivery of the transferred or exchanged water.
 Contractors participating in a transfer or an exchange shall submit the request in a timely manner.
- (g) The District shall, for each transfer or exchange it participates in, confirm to the State in a resolution or other appropriate document approving the transfer or exchange, including use of Article 56(c) stored water, that:
 - (1) The «DistrictAgency1» has complied with all applicable laws.
 - (2) The «DistrictAgency1» has provided any required notices to public agencies and the public.
 - (3) The «DistrictAgency1» has provided the relevant terms to all contractors and to the Water Transfers Committee of the State Water Contractors Association.
 - (4) The «DistrictAgency1» is informed and believes that the transfer or exchange will not harm other contractors.
 - (5) The "DistrictAgency1" is informed and believes that the transfer or exchange will not adversely impact State Water Project operations.
 - (6) The "DistrictAgency1" is informed and believes that the transfer or exchange will not affect its ability to make all payments, including payments when due under its Contract for its share of the financing costs of the State's Central Valley Project Revenue Bonds.
 - (7) The "DistrictAgency1" has considered the potential impacts of the transfer or exchange within its service area.

(h) Dispute Resolution Process Prior to Executing an Agreement

The State and the contractors shall comply with the following process to resolve disputes if a contractor that is not participating in the transfer or exchange claims that the proposed transfer and/or exchange has a significant adverse impact.

- i. Any claim to a significant adverse impact may only be made after the "DistrictAgency1" has_submitted the relevant terms pursuant to Article 57(g)(3) and before the State approves a transfer or an exchange agreement.
- ii. In the event that any dispute cannot be resolved among the contractors, the State will convene a group including the Department's Chief of the State Water Project Analysis Office, the Department's Chief Counsel and the Department's Chief of the Division of Operations or their designees and the contractors involved. The contractor's representatives shall be chosen by each contractor. Any contractor claiming a significant adverse impact must submit written documentation to support this claim and identify a proposed solution. This documentation must be provided 2 weeks in advance of a meeting of the group that includes the representatives identified in this paragraph.
- iii. If this group cannot resolve the dispute, the issue will be taken to the Director of the Department of Water Resources and that decision will be final.

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WATER MANAGEMENT AMENDMENT IMPLEMENTING AND ADMINISTRATIVE PROVISIONS

IT IS FURTHER MUTUALLY AGREED that the following provisions, which shall not be part of the Water Supply Contract text, shall be a part of this Amendment and be binding on the Parties.

1. EFFECTIVE DATE OF WATER MANAGEMENT AMENDMENT

- (a) The Water Management Amendment shall take effect ("Water Management Amendment effective date") on the last day of the calendar month in which the State and 24 or more contractors have executed the Water Management Amendment, unless a final judgment by a court of competent jurisdiction has been entered that the Water Management Amendment is invalid or unenforceable or a final order has been entered that enjoins the implementation of the Water Management Amendment.
 - (b) If any part of the Water Management Amendment of any contractor is determined by a court of competent jurisdiction in a final judgment or order to be invalid or unenforceable, the Water Management Amendments of all contractors shall be of no force and effect unless the State and 24 or more contractors agree any the remaining provisions of the contract may remain in full force and effect.
 - (c) If 24 or more contractors have not executed the Water Management Amendment by February 28, 2021 then within 30 days the State, after consultation with the contractors that have executed the amendment, shall make a determination whether to waive the requirement of subdivision (a) of this effective date provision. The State shall promptly notify all contractors of the State's determination. If the State determines, pursuant to this Article to allow the Water Management Amendment to take effect, it shall take effect only as to those consenting contractors.
 - (d) If any contractor has not executed the Water Management Amendment within sixty (60) days after its effective date pursuant to subdivisions (a) through (c) of this effective date provision, this Amendment shall not take effect as to such contractor unless the contractor and the State, in its discretion, thereafter execute such contractor's Water Management Amendment, in which case the Water Management Amendment effective date for purposes of that contractor's Amendment shall be as agreed upon by the State and

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contractor, and shall replace the effective date identified in subdivision (a) for that contractor.

2. ADMINISTRATION OF CONTRACTS WITHOUT WATER MANAGEMENT AMENDMENT

The State shall administer the water supply contracts of any contractors that do not execute the Water Management Amendment in a manner that is consistent with the contractual rights of such contractors. These contractors' rights are not anticipated to be affected adversely or benefited by the Water Management Amendments.

3. OTHER CONTRACT PROVISIONS

Except as amended by this Amendment, all provisions of the contract shall be and remain the same and in full force and effect, provided, however, that any reference to the definition of a term in Article 1, shall be deemed to be a reference to the definition of that term, notwithstanding that the definition has been re-lettered within Article 1. In preparing a consolidated contract, the parties agree to update all such references to reflect the definitions' lettering within Article 1.

4. DocuSign

The Parties agree to accept electronic signatures generated using DocuSign as original signatures.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment on the date first above written.

Approved as to Legal Form and Sufficiency:	STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
Chief Counsel Department of Water Resources	Director
	Date
Approved as to Form:	«CONTRACTOR_up»
General Counsel «Contractor Ic»	General Manager
35 <u></u>	Date

EXHIBIT "B"

COMPARISON OF KEY PROVISIONS IN EXISTING STATE WATER PROJECT CONTRACT AND WATER MANAGEMENT AMENDMENT

Key	Existing SWP Contract	Water Management Amendment	
Provision Transfers			
Transfer of Table A Water	 Allows permanent transfers. Multi-year transfer generally not allowed. Single year transfers handled through Turn Back Pool. Cannot transfer water in a year when storing water. 	 Allows permanent and non-permanent transfers. Single year or Multi-year transfers allowed. Turn Back Pool language is deleted. May transfer and store water in the same year. SWP Contractors set the compensation terms. 	
Transfer of Article 21 Water	Not allowed.	 Allowed for certain Agricultural SWP Contractors. Other SWP Contractors may be allowed after demonstration of special need and with DWR approval. 	
Transfer of Carryover Water	Generally, not allowed.	 Permits the transfer of up to 50% of carryover water to another Contractor. Greater than 50% allowed with DWR approval. 	
Transfer of Stored Water	Transfer of stored water is not allowed. Exchange Exchange	May transfer water stored outside a Contractor's service area directly to another Contractor.	
Exchange of Table A Water	 Maximum ratios unclear, generally 2:1. Limits on monetary compensation unclear. 	 Establishes exchange ratios scale based on Table A allocation at the time of agreement execution: Allocation > 50% = 2:1 ratio Allocation 25% to 50% = 3:1 ratio Allocation 15% to 25% = 4:1 ratio Allocation <15% = 5:1 ratio Return water over 10 years. Sets a maximum cost compensation:	
Exchange of Article 21 Water	Not allowed.	Not allowed.	
Exchange of Carryover Water	Not allowed.	 Permits the exchange of up to 50% of carryover water to another Contractor. Greater than 50% allowed with DWR approval. 	
Exchange of Stored Water	Not allowed.	May exchange water stored outside a Contractor's service area directly with another Contractor.	
	General Pr	ovisions	
		 Transfers and exchanges continue to require DWR approval. Contractors can be both buyers and sellers of water in the same year. Requires certain conditions are met to avoid hard to the SWP and other Contractors. Provides a dispute resolution process for non-participating Contractors who feel they may be negatively impacted by a transfer or exchange. Adds provisions to ensure transparency. 	

	Contractor can petition DWR for exceptions to some of the transfer and exchange terms upon demonstration of special needs or circumstances.