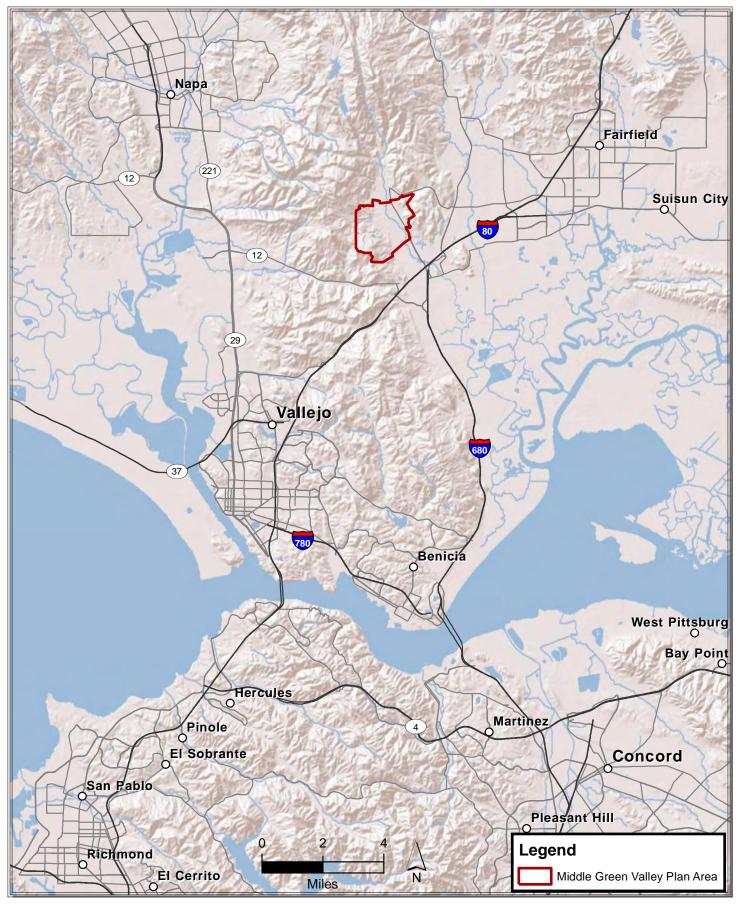
## **Figures**



X:\2011 Job Files\11-112\GIS\Figure 1-1 Location Map.mxd



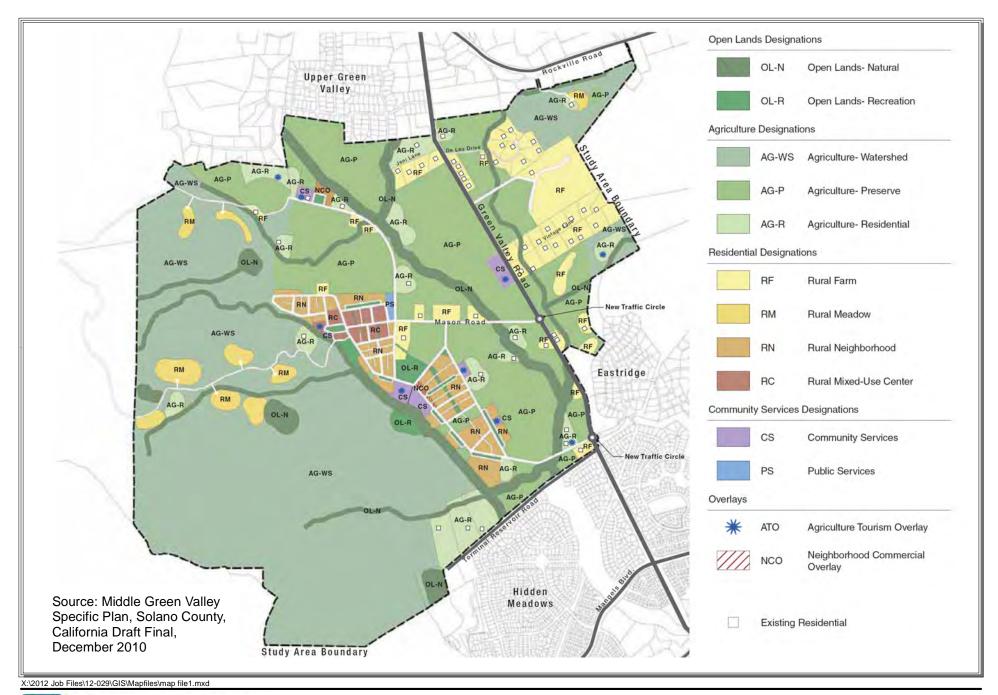
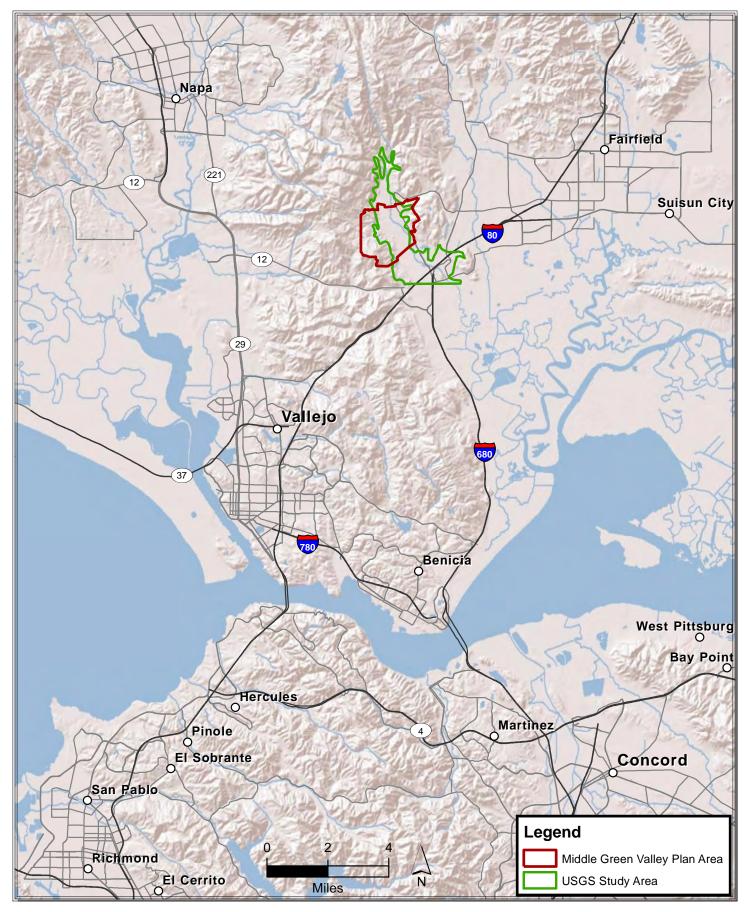


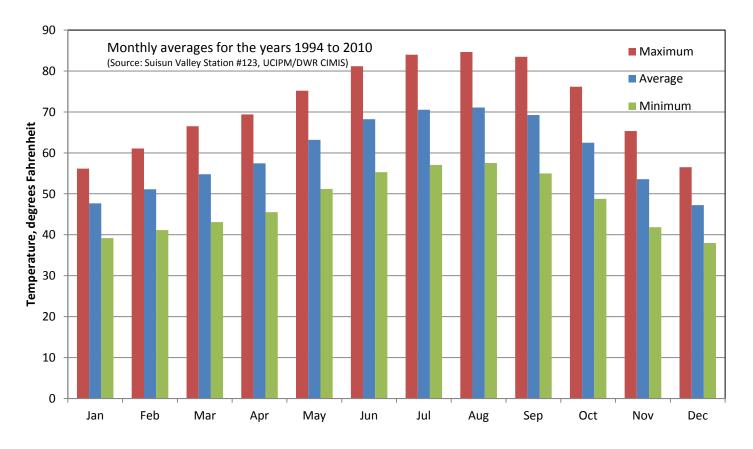


Figure 1-2 Proposed Land Use Designations Middle Green Valley Plan Area



X:\2011 Job Files\11-112\GIS\Figure 1-1 Location Map.mxd





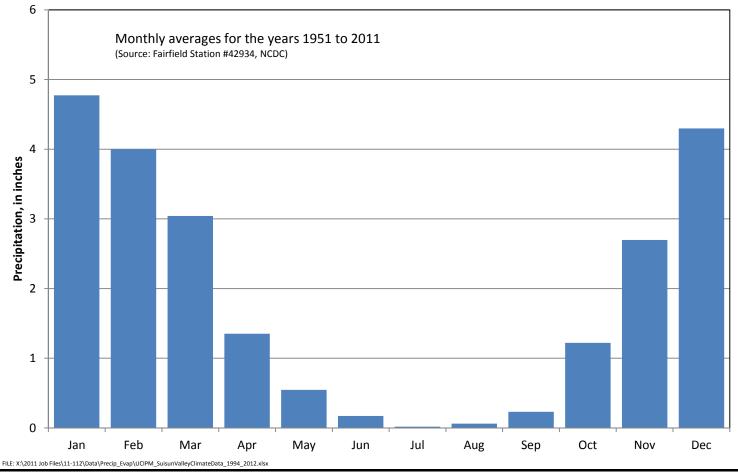
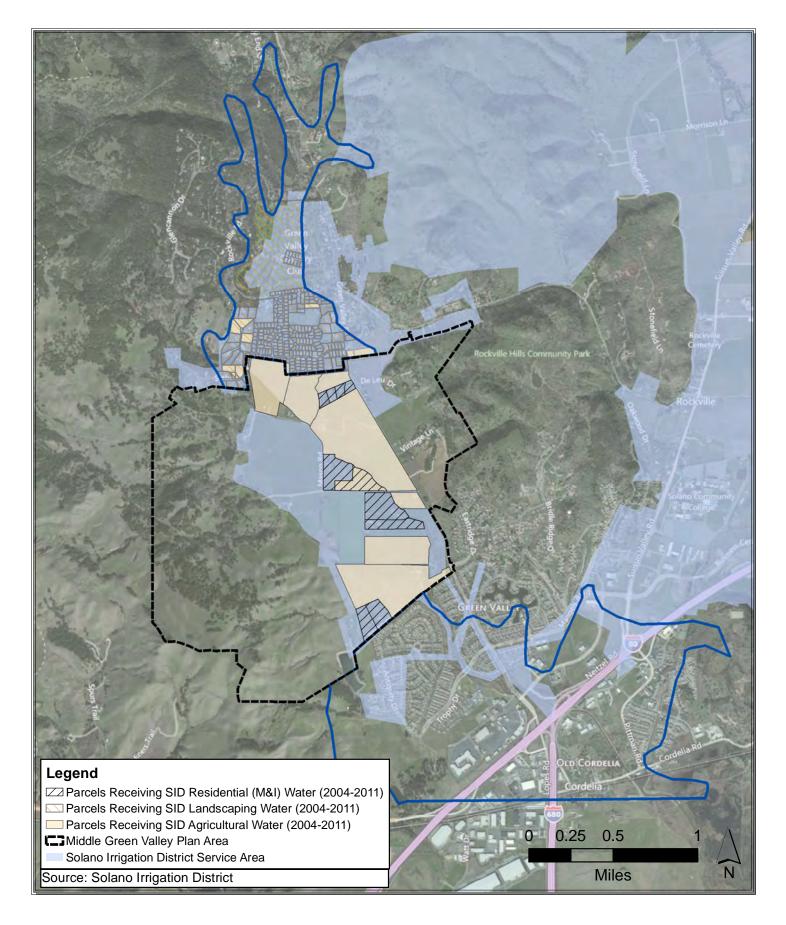


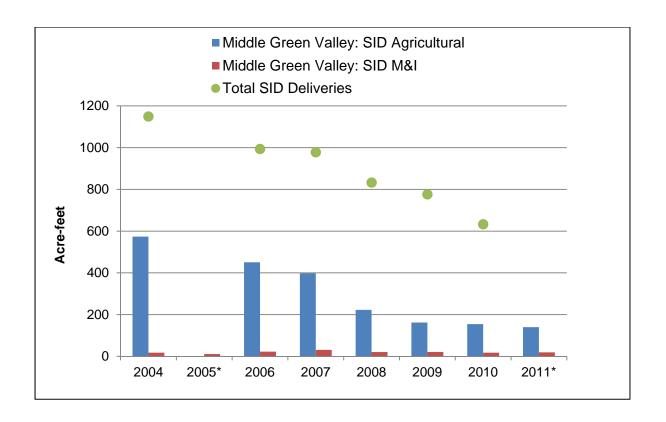


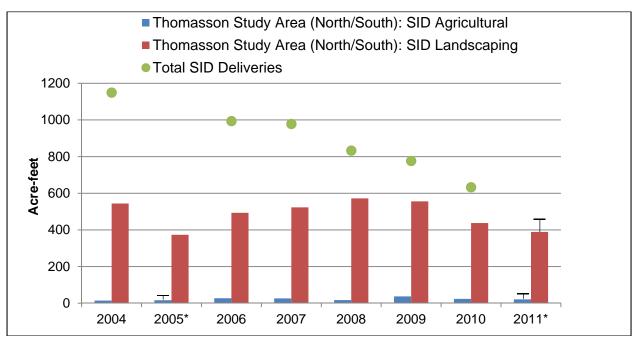
Figure 2-1
Average Monthly Temperature and Precipitation
Suisun Valley and Fairfield Stations



X:\2011 Job Files\11-112\GIS\Figure 2-x SID Deliveries.mxd

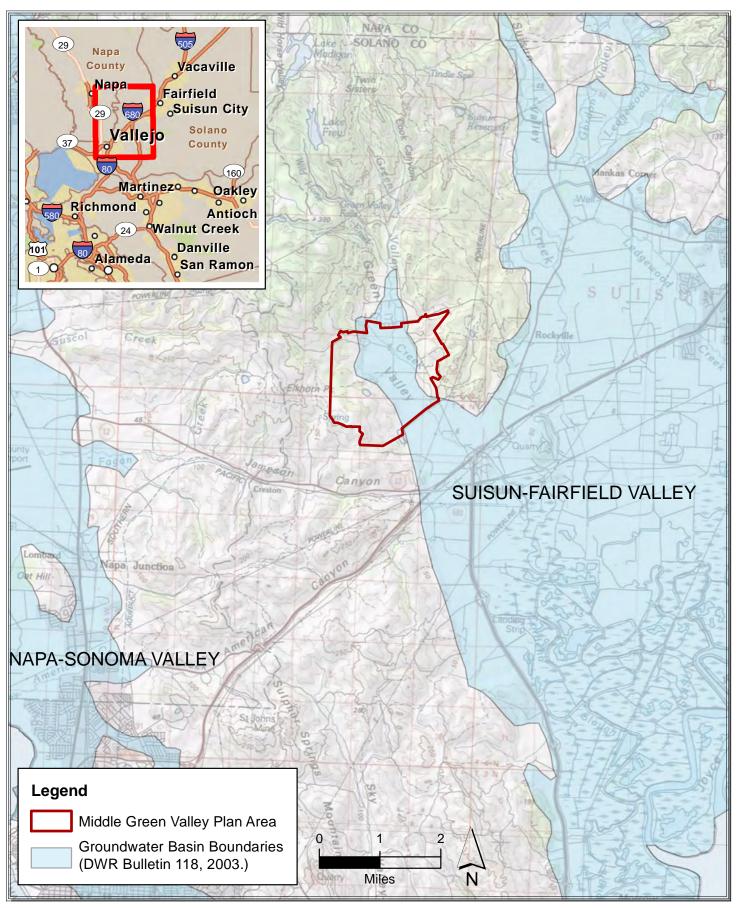






<sup>\*</sup> Data provided by SID did not include Middle Green Valley Plan Area agricultural water deliveries for 2012; or Middle Green Valley Plan Area municipal and industrial deliveries for 2012; nor complete Thomasson study area (north/south) agricultural deliveries for 2005, 2011, or 2012.

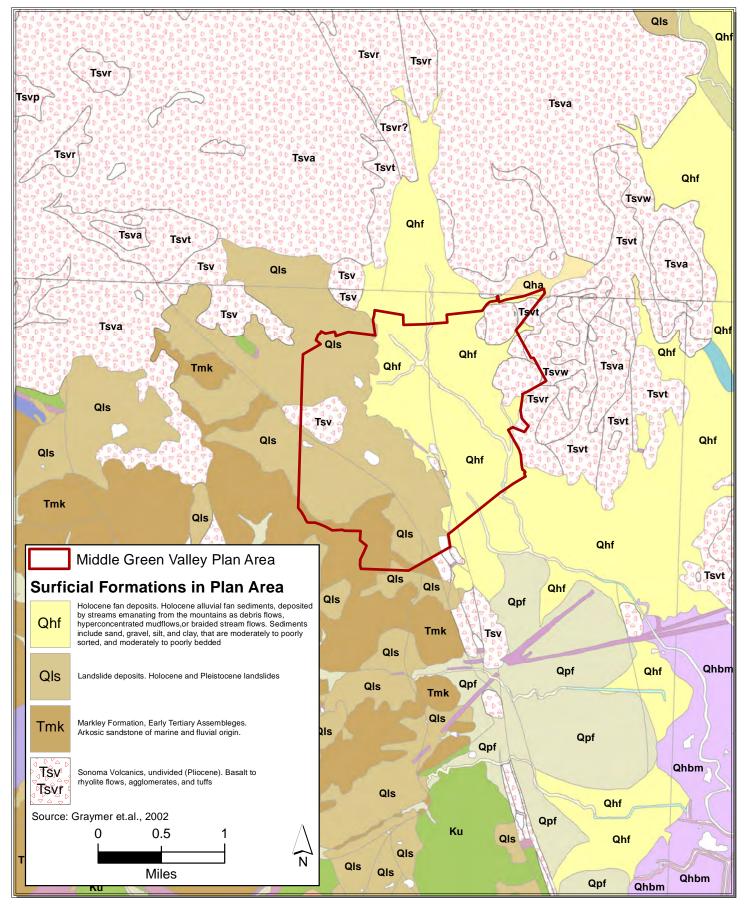




X:\2011 Job Files\11-112\GIS\plan area with DWR GWB.mxd

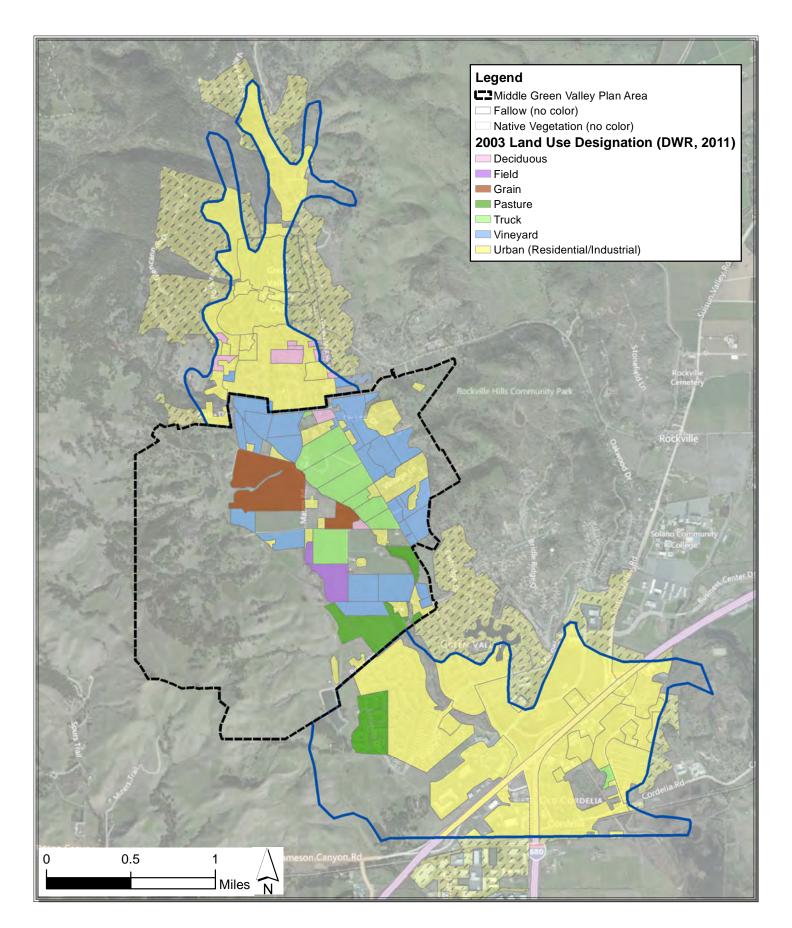


Figure 3-1 Suisun-Fairfield Valley Groundwater Basin and Middle Green Valley Plan Area



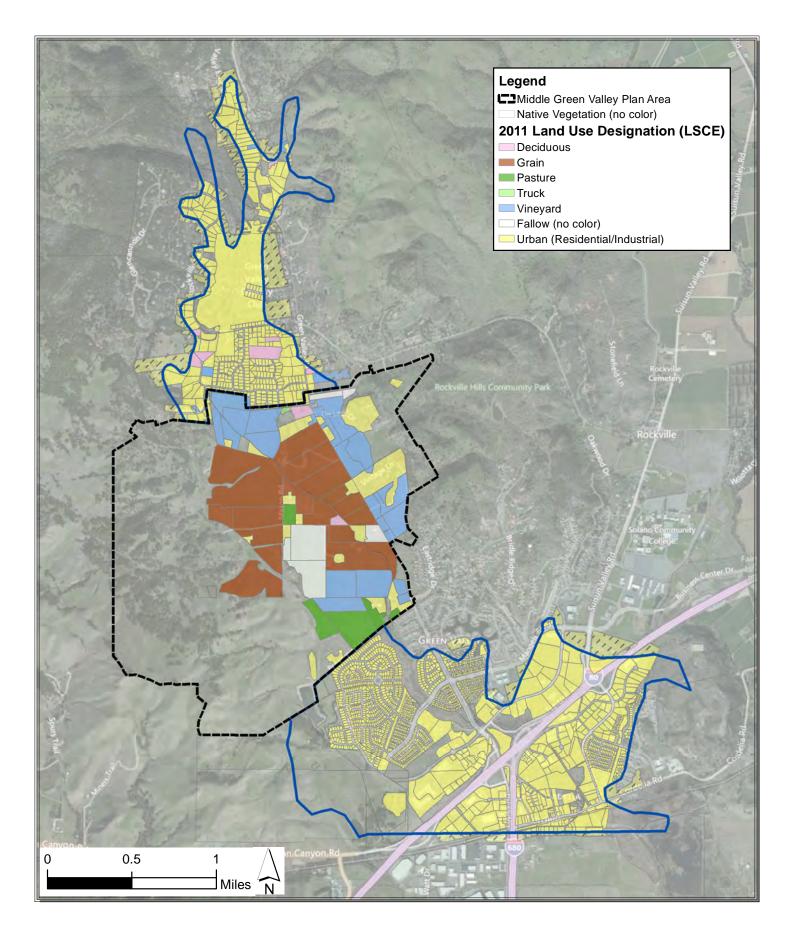
X:\2011 Job Files\11-112\GIS\Geology Map Green Valley Area, Solano County, California.mxd





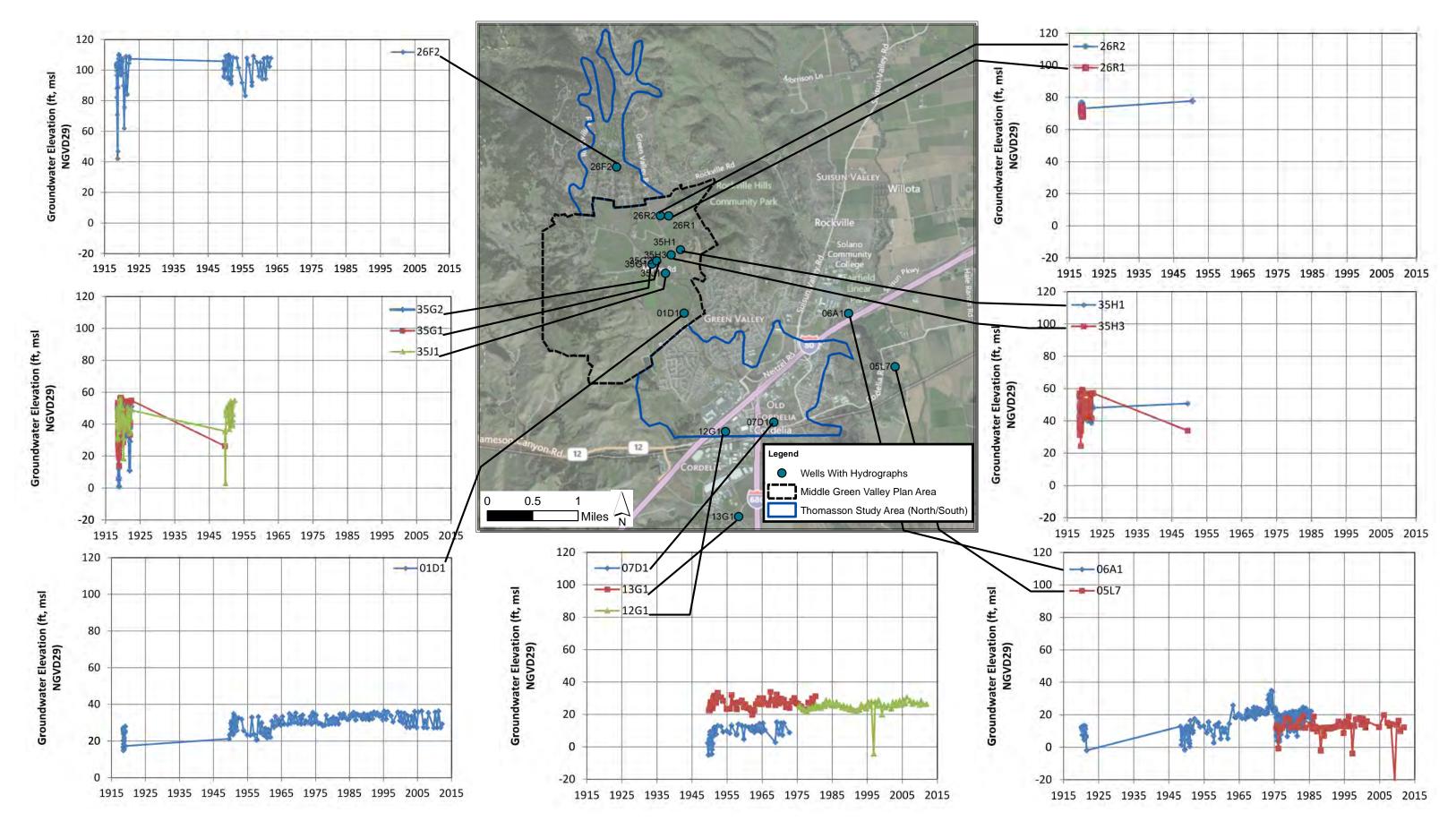
X:\2011 Job Files\11-112\GIS\Expanded WSA Figures\Figure 4-x 2003 Landuse.mxd





X:\2011 Job Files\11-112\GIS\Expanded WSA Figures\Figure 4-x 2011 Landuse.mxd

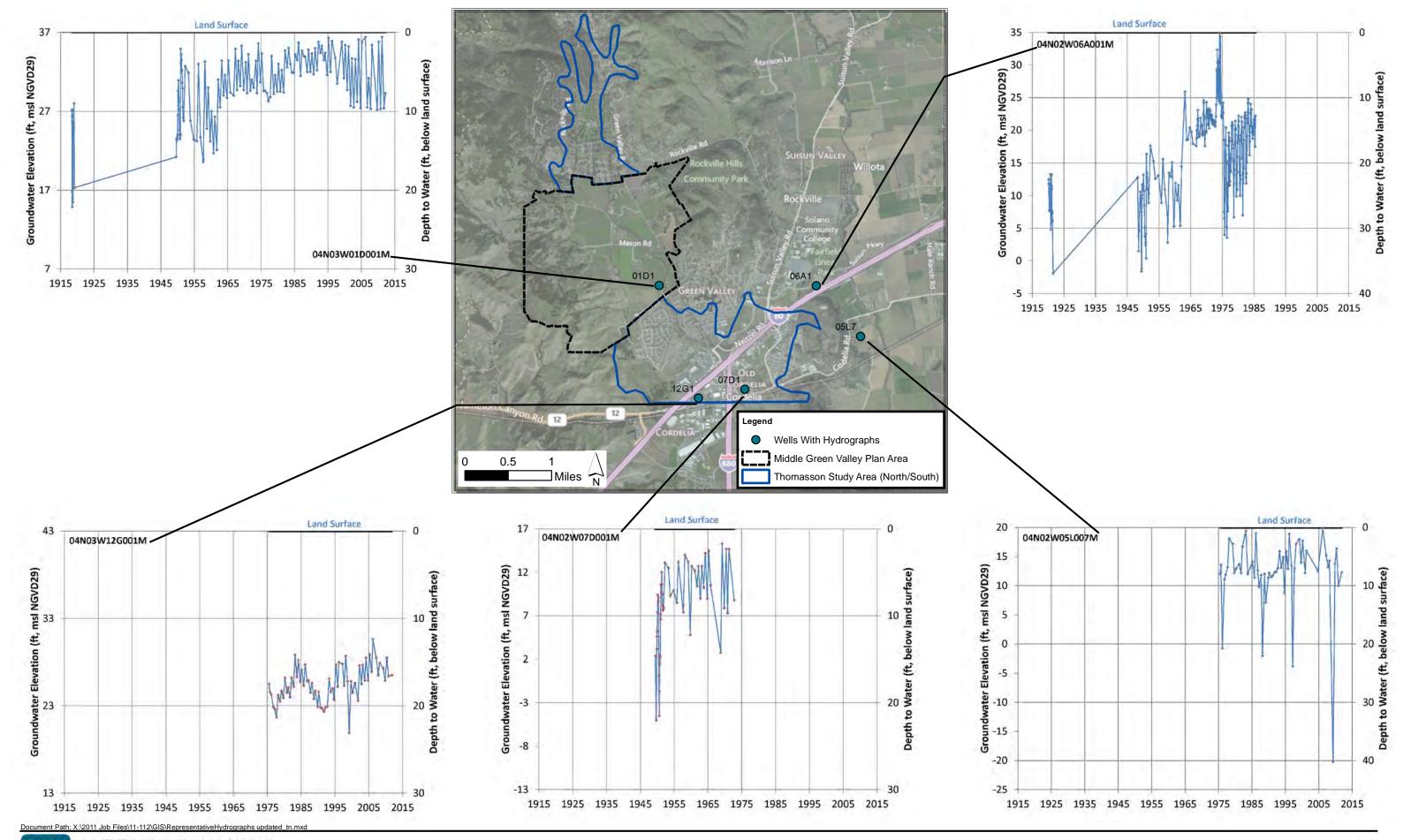




Document Path: X:\2011 Job Files\11-112\GIS\Figure 4-x Representative WLEs.mxd

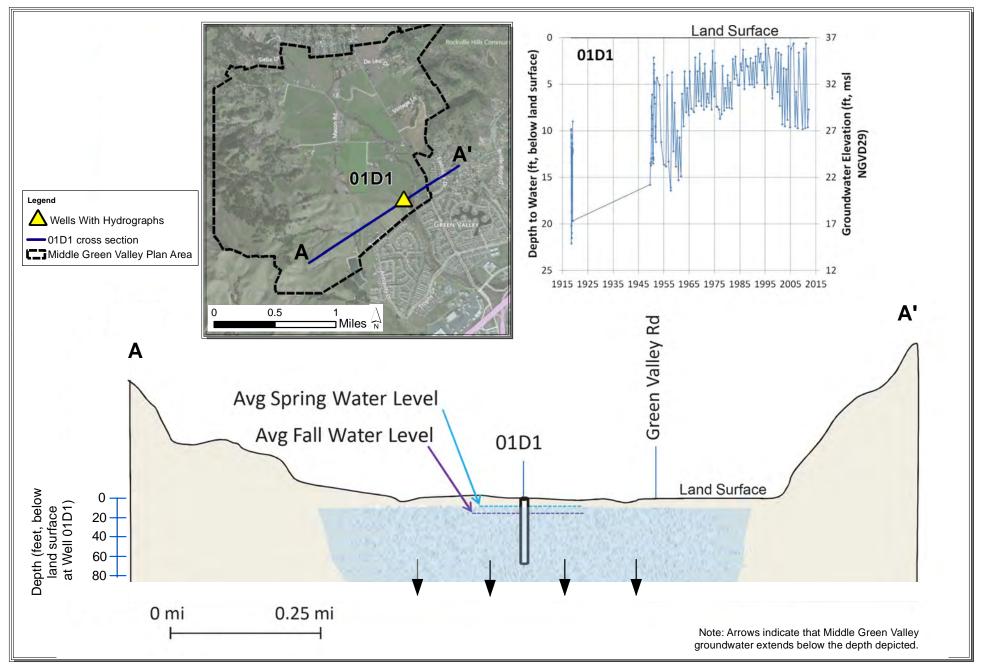


Figure 4-3 Wells with Water Level Data Representative Hydrographs



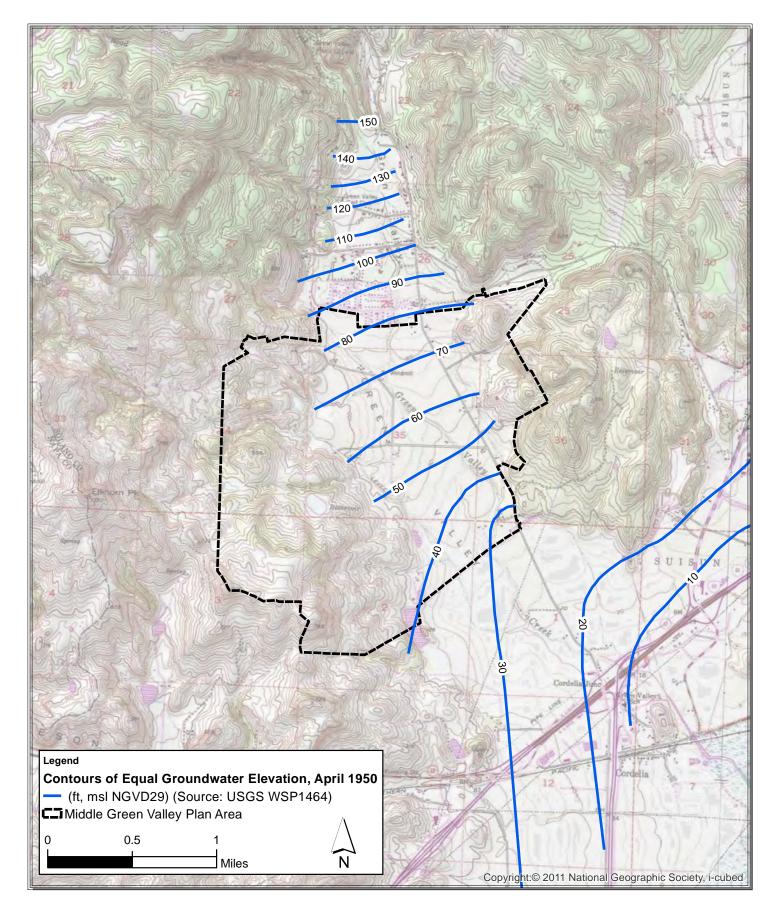
LUHDORFF & SCALMANINI CONSULTING ENGINEERS

Figure 4-4 Wells with Water Level Data Representative Depths to Water



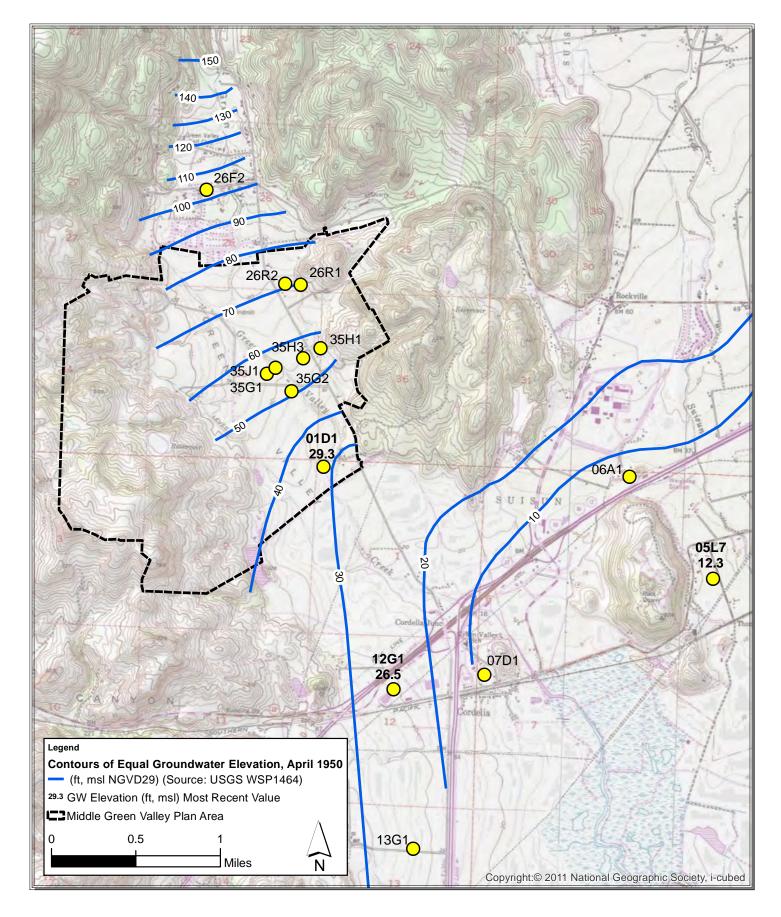
X:\2011 Job Files\11-112\GIS\MGV Depths to GW Diagram.mxd





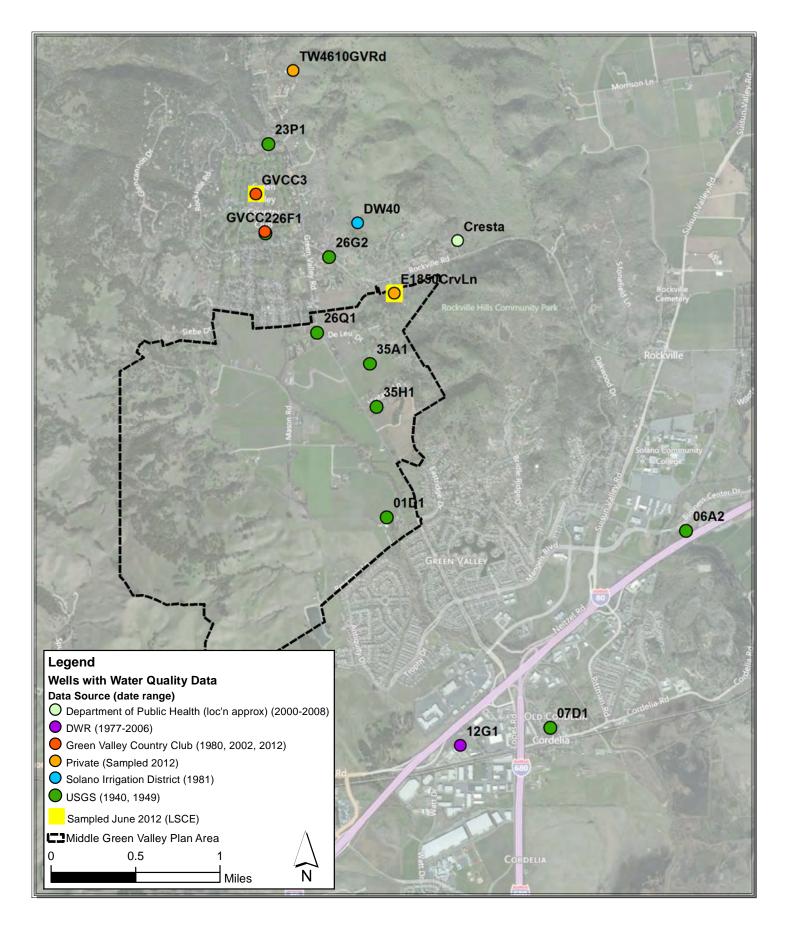
X:\2011 Job Files\11-112\GIS\Expanded WSA Figures\Figure 4-7 April1950WLEContours.mxd





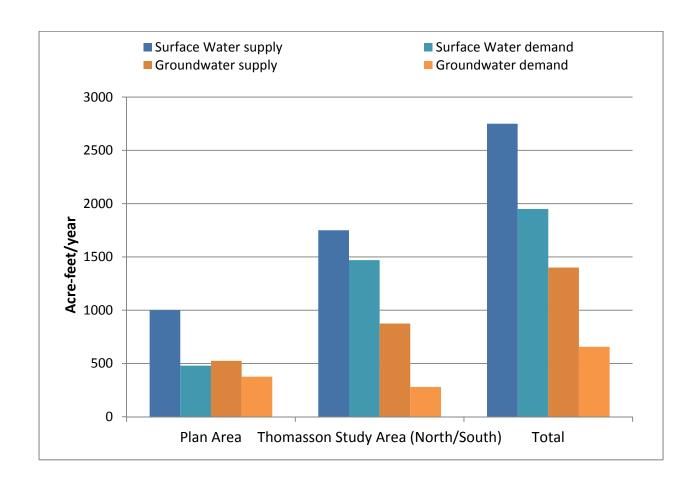
X:\2011 Job Files\11-112\GIS\Expanded WSA Figures\Figure 4-8April1950WLEContours with well.mxd





X:\2011 Job Files\11-112\GIS\Expanded WSA Figures\Figure 4-9 GWQSites.mxd





## **Appendix**

#### APPENDIX GROUNDWATER QUALITY - INORGANIC CONSTITUENTS MIDDLE GREEN VALLEY PLAN AREA

Source	Map Label	Well Name	sample date	comment	Ag* mg/L	Al mg/L	As mg/L	B mg/L	Ba mg/L	Be mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Fe mg/L	Hg mg/L	Mn mg/L	Ni ug/L	Pb mg/L	Sb mg/L	Se mg/L	Si mg/L	TI mg/L	Zn mg/L
		,		MCL**:	0.1 secondary	1 primary	0.01 primary		1 primary	0.004 primary	0.005 primary	0.05 primary	1 secondary	0.3 secondary	0.002 primary	0.05 secondary	100 primary	0.015 primary	0.006 primary	0.05 primary		0.002 primary	5 secondary
Wells in the P	Plan Area																						
USGS WSP14	164 Table 50																						
	.D1	04N03W01D001M	8/25/1949																				
260		05N03W26Q001M	8/25/1949																				
35/		05N03W35A001M	8/25/1949																				
351		05N03W35H001M	8/25/1949															1					
Nells Outside JSGS WSP14	e the Plan Area		I	l I						1	-							ł					
		04N02W06A002M	8/25/1949				-											-					<del> </del>
06/		04N02W06A002M 04N02W07D001M	8/25/1949											<b> </b>				<del> </del>					<del> </del>
231		05N03W23P001M	8/25/1949											-				-					1
261		05N03W25F001M	5/1/1940					0.34															-
261		05N03W26F001M	8/25/1949					0.34						-									-
260		05N03W26G002M	9/23/1949				-	ND										-					-
DWR		0511051V20G0021VI	3/23/1343					IND															-
120	G1	04N03W12G001M	7/12/1977					0.3										-					<del> </del>
120		04N03W12G001M	7/5/1979					0.5															-
120		04N03W12G001M	6/24/1981															l					l
120		04N03W12G001M	6/16/1983															<b></b>				-	<b></b>
120		04N03W12G001M	7/17/1985																				
120		04N03W12G001M	7/24/1987					0.4														-	
120		04N03W12G001M	7/12/1989					0															l
120		04N03W12G001M	8/18/1998															<b>†</b>					<b></b>
120		04N03W12G001M	8/26/2004					0.4															
120		04N03W12G001M	7/19/2006					0.5										İ					<b></b>
DPH	.01		7,13,2000					0.5										<b>†</b>					h
	esta	4800589-001	11/10/2000		ND	0.2	ND		ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND		ND	N
	esta	4800589-001	3/23/2001															1					
	esta	4800589-001	12/23/2003		ND	0.05	ND		ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		ND	
	esta	4800589-001	12/16/2004																				
	esta	4800589-001	12/20/2005																				
	esta	4800589-001	2/22/2006										ND										1
	esta	4800589-001	11/27/2006																				
	esta	4800589-001	11/20/2007										***************************************					İ					
Cre	esta	4800589-001	10/23/2008		ND	ND	ND		ND	ND	ND	ND	ND		ND		ND	ND	ND	ND		ND	
SID	_																						
DW	N40	SID Well DW40***	5/11/1981	test hole at 260'			0.005	0.24	0.013				***************************************	0.9		0.21							
DW	N40	SID Well DW40***	5/11/1981	test hole at 300'			0.004	0.15	0.09					0.43		0.05							
DW	N40	SID Well DW40***		test hole at 380'			0.004	0.27	0.06				***************************************	0.44		0.17		Ī					
DW	N40	SID Well DW40***	5/11/1981	test hole at 480'	<0.01		<0.004		0.15		<0.001	<0.02	0.02	0.57	<0.001	0.15		<0.01		<0.005			0.
DW	N40	SID Well DW40***	5/11/1981	test hole at 560'			0.025	0.29	0.162		•			0.51		0.07							
DW	N40	SID Well DW40***	5/19/1981	test hole at 460'			<0.005	0.06	<0.1					5		0.05							
DW	N40	SID Well DW40***	5/19/1981	test hole at 480'			<0.005	0.14	<0.1					4.5		0.04							
DW	N40	SID Well DW40***	5/19/1981	test hole at 520'			<0.005	0.2	<0.1		•			5		0.03							
DW	N40	SID Well DW40***	5/19/1981	test hole at 540'	<0.005		<0.005	0.08	<0.1		<0.002	0.006	<0.1	5.2	<0.0005	0.03		<0.005		<0.005			<(
DW	N40	SID Well DW40***	5/19/1981	test hole at 620'			<0.005	<0.05	<0.1					4.5		0.04							
DW	N40	SID Well DW40***		test hole at 665'			<0.005	<0.05	<0.1					4		0.04							
DW	N40	SID Well DW40	7/15/1981	after 4hrs of pumping			<0.005	0.095	<0.1					2		0.23							
DW	N40	SID Well DW40	7/15/1981	after 8hrs of pumping			<0.005	0.057	<0.1					2.5		0.23							
	Country Club																						
	/CC2	Green Valley Country Club Well #2	4/29/1980		<0.005		<0.03		5.3		<0.01	<0.025	0.05			<0.025		<0.01		<0.01			<0.
	/CC3	Green Valley Country Club Well #3	11/8/2002					<0.1					<0.005			0.15					86		<0.
GV	/CC3	Green Valley Country Club Well #3	6/12/2012		<0.010	<0.050	<0.002	<0.1	<0.1	<0.001	<0.001	<0.010	<0.050	11	<0.001	0.37	<10	<0.005	<0.006	<0.005		<0.001	<0.0
Private																							
	V4610GVRd	Tom West 4610 Green Valley Rd	4/25/2012				0.0016	<0.1						8.2		0.44					109		0.0
F18	850CrvLn	Engell 1850 Cravea Lane	6/12/2012		< 0.010	< 0.050	< 0.002	<0.1	< 0.1	< 0.001	< 0.001	< 0.010	< 0.050	<0.1	< 0.001	< 0.010	<10	< 0.005	<0.006	< 0.005	. T	< 0.001	<0.0

<sup>\*</sup> Ag = Silver, Al = Aluminum, As = Arsenic, B = Boron, Ba = Barium, Be = Beryllium, Cd = Cadmium, Cr = Chromium, Cu = Copper, Fe = Irc

\*\* Water quality standards are listed for reference as primary Maximum Contaminant Level (MCL) or secondary MCLs

\*\* Depth-specific sampling over 11 intervals and multi-hour pump test

Highlighted cells exceed Maximum Contaminant Level; ND indicates non-detectible concentrations with no detection limit reported

#### APPENDIX GROUNDWATER QUALITY - GENERAL MINERALS MIDDLE GREEN VALLEY PLAN AREA

ource	Map Label	Well Name	sample date	comment  MCL**:	pH* pH units 6.5-8.5	TDS mg/L 500		Hardness All g/L as CaCg/L			CO3 L as CaC(g	OH /L as CaC(	Ca mg/L	K mg/L	Mg mg/L	Na mg/L	Cl mg/L 250	F mg/L 2	NH3-N	NO2-N ug/L 1000	NO3-NO3 mg/L 45	NO3+NO2-N ug/L 10000	SO4 mg/L 250	Turbidi NTU 5
		_	,	IVICE**.	secondary	secondary	secondary											primary		primary	primary	primary	secondary	
lls in the	Plan Area																							
	464 Table 50	)	İ		1			1					1				- 1					i		$\overline{}$
	1D1	04N03W01D001M	8/25/1949				487	115									48			-				-
	601	05N03W26Q001M	8/25/1949				240	70			-						22							
	5A1	05N03W35A001M	8/25/1949				158	40			- +						11							+
	5H1	05N03W35H001M	8/25/1949				188	40									15				-			+
	de the Plan A		6/23/1343				100	40									15							
	464 Table 50		1		1		1					- 1					1			-		1		1
			0/25/1010				557	150	+				+									ļ		+
	6A2	04N02W06A002M	8/25/1949				557	150									51					ļ		+
	7D1	04N02W07D001M	8/25/1949				1030	200									149							+
	3P1	05N03W23P001M	8/25/1949				236	75									17							+
	6F1	05N03W26F001M	5/1/1940																					
	6F1	05N03W26F001M	8/25/1949				161	40									12							
	6G2	05N03W26G002M	9/23/1949				50															ļ		-
VR																								
	2G1	04N03W12G001M	7/12/1977		8.2	998		505	352				136	0.8			243				. 27	1	137	7
	2G1	04N03W12G001M	7/5/1979		8.4		1590	491	382				134		38	164	211							1
	2G1	04N03W12G001M	6/24/1981		8.2		1750	556	390		T		150		44	172	247		T					
1	2G1	04N03W12G001M	6/16/1983		8.4		2020	826	446				240		55	180	295							
1	2G1	04N03W12G001M	7/17/1985		8.2		2200	715	444				189		59	211	311							T
1	2G1	04N03W12G001M	7/24/1987		8.2	1490	2200	744	450				184	1.2	69	219	336				31		234	4
	2G1	04N03W12G001M	7/12/1989		8.4		2040	672	474				180	1	54		287							
	2G1	04N03W12G001M	8/18/1998		7.6		2160	692	457				190		53		285			-				+
	2G1	04N03W12G001M	8/26/2004		7.6	1288	2200	77	429		-		21	0		509	218				25.6		262	2
	2G1	04N03W12G001M 04N03W12G001M	7/19/2006		7.7	1330	2251	5	476				1	1		505	210				23.2		327	
н	201	04N03W12G001W	7/13/2000		7.7	1330	2231										210				23.2		321	<del></del>
		4000500 004	44/40/2000				4.40	24	- 40			110	7.0		2.7			ND						
	resta	4800589-001	11/10/2000		6.8	ND	140	34	40	50	ND	ND	7.6	5	3.7	11	9	ND		ND			5.9	3
	resta	4800589-001	3/23/2001																		E	<del></del>		
	resta	4800589-001	12/23/2003												3.4			0.1		ND				
	resta	4800589-001	12/16/2004																		6.7			
C	resta	4800589-001	12/20/2005																		6.2			
C	resta	4800589-001	2/22/2006		6.75	170	160	42	39	48	ND	ND	9	5.8	4.8	13	13	ND			8.1		8.2	2
С	resta	4800589-001	11/27/2006																	ND	7	1600		
С	resta	4800589-001	11/20/2007																		5.4			
	resta	4800589-001	10/23/2008																ND		NE			
)			.,.,																			ļ		+
	W40	SID Well DW40***	5/11/1981	test hole at 260'		283	150			78	ND						15.2					† · · · · · · · · · · · · · · · · · · ·		+
	W40	SID Well DW40***		test hole at 300'		220	152			73	ND						13.7				•	1		+
	W40	SID Well DW40***		test hole at 380'		289	151			75	ND						13.7							+
	W40	SID Well DW40***			7.5	360	153	44		70	ND	ND	8.5		5.8	18.8	15.7	<0.1		-	1.15102		<2	2
				test hole at 480'	7.5			44				ND	8.5		5.6	10.0		VU.1			1.15102			4
	W40	SID Well DW40***		test hole at 560'		326	152			102	ND						4.9							
	W40	SID Well DW40***		test hole at 460'		130	250		105	105	<1	<1					8.2							
	W40	SID Well DW40***		test hole at 480'		170			98	98	<1	<1					8.2					ļ		
	W40	SID Well DW40***		test hole at 520'		150	250		94	94	<1	<1					8.2							
	W40	SID Well DW40***	5/19/1981	test hole at 540'	7.8	170		90	100	100	<1	<1	20		9.4	20	8.2	0.08			<0.02		8.3	3
D	W40	SID Well DW40***	5/19/1981	test hole at 620'		160	290		60	60	<1	<1	T				26							
D	W40	SID Well DW40***	5/19/1981	test hole at 665'		140	250		98	98	<1	<1					8.2							
D	W40	SID Well DW40		after 4hrs of pumping		210				95	0						7							1
D		SID Well DW40		after 8hrs of pumping		240				93	0						7							
	y Country Clu		7, 00.								1													
		Green Valley Country Club Well #2	4/29/1980		7.2	194	200	60	59	59	ND	ND	13.1		9.6	11.1	9.4				1.1		18	8
	VCC3	Green Valley Country Club Well #3	11/8/2002		7.4	420	220	64	120	120	<10	<10	13.1		7.7	27	14	0.5	-	<100	1	<2000		
	VCC3	Green Valley Country Club Well #3	6/12/2012		6.87	140		54	87	87	<5.0	<5.0	10	5		23				1100	<2.0		<0.50	
vate	VCCJ	Green valley country club well #3	0/12/2012		0.87	140	210	J-4	- 67	07	\5.0	\3.0	10		0.7	23	11	0.21			×2.0		\0.50	-
	WACTOCKET	Tom West 4610 Creen Valley 27	4/25/2012	-	7.5	240	200	71	88	108	<6.0	<1.7	14		8.4	17	9.1	0.31			<2		4.2	-
		Tom West 4610 Green Valley Rd												2.0										
IF.	1850CrvLn	Engell 1850 Cravea Lane	6/12/2012		6.61	180	160	45	40	40	<5.0	<5.0	8.3	3.8	5.8	12	9.7	< 0.10	1		14	-	5.6	٥

\* pH = pH, TDS = Total Dissolved Solids, EC = Electrical Conductivity, Hardness = Hardness (as CaCO3), Alk-total = Total Alkalinity (as CaCO3), CO3 = Carbonate (as CaCO3), OH = Hydroxide (as CaCO3), CA = Calcium, K = Potassium, Mg = Magnesium, Na = Sodium, CI = Chloride, F = Flouride, NO2-N = Nitrite as Nitrogen, NO3-NO3 = Nitrate and pri = pri, ID = 102a Dissolved Solids, EL = Electrical Conductivity, Hardness = Farancess (as CaLU3), Aik-total = Iotal Alkalinity (as Cal Nitrate, NO3-NO2-N = Nitrate plus Nitrite as Nitrogen, SO4 = Sulfate, Turblidy = Turblidity = Turblidity \*\* Water quality standards are listed for reference as primary Maximum Contaminant Level (MCL) or secondary MCLs \*\*\* Depth-specific sampling over 11 intervals and multi-hour pump test Highlighted cells exceed Maximum Contaminant Level; ND indicates non-detectible concentrations with no detection limit reported

# **Appendix B1**

State Water Resources Control Board, documents regarding Water Rights License 13876



## STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

#### **DIVISION OF WATER RIGHTS**

#### RIGHT TO DIVERT AND USE WATER

**APPLICATION 11199** 

**PERMIT 10657** 

**LICENSE 13876** 

Right Holder:

Solano County Water Agency
Solano Irrigation District
Maine Prairie Water District
City of Vacaville
City of Fairfield
City of Vallejo
City of Suisun
California Department of Corrections
Regents of the University of California
c/o 810 Vaca Valley Parkway, Suite 203
Vacaville, CA 95688

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from **October 29, 1945**. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated July 6, 2012. This right supercedes any previously issued right on **Application 11199**. The right holder has made proof, to the satisfaction of the State Water Board, of the quantities of water put to beneficial use during the authorized development schedule.

The Deputy Director for Water Rights finds that: (a) the change will not operate to the injury of any lawful user of water; (b) good cause has been shown for the change; (c) the petition does not constitute the initiation of a new right; and (d) the State Water Board has made the required findings pursuant to the California Environmental Quality Act (CEQA) or the project is exempt from CEQA.

The State Water Board has complied with its independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346, 658 P.2d 709].)

Right holder is hereby granted a right to divert and use water as follows:

Source of water: Putah Creek

Tributary to: Yolo By-Pass

Within the Counties of Solano and Yolo

2. Location of point of diversion

By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
Monticello Dam North 1,948,789 feet and East 6,532,057 feet	SW¼ of NE¼	29	8N	2 <b>W</b>	MD

Location of point of rediversion

By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
Putah Diversion Dam  North 1,940,989 feet and East 6,559,557 feet	SW¼ of SE¼	31	8N	1W	MD

3. Purpose of use	4. Place of use										
	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian	Acres					
Domestic, Municipal, Industrial, Frost Protection, Irrigation, Recreational	428,300 acres in Yolo and Solano Counties within T2N to T8N, R5W to R4E, MDB&M										
Fish and Wildlife Enhancement	29-miles of Putah Cree Sacramento River Dee										
Recreational	Lake Berryessa within	T7N to T10N, R		MDB&M							

The place of use is shown on map 413-208-1484A dated February 9, 2009, filed with the State Water Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 948,337 acre-feet per annum by storage to be collected from November 1 of each year to May 31 of the succeeding year. The maximum withdrawal in any one year shall not exceed 360,699 acre-feet per annum.

(000005C)

6. The total amount taken from the source (collection to storage plus direct diversion) under this license, and the water rights pursuant to Applications 12716 and 12578 shall not exceed **999,031 acrefeet per annum**.

(000005Q)

7. The maximum amount placed to beneficial use (withdrawal from storage plus direct diversion) under this water right and the water rights pursuant to Applications 12716 and 12578 shall not exceed **401,286 acre-feet per annum.** 

(0000114)

8. The total maximum quantity of water delivered for consumptive use (withdrawal from storage plus direct diversion) under this license, together with that delivered under the water rights pursuant to Applications 12578 and 12716 shall not exceed **250,000 acre-feet** in any one year.

(0000114)

9. Licensee shall operate the Solano Project to comply with the release and instream flow requirements specified in Exhibits E-1, E-2, and E-3 (attached). These requirements are the same as the release and instream-flow requirements specified in the Second Amended Judgments in the Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565, Sacramento County Superior Court.

Notwithstanding the above license requirement, the State Water Board shall not pursue an action or proceeding for enforcement or violation of this condition based on a violation or violations of one or more of the minimum mean daily flow requirements established in Exhibit E-1 section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4), and D.(3), or one or more of the minimum instantaneous flow requirements established in Exhibit E-1 sections A.(2), B.(2), C.(1), C.(2), C.(3) and C.(4), provided that:

- 1. The Solano Project was being operated to comply with the release and instream flow requirements in Exhibits E-1, E-2, and E-3; and
- 2. The violation of the minimum mean daily flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4) or D.(3), or the minimum instantaneous flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3) or C.(4) was solely the result of an unanticipated and unforeseeable increase in a diversion or diversions from, or reduction in an inflow or inflows into, Putah Creek downstream of the Putah Diversion Dam, by some person or entity besides U.S. Bureau of Reclamation, the Solano County Water Agency or the Solano Irrigation District, and the increase or reduction occurred so rapidly that the Solano Project could not reasonably maintain compliance by increasing the releases from the Putah Diversion Dam in Lower Putah Creek; and
- 3. The 4-day running mean flow at the relevant compliance point equaled or exceeded the applicable minimum mean daily flow; and
- 4. The instantaneous flow at the relevant compliance point was not more than 5 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from January through July, and was not more than 3 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from August through December.

The dedication of water to instream flow is not intended to affect any obligation imposed pursuant to the existing water rights for the Solano Project to provide protection to downstream prior rights and to provide percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project. Water required pursuant to the flow regime set forth in Attachment E-1 over and above the amounts of water required to meet existing obligations for percolation and downstream prior rights is dedicated to instream flows pursuant to Water Code section 1707. Water dedicated to the environment pursuant to Water Code section 1707 is not available for appropriation.

The Licensee shall electronically report to the State Water Board: (a) daily records of diversions to Putah South Canal, (b) daily records of flows past the Putah Diversion Dam, (c) daily records of the quantity dedicated to the environment, pursuant to the 1707 petition, and (d) records of depth to groundwater in the spring of each year for the area influenced by Putah Creek between mile 4.0 and

mile 11.0. The requirement to record depth to groundwater may be discontinued upon a showing, to the satisfaction of the Deputy Director for Water Rights, that further groundwater elevation monitoring is not needed.

No credit shall be given for the 1707 petition flows unless the required documentation is timely submitted.

Licensee shall allow authorized representatives of the State Water Board reasonable access to the project works and properties for the purpose of gathering information and data.

(0510900)

10. Licensee shall release water into Putah Creek channel from Monticello Reservoir and past the Putah Diversion Dam in such amounts at such times and rates as will be sufficient, together with inflow from downstream tributary sources, to supply downstream diversions of the surface flow under vested prior rights to the extent water would have been available for such diversions from unregulated flow, and sufficient to maintain percolation of water from the stream channel as such percolation would occur from unregulated flow, in order that operation of the project shall not reduce natural recharge of groundwater from Putah Creek.

The State Water Board reserves continuing authority over the license to: (1) determine if the schedule of releases required herein provides adequate protection to downstream prior rights and provides percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project, (2) make further orders that may be necessary concerning proper releases of water, and (3) impose conditions providing for additional measurements or studies that may be necessary for a final determination to be made.

(0500300)

11. This license is subject to post-October 29, 1945 appropriative water rights in the Putah Creek watershed above Monticello Dam which (1) are licensed for the use of water perfected as of December 31, 1995, pursuant to the March 10, 1995, Condition 12 Settlement Agreement, or (2) are perfected after December 31, 1995, provided the holders of such rights have subscribed, subscribe, or are otherwise subject to the provisions of the March 10, 1995, Condition 12 Settlement Agreement.

(0500300)

12. If it is determined after license issuance that the as-built conditions of the project are not correctly represented by the map(s) prepared to accompany the application, licensee shall, at his expense have the subject map(s) updated or replaced with equivalent as-built map(s). Said revision(s) or new map(s) shall be prepared by a civil engineer or land surveyor registered or licensed in the State of California and shall meet the requirements prescribed in section 715 and sections 717 through 723 of the California Code of Regulations, Title 23. Said revision(s) or map(s) shall be furnished upon request of the Deputy Director for Water Rights.

(0000030)

### THIS LICENSE IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

Reports shall be filed promptly by the right holder on the appropriate forms which will be provided for the purpose from time to time by the State Water Board.

Right holder shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by the State Water Board, reasonable access to project works to determine compliance with the terms of this right.

Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this right with a view to eliminating waste of water and to meeting the reasonable water requirements of right holder without unreasonable draft on the source. Right holder may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this right and to determine accurately water use as against reasonable water requirement for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by right holder in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution article X, section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust.

The quantity of water diverted under this right is subject to modification by the State Water Board if, after notice to the right holder and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that: (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

This right does not authorize any act which results in the taking of a threatened or endangered species or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, right holder shall obtain authorization for an incidental take prior to

construction or operation of the project. Right holder shall be responsible for meeting all requirements of the state or federal Endangered Species Acts for the project authorized under this right.

If construction or rehabilitation work is required for the diversion works covered by this right within the bed, channel, or bank of the affected water body, right holder shall enter into a streambed or lake alteration agreement with the State Department of Fish and Wildlife. Right holder shall submit a copy of the agreement, or waiver thereof, to the Division of Water Rights prior to commencement of work. Compliance with the terms and conditions of the agreement is the responsibility of the right holder.

Water Code section 1629. Every licensee, if he accepts a license, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefore shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Water Code section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Water Code section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

STATE WATER RESOURCES CONTROL BOARD

Barbara Evoy, Deputy Director Division of Water Rights

James W. Knosel

Dated:

MAY 28 2013

Attachments: Exhibits E-1, E-2 and E-3

#### Exhibit "E-1"

### Solano Project Releases and Instream Flows for Lower Putah Creek

Diversions under the rights issued pursuant to Applications 11199, 12578 and 12716 are not authorized unless the flows set forth in this exhibit are met.

#### A. Rearing Flows ((1), (2) & (3) all shall be maintained)

(1) Licensee/Permittee shall, for each month as set forth below, maintain mean daily releases from the Putah Diversion Dam to Creek downstream of the Putah Diversion Dam (hereinafter "lower Putah Creek") that are equal to or in excess of the following rates, expressed in cubic feet per second ("cfs"):

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aua	Sep
Mean Daily release (cfs)	20	25	25	25	16	26	46	43	43	43	34	20

These mean daily releases shall be measured at the Putah Diversion Dam and made from the Putah Diversion Dam into lower Putah Creek immediately downstream of the Putah Diversion Dam. The instantaneous releases at the Putah Diversion Dam shall at all times equal or exceed ninety percent (90%) of the applicable mean daily release requirement.

(2) Licensee/Permittee shall, for each month as set forth below, release sufficient water from the Putah Diversion Dam into lower Putah Creek immediately downstream of the Putah Diversion Dam to maintain mean daily flows in lower Putah Creek that are equal to or in excess of the following rates, expressed in cubic feet per second ("cfs"):

	Oct	Nov	Dec	Jan	Feb	Mar	ΙαΑ	Mav	Jun	Jul	Aua	Sep
Mean Daily Flows (cfs)	5	10	10	15	15	25	30	20	15	15	10	5 5

These mean daily flows shall be maintained and measured at or in the near vicinity of the

Interstate 80 Bridge. The instantaneous flow at the Interstate 80 Bridge shall at all times equal or exceed ninety percent (90%) of the applicable mean daily flow requirement.

Licensee/Permittee shall at all times of the year release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a continuous flow of surface water in Putah Creek from the Old Davis Road Bridge to the western boundary of the Yolo Bypass, identified as River Mile 0.0 on trial exhibit number 41 in the Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565.

### B. Spawning Flows ((1), (2) & (3) all shall be maintained)

- (1) At a time between February 15 and March 31 of every calendar year,

  Licensee/Permittee shall release a three-consecutive-day pulse of water from the

  Putah Diversion Dam into lower Putah Creek equal to or in excess of the following
  rates:
  - (a) 150 cfs for the first 24 hours;
  - (b) 100 cfs for the second 24 hours; and
  - (c) 80 cfs for the third 24 hours.

Licensee/Permittee may, in its discretion, time this pulse so as to utilize any uncontrolled flows that may provide some or all of the water needed to comply with this requirement.

(2) In every year, for the 30 days that follow the three-day pulse release described in paragraph B.(1), Licensee/Permittee shall release sufficient water from the Putah Diversion Dam into lower Putah Creek to maintain a mean daily flow equal to or in excess of 50 cfs at the Interstate 80 Bridge. During this period, the instantaneous flows at the Interstate 80 Bridge shall at all times equal or exceed 45 cfs.

(3) In every year, at the conclusion of the 30<sup>th</sup> day of the 50 cfs spawning flows described in subsection B.(2), Licensee/Permittee then shall ramp down the controlled release from the Putah Diversion Dam gradually over a seven-day period until the flows are in compliance with the applicable requirements set forth in subsections A.(2), A.(3), C.(3) and C.(4) of this Exhibit "E-1".

## C. Supplemental Flows ((1), (2), (3) & (4) all shall be maintained)

The requirements set forth thus far herein are intended to protect the aquatic and related resources found in lower Putah Creek. In addition to maintaining these resources, Licensee/Permittee shall provide supplemental flows in an attempt to enhance the aquatic and related resources of lower Putah Creek above that baseline. Accordingly:

- (1) Licensee/Permittee shall, during the period from November 1 through December 15 of each calendar year, release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 5 cfs, and an instantaneous flow of at least 2 cfs, at the point where Putah Creek discharges into the Toe Drain on the eastern side of the Yolo Bypass (the "East Toe Drain").
- (2) Beginning sometime between November 15 and December 15 of each calendar year, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 50 cfs, and an instantaneous flow of at least 45 cfs, for five consecutive days at the point where Putah Creek discharges into the East Toe Drain. If a flash board dam is present on Putah Creek near the East Toe Drain during that period, and if the flash boards are removed during that period, then to the extent feasible the first day of the 50 cfs pulse flow at the East Toe Drain shall follow the removal of the flash boards. The precise timing of the initiation of the 50 cfs pulse flow shall be set each year by the

Lower Putah Creek Coordinating Committee (the "LPCCC") established in accordance with section III of the Second Amended Judgments in the *Putah Creek Water Cases*, Judicial Council Coordination Proceeding No. 2565. The objective of the LPCCC shall be to time the release so as to maximize the potential for such flows to attract anadromous fish into Putah Creek. If the exact date of releases has not been established or agreed upon by the LPCCC, then the releases dealt with in this subparagraph shall commence on December 1 of the affected calendar year.

- (3) Beginning on the sixth day after initiation of the above described 50 cfs pulse flow, and continuing each day thereafter through March 31, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 19 cfs, and an instantaneous flow of at least 14 cfs, at I-80.
- (4) Beginning on April 1 of each calendar year, and continuing each day thereafter through May 31, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 5 cfs, and an instantaneous flow of at least 2 cfs, at the point where Putah Creek discharges into the East Toe Drain.

#### D. Drought Year Flows

(1) During years when total storage in Lake Berryessa is less than 750,000 acre feet ("af") as of April 1 (a "Drought Year"), the release and instream flow requirements set forth in sections D.(2), D.(3) and D.(4) below ("Drought Year Requirements") shall apply instead of the release and instream flow requirements set forth in sections A., B. and C. above ("Non-Drought Year Requirements"). Provided, however that if after April 1 the total storage in Lake Berryessa rises to 750,000 af or more, then the Non-Drought Year Requirements shall immediately take effect.

(2) During a Drought Year, releases of water from the Putah Diversion Dam into Lower Putah Creek shall equal or exceed the following amounts (mean daily values, in cfs, with instantaneous releases always equal to or exceeding 90% of the listed values):

Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mav	lun	lul	A	
15	25	25	25	16	26	46	33	33	33	26	Sep 15

- During a Drought Year, Licensee/Permittee shall release sufficient water from the Putah Diversion Dam to maintain a continuous flow of surface water in Putah Creek from Putah Diversion Dam to the Interstate 80 Bridge, and further shall release sufficient water from the Putah Diversion Dam to maintain a minimum mean daily instream flow of 2 cfs at the Interstate 80 Bridge, with instantaneous flows always equal to or exceed 1 cfs. Under these conditions, Licensee/Permittee shall not be required to maintain a continuous flow of surface water in the reach of Putah Creek below the Interstate 80 Bridge.
- Whenever the release and instream flow requirements set forth in sections D.(2) and D.(3) are in effect for two consecutive years, then during the next year thereafter the Non-Drought Year Requirements shall apply and shall remain in effect for an entire period from April 1 through March 31, unless total storage in Lake Berryessa on April 1 is less than 400,000 af. If the Drought Year Requirements are ever in effect for three or more consecutive years, then the Non-Drought Year Requirements shall apply and remain in effect for an entire period from April 1 through March 31 in the first subsequent year during which total storage in Lake Berryessa on April 1 exceeds 400,000 af.
- (5) For the purposes of this section D, "total storage in Lake Berryessa" shall be the actual amount of water that physically is stored in Lake Berryessa (including all carryover storage) plus a Storage Adjustment. As of the date of entry of the Amended Judgment, the Storage Adjustment shall be zero. Thereafter, the amount

of any controlled release of water from Lake Berryessa that is not for the purpose of (i) Solano Project Diversions, or (ii) maintaining the flows in lower Putah Creek that are required by the Second Amended Judgment, shall be added to the Storage Adjustment. When Lake Berryessa spills, and all carryover storage has been spilled or otherwise eliminated, the Storage Adjustment shall be re-set to zero. The Storage Adjustment shall never be less than zero. "Solano Project Diversions," for the purpose of this paragraph, means water delivered to Solano Project Participating Agencies and Putah South Canal Conveyance losses (Canal inflows minus deliveries from canals).

(6) If Solano Project Water that is not within the scope of Solano Project Contract
Allocations, as is defined in Section IV of the Second Amended Judgments in the
Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565, ever
is stored in an offstream reservoir or reservoirs or underground storage, and, as a
result, Lake Berryessa storage levels are reduced below the levels that would occur
in the absence of such storage, then the 750,000 af amount in paragraph D.(I) and
the 400,000 af amount in paragraph D.(4) shall be adjusted so that Drought Year
Requirements will continue to occur at the same frequencies as they would have
occurred in the absence of such storage.

## E. <u>Illegal Diversion Account</u>

If there is any risk that illegal diversions may take place from lower Putah Creek to a degree that water released by the Solano Project for the purposes of maintaining the minimum flows set forth herein will be significantly depleted, then the procedures set forth in the attached Exhibit "E-2" shall be implemented.

## F. Monitoring Requirements ((1), (2), (3), & (4) all shall be satisfied)

- (1) Licensee/Permittee shall continuously measure and record releases from the Putah Diversion Dam to lower Putah Creek, and shall determine and record each day's mean daily release.
- Licensee/Permittee shall forthwith install and maintain flow measurement gauges (2)capable of measuring instream flows on a continuous basis at the Interstate 80 Bridge and near the East Toe Drain. Licensee/Permittee shall collect and maintain the data recorded by each of these gauges as is necessary to demonstrate their compliance with the flow requirements imposed by the Second Amended Judgment. In addition, Licensee/Permittee shall make regular measurements of instream flows at Stevenson Road Bridge, Pedrick Road Bridge and Old Davis Road Bridge. If the instream flow measured at Stevenson Road Bridge, Pedrick Road Bridge, or at Old Davis Road Bridge, is less than the minimum instream flow requirements in section A.(2) above on more than an infrequent basis, then the paragraph A.(2) flow requirements shall start to apply at such measurement point or points, in addition to still applying at the Interstate 80 Bridge. Licensee/Permittee shall install, maintain, repair, calibrate and operate gauging equipment at such compliance points as may be necessary to ensure and demonstrate their compliance with the provisions of this Exhibit "E-1". Gaging equipment shall be installed to provide a range of measurement from 0 cfs to at least 200 cfs.
- (3) Licensee/Permittee shall monitor flows in the entire reach of lower Putah Creek from Old Davis Road Bridge to River Mile 0.0 with sufficient frequency and by sufficient means to ensure compliance with the requirement in part A.(3) of the Second Amended Judgment that continuous flow of surface water be maintained in this reach at all times of the year. All measurements and observations of this reach

- made for purposes of compliance with this requirement shall be recorded.
- (4) Licensee/Permittee shall maintain records, in both paper and electronic format, of all release and flow measurements, all calculated mean daily releases and flows, and all observations required by the Second Amended Judgment. Promptly upon request, these records shall be made available for review and copying by any person during normal business hours at the offices of Licensee/Permittee or its designee.

#### Exhibit "E-2"

#### Effects of Illegal Diversions of Water from Lower Putah Creek on Obligations under the Water Rights on Applications 11199, 12578 and 12716 to Maintain Exhibit E-1 Instream Flow Requirements

- 1. The right holders under the rights issued pursuant to Applications 11199, 12578 and 12716 shall satisfy all of the release and instream flow requirements that are specified in Exhibit "E-I" at all times, whether or not any illegal diversions of water from lower Putah Creek are occurring, except to the extent that exceptions to the instream flow requirements are authorized by this Exhibit "E-2". These exceptions shall only be authorized during the irrigation season. "Irrigation season" shall mean the period from March 1 through October 31 of each year.
- 2. To determine the obligations under the rights issued pursuant to Applications 11199, 12578 and 12716 to satisfy the instream flow requirements specified in Exhibit "E-1" during times when illegal diversions from lower Putah Creek are occurring, an Illegal Diversion Account shall be established. Starting at the beginning of the sixth irrigation season during which this Illegal Diversion Account is drawn upon, the balance in this account shall be set to 1,000 acre feet at the beginning of each irrigation season, regardless of the account's balance at the end of the prior irrigation season. Prior to the sixth irrigation season in which the Illegal Diversion Account is drawn upon, the balance in the Illegal Diversion Account at the beginning of each irrigation season shall be set to 2,000 acre feet. Any credits made pursuant to Paragraph 9 of this Exhibit "E-2" for any irrigation season shall be in addition to the initial balance. The holders of the water rights issued pursuant to Applications 11199, 12578 and 12715 shall maintain an accurate accounting of all credits to and deductions from this account. In any year that U.S. Bureau of Reclamation does not maintain the required accounting, Solano County Water Agency (as holder of the water rights under Applications 11199 and 12578) is

required to do so and may not waive, defer or delay this requirement. Hereafter, the entity maintaining the required accounting is referred to as the "Accounting Entity".

- 3. At the beginning of each irrigation season, the Accounting Entity shall provide written notice to all riparian landowners of the Accounting Entity's projections of the time period during which such landowners legally may divert from each reach of lower Putah Creek during the irrigation season. This notice shall encourage each riparian landowner to provide the Accounting Entity with the dates and amounts of the landowner's planned diversions of water from lower Putah Creek during the irrigation season. The Accounting Entity may, in its discretion, provide additional notices, making updated projections of the amounts of water that such landowners legally may divert from lower Putah Creek, to these landowners at the irrigation season progresses. The calculations in these notices shall be based on the formulas and procedures described in Exhibit "E-3".
- 4. The term "illegal diversion" in this Exhibit "E-2" means a diversion that is illegal based on the formulas and procedures described in Exhibit "E-3". The sole purpose of this definition is for implementing the provisions of this Exhibit "E-2" regarding deductions from the Illegal Diversion Account pursuant to this paragraph 4 and modifying the Solano Project's release requirements pursuant to paragraph 6 of this Exhibit "E-2". If the Accounting Entity has filed, and is diligently pursuing, a court action against a landowner with an illegal diversion, and if the Accounting Entity has complied with all of the provisions of paragraph 3 of this Exhibit "E-2", then deductions shall be made from the Illegal Diversion Account for any amounts of water that the Solano Project releases from the Putah Diversion Dam into lower Putah Creek during the irrigation season solely for the purpose of compensating for that illegal diversion while maintaining the instream flows specified in Exhibit "E-1". "Diligently pursuing" means seeking, at the earliest possible opportunities, a temporary restraining order, a preliminary injunction and a

permanent injunction stopping the illegal diversion, and a declaratory judgment regarding the illegality of the diversion. If there is more than one illegal diversion, then all of the provisions of this paragraph shall apply to each illegal diversion.

- During any period during which deductions are being made from the Illegal Diversion Account, the Accounting Entity shall make streamflow measurements on a continuous basis at sufficient locations along lower Putah Creek to make the calculations and determinations described in Exhibit "E-3". During such periods, the Accounting Entity shall post all such data, calculations and determination on its Internet website, or make such information available to members of the public by similar electronic means, and shall update such posted information at least once each day.
- 6. If the balance in the Illegal Diversion Account ever reaches zero, then during the remainder of the irrigation season during which the Account balance reached zero and while the Accounting Entity continues to diligently pursue the court action described in the paragraph 4 above and continues to make available the data, calculations, determinations and reports described in paragraph 5 above, and while the court action is pending, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall not be required to fully comply with any instream flow requirement that is specified in Exhibit "E-1" for a point that is located downstream of any illegal diversion that is subject to the court action and that occurs after the Illegal Diversion Account balance reaches zero. Instead, under these conditions, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall release from the Putah Diversion Dam into lower Putah Creek at least the amounts of water that would be sufficient to satisfy all of the instream flow requirements in Exhibit "E-1", if the illegal diversion that is subject to the court action were not occurring. Under these circumstances, the holders of the water rights issued pursuant to Applications 11199,

12578 and 12716 release obligations shall be adjusted as frequently as necessary to reflect changes in hydrological conditions or changes in the rate of the illegal diversion. Immediately upon the cessation of such illegal diversion, the conclusion, dismissal or cessation of diligent pursuit of the court action, or the end of the irrigation season, whichever occurs first, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall satisfy all of the instream flow requirements in Exhibit "E-1". If court actions regarding more than one illegal diversion are pending, then the provisions of this paragraph shall apply to all such illegal diversions.

- 7. Deductions from the Illegal Diversion Account for an illegal diversion may be made only for a maximum of two years after the court action described in paragraph 4 above is filed against the landowner with the illegal diversion. Even if a final judgment is not issued in such court action within two years after the action is filed, and even if such court action is dismissed for any reason, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 nevertheless thereafter shall be required to maintain all of the instream flows described in Exhibit "E-1", and no further deductions shall ever be made from the Illegal Diversion Account for any illegal diversion that is or was the subject of the court action. However, if a new illegal diversion with neither a point of diversion nor a place of use that is within the scope of the court action described in paragraph 4 above occurs, then the provisions of paragraphs 4, 5 and 6 above, and this paragraph, shall apply to the new illegal diversion. If there is more than one such new illegal diversion, then the provisions of paragraphs 4, 5 and 6 above, and this paragraph, shall apply to each such new illegal diversion.
- 8. If a court of competent jurisdiction issues a final judgment specifying the legality or illegality of any particular diversion from lower Putah Creek, then the Accounting Entity shall adjust the formulas and calculations in Exhibit "E-3" to be consistent with the

court's judgment and the adjusted formulas and calculations shall be applied thereafter. If any interested party to the Second Amended Judgment disagrees with the Accounting Entity's adjustment, then that party may ask the court or State Water Board, by noticed motion, to determine what the appropriate adjustment should be. The State Water Board shall be timely informed of any court determination.

9. If any adjustments to the formulas or calculations in Exhibit "E-3" are made pursuant to paragraph 8 of this Exhibit "E-2", then appropriate adjustments shall be made to the Illegal Diversion Account, for example, credits shall be made for the total amount of all debits that previously were made from the Account for diversions that were treated by the Accounting Entity as illegal, but which would have been legal under the adjusted formulas and calculations. If the Accounting Entity ceases to diligently pursue any court action described in paragraph 4 of this Exhibit "E-2" before a final judgment is entered, then credits shall be made to the Illegal Diversion Account for the total amount of all debits that previously were made from the Account for the diversion that was the subject of the court action. The credits described in this paragraph shall be spread equally over the same number of irrigation seasons as the number of irrigation seasons during which debits from the Account were made. If the court issues its final judgment during an irrigation season, then the first year of such credits shall be made immediately to the Account. If the court issues its final judgment not during an irrigation season, then the first year of such credits shall be made during the next irrigation season. Subsequent credits shall be made during the immediately following irrigation seasons.

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#### Exhibit "E-3"

# METHODOLOGY FOR MONITORING AND QUANTIFYING THE AVAILABILITY AND USE OF RIPARIAN WATER IN LOWER PUTAH CREEK

This document provides U.S. Bureau of Reclamation's (Reclamation) explanation and basis for the methodology for monitoring and quantifying the availability and use of riparian water in Putah Creek, downstream of the Putah Diversion Dam. The methodology, hereafter referred to as the Lower Putah Creek Riparian Water Program ("PRWP"), will be used by the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716, to (I) differentiate between and quantify the availability of riparian versus non-riparian waters in Putah Creek, downstream of the Putah Diversion Dam, and (2) identify and quantify illegal water diversions, downstream of the Putah Diversion Dam. Reclamation anticipates that implementation of the PRWP will increase the efficiency with which the instream flow requirements of the Solano Project are satisfied, and facilitate the lawful diversion of riparian water downstream of the Putah Diversion Dam.

As holders of the water rights issued pursuant to Applications 11199, 12578 and 12716, either Reclamation or the Solano County Water Agency (SCWA) may use the above methodology to determine riparian water in Putah Creek downstream of the Putah Diversion Dam. In any year that Reclamation does not perform the calculations, SCWA (as holder of the water rights under Applications 11199 and 12578) is required to do so and may not waive, defer or delay this requirement.

#### 1.0 OVERVIEW

## 1.1 Key Elements of Lower Putah Creek Riparian Water Program

The PRWP consists of two components: Pre-irrigation season water availability forecasts, and real-time stream flow monitoring during the irrigation season, where "irrigation season" is defined as March 1 through October 31. Annual water availability forecasts will be provided to riparian water users prior to the irrigation season, so they and other interested parties can plan and, if necessary, make other arrangements for obtaining irrigation water, before significant time and financial resources are committed to the cultivation of a given crop. Real-time monitoring will be conducted to: (1) determine, on a daily basis, the quantities of riparian water that are available to water users in Lower Putah Creek, and (2) differentiate and quantify, on a daily basis, legal versus illegal riparian diversions.

#### 1.2 Definition of Riparian Water

For the purposes of the PRWP, riparian stream flows are defined as any surface water derived from precipitation or rising groundwater that, given prevailing hydrologic conditions, would occur in Lower Putah Creek in the absence of the Solano Project. Non-riparian water, such as treated wastewater and agricultural return flows originating from a non-riparian source (e.g., pumped groundwater that would not otherwise be tributary to the creek) cannot, by definition, be diverted by riparian water right claimants and, therefore, is not included as a source of riparian water from Lower Putah Creek.

## 2.0 WATER AVAILABILITY FORECASTS

Riparian water availability forecasts for Lower Putah Creek will be based on stream flow conditions observed in the Putah Creek drainage, upstream of the Putah Diversion Dam, in the

prior (i.e., antecedent conditions) and current water year. Forecasts will be made on January 1, March 1 and May 1. The January 1 and March 1 forecasts, which will be made before the current rainy season is over, will be based in part on projected stream flow conditions for the balance of the rainy season, while the May 1 forecast, the final forecast for the water year, will be based on actual runoff measured to date. Both the January 1 and March 1 forecasts will include three scenarios, based on the assumption that the balance of the rainy season will either be "wet" (25% exceedance), "normal" (50% exceedance) or "dry" (75% exceedance).

In order to address the differing sources and durations of riparian stream flows (surface stream flows from Putah Creek and/or tributaries to Putah Creek, or rising groundwater), Lower Putah Creek has been divided into five reaches. Water availability forecasts will be made for each reach. Stream reach designations and the analytic framework for making water availability forecasts are presented in "Attachment 1".

#### 3.0 **REAL-TIME MONITORING**

### 3.1 Quantifying Available Riparian Water Supply

Stream flows and the associated stream flow gains and losses will be monitored by reach, on a continuous basis, and the availability of riparian water and extent of illegal diversions will be determined daily, using a series of water mass balance equations to track the quantities of both riparian and non-riparian water entering and leaving each stream reach.

A summary of the equations used to define riparian water availability, by stream reach, is presented in Attachment 1.

Although the determination of net riparian flow is based on real-time stream flow measurements, there are situations where real-time stream flow measurements are not

practical and therefore simplifying assumptions must be used, much as they are in the Condition 12 Settlement Agreement for the Upper Putah Creek drainage. For example, under existing conditions it is difficult to measure accurately real-time stream flow losses in the stream reach now inundated by Lake Solano. Consequently, a "fixed" loss figure previously adopted by the United States Bureau of Reclamation may be used in the water mass balance calculation for this reach. In all cases, the simplifying assumptions used to quantify the availability of riparian water are purposely conservative in the sense that they tend to overstate the availability of riparian stream flows. Overstating riparian water availability is preferred, since it presumably increases the enforceability of the PRWP and its acceptability to riparian water users.

#### 3.1.1 Data Collection

## 3.1.1.1 Measurement of Riparian Diversions

Riparian diversions will either be measured directly, using an appropriate meter and assuming landowner/operator permission is obtained, or indirectly, via measurement of creek stream flows in the vicinity of the diversion. Riparian diversions typically constitute a readily measurable fraction of the total stream flow in any given reach (500-2,000 gallons per minute, or about 1-5 cubic feet per second), and are therefore easily detected by continuously measuring stream flows entering and leaving a given stream segment.

## 3.1.1.2 Measurement of Agricultural Return Flows and Wastewater Discharges

The agricultural return flows entering Lower Putah Creek are for the most part non riparian water sources, as are the treated wastewater discharges from the University of California -Davis (U.C. Davis) water treatment facility, which enter Lower Putah Creek near Old Davis Road. Nevertheless, these water sources must be quantified for water mass balance accounting purposes. The University's treated wastewater discharges are measured and recorded by the

treatment plant operators. Most of the agricultural return flows are too small and/or sporadic to warrant direct measurement, and will therefore be estimated, or if insignificant relative to the total creek stream flow, ignored. However, one notable exception is the Willow Canal, which discharges into Lower Putah Creek just upstream of Pedrick Road. Discharges from the Willow Canal, which is operated by the Yolo County Flood Control and Water Conservation District (YCFC&WCD), will be measured as necessary.

## 3.1.1.3 Measurement of Groundwater Seepage and Evapotranspiration

The amounts of groundwater seepage (into or out of the creek) and water lost to open-water evaporation and transpiration by riparian vegetation vary gradually over time, in comparison to the fluctuating gains and losses associated with water diversions and agricultural return flows. For the purposes of the PRWP, the net flow gain or loss from these factors (groundwater seepage, evaporation and transpiration) are combined into a single term that represents the natural or "background" net stream flow gain or loss rate within a given reach. Background gains and losses are most easily quantified as the difference in stream flow over a given reach ("top of reach" stream flow versus "bottom of reach" stream flow), in the absence of any diversions or "intra reach inflows."

Groundwater seepage along the reach from 1-505 to Stevenson Bridge typically transitions from net loss (seepage out of the creek) to net gain (seepage into the creek). The location of the transition point and the total amount of influent seepage along the gaining stretch depend on the regional groundwater levels in the underlying groundwater basin. This reach will be subdivided into two sub-reaches when necessary to calculate riparian water availability. The upstream end of the gaining segment will be detected by periodic stream flow measurements and/or temperature changes in the creek.

#### 3.1.1.4 Special Situations

#### Pumping from Riparian Wells

There is no clear boundary between wells that induce additional seepage from the creek and wells that pump regional groundwater; the percentage of pumped water that consists of induced seepage decreases gradually with depth and horizontal distance from the creek. A pragmatic approach adequate for the purpose of the PRWP is to include in the accounting the effects of a well if its effect on stream flow can be detected by the stream flow monitoring program. The philosophy behind this approach is that well pumping does not matter if its effects on stream flow are not measurable; and if the effects are measurable, then the evidence and justification for including the well as a riparian diverter are already at hand. In practice, it is unlikely that wells more than about 500 feet from the creek or more than 100 feet deep will measurably affect stream flow.

## Impoundments Below Mace Boulevard

Riparian water accounting is slightly more complicated at the downstream end of Putah Creek, between Mace Boulevard and the Toe Drain in the Yolo Bypass. Two impoundments are created in the creek channel each year to provide pumping pools for irrigation operations. The lower impoundment is a flashboard dam operated jointly by Los Rios Farms and the California Department of Fish and Game. Frequently, some of the water impounded behind this dam is water that is diverted from the Toe Drain of the Yolo Bypass at a pumping station about 1 mile north of the dam and conveyed to the impoundment by a canal. It may be necessary to gage the inflows from this canal into Putah Creek to determine the availability of Putah Creek riparian water in the impoundment. The issue may be moot, however, because the downstream

compliance point for resident native fish flows is at river mile 0, which is upstream of the impoundment.

The upper impoundment is a temporary dirt berm across the channel that provides a crossing for farm vehicles in addition to creating a pumping pool. The berm is at about river mile 1.0 (aligned with country road 106B), and the impounded water derives entirely from Putah Creek. Irrigation return flows from adjacent fields may include water that originated from Toe Drain diversions, and these return flows will be measured or estimated in the same manner as for return flows in other reaches of the creek.

#### Riparian Diversions from Pools in the Creekbed

Prior to construction of the Solano Project, landowners in a few locations were able to pump water from natural or constructed pools in the creekbed after live flow in the creek had ceased in summer. These pools were separate from the well-documented gaining reach above Stevenson Bridge, where groundwater seepage into the creekbed can create surface water stream flows in the absence of surface water inflows from upstream reaches. The accounting methodology described here does not encompass the water in isolated pools that would have been present in the absence of the Solano Project. The historical number of pools is thought to be small, and the pumping rates they could sustain also were probably small.

The possible availability of riparian water from isolated pools will be dealt with on a case-by-case basis. If a landowner can provide evidence that persistent pools existed on his or her property during periods of discontinuous streamflow prior to the Solano Project construction, then the sustained pumping yield of those pools will be estimated to quantify the amount of riparian water presently available to the landowner from that source. The yield will be estimated

from the pool volume and the permeability of the surrounding streambed materials, which may release shallow groundwater when the pool level is lowered by pumping.

#### New Diversions and Return Flows

As parcels change ownership or existing landowners modify their farming operations, some diversions and return flows may be added and others discontinued. Word of mouth and the annual riparian water forecast mailing should be sufficient to inform any newcomers that riparian diversions from Lower Putah Creek are monitored and regulated. The new users will be encouraged to join the cooperative effort to manage and utilize riparian water supplies. Any changes in discharges by U.C. Davis, YCFC&WCD, and other agencies or industries hopefully will also be communicated to the SCWA to facilitate a smooth transition. Any unreported changes will eventually be detected by the stream flow monitoring program, periodic field surveys, neighboring landowners, or the stream keeper.

### Uncooperative Riparian Diverters

It is hoped that all riparian diverters will cooperate with each other and with the SCWA to make efficient use of the available riparian water supply without any illegal diversions. However, it is possible that some landowners will attempt to conceal their diversions or refuse to provide information about when and how much water they are diverting, or when and where return flows occur. Fortunately, all of this information can be obtained anyway. It would be impossible to conceal a significant diversion for very long because the pumping equipment and power supplies are large, visible, and make sound and because the effects of the diversion will be detected by the stream flow monitoring program. The pumping rate at any diversion can be measured fairly accurately by gaging the stream flow immediately upstream and downstream of the diversion. Return flows can similarly be estimated by surveys of the field drainage patterns and the direct observation of the return flows.

#### 3.2 Quantifying Illegal Diversions

Any diversion in excess of the calculated net riparian flow is considered illegal. Illegal diversions, like net riparian flow, will be monitored and quantified by reach, and to the extent possible, by individual diverters. A summary of the equations used to quantify illegal diversions is presented in Attachment 1.

If total riparian diversions in any given reach exceed the available riparian supply and the diverters are unwilling to voluntarily reduce their total diversions to match the available supply, and these actions adversely affect the SCWA, then the Agency may sue some or all of the active diverters and seek court orders addressing the illegal diversions. It is hoped that this type of enforcement action will not be necessary. The PRWP will provide all of the data needed on a real-time basis to enable the active riparian diverters to manage their activities and restrict the locations and rates of their diversions so that they remain within the legally available supply.

## 3.3 Public Access to Riparian Water Accounting Data and Calculations

The SCWA will conduct the data collection activities and complete the calculations necessary to generate the pre-irrigation season water availability forecasts and the real-time riparian water availability determinations. All data collected for these purposes and all formulas and computer programs used in the calculations will be available on request to any interested agency, group or individual. The SCWA will publish the data and results on its website and update the information approximately daily during the irrigation season.

The SCWA will deliver the first (January) pre-season water availability forecast by mail to all riparian landowners along Lower Putah Creek. Landowners may at that time request that

the subsequent forecasts (March and May) also be sent by mail if the landowner is unable to access the information by Internet. It would not be practical to disseminate the real-time monitoring data by mail because it will be updated daily during the irrigation season. Active diverters who need the daily information will be able to view it on the SCWA's website or call the Agency to obtain the information by telephone.

#### **ATTACHMENT 1 TO EXHIBIT "E-3"**

#### 1.0 <u>Pre Irrigation Season Predictions</u>

A) Objective:

To estimate future availability of riparian stream flows, based on projected and/or prior hydrologic conditions in the Putah Creek drainage. For pre irrigation season prediction purposes, assume riparian stream flows consist of surface runoff from precipitation and rising groundwater.

- B) Analytic Approach:
  - i) Divide Lower Putah Creek into the following reaches:
    - a. Putah Diversion Dam to Highway 505 Bridge (a "losing reach")
    - b. Highway 505 Bridge to Stevenson Bridge (a "gaining reach")
    - c. Stevenson Bridge to I-80 Bridge (a "losing reach")
    - d. I-80 Bridge to Mace Boulevard (a "losing reach")
    - e. Mace Boulevard to Yolo Bypass (a "losing reach")

(Reach designations based on hydrogeologic features, proximity of suitable stream flow gaging sites and existing riparian diversions. When necessary, reach "b" will be subdivided into two sub-reaches.)

- ii) Predict average monthly flow and date of zero flow for each of the above riparian water sources, in each of the five reaches:
  - a) Surface runoff: calculate using statistical relationships derived from historical data.
    - Stream flow recession curves derived from stream flow gaging data for "At Winters", "Near Winters" and "Near Davis" stream flow gaging stations
    - Stream reach percolation/evapotranspiration loss estimating algorithms
       Developed for the SCWA's Lower Putah Creek stream flow model
  - b) Rising groundwater: calculate using statistical relationships derived from historical data.
    - Stream reach groundwater gain/loss estimating algorithms developed for the Solano County Water Agency's Lower Putah Creek streamflow model
- C) Timing of Pre Irrigation Season Predictions:
  - i) January 1 Predictions based on hydrology of water year to date and three scenarios for the remainder of the year's rainy season: "wet year" (25% Lake Berryessa inflow exceedance), "normal year" (50% Lake Berryessa inflow exceedance) and "dry year" (75% Lake Berryessa inflow exceedance)
  - ii) March 1 Predictions based on hydrology of water year to date and projected

25%, 50% and 75% exceedance runoff rates for the remainder of the year's rainy season

iii) May 1 - Final prediction based on hydrology of the water year through April

## 2.0 Methodology for Quantifying Riparian Streamflows During Irrigation Season

Note:

Riparian stream flows are defined here as any surface water derived from precipitation or rising groundwater that, given prevailing hydrologic conditions, would occur in Lower Putah Creek in the absence of the Solano Project. Non riparian water, such as treated wastewater and agricultural return flows originating from a non-riparian source (e.g., pumped groundwater) cannot, by definition, be diverted by riparian water right claimants and therefore, are not included as a source of riparian water from Lower Putah Creek.

#### A) Overview:

- i) Calculate, on a daily basis, pre-Solano Project stream flows (i.e., stream flow that would occur if there were no dams -no Solano Project) at the Putah Diversion Dam site
- ii) Compare computed daily pre-Solano Project stream flow (i.e., stream flow that would occur if there were no dams -no Solano Project) with current Putah Diversion Dam release -determine what fraction of the current release is stored water or any other non-riparian water source, versus riparian stream flows
- iii) Using real-time stream flow monitoring data to quantify prevailing percolation/evapotranspiration losses and any non-riparian water sources, calculate riparian flows by stream reach. The total quantity of riparian water in any given reach is defined here as the sum of all riparian water sources less percolation/evapotranspiration losses.

### B) Analytical Approach:

i) Riparian stream flows at Putah Diversion Dam site

USRSF = LBI + IDTI -IDCL

Where: USRSF = Riparian stream flow at Putah Diversion Dam

LBI = Computed/measured Lake Berryessa inflow (less any associated non riparian flow)

IDTI = Inter Dam Reach tributary inflow (less any associated non riparian flow)

IDCL = channel percolation/evapotranspiration losses that would occur in the Inter Dam Reach in the absence of Lake Solano

(A stream gage will be placed on Pleasants Creek to facilitate real-time estimation of inflow from inter-dam tributaries. For accounting purposes, seepage and evaporation losses from Lake Solano are assumed to be constant and will therefore be characterized by a fixed continuous loss rate term).

ii) Riparian stream flows in first reach downstream of Putah Diversion Dam (Putah Diversion Dam to 505 Bridge)

1RRSF = USRSF + TRSF + IRAG -1RCL

Where: 1RRSF = Computed riparian stream flow in Reach 1

USFSF = Computed riparian stream flow at Putah Diversion Dam

TRSF = Measured stream flow from tributaries (Dry Creek, McCune aka

Pleasant Creek), less any associated non riparian flow

1RAG = Ag return flow water originating from a riparian source in reach 1

1RCL = Measured channel percolation/evapotranspiration losses in

reach 1

#### Notes:

- (1) Agricultural return flow water that originates from a riparian water source (riparian water diverted from Putah Creek or associated tributaries) is classified as riparian water and therefore can be lawfully diverted by other riparian water right claimants.
- iii) Riparian stream flows in second reach downstream of Putah Diversion Dam (505 Bridge to Stevenson Bridge)

2RRSF = 1RRSF -1RD (±) 2RCL + 2RAG

Where: 2RRSF = Computed riparian stream flow in Reach 2

1RRSF = Computed riparian stream flow in Reach 1

2RCL = Combined sum of groundwater "gains", channel

percolation/evapotranspiration losses in reach 2

2RAG = Ag return flow water in reach 2 originating from a riparian

source

1RD = Riparian diversion in Reach 1

#### Notes:

- (1) There are no significant tributaries entering Putah Creek in this Reach
- (2) Due to the spatial and temporal variability of rising groundwater, portions of the so called "gaining reach" (generally the upstream most third of the reach) frequently lose rather than gain water. Accordingly, there are instances when some of the riparian diverters within Reach 2 have access to rising groundwater, while others do not. When necessary, Reach 2 will be broken into two sub reaches for the purpose of quantifying riparian stream flows.

iv) Riparian stream flows in third reach downstream of Putah Diversion Dam (Stevenson Bridge to 1-80)

3RRSF = 2RRSF -2RD -3RCL +3RAG

Where: 3RRSF = Computed riparian stream flow in Reach 3

2RRSF = Computed riparian stream flow in Reach 2

2RD = Riparian diversions in Reach 2

3RCL = Measured channel percolation/evapotranspiration losses

in reach 3

3RAG = Ag return flow water in reach 3 originating from a riparian

source

v) Riparian stream flows in fourth reach downstream of Putah Diversion Dam (1-80 to Mace Boulevard)

4RRSF = 3RRSF- 3RD -4RCL + 4RAG

Where: 4RRSF = Computed riparian stream flow in Reach 4

3RRSF = Computed riparian stream flow in Reach 3

3RD = Riparian diversion in Reach 3

4RCL = Measured channel percolation/evapotranspiration losses in reach 4

4RAG = Ag return flow water in reach 4 originating from a riparian source

vi) Riparian stream flows in fifth reach downstream of Putah Diversion Dam (Mace Boulevard to RM 0.0 aka Yolo Bypass)

5RRSF = 4RRSF- 4RD -5RCL + 5RAG

Where: 5RRSF = Computed riparian stream flows in Reach 5

4RRSF = Computed riparian stream flows in Reach 4

4RD = Riparian diversions in Reach 4

5RCL = Measured channel percolation/evapotranspiration losses in reach 5

5RAG = Ag return flow water in reach 5 originating from a riparian source

Note:

(1) The above formulas will be adjusted as necessary to reflect changing conditions such as new or terminated diversions or discharges.

## 3.0 Methodology for Quantifying Illegal Riparian Diversion During Irrigation Season

Note:

(1) Diversions in excess of the available riparian stream flow (i.e., diversion of water released from storage or other non-riparian flow) are considered illegal

#### A) Overview:

i) For each reach, calculate difference between daily riparian diversions and computed riparian streamflow. If riparian diversions exceed computed riparian streamflow, the difference is considered to be the result of illegal diversions.

#### B) Analytical Approach:

i) Illegal riparian diversions in first through fifth reaches downstream of Putah Diversion Dam

If: (ith)RD>(ith)RRSF
Then: (ithIRD) = (ithRD) -(ithRRSF)

Where: (ith)RD = Riparian diversions in Reach 1,2,3,4 or 5 (ithRRSF) = Computed riparian streamflow in Reach 1,2,3,4 or 5 (ithIRD) = Computed illegal diversions in Reach 1,2,3,4 or 5

The SCWA is under no obligation to enforce against any illegal riparian diverters whose actions do not adversely affect the Agency's ability to comply with any contractual or legal obligation.

KMrowka:ds 3/13 and 3/16/2009.GHernandez 03/05/2013. U:\PALDRV\KMrowka\Reclamation Berressa\11199 exhibit E-3.docx

# **Appendix B2**

State Water Resources Control Board, documents regarding Water Rights License 13877



# STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

#### **DIVISION OF WATER RIGHTS**

#### RIGHT TO DIVERT AND USE WATER

**APPLICATION 12578** 

**PERMIT 10658** 

LICENSE 13877

Right Holder:

Solano County Water Agency
Solano Irrigation District
Maine Prairie Water District
City of Vacaville
City of Fairfield
City of Vallejo
City of Suisun
California Department of Corrections
Regents of the University of California
c/o 810 Vaca Valley Parkway, Suite203
Vacaville, CA 95688

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from **September 27**, **1948**. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated July 6, 2012. This right supercedes any previously issued right on **Application 12578**. The right holder has made proof, to the satisfaction of the State Water Board, of the quantities of water put to beneficial use during the authorized development schedule.

The Deputy Director for Water Rights finds that: (a) the change will not operate to the injury of any lawful user of water; (b) good cause has been shown for the change; (c) the petition does not constitute the initiation of a new right; and (d) the State Water Board has made the required findings pursuant to the California Environmental Quality Act (CEQA) or the project is exempt from CEQA.

The State Water Board has complied with its independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (National Audubon Society v. Superior Court (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346, 658 P.2d 709].)

#### Right holder is hereby granted a right to divert and use water as follows:

Source of water: Putah Creek

Tributary to: Yolo By-Pass

Within the Counties of Solano and Yolo

Location of points of diversion

z. Location of points of d	<del></del>	<del>                                     </del>		1	
By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
Monticello Dam North 1,948,789 feet and East 6,532,057 feet	SW¼ of NE¼	29	8N	2W	MD
Putah Diversion Dam North 1,940,989 feet and East 6,559,557 feet	SW¼ of SE¼	31	8N	1W	MD

3. Purpose of use	4. Place of use										
	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian	Acres					
Domestic, Municipal, Industrial, Irrigation, Frost Protection, Recreational	428,300 acres in Yolo and Solano Counties within T2N to T8N, R5W to R4E, MDB&M.										
Fish and Wildlife Enhancement		29-miles of Putah Creek stream channel between Monticello Dam and the Sacramento River Deep Water Ship Toe Drain within T8N, R2W to R2E, MDB&M									
Recreational	Lake Berryessa within T7N to T10N, R2W to R5W, MDB&M										

The place of use is shown on map 413-208-1484A dated February 9, 2009, filed with the State Water Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 450 cubic feet or foot per second by direct diversion to be diverted from February 1 to November 15 of each year. The maximum amount diverted under this right shall not exceed 58,899 acre-feet per annum.

(000005A)

6. The total amount taken from the source (collection to storage plus direct diversion) under this license, and the water rights pursuant to Applications 11199 and 12716 shall not exceed **999,031 acrefeet per annum**.

(000005Q)

7. The maximum amount placed to beneficial use (withdrawal from storage plus direct diversion) under this license, and the water rights pursuant to Applications 11199 and 12716 shall not exceed **401,286 acre-feet per annum.** 

(0000114)

8. The total maximum quantity of water delivered for consumptive use under this license (withdrawal from storage plus direct diversion), together with that delivered under the water rights pursuant to Applications 11199 and 12716 shall not exceed **250,000 acre-feet** in any one year.

(0000114)

9. Licensee shall operate the Solano Project to comply with the release and instream flow requirements specified in Exhibits E-1, E-2, and E-3 (attached). These requirements are the same as the release and instream-flow requirements specified in the Second Amended Judgments in the Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565, Sacramento County Superior Court.

Notwithstanding the above license requirement, the State Water Board shall not pursue an action or proceeding for enforcement or violation of this condition based on a violation or violations of one or more of the minimum mean daily flow requirements established in Exhibit E-1 section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4), and D.(3), or one or more of the minimum instantaneous flow requirements established in Exhibit E-1 sections A.(2), B.(2), C.(1), C.(2), C.(3) and C.(4), provided that:

- 1. The Solano Project was being operated to comply with the release and instream flow requirements in Exhibits E-1, E-2, and E-3; and
- 2. The violation of the minimum mean daily flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4) or D.(3), or the minimum instantaneous flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3) or C.(4) was solely the result of an unanticipated and unforeseeable increase in a diversion or diversions from, or reduction in an inflow or inflows into, Putah Creek downstream of the Putah Diversion Dam, by some person or entity besides U..S. Bureau of Reclamation, the Solano County Water Agency or the Solano Irrigation District, and the increase or reduction occurred so rapidly that the Solano Project could not reasonably maintain compliance by increasing the releases from the Putah Diversion Dam in Lower Putah Creek; and
- 3. The 4-day running mean flow at the relevant compliance point equaled or exceeded the applicable minimum mean daily flow; and
- 4. The instantaneous flow at the relevant compliance point was not more than 5 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from January through July, and was not more than 3 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from August through December.

The dedication of water to instream flow is not intended to affect any obligation imposed pursuant to the existing water rights for the Solano Project to provide protection to downstream prior rights and to provide percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project. Water required pursuant to the flow regime set forth in Attachment E-1 over and above the amounts of water required to meet existing obligations for percolation and downstream prior rights is dedicated to instream flows pursuant to Water Code section 1707. Water dedicated to the environment pursuant to Water Code section 1707 is not available for appropriation.

The Licensee shall electronically report to the State Water Board: (a) daily records of diversions to Putah South Canal, (b) daily records of flows past the Putah Diversion Dam, (c) daily records of the quantity dedicated to the environment, pursuant to the 1707 petition, and (d) records of depth to groundwater in the spring of each year for the area influenced by Putah Creek between mile 4.0 and mile 11.0. The requirement to record depth to groundwater may be discontinued upon a showing, to the satisfaction of the Deputy Director for Water Rights, that further groundwater elevation monitoring is not needed.

No credit shall be given for the 1707 petition flows unless the required documentation is timely submitted.

Licensee shall allow authorized representatives of the State Water Board reasonable access to the project works and properties for the purpose of gathering information and data.

(0510900)

10. Licensee shall release water into Putah Creek channel from Monticello Reservoir and past the Putah Diversion Dam in such amounts at such times and rates as will be sufficient, together with inflow from downstream tributary sources, to supply downstream diversions of the surface flow under vested prior rights to the extent water would have been available for such diversions from unregulated flow, and sufficient to maintain percolation of water from the stream channel as such percolation would occur from unregulated flow, in order that operation of the project shall not reduce natural recharge of groundwater from Putah Creek.

The State Water Board reserves continuing authority over the license to: (1) determine if the schedule of releases required herein provides adequate protection to downstream prior rights and provides percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project, (2) make further orders that may be necessary concerning proper releases of water, and (3) impose conditions providing for additional measurements or studies that may be necessary for a final determination to be made.

(0500300)

- 11. This license is subject to post-October 29, 1945 appropriative water rights in the Putah Creek watershed above Monticello Dam which (1) are licensed for the use of water perfected as of December 31, 1995, pursuant to the March 10, 1995, Condition 12 Settlement Agreement, or (2) are perfected after December 31, 1995, provided the holders of such rights have subscribed, subscribe, or are otherwise subject to the provisions of the March 10, 1995, Condition 12 Settlement Agreement. (0500300)
- 12. If it is determined after license issuance that the as-built conditions of the project are not correctly represented by the map(s) prepared to accompany the application, licensee shall, at his expense have the subject map(s) updated or replaced with equivalent as-built map(s). Said revision(s) or new map(s) shall be prepared by a civil engineer or land surveyor registered or licensed in the State of California and shall meet the requirements prescribed in section 715 and sections 717 through 723 of the California Code of Regulations, Title 23. Said revision(s) or map(s) shall be furnished upon request of the Chief, Division of Water Rights.

(0000030)

## THIS LICENSE IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

Reports shall be filed promptly by the right holder on the appropriate forms which will be provided for the purpose from time to time by the State Water Board.

Right holder shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by the State Water Board, reasonable access to project works to determine compliance with the terms of this right.

Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this right with a view to eliminating waste of water and to meeting the reasonable water requirements of right holder without unreasonable draft on the source. Right holder may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this right and to determine accurately water use as against reasonable water requirement for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by right holder in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution article X, section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust.

The quantity of water diverted under this right is subject to modification by the State Water Board if, after notice to the right holder and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that: (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

This right does not authorize any act which results in the taking of a threatened or endangered species or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, right holder shall obtain authorization for an incidental take prior to

construction or operation of the project. Right holder shall be responsible for meeting all requirements of the state or federal Endangered Species Acts for the project authorized under this right.

If construction or rehabilitation work is required for the diversion works covered by this right within the bed, channel, or bank of the affected water body, right holder shall enter into a streambed or lake alteration agreement with the State Department of Fish and Wildlife. Right holder shall submit a copy of the agreement, or waiver thereof, to the Division of Water Rights prior to commencement of work. Compliance with the terms and conditions of the agreement is the responsibility of the right holder.

Water Code section 1629. Every licensee, if he accepts a license, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefore shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State. of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Water Code section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Water Code section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

STATE WATER RESOURCES CONTROL BOARD

Barbara Evoy, Deputy Director Division of Water Rights

ames W. Kassel

MAY 28 2013

Dated:

Attachments: Exhibits E-1, E-2 and E-3

#### Exhibit "E-1"

## Solano Project Releases and Instream Flows for Lower Putah Creek

Diversions under the rights issued pursuant to Applications 11199, 12578 and 12716 are not authorized unless the flows set forth in this exhibit are met.

#### A. Rearing Flows ((1), (2) & (3) all shall be maintained)

(1) Licensee/Permittee shall, for each month as set forth below, maintain mean daily releases from the Putah Diversion Dam to Creek downstream of the Putah Diversion Dam (hereinafter "lower Putah Creek") that are equal to or in excess of the following rates, expressed in cubic feet per second ("cfs"):

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aua	Sep
Mean Daily release (cfs)	20	25	25	25	16	26	46	43	43	43	34	20

These mean daily releases shall be measured at the Putah Diversion Dam and made from the Putah Diversion Dam into lower Putah Creek immediately downstream of the Putah Diversion Dam. The instantaneous releases at the Putah Diversion Dam shall at all times equal or exceed ninety percent (90%) of the applicable mean daily release requirement.

(2) Licensee/Permittee shall, for each month as set forth below, release sufficient water from the Putah Diversion Dam into lower Putah Creek immediately downstream of the Putah Diversion Dam to maintain mean daily flows in lower Putah Creek that are equal to or in excess of the following rates, expressed in cubic feet per second ("cfs"):

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aua	Sep
Mean Daily Flows (cfs)	5	10	10	15	15	25	30	20	15	15	10	5
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These mean daily flows shall be maintained and measured at or in the near vicinity of the

Interstate 80 Bridge. The instantaneous flow at the Interstate 80 Bridge shall at all times equal or exceed ninety percent (90%) of the applicable mean daily flow requirement.

Licensee/Permittee shall at all times of the year release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a continuous flow of surface water in Putah Creek from the Old Davis Road Bridge to the western boundary of the Yolo Bypass, identified as River Mile 0.0 on trial exhibit number 41 in the Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565.

## B. Spawning Flows ((1), (2) & (3) all shall be maintained)

- (1) At a time between February 15 and March 31 of every calendar year,

  Licensee/Permittee shall release a three-consecutive-day pulse of water from the

  Putah Diversion Dam into lower Putah Creek equal to or in excess of the following
  rates:
  - (a) 150 cfs for the first 24 hours;
  - (b) 100 cfs for the second 24 hours; and
  - (c) 80 cfs for the third 24 hours.

Licensee/Permittee may, in its discretion, time this pulse so as to utilize any uncontrolled flows that may provide some or all of the water needed to comply with this requirement.

(2) In every year, for the 30 days that follow the three-day pulse release described in paragraph B.(1), Licensee/Permittee shall release sufficient water from the Putah Diversion Dam into lower Putah Creek to maintain a mean daily flow equal to or in excess of 50 cfs at the Interstate 80 Bridge. During this period, the instantaneous flows at the Interstate 80 Bridge shall at all times equal or exceed 45 cfs.

(3) In every year, at the conclusion of the 30<sup>th</sup> day of the 50 cfs spawning flows described in subsection B.(2), Licensee/Permittee then shall ramp down the controlled release from the Putah Diversion Dam gradually over a seven-day period until the flows are in compliance with the applicable requirements set forth in subsections A.(2), A.(3), C.(3) and C.(4) of this Exhibit "E-1".

# C. Supplemental Flows ((1), (2), (3) & (4) all shall be maintained)

The requirements set forth thus far herein are intended to protect the aquatic and related resources found in lower Putah Creek. In addition to maintaining these resources, Licensee/Permittee shall provide supplemental flows in an attempt to enhance the aquatic and related resources of lower Putah Creek above that baseline. Accordingly:

- (1) Licensee/Permittee shall, during the period from November 1 through December 15 of each calendar year, release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 5 cfs, and an instantaneous flow of at least 2 cfs, at the point where Putah Creek discharges into the Toe Drain on the eastern side of the Yolo Bypass (the "East Toe Drain").
- (2) Beginning sometime between November 15 and December 15 of each calendar year, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 50 cfs, and an instantaneous flow of at least 45 cfs, for five consecutive days at the point where Putah Creek discharges into the East Toe Drain. If a flash board dam is present on Putah Creek near the East Toe Drain during that period, and if the flash boards are removed during that period, then to the extent feasible the first day of the 50 cfs pulse flow at the East Toe Drain shall follow the removal of the flash boards. The precise timing of the initiation of the 50 cfs pulse flow shall be set each year by the

Lower Putah Creek Coordinating Committee (the "LPCCC") established in accordance with section III of the Second Amended Judgments in the *Putah Creek Water Cases*, Judicial Council Coordination Proceeding No. 2565. The objective of the LPCCC shall be to time the release so as to maximize the potential for such flows to attract anadromous fish into Putah Creek. If the exact date of releases has not been established or agreed upon by the LPCCC, then the releases dealt with in this subparagraph shall commence on December 1 of the affected calendar year.

- (3) Beginning on the sixth day after initiation of the above described 50 cfs pulse flow, and continuing each day thereafter through March 31, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 19 cfs, and an instantaneous flow of at least 14 cfs, at I-80.
- (4) Beginning on April 1 of each calendar year, and continuing each day thereafter through May 31, Licensee/Permittee shall release sufficient water from Putah Diversion Dam to lower Putah Creek to maintain a mean daily flow of at least 5 cfs, and an instantaneous flow of at least 2 cfs, at the point where Putah Creek discharges into the East Toe Drain.

# D. Drought Year Flows

(1) During years when total storage in Lake Berryessa is less than 750,000 acre feet ("af") as of April 1 (a "Drought Year"), the release and instream flow requirements set forth in sections D.(2), D.(3) and D.(4) below ("Drought Year Requirements") shall apply instead of the release and instream flow requirements set forth in sections A., B. and C. above ("Non-Drought Year Requirements"). Provided, however that if after April 1 the total storage in Lake Berryessa rises to 750,000 af or more, then the Non-Drought Year Requirements shall immediately take effect.

(2) During a Drought Year, releases of water from the Putah Diversion Dam into Lower Putah Creek shall equal or exceed the following amounts (mean daily values, in cfs, with instantaneous releases always equal to or exceeding 90% of the listed values):

Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mav	lun	lul	Δ	
15	25	25	25	16	26	46	33	33	33	26	Sep 15

- During a Drought Year, Licensee/Permittee shall release sufficient water from the Putah Diversion Dam to maintain a continuous flow of surface water in Putah Creek from Putah Diversion Dam to the Interstate 80 Bridge, and further shall release sufficient water from the Putah Diversion Dam to maintain a minimum mean daily instream flow of 2 cfs at the Interstate 80 Bridge, with instantaneous flows always equal to or exceed 1 cfs. Under these conditions, Licensee/Permittee shall not be required to maintain a continuous flow of surface water in the reach of Putah Creek below the Interstate 80 Bridge.
- Whenever the release and instream flow requirements set forth in sections D.(2) and D.(3) are in effect for two consecutive years, then during the next year thereafter the Non-Drought Year Requirements shall apply and shall remain in effect for an entire period from April 1 through March 31, unless total storage in Lake Berryessa on April 1 is less than 400,000 af. If the Drought Year Requirements are ever in effect for three or more consecutive years, then the Non-Drought Year Requirements shall apply and remain in effect for an entire period from April 1 through March 31 in the first subsequent year during which total storage in Lake Berryessa on April 1 exceeds 400,000 af.
- (5) For the purposes of this section D, "total storage in Lake Berryessa" shall be the actual amount of water that physically is stored in Lake Berryessa (including all carryover storage) plus a Storage Adjustment. As of the date of entry of the Amended Judgment, the Storage Adjustment shall be zero. Thereafter, the amount

of any controlled release of water from Lake Berryessa that is not for the purpose of (i) Solano Project Diversions, or (ii) maintaining the flows in lower Putah Creek that are required by the Second Amended Judgment, shall be added to the Storage Adjustment. When Lake Berryessa spills, and all carryover storage has been spilled or otherwise eliminated, the Storage Adjustment shall be re-set to zero. The Storage Adjustment shall never be less than zero. "Solano Project Diversions," for the purpose of this paragraph, means water delivered to Solano Project Participating Agencies and Putah South Canal Conveyance losses (Canal inflows minus deliveries from canals).

(6) If Solano Project Water that is not within the scope of Solano Project Contract
Allocations, as is defined in Section IV of the Second Amended Judgments in the
Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565, ever
is stored in an offstream reservoir or reservoirs or underground storage, and, as a
result, Lake Berryessa storage levels are reduced below the levels that would occur
in the absence of such storage, then the 750,000 af amount in paragraph D.(I) and
the 400,000 af amount in paragraph D.(4) shall be adjusted so that Drought Year
Requirements will continue to occur at the same frequencies as they would have
occurred in the absence of such storage.

# E. <u>Illegal Diversion Account</u>

If there is any risk that illegal diversions may take place from lower Putah Creek to a degree that water released by the Solano Project for the purposes of maintaining the minimum flows set forth herein will be significantly depleted, then the procedures set forth in the attached Exhibit "E-2" shall be implemented.

# F. Monitoring Requirements ((1), (2), (3), & (4) all shall be satisfied)

- (1) Licensee/Permittee shall continuously measure and record releases from the Putah Diversion Dam to lower Putah Creek, and shall determine and record each day's mean daily release.
- Licensee/Permittee shall forthwith install and maintain flow measurement gauges (2)capable of measuring instream flows on a continuous basis at the Interstate 80 Bridge and near the East Toe Drain. Licensee/Permittee shall collect and maintain the data recorded by each of these gauges as is necessary to demonstrate their compliance with the flow requirements imposed by the Second Amended Judgment. In addition, Licensee/Permittee shall make regular measurements of instream flows at Stevenson Road Bridge, Pedrick Road Bridge and Old Davis Road Bridge. If the instream flow measured at Stevenson Road Bridge, Pedrick Road Bridge, or at Old Davis Road Bridge, is less than the minimum instream flow requirements in section A.(2) above on more than an infrequent basis, then the paragraph A.(2) flow requirements shall start to apply at such measurement point or points, in addition to still applying at the Interstate 80 Bridge. Licensee/Permittee shall install, maintain, repair, calibrate and operate gauging equipment at such compliance points as may be necessary to ensure and demonstrate their compliance with the provisions of this Exhibit "E-1". Gaging equipment shall be installed to provide a range of measurement from 0 cfs to at least 200 cfs.
- (3) Licensee/Permittee shall monitor flows in the entire reach of lower Putah Creek from Old Davis Road Bridge to River Mile 0.0 with sufficient frequency and by sufficient means to ensure compliance with the requirement in part A.(3) of the Second Amended Judgment that continuous flow of surface water be maintained in this reach at all times of the year. All measurements and observations of this reach

- made for purposes of compliance with this requirement shall be recorded.
- (4) Licensee/Permittee shall maintain records, in both paper and electronic format, of all release and flow measurements, all calculated mean daily releases and flows, and all observations required by the Second Amended Judgment. Promptly upon request, these records shall be made available for review and copying by any person during normal business hours at the offices of Licensee/Permittee or its designee.

#### Exhibit "E-2"

### Effects of Illegal Diversions of Water from Lower Putah Creek on Obligations under the Water Rights on Applications 11199, 12578 and 12716 to Maintain Exhibit E-1 Instream Flow Requirements

- 1. The right holders under the rights issued pursuant to Applications 11199, 12578 and 12716 shall satisfy all of the release and instream flow requirements that are specified in Exhibit "E-I" at all times, whether or not any illegal diversions of water from lower Putah Creek are occurring, except to the extent that exceptions to the instream flow requirements are authorized by this Exhibit "E-2". These exceptions shall only be authorized during the irrigation season. "Irrigation season" shall mean the period from March 1 through October 31 of each year.
- 2. To determine the obligations under the rights issued pursuant to Applications 11199, 12578 and 12716 to satisfy the instream flow requirements specified in Exhibit "E-1" during times when illegal diversions from lower Putah Creek are occurring, an Illegal Diversion Account shall be established. Starting at the beginning of the sixth irrigation season during which this Illegal Diversion Account is drawn upon, the balance in this account shall be set to 1,000 acre feet at the beginning of each irrigation season, regardless of the account's balance at the end of the prior irrigation season. Prior to the sixth irrigation season in which the Illegal Diversion Account is drawn upon, the balance in the Illegal Diversion Account at the beginning of each irrigation season shall be set to 2,000 acre feet. Any credits made pursuant to Paragraph 9 of this Exhibit "E-2" for any irrigation season shall be in addition to the initial balance. The holders of the water rights issued pursuant to Applications 11199, 12578 and 12715 shall maintain an accurate accounting of all credits to and deductions from this account. In any year that U.S. Bureau of Reclamation does not maintain the required accounting, Solano County Water Agency (as holder of the water rights under Applications 11199 and 12578) is

required to do so and may not waive, defer or delay this requirement. Hereafter, the entity maintaining the required accounting is referred to as the "Accounting Entity".

- 3. At the beginning of each irrigation season, the Accounting Entity shall provide written notice to all riparian landowners of the Accounting Entity's projections of the time period during which such landowners legally may divert from each reach of lower Putah Creek during the irrigation season. This notice shall encourage each riparian landowner to provide the Accounting Entity with the dates and amounts of the landowner's planned diversions of water from lower Putah Creek during the irrigation season. The Accounting Entity may, in its discretion, provide additional notices, making updated projections of the amounts of water that such landowners legally may divert from lower Putah Creek, to these landowners at the irrigation season progresses. The calculations in these notices shall be based on the formulas and procedures described in Exhibit "E-3".
- 4. The term "illegal diversion" in this Exhibit "E-2" means a diversion that is illegal based on the formulas and procedures described in Exhibit "E-3". The sole purpose of this definition is for implementing the provisions of this Exhibit "E-2" regarding deductions from the Illegal Diversion Account pursuant to this paragraph 4 and modifying the Solano Project's release requirements pursuant to paragraph 6 of this Exhibit "E-2". If the Accounting Entity has filed, and is diligently pursuing, a court action against a landowner with an illegal diversion, and if the Accounting Entity has complied with all of the provisions of paragraph 3 of this Exhibit "E-2", then deductions shall be made from the Illegal Diversion Account for any amounts of water that the Solano Project releases from the Putah Diversion Dam into lower Putah Creek during the irrigation season solely for the purpose of compensating for that illegal diversion while maintaining the instream flows specified in Exhibit "E-1". "Diligently pursuing" means seeking, at the earliest possible opportunities, a temporary restraining order, a preliminary injunction and a

permanent injunction stopping the illegal diversion, and a declaratory judgment regarding the illegality of the diversion. If there is more than one illegal diversion, then all of the provisions of this paragraph shall apply to each illegal diversion.

- During any period during which deductions are being made from the Illegal Diversion Account, the Accounting Entity shall make streamflow measurements on a continuous basis at sufficient locations along lower Putah Creek to make the calculations and determinations described in Exhibit "E-3". During such periods, the Accounting Entity shall post all such data, calculations and determination on its Internet website, or make such information available to members of the public by similar electronic means, and shall update such posted information at least once each day.
- 6. If the balance in the Illegal Diversion Account ever reaches zero, then during the remainder of the irrigation season during which the Account balance reached zero and while the Accounting Entity continues to diligently pursue the court action described in the paragraph 4 above and continues to make available the data, calculations, determinations and reports described in paragraph 5 above, and while the court action is pending, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall not be required to fully comply with any instream flow requirement that is specified in Exhibit "E-1" for a point that is located downstream of any illegal diversion that is subject to the court action and that occurs after the Illegal Diversion Account balance reaches zero. Instead, under these conditions, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall release from the Putah Diversion Dam into lower Putah Creek at least the amounts of water that would be sufficient to satisfy all of the instream flow requirements in Exhibit "E-1", if the illegal diversion that is subject to the court action were not occurring. Under these circumstances, the holders of the water rights issued pursuant to Applications 11199,

12578 and 12716 release obligations shall be adjusted as frequently as necessary to reflect changes in hydrological conditions or changes in the rate of the illegal diversion. Immediately upon the cessation of such illegal diversion, the conclusion, dismissal or cessation of diligent pursuit of the court action, or the end of the irrigation season, whichever occurs first, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 shall satisfy all of the instream flow requirements in Exhibit "E-1". If court actions regarding more than one illegal diversion are pending, then the provisions of this paragraph shall apply to all such illegal diversions.

- 7. Deductions from the Illegal Diversion Account for an illegal diversion may be made only for a maximum of two years after the court action described in paragraph 4 above is filed against the landowner with the illegal diversion. Even if a final judgment is not issued in such court action within two years after the action is filed, and even if such court action is dismissed for any reason, the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716 nevertheless thereafter shall be required to maintain all of the instream flows described in Exhibit "E-1", and no further deductions shall ever be made from the Illegal Diversion Account for any illegal diversion that is or was the subject of the court action. However, if a new illegal diversion with neither a point of diversion nor a place of use that is within the scope of the court action described in paragraph 4 above occurs, then the provisions of paragraphs 4, 5 and 6 above, and this paragraph, shall apply to the new illegal diversion. If there is more than one such new illegal diversion, then the provisions of paragraphs 4, 5 and 6 above, and this paragraph, shall apply to each such new illegal diversion.
- 8. If a court of competent jurisdiction issues a final judgment specifying the legality or illegality of any particular diversion from lower Putah Creek, then the Accounting Entity shall adjust the formulas and calculations in Exhibit "E-3" to be consistent with the

court's judgment and the adjusted formulas and calculations shall be applied thereafter. If any interested party to the Second Amended Judgment disagrees with the Accounting Entity's adjustment, then that party may ask the court or State Water Board, by noticed motion, to determine what the appropriate adjustment should be. The State Water Board shall be timely informed of any court determination.

9. If any adjustments to the formulas or calculations in Exhibit "E-3" are made pursuant to paragraph 8 of this Exhibit "E-2", then appropriate adjustments shall be made to the Illegal Diversion Account, for example, credits shall be made for the total amount of all debits that previously were made from the Account for diversions that were treated by the Accounting Entity as illegal, but which would have been legal under the adjusted formulas and calculations. If the Accounting Entity ceases to diligently pursue any court action described in paragraph 4 of this Exhibit "E-2" before a final judgment is entered, then credits shall be made to the Illegal Diversion Account for the total amount of all debits that previously were made from the Account for the diversion that was the subject of the court action. The credits described in this paragraph shall be spread equally over the same number of irrigation seasons as the number of irrigation seasons during which debits from the Account were made. If the court issues its final judgment during an irrigation season, then the first year of such credits shall be made immediately to the Account. If the court issues its final judgment not during an irrigation season, then the first year of such credits shall be made during the next irrigation season. Subsequent credits shall be made during the immediately following irrigation seasons.

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#### Exhibit "E-3"

# METHODOLOGY FOR MONITORING AND QUANTIFYING THE AVAILABILITY AND USE OF RIPARIAN WATER IN LOWER PUTAH CREEK

This document provides U.S. Bureau of Reclamation's (Reclamation) explanation and basis for the methodology for monitoring and quantifying the availability and use of riparian water in Putah Creek, downstream of the Putah Diversion Dam. The methodology, hereafter referred to as the Lower Putah Creek Riparian Water Program ("PRWP"), will be used by the holders of the water rights issued pursuant to Applications 11199, 12578 and 12716, to (I) differentiate between and quantify the availability of riparian versus non-riparian waters in Putah Creek, downstream of the Putah Diversion Dam, and (2) identify and quantify illegal water diversions, downstream of the Putah Diversion Dam. Reclamation anticipates that implementation of the PRWP will increase the efficiency with which the instream flow requirements of the Solano Project are satisfied, and facilitate the lawful diversion of riparian water downstream of the Putah Diversion Dam.

As holders of the water rights issued pursuant to Applications 11199, 12578 and 12716, either Reclamation or the Solano County Water Agency (SCWA) may use the above methodology to determine riparian water in Putah Creek downstream of the Putah Diversion Dam. In any year that Reclamation does not perform the calculations, SCWA (as holder of the water rights under Applications 11199 and 12578) is required to do so and may not waive, defer or delay this requirement.

#### 1.0 OVERVIEW

# 1.1 Key Elements of Lower Putah Creek Riparian Water Program

The PRWP consists of two components: Pre-irrigation season water availability forecasts, and real-time stream flow monitoring during the irrigation season, where "irrigation season" is defined as March 1 through October 31. Annual water availability forecasts will be provided to riparian water users prior to the irrigation season, so they and other interested parties can plan and, if necessary, make other arrangements for obtaining irrigation water, before significant time and financial resources are committed to the cultivation of a given crop. Real-time monitoring will be conducted to: (1) determine, on a daily basis, the quantities of riparian water that are available to water users in Lower Putah Creek, and (2) differentiate and quantify, on a daily basis, legal versus illegal riparian diversions.

## 1.2 Definition of Riparian Water

For the purposes of the PRWP, riparian stream flows are defined as any surface water derived from precipitation or rising groundwater that, given prevailing hydrologic conditions, would occur in Lower Putah Creek in the absence of the Solano Project. Non-riparian water, such as treated wastewater and agricultural return flows originating from a non-riparian source (e.g., pumped groundwater that would not otherwise be tributary to the creek) cannot, by definition, be diverted by riparian water right claimants and, therefore, is not included as a source of riparian water from Lower Putah Creek.

# 2.0 WATER AVAILABILITY FORECASTS

Riparian water availability forecasts for Lower Putah Creek will be based on stream flow conditions observed in the Putah Creek drainage, upstream of the Putah Diversion Dam, in the

prior (i.e., antecedent conditions) and current water year. Forecasts will be made on January 1, March 1 and May 1. The January 1 and March 1 forecasts, which will be made before the current rainy season is over, will be based in part on projected stream flow conditions for the balance of the rainy season, while the May 1 forecast, the final forecast for the water year, will be based on actual runoff measured to date. Both the January 1 and March 1 forecasts will include three scenarios, based on the assumption that the balance of the rainy season will either be "wet" (25% exceedance), "normal" (50% exceedance) or "dry" (75% exceedance).

In order to address the differing sources and durations of riparian stream flows (surface stream flows from Putah Creek and/or tributaries to Putah Creek, or rising groundwater), Lower Putah Creek has been divided into five reaches. Water availability forecasts will be made for each reach. Stream reach designations and the analytic framework for making water availability forecasts are presented in "Attachment 1".

#### 3.0 **REAL-TIME MONITORING**

# 3.1 Quantifying Available Riparian Water Supply

Stream flows and the associated stream flow gains and losses will be monitored by reach, on a continuous basis, and the availability of riparian water and extent of illegal diversions will be determined daily, using a series of water mass balance equations to track the quantities of both riparian and non-riparian water entering and leaving each stream reach.

A summary of the equations used to define riparian water availability, by stream reach, is presented in Attachment 1.

Although the determination of net riparian flow is based on real-time stream flow measurements, there are situations where real-time stream flow measurements are not

practical and therefore simplifying assumptions must be used, much as they are in the Condition 12 Settlement Agreement for the Upper Putah Creek drainage. For example, under existing conditions it is difficult to measure accurately real-time stream flow losses in the stream reach now inundated by Lake Solano. Consequently, a "fixed" loss figure previously adopted by the United States Bureau of Reclamation may be used in the water mass balance calculation for this reach. In all cases, the simplifying assumptions used to quantify the availability of riparian water are purposely conservative in the sense that they tend to overstate the availability of riparian stream flows. Overstating riparian water availability is preferred, since it presumably increases the enforceability of the PRWP and its acceptability to riparian water users.

#### 3.1.1 Data Collection

# 3.1.1.1 Measurement of Riparian Diversions

Riparian diversions will either be measured directly, using an appropriate meter and assuming landowner/operator permission is obtained, or indirectly, via measurement of creek stream flows in the vicinity of the diversion. Riparian diversions typically constitute a readily measurable fraction of the total stream flow in any given reach (500-2,000 gallons per minute, or about 1-5 cubic feet per second), and are therefore easily detected by continuously measuring stream flows entering and leaving a given stream segment.

# 3.1.1.2 Measurement of Agricultural Return Flows and Wastewater Discharges

The agricultural return flows entering Lower Putah Creek are for the most part non riparian water sources, as are the treated wastewater discharges from the University of California -Davis (U.C. Davis) water treatment facility, which enter Lower Putah Creek near Old Davis Road. Nevertheless, these water sources must be quantified for water mass balance accounting purposes. The University's treated wastewater discharges are measured and recorded by the

treatment plant operators. Most of the agricultural return flows are too small and/or sporadic to warrant direct measurement, and will therefore be estimated, or if insignificant relative to the total creek stream flow, ignored. However, one notable exception is the Willow Canal, which discharges into Lower Putah Creek just upstream of Pedrick Road. Discharges from the Willow Canal, which is operated by the Yolo County Flood Control and Water Conservation District (YCFC&WCD), will be measured as necessary.

# 3.1.1.3 Measurement of Groundwater Seepage and Evapotranspiration

The amounts of groundwater seepage (into or out of the creek) and water lost to open-water evaporation and transpiration by riparian vegetation vary gradually over time, in comparison to the fluctuating gains and losses associated with water diversions and agricultural return flows. For the purposes of the PRWP, the net flow gain or loss from these factors (groundwater seepage, evaporation and transpiration) are combined into a single term that represents the natural or "background" net stream flow gain or loss rate within a given reach. Background gains and losses are most easily quantified as the difference in stream flow over a given reach ("top of reach" stream flow versus "bottom of reach" stream flow), in the absence of any diversions or "intra reach inflows."

Groundwater seepage along the reach from 1-505 to Stevenson Bridge typically transitions from net loss (seepage out of the creek) to net gain (seepage into the creek). The location of the transition point and the total amount of influent seepage along the gaining stretch depend on the regional groundwater levels in the underlying groundwater basin. This reach will be subdivided into two sub-reaches when necessary to calculate riparian water availability. The upstream end of the gaining segment will be detected by periodic stream flow measurements and/or temperature changes in the creek.

#### 3.1.1.4 Special Situations

#### Pumping from Riparian Wells

There is no clear boundary between wells that induce additional seepage from the creek and wells that pump regional groundwater; the percentage of pumped water that consists of induced seepage decreases gradually with depth and horizontal distance from the creek. A pragmatic approach adequate for the purpose of the PRWP is to include in the accounting the effects of a well if its effect on stream flow can be detected by the stream flow monitoring program. The philosophy behind this approach is that well pumping does not matter if its effects on stream flow are not measurable; and if the effects are measurable, then the evidence and justification for including the well as a riparian diverter are already at hand. In practice, it is unlikely that wells more than about 500 feet from the creek or more than 100 feet deep will measurably affect stream flow.

# Impoundments Below Mace Boulevard

Riparian water accounting is slightly more complicated at the downstream end of Putah Creek, between Mace Boulevard and the Toe Drain in the Yolo Bypass. Two impoundments are created in the creek channel each year to provide pumping pools for irrigation operations. The lower impoundment is a flashboard dam operated jointly by Los Rios Farms and the California Department of Fish and Game. Frequently, some of the water impounded behind this dam is water that is diverted from the Toe Drain of the Yolo Bypass at a pumping station about 1 mile north of the dam and conveyed to the impoundment by a canal. It may be necessary to gage the inflows from this canal into Putah Creek to determine the availability of Putah Creek riparian water in the impoundment. The issue may be moot, however, because the downstream

compliance point for resident native fish flows is at river mile 0, which is upstream of the impoundment.

The upper impoundment is a temporary dirt berm across the channel that provides a crossing for farm vehicles in addition to creating a pumping pool. The berm is at about river mile 1.0 (aligned with country road 106B), and the impounded water derives entirely from Putah Creek. Irrigation return flows from adjacent fields may include water that originated from Toe Drain diversions, and these return flows will be measured or estimated in the same manner as for return flows in other reaches of the creek.

## Riparian Diversions from Pools in the Creekbed

Prior to construction of the Solano Project, landowners in a few locations were able to pump water from natural or constructed pools in the creekbed after live flow in the creek had ceased in summer. These pools were separate from the well-documented gaining reach above Stevenson Bridge, where groundwater seepage into the creekbed can create surface water stream flows in the absence of surface water inflows from upstream reaches. The accounting methodology described here does not encompass the water in isolated pools that would have been present in the absence of the Solano Project. The historical number of pools is thought to be small, and the pumping rates they could sustain also were probably small.

The possible availability of riparian water from isolated pools will be dealt with on a case-by-case basis. If a landowner can provide evidence that persistent pools existed on his or her property during periods of discontinuous streamflow prior to the Solano Project construction, then the sustained pumping yield of those pools will be estimated to quantify the amount of riparian water presently available to the landowner from that source. The yield will be estimated

from the pool volume and the permeability of the surrounding streambed materials, which may release shallow groundwater when the pool level is lowered by pumping.

## New Diversions and Return Flows

As parcels change ownership or existing landowners modify their farming operations, some diversions and return flows may be added and others discontinued. Word of mouth and the annual riparian water forecast mailing should be sufficient to inform any newcomers that riparian diversions from Lower Putah Creek are monitored and regulated. The new users will be encouraged to join the cooperative effort to manage and utilize riparian water supplies. Any changes in discharges by U.C. Davis, YCFC&WCD, and other agencies or industries hopefully will also be communicated to the SCWA to facilitate a smooth transition. Any unreported changes will eventually be detected by the stream flow monitoring program, periodic field surveys, neighboring landowners, or the stream keeper.

# Uncooperative Riparian Diverters

It is hoped that all riparian diverters will cooperate with each other and with the SCWA to make efficient use of the available riparian water supply without any illegal diversions. However, it is possible that some landowners will attempt to conceal their diversions or refuse to provide information about when and how much water they are diverting, or when and where return flows occur. Fortunately, all of this information can be obtained anyway. It would be impossible to conceal a significant diversion for very long because the pumping equipment and power supplies are large, visible, and make sound and because the effects of the diversion will be detected by the stream flow monitoring program. The pumping rate at any diversion can be measured fairly accurately by gaging the stream flow immediately upstream and downstream of the diversion. Return flows can similarly be estimated by surveys of the field drainage patterns and the direct observation of the return flows.

#### 3.2 Quantifying Illegal Diversions

Any diversion in excess of the calculated net riparian flow is considered illegal. Illegal diversions, like net riparian flow, will be monitored and quantified by reach, and to the extent possible, by individual diverters. A summary of the equations used to quantify illegal diversions is presented in Attachment 1.

If total riparian diversions in any given reach exceed the available riparian supply and the diverters are unwilling to voluntarily reduce their total diversions to match the available supply, and these actions adversely affect the SCWA, then the Agency may sue some or all of the active diverters and seek court orders addressing the illegal diversions. It is hoped that this type of enforcement action will not be necessary. The PRWP will provide all of the data needed on a real-time basis to enable the active riparian diverters to manage their activities and restrict the locations and rates of their diversions so that they remain within the legally available supply.

# 3.3 Public Access to Riparian Water Accounting Data and Calculations

The SCWA will conduct the data collection activities and complete the calculations necessary to generate the pre-irrigation season water availability forecasts and the real-time riparian water availability determinations. All data collected for these purposes and all formulas and computer programs used in the calculations will be available on request to any interested agency, group or individual. The SCWA will publish the data and results on its website and update the information approximately daily during the irrigation season.

The SCWA will deliver the first (January) pre-season water availability forecast by mail to all riparian landowners along Lower Putah Creek. Landowners may at that time request that

the subsequent forecasts (March and May) also be sent by mail if the landowner is unable to access the information by Internet. It would not be practical to disseminate the real-time monitoring data by mail because it will be updated daily during the irrigation season. Active diverters who need the daily information will be able to view it on the SCWA's website or call the Agency to obtain the information by telephone.

#### **ATTACHMENT 1 TO EXHIBIT "E-3"**

### 1.0 <u>Pre Irrigation Season Predictions</u>

A) Objective:

To estimate future availability of riparian stream flows, based on projected and/or prior hydrologic conditions in the Putah Creek drainage. For pre irrigation season prediction purposes, assume riparian stream flows consist of surface runoff from precipitation and rising groundwater.

- B) Analytic Approach:
  - i) Divide Lower Putah Creek into the following reaches:
    - a. Putah Diversion Dam to Highway 505 Bridge (a "losing reach")
    - b. Highway 505 Bridge to Stevenson Bridge (a "gaining reach")
    - c. Stevenson Bridge to I-80 Bridge (a "losing reach")
    - d. I-80 Bridge to Mace Boulevard (a "losing reach")
    - e. Mace Boulevard to Yolo Bypass (a "losing reach")

(Reach designations based on hydrogeologic features, proximity of suitable stream flow gaging sites and existing riparian diversions. When necessary, reach "b" will be subdivided into two sub-reaches.)

- ii) Predict average monthly flow and date of zero flow for each of the above riparian water sources, in each of the five reaches:
  - a) Surface runoff: calculate using statistical relationships derived from historical data.
    - Stream flow recession curves derived from stream flow gaging data for "At Winters", "Near Winters" and "Near Davis" stream flow gaging stations
    - Stream reach percolation/evapotranspiration loss estimating algorithms
       Developed for the SCWA's Lower Putah Creek stream flow model
  - b) Rising groundwater: calculate using statistical relationships derived from historical data.
    - Stream reach groundwater gain/loss estimating algorithms developed for the Solano County Water Agency's Lower Putah Creek streamflow model
- C) Timing of Pre Irrigation Season Predictions:
  - i) January 1 Predictions based on hydrology of water year to date and three scenarios for the remainder of the year's rainy season: "wet year" (25% Lake Berryessa inflow exceedance), "normal year" (50% Lake Berryessa inflow exceedance) and "dry year" (75% Lake Berryessa inflow exceedance)
  - ii) March 1 Predictions based on hydrology of water year to date and projected

25%, 50% and 75% exceedance runoff rates for the remainder of the year's rainy season

iii) May 1 - Final prediction based on hydrology of the water year through April

# 2.0 Methodology for Quantifying Riparian Streamflows During Irrigation Season

Note:

Riparian stream flows are defined here as any surface water derived from precipitation or rising groundwater that, given prevailing hydrologic conditions, would occur in Lower Putah Creek in the absence of the Solano Project. Non riparian water, such as treated wastewater and agricultural return flows originating from a non-riparian source (e.g., pumped groundwater) cannot, by definition, be diverted by riparian water right claimants and therefore, are not included as a source of riparian water from Lower Putah Creek.

#### A) Overview:

- i) Calculate, on a daily basis, pre-Solano Project stream flows (i.e., stream flow that would occur if there were no dams -no Solano Project) at the Putah Diversion Dam site
- ii) Compare computed daily pre-Solano Project stream flow (i.e., stream flow that would occur if there were no dams -no Solano Project) with current Putah Diversion Dam release -determine what fraction of the current release is stored water or any other non-riparian water source, versus riparian stream flows
- iii) Using real-time stream flow monitoring data to quantify prevailing percolation/evapotranspiration losses and any non-riparian water sources, calculate riparian flows by stream reach. The total quantity of riparian water in any given reach is defined here as the sum of all riparian water sources less percolation/evapotranspiration losses.

# B) Analytical Approach:

i) Riparian stream flows at Putah Diversion Dam site

USRSF = LBI + IDTI -IDCL

Where: USRSF = Riparian stream flow at Putah Diversion Dam

LBI = Computed/measured Lake Berryessa inflow (less any associated non riparian flow)

IDTI = Inter Dam Reach tributary inflow (less any associated non riparian flow)

IDCL = channel percolation/evapotranspiration losses that would occur in the Inter Dam Reach in the absence of Lake Solano

(A stream gage will be placed on Pleasants Creek to facilitate real-time estimation of inflow from inter-dam tributaries. For accounting purposes, seepage and evaporation losses from Lake Solano are assumed to be constant and will therefore be characterized by a fixed continuous loss rate term).

ii) Riparian stream flows in first reach downstream of Putah Diversion Dam (Putah Diversion Dam to 505 Bridge)

1RRSF = USRSF + TRSF + IRAG -1RCL

Where: 1RRSF = Computed riparian stream flow in Reach 1

USFSF = Computed riparian stream flow at Putah Diversion Dam

TRSF = Measured stream flow from tributaries (Dry Creek, McCune aka

Pleasant Creek), less any associated non riparian flow

1RAG = Ag return flow water originating from a riparian source in reach 1

1RCL = Measured channel percolation/evapotranspiration losses in

reach 1

#### Notes:

- (1) Agricultural return flow water that originates from a riparian water source (riparian water diverted from Putah Creek or associated tributaries) is classified as riparian water and therefore can be lawfully diverted by other riparian water right claimants.
- iii) Riparian stream flows in second reach downstream of Putah Diversion Dam (505 Bridge to Stevenson Bridge)

2RRSF = 1RRSF -1RD (±) 2RCL + 2RAG

Where: 2RRSF = Computed riparian stream flow in Reach 2

1RRSF = Computed riparian stream flow in Reach 1

2RCL = Combined sum of groundwater "gains", channel

percolation/evapotranspiration losses in reach 2

2RAG = Ag return flow water in reach 2 originating from a riparian

source

1RD = Riparian diversion in Reach 1

#### Notes:

- (1) There are no significant tributaries entering Putah Creek in this Reach
- (2) Due to the spatial and temporal variability of rising groundwater, portions of the so called "gaining reach" (generally the upstream most third of the reach) frequently lose rather than gain water. Accordingly, there are instances when some of the riparian diverters within Reach 2 have access to rising groundwater, while others do not. When necessary, Reach 2 will be broken into two sub reaches for the purpose of quantifying riparian stream flows.

iv) Riparian stream flows in third reach downstream of Putah Diversion Dam (Stevenson Bridge to 1-80)

3RRSF = 2RRSF -2RD -3RCL +3RAG

Where: 3RRSF = Computed riparian stream flow in Reach 3

2RRSF = Computed riparian stream flow in Reach 2

2RD = Riparian diversions in Reach 2

3RCL = Measured channel percolation/evapotranspiration losses

in reach 3

3RAG = Ag return flow water in reach 3 originating from a riparian

source

v) Riparian stream flows in fourth reach downstream of Putah Diversion Dam (1-80 to Mace Boulevard)

4RRSF = 3RRSF- 3RD -4RCL + 4RAG

Where: 4RRSF = Computed riparian stream flow in Reach 4

3RRSF = Computed riparian stream flow in Reach 3

3RD = Riparian diversion in Reach 3

4RCL = Measured channel percolation/evapotranspiration losses in reach 4

4RAG = Ag return flow water in reach 4 originating from a riparian source

vi) Riparian stream flows in fifth reach downstream of Putah Diversion Dam (Mace Boulevard to RM 0.0 aka Yolo Bypass)

5RRSF = 4RRSF- 4RD -5RCL + 5RAG

Where: 5RRSF = Computed riparian stream flows in Reach 5

4RRSF = Computed riparian stream flows in Reach 4

4RD = Riparian diversions in Reach 4

5RCL = Measured channel percolation/evapotranspiration losses in reach 5

5RAG = Ag return flow water in reach 5 originating from a riparian source

Note:

(1) The above formulas will be adjusted as necessary to reflect changing conditions such as new or terminated diversions or discharges.

# 3.0 Methodology for Quantifying Illegal Riparian Diversion During Irrigation Season

Note:

(1) Diversions in excess of the available riparian stream flow (i.e., diversion of water released from storage or other non-riparian flow) are considered illegal

#### A) Overview:

i) For each reach, calculate difference between daily riparian diversions and computed riparian streamflow. If riparian diversions exceed computed riparian streamflow, the difference is considered to be the result of illegal diversions.

#### B) Analytical Approach:

i) Illegal riparian diversions in first through fifth reaches downstream of Putah Diversion Dam

If: (ith)RD>(ith)RRSF
Then: (ithIRD) = (ithRD) -(ithRRSF)

Where: (ith)RD = Riparian diversions in Reach 1,2,3,4 or 5 (ithRRSF) = Computed riparian streamflow in Reach 1,2,3,4 or 5 (ithIRD) = Computed illegal diversions in Reach 1,2,3,4 or 5

The SCWA is under no obligation to enforce against any illegal riparian diverters whose actions do not adversely affect the Agency's ability to comply with any contractual or legal obligation.

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# **Appendix B3**

State Water Resources Control Board, documents regarding Water Rights Permit 10659 (U.S. Bureau of Reclamation)



# STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

#### **DIVISION OF WATER RIGHTS**

# RIGHT TO DIVERT AND USE WATER

**APPLICATION 12716** 

**PERMIT 10659** 

Right Holder:

U.S. Bureau of Reclamation Mid Pacific Region MP 460 2800 Cottage Way Sacramento, CA 95825-1898

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from **September 27, 1948.** This right supercedes any previously issued right on **Application 12716**.

### Right holder is hereby granted a right to divert and use water as follows:

1. Source of water: Putah Creek

Tributary to: Yolo By-Pass

Within the Counties of Solano and Yolo

2. Location of point of diversion

By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)	Township	Range	Base and Meridian	
Putah Diversion Dam North 1,940,989 feet and East 6,559,557 feet	SE¼ of SE¼	31	8N	1W	MD	

3. Purpose of use	4. Place of use	Section (Projected)*	Township	Range	Base and Meridian	Acres		
Domestic, Municipal, Industrial, Irrigation, Frost Protection, Recreational	428,300 acres in Yolo and Solano Counties within T2N to T8N, R5W to R4E, MDB&M.							
Fish and Wildlife Enhancement	29-miles of Putah Creek stream channel between Monticello Dam and the Sacramento River Deep Water Ship Toe Drain within T8N, R2W to R2E, MDB&M							
Recreational	Lake Berryessa within T7N to T10N, R2W to R5W, MDB&M							

The place of use is shown on map 413-208-1484A dated February 9, 2009, filed with the State Water Board.

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 116 cubic feet per second to be diverted from November 16 of each year to January 31 of the succeeding year. The maximum amount diverted under this permit shall not exceed 17.717 acre-feet per year.

(000005A)

6. The total amount taken from the source (collection to storage plus direct diversion) under this permit and the water rights pursuant to Applications 11199 and 12578 shall not exceed 999,031 acre-feet per annum.

(000005Q)

7. The maximum amount placed to beneficial use (withdrawal from storage plus direct diversion) under Permit 10659, the license issued pursuant to Application 11199, and the license issued pursuant to Application 12578 shall not exceed **401,286 acre-feet per annum**.

(0000114)

8. Construction work and complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by **December 31, 2032.** 

(0000009)

9. The total quantity of water delivered for consumptive use under Permit 10659, together with that delivered under the license issued pursuant to Application 11199 and the license issued pursuant to Application 12578 shall not exceed 250,000 acre-feet in any one year.

(0000114)

10. The Solano County Water Agency, et al. (SCWA) holds the senior rights for the Solano Project (rights under Applications 11199 and 12578). Upon licensing, SCWA will also hold the water right on Application 12716.

Under the water rights on Applications 11199 and 12578, SCWA is required to operate the Solano Project to comply with the release and instream flow requirements specified in Exhibits E-1, E-2, and E-3 (attached). Nothing herein authorizes diversions, except those diversions in compliance with the release and instream flow requirements specified in Exhibits E-1, E-2 and E-3. These requirements are the same as the release and instream-flow requirements specified in the Second Amended Judgments in the Putah Creek Water Cases, Judicial Council Coordination Proceeding No. 2565, Sacramento County Superior Court.

Notwithstanding the above permit requirement, the State Water Board shall not pursue an action or proceeding for enforcement of violation of this condition based on a violation or violations of one or more of the minimum mean daily flow requirements established in Exhibit E-1 section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4), and D.(3), or one or more of the minimum instantaneous flow requirements established in Exhibit E-1 sections A.(2), B.(2), C.(1), C.(2), C.(3) and C.(4), provided that:

- 1. The Solano Project was being operated to comply with the release and instream flow requirements in Exhibits E-1, E-2, and E-3; and
- 2. The violation of the minimum mean daily flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3), C.(4) or D.(3), or the minimum instantaneous flow requirement in Exhibit E-1, section A.(2), B.(2), C.(1), C.(2), C.(3) or C.(4) was solely the result of an unanticipated and unforeseeable increase in a diversion or diversions from, or reduction in an inflow or inflows into, Putah Creek downstream of the Putah Diversion Dam, by some

person or entity besides U.S. Bureau of Reclamation, the Solano County Water Agency or the Solano Irrigation District, and the increase or reduction occurred so rapidly that the Solano Project could not reasonably maintain compliance by increasing the releases from the Putah Diversion Dam in Lower Putah Creek; and

- The 4-day running mean flow at the relevant compliance point equaled or exceeded the applicable minimum mean daily flow; and
- 4. The instantaneous flow at the relevant compliance point was not more than 5 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from January through July, and was not more than 3 cubic feet per second less than the applicable minimum mean daily flow if the violation occurred during the period from August through December.

The dedication of water to instream flow is not intended to affect any obligation imposed pursuant to the existing water rights for the Solano Project to provide protection to downstream prior rights and to provide percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project. Water required pursuant to the flow regime set forth in Attachment E-1 over and above the amounts of water required to meet existing obligations for percolation and downstream prior rights is dedicated to instream flows pursuant to Water Code section 1707. Water dedicated to the environment pursuant to Water Code section 1707 is not available for appropriation.

The Permittee shall electronically report to the State Water Board: (a) daily records of diversions to Putah South Canal, (b) daily records of flows past the Putah Diversion Dam, (c) daily records of the quantity dedicated to the environment, pursuant to the 1707 petition, and (d) records of depth to groundwater in the spring of each year for the area influenced by Putah Creek between mile 4.0 and mile 11.0. The requirement to record depth to groundwater may be discontinued upon a showing, to the satisfaction of the Deputy Director for Water Rights, that further groundwater elevation monitoring is not needed.

No credit shall be given for the 1707 petition flows unless the required documentation under (c) is timely submitted.

Permittee shall allow authorized representatives of the State Water Board reasonable access to the project works and properties for the purpose of gathering information and data.

(0140499)

11. Permittee shall release water into Putah Creek channel from Monticello Reservoir and past the Putah Diversion Dam in such amounts at such times and rates as will be sufficient, together with inflow from downstream tributary sources, to supply downstream diversions of the surface flow under vested prior rights to the extent water would have been available for such diversions from unregulated flow, and sufficient to maintain percolation of water from the stream channel as such percolation would occur from unregulated flow, in order that operation of the project shall not reduce natural recharge of groundwater from Putah Creek.

The State Water Board reserves continuing authority over the permit to: (1) determine if the schedule of releases required herein provides adequate protection to downstream prior rights and provides percolation from the stream channel of Putah Creek to the extent that would occur in the absence of the Solano Project, (2) make further orders that may be necessary concerning proper releases of water, and (3) impose conditions providing for additional measurements or studies that may be necessary for a final determination to be made.

(0500300)

All releases of water past the Putah Diversion Dam shall be made in such a manner as to maintain 12. a permanent live stream at all times as far below the diversion dam as possible, consistent with the purpose of the project and the requirements of downstream users.

(0540499)

This permit is subject to post-October 29, 1945 appropriative water rights in the Putah Creek 13. watershed above Monticello Dam which (1) are licensed for the use of water perfected as of December 31, 1995, pursuant to the March 10, 1995, Condition 12 Settlement Agreement, or (2) are perfected after December 31, 1995, provided the holders of such rights have subscribed, subscribe, or are otherwise subject to the provisions of the March 10, 1995, Condition 12 Settlement Agreement.

(0540899)

If it is determined after permit issuance that the as-built conditions of the project are not correctly 14. represented by the map(s) prepared to accompany the application, permittee shall, at his expense have the subject map(s) updated or replaced with equivalent as-built map(s). Said revision(s) or new map(s) shall be prepared by a civil engineer or land surveyor registered or licensed in the State of California and shall meet the requirements prescribed in section 715 and sections 717 through 723 of the California Code of Regulations, Title 23. Said revision(s) or map(s) shall be furnished upon request of the Chief, Division of Water Rights.

(0000030)

- The right to divert and store water, and apply said water to beneficial use as provided in this 15. permit is granted to the United States as Trustee for the benefit of the public agencies of the State together with the owners of land and water users within such public agencies as shall be supplied with the water appropriated under this permit. (0540699)
- Subject to compliance by the public agencies concerned with any and all present and future valid 16. contractual obligations with the United States, such public agencies, on behalf of their landowners and other water users, shall, consistent with other terms of this permit, have the permanent right to the use of all water appropriated and beneficially used hereunder, which right, except where water is distributed to the general public by a private agency in charge of a public use, shall be appurtenant to the land to which said water shall be applied, subject to continued beneficial use and the right to change the point of diversion, place of use, and purpose of use, as provided in Chapter 10 of Part 1 of Division 2 of the Water Code of the State of California, and further subject to the right to dispose of temporary surplus.

(0540699)

Upon completion of the appropriation and beneficial use of water under this permit, any license or 17. licenses which may be issued pursuant to Chapter 9 of Part 2 of Division 2 of the California Water Code shall be issued to the public agencies of the State within which the water shall have been found by inspection by the Board to have been applied to beneficial use.

(0540699)

# THIS PERMIT IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

- A. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)
- B. Progress reports shall be submitted promptly by right holder when requested by the State Water Board until a license is issued.

(0000010)

C. Right holder shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by the State Water Board, reasonable access to project works to determine compliance with the terms of this right.

(0000011)

D. Pursuant to California Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this right with a view to eliminating waste of water and to meeting the reasonable water requirements of right holder without unreasonable draft on the source. Right holder may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this right and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by right holder in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2, is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

(0000012)

E. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Board if, after notice to right holder and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

(0000013)

- F. This right does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, right holder shall obtain authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this right.
- G. Right holder shall maintain records of the amount of water diverted and used to enable the State Water Board to determine the amount of water that has been applied to beneficial use pursuant to Water Code section 1605. (0000015)
- H. No water shall be diverted under this right, and no construction related to such diversion shall commence, until right holder obtains all necessary permits or other approvals required by other agencies. If an amended permit is issued, no new facilities shall be utilized, nor shall the amount of water diverted increase beyond the maximum amount diverted during the previously authorized development schedule, until right holder complies with the requirements of this term.

Within 90 days of the issuance of this permit or any subsequent amendment, right holder shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, right holder shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish & G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002.); (3) Regional Water Quality Control Board Waste Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344.); or, (5) local grading permits.

Right holder shall, within 30 days of issuance of all permits, approvals or waivers, transmit copies to the Division of Water Rights. (0000203)

### This right is issued and right holder takes it subject to the following provisions of the Water Code:

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

STATE WATER RESOURCES CONTROL BOARD

Barbara Evoy, Deputy Director
Division of Water Rights

ans W. Kassel

Dated:

MAY 28 2013

# **Appendix B4**

Contract between the U.S. Bureau of Reclamation and Solano County Water Agency Providing for Water Service

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION Solano Project, California

# CONTRACT BETWEEN THE UNITED STATES AND

# SOLANO COUNTY WATER AGENCY PROVIDING FOR WATER SERVICE

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•	Contract No. 14-00-200-4090
2 3	UNITED STATES
<i>3</i> 4	DEPARTMENT OF THE INTERIOR
5	BUREAU OF RECLAMATION
<i>-</i>	Solano Project, California
6	CONTRACT BETWEEN THE UNITED STATES
7	AND
8	SOLANO COUNTY WATER AGENCY
9	THIS CONTRACT, made this 28 day of February 1999, in
0	pursuance generally of the Act of June 17, 1902 (32 Stat. 388), and acts amendatory or
1	supplementary thereto, including, but not limited to, the acts of August 26, 1937 (50 Stat. 844),
2	as amended and supplemented, August 4, 1939 (53 Stat. 1187), as amended and supplemented,
3	July 2, 1956 (70 Stat. 483), June 21, 1963 (77 Stat. 68), and October 12, 1982 (96 Stat. 1262), as
4	amended, all collectively hereinafter referred to as the Federal Reclamation law, between THE
5	UNITED STATES OF AMERICA, hereinafter referred to as the United States, and the
6	SOLANO COUNTY WATER AGENCY, successor in interest to the SOLANO COUNTY
7	FLOOD CONTROL AND WATER CONSERVATION DISTRICT, hereinafter referred to as
8	the Agency, a political subdivision of the State of California, duly organized, existing, and acting
9	pursuant to the laws thereof, with its principal place of business in the City of Vacaville, State of
.0	California,

WITNESSETH, That:

#### **EXPLANATORY RECITALS**

WHEREAS, on May 5, 1948, the Secretary of the Interior approved and adopted
a report on the Solano County Project, dated March 15, 1948, which was presented to the
President of the United States on November 11, 1948, and to the Congress on January 1, 1949,
thereby authorizing the Secretary of the Interior to construct the Project; and
WHEREAS, the United States has constructed the Solano Project, herein after
referred to as the Project, for flood control and for the storage, diversion, carriage, distribution,
and beneficial use of water of the Putah Creek for the purpose of agricultural, municipal,
industrial and domestic consumption, and other purposes; and
WHEREAS, on March 7, 1955, the Agency and the United States entered into
Contract No. 14-06-200-4090 (Original Contract), which required the United States to furnish
Project water to the Agency to be delivered to various Participating Agencies of the Agency; and
WHEREAS, the United States has determined that the Agency to date has fulfilled
all of its obligations under the Original Contract; and
WHEREAS, the Contracting Officer has determined that the Participating
Agencies have for many years had the capability to fully utilize for reasonable and beneficial use
the water of the Project; and
WHEREAS, the United States and the Agency have requested the State Water
Resources Control Board (SWRCB) to license the Project water rights, and have entered into an
agreement which provides that: (1) if prior to the licensing of the Project water rights, title to the
major Project works has not been transferred to the Agency and /or the Participating Agencies
and the reimbursable costs of the Project have not been fully repaid, the Agency shall take all

necessary steps to add the United States as an additional licensee pending such transfer of title or such repayment; (2) if after the name of the United States has been added to the Project water right license (s), title to the major Project works is transferred to the Agency and/or the Participating Agencies or the Agency and the Participating Agencies fully repay the reimbursable costs of the Project, the United States shall thereupon take all necessary steps to remove its name from the license (s); (3) upon the issuance of the license (s), the Agency shall take all necessary steps to add the Participating Agencies as additional licensees; and

WHEREAS, rights of renewal of Contract No. 14-06-200-4090 pursuant to subsections (c) and (e) of Section 9 of the Act of August 4, 1939 (53 Stat. 1187), as amended by the Acts of July 2, 1956 (70 Stat. 483) and June 21, 1963 (77 Stat. 68) are set forth in this contract; and

WHEREAS, the Contracting Officer and the Agency agree that the Project shall be operated to provide for the protection of prior downstream rights holders and public trust resources in accordance with Project Water Rights, and that the Contracting Officer will petition the State Water Resources Control Board (SWRCB) to amend the Solano Project water rights to address the Project's obligation to release water into Putah Creek for public trust resources in addition to such water currently being released for downstream interests; and

WHEREAS, the Contracting Officer and the Agency will execute a contract which provides for the Agency and any of its subcontractors to continue the funding and performance of operation and maintenance of the Project; and,

NOW, THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is hereby mutually agreed by the parties hereto as follows:

#### **DEFINITIONS**

1. When used herein unless otherwise distinctly expressed, or manifestly incompatible with the intent hereof, the term:

- (a) "Act" shall mean the Solano County Water Agency Act, being Chapter 573 of the 1989 Statutes of the State of California, as the same may hereafter be amended or re-enacted;
- (b) "Administrative Charges" shall mean those Project costs, including overhead, reasonably incurred by the Contracting Officer in connection with, but not limited to: monitoring, administering, and negotiating a subsequent renewal and/or possibly amendments or supplements to this contract; maintaining water delivery and payment records; accounting for annual financial operations; the development of annual water rates and related activities; activities associated with Project water rights, including but not limited to the State licensing process; and all costs exclusive of capital costs associated with all environmental requirements required to administer this contract and provide for the continuation of water as intended herein;
- (c) "Agency's Service Area" shall mean the area to which the Agency is permitted to provide Project Water under this contract identified in Exhibit "A", which area and exhibit may be revised without amending this contract if such revisions are acceptable to the Contracting Officer;
- (d) "Available Supply" shall mean the quantity of Project Water the United
  States is authorized by applicable law, including, but not limited to, applicable provisions
  of California water law, the provisions of Project water right permits/licenses, and final

decisions of the SWRCB or any Court which are binding on the United States, to make available to the Agency during each Year pursuant to this contract. The Available Supply does not include the quantity of Project Water the Contracting Officer is required by applicable law to make available to some party other than the Agency, including the Napa County Flood Control and Water Conservation District, and/or is required by applicable law to allocate to a purpose or purposes other than irrigation, municipal or industrial purposes. In addition, unless mutually agreed by the parties, in writing, the Available Supply during each Year shall not exceed the lesser of the total quantity of Project Water (i) stored in or that can be physically conveyed through Project facilities during that Year, or (ii) 207,350 acre-feet plus the amounts of any water stored from previous years pursuant to Article 4(c). If the United States is no longer named or is no longer a licensee on the Project water rights and the Agency has fully repaid the reimbursable cost of the Project, the prior sentence shall no longer be applicable: (e) "Calendar Year" shall mean the period from January 1 through

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- December 31, both dates inclusive:
- **(f)** "Contract Year" or "Year" shall mean the period from and including the first day of March of each Calendar Year through and including the last day of February of the following Calendar Year;
- (g) "Contracting Officer" shall mean the Secretary of the United States Department of the Interior or his duly authorized representative:
- (h) "Delivered Water" shall mean Project Water made available to the Agency and diverted at the point(s) of delivery approved by the Contracting Officer;

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- (i) "Eligible Lands" shall mean all lands to which Irrigation Water may be delivered in accordance with Section 204 of the RRA;
- (j) "Excess Lands" shall mean all lands defined as excess in Section 204 of the RRA, other than those lands exempt from acreage limitation under Federal Reclamation law;
- (k) "Ineligible Lands" shall mean all lands to which Irrigation Water may not be delivered in accordance with Section 204 of the RRA;
- (i) "Irrigation Water" shall mean Delivered Water which is used primarily in the production of commercial agricultural crops or livestock, including domestic use incidental thereto, and watering of livestock. Irrigation Water shall also include Delivered Water furnished to public entities for use on land that Reclamation determines the public entity uses primarily for non-revenue producing functions;
- (m) "M&I Water" shall mean water Delivered Water other than Irrigation
  Water. M&I Water shall include water used for purposes such as the watering of
  landscaping or pasture for animals (e.g., horses) which are kept for personal enjoyment or
  water delivered to landholdings operated in units of less than two (2) acres, or such larger
  landholding size, if any, specified in a water service contract between a Participating
  Agency or Public Agency and the United States, unless the Agency establishes to the
  satisfaction of the Contracting Officer that the use of water delivered to any such
  landholding is a use described in subdivision (1) of this Article;
- (n) "Participating Agency" shall mean any water district, reclamation district, irrigation district, water conservation district, municipality, flood control district,

other public entity, city, or political subdivision of the state empowered by law to appropriate water and to deliver water to water users, the territory of which lies principally within Solano County, or any state agency, which Participating Agency enters into a contract with the Agency for (i) the repayment in whole or in part to the Agency or any other person, corporation, public agency, or the United States of any or all of the construction costs of the Project, (ii) the underwriting in whole or part of any or all of those construction costs, (iii) the repayment in whole or in part to the Agency or any other person, corporation, public agency, or the United States of any or all of the cost of furnishing Project Water to the agency or the underwriting in whole or in part of the cost, or (iv) the payment in whole or in part for Project Water to be furnished or sold to that Participating Agency by the Agency or the United States.

- (o) "Project" shall mean the Solano Project, California, consisting of
  Monticello Dam and Reservoir, Putah Diversion Dam and Reservoir, and Putah South
  Canal, substantially as described and set forth in House Document No. 65, 81st Congress,
  1st Session (the "Solano Project Report");
- (p) "Project Water" shall mean all water that is developed, diverted, stored, or delivered by the United States in accordance with the statutes authorizing the Project and in accordance with the terms and conditions of applicable water rights permits and licenses acquired by and/or issued to the United States pursuant to California law which are now in effect and as may in the future be modified;
- (q) "Public Entity" shall mean States, political subdivisions or agencies thereof, and agencies of the federal government;

(r) "Secretary" or "Contracting Officer" shall mean the Secretary of the United
States Department of the Interior or his duly authorized representative;

#### TERM OF CONTRACT--RIGHT TO USE OF WATER

2. (a) This contract shall be effective from March 1, 1999, and shall remain in effect through February 29, 2024. Upon request by the Agency, this contract and each renewal thereof shall be renewed pursuant to the Act of July 2, 1956 (70 Stat. 483), and the Act of June 21, 1963 (77 Stat. 68); Provided. That the request for renewal is given no later than two (2) years prior to the date on which the then-existing contract expires; and Provided further. That the Contracting Officer determines the Agency has substantially complied with all the terms and conditions of the contract then in effect.

#### WATER TO BE MADE AVAILABLE AND DELIVERED TO THE AGENCY

- 3. (a) Subject to the terms and conditions of this contract, and consistent with applicable State water right permits and licenses, the Agency is entitled to, and the Contracting Officer shall be obligated to make available to the Agency the Available Supply of water from the Project. The quantity of Project Water made available to the Agency in any Year shall be scheduled and paid for pursuant to the provisions of Articles 4 and 5, and shall not exceed the quantity of Project Water the Agency intends to put to reasonable beneficial use within the Agency's Service Area or sell, transfer, or exchange pursuant to Article 8 during any Year.
- (b) The Agency shall utilize the Delivered Water in accordance with all applicable requirements of any Biological Opinion addressing the execution of this contract developed pursuant to Section 7 of the Endangered Species Act of 1973 as amended, and in accordance with such environmental documentation as may be required for specific activities.

are parties to the Putah Creek Water Cases (Judicial Council Coordination No. 2565) and that the Contracting Officer will petition the SWRCB to amend the Solano Project water rights to address the Project's obligation to release water into Putah Creek for public trust resources in addition to the quantities of water that are currently being released for downstream interests. The parties agree to work in good faith to pursue such petition which would meet the needs of the public trust resources. Nothing in this contract shall be construed to prohibit the Contracting Officer from filing, or taking further actions in support of such petition.

(d) Subject to the terms and conditions of this contract, the Agency's right pursuant to Federal Reclamation law and applicable State law to the beneficial use of water made available under and furnished pursuant to this renewal contract, and any subsequent renewal hereof, shall not be disturbed so long as the Agency fulfills all of its obligations under this and any subsequent renewal contracts.

#### TIME FOR DELIVERY OF WATER

- 4. (a) By February 1 of each Calendar Year during the term of this contract, the Agency shall submit to the Contracting Officer a written schedule, satisfactory to the Contracting Officer, showing the times and quantities of Project Water to be delivered to the Agency for irrigation and M&I use during the upcoming Year.
- (b) Said schedule shall indicate separately the amount of Irrigation Water,

  M&I Water, and the amount to cover conveyance canal losses, to be furnished by the United

  States during each month of the Year for which said schedule is submitted. The United States

  shall make all reasonable efforts to furnish Project Water in accordance with said schedule, or any

revision thereof satisfactory to the Contracting Officer, submitted by the Agency within a reasonable time before the desired change of the time for delivery as nearly as may be feasible.

the Contracting Officer that any portion of the water that the Agency has scheduled and paid for, pursuant to this Article 4 and Article 5 respectively, will not be used, then to the extent that storage space is available in Monticello Reservoir of the Project, the United States may, upon request of the Agency, withhold delivery of and store in Monticello Reservoir, for and on behalf of the Agency, any such unused quantities of water required to be made available and furnished by the United States pursuant to this contract, such water shall thereafter be made available to the Agency in accordance with a schedule to be furnished by the Agency; Provided, That in the event any water is so stored and it becomes necessary to release water from Monticello Reservoir because of the lack of storage capacity or in the event that water spills from Monticello Reservoir, water so released or spilled shall, up to the amount stored for and on behalf of the Agency, be deemed the water stored for and on behalf of the Agency.

#### RATE AND METHOD OF PAYMENT FOR PROJECT WATER

5. (a) The rate to be paid for Irrigation Water furnished during the Year beginning March 1, 1999, shall be \$2.65 per acre-foot. This rate shall also apply to conveyance canal losses. Six (6) months prior to the end of every Year beginning March 1, 2000, and every Year thereafter, Reclamation shall revise the Irrigation Water rate, as necessary for the sole purpose of recovering the Project's unpaid capital costs of the Project by February 28, 2009. The Irrigation Water rate shall be adjusted in accordance with the following methodology: Reclamation shall assume an annual delivery of 157,000 acre-feet of Irrigation Water. If the

Amount of Irrigation Water delivered in any Year is less that 157,000 acre-feet, the following Year's Irrigation Water rate will be increased to recover the difference between the revenues that would have been collected by delivering 157,000 acre-feet at \$2.65 per acre-foot. If the Irrigation Water delivered in any year exceeds 157,000 acre-feet, the following Year's Irrigation Water rate will remain at \$2.65 per acre-foot. Water stored and paid for pursuant to Article 4(c) above shall not be subject to any Rate in the year in which it is ultimately delivered.

- (b) The rate to be paid for M&I Water furnished beginning March 1, 1999, shall be \$15.00 per acre-foot. Six (6) months prior to the end of every Year, beginning in 2000, and every Year thereafter, Reclamation shall revise the M&I Water rate, as necessary, for the sole purpose of recovering the unpaid capital costs of the Project by February 28, 2009. It is recognized that all revenues derived from the delivery of M&I Project water shall be credited to repayment of the unpaid capital cost of the Project allocated to irrigation. The M&I Water rate shall be adjusted in accordance with the following methodology: Reclamation shall assume an annual delivery of 43,000 acre-feet of M&I Water per Year. If the amount of M&I Water delivered in any Year is less than 43,000 acre-feet, the following Year's M&I Water rate will be increased to recover the difference between the revenues that would have been collected by delivering 43,000 acre-feet at \$15.00 per acre-foot. If the M&I Water delivered in any year exceeds 43,000 acre-feet, the following Year's M&I Water rate will be remain at \$15.00 per acre feet. Water stored and paid for pursuant to Article 4.(c) above shall not be subject to any Rate in the year in which it is ultimately delivered.
- (c) Each Year the Agency shall make payment of the amount due to the United States for the amounts of Irrigation Water, M&I Water, and conveyance canal losses as described

in Article 4(a) as follows: The Agency shall pay for one-half of the amount of Project Water scheduled to be delivered during each Year on or before the first day of the Year and shall pay the remainder of said amount on before September 1 of said Year, or such other later date or dates of the respective Year as may be specified by the Contracting Officer in a written notice to the Agency.

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(d) In addition to the rates described in (a) and (b) of this Article, the Agency shall pay in advance to United States sufficient funds to cover any Administrative Charges associated with this contract in any upcoming Year. In consultation with the Agency, Reclamation shall estimate the Administrative Charges and shall provide said estimate to the Agency in writing by January 1 of each Calendar Year. The Agency shall pay one-half of the estimated Administrative Charges for each Year by March 1 of each Calendar Year and the remaining one half by September 1 of each Calendar Year. However, for the period March 1, 1999, through February 29, 2000, the Agency shall provide payment of the Administrative Costs in the following manner: The Agency shall advance to the United States \$25,000 to finance the estimated Administrative Charges for the period March 1, 1999, through February 29, 2000. If the Contracting Officer determines after consultation with the Agency, anytime between March 1, 1999, through February 29, 2000, that \$25,000 is insufficient to cover the actual Administrative Charges for the period March 1, 1999, through February 29, 2000, the Contracting Officer shall so advise the Agency, and the Agency shall remit to the United States an amount sufficient to cover the actual Administrative Charges.

(e) Upon payout of the capital costs of the Project allocated to irrigation, the water rates described in (a) and (b) of this Article shall be adjusted or eliminated, as appropriate, in accordance with Federal Reclamation law then in effect.

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In the event that the United States undertakes improvements, (f) modifications, and/or additions to the Project, which result in an increase of the capital costs of the Project, and the repayment of such cost is not expressly addressed in the statute authorizing such undertaking (for example, the Safety of Dams Act of November 2, 1978, as amended), under those circumstances, the United States, in consultation with the Agency, shall establish an appropriate repayment period and the Agency shall commence paying a rate, which is sufficient to permit the United States to recover such additional capital costs from the Agency within that repayment period. Should additional capital work be approved for the Solano Project, Napa County Flood Control and Water Conservation District (District) shall only be responsible for its appropriate share of any additional capital costs associated with improvements and modifications to Project facilities used to store or deliver Project Water to said District. Improvements and modifications to Project facilities not used to store or deliver Project Water to the District will be the responsibility of the Agency, its successors or assigns, as appropriate. The District's share of any future capital cost for the Project shall be based on its prorated share of the quantity of Project Water delivered from the Project.

(g) Revenues received by the United States pursuant to this renewal contract shall be allocated and applied in accordance with Federal Reclamation law.

(h) At the Agency's request, the Contracting Officer shall provide to the Agency an accounting of all the expenses allocated and the disposition of all revenues received pursuant to this renewal contract in sufficient detail to allow the Agency to determine that the allocation of expenses and disposition of all revenues received was accomplished in conformance with Federal Reclamation law. The Contracting Officer and the Agency shall enter into good faith negotiations to resolve any discrepancies or disputes arising out of said accounting or the Agency's review thereof.

(i) The parties acknowledge and agree that the efficient administration of this renewal contract is their mutual goal. Recognizing that experience has demonstrated that mechanisms, policies and procedures used for establishing rates and charges, and/or for making and allocating payments, other than those set forth in this Article could be in the mutual best interest of the parties, it is expressly agreed that the parties may enter into agreements for alternative mechanisms, policies, and procedures for any of those purposes while this renewal contract is in effect without amending this renewal contract.

### POINT OF DELIVERY AND RESPONSIBILITY FOR DISTRIBUTION OF WATER

6. (a) The Project Water to be furnished to the Agency pursuant to this contract shall be made available to the Agency at the headworks of the Putah South Canal at the Putah Diversion Dam, and any additional point or points of delivery either on Project facilities or another location or locations mutually agreed to in writing by the Contracting Officer and the Agency, which writing shall also address measuring points and obligations for any additional location or locations.

(b) Irrigation Water furnished to the Agency pursuant to this contract shall be delivered by the Agency to its Participating Agencies in accordance with applicable land classification provisions of Federal Reclamation law and the associated regulations. The Agency shall not deliver Project Water to land outside the Agency's Service Area unless approved by the Contracting Officer.

- (c) All Delivered Water shall be measured and recorded with existing equipment furnished and installed by the Contracting Officer, and operated, maintained, and replaced, as necessary, by the Agency, at the headworks of the Putah South Canal. Upon the request of the Contracting Officer, the Agency shall investigate the accuracy of such measurements and shall take any necessary steps to adjust any errors appearing therein.
- M&I Water delivered to Participating Agencies that receive exclusively M&I Water will be measured by the Agency at the points of delivery to each of said Participating Agency. All M&I Water delivered to Participating Agencies that receive both M&I Water and Irrigation Water is measured by each of these Participating Agencies at the point(s) of delivery to each of the Participating Agency's customers of said class of water. Where necessary, as conclusively determined by the Contracting Officer, the Agency will install measuring equipment at turnouts along the Putah South Canal; Provided, That upon the request of the United States, the Agency shall investigate the accuracy of all measuring equipment, installed by the Agency and its Participating Agencies, to determine the amounts of M&I Water used, and shall adjust, at the Agency's expense, any errors disclosed by such investigation. The Agency shall provide the United States with access to all such measuring equipment to permit it to determine the accuracy

thereof. The Agency shall maintain records satisfactory to the Contracting Officer of the amount of M&I Water furnished.

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- (e) The Agency shall advise the Contracting Officer on or before the 15th calendar day of each month of the total quantity of Delivered Water taken during the preceding month, and the quantity of such water taken as M&I Water.
- handling, use, disposal, or distribution of water, which may be furnished hereunder, outside the facilities then being operated and maintained by the United States. The Agency and Participating Agencies shall hold harmless the United States, its officers, agents and employees from legal liability for damages of any nature whatsoever arising out of any actions or omissions by the Agency, its officers, agents and employees related to the control, carriage, handling, use, or disposal or distribution of water outside the facilities operated and maintained by the United States, unless provided for in any Operations and Maintenance contract between the Contracting Officer and the Agency.

#### MEASUREMENT OF WATER WITHIN THE PARTICIPATING AGENCIES

7. (a) Within five (5) years of the effective date of this contract, the Agency and all Participating Agencies shall ensure that, unless one or more of the Participating Agencies establishes an alternative measurement program satisfactory to the Contracting Officer, all Irrigation Water delivered within each of the Participating Agency's service areas is measured at each agricultural turnout and all M&I Water delivered within each of the Participating Agency's service areas is measured at each municipal and industrial service connection. All water measuring devices or water measuring methods of comparable effectiveness must be acceptable to

the Contracting Officer. The Participating Agencies shall be responsible for installing, operating, and maintaining and repairing all such measuring devices and implementing all such water measuring methods at no cost to the United States. The Participating Agencies shall use the information obtained from such water measuring devices or water measuring methods to ensure proper management of the water; to bill water users for water delivered by the Participating Agency; and, if applicable, to record water delivered for M&I purposes by customer class as defined in its water conservation plan. Nothing herein contained, however, shall preclude any Participating Agency from establishing and collecting any charges, assessments or other revenues authorized by California law. The Agency shall also include a summary of each of the Participating Agency's annual surface water deliveries in the annual report described in Article 14(c).

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- (b) All new surface water delivery systems installed within any Participating

  Agency's service area after the effective date of this contract shall comply with the measurement

  provisions described in subdivision (a) of this Article.
- (c) The Agency shall inform the Contracting Officer and the State of California in writing by April 30 of each Year of the monthly volume of surface Project and non-Project Water delivered by the Agency within the Agency's Service Area during the previous Year.
- (d) The Agency shall be responsible for ascertaining and reporting to the Contracting Officer whether the amount of Irrigation Water or M&I Water delivered each Year, irrespective of the size of the landholding where the water is used, so that the Contracting Officer can apply the appropriate rates.

#### TRANSFERS OR EXCHANGES OF WATER

transferred, or exchanged with the prior written approval of the Contracting Officer and completed consultation pursuant to Section 7 of the Federal Endangered Species Act of 1973 as amended, and only if authorized by other applicable Federal laws, State laws, and applicable guidelines or regulations then in effect. Notwithstanding the foregoing, the Agency shall have the right, in accordance with the Agency's contracts with Participating Agencies, to transfer allocations of Project Water among Participating Agencies for use within the Agency's Service Area without prior consent by or notice to the Contracting Officer, as long as the transfer is in accordance with all the applicable requirements of any Biological Opinion on this contract. Without the prior approval of the Contracting Officer and completed consultation under Section 7 of the Endangered Species Act of 1973 as amended, the right to Project Water provided for in this contract may not be sold, transferred, or exchanged outside the Agency's Service Area.

#### **APPLICATION OF PAYMENTS AND ADJUSTMENTS**

9. (a) The amount of any overpayment by the Agency shall be applied first to any accrued indebtedness arising out of this contract then due and payable to the United States by the Agency, and any amount of such overpayment thereafter remaining shall, at the option of the Agency, be refunded to the Agency or credited upon amounts to become due to the United States from the Agency under the provisions of this contract in the ensuing Year.

#### TEMPORARY REDUCTIONS--RETURN FLOWS

10. (a) Subject to: (i) the authorized purposes and priorities of the Project; and (ii) the obligations of the United States under existing contracts, or renewals thereof, providing for water deliveries from the Project, the Contracting Officer shall make all reasonable efforts to optimize Project Water deliveries to the Agency as provided in this contract.

Project Water to be delivered to the Agency as herein provided for the purposes of investigation, inspection, maintenance, repair, or replacement of any of the Project facilities or any part thereof necessary for the delivery of Project Water to the Agency, but so far as feasible the Contracting Officer will give the Agency due notice in advance of such temporary discontinuance or reduction, except in case of emergency, in which case no notice need be given: Provided, That the United States shall use its best efforts to avoid any discontinuance or reduction in such service. Upon resumption of service after such reduction or discontinuance, and if requested by the Agency, the United States will, if possible, deliver the quantity of Project Water, which would have been delivered hereunder in the absence of such discontinuance or reduction: Provided further, That with respect to any quantity of Project Water not delivered after a discontinuance or reduction the Agency shall be relieved of its scheduling and payment obligations for such quantity of Project Water.

derived from water delivered to the Agency hereunder, which escapes or is discharged beyond the boundaries of the Agency: Provided, That this shall not be construed as claiming for the United States any right to groundwater recharge within the Agency's boundaries subject to the limitations of Article 11, seepage or return flow being put to reasonable and beneficial use pursuant to this contract within the Agency's Service Area by the Agency or those claiming by, through, or under the Agency.

#### **UNAVOIDABLE GROUND-WATER PERCOLATION**

11. The Agency shall not be deemed to have furnished Irrigation Water to Excess Lands or Ineligible Lands within the meaning of this contract if such lands are irrigated with ground water that reaches the underground strata as an unavoidable result of the furnishing of Irrigation Water by the Agency to Eligible Lands.

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#### SEVERABILITY

12. In the event that a person or entity, who is neither (i) a party to a Project contract nor (ii) a person or entity that received Project Water from a party to a Project contract, nor (iii) an association or other form of organization whose primary function is to represent parties to Project contracts, brings an action in a court of competent jurisdiction challenging the legality of enforceability of a provision included in this contract and said person, entity, association, or organization obtains a final court decision holding that such provision is legally invalid or unenforceable, and the Agency has not intervened in that lawsuit in support of the plaintiff(s), the parties to this contract shall use their best efforts to (i) within thirty (30) days of the date of such final court decision identify by mutual agreement the provisions in this contract which must be revised, and (ii) within three (3) months thereafter promptly agree on the appropriate revision(s). The time periods specified above may be extended by mutual agreement of the parties. Pending the completion of the actions designated above, to the extent it can do so without violating any applicable provision of law, the United States shall continue to make the quantities of Project water specified in this contract available to the Agency pursuant to the provisions of this contract, which were not found to be legally invalid or unenforceable in the final court decision.

#### AGENCY TO PAY CERTAIN MISCELLANEOUS COSTS

13. In addition to other payments to be made by the Agency pursuant to this contract, the Agency shall pay to the United States, within sixty (60) days after receipt of a bill and detailed statement submitted by the Contracting Officer to the Agency for such specific items of direct cost incurred by the United States for work requested by the Agency associated with this contract plus a percentage of such direct costs for administrative and general overhead in accordance with applicable Bureau of Reclamation policy and procedures. All such amounts referred to in this Article shall not exceed the amount agreed to in writing in advance by the Agency. This Article shall not apply to costs for routine contract administration.

#### **WATER CONSERVATION**

- 14. (a) The parties acknowledge that, as of the date of execution of this contract, the Agency and each of the Participating Agencies that is obligated to do so have developed and are implementing water conservation plans (i) which contain definite water conservation goals, appropriate economically feasible water conservation measures, and a time schedule for meeting the water conservation goals, (ii) which meet or exceed (a) the requirements of Federal law and (b) the criteria entitled "U.S. Bureau of Reclamation, Mid-Pacific Region Criteria for Evaluating Water Management Plans," and (iii) and which shall be updated at least every five (5) years.
- (b) The Agency shall, promptly upon its adoption, submit to the Contracting

  Officer a copy of any material revision to its water conservation plan or to a water conservation

  plan of a Participating Agency.

(c) The Agency shall submit to the Contracting Officer by February 15, of each Calendar Year, a report of the status of implementation of its water conservation plan and implementation of the water conservation plans of each of the Participating Agencies.

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- (d) (1) If at any time the Contracting Officer concludes that the Agency or a Participating Agency's water conservation plan does not substantially conform to the requirements of Federal law or rules or regulations promulgated by the Contracting Officer pursuant to Federal law, then the Agency and/or each Participating Agency shall amend their respective water conservation plans as necessary to meet the requirements of such law, rule, or regulation.
- Participating Agency's water conservation plan is materially inconsistent with any water conservation criteria adopted by the Contracting Officer pursuant to Reclamation law then in effect, the Contracting Office shall promptly notify the Agency or Participating Agency of his conclusion and the reasons for it. Thereafter, the Contracting Officer and the Agency or Participating Agency or Participating Agency or Participating Agency or Participating Agency or Participating Agency shall promptly confer for the purpose of reaching agreement as to any changes that will be made to the water conservation plan in light of such criteria.

# WATER ACQUIRED BY THE AGENCY OTHER THAN FROM THE UNITED STATES

15. Water or water rights now owned or hereafter acquired by the Agency other than from the United States and Irrigation Water furnished pursuant to the terms of this contract may be simultaneously transported through the same distribution facilities of the Agency subject to the following: (i) if the facilities utilized for commingling Irrigation Water and non-Project water

were constructed without funds made available pursuant to Federal Reclamation law, the provisions of Federal Reclamation law will be applicable only to the landholders of lands, which receive Irrigation Water; (ii) the eligibility of land to receive Irrigation Water must be established through the certification requirements as specified in the Acreage Limitation Rules and Regulations 43 CFR Part 426); (iii) the water requirements of eligible lands within the Agency's Service Area can be established, and the quantity of Irrigation Water to be utilized is less than or equal to the quantity necessary to irrigate such eligible lands; and (iv) the facilities utilized for commingling Irrigation Water and non-Project water are constructed with funds made available pursuant to Federal Reclamation law, the non-Project water will be subject to Federal Reclamation law.

#### EXISTING OR ACQUIRED WATER OR WATER RIGHTS

16. Except as specifically provided in Article 15 of this contract, the provisions of this contract shall not be applicable to or affect any water or water rights now owned or hereafter acquired by the Agency or any user of such water within the Agency's Service Area from other than the United States. Any such water shall not be considered Project Water under this contract. In addition, this contract shall not be construed as limiting or curtailing any rights, which the Agency or any water user within the Agency's Service Area acquires or has available under any other contract pursuant to the Federal Reclamation law.

#### TITLE TO REMAIN IN THE UNITED STATES

17. Title to all of the Project works constructed by the United States shall be and remain in the name of the United States until otherwise provided by the Congress,

notwithstanding the transfer of any of such works to the Agency or other non-Federal entity for operation and maintenance.

#### CONTRACTS BETWEEN AGENCY AND PARTICIPATING AGENCIES

Agency, the Agency shall enter into a contractual relationship with that Participating Agency, which shall provide that the terms thereof are subject to the terms of this contract. Currently the Agency has contracts with the following Participating Agencies: the California Department of Corrections; the Cities of Fairfield, Suisun City, Vacaville, and Vallejo; the Maine Prairie Water District; the Solano Irrigation District; and the University of California; which contracts provide for a right to renewal upon renewal of the Original Contract.

# CONDITIONS UPON DELIVERY OF WATER BY THE UNITED STATES FROM THE PROJECT

19. The Agency shall be the exclusive party through which the United States furnishes Project Water by contract to water users within the territorial jurisdiction of the Agency.

#### WATER AND AIR POLLUTION CONTROL

20. The Agency, in carrying out this contract, shall comply with all applicable water and air pollution laws and regulations of the United States and the State of California, and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities.

#### **QUALITY OF WATER**

21. (a) Project facilities used to make available and deliver Project Water to the Agency pursuant to this contract shall be operated and maintained to enable the United States to make available and deliver Project Water to the Agency in accordance with the water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws. The United States is under no obligation to construct or furnish water treatment facilities to maintain or to better the quality of Project Water furnished to the Agency pursuant to this contract. The

United States does not warrant the quality of Project Water made available and delivered to the Agency pursuant to this contract.

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- (b) The operation and maintenance of Project facilities shall be performed in such manner as is practicable to maintain the quality of raw water made available through such facilities at the highest level reasonably attainable as determined by the Contracting Officer. The Agency shall be responsible for compliance with all State and Federal water quality standards applicable to surface and subsurface agricultural drainage discharges generated through the use of Federal or Agency facilities or Project Water provided by the Agency within the Agency's Service Area. This Article shall not affect or alter any legal obligations of the Secretary to provide drainage services.
- (c) The Contracting Officer shall continue to cooperate with the Agency on programs and projects to improve the quality of water delivered by the Project including, but not limited to, measures to control erosion, sedimentation, and pollutants in the watershed of Monticello Reservoir.

#### COMPLIANCE WITH FEDERAL RECLAMATION LAW

22. The parties agree that the delivery of irrigation water or use of Federal facilities pursuant to this contract is subject to Federal Reclamation law including, but not limited to the Reclamation Reform Act of 1982 (43 U.S.C. 390aa et seq.), as amended and supplemented, and the rules and regulations promulgated by the Secretary of the Interior under Federal Reclamation law.

#### RULES, REGULATIONS, DETERMINATIONS, AND SHORTAGE

- 23. (a) The parties agree that the delivery of water of the use of Federal facilities pursuant to this contract for non-irrigation purposes is subject to Reclamation law, as amended and supplemented, and the rules and regulations promulgated by the Secretary of the Interior under Reclamation law.
- (b) The Contracting Officer shall have the right to make determinations necessary to administer this contract that are consistent with the expressed and implied provisions of this contract, the laws of the United States and the State of California, and the rules and regulations promulgated by the Secretary of the Interior. Such determinations shall be made in consultation with the Agency.
- (c) Where the terms of this contract provide for actions to be based upon the opinion or determination of either party to this contract, said terms will not be construed as

permitting such action to be predicated upon arbitrary, capricious, or unreasonable opinions or determinations. Both parties, notwithstanding any other provisions of this contract, expressly reserve the right to seek relief from and appropriate adjustment, including monetary damages, for any such arbitrary, capricious, or unreasonable opinion or determination. Each opinion or determination by either party shall be provided in a timely manner.

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- (d) There may occur at times, during any Year, a shortage in the quantity of water available for furnishing to the Agency for distribution to Participating Agencies. If there is a reduction in the Project Water available to the Agency during any Year because of errors in physical operations of the Project, drought, other physical causes beyond the control of the Contracting Officer, or actions taken by the Contracting Officer to meet legal obligations, no liability shall accrue against the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising therefrom, so long as actions based upon the opinions or determinations of the Contracting Officer are consistent with the standards in this Article 23.
- (e) No liability shall accrue against the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising from the filing or the pursuit of the petition that the Contracting Officer has filed with the SWRCB, as referred to in Article 3(c), to amend the Solano Project water rights to address the Project's obligation to release water into Putah Creek for public trust resources; Provided, Such petition is reasonable in light of the respective obligations of the parties pursuant to this contract and is consistent with Articles 23(b) and (c), above.
- (f) The Contracting Officer shall use all reasonable means to guard against a condition of shortage in the quantity of water to be made available to the Agency in any Year pursuant to this contract.

#### CHARGES FOR DELINQUENT PAYMENTS

24. (a) The Agency shall be subject to interest, administrative, and penalty charges on delinquent installments or payments. When a payment is not received by the due date, the Agency shall pay an interest charge for each day the payment is delinquent beyond the due date. When a payment becomes 60 days delinquent, the Agency shall pay an administrative charge to cover additional costs of billing and processing the delinquent payment. When a payment is delinquent 90 days or more, the Agency shall pay an additional penalty charge of 6 percent per

year for each day the payment is delinquent beyond the due date. Further, the Agency shall pay any fees incurred for debt collection services associated with a delinquent payment.

- (b) The interest charge rate shall be the greater of the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month prescribed by Section 6 of the Reclamation Project Act of 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain fixed for the duration of the delinquent period.
- (c) When a partial payment on a delinquent account is received, the amount received shall be applied, first to the penalty, second to the administrative charges, third to the accrued interest, and finally to the overdue payment.

#### **EQUAL OPPORTUNITY**

- 25. During the performance of this contract, the Agency agrees as follows:
- (1) The Agency will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Agency will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of payment or other forms of compensation; and selection for training, including apprenticeship. The Agency agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- (2) The Agency will, in all solicitations or advertisements for employees placed by or on behalf of the Agency, state that all qualified applicants will receive consideration for employment without discrimination because of race, color, religion, sex, or national origin.
- (3) The Agency will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Agency's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Agency will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Agency will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (6) In the event of the Agency's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Agency may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Agency will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The Agency will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the Agency becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Agency may request the United States to enter into such litigation to protect the interests of the United States.

# GENERAL OBLIGATION-BENEFITS CONDITIONED UPON PAYMENT

- 26. (a) The obligation of the Agency to pay the United States as provided in this contract is a general obligation of the Agency notwithstanding the manner in which the obligation may be distributed among the Agency's water users and notwithstanding the default of individual water users in their obligations to the Agency.
- (b) The payment of charges becoming due hereunder is a condition precedent to receiving benefits under this contract. The United States shall not make water available to the Agency through project facilities during any period in which the Agency may be in arrears in the advance payment of water rates due the United States. The Agency shall not furnish water made available pursuant to this contract for lands or parties, which are in arrears in the advance payment of water rates levied or established by the Agency.

# COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

- 27. (a) The Agency shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1975 (P.L. 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.) and any other applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior and/or Bureau of Reclamation.
- (b) These statutes require that no person in the United States shall, on the grounds of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation. By executing this contract, the Agency agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.
- (c) The Agency makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Agency by the Bureau of Reclamation, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Agency recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this Article, and that the United States reserves the right to seek judicial enforcement thereof.

#### PRIVACY ACT COMPLIANCE

- 28. (a) The Agency shall comply with the Privacy Act of 1974 (5 U.S.C. 552a) (the Act) and the Department of the Interior rules and regulations under the Act (43 CFR 2.45 et seq.) in maintaining landholder acreage certification and reporting records, required to be submitted to the Agency for compliance with Sections 206 and 228 of the Reclamation Reform Act of 1982 (96 Stat. 1266), and pursuant to 43 CFR 426.18.
- (b) With respect to the application and administration of the criminal penalty provisions of the Act (5 U.S.C. 552a(i)), the Agency and the Agency's employees responsible for maintaining the certification and reporting records referenced in (a) above are considered to be employees of the Department of the Interior. See 5 U.S.C. 552a(m).
- (c) The Contracting Officer or a designated representative shall provide the Agency with current copies of the Interior Department Privacy Act regulations and the Bureau of Reclamation Federal Register Privacy Act System of Records Notice (Acreage Limitation-Interior, Reclamation-31) which govern the maintenance, safeguarding, and disclosure of information contained in the landholder's certification and reporting records.

(d) The Contracting Officer shall designate a full-time employee of the Bureau of Reclamation to be the System Manager who shall be responsible for making decisions on denials pursuant to 43 CFR 2.61 and 2.64 amendment requests pursuant to 43 CFR 2.72. The Agency is authorized to grant requests by individuals for access to their own records.

(e) The Agency shall forward promptly to the System Manager each proposed denial of access under 43 CFR 2.64; and each request for amendment of records filed under 43 CFR 2.71; notify the requester accordingly of such referral; and provide the System Manager with information and records necessary to prepare an appropriate response to the requester. These requirements do not apply to individuals seeking access to their own certification and reporting forms filed with the Agency pursuant to 43 CFR 426.18, unless the requester elects to cite the Privacy Act as a basis for the request.

#### CONTINGENT ON APPORTIONMENT OR ALLOTMENT OF FUNDS

29. The expenditure or advance of any money or the performance of any obligation of the United States under this contract shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Agency from any obligations under this contract. No liability shall accrue to the United States in case funds are not appropriated or allotted.

#### BOOKS, RECORDS, AND REPORTS

- 30. (a) The Agency shall establish and maintain accounts and other books and records pertaining to administration of the terms and conditions of this contract, including: the Agency's financial transactions, water supply data, and Project land and right-of-way agreements; the water users' land-use (crop census), landownership, land-leasing and water use data; and other matters that the Contracting Officer may require. Reports thereon shall be furnished to the Contracting Officer in such form and on such date or dates as the Contracting Officer may require. Subject to applicable Federal laws and regulations, each party to this contract shall have the right during office hours to examine and make copies of the other party's books and records relating to matters covered by this contract.
- (b) Notwithstanding Article 30(a) above, the Agency may meet its obligation as set forth in Article 30(a) above through delegation to any Participating Agency.

#### ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED

31. (a) The provisions of this contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this contract or any right or interest therein shall be valid until approved in writing by the Contracting Officer.

(b) Unless directed by law to the contrary, no assignment or transfer of this contract or any right or interest therein by the Contracting Officer shall be valid until approved in writing by the Agency.

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# OFFICIALS NOT TO BENEFIT

32. No Member of or Delegate to Congress, Resident Commissioner, or official of the Agency shall benefit from this contract other than as a water user or landowner in the same manner as other water users or landowners.

# CHANGES IN AGENCY'S ORGANIZATION

33. While this contract is in effect, no change may be made in the Agency's boundaries, by inclusion or exclusion of lands, dissolution, consolidation, merger or otherwise, except upon the Contracting Officer's written consent.

### **CONFIRMATION OF CONTRACT**

34. The Agency, after the execution of this contract, shall promptly seek to secure a decree of a court of competent jurisdiction of the State of California, confirming the execution of this contract. The Agency shall furnish the United States a certified copy of the final decree, the validation proceedings, and all pertinent supporting records of the court approving and confirming this contract, and decreeing and adjudging it to be lawful, valid, and binding on the Agency. This contract shall not be binding on the United States until such final decree has been secured.

### **NOTICES**

35. Any notice, demand, or request authorized or required by this contract shall be deemed to have been given, on behalf of the Agency, when mailed, postage prepaid, or delivered to the Area Manager, Central California Area Office, Bureau of Reclamation, 7794 Folsom Dam Road, Folsom, California 95630-1799, on behalf of the United States, when mailed, postage prepaid, or delivered to the Manager, Solano County Water Agency, 508 Elmira Road, Vacaville, California 95687. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this Article for other notices.

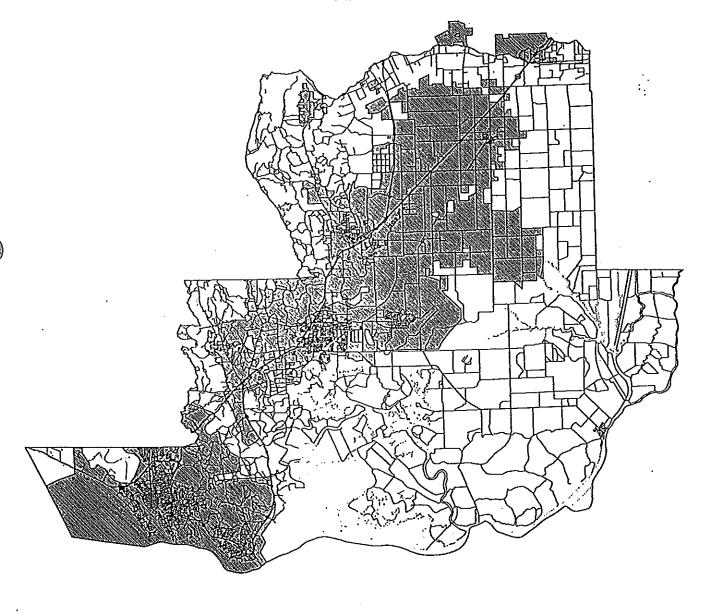
IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written. 2 THE UNITED STATES OF AMERICA 3 APPROVED AS TO LEGAL FORM AND SUFFICIENCY 6 Regional Director, Mid Pacific Region Bureau of Reclamation SOLANO COUNTY WATER AGENCY (SEAL) Title: Chair man 11 12 Attest: 13 Secretary 14

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Contract Service Areas

Solano County Water Agency Contract Service Area



# **Appendix B5**

Solano County Water Agency
Agreement with
the Solano Irrigation District for
Participating Agency Contract for
Solano Project Water Service

# SOLANO COUNTY WATER AGENCY AGREEMENT WITH THE SOLANO IRRIGATION DISTRICT FOR PARTICIPATING AGENCY CONTRACT FOR SOLANO PROJECT WATER SERVICE

THIS CONTRACT, made and entered into this <u>lst</u> day of March, 1999, by and between SOLANO COUNTY WATER AGENCY, a public corporation, created and existing under and by virtue of Chapter 578 of the 1989 Statutes of the State of California, as amended, hereinafter referred to as "the Agency", and the Solano Irrigation District, an irrigation district, organized and existing under and by virtue of Division 11 of the Water Code of the State of California, hereinafter referred to as "the Participating Agency."

### **EXPLANATORY RECITALS**

WHEREAS, the predecessor in interest to the Agency and the Secretary of the Interior entered into an agreement for water service in 1955 whereby the Agency has been furnished water service by the United States from the Solano Project for the use and benefit of the Agency's Participating Agencies; and

WHEREAS, the Participating Agency and the Agency entered into a water service contract for an allocation of the water service provided to the Agency by the United States in 1955; and

WHEREAS, the Board of Directors of the Agency on behalf of the Agency and the Secretary of the Interior have executed an agreement entitled "Renewal Contract".

Between the United States and Solano County Water Agency Providing for Project Water Service" dated March 1, 1999, and Numbered 14-06-200-4090, whereby the Agency will

be furnished by the United States water service consisting of a water supply from the Solano Project for the use and benefit of the Agency's Participating Agencies, including this Participating Agency; and

WHEREAS, the lands and inhabitants of the Participating Agency continue to be in need of water for beneficial uses, and the Participating Agency desires to renew its contract with the Agency; and

WHEREAS, the Agency desires to continue to make available to its Participating Agencies, including this Participating Agency, all the water made available to the Agency from the Solano Project under such terms and conditions which, as far as practical and consistent with the ultimate use of the water, shall be fair and equal for all Participating Agencies, and consistent with the amount of Project Water which has been received from the Agency by the Participating Agency.

#### WITNESSETH:

In consideration of the mutual and dependent covenants herein contained, the parties hereto agree as follows:

Section 1. <u>Definitions</u>. When used herein, unless otherwise distinctly expressed or manifestly incompatible with the intent hereof, the term:

- (a) "Act" shall mean the Solano County Water Agency Act, being Chapter 578 of the 1989 Statutes of the State of California as the same may hereafter be amended or re-enacted.
  - (b) "Calendar Year" shall mean the period from January 1 through December

- 31, both dates inclusive.
  - (c) "The Canal" shall mean the Putah South Canal.
- (d) "Contract Year" or "Year" shall mean the period from and including the first day of March of each Calendar Year through and including the last day of February of the following Calendar Year.
- (e) "Irrigation Water" shall mean Project Water which is primarily used in the production of commercial agricultural crops or livestock, including domestic use incidental thereto, and watering of livestock.
- Water shall include water used for purposes such as the watering of landscaping or pasture for animals (e.g., horses) which are kept for personal enjoyment or water delivered to landholdings operated in units of less than two (2) acres, or such larger landholding size, if any, specified in a water service contract between a Participating Agency and the United States, unless the Agency or Participating Agency establishes to the satisfaction of the Contracting Officer that the use of water delivered to any such landholding is a use described in subdivision (e) of this Section;
- (g) "The Master Contract" shall mean that contract between the United States of America and the Agency entitled "Contract between the United States and Solano County Water Agency Providing for Project Water Service" dated March 1, 1999, and Numbered 14-06-200-4090, and the same as it may hereafter be revised, amended, supplemented or replaced by a similar contract between the same parties.
- (h) "Participating Agency" shall mean any water district, reclamation district, irrigation district, water conservation district, municipality, flood control district, other

public entity, city or political subdivision of the state empowered by law to appropriate water and to deliver water to water users, the territory of which lies principally within Solano County, or any state agency, which Participating Agency enters into a contract with the Agency for (a) the repayment in whole or in part to the Agency or any other person, corporation, public agency, or the United States of any or all of the construction costs of the Project (b) the underwriting in whole or part of any or all of those construction costs, (c) the repayment in whole or in part to the Agency or any other person, corporation, public agency, or the United States of any or all of the cost of furnishing Project Water to the Participating Agency or the underwriting in whole or in part of the cost, or (d) the payment in whole or in part for Project Water to be furnished or sold to that Participating Agency by the Agency, or the United States.

- (i) "Project" shall mean the Solano Project, California, of the Bureau of Reclamation, consisting of Monticello Dam and Reservoir, Putah Diversion Dam and Reservoir, and Putah South Canal, substantially as described and set forth in the House Document No. 65, 81st Congress, 1<sup>st</sup> Session.
- (j) "Project Water" shall mean all water that is developed, diverted, stored, or delivered by the United States and made available through the Agency to the Participating Agency in accordance with the statutes authorizing the Project and in accordance with the terms and conditions of applicable water rights permits and licenses acquired by and/or issued to the United States and/or the Agency and Participating Agencies pursuant to California law for the Solano Project which are now in effect and as may in the future be modified.
  - (k) "Secretary" or "Contracting Officer" shall mean the Secretary of the

United States Department of the Interior or his or her duly authorized representative.

Section 2. Term of Contract. This contract shall become effective on March 1, 1999, and shall remain in effect until the end of the term of the Master Contract; provided, that in the event that the Agency, at its option, extends or renews the Master Contract, then the Participating Agency, at its option, may extend or renew this contract, subject to the terms of the Master Contract as so extended or renewed and subject to such rates for water service as shall then be established by the Agency; provided further, that whenever the Master Contract is terminated, or suspended, in the manner and for a cause or causes specified in the Master Contract, this contract shall be similarly terminated or suspended.

Section 3. Quantities of Water to be Furnished. The Agency shall furnish to the Participating Agency, and the Participating Agency shall pay to the Agency for, a water service consisting of up to 141,000 acre feet per year for water from the Project. The Agency will not enter into any new contracts, or amend any existing contracts, with any Participating Agencies if such new contract or amendment would cause the total amount of water to be furnished to all Participating Agencies to exceed 192,350 acre feet per year, which is the current amount of Project Water currently contracted for with the existing Participating Agencies, without the prior written concurrence of all other existing Participating Agencies.

Section 4. <u>Time for Delivery of Water</u>. The Participating Agency shall submit, in writing, to the Agency, prior to February 15 of each Contract Year during the term thereof, a schedule, in a form satisfactory to the Agency, of water deliveries to be made to the Participating Agency during the following Contract Year.

# Section 5. Rate and Method of Payment.

(a) The Participating Agency shall pay the Agency for all water furnished from the Project a base rate, per acre foot, which shall be announced each year by the Agency, provided, however, that the base rate so announced shall not be in excess of \$2.65 per acre foot for Irrigation Water or \$15.00 per acre foot for M&I Water, during the entire term of this contract, except as provided herein. If the rates for Project Water charged to the Agency by the Contracting Officer, as identified in Article 5(a) and 5(b) of the Master Contract, increase beyond \$2.65 per acre foot for Irrigation Water or \$15.00 per acre foot for M&I Water, the Agency may adjust the rates identified in this subdivision, for all Participating Agencies, to recover all or part of the new rates so charged to the Agency by the Contracting Officer. Such adjustment will result in new rates, but the ratio between M&I Water and Irrigation Water rates shall be the same as between \$15.00 and \$2.65. The new rates under this subdivision will be applied uniformly to M&I Water users and Irrigation Water users, meaning that all Participating Agencies using M&I Water will pay the same rate and all Participating Agencies using Irrigation Water will pay the same rate. It is the intent of the Agency that rates under this Section 5(a) be the same as the rates charged to the Agency by the Contracting Officer pursuant to Articles 5(a) and 5(b) of the Master Contract, including the expectation that after payout of

pay the same rate. It is the intent of the Agency that rates under this Section 5(a) be the same as the rates charged to the Agency by the Contracting Officer pursuant to Articles 5(a) and 5(b) of the Master Contract, including the expectation that after payout of Project capital costs the rates in Article 5(a) and 5(b) will be adjusted or eliminated, except if additional funding is needed from the Participating Agencies for replacement and improvement of Solano Project facilities. Any increase in the rates in this Section 5(a) shall only be imposed, consistent with applicable law, after consultation with the Participating Agencies and review and comment by the Agency's Advisory Commission.

- (b) In addition to the base rate described in subdivision (a) of this Section, the Agency may assess an additional charge to the Participating Agency to pay for an Administrative Charge, as described in Article 1(b) of the Master Contract, assessed to the Agency by the Contracting Officer, if the annual Administrative Charge is estimated, through the process described in Article 5(d) of the Master Contract, to be greater than \$100,000 per year. This additional charge will be apportioned to Participating Agencies such that the ratio between M&I Water and Irrigation Water rates under this subsection shall be the same as between \$15.00 and \$2.65. The new rates under this subdivision will be applied uniformly to M&I Water users and Irrigation Water users, meaning that all Participating Agencies using M&I Water will pay the same rate and all Participating Agencies using Irrigation Water will pay the same rate.
- (c) In addition to the charges described in subdivisions (a) and (b) of this Section, the Agency may assess an additional charge to the Participating Agency to pay for improvements, modifications, and/or additions to the Project, as described in Article 5(f) of the Master Contract, assessed to the Agency by the Contracting Officer. The Agency

will determine how this charge will be apportioned to Participating Agencies, consistent with applicable law, and after consultation with Participating Agencies and review and comment by the Agency's Advisory Commission. The Agency shall spread this additional charge to the Participating Agency over a reasonable period of repayment

(d) Each Contract Year, the Participating Agency will pay to the Agency, the amount due to the Agency for the quantities of water to be made available to the Participating Agency pursuant to the terms hereof, excluding any Project Water stored in the Project pursuant to Section 11 of this Agreement which has already been paid for, as follows: the Participating Agency shall pay one-half of the amount payable for each Contract Year on or before February 1 preceding such Contract Year, and shall pay the remainder of said amount on or before August 1 of said Contract Year.

# Section 6. Point of Delivery, Measurement and Responsibility for Distribution.

- (a) The Project Water to be furnished to the Participating Agency pursuant to this contract shall be made available to the Participating Agency at such turnout or turnouts from the Canal, and any additional point or points of delivery either on Project facilities or another location or locations mutually agreed to in writing by the Agency and the Contracting Officer, which writing shall also address measuring points and obligations of additional location or locations.
- (b) All water furnished pursuant to this contract shall be measured either by the Agency or the Participating Agency at each point of delivery established pursuant to Section 6(a) hereof, with equipment satisfactory to the Agency which, if not provided by the United States, shall be installed, operated and maintained at the expense of the

upon request of the Participating Agency, the accuracy of such measurements will be investigated by the Agency. Any error appearing therein will be adjusted. The Participating Agency may inspect such measuring equipment for the purpose of determining the accuracy thereof. For equipment provided by the Participating Agency, all determinations relative to the measurement of water shall be made by the Participating Agency and upon the request of the Agency, the accuracy of such measurements will be investigated by the Participating Agency. Any errors appearing therein will be adjusted. The Agency may inspect such measuring equipment for the purposes of determining the accuracy thereof.

(c) The Agency shall not be responsible, beyond the aforesaid points of delivery, for the control, carriage, handling, use, disposal, or distribution of water which may be furnished hereunder, and the Participating Agency shall hold the Agency and the United States, their officers, agents and employees harmless from legal liability for damages of any nature whatsoever arising out of any actions or omissions by the Participating Agency, its officers, agents and employees related to the control, carriage, handling, use, disposal, or distribution of water beyond the aforesaid points of delivery. The Agency waives all right, title, and interest in or to any water, seepage, drainage, over-flow or return flow derived from water furnished under this contract, provided, however, that nothing herein shall in any manner affect the right of the United States of America, to waste, seepage and return flow which escapes or is discharged beyond the boundaries of the Agency, as specified in Article 10(c) of the Master Contract.

Section 7. Sales, Transfers and Exchanges of Project Water.

- (a) The Participating Agency may deliver or cause to be delivered any water furnished hereunder, including a sale, transfer or exchange of Project Water to another Participating Agency, or any other public agency in Solano County, for use on lands within Agency's Service Area as defined in Article 1(c) of the Master Contract upon prior written notification to the Agency and subject to the restrictions in this Section.
- (b) The Participating Agency shall not, directly or indirectly, deliver or cause to be delivered any water furnished hereunder, including a sale, transfer or exchange of Project Water, for use on lands outside the Agency's Service Area as defined in Article 1(c) of the Master Contract.
- (c) Notwithstanding subsection (b) above, a Participating Agency may deliver or cause to be delivered any water furnished hereunder, including a sale, transfer or exchange of Project Water, outside the Agency's Service Area as defined in Article 1 (c) of the Master Contract, under the following conditions:
  - (1) The Participating Agency shall cause the lands to which the water is to be delivered to be added to the Agency's Service Area, in accordance with California Law, including obtaining approval of the Agency and, if necessary, the Contracting Officer, and at the cost of the Participating Agency. The contents of the petition to the State Water Resources Control Board, and any terms and conditions to be imposed upon the grant of any such petition, shall be approved by the Agency.
  - (2) The Participating Agency must first offer the water proposed to be delivered, under substantially the same terms and conditions, to all other Participating Agencies. The Participating Agencies shall have 30 days to

respond in writing to the proposing Participating Agency as to their intention to exercise this right of first refusal. Any Participating Agency exercising its right of first refusal will then have an additional 60 days to complete a transaction to exercise this right of first refusal. Any exercise of this right of first refusal must be for the full amount of the proposal. If more than one Participating Agency exercises the right of first refusal, water to be made available by the proposal will be apportioned, among the Participating Agencies exercising the right of first refusal, upon the basis of the amount of Project Water each Participating Agency is entitled to receive pursuant to its contract with the Agency, or some other apportionment agreed to by the Participating Agencies exercising the right of first refusal. This subsection (2) does not apply to annexations of lands by a Participating Agency inside Solano County.

(d) Any existing sales, transfers or exchanges of Project Water existing as of the date of this Contract that have been approved by the Agency shall be deemed approved under this Contract.

Section 8. Water Shortages. There may occur at times, during any year, a shortage in the quantity of water available for furnishing to the Agency for distribution to Participating Agencies. If there is a reduction in the Project Water available to the Agency during any Year because of errors in physical operations of the Project, drought, other physical causes beyond the control of the Contracting Officer, or actions taken by the Contracting Officer to meet legal obligations, no liability shall accrue against the

Agency or the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising therefrom, so long as actions based upon the opinions or determinations of the Contracting Officer are consistent with the standards in Article 23 of the Master Contract. In any year in which there may occur a shortage from any cause so that the total quantity of water made available to the Agency is less than the total of all quantities contracted for by this Participating Agency and other Participating Agencies, the Agency shall apportion the water supply available to the Agency among all Participating Agency entitled to receive water from the Project, in proportion to their contractual entitlements to Project Water, as specified in Section 3 of the agreement for each Participating Agency. Within seven (7) days of the receipt by the Agency from the Contracting Officer of notice of an actual or probable shortage, the Agency will transmit a true copy of such notice to all Participating Agencies.

Section 9. Adjustments. The amount of any overpayment by the Participating Agency, by reason of the amount of water actually available hereunder from the Project during any Contract Year having been less than the quantity of such water which the Participating Agency otherwise would have been required to pay for under the provisions of this contract, shall be applied first to any accrued indebtedness arising out of this contract, then due and owing to the Agency by the Participating Agency, and any amount of such overpayment thereafter remaining shall, at the option of the Participating Agency, be refunded to the Participating Agency or credited upon amounts to become due to the Agency from the Participating Agency under the provisions of this contract in the ensuring Contract Year.

Section 10. Non-responsibility for Quality of Water. Neither the Agency nor the United States assumes any responsibility with respect to the quality of the water to be furnished pursuant to this contract, and neither the Agency nor the United States warrants the quality of any such water. The Agency shall continue to cooperate with the Contracting Officer and Participating Agencies on programs and projects to improve the quality of water delivered by the Project including, but not limited to, measures to control erosion, sedimentation, and pollutants in the watershed of Monticello Reservoir.

# Section 11. Storage of Water.

(a) To the extent that storage space in Monticello Reservoir is available, the Agency, upon the request of the Participating Agency, shall withhold delivery of and store in Monticello Reservoir, for and on behalf of the Participating Agency, any such unused quantities of water required to be furnished to the Participating Agency by the Agency pursuant to this contract. To the extent that such water can be delivered without impacting the delivery of Project Water to any Participating Agency for the current Water Year, such water shall therefore be made available to the Participating Agency in accordance with a schedule to be furnished by the Participating Agency. If two or more Participating Agencies request storage of water in Monticello Reservoir, the available storage space will be apportioned each year upon the basis of the amount of water each of such Participating Agencies is entitled to receive pursuant to its contract with the Agency.

- (b) In the event any water is so stored by any Participating Agency, and it becomes necessary to release water from Monticello Reservoir because of the lack of storage capacity or in the event that water spills from Monticello Reservoir, water so released or spilled shall, up to the amount stored for and on behalf of the Participating Agencies, be deemed to be water stored for and on behalf of such Participating Agencies. If only a portion of the stored water is released or spilled, the amount of such release or spill shall be apportioned to each Participating Agency in proportion to the amount of stored water each Participating Agency possessed immediately prior to the release or spill.
- (c) No payment to the Agency is required when stored water is released to the Participating Agency because the stored water is paid for, during the Year of allocation, as part of the Participating Agency's annual Project Water supply pursuant to Section 5(a) of this agreement.

# Section 12. Measurement of Water within the Participating Agency.

(a) Within five (5) years of the effective date of this contract, the Participating Agency shall ensure that, unless the Participating Agency establishes an alternative measurement program satisfactory to the Contracting Officer, all Irrigation Water delivered within each of the Participating Agency's service areas is measured at each agricultural turnout and all M&I Water delivered within each of the Participating Agency's service areas is measured at each municipal and industrial service connection. All water measuring devices or water measuring methods of comparable effectiveness must be acceptable to the Contracting Officer. The Participating Agency shall be

responsible for installing, operating, and maintaining and repairing all such measuring devices and implementing all such water measuring methods at no cost to the Agency or the United States. The Participating Agency shall use the information obtained from such water measuring devices or water measuring methods to ensure proper management of the water; to bill water users for water delivered by the Participating Agency; and, if applicable, to record M&I Water delivered by customer class as defined in its water conservation plan. Nothing herein contained, however, shall preclude any Participating Agency from establishing and collecting any charges, assessments or other revenues authorized by California law.

(b) All new surface water delivery systems installed within the Participating Agency's service area after the effective date of this contract shall comply with the measurement provisions described in subdivision (a) of this Section.

#### Section 13. Water Conservation.

(a) The parties acknowledge that, as of the date of execution of this contract, the Agency and each Participating Agency that is obligated to do so have developed and are implementing water conservation plans (i) which contain definite water conservation goals, appropriate economically feasible water conservation measures, and a time schedule for meeting the water conservation goals, (ii) which meet or exceed (a) the requirements of Federal law and (b) the criteria entitled "U.S. Bureau of Reclamation, Mid-Pacific Region Criteria for Evaluating Water Management Plans," and (iii) and which shall be updated at least every five (5) years.

- (b) The Participating Agency shall, promptly upon its adoption, submit to the Agency a copy of any material revision to the Participating Agency's water conservation plan for the Agency's submittal to the Contracting Officer.
- (c) The Participating Agency shall submit to the Agency by February 1, of each Calendar Year, a report of the status of implementation of its water conservation plan for the Agency's submittal to the Contracting Officer.
  - (d) (1) If at any time the Contracting Officer concludes that the Participating Agency's water conservation plan does not substantially conform to the requirements of Federal law or rules or regulations promulgated by the Contracting Officer pursuant to Federal law, then the Participating Agency shall amend its respective water conservation plan as necessary to meet the requirements of such law, rule, or regulation.
  - (2) If at any time the Contracting Officer concludes that the Participating Agency's water conservation plan is materially inconsistent with any water conservation criteria adopted by the Contracting Officer pursuant to Reclamation law then in effect, the Contracting Office shall promptly notify the Participating Agency of his conclusion and the reasons for it. Thereafter, the Contracting Officer and the Participating Agency shall promptly confer for the purpose of reaching agreement as to any changes that will be made to the water conservation plan in light of such criteria.

Section 14. <u>Agreed Charges a General Obligation</u>. The obligations of the Participating Agency arising out of or pursuant or incidental to this contract or the Master

Contract including, without limiting the generality of the foregoing, the obligations of the Participating Agency to pay to the Agency the sums becoming due the Agency for water furnished hereunder, shall constitute a general obligation of the Participating Agency and the Participating Agency shall use all the powers and resources available to it under the law, including but not limited to causing to be levied, imposed and collected all necessary taxes, assessments, tolls and charges, to collect the funds necessary for and to pay its obligations to the Agency under this contract. The general obligations of the Participating Agency to pay to the Agency the sums due the Agency, pursuant to this contract shall not in any way be reduced, postponed or otherwise affected by the individual default in the payment to the Participating Agency by individual water users of assessments, tolls, or other charges levied or owing to the Participating Agency.

Section 15. <u>Defaults</u>. Should the Participating Agency fail to make any payment to the Agency when the same shall become due for water to be furnished to the Participating Agency pursuant to this contract, the Agency may thereafter take actions to enforce the terms of the contract.

Section 16. Penalty for Late Payment. The Agency shall bill Participating

Agencies at least 60 days prior to February 1 and August 1 of each year. If full payment is not received by the Agency by February 1 and August 1, the Participating Agency shall remain obligated to pay the full amount due, plus pay the Agency interest on the full amount due at the annual interest rate equivalent to the interest earned on investments in the State of California Treasurer's Office Local Agency Investment Fund plus two

percent (2%), based on the most current reported interest rate, for the time period the payment is not paid beyond applicable February 1 or August 1 date.

Section 17. Participating Agency to Keep Books, Records and Other Data. The Participating Agency shall establish and maintain account and other books and records sufficient to enable the Agency to furnish to the United States reports and statements, to such extent and in such manner and form as may be prescribed by the United States. At the direction of the Agency, the Participating Agency shall provide directly to the Contracting Officer any information, required in the Master Contract, pertaining to the Participating Agency's use of Project Water.

Section 18. Service Area of the Participating Agency. Upon request by the Agency, the Participating Agency will furnish the Agency with maps showing the service area or areas of its water distribution system. The Participating Agency will not serve Project Water outside of the Agency's Service Area, as defined in Article 1(c) of the Master Contract.

# Section 19. Limitations on Obligation of Agency to Furnish Water.

(a) Notwithstanding any provisions of this contract to the contrary, the obligation of the Agency to furnish water hereunder shall be limited to the times and to the extent that water and facilities necessary for furnishing the same are available to the Agency as determined by the Contracting Officer.

(b) The Agency shall not be liable for failure to perform any portion of this contract to the extent that such failure is caused by the failure of the United States to perform any obligation imposed on the United States by the Master Contract; provided, however, that the obligations of the Participating Agency hereunder shall be reduced to the extent that the Agency is prevented from performing as aforesaid; and provided, further, that the Agency shall diligently and promptly pursue all rights and remedies available to it to enforce the rights of the Agency, this Participating Agency and other Participating Agencies against the United States under the Master Contract relative to such failure to perform.

Section 20. Applicability of Master Contract. This contract is subject to the obligations and limitations imposed by the Master Contract. The Master Contract is hereby incorporated herein by this reference to all respects as though set forth in full at this point. The Participating Agency hereby expressly agrees to the provisions of the Master Contract imposing obligations and limitations upon it, including the Biological Opinion, referenced in Section 3 (b) of the Master Contract which will impose requirements on the Participating Agency. If there is any conflict between the Master Contract and this Participating Agency Contract, the Master Contract will govern.

Section 21. <u>Duties of Agency</u>. The Agency hereby covenants and agrees promptly and completely to fulfill its obligations under this contract and the Master Contract and to apply and to pay to the United States for credit against obligations of the Agency for the Participating Agency under the Master Contract all sums received by the

Agency from the Participating Agency hereunder, as long as these financial obligations still exist pursuant to the Master Contract.

Section 22. Existing Water Rights. The provisions of this contract shall not be applicable to or affect water or water rights now owned or hereafter acquired, other than from the United States or the Agency, by the Participating Agency or by any landowner therein, nor shall this contract be construed as limiting or curtailing any rights which the Participating Agency or any landowner therein acquires or has available to it or him under the Federal Reclamation laws.

Section 23. Contingent Upon Appropriations or Allotments of Funds. The expenditure of any money or the performance of any work or service by the United States provided for in the Master Contract which may require appropriations of money by Congress or the allotment of funds, shall be contingent upon such appropriations or allotments being made. The failure of Congress to so appropriate funds or the failure of an allotment of funds shall not relieve the Participating Agency from any obligations under this contract and no liability shall accrue to the Agency in case such funds are not so appropriated or allotted: Provided, that in the event that water deliveries are halted or curtailed, as a result of such failure to appropriate or allot funds, the obligation of the Participating Agency to make payments pursuant to this contract shall be reduced to the extent of such halting or curtailment of service.

Section 24. <u>Notices</u>. All notices that are required, either expressly or by implication, to be given by any party to the other under this contract shall be delivered or mailed, United States first-class postage prepaid, addressed as follows:

For the Agency:

SOLANO COUNTY WATER AGENCY

508 Elmira Road

Vacaville, California 95687 Attention: General Manager

For the Participating Agency

SOLANO IRRIGATION DISTRICT

508 Elmira Road Vacaville, CA 95687

Attention: Secretary-Manager

Notice shall be deemed given (a) two calendar days following mailing via regular or certified mail, returned receipt requested, (b) one business day after deposit with any one day delivery service assuring "next day" deliver, (c) upon actual receipt of notice, or (d) upon transmission, if by facsimile, whichever is earlier. The parties shall promptly give written notice to each other of any change of address and mailing or shipment to the addresses stated herein shall be deemed sufficient unless written notification of a change of address has been received; provided, however, that this Section shall not preclude the effective service of any such notice or announcement by other means.

Section 25. <u>Waiver of Breaches</u>. Any waiver at any time by either party to this contract of its rights with respect to a breach or default, or any other matter arising in connection with this contract, shall not be deemed to be a waiver with respect to any subsequent breach, default or matter.

Section 26. <u>Assignment Prohibited</u>. The provisions of this contract shall apply to and bind the successors and assigns of the respective parties, but no assignment or transfer of this contract, or any part thereof or interest therein, excepting transfers and exchanges of Project Water pursuant to Section 7 of this agreement, shall be valid until and unless approved by the Agency in writing.

Section 27. <u>Reasonableness of Determination</u>. Where the terms of this contract provide for action to be based upon the opinion or determination of either party to this contract, or of the Contracting Officer, said terms shall not be construed as permitting such actions to be predicated upon arbitrary, or unreasonable opinions or determinations.

Section 28. <u>Equal Opportunity</u>. During the performance of this contract, the Participating Agency agrees as follows:

(a) The Participating Agency will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The participating Agency will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Participating Agency agrees to post in conspicuous places, available for employees and applicants for employment, notices to

be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

- (b) The Participating Agency will, in all solicitations or advertisements for employees placed by or on behalf of the Participating Agency, state that all qualified applicants will receive consideration for employment without discrimination because of race, color, religion, sex, or national origin.
- (c) The Participating Agency will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Participating Agency's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Participating Agency will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The Participating Agency will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (f) In the event of the Participating Agency's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or

orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Participating Agency may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

through (g) in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The Participating Agency will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the Participating Agency becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Participating Agency may request the United States to enter into such litigation to protect the interests of the United States.

The provisions of this section do not refer to or cover any activities of the Participating Agency which are not related to or involved in the performance of the Master Contract.

Section 29. <u>Federal Reclamation Law</u>. The Participating Agency acknowledges and agrees that the delivery of water or use of federal facilities pursuant to this Contract is subject to Federal Reclamation law, as defined in the Master Contract.

Section 30. <u>Levy of Taxes and Assessments.</u> The Participating Agency shall cause to be levied, imposed and collected, as a term of this renewal agreement, all taxes, assessments, tolls and charges to pay the amounts required herein, and will use all of the authority and resources of the Participating Agency to make in full all payments to be made to the Agency pursuant to this contract on or before the date such payments become due and to meet its other obligations hereunder.

Section 31. <u>Validation</u>. The Agency, with the cooperation of the Participating Agency, after the execution of this contract, shall promptly seek to secure a decree of a court of competent jurisdiction of the State of California, confirming the execution of this contract. The Agency shall furnish the Participating Agency a certified copy of the final decree, the validation proceedings, and all pertinent supporting records of the court approving and confirming this contract, and decreeing and adjudging it to be lawful, valid, and binding on the Participating Agency.

Section 32. Entire Agreement. This contract constitutes the entire agreement between the Participating Agency and the Agency, and supersedes the preceding Participating Agency Contract between the parties dated June 28, 1955, any oral agreement, statement or promise between them relating to the subject matter of this contract. Any amendment, including oral modification, must be reduced to writing and signed by both parties to be effective.

IN WITNESS WHEREOF, the parties hereto have hereunto affixed their names the day and first year hereinabove written.

SOLANO COUNTY WATER AGENCY

Attest:

David Okita, Secretary and General Manager

SOLANO IRRIGATION DISTRICT

Marian Maginnis, President

Attest:

Robert Isaac, Secretary-Manager

SPSID.agt

# **Appendix B6**

Solano Project Members' Agreement as to Drought Measures and Water Allocation

# SOLANO PROJECT MEMBERS' AGREEMENT AS TO DROUGHT MEASURES AND WATER ALLOCATION

THIS AGREEMENT, dated as of	March 1	, 1999, by and
among the Solano Irrigation District, a Califor	nia Irrigation Distri	ct (hereinafter referred to as
"SID"), Maine Prairie Water District, (hereina	fter referred to as "	MPWD"), the City of Fairfield,
a California municipal corporation (hereinafter	r referred to as "Fai	rfield"), the City of Vacaville, a
California municipal corporation (hereinafter r	referred to as "Vaca	wille"), the City of Suisun City
(hereinafter referred to as "Suisun"), and the C	City of Vallejo, a Ca	difornia municipal corporation
(hereinafter referred to as, "Vallejo"), individua	ally referred to or c	ollectively referred to in this
Agreement as "Party" or "Parties," respectivel	y, is made and ente	red into and the Parties do, for
full and adequate consideration, receipt of whi	ich is hereby acknow	wledged, agree as follows:

#### Section 1.0: Background Facts

1.1 The Parties are all, through contracts with the Solano County Water Agency ("SCWA"), Participating Agencies of the Solano Project, entitled to annual deliveries of water from the Solano Project in the following amounts:

Name of Party	Annual Entitlement (Acre-Feet ("AF")/Water Year)
Solano Irrigation District	141,000
Fairfield	9,200
Vacaville	5,600
Suisun City	1,600
Maine Prairie	15,000
Vallejo	14,750
Total:	<u>187,150</u>

The present contract between the United States and SCWA for Solano Project water supply ("Solano Project Master Contract") expires in 1999, and negotiations between the United States and SCWA for Solano Project Master Contract renewal and extension are underway, and the Member Unit Parties' contracts with SCWA for the annual entitlements will be extended or renewed.

(Final 1/25/99)

- 1.2 The Parties wish to provide for this Agreement as to the measures to be used in regard to the accounting of water not used from a Party's annual entitlement from the Solano Project in a year after renewal, and also to provide for contractually agreed-to and enforceable curtailments in the amounts of water taken under the respective Parties' annual entitlements during certain drought conditions. This Agreement provides for the accounting of and preservation of the rights of the Parties to those waters which are voluntarily or mandatorily curtailed.
  - 1.3 The Parties wish to further provide in this Agreement for special measures which SID will implement should the drought conditions deepen and become more severe, resulting in reduction of storage in Lake Berryessa to certain levels despite all reasonable efforts of the Parties.
  - 1.4 The Parties agree that each of the Background Facts in Section 1.0 et seq. is true and correct, and a portion of the consideration for this Agreement.

# Section 2.0: Definitions.

- 2.1 The phrase "Storage in Lake Berryessa" shall mean the amount of water stored on the date specified in this Agreement within Lake Berryessa (i) excluding any amounts of water in dead storage which may not be physically released or diverted from Lake Berryessa for any reason, (ii) excluding any amounts of water held on that date in Voluntary Carryover Accounts by the Parties to this Agreement, but (iii) including any amounts of water held in Restricted Carryover Accounts by the Parties on that date. The Storage in Lake Berryessa shall be calculated utilizing the most current elevation capacity curve for Lake Berryessa approved by the United States.
- 2.2 The phrase "annual entitlements" shall mean the amount of water a Party is entitled to delivery each water year in the amounts set forth in Paragraph 1.1 above, where each "water year" begins on March 1, and ends on the last day of the following February, as set forth in the present contracts.

#### Section 3.0: Renewal Contracts of Parties

3.1. The Parties agree that the Parties shall each be entitled to renewal of their

Contract with SCWA for the purchase of water from the Solano Project annually on the basis of the annual amounts set forth in Paragraph 1.1 above.

- 3.2 It shall be a precondition to the enforceability of this Agreement that each of the Parties shall have received and accepted a renewal contract for Solano Project Water in the above amounts from SCWA ("Renewal Participating Agency Contract") and that the terms of those agreements have been accepted by each Party and approved by the United States Department of Interior, Bureau of Reclamation, if such approval is required by the Solano Project Master Contract, and the Renewal Participating Agency Contracts have each been validated in accordance with the provisions of California Code of Civil Procedure section 860, et seq. It shall be a further precondition of the enforceability of this Agreement that no material change has been made in the terms and provisions of each Renewal Participating Agency Contract including, without excluding other material changes, that:
  - 3.2.1 The term of all of the Renewal Participating Agency Contracts shall be equivalent to the term of the renewed Solano Project Master Contract; and
  - 3.2.2 The proportions of payment amounts per AF of water available under the Renewal Participating Agency Contracts shall be the same as the existing Contracts of \$15.00 per AF for municipal and industrial ("M&I") water use and \$2.65 per AF for irrigation use or a ratio of 5.66 to 1, depending on the respective purpose of use; and
  - 3.2.3 There shall be included within all Renewal Participating Agency Contracts provisions permitting each Party to voluntarily retain carryover storage in Lake Berryessa for any unutilized portion of that Party's annual water entitlement under its Renewal Participating Agency Contract under the following conditions:
  - (a) The amount so voluntarily unutilized on the last day of February shall be added on that date to a carryover account ("Voluntary Carryover Account") for the Party that did not order delivery of the amount of water, but the Party shall pay SCWA for the undelivered water as if the water was delivered to the Party in that year in accordance with the Renewal Participating Agency Contract terms. No additional payment will be required for subsequent use of that water if there is no change in type of use.

- (b) Any water in a Party's Voluntary Carryover Account may be utilized by that Party, in addition to all portions of their annual entitlement, in any water year subsequent to the water year in which it is added to the Party's Voluntary Carryover Account, or may be assigned, with approval by SCWA, to another Party to this Agreement, for use by the other Party in the year of non-diversion before its addition to a Party's Voluntary Carryover Account or for use in a subsequent water year from that assignee's Voluntary Carryover Account.
  - (c) Any water in a Party's Voluntary Carryover Account at the time that Lake Berryessa spills, or at a time in which emergency releases are made from Lake Berryessa for any other reason which releases are not delivered by the Solano Project to SCWA, may be lost as follows: The spill or emergency release shall be charged proportionately to each Party having a Voluntary Carryover Account and subtracted from the Parties' Voluntary Carryover Accounts then having a balance in their accounts to the extent of the spill or emergency release.

Example: Party A has 20,000 AF in its Voluntary Carryover Account, Party Y has 10,000 AF in its Voluntary Carryover Account, and Party X has 2,000 AF in its Voluntary Carryover Account, as these accounts exist at the time the spill condition commences, and these are the only carryover amounts presently in Lake Berryessa. A spill condition occurs in which water is not diverted into the Putah South Canal for beneficial use, or is not credited to a release requirement of the Solano Project in Putah Creek, including carriage losses upstream of Putah Diversion Dam. Each net acre foot spilling shall be charged proportionately to each Party's Voluntary Carryover Account. In the example, the percentages are: Party A, 62.5%; Party Y, 31.25%; Party X, 6.25%. If the net spill was of 16,000 AF, the Voluntary Carryover Accounts of all Parties would be reduced by 50%. If the net spill exceeded 32,000 AF, each Party's Voluntary Carryover Account would have a zero balance.

- (d) No monies shall be reimbursable from SCWA to the Parties for the amounts paid for the Voluntary Carryover Account water to SCWA which is spilled.
- (e) No evaporation, measurement or carriage loss will be charged upon any Party's Voluntary Carryover Account balance. No Party shall be charged a storage charge upon its Voluntary Carryover Account balances.

#### Section 4.0: Preparation of Drought Contingency Plans:

December 1, the Parties will participate with SCWA staff in preparation of a Drought Contingency Plan which shall include reasonable water conservation measures, investigation of potential emergency supplies which could be imported without construction of new conveyance facilities, and other reasonable measures which could reduce the depletion of Storage in Lake Berryessa. Implementation of any of these measures by the Parties and SCWA will only be with the consent of the individual Parties electing to participate, and SCWA will not suspend or supersede provisions of the Participating Agency Renewal Contracts with SCWA. The Drought Contingency Plan shall also address terms and conditions for water sales pursuant to Paragraph 5.6(b). If Storage in Lake Berryessa exceeds 1.1 million AF on the following April 1, development of the Drought Contingency Plan shall be suspended.

# Section 5.0 <u>Mandatory Additions to Storage and Carryover Accounts by Parties</u> ("Restricted Carryover Account"):

- as measured on April 1 of any water year, then each of the Parties agrees to forego taking delivery of at least 5% of the Party's annual entitlement. If the Storage in Lake Berryessa is between 450,000 AF and 550,000 AF as measured on April 1, the Parties agree that they will forego taking delivery of at least 10% of their annual entitlements. On the first day of the next water year, a 5% (if Storage in Lake Berryessa had been between 550,000 AF and 800,000 AF the previous April 1) or 10% (if Storage in Lake Berryessa had been between 450,000 AF and 550,000 AF the previous April 1) portion of each Party's annual entitlement shall be credited to what will be called the Party's "Restricted Carryover Account."
- 5.2 Restricted Carryover shall be classified as either irrigation or M&I. For a Party that delivers only one class of water, 100% of its Restricted Carryover shall be designated of that class. For a Party that delivers both irrigation water and M&I water, the Restricted Carryover shall be segregated into irrigation ("irrigation Restricted Carryover") and M&I ("M&I Restricted Carryover") classes based on the amounts of each class of water acquired by that Party from SCWA during the water year in which the Restricted Carryover was generated.

Example: The Storage in Lake Berryessa is between 550,000 AF and 750,000 AF on April 1. Party A delivers both M&I and irrigation water, and in the current water year acquires 20% M&I and 80% irrigation from SCWA. The 5% of annual entitlement foregone amount deposited in Party A's Restricted Carryover Account the following water year would be classified as 1% M&I Restricted Carryover and 4% irrigation Restricted Carryover.

- 5.3 Notwithstanding the mandatory foregoance of a portion of its annual entitlement, a Party having a Voluntary Carryover Account balance from voluntary curtailment of use may take any portion of the Voluntary Carryover Account balance from that account in a water year.
- 5.4 A Party shall not withdraw water from its Restricted Carryover Account until either (a) the Storage in Lake Berryessa on a subsequent April 1 exceeds 800,000 AF, or (b) the Storage in Lake Berryessa on a subsequent April 1 falls below 450,000 AF. If the April 1 Storage in Lake Berryessa exceeds 800,000 AF, the Restricted Carryover Accounts shall convert to or combine with Voluntary Carryover Accounts of the respective Parties. If the April 1 Storage in Lake Berryessa falls below 450,000 AF, the water in Restricted Carryover Accounts will become available to the Member unit Parties as specified in Section 5.6 below.

Example: Party A serves only M&I water and has a Voluntary Carryover Account balance of 2,000 AF on April 1 and no Restricted Carryover Account balance. The April 1 Storage in Lake Berryessa is less than 800,000 AF but more than 550,000 AF. Party A will forego taking delivery of at least 5% of its annual entitlement in the current water year ending on the last day of February. Party A may, up to the last day of February, order and receive 95% of its annual entitlement and an additional 2,000 AF from its Voluntary Carryover Account, bringing its Voluntary Carryover Account to zero on the last day of the water year. The following water year, the Restricted Carryover Account of Party A will have the foregone amount of 5% in it, classified as 100% M&I Restricted Carryover. If the Storage in Lake Berryessa on April 1 of that year exceeds 800,000 AF, Party A's Restricted Carryover Account will convert to a Voluntary Carryover Account, and Party A is entitled to use the water at any time. If the Storage in Lake Berryessa falls below 450,000 AF on April 1 of that year, the water in Restricted Carryover Accounts will become available to the Parties as specified in Section 5.6

below. If the April 1 Storage in Lake Berryessa is any other amount (between 450,000 AF and 800,000 AF), the foregone amount remains in Party A's Restricted Carryover Account and is not available for use.

5.5 After successive water years in which Storage in Lake Berryessa is between 450,000 AF and 800,000 AF on April 1, water will tend to accumulate in the Restricted Carryover Accounts. The above provisions notwithstanding, however, accumulated water in a Party's Restricted Carryover Account (combined M&I and irrigation Restricted Carryover) shall not exceed 50% of that Party's annual entitlement.

Example: Same as last example (Section 5.4) except Party A starts with a Restricted Carryover Account balance of 48% of its annual entitlement. Party A would be required to deposit only 2% of its annual entitlement into its Restricted Carryover Account to bring the Restricted Carryover Account up to the maximum 50% of annual entitlement. Party A may take delivery and use up to 98% of its annual entitlement that water year, excluding any Voluntary Carryover.

5.6 When Storage in Lake Berryessa falls to less than 450,000 AF on April 1, the Parties will not be required to deposit additional water into Restricted Carryover attributable to that water year and water from the Restricted Carryover Accounts will be released to the Parties as follows:

. .

- a. The Parties shall have access to their M&I Restricted Carryover Account balances for M&I uses; and
- b. The Parties shall have access to their irrigation Restricted Carryover balances for voluntary sale to other Parties for M&I uses based on terms and conditions established through the drought contingency planning process of Section 4.0.

Example: In 2006, Storage in Lake Berryessa is between 550,000 AF and 800,000 AF on April 1 after being above 800,000 AF the previous year. A 5% Restricted Carryover amount is required of all Parties for that water year. Since water orders are submitted to SCWA prior to March 1, the order for that year will be amended to reflect the reduction in available water supply for each of the Parties and the foregone amount will be credited to the Restricted Carryover Accounts on March 1, 2007. On April 1 in each of years 2007 and 2008,

Storage in Lake Berryessa is between 450,000 AF and 550,000 AF. On March 1, 2009, each Party will have 25% of its annual entitlement in its Restricted Carryover Account. On April 1, 2009, Storage in Lake Berryessa falls below 450,000 AF. The Parties will not be required to deposit further water into their Restricted Carryover Accounts that year, and each Party may use any M&I Restricted Carryover in its Restricted Carryover Account for M&I uses that year. Furthermore, Parties with irrigation Restricted Carryover may sell all or any part of that water to other Parties for M&I use pursuant to the drought contingency plan of Section 4.0 above. Any water not sold will remain irrigation Restricted Carryover in the selling Party's Restricted Carryover Account, and such water's disposition will be determined by the April 1 Storage in Lake Berryessa in subsequent years.

- 5.7 Any amounts of water which are mandatorily foregone and placed into the Restricted Carryover Accounts by the Parties pursuant to Paragraph 5.1 shall be subject to payment of the water charge to SCWA for the foregone amount. No additional payment will be required for subsequent use of that water if there is no change in the type of use.
- In addition to the provisions above, when Storage in Lake Berryessa is less 5.8 than 400,000 AF on April 1, SID will prepare to implement a voluntary agricultural water marketing program in order to sign up growers who are willing to sell their water allocations for the next water year beginning March 1 of the following year. The water obtained by this voluntary process will be marketed by SID to the Parties to meet M&I water needs of those Parties. The process, methods of determining cost, and conditions governing the marketing to Participating Agencies shall be reasonable and are generally outlined as to form in Exhibit "A" entitled "Solano Irrigation District Drought Impact Reduction Program" (referred to herein as "Program"). The SID Board of Directors may alter and modify the conditions, charges and terms of the Program from time to time, but the purposes of the Program of providing for voluntary relinquishment of agricultural water, while avoiding permanent adverse economic, environmental and social or organizational damage to the agricultural community and to the Parties' M&I users, and retaining the viability of SID, shall be reasonably retained in the Program adopted and implemented by SID. Parties desiring to obtain water from SID for M&I purposes will be provided a reasonable opportunity to comment on any proposed Program changes in advance of their implementation by SID.

5.9 If the Solano Irrigation District Drought Impact Reduction Program shall have been implemented for two or more successive years in the previous three years, and a total of more than 35,000 AF of water are subscribed during the three years to meet M&I water needs of Parties, and on the following April I Storage in Lake Berryessa is less than 400,000 AF, the amounts of water to be made available under the Program in that year shall be reduced by SID to a maximum of 5,000 AF.

Example A: Same as last example (Section 5.6), with the additional facts that Storage in Lake Berryessa drops below 400,000 AF on April 1 in years 2010 through 2012, and in year 2009 and 2010, the Program provides for the subscription of 20,000 AF annually for M&I use. Because in the successive years 2009 and 2010 the Program is utilized to provide 35,000 AF or more to M&I users, each Party would have the additional right to participate in the Program in year 2011, but only to the extent of the Party's share of a total Program amount not to exceed 5,000 AF. In year 2012, because more than 35,000 AF were subscribed to under the Program over the past three years and the program was in effect in at least two successive years within the previous three years, the Program shall be reduced again to a maximum of 5,000 AF. If Storage in Lake Berryessa continues below 400,000 AF on April 1, 2013, the 5,000 AF restriction would not be in effect because the Program did not provide 35,000 AF or more to M&I users over the past three years.

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Example B: Same as last example, except Storage in Lake Berryessa is above 400,000 AF on April 1, 2010, and therefore the Program is not in effect that year. In year 2011 the program provides for the subscription of 20,000 AF for M&I use. In year 2012, the 5,000 AF restriction would not be in effect because, although the Program provided over 35,000 AF to M&I users over the past three years, the Program was not in effect in at least two successive years during that period. If Storage in Lake Berryessa continues below 400,000 AF on April 1, 2013, the 5,000 AF restriction would be in effect if the 2012 subscription was 15,000 AF or more (so that the combined 2011 and 2012 subscription was 35,000 AF or more).

5.10 Except as provided otherwise by this Section, Restricted Carryover will be treated the same as Voluntary Carryover.

#### Section 6.0: No Assignments

6.1 This Agreement, and the rights, duties and benefits given in it, may not be assigned by a Party to a non-Party without the advance written consent of all other Parties, and any attempted direct or indirect assignment without such consent is void. The amounts of water in a Party's Voluntary or Restricted Carryover Accounts may not be assigned directly or indirectly for the benefit of non-Parties and SCWA must consent to any such assignments between Parties. Approval of assignment of portions of a Party's annual entitlement to water under its Renewal Participating Agency Contract by SCWA shall carry with it the obligation to provide the Restricted Carryover Account amounts attributable to that entitlement.

#### Section 7.0: Counterparts

7.1 This Agreement may be executed in several duplicate counterparts, each of which shall be an original.

#### Section 8.0: SCWA Consent

8.1 The Solano County Water Agency executes this Agreement for the purposes of consenting to the terms hereof. Each Party shall have the right to enforce the terms of this Agreement against any or all other Parties.

		SOLANO IRRIGATION DISTRICT
Dated:	By:	Mario Characas
	•	President, Board of Directors
[SEAL] Attest:		
Jahot & Drac		
Secretary, Board of Directors	;	

Approved as to form:

District Counsel, Solano Irrigation District

MAINE PRAIRIE WATER DISTRICT Dated: [SEAL] Attest: Secretary, Board of Directors Approved as to form: District Counsel CITY OF FAIRFIELD Dated: By: Mayor [SEAL] Attest: Clerk, City of Fairfield Approved as to form: City Attorney, City of Fairfield CITY OF SUISUN CITY Dated: By: Mayor [SEAL] Attest:

11

Clerk of the City of Suisun City

City Attorney, City of Suisun City

Approved as to form:

### MAINE PRAIRIE WATER DISTRICT

Dated:	Ву:	
[SEAL] Attest:		President, Board of Directors
Secretary, Board of Directors		
Approved as to form:		
District Counsel		<u> </u>
,		CITY OF FAIRFIELD
Dated:	By:	Mayor Attygron
[SEAL] Attest:		Transition v
Yilmy Bulhan, Deputy Clerk City of Fairfield		·
Approved as to form:  City Attorney, City of Fairfie	<del>L</del>	
		CITY OF SUISUN CITY
Dated:	Ву:	Mayor
[SEAL] Attest:		·
Clerk of the City of Suisun C	City	<u> </u>
Approved as to form:		
City Attorney City of Spien	n City	<del> </del>

### MAINE PRAIRIE WATER DISTRICT

Dated: B	y:		
[SEAL] Attest:	-	President, Board of Directors	
Secretary, Board of Directors	<del></del> .		
Approved as to form:			
District Counsel			
•		CITY OF FAIRFIELD	
Dated: B	y:		
[SEAL] Attest:		Mayor	
Clerk, City of Fairfield		. ·	
Approved as to form:			
City Attorney, City of Fairfield			
		CITY OF SUISUN CITY	
Dated: B	y:	XIMPLLY	
[SEAL] Attest:		Mayor	·
Sharon Jantura Clerk of the City of Suisun City		· · · · · · · · · · · · · · · · · · ·	
Approved as to form:	/		
City Attorney, City of Suisun C	 City	· · · · · · · · · · · · · · · · · · ·	

### CITY OF VACAVILLE

Dated:	Ву: '	Mayor A Dem
[SEAL] Attest:  **Excleen M Chra Clerk of the City of Vacaville	lron.	iso-
Approved as to form:  City Attorney, City of Vacan	ville	· .
•		CITY OF VALLEJO
Dated:	Ву:	City Manager
[SEAL] Attest:		
Clerk of the City of Vallejo		
Approved as to form:		
City Attorney, City of Valle	jo	
CONSENTED TO:		SOLANO COUNTY WATER AGENCY
Dated:	Ву:	President, Board of Directors
[SEAL] Attest:		
Secretary, Board of Director	rs	
Approved as to form:		
District Counsel		<del></del> .

### CITY OF VACAVILLE

Dated:	By:	
	·	Mayor
[SEAL] Attest:		
Clerk of the City of Vacavil	le	
Approved as to form:		
City Attorney, City of Vacar	ville	· ·
Dated: 3/12/99	Ву:	CITY OF VALLEJO  Ciry Manager
[SEAL] Attest:		
Clerk of the City of Vallejo Approved as to form:		· .
John M. Hours Gity Attorney, City of Valle	jo	· · · · · · · · · · · · · · · · · · ·
CONSENTED TO:		
	٠	SOLANO COUNTY WATER AGENCY
Dated:	Ву:	
[SEAL] Attest:		President, Board of Directors
Secretary, Board of Director	rs	<del></del>
Approved as to form:		·
District Counsel		· · · · · · · · · · · · · · · · · · ·

### CITY OF VACAVILLE

Dated:	By:	•	
	•	Mayor	
[SEAL] Attest:			
Clerk of the City of Vacavil	le		
Approved as to form:			
City Attorney, City of Vaca	ville		
•		CITY OF VALLEJO	
Dated:	Ву:	City Manager	—
[SEAL] Attest:			
Clerk of the City of Vallejo	•		
Approved as to form:			
City Attorney, City of Valle	jo		
CONSENTED TO:		SOLANO COUNTY WATER AGENCY	•
Dated:	Ву:	President, Board of Directors	
[SEAL] Attest: Secretary, Board of Director	rs	Tresident, Board of Differents	
Approved as to form:			
District Counsel			

#### **EXHIBIT "A"**

## SOLANO IRRIGATION DISTRICT DROUGHT IMPACT REDUCTION PROGRAM ELEMENTS

The Program will include the following elements:

- 1.0 The District's Contract with the Parties requesting Municipal and Industrial Water:
- 1.1 <u>Proportions in Program:</u> On or about April 1 when it is determined that the amount of water in Storage in Lake Berryessa is less than 400,000 AF, excluding water which is in dead storage and water which is in the voluntary carryover accounts of the Parties to the Agreement, the Parties, including SID, delivering municipal and industrial water in proportion to the average annual amounts of municipal and industrial water ordered and paid for from the Solano Project by those Parties during the preceding five (5) full water years, shall be entitled to participate in the SID Drought Impact Reduction Program ("The Program").
- 1.2 No Assignment of Proportion of Program Water: All Parties seeking water under the Program for municipal and industrial use shall be entitled to their proportional share of the water made available by the Program. If a Party desires less than their proportional share of the Drought Impact Reduction Program water, they may not assign their relinquished portion of the Program water to any other Party, and the relinquished portion of the water will be divided in accordance with the percentage of the Program water requested by Parties, if any Party requests less than their proportional share.
- 1.3 <u>District Target Price</u>: On or before May 1, SID will establish and announce a target price per AF for the amount of water which will be deemed relinquished by a Landowner and/or Tenant within SID for the Program in the following water year.
- 1.4 Additional Costs: In addition to the target price payable to the Landowner and/or Tenant for each acre foot, SID shall establish the additional amounts payable to SID for its operation and maintenance costs, lost water revenues and other reasonable costs to be incurred in implementing the Program. SID will establish the amounts of water which will be allocated to each acre of land under the rules and regulations in the following water year in which the Program is to be implemented and to which the target price and charges of SID would apply if the Landowner and/or Tenant elect to participate in the Program.

- days notice shall be provided to the Parties serving Municipal and Industrial water of their right to subscribe and contract to the terms of the Program and their right to purchase upon those terms their proportionate share of the Program water in the following water year. The Program water to be made available to the Parties providing for municipal and industrial water service, including SID, shall not exceed twenty thousand (20,000) AF in a water year, or the water allocation from 7,500 acres of SID land, whichever sum is less. A Party declining to or ormitting to subscribe to its proportionate share of the Program water may subscribe to a lesser amount of water, or if no election to subscribe is made, their proportionate share shall be divided among the other participants in proportion to requests of the remaining Parties limited by those Parties' proportions established under Paragraph 1.1 above (five years' historic ordering of M & I water from Solano Project). All subscription requests shall be submitted in writing.
- 1.6 Solicitation Period: Because the terms will be announced and the subscriptions sought approximately 9 months before the relinquishment would commence to take effect, a period of at least 45 days beginning on or before August 1 will be provided for Landowners and Tenants within the boundaries of SID to offer in writing the amounts of water specified and committed to be purchased by the Parties for municipal and industrial purposes in the following water year under the Program.
- 1.7 <u>Solicitation Complete Finalization of Contract Amounts</u>: If sufficient Landowner and/or Tenant participants are received within the initial 45-day period by SID, a final binding contract for these amounts shall be delivered by the Parties to SID for the purchases, and SID will submit contracts to the participating SID landowners and/or tenants for the relinquishment to take effect in the following water year.
- 1.8 <u>Insufficient or Excessive Landowner Offers:</u> If insufficient lands subscribe to the SID Program in the solicitation, and insufficient amounts of water are obtained to meet the total demand of the requesting Parties, which demand shall not exceed 20,000 AF or water from 7,500 acres, whichever is less in any water year, the Parties shall nevertheless be bound to purchase those amounts tendered by landowners and/or tenants from SID.

If the participating landowners and/or tenants offer amounts of water in excess of subscriptions of the Parties, the amounts tendered by each participant will be reduced by a factor representing the excess amount as a percent of the subscribed amount.

Final contracts with participants and the subscribing Parties shall be delivered to SID for approval on or before October 15.

- October 15, and shall be obtained by SID and distributed by SID in accordance with its contractual terms with the Landowners and Tenants. Interest earned upon the payments prior to disbursement shall be credited to the Parties participating in the Program. The participating Parties shall pay to SCWA the municipal and industrial rate for the water so assigned by SID to the Parties prior to the Parties participating in the Program ordering and delivery of the water in the following water year.
- Landowner/Tenant agreement with SID will not provide for an upset price, and thus if the following water year is a plentiful water year, nevertheless the water to be transferred by SID to the Parties will be transferred on the first day of the subsequent water year and will be added to the account of the participating Parties in the Program on that day. Participating Parties should recognize that it is possible that spills of Lake Berryessa may occur after March 1, and thus it is theoretically possible to obtain water pursuant to the Program and to lose it forthwith without the ability to use it or hold it in a carryover account. Water transferred by SID to participating Parties will be treated as voluntarily added to the Party's carryover account if not utilized in the water year.
- 1.11 No Waiver or Transfer of Water Outside Solano Project Service Areas: As a condition of participating in the Program, no Party participating in the receipt of water from the Program shall directly or indirectly in the water year that deliveries are made under the Program (i) waive the ability to receive water from other sources available to it, or (ii) transfer directly or indirectly the amounts held by the Party in their Solano Project account or held by them pursuant to their State Water Project contracts or held as other water rights to any non-Party, or (iii) allow amounts to be received by the Party pursuant to the Solano Irrigation District Drought

Impact Reduction Program to be used for the benefit of a non-Party or for use outside the service area of the Solano Project.

- 1.12 Solano County Water Agency will be paid for the water transferred by SID at the municipal industrial rate by the purchaser in accordance with the schedule for payments by the Party to SCWA under the Renewal Member Unit Contract.
- 2.0 SIDs' Contract with Landowners/Tenants: The Program will be implemented with voluntarily participating landowners and tenants by SID determining an amount of water to be allocated by SID in the ensuing water year for each acre of participating land, and a price per acre divided by the number of AF to be allocated yielding a per AF price for water tendered by landowner and tenant to SID. Landowners will be required to allocate full measurable fields or tracts to the Program. Parcels of 20 acres or less in size will not be eligible. Water from land with permanent crops such as trees and vines will not be eligible for transfer. Participants in this relinquishment program shall not supplement their allocation with ground water at levels which exceed the historical average over the previous four (4) years. No more than 7,500 acres of SID lands will be removed from production in a water year under the Program. Specific guidelines and contract forms will be developed by SID prior to the beginning of the landowner solicitation period and that information will be provided in a notice to owners of eligible lands.

(Final 11/30/98)