

Appendix F, Modeling

Section 1-3 CalSim 3 Contracts

Central Valley Project and State Water Project Contract Assumptions

This section summarizes the SWP and CVP contract assumptions for CalSim 3 modeling conducted for the LTO.

Table 1. CVP Sacramento River Settlement Contracts

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
Water Budget Area 02: Sacramento River Right Bank, RM 254.1 – RM 309.5										
Redding, City of ¹	14-06-200-2871A	District	02_SU	SAC296	246.25	295.3		8,926	1,574	10,500
Subtotal										10,500
Anderson-Cottonwood ID ³	14-06-200-3346A	District	02_SA	SAC296	246.0	295.0		102,850	5,950	108,800
Lake California Property Owners As. Inc.	14-06-200-4961A	Short	02_SA	SAC296	221.0	269.4		580	200	780
Leviathan, Inc.	14-06-200-7308A	Short	02_SA	SAC296	221.0	269.4	160	355	345	700
Subtotal										110,280
Water Budget Area 03: Sacramento River Left Bank, RM 250.1 – RM 309.5										
Redding, City of ²	14-06-200-2871A	District	03_SU	SAC296	246.7	295.7		8,925	1,575	10,500
Subtotal										10,500
Anderson-Cottonwood ID ⁴	14-06-200-3346A	District	03_SA	SAC289	240.5	289.3		18,150	1,050	19,200
Riverview Golf and Country Club	14-60-200-8286A	Short	03_SA	SAC289	240.8	289.9	100	255	25	280
Daniell, Harry W.	14-06-200-4348A	Short	03_SA	SAC289	240.3	289.0	6	13	7	20
Redding Rancheria Tribe	7-07-20-W0006	Short	03_SA	SAC289	240.2	288.8	73	70	135	205
Driscoll Strawberry Associates, Inc.	14-06-200-4736A	Short	03_SA	SAC289	207.5	255.2	160	330	490	820
Subtotal										20,525
Water Budget Area 04: Sacramento River Right Bank, RM 206.1 – RM 254.1										
Exchange Bank (Nature Conservancy)	14-06-200-3774A	Short	04_NA	SAC224	168.85	219.5	320	210	570	780
Rubio, Exequiel P. and Elsa A.	14-06-200-2368A	Short	04_NA	SAC224	166.8	217.4	8	11	5	16
Penner, Roger & Leona	14-06-200-960A	Short	04_NA	SAC224	156.8	207.6	52	159	21	180
Freeman, Vola	2212A	Short	Not renewed	SAC224	156.1	207.2	8	0	0	0
Mclane, Robert and Naomi	4446A	Short	Not renewed	SAC224	155.6	206.5	13	0	0	0
Alexander, Thomas and Karen	14-06-200-7754A	Short	04_NA	SAC224	155.6	206.5	5	9	13	22
Subtotal										998
Water Budget Area 05: Sacramento River Left Bank, RM 195.7 – RM 250.1										
J. B. Unlimited, Inc.	14-06-200-2519A	Short	05_NA	SAC240	197.0	245.7	154	220	290	510
Micke, Daniel H. and Nina J.	14-06-200-7995A	Short	05_NA	SAC240	196.6	245.3	34	81	19	100
Gjermann, Hal	14-06-200-4010A	Short	05_NA	SAC240	196.55	245.0	5	8	4	12
Subtotal										622
Water Budget Area 08N: Sacramento River Right Bank, RM 153.7 – RM 206.1										
Princeton-Cordora-Glenn ID	14-06-200-849A	District	08N_SA1	SAC178	154.8, 123.9	178.0		52,810	15,000	67,810
Provident ID	14-06-200-856A	District	08N_SA1	SAC178	123.9	178.0		49,730	5,000	54,730

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
Maxwell ID ⁵	14-06-200-6078A	District	08N_SA1	SAC159	103.8, 104.1	159.6		599	300	899
Green Valley Corporation	14-06-200-5210A	Long	08N_SA1	SAC159	106.0	161.5	286	680	210	890
Swenson Farms, LLC	14-06-200-5211A	Short	08N_SA1	SAC159	106.0	161.5	184	555	325	880
Tuttle, Charles Jr. and Noack, Sue T. Trustees	14-06-200-7296A	Short	08N_SA1	SAC159	103.9	159.6	140	120	270	390
Cachil Dehe Band of Wintun Indians	14-06-200-7206A	Short	08N_SA1	SAC159	103.7	159.4	23	80	100	180
Seaver, Charles W. and B.J., Trustees	14-06-200-3296A	Short	08N_SA1	SAC159	99.3	154.4	161	210	270	480
Subtotal										126,259
Glenn-Colusa ID ⁷	14-06-200-855A	District	08N_SA2	SAC207	154.8	206.6		396,000	57,750	453,750
Subtotal										453,750
Water Budget Area 08S: Sacramento River Right Bank, RM 92.8 – RM 153.7										
Maxwell ID ⁶	14-06-200-6078A	District	08S_SA1	SAC159	103.8, 104.1	159.6		11,381	5,700	17,081
Odysseus Farms Partnership	1664A	Long	Not renewed	SAC159	93.15	149.2	758	0	0	0
Roberts Ditch Irrigation Company, Inc.	14-06-200-935A	District	08S_SA1	SAC159	90.7	146.8		4,140	300	4,440
King, Benjamin and Laura	14-06-200-1086Y	Short	08S_SA1	SAC159	89.2	144.7	5	12	7	19
King, Laura	14-06-200-1086Z	Short	08S_SA1	SAC159	89.2	144.7	6	13	13	26
Wisler, John W., Jr.	14-06-200-5215A	Short	08S_SA1	SAC159	88.0	144.6	18	8	27	35
Empire Group, LLC	14-06-200-2145A	Short	08S_SA1	SAC159	87.7	144.0	65	164	16	180
Steidlmayer, Anthony E. et al.	874A	Short	Not renewed	SAC159	83.0	139.0	168	0	0	0
Sycamore MWC	14-06-200-2146A	Long	08S_SA1	SAC159	77.8, 78.15, 78.75, 78.8	135.5		22,000	9,800	31,800
Subtotal										53,581
Glenn-Colusa ID ⁸	14-06-200-855A	District	08S_SA2	SAC207	154.8	206.6		324,000	47,250	371,250
Subtotal										371,250
Jansen, Peter and Sandy	14-06-200-1426A	Short	08S_SA3	SAC121	70.4	128.1	61	150	40	190
Gillaspy, William F., Trustee	14-06-200-8117A	Short	08S_SA3	SAC121	70.4	128.1	64	120	90	210
Charter, Kristine	14-06-200-8118A	Short	08S_SA3	SAC121	70.4	128.1	92	165	135	300
Driver, Gary, et al.	14-06-200-8585A	Short	08S_SA3	SAC121	69.2	127.0	10	8	22	30
Reclamation District 108	14-06-200-876A	District	08S_SA3	SAC121	43.1, 43.3, 51.1, 56.4, 59.15, 61.05, 61.2, 62.3, 63.2, 70.4	120.9		199,000	33,000	232,000
River Garden Farms Company	14-06-200-878A	Long	08S_SA3	SAC109	34.5, 41.0, 43.1	101.5		29,300	500	29,800
Driver, John A. & Clare M., Trustees	14-06-200-1314A	Short	08S_SA3	SAC109	36.45	95.2	84	150	80	230
Driver, John A. & Clare M., Trustees	14-06-200-2398A	Short	08S_SA3	SAC109	36.45	95.2	6	6	10	16
Subtotal										262,776

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
Water Budget Area 09: Sacramento River Left Bank, RM 140.6 – RM 195.7										
Pacific Realty Associates, L.P. (M&T Chico Ranch)	14-06-200-940A	Long	09_SA1	SAC196	140.8, 141.5	195.6		16,980	976	17,956
Subtotal										17,956
Reclamation District 1004	14-06-200-890A	District	09_SA2	SAC162	84.28, 85.3, 89.12, 111.8	164.8		56,400	15,000	71,400
Spence, Ruthann (Spence Farms)	4829A	Long	Not renewed	SAC162	104.8	160.4	209	0	0	0
Anderson, Arthur L. et al.	14-06-200-3591A	Short	09_SA2	SAC162	102.5	158.1	200	445	45	490
Carter Mutual Water Company	14-06-200-2401A	District	09_SA2	SAC162	99.25, 101.8, 102.9	158.1		6,450	672	7,122
Forry, Laurie and Adams, Louise	14-06-200-7691A	Long	09_SA2	SAC162	99.8	154.8	506	2,285	0	2,285
Otterson, Mike, Trustee	14-06-200-2896A	Long	09_SA2	SAC162	98.9	154.7	422	1,515	300	1,815
T&P Farms	14-06-200-2993A	Long	09_SA2	SAC162	98.6	153.7	409	1,360	200	1,560
Griffin, Joseph and Prater, Sharon	14-06-200-2895A	Long	09_SA2	SAC162	95.8	151.3	552	1,610	1,150	2,760
Baber, Jack W. et al.	14-06-200-1604A	Long	09_SA2	SAC162	95.6	151.1	1,068	3,630	2,630	6,260
Eastside Mutual Water Company	14-06-200-1053A	District	09_SA2	SAC162	95.25	150.8	1,006	2,170	634	2,804
Zelmar Ranch, Inc.	14-06-200-1827A	Short	09_SA2	SAC162	92.5	148.7	120	112	52	164
Gomes, Judith A., Trustee	14-06-200-1827X	Short	09_SA2	SAC162	92.5	149.7	72	168	78	246
Butte Creek Farms, Inc.	14-06-200-2851A	Short	09_SA2	SAC162	89.26	145.7	17	20	16	36
Butte Creek Farms, Inc.	14-06-200-5206A	Short	09_SA2	SAC162	89.24	145.6	36	40	55	95
Butte Creek Farms, Inc.	14-06-200-1976A	Short	09_SA2	SAC162	88.7	145.2	114	196	8	204
Butte Creek Farms, Inc.	14-06-200-7744X	Short	09_SA2	SAC162	88.7	145.2	180	300	340	640
Howard, Theodore W. and Linda M.	14-06-200-1976X	Short	09_SA2	SAC162	88.7	145.2	31	74	2	76
Locvich, Loyd	1945A	Short	Not renewed	SAC162	88.2	144.7	160	0	0	0
Ehrke, Allen A. and Bonnie E.	14-06-200-8330A	Short	09_SA2	SAC162	86.8	143.3	165	220	160	380
Subtotal										98,337
Water Budget Area 18: Sacramento River Left Bank, RM 121.8 – RM 140.6										
Fedora, Sibley G. and Margaret L., Trustees	14-60-200-2916A	Short	18_SA	SAC136	82.7	139.3	86	190	20	210
Reische, Laverne C. et al.	14-06-200-1150A	Short	18_SA	SAC136	82.5	139.1	104	183	267	450
Reische, Eric L.	14-06-200-1150X	Short	18_SA	SAC136	82.5	139.1	18	37	53	90
Tarke, Stephen E. and D.F., Trustees	14-06-200-1949A	Long	18_SA	SAC136	81.5	138.1	492	1,700	1,000	2,700
Meridian Farms Water Company	14-06-200-838A	District	18_SA	SAC136	71.1, 74.8, 80.0	136.5		23,000	12,000	35,000
Churkin, Michael Jr. et al.	14-06-200-7227A	Short	18_SA	SAC136	79.5	135.8	49	75	55	130
Eggleston, Ronald H. et ux.	14-06-200-7339A	Short	18_SA	SAC136	79.0	135.3	28	53	12	65
Hale, Judith A. and Marks, Alice K.	14-06-200-7572A	Short	18_SA	SAC136	79.0	135.3	54	117	13	130
Hale, Judith A. and Marks, Alice K.	14-06-200-1638A	Short	18_SA	SAC136	79.0	135.3	31	58	17	75

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
Pires, Lawrence and Beverly	7744A	Short	Not renewed	SAC136	77.9	134.6	111	0	0	0
Davis, Ina M.	14-06-200-1851A	Short	18_SA	SAC136	76.2	132.5	34	71	14	85
Chesney, Adona, Trustee	14-06-200-930A	Short	18_SA	SAC136	76.15	132.5	149	310	390	700
Andreotti, Beverly F. et al.	14-06-200-1898A	Long	18_SA	SAC136	72.1	128.8	462	2,060	1,560	3,620
Mclaughlin, Jack E. and Margery L.	2514A	Short	Not renewed	SAC136	72.0	128.7	142	0	0	0
Lomo Cold Storage and Micheli, Justin J.	14-06-200-931A	Long	18_SA	SAC136	67.5	125.1		6,410	700	7,110
Anderson R. and J., Properties, LP	14-06-200-1726A	Short	18_SA	SAC136	67.1	124.7	95	149	88	237
Lonon, Michael E.	14-06-200-8658A	Short	18_SA	SAC136	67.1	124.7	260	715	440	1,155
Tisdale Irrigation and Drainage Company	14-06-200-2781A	District	18_SA	SAC136	64.4, 67.1	124.3		7,900	2,000	9,900
Sutter MWC⁹	14-06-200-815A	District	18_SA	SAC136	63.75	121.2		10,170	3,390	13,560
Subtotal										75,217
Water Budget Area 19: Sacramento River Left Bank, RM 87.5 – RM 121.8										
Oji Brothers Farm, Inc.	14-06-200-3753A	Long	19_SA	SAC122	63.9	121.3		1,340	1,860	3,200
Sutter MWC¹⁰	14-06-200-815A	District	19_SA	SAC091, SAC099, SAC122	32.4, 40.6, 63.75	121.2		159,330	53,110	212,440
Young, Troy Brady and Susan Elizabeth	14-06-200-2552A	Short	19_SA	SAC122	63.3	121.1	4	2	8	10
Sekhon, Arjinderpal and Daljit	W0001	Short	Not renewed	SAC115	62.3	119.8	155	0	0	0
Butler, Dianne E., Trust	14-06-200-2365A	Short	19_SA	SAC115	60.5, 61.8	119.4	142	180	280	434
Hatfield, Paul and Crystal	14-06-200-2365X	Short	19_SA	SAC115						26
Howald Farms, Inc.	14-06-200-1042A	Long	19_SA	SAC115	60.4	118.9	512	1,350	1,410	2,760
Kary, Carol Trustee	14-06-200-2520A	Short	19_SA	SAC115	59.8	117.4	280	400	600	1,000
Wallace, Joseph V., and Janice C.	14-06-200-5200A	Short	19_SA	SAC115	58.9	116.7	80	295	60	355
Lockett, William P. and Jean B.	14-06-200-4105A	Short	19_SA	SAC115	58.3	116.8	490	370	47	417
O'Brien, Frank J., and Janice C.	14-06-200-4105X	Long	19_SA	SAC115	58.3	116.0	290	550	289	839
Dyer, Jeffrey E., and Wing-Dyer, Jan	14-06-200-2486A	Short	19_SA	SAC115	57.75	115.6	120	180	340	520
Pelger Mutual Water Company	14-06-200-2073A	District	19_SA	SAC115	56.96	114.8		7,110	1,750	8,860
Bardis, Cristo D. et al.	14-06-200-1286A	Long	19_SA	SAC109	55.1	112.8	2,055	8,070	2,000	10,070
Van Ruiten Brothers	14-06-200-1415A	Short	19_SA	SAC109			164	50	275	325
Van Ruiten Brothers	14-06-200-5200X	Short	19_SA	SAC109	52.3	110.3	80	25	135	160
Nelson, Henry E., Trustee	14-06-200-1954A	Short	19_SA	SAC109	52.0	110.0	43	38	98	136
Saeed, Faraz A.	8-07-20-W0117	Long	19_SA	SAC109	50.0	108.0	483	2,450	710	3,160
Van Ruiten Brothers	14-06-200-880A	Long	19_SA	SAC109	49.0, 49.7	107.5	375	947	538	1,485
Van Ruiten Brothers	14-06-200-880X	Long	19_SA	SAC109	49.0	106.8		372	212	584
Oji, Mitsue, Family Partnership et al.	14-06-200-2427A	Long	19_SA	SAC109	48.7	106.8		3,430	1,310	4,740

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
Henle, Thomas N., Trustee	14-06-200-932A	Long	19_SA	SAC109	46.5	105.6	393	935	0	935
Windswept Land and Livestock Company	14-06-200-2045A	Long	19_SA	SAC109	44.2, 45.6, 46.45	105.1	738	4,040	0	4,040
Knights Landing Properties, LLC	14-06-200-889A	Short	19_SA	SAC099	38.8	97.3	112	180	20	200
Sooch, Jagar S., et al.	14-06-200-7049A	Short	19_SA	SAC099	37.75	96.4	78	70	85	155
KLSY LLC	14-06-200-7556A	Short	19_SA	SAC099	37.2	95.8	63	80	90	170
Quad-H Ranches, Inc.	14-06-200-2153A	Short	19_SA	SAC099	36.2	94.9	74	190	310	500
Giusti, Richard J. and Sandra A., Trustees	14-06-200-4076A	Short	19_SA	SAC099	36.2	95.0	304	850	760	1,610
Drew, Jerry	2250A	Short	Not renewed	SAC099	35.85	94.4	9	0	0	0
Jaeger, William L. and Patricia A.	7-07-20-W0002	Short	19_SA	SAC091	Sutter Bypass		112	385	485	870
Morehead, Joseph A. and Brenda	14-06-200-5789A	Short	19_SA	SAC091	Sutter Bypass		48	115	140	255
Heidrick & McGinnis Properties, LP	14-06-200-1176A	Short	19_SA	SAC091	33.75	92.4	72	360	200	560
B&D Family Partnership	14-06-200-4178A	Short	19_SA	SAC091	33.75	92.4	14	36	24	60
MCM Properties, Inc.	14-06-200-7827A	Long	19_SA	SAC091	33.75	91.8	201	860	610	1,470
Richter, Henry D. et al.	14-06-200-4362A	Long	19_SA	SAC091	33.2	92.0	583	1,750	1,030	2,780
Furlan, Emile and Simone, Family Trust	14-06-200-1175A	Short	19_SA	SAC091	32.5	90.9	195	23	30	53
Wallace, Kenneth L. Living Trust	14-06-200-1175A-X	Short	19_SA	SAC091	32.5, 33.2	91.6	195	547	320	867
Byrd, Anna C., and Osborne, Jane ¹²	14-06-200-1595A	Long	19_SA	SAC091	26.8, 30.5	89.6	316	1,065	200	1,265
Subtotal										267,311
Water Budget Area 21: Sacramento River Right Bank, RM 62.1 – RM 92.8										
Edson, Wallace L. and Mary O.	906A	Short	Not renewed	SAC083	33.85	92.5	25	0	0	0
Driver, William A., et al.	14-06-200-939A-1	Short	21_SA	SAC083	32.5	91.2	82	54	106	160
Driver, Gregory E.	14-06-200-939A-2	Short	21_SA	SAC083	32.5	91.2	80	6	14	20
Giovanetti, Emil Joseph	14-06-200-991A	Short	21_SA	SAC083	31.5	90.5	150	470	50	520
Heidrick, James E. and Terry E., Trustee	14-06-200-1616A	Short	21_SA	SAC083	30.6	89.5	42	69	16	85
Knights Landing Investors, LLC	14-06-200-4604A	Long	21_SA	SAC083	32.1, 30.7, 29.7	88.6	820	2,680	960	3,640
Heidrick, James E. and Terry E., Trustee	14-06-200-8322A	Short	21_SA	SAC083	29.2, 30.3	89.6	204	370	60	430
Hershey Land Company	7972A	Long	Not renewed	SAC083	28.1	87.2	727	0	0	0
Sacramento River Ranch LLC	14-06-200-2149A	Long	21_SA	SAC083	16.6, 17.0, 22.5	84.5		4,000	0	4,000
Yolo Land Trust	14-06-200-2148A	Long	21_SA	SAC083	16.1	78.1		630	0	630
Conaway Preservation Group	14-06-200-7422A	Long	21_SA	SAC074	12.0	73.6		40,190	672	40,862
Woodland-Davis Clean Water Agency	14-06-200-7422X	Long	21_SA	SAC074	12.0	73.6		10,000	0	10,000
Wilson Ranch Partnership	14-06-200-4520A	Long	21_SA	SAC074	11.1	72.9		370	0	370
Reclamation District 900 and 1000	14-06-200-1779A	Short	21_SA	SAC074	9.35	71.1	142	281	123	404

Central Valley Project Settlement Contractor	Contract		CalSim 3 Representation		Geographic Location			Contract Amount (AF/year)		
	Number	Form	Demand Unit	Diversion Node	Contract River Mile	Adjusted River Mile ¹³	Size (acres)	Base	Project	Total
McClatchy Partners, LLC and Riveryby LLC	14-06-200-934A	Short	21_SA	SAC074	5.25	66.9	177	470	30	500
Subtotal										61,621
Water Budget Area 17: Sacramento River Left Bank, RM 82.7 – RM 87.5										
Byrd, Anna C., and Osborne, Jane ¹²	14-06-200-1595A	Long						0	0	0
Subtotal										0
Water Budget Area 22: Sacramento River Left Bank, RM 64.9 – RM 82.7										
Pleasant Grove-Verona MWC ¹¹	14-06-200-5520A	District	22_SA1	SAC082	19.6	81.7		23,790	2,500	26,290
Natomas Central MWC ¹¹	14-06-200-885A	Long	22_SA1	SAC082	2.15,6.1,7.5, 4.1,16.0,19.6	81.5		98,200	22,000	120,200
Odysseus Farms Partnership	14-06-200-8574A	Short	22_SA1	SAC076	19.6	81.7	121	220	410	630
Cummings, William C.	7-07-20-W0054	Short	22_SA1	SAC076	18.7	81.0	130	180	120	300
Lauppe, Burton H., and Kathryn L.	14-06-200-1289A	Short	22_SA1	SAC076	18.45	80.6	264	720	230	950
Natomas Basin Conservancy	14-06-200-1364A	Short	22_SA1	SAC076	18.2	80.2	271	221	269	490
Lauppe, Alan, Joan Johnson, and Warren Lauppe	14-06-200-1364Y	Short	22_SA1	SAC076	18.2	80.2	12	6	14	20
Lauppe, Burton H., and Kathryn L.	14-06-200-1364X	Short	22_SA1	SAC076	18.2	80.2	110	153	197	350
Siddiqui, Javed and Amna	2065A	Short	Not renewed	SAC076	10.75	72.5	88	0	0	0
Willey, Edwin A. and Marjorie E.	14-06-200-3556A	Short	22_SA1	SAC076	10.75	72.5	46	75	20	95
Siddiqui, Javed and Amna	7941A	Long	Not renewed	SAC076	10.25	71.8	280	0	0	0
Sacramento, County of	14-06-200-2404A	Short	22_SA1	SAC076	9.3	71.2	250	520	230	750
Subtotal										150,075
Total								1,761,376	330,182	2,091,558

AF = acre-feet; CVP = Central Valley Project; GIS = geographical information system; ID = Irrigation District; LLC = Limited Liability Company; LP = Limited Partnership; MWC = Mutual Water Company; RM = river mile; WBA = Water Budget Area.

¹ Contract for City of Redding estimated as 50% of 21,000 AF based on Census 2000 population located within Foothill, Hill 900 and Cascade pressure zones.

² Contract for City of Redding estimated as 50% of 21,000 AF based on Census 2000 population located within Enterprise Zone.

³ Contract for Anderson-Cottonwood ID estimated as 85% of 125,000 AF based on historical delivery data. Additional 85% of 3,000 AF water rights.

⁴ Contract for Anderson-Cottonwood ID estimated as 15% of 125,000 AF based on historical delivery data. Additional 15% of 3,000 AF water rights.

⁵ Contract for Maxwell ID estimated as 5% of 18,000 AF based on GIS land-use surveys of cropped area.

⁶ Contract for Maxwell ID estimated as 95% of 18,000 AF based on GIS land-use surveys of cropped area.

⁷ Contract for Glenn-Colusa ID estimated as 55% of 825,000 AF based on GIS land-use surveys of cropped area.

⁸ Contract for Glenn-Colusa ID estimated as 45% of 825,000 AF based on GIS land-use surveys of cropped area.

⁹ Contract for Sutter MWC estimated as 94% of 226,000 AF based on GIS land-use surveys of cropped area. Diversion from Tisdale Pumping Plant.

¹⁰ Contract for Sutter MWC estimated as 6% of 226,000 AF based on GIS land-use surveys of cropped area.

¹¹ Pleasant Grove-Verona MWC and Natomas Central MWC also divert water from the Natomas Cross Canal.

¹² Contractor located in WBA 17S and WBA 19. For modeling purposes, land assumed to be in WBA 19

¹³ CalSim 3 river mile refers to most upstream diversion point. RM 61.7 corresponds to the I Street Bridge in the City of Sacramento. This is RM 0.0 for Reclamation contract river miles.

Table 2. CVP San Joaquin River Exchange Contracts

Central Valley Project Exchange Contractor	Contract Number	CalSim 3 Representation		Point of Diversion	Contract Amount (AF/year)
		Demand Unit	Diversion Node		
Columbia CC	I1r-1144	64_XA	MDOTA	Mendota Pool	59,000
San Luis CC	I1r-1144	72_XA1	SJR180, ARY010	San Joaquin River at Sack Dam via Arroyo Canal	163,600
Central California ID (north) ¹	I1r-1144	72_XA3	XCC055	Delta-Mendota Canal via Wolfson Bypass and Outside and Main canals	140,000
Central California ID (South)	I1r-1144	72_XA2	MDOTA, XCC010	Mendota Pool via Outside and Main canals	392,400
Firebaugh CC	I1r-1144	73_XA	DMC111, MDOTA	Delta-Mendota Canal, Check 20 and Mendota Pool	85,000

AF = acre-feet; CC = Canal Company; CVP = Central Valley Project; ID = Irrigation District.

¹ Under an exchange agreement with Reclamation (contract 9-07-20-W0812), Central California ID makes available up to 2,500 AF of exchange water to be delivered by Reclamation from the California Aqueduct (MP 89.7) to the Dos Palos Area Joint Powers Authority (JPA).

Table 3. CVP Schedule 2 Water Rights and Contract Amounts

Central Valley Project Schedule 2 Contractor ¹	Contract Number	CalSim 3 Representation		Point of Diversion	Contract Amount (AF/year)	
		Demand Unit	Diversion Node		Irrigation	Schedule 2
Dudley & Indart/Coelho/Hansen	14-06-200-4448A	91_PA	MDOTA	Fresno Slough	-	2,280
Fresno Slough WD	14-06-200-4019A	91_PA	MDOTA	Fresno Slough	4,000	866
James ID	14-06-200-700A	91_PA	MDOTA	Fresno Slough	35,300	9,700
Meyers Farms Family Trust	9-07-20-W1608	91_PA	MDOTA	Fresno Slough	-	210
Kenneth and Karen Carvalho Revocable Trust	11-WC-20-0026	91_PA	MDOTA	Fresno Slough	-	600
Reclamation District 1606	14-06-200-3802A	91_PA	MDOTA	Fresno Slough	228	342
Terra Linda Farms	14-06-200-7859A	91_PA	MDOTA	Fresno Slough	2,080	1,332
Tranquility ID	14-06-200-701A	91_PA	MDOTA	Fresno Slough	13,800	20,200
Tranquility PUD	14-06-200-3537A	91_PA	MDOTA	Fresno Slough	70	93
Total					55,478	35,623

AF = acre-feet; CVP = Central Valley Project; ID = Irrigation District; PUD = Public Utility District; WD = Water District.

¹ Schedule 2 water is all water delivered without charge under the authority of Section 14 of the Reclamation Project Act of 1939, as a permanent adjustment and settlement of a district's asserted claims to water in the Fresno Slough tributary to the San Joaquin River in fulfillment of such rights pursuant to Contract No. I7R-1145, "Contract for Purchaser of Miller & Lux Water Rights," dated July 27, 1939.

² Formerly Coelho Family Trust

Table 4. CVP Water Service Contracts for Service Areas North of Delta

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Sacramento and Trinity River Divisions⁴					
Clear Creek CSD	489-A	02_PA	WKYTN	7,300 ¹	-
Centerville CSD	14-06-200-3367X	02_PU	WKYTN	-	2,900 ³
Clear Creek CSD	14-06-200-489-A		WKYTN	-	8,000 ¹
Shasta CSD	14-06-200-862A		WKYTN	-	1,000
Shasta County WA	14-06-200-3367A		WKYTN	-	332 ²
Keswick CSA	N/A		WKYTN	-	400 ²
Bella Vista WD	14-06-200-851A		03_PA	SAC294	18,000 ⁸
Bella Vista WD	14-06-200-851A	03_PU2	SAC294	-	6,578 ⁸
City of Shasta Lake	4-07-20-W1134	03_PU1	SHSTA	-	4,400
Mountain Gate CSD	14-06-200-6998		SHSTA	-	1,350
Jones Valley CSA	N/A		SHSTA	-	290 ²
Redding, City of (Buckeye WTP)	14-06-200-5272A	03_PU3	WKYTN	-	6,140
Subtotal				25,300	31,390
Corning Canal Unit					
Corning WD	14-06-200-6575	04_PA1	CCL005	20,000	-
Proberta WD	14-06-200-7311			3,500	-
Thomes Creek WD	14-06-200-5271A			6,400	-
Subtotal				29,900	0
Tehama-Colusa Canal Unit					
Kirkwood WD	7-07-20-W0056	04_PA2	TCC022	2,100	-
Glide WD	W0040	07N_PA	TCC036	10,500	-
Kanawha WD	466-A			45,000	-

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Orland-Artois WD	14-06-200-8382A			53,000	-
Colusa, County of					
Holthouse WD (65%) (assigned)	1-07-20-W0224			1,513	-
Colusa, County of	14-06-200-8310A			10	-
4-M WD (assigned)	0-07-20-W0183			5,415	-
Colusa County WD (assigned)	1-07-20-W0220			5,667	-
Cortina WD (assigned)	0-07-20-W0206			1,615	-
Glenn Valley WD (assigned)	1-07-20-W0219			1,730	-
Holthouse WD (35%) (assigned)	1-07-20-W0224			814	-
La Grande WD (assigned)	0-07-20-W0190			2,090	-
Myers-Marsh MWC (assigned)	1-07-20-W0225			242	-
Colusa County WD	14-06-200-304-A			62,200	-
Colusa, County of	14-06-200-8310A			914	-
Davis WD	14-06-200-6001A			4,000	-
Dunnigan WD	14-06-200-399-A			19,000	-
La Grande WD	7-07-20-W0022			5,000	-
Westside WD	14-06-200-8222			65,000	-
Subtotal				285,800	0
Black Butte Unit					
4-E WD	3-07-20-W0312	N/A	N/A	35	-
Elk Creek CSD	3-07-20-W0312				100
Stony Creek WD	2-07-20-W0261	SCKWD	EPARK		3,345
U.S. Forest Service (Salt Creek)	14-06-200-3621A	N/A	N/A		45
Whitney Construction, Inc.	14-06-200-5749A	N/A	N/A		25

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
U.S. Forest Service	14-06-200-3464A	N/A	N/A		10
Colusa, County of (Stonyford)	4-07-20-W0348	N/A	N/A		40
Subtotal				35	3,565
Colusa Basin Drain					
Colusa Drain MWC ⁵	8-07-20-W0693	08N_PA	CBD049	5,600	-
Colusa Drain MWC ⁵	8-07-20-W0693	08S_PA	CBD028	49,000	-
Colusa Drain MWC ⁵	8-07-20-W0693	21_PA	KLR005	15,400	-
Subtotal				70,000	0
American River Division					
El Dorado ID	14-06-200-1357A	ELDID	FOLSM	-	7,550
El Dorado County Water Agency ¹¹	07-WC-20-3534	ELDID	FOLSM		15,000
City of Roseville	14-06-200-3474A	26N_PU1	FOLSM	-	32,000
Sacramento County WA	6-07-20-W1372	26S_PU4, 26S_PU6	SAC052, SAC062	-	22,000
San Juan WD	6-07-20-W1373	26N_PU2, 26N_PU3	FOLSM	-	24,200
East Bay MUD	14-06-200-5183A	EBMUD	FOLSM	-	133,000
SMUD	14-06-200-5198A	60N_PU	FOLSM	-	30,000
Sacramento County WA (SMUD assignment)	N/A	26S_PU4, 26S_PU6	SAC052, SAC062	-	30,000
Placer County WA	14-06-200-5082A	⁶	FOLSM	-	35,000
Subtotal				0	328,750
Delta Division					
Contra Costa WD	175r-3401A	CCWD	RSL004, OMR021, VCT002	-	195,000
Subtotal				0	195,000

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Other					
Feather WD	14-06-200-171-A	16_PA	FTR020	20,000	
City of West Sacramento ^{7,9}	0-07-20-W0187	21_PU	SAC066		23,600
Subtotal				20,000	23,600
Total				431,035	582,305

AF = acre-feet; CSA = County Service Area; CSD = Community Service District; CVP = Central Valley Project; ID = Irrigation District; M&I = municipal and industrial; MUD = Municipal Utility District; MWC = Mutual Water Company; N/A = not applicable; SMUD = Sacramento Municipal Utility District; WA = Water Agency; WD = Water District; WTP = water treatment plant.

¹ Split between irrigation and M&I use based on an urban demand of 8,000 AF/year.

² Shasta County WA provides water to water purveyors in Shasta County, including 500 AF to Keswick CSA, 190 AF to Jones Valley CSA, and 332 AF elsewhere. For modeling purposes, it is assumed that 332 AF are made available to contractors in 02_PU. Under a 2008 transfer agreement, 100 AF of Shasta County WA water were transferred from Keswick CSA to Jones Valley CSA.

³ Centerville Community Services District as part of the liquidation of the Townsend Flat Water Ditch Company's pre-1914 water rights holdings on Clear Creek has secured 900 AF of CVP supplies in addition to the 2,900 AF. These quantities of supply are not subject to cutbacks, and the water may be transferred to any other purveyor in the Redding Basin.

⁴ The McConnell Foundation as part of the liquidation of the Townsend Flat Water Ditch Company's pre-1914 water rights holdings on Clear Creek, has secured 5,100 AF of CVP supplies. These quantities of supply are not subject to cutbacks, and the water may be transferred to any other purveyor in the Redding Basin. For modeling purposes, it is assumed that this water is available to urban municipalities.

⁵ Division of the 70,000 AF/year contract for the Colusa Drain MWC is based on GIS land use (irrigated area) and split 8%, 70%, and 22% among the 3 demand units 08N_PA, 08S_PA, and 21_PA.

⁶ Placer County WA currently has no facilities to take delivery of CVP water from Folsom Lake.

⁷ Contract amount for West Sacramento includes water right water and CVP project water.

⁸ Split between irrigation and M&I use for Bella Vista WD based on Reclamation delivery data for water years 2000 – 2009.

⁹ The City of West Sacramento also could be categorized as a CVP settlement contractor.

¹⁰ Seven districts have assigned a total of 20,000 AF to Colusa County Water District.

¹¹ For modeling purposes, it is assumed that 7,500 AF of El Dorado County Water Agency CVP contract water would be available to El Dorado Irrigation District for diversion at Folsom Lake.

Table 5. CVP Contract Amounts for Service Areas South of Delta

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Upper Delta-Mendota Canal					
Byron-Bethany ID ⁶	14-06-200-785	71_PA8	DMC011	20,600	-
Tracy, City of	14-06-200-7858A	50_PU	DMC016	-	10,000
Tracy, City of (from Banta-Carbona ID)	14-06-200-4305A-B			-	5,000
Tracy, City of (from West Side ID)	7-07-20-W0045-B			-	5,000
Banta-Carbona ID	14-06-200-4305A	50_PA1	DMC021	20,000	-
West Side ID	7-07-20-W0045			5,000	-
Hospital WD	14-06-200-922	71_PA1	DMC030	34,105	-
West Stanislaus ID	14-06-200-1072	71_PA2	DMC034	50,000	-
Kern Canon WD	14-06-200-922	71_PA3	DMC034	7,700	-
Patterson ID ¹	14-06-200-3598A	71_PA4	DMC044	22,500	-
Del Puerto WD	14-06-200-922	71_PA5	DMC044	12,060	-
Salado WD	14-06-200-922		DMC044	9,130	-
Orestimba WD	14-06-200-922		DMC044	15,860	-
Sunflower WD	14-06-200-922		DMC044	16,625	-
Davis WD	14-06-200-922		DMC064	5,400	-
Foothill WD	14-06-200-922	71_PA6	DMC064	10,840	-
Mustang WD	14-06-200-922		DMC064	14,680	-
Quinto WD	14-06-200-922		DMC064	8,620	-
Romero WD	14-06-200-922		DMC064	5,190	-
Subtotal					258,310

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Lower Delta-Mendota Canal, Volta Wasteway, Mendota Pool					
Laguna WD	2-07-20-W0266	72_PA	XCC025	800	-
San Luis WD (north) ²	14-06-200-7773A (part)	73_PA1	DMC070	62,540	-
Eagle Field WD	14-06-200-7754	73_PA2	DMC105	4,550	-
Mercy Springs WD	14-06-200-3365A		DMC105	2,842	-
Oro Loma WD	14-06-200-7823		DMC105	600	-
Panoche WD ³	14-06-200-7864A (part)	73_PA3	DMC091	27,000	-
Westlands WD (from Broadview WD)	14-06-200-8092	90_PA1		27,000	-
Westlands WD DD No.2 (from Mercy Springs WD)	14-06-200-3365A-C			4,198	-
Westlands WD DD No. 1 (from Widren WD)	14-06-200-8018-B		COC001	2,990	-
Westlands WD DD No. 1 (from Centinella WD)	7-07-20-W0055-B			2,500	-
Westlands WD DD No. 1 (from Oro Lomo WD)	14-06-200-7823			4,000	-
Subtotal				139,020	0
San Felipe Division					
San Benito County WD	8-07-20-W0130	N/A	SLUIS	35,550	8,250
Santa Clara Valley WD	7-07-20-W0023	N/A	SLUIS	33,100	119,400
Pajaro Valley WD	14-06-200-3365A-B	N/A	SLUIS	6,260	
State of California	14-06-200-8033A	N/A	SLUIS	-	10
Subtotal				74,910	127,660
California Aqueduct					
U.S. Department of Veteran Affairs	3-07-20-W1124	71_PU2	CAA066	-	850
California State Parks and Recreation ⁴	14-06-200-4353A		CAA071	2,250	-
Los Banos Gravel Company	8-07-20-W0151		CAA071	250	-
San Luis WD (south) ²	14-06-200-7773A (part)	73_PA3	CAA087	62,540	-

Central Valley Project Water Service Contractor	Contract Number	CalSim 3 Representation		Contract (AF/year)	
		Demand Unit	Diversion Node	Irrigation	M&I
Panoche WD ³	14-06-200-7864A (part)	90_PA1, 90_PA2	CAA109	67,000	-
Pacheco WD	6-07-20-W0469		CAA109	10,080	-
Westlands WD, CA Joint Reach 4	14-06-200-495A		CAA109	219,000	-
Westlands WD, CA Joint Reach 5			CAA143, COC001	570,000	-
Westlands WD, CA Joint Reach 6			CAA155	219,000	-
Westlands WD, CA Joint Reach 7			CAA172	142,000	-
Avenal, City of	14-06-200-4619A		90_PU	CAA165	-
Coalinga, City of	14-06-200-4173A	COC001		-	10,000
Huron, City of	14-06-200-7081A	CAA156		-	3,000
Subtotal				1,292,120	17,350
Eastside Division⁷					
Central San Joaquin WCD	4-07-20-W0330			80,000	
Stockton East WD	4-07-20-W0329			75,000	
Subtotal				155,000	
Cross Valley Canal					
Fresno, County of	14-06-200-8292A	N/A	D855	3,000	-
Hills Valley ID	14-06-200-8466A	N/A		3,346	-
Kern-Tulare WD	14-06-200-8601A	N/A		40,000	-
Lower Tule River ID	14-06-200-8237A	N/A		31,102	-
Pixley ID	14-06-200-8238A	N/A		31,102	-
Kern-Tulare WD	14-06-200-8367A	N/A		13,300	-
Tri-Valley WD	14-06-200-8565A	N/A		1,142	-
Fresno, County of	14-06-200-8293A	N/A		5,308	-
Subtotal				128,300	0

AF = acre-feet; CVP = Central Valley Project; DD = Distribution District; ID = Irrigation District; M&I = municipal and industrial; N/A = not applicable; WD = Water District

¹ Patterson ID contract includes 6,000 AF/year of water furnished at no cost to replace for San Joaquin River water rights water.

² The total contract amount for San Luis WD is 125,080 AF. This is split between CalSim 3 demand units 73_PA1 and 73_PA3, based on a GIS analysis of land area, in proportions 50% and 50%.

³ The contract amount for Panoche WD is split between the Delta-Mendota Canal and Joint Reach of the California Aqueduct based on information received from the San Luis and Delta-Mendota Authority.

⁴ The contract with California State Parks and Recreation states that 5,000 AF of water will be provided for use in parks adjacent to San Luis Reservoir and that Reclamation shall provide 45% and DWR shall provide 55%.

⁵ Byron-Bethany ID diverts up to 5,000 AF/year under pre-1914 water rights water pumped from Clifton Court Forebay and the California Aqueduct upstream from Banks Pumping Plant.

⁶ Under a contract between Byron-Bethany ID and Musco Olive, the district may provide up to 800 AF/year of its CVP water to Musco Olive, which is represented by demand unit 71_PU1.

⁷ Under the 1988 Stipulation and Agreement, Oakdale ID and South San Joaquin ID may receive the annual inflow to New Melones Reservoir, up to a maximum of 600,000 AF/year. Reclamation is obligated to make up 33% of any deficiency below 600,000 AF/year with withdrawals from storage.

Table 6. Refuge Level 2 and Level 4 Amounts per Exhibit B of Water Service Contracts

Wildlife Refuge Area	Contract Number	CalSim 3 Representation		Point of Diversion	Water Supply Contract Amounts (AF/year) ⁸			
		Demand Unit	Diversion Node		Level 2 Amount ¹	Incremental Level 4	Replacement Water ²	Total Level 4 Amount
Sacramento River Hydrologic Region								
Sacramento NWR	01-WC-20-1757	08N_PR1	GCC027	Glenn-Colusa Canal	46,400	3,600	–	50,000
Delevan NWR	01-WC-20-1757	08N_PR2	GCC039	Glenn-Colusa Canal	20,950	9,050	–	30,000
Colusa NWR	01-WC-20-1757	08S_PR	GCC056, CBD037	Glenn-Colusa Canal, Colusa Basin Drain	25,000	–	–	25,000
Sutter NWR ⁵	01-WC-20-1757	17S_PR	SBP028, SEC009	Sutter Bypass, Sutter Extension Canal	23,500 ⁶	6,500	–	30,000
Gray Lodge WA ⁵	01-WC-20-1755	17N_PR	JBC002	Joint Board Canal	35,400 ⁷	8,600	–	44,000
Subtotal					151,250	27,750	0	179,000
San Joaquin River and Tulare Lake Hydrologic Regions								
Merced NWR ⁴	01-WC-20-1756	63_PR2	DED010	Deadman Creek	13,500	2,500	–	16,000
San Luis NWR – East Bear Creek Unit ⁵	01-WC-20-1756	63_PR3	EBP048	Eastside Bypass	8,863	4,432	–	13,295
Volta WA	01-WC-20-1756	72_PR1	VLW008	Volta Wasteway	13,000 ³	3,000	3,000	16,000
San Luis NWR – Kesterson Unit	01-WC-20-1758	72_PR2	XCC033	Main and Outside canals	10,000 ³	–	6,500	10,000
San Luis NWR – Freitas Unit	01-WC-20-1758				5,290 ³	–	1,763	5,290
San Luis NWR – San Luis Unit	01-WC-20-1758	72_PR3	ARY010	Arroyo Canal	19,000 ³	–	5,650	19,000
San Luis NWR – West Bear Creek Unit	01-WC-20-1758				7,207	3,603	–	10,810
Los Banos WA	01-WC-20-1756	72_PR4	XCC033	Main and Outside canals	16,670	8,330	–	25,000
North Grasslands WA – Salt Slough Unit	01-WC-20-1756		ARY010,	Arroyo Canal,	6,680	3,340	–	10,020
North Grasslands WA – China Island Unit	01-WC-20-1756		XCC033	Main and Outside canals	6,967	3,483	–	10,450
Grassland RCD (north)	01-WC-20-1754	72_PR5	LBN012, XCC054	Los Banos Creek, Main and Outside canals	125,000	55,000	–	180,000

Wildlife Refuge Area	Contract Number	CalSim 3 Representation		Point of Diversion	Water Supply Contract Amounts (AF/year) ⁸			
		Demand Unit	Diversion Node		Level 2 Amount ¹	Incremental Level 4	Replacement Water ²	Total Level 4 Amount
Grassland RCD (south)	01-WC-20-1754	72_PR6	ARY013, XCC025	Arroyo Canal, Main and Outside canals				
Mendota WA ⁵	01-WC-20-1756	91_PR	MDOTA	Mendota Pool	27,594 ³	2,056	9,094	29,650
Kern NWR ⁵	01-WC-20-1758	N/A	D856	California Aqueduct	9,950	15,050	–	25,000
Pixley NWR ⁵	01-WC-20-1758	N/A	D856	California Aqueduct	1,280	4,720	–	6,000
Subtotal					271,001	105,514	26,007	376,515
Total					422,251	133,264	26,007	555,515

"–" = No contract or water right; AF = acre-feet; CVP = Central Valley Project; CVPIA = Central Valley project Improvement Act; ID = Irrigation District; NWR = National Wildlife Refuge; RCD = Resource Conservation District; Reclamation = U.S. Department of the Interior, Bureau of Reclamation; SWP = State Water Project; WA = Wildlife Area or Wildlife Management Area; WD = Water District.

¹ Level 2 amounts do not include conveyance losses.

² Replacement water is water that Reclamation provides from CVP yield to certain CVPIA refuges through contracts with management agencies executed before the passage of the CVPIA. It is to be replaced to the CVP when water can be acquired from willing sellers.

³ Contract amounts include replacement water. Without replacement water the contract amounts are as follows: San Luis Unit, 13,350 AF; Kesterson Unit, 3,500 AF; Freitas Unit, 3,527 AF; Mendota WA, 18,500 AF, and Volta WA, 10,000 AF.

⁴ Merced NWR receives 15,000 AF of mitigation water from Merced ID in accordance with Article 45 of its 1964 Federal Energy Regulatory Commission (FERC) license, which expires 2/28/2014. An additional 1,000 AF is met through groundwater pumping.

⁵ Deliveries of Level 2 water are limited by conveyance constraints.

⁶ Includes 3,000 AF of non-CVP water to be delivered from Sutter Extension WD

⁷ Includes 18,841 AF of non-CVP water to be delivered by Biggs-West Gridley WD and SWP. Biggs-West Gridley WD delivers up to 6,949 AF to primary lands and up to 3,936 AF to secondary lands within the district. The SWP delivers up to 5,079 AF of surplus water to primary lands and 2,877 AF of surplus water to secondary lands

⁸ Level 2 and incremental Level 4 amounts differ from Reclamation 1989 reports because of inclusion of replacement water. Level 2 water under the water supply contracts includes 26,007 AF of Replacement water. Under the water supply contracts, incremental Level 4 amounts have been reduced by the same amount.

Table 7. Maximum Annual State Water Project Table A Amounts

State Water Project Long-term Contractors	CalSim 3 Representation		Maximum Table A Amount (AF/year)
	Demand Unit	Diversion Node(s)	
Feather River			
County of Butte ¹	N/A	N/A	27,500
Plumas County FC&WCD	PLMAS	BGC002	2,700
City of Yuba City	16_PU	FTR031	9,600
Total for Feather River			39,800
North Bay			
Napa County FC&WCD	NAPA	BKR004	29,025
Solano County WA	N/A	BKR004	47,756
Total for North Bay			76,781
South Bay			
Alameda County FC&WCD, Zone 7	N/A	SBA009,SBA020	80,619
Alameda County WD	N/A	SBA029	42,000
Santa Clara Valley WD	N/A	SBA036	100,000
Total for South Bay Aqueduct			222,619
San Joaquin Valley			
Oak Flat WD	71_PA7	CAA046	5,700
County of Kings	N/A	CAA181	9,305
Dudley Ridge WD	N/A	CAA184	41,350
Empire West Side ID	N/A	CAA173	3,000
Kern County WA	N/A	Multiple nodes	982,730
Tulare Lake Basin WSD	N/A	CAA183	87,471
Total for San Joaquin Valley			1,129,556

State Water Project Long-term Contractors	CalSim 3 Representation		Maximum Table A Amount (AF/year)
	Demand Unit	Diversion Node(s)	
Central Coast			
San Luis Obispo County FC&WCD	N/A	CSB103	25,000
Santa Barbara County FC&WCD	N/A	CSB115	45,486
Total for Central Coast			70,486
Southern California			
Antelope Valley-East Kern WA	N/A	ESB324	144,844
Santa Clarita Valley	N/A	CSTIC	95,200
Coachella Valley WD	N/A	ESB407	138,350
Crestline-Lake Arrowhead WA	N/A	SVWRD	5,800
Desert WA	N/A	ESB408	55,750
Littlerock Creek ID	N/A	ESB355	2,300
Mojave WA	N/A	ESB403	89,800
Metropolitan WD	N/A	Multiple nodes	1,911,500
Palmdale WD	N/A	ESB347	21,300
San Bernardino Valley MWD	N/A	ESB414	102,600
San Gabriel Valley MWD	N/A	ESB415	28,800
San Geronio Pass WA	N/A	ESB420	17,300
Ventura County FCD	N/A	CSTIC	20,000
Total for Southern California			2,633,544
Table A Total			4,172,786

AF = acre-feet; FC&WCD = Flood Control and Water Conservation District; FCD = Flood Control District; ID = Irrigation District; MWD = Metropolitan Water District of Southern California; N/A = not applicable; WA = Water Agency; WD = Water District; WSD = Water Storage District.

¹ County of Butte wholesales water to municipal and industrial water purveyors in the county. In CalSim 3, water from the county is available for demand units 11_NU1 (California Water Service Company – Oroville), 12_NU1 (Thermalito ID), and 16_PU (City of Yuba City).

Table 8. Feather River Service Area Contracts and Water Rights

Water Purveyor	Point of Diversion	CalSim 3 Representation		Contract Amount (AF/year)			Contract Period of Diversion
		Demand Unit	Diversion Node	Table A	Settlement Contract	Water Right	
Western Canal WD	Thermalito Afterbay	11_SA1	THRMA	–	150,000	145,000	Mar – Oct
Richvale ID ¹		11_SA2		–	148,500	1,350	
Biggs-West Gridley WD ¹		11_SA3		–	160,000	1,000	
Butte WD ¹				–	131,500	1,650	
Sutter Extension WD ¹	Thermalito Afterbay	11_SA4	THRMA	–	110,000	1,000	Apr – Oct
	Sunset Pumps		FTR039	–	50,000 ⁵	–	
Butte County	N/A	N/A	N/A	27,500	–	–	Jan – Dec
Thermalito ID	Power Canal	11_NU1	PCL000	–	–	8,000 ²	Jan – Dec
South Feather Water and Power Agency	Lake Oroville	13_NU1	OROVL	–	–	17,555 ³	Jan – Dec
Plumas MWC	Feather River	15S_SA	FTR018	–	8,000	6,000	Jan – Dec
Garden Highway MWC		16_SA	FTR014	–	12,870	5,130	Apr – Oct
Oswald WD			FTR021	–	2,850	150	Apr – Oct
Tudor MWC			FTR018	–	4,790	210	Jan – Dec
City of Yuba City		16_PU	FTR031	9,600	–	–	Jan – Dec
Subtotal				37,100	778,510	187,045	
Miscellaneous diverters ⁶	Feather River		N/A		26,650		
Feather WD ⁷	Feather River	16_PA	FTR021		20,000		
Total					1,015,555		

“–” = No contract or water right; AF = acre-feet; CVP = Central Valley Project; DWR = California Department of Water Resources; ID = Irrigation District; MWC = Mutual Water Company; WD = Water District.

¹ The Joint WD Board includes Biggs-West Gridley WD, Butte WD, Richvale ID, and Sutter Extension WD. The Joint WD Board signed a settlement agreement with DWR for 550,000 AF of water, subject to deficiencies (settlement water), and 5,000 AF of water, not subject to deficiencies, in dry years. These amounts are shared among the member districts, for modeling purposes, as shown in the table. Additionally, the districts have the right to divert up to 10,000 AF of carriage water during the irrigation season, if it is returned to the Feather River above the City of Yuba City as operational spills.

² The amount of water available to Thermalito ID depends on the water supply at Lake Wilenor. The maximum entitlement is 8,000 AF/year represented in CalSim 3.

³ The amount of water available to South Feather Water and Power Agency depends on the water supply at Ponderosa Reservoir. The maximum entitlement is 17,555 AF/year.

⁴ DWR has additional agreements with Last Chance Creek WD, which claims pre-1914 water rights on the Middle Fork of the Feather River.

⁵ The amount of water that may be diverted at the Sunset Pumps is increased to 65,000 AF when the unimpaired runoff to Lake Oroville for the period April 1 through July 31, as forecasted by DWR on May 10, is equal to or exceeds 1,500,000 AF, or when such forecasted runoff when added to the previous year's April 1 to July 31 runoff into Lake Oroville is equal to or exceeds 3,000,000 AF.

⁶ These include minor diverters who hold riparian and appropriative water rights.

⁷ Feather WD is a CVP contractor but is included here to show the total demands on Lake Oroville.