SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX A

WATER PRODUCTION AND USE

WATER YEAR 2011-12

July 2013

TABLE A-1

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

EASTERN MUNICIPAL WATER DISTRICT
2011-12
Quantities in Acre Feet

	PRODUCTION					USE						RECLAIMED WASTEWATER			
MONTH YEAR	WELLS	IMPORT 1/	EXPORT FROM SMRW 2/	NET IMPORT	TOTAL	AG	COMM	DOM	TOTAL	LOSS 3/	TOTAL USE	REUSE IN SMRW 4/	REUSE OUTSIDE SMRW	OTHER REUSE 5/	TOTAL
2011															
OCT	0	1,514	225	1,289	1,289	10	268	947	1,225	64	1,289	221	690	295	1,206
NOV	0	1,099	0	1,099	1,099	1	198	845	1,044	55	1,099	176	389	658	1,223
DEC	0	788	0	788	788	11	116	622	749	39	788	131	405	732	1,268
2012															
JAN	0	873	0	873	873	14	138	677	829	44	873	146	469	636	1,251
FEB	0	853	0	853	853	1	146	663	810	43	853	85	443	657	1,185
MAR	0	813	0	813	813	12	136	624	772	41	813	104	579	581	1,264
APR	0	911	43	868	868	6	156	663	825	43	868	84	678	444	1,206
MAY	0	1,864	670	1,194	1,194	7	249	878	1,134	60	1,194	161	662	479	1,302
JUNE	0	2,222	418	1,804	1,804	2	410	1,302	1,714	90	1,804	287	876	50	1,213
JULY	0	1,694	0	1,694	1,694	10	404	1,195	1,609	85	1,694	298	937	28	1,263
AUG	0	1,834	0	1,834	1,834	16	440	1,286	1,742	92	1,834	319	990	(52)	1,257
SEPT	0	1,954	0	1,954	1,954	6	476	1,374	1,856	98	1,954	352	907	17	1,276
TOTAL	0	16,419	1,356	15,063	15,063	96	3,137	11,076	14,309	754	15,063	2,364	8,025	4,525	14,914

1/ Does not include deliveries to Rancho California WD, Elsinore Valley MWD or Western MWD.
2/ Portion of imported supplies exported for delivery to Eastern MWD's retail customers located outside the Watershed.
3/ Loss = 5%
4/ No sewage diverted to RCWD for 2012 Water Year for treatment at Santa Rosa Water Reclamation Facility.
Reuse within Watershed includes 549 AF sold to RCWD and 329 sold to Pechanga Band.
5/ Other Reuse includes changes of storage in Winchester and Sun City storage ponds, evaporation and percolation losses, and discharges to Temescal Creek in the Santa Ana Watershed of 285 AF.

TABLE A-2

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

ELSINORE VALLEY MUNICIPAL WATER DISTRICT
2011-12
Quantities in Acre Feet

	PRODUCTION			USE						
MONTH YEAR	WELLS	IMPORT	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS *	TOTAL USE	WASTEWATER EXPORTED
2011										
OCT	0	419	419	6	90	311	407	12	419	94
NOV	0	764	764	3	168	570	741	23	764	100
DEC	0	351	351	6	56	279	341	10	351	101
2012										
JAN	0	347	347	1	53	283	337	10	347	98
FEB	0	501	501	1	84	401	486	15	501	100
MAR	0	391	391	1	72	306	379	12	391	100
APR	0	257	257	1	42	206	249	8	257	98
MAY	0	854	854	1	196	631	828	26	854	105
JUNE	0	755	755	1	195	536	732	23	755	99
JULY	0	774	774	2	180	569	751	23	774	109
AUG	0	1,156	1,156	2	353	766	1,121	35	1,156	106
SEPT	0	829	829	2	234	568	804	25	829	95
TOTAL	0	7,398	7,398	27	1,723	5,426	7,176	222	7,398	1,205

* Loss percentage within the Santa Margarita River Watershed is determined using the calculation to determine District-wide unaccounted for water by comparing District-wide annual supply and customer deliveries, and is assumed to be constant for all months.

TABLE A-3

SANTA MARGARITA RIVER WATERSHED

MONTHLY WATER PRODUCTION AND USE

FALLBROOK PUBLIC UTILITY DISTRICT

2011-12

Quantities in Acre Feet

	DISTRICT WIDE PRODUCTION				SMRW PRODUCTION			SMRW USE						WASTEWATER			
MONTH YEAR	TOTAL LAKE SKINNER DIVERSIONS 1/	LAKE SKINNER DIVERSIONS DELIVERED	TOTAL DISTRICT IMPORT 2/	TOTAL DISTRICT SUPPLY 3/	SMRW LAKE SKINNER	SMRW IMPORT	TOTAL SMRW PRODUCTION	AG	COMM	DOM	TOTAL DELIVERED IN SMRW	LOSS 4/	TOTAL USE IN SMRW	FROM SMRW	REUSE IN SMRW	FROM U. S. NWS 5/	EXPORT FROM SMRW
2011																	
OCT	0	0	1,098	1,098	0	734	734	446	30	198	674	60	734	76	2	0	74
NOV	0	0	554	554	0	544	544	305	27	167	499	45	544	78	1	0	77
DEC	0	0	750	750	0	320	320	151	19	124	294	26	320	84	1	0	83
2012																	
JAN	0	0	821	821	0	508	508	280	44	142	466	42	508	63	1	1	61
FEB	0	0	713	713	0	435	435	228	35	136	399	36	435	76	1	1	74
MAR	0	0	623	623	0	351	351	181	17	124	322	29	351	88	1	1	86
APR	0	0	658	658	0	321	321	147	19	129	295	26	321	80	1	1	78
MAY	0	0	1,117	1,117	0	415	415	226	20	135	381	34	415	82	2	1	79
JUNE	0	0	1,381	1,381	0	769	769	474	24	208	706	63	769	71	2	1	68
JULY	0	0	1,504	1,504	0	909	909	585	34	215	834	75	909	84	3	1	80
AUG	0	0	1,715	1,715	0	879	879	547	31	229	807	72	879	91	3	0	88
SEPT	0	0	1,645	1,645	0	1,069	1,069	691	37	253	981	88	1,069	85	3	2	80
TOTAL	0	0	12,579	12,579	0	7,254	7,254	4,261	337	2,060	6,658	596	7,254	958	21	9	928

1/ Diverted under Permit No. 11356.

2/ Includes 143 acre feet from Capra Well located in San Luis Rey Watershed and remaining supply from San Diego County Water Authority.

3/ A portion of the District is outside the Santa Margarita River Watershed.

4/ Loss percentage within the Santa Margarita River Watershed is determined using the calculation to determine District-wide unaccounted for water by comparing District-wide annual supply and customer deliveries, and is assumed to be constant for all months.

5/ United States Naval Weapons Station.

TABLE A-4

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

METROPOLITAN WATER DISTRICT
DELIVERIES IN DOMENIGONI VALLEY
2011-12
Quantities in Acre Feet

	PRODUCTION			USE					
MONTH YEAR	WELLS	IMPORT TO SMRW	TOTAL IN SMRW	AG	COMM/ DOM*	GW RECHARGE	TOTAL DELIVERED	LOSS **	TOTAL USE
2011									
OCT	0	44	44	44	0	0	44	0	44
NOV	0	18	18	18	0	0	18	0	18
DEC	0	24	24	24	0	0	24	0	24
2012									
JAN	0	21	21	21	0	0	21	0	21
FEB	0	14	14	14	0	0	14	0	14
MAR	0	20	20	20	0	0	20	0	20
APR	0	54	54	54	0	0	54	0	54
MAY	0	64	64	64	0	0	64	0	64
JUNE	0	58	58	58	0	0	58	0	58
JULY	0	44	44	44	0	0	44	0	44
AUG	0	41	41	41	0	0	41	0	41
SEPT	0	64	64	64	0	0	64	0	64
TOTAL	0	466	466	466	0	0	466	0	466

* Construction water
** Points of delivery located at metered pumps on San Diego Canal and thus the losses in the MWD system are zero.

TABLE A-5

SANTA MARGARITA RIVER WATERSHED

MONTHLY WATER PRODUCTION AND USE

PECHANGA INDIAN RESERVATION

2011-12

Quantities in Acre Feet

	PRODUCTION				USE					
MONTH YEAR	WELLS ON RESERVATION 1/	DELIVERED GROUNDWATER FROM RCWD 2/	RECLAIMED WASTEWATER FROM EMWD 3/	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS 4/	TOTAL USE
2011										
OCT	47	21	37	105	54	31	16	101	4	105
NOV	38	13	6	57	14	31	9	54	3	57
DEC	28	12	2	42	6	25	9	40	2	42
2012										
JAN	36	19	3	58	10	28	10	48	10	58
FEB	37	12	12	61	19	30	12	61	0	61
MAR	30	19	11	60	18	26	12	56	4	60
APR	32	21	21	74	31	24	12	67	7	74
MAY	67	20	49	136	69	39	23	131	5	136
JUNE	67	21	51	139	76	35	24	135	4	139
JULY	97	10	53	160	81	45	28	154	6	160
AUG	93	7	41	141	70	47	27	144	(3)	141
SEPT	97	2	43	142	65	44	33	142	0	142
TOTAL	669	177	329	1,175	513	405	215	1,133	42	1,175

1/ Total production attributed to Eduardo, Eagle III, Kelsey, Ballpark and Zone V Rock 1 wells.

2/ Water provided from Rancho California WD Well Nos. 119, 122, and 211.

3/ Reclaimed wastewater provided by Eastern MWD via Wheeling Agreement with Rancho California WD shown as a component of production for Table A-5 only to illustrate water budget for Reservation. Actual production for Watershed accounted for on Table A-1 and Table 7.1 for Eastern MWD.

4/ Loss determined as Total Production less Total Delivered.

TABLE A-6

SANTA MARGARITA RIVER WATERSHED

MONTHLY WATER PRODUCTION AND USE

RAINBOW MUNICIPAL WATER DISTRICT

2011-12

Quantities in Acre Feet

	PRODUCTION			USE				
MONTH YEAR	**LOCAL**	**IMPORT TO WATERSHED**	**TOTAL IN WATERSHED**	**AG**	**COMMERCIAL/ DOMESTIC**	**TOTAL DELIVERIES**	**LOSS***	**TOTAL USE**
2011								
OCT	0	243	243	207	14	221	22	243
NOV	0	178	178	153	9	162	16	178
DEC	0	107	107	91	6	97	10	107
2012								
JAN	0	100	100	84	7	91	9	100
FEB	0	96	96	79	8	87	9	96
MAR	0	90	90	76	6	82	8	90
APR	0	120	120	103	6	109	11	120
MAY	0	113	113	97	6	103	10	113
JUNE	0	206	206	174	13	187	19	206
JULY	0	178	178	150	12	162	16	178
AUG	0	210	210	177	14	191	19	210
SEPT	0	251	251	211	17	228	23	251
TOTAL	0	1,892	1,892	1,602	118	1,720	172	1,892

* Loss = 10% of use

TABLE A-7

SANTA MARGARITA RIVER WATERSHED

MONTHLY WATER PRODUCTION AND USE

RANCHO CALIFORNIA WATER DISTRICT

2011-12

Quantities in Acre Feet

	PRODUCTION							USE									VAIL	RECLAIMED WASTEWATER
MONTH YEAR	WELLS 1/	EXPORT 2/	NET WELLS	IMPORT 3/	EXPORT 4/	NET IMPORT	TOTAL	AG	AG/ DOM	COMM	DOM	SMR RELEASE 5/	IMPORT RECHARGE TO STORAGE 6/	TOTAL USE	LOSS 7/	TOTAL	RELEASE AND RECHARGE 8/	REUSED IN SMRW 9/
2011																		
OCT	1,929	23	1,906	3,669	44	3,625	5,531	2,238	580	419	2,625	252	153	6,267	(736)	5,531	(1)	298
NOV	1,438	23	1,415	1,859	27	1,832	3,247	1,628	406	330	2,057	145	191	4,757	(1,510)	3,247	0	294
DEC	2,088	18	2,070	1,750	14	1,736	3,806	961	251	304	1,694	252	110	3,572	234	3,806	0	308
2012																		
JAN	1,972	24	1,948	2,231	15	2,216	4,164	1,283	333	235	1,369	614	300	4,134	30	4,164	0	245
FEB	1,832	17	1,815	2,031	13	2,018	3,833	968	263	260	1,387	479	132	3,489	344	3,833	0	283
MAR	1,695	21	1,674	1,849	19	1,830	3,504	1,285	326	297	1,700	448	(51)	4,005	(501)	3,504	0	247
APR	1,976	16	1,960	2,084	13	2,071	4,031	718	185	237	1,353	315	56	2,864	1,167	4,031	0	261
MAY	2,250	17	2,233	4,211	31	4,180	6,413	1,335	335	296	1,665	285	53	3,969	2,444	6,413	(1)	264
JUNE	2,322	29	2,293	5,365	70	5,295	7,588	2,822	731	392	2,894	326	(59)	7,106	482	7,588	(1)	235
JULY	2,264	25	2,239	5,852	72	5,780	8,019	2,804	692	452	3,014	201	(58)	7,105	914	8,019	(1)	276
AUG	2,828	31	2,797	6,168	77	6,091	8,888	2,991	722	445	3,099	207	(195)	7,269	1,619	8,888	0	283
SEPT	2,348	40	2,308	5,326	100	5,226	7,534	3,838	961	550	3,747	184	70	9,350	(1,816)	7,534	(1)	243
TOTAL	24,942	284	24,658	42,395	495	41,900	66,558	22,871	5,785	4,217	26,604	3,708	702	63,887	2,671	66,558	(5)	3,237

1/ Wells recovered 24,942 AF from older alluvium. An additional 177 AF was delivered to Pechanga Indian Reservation and is shown on Table A-5.
2/ Groundwater used in San Mateo Watershed.
3/ Includes 24,282 AF direct use (13,109 AF to Rancho Division and 11,173 AF to Santa Rosa Division); 14,643 AF direct recharge; and 3,470 AF from MWD WR-34.
4/ Import used in San Mateo Watershed.
5/ 32 AF into Murrieta Creek from Wells 101, 102, and 118; 54 AF into Santa Gertrudis Creek from Wells 106 and 108;
0 AF from System River Meter; 152 AF from potable connection to WR-34 outlet pipe and 3,470 AF from MWD WR-34.
6/ 14,643 AF of direct recharge less 13,941 AF of import recovery.
7/ Loss = Total production less total use and includes 137 acre feet pumped from wells 102, 121, 135, 146 and 155 directly into reclaimed water system.
8/ Vail releases and the related Vail recharge are computed as Total Release less Inflow to be bypassed. See Tables 3.3 and 7.4 for explanation of minus 5 AF in 2011-12.
9/ Does not include 549 AF reclaimed wastewater purchased from EMWD.

TABLE A-8

SANTA MARGARITA RIVER WATERSHED

MONTHLY WATER PRODUCTION AND USE

U.S.M.C. - CAMP PENDLETON

2011-12

Quantities in Acre Feet

	PRODUCTION			USE						RECLAIMED WASTEWATER				EXPORTS		
MONTH YEAR	AG LOCAL	CAMP SUPPLY	TOTAL	AGRICULTURE IN SMRW 1/	AGRICULTURE OUT SMRW 1/	CAMP SUPPLY IN SMRW 2/	CAMP SUPPLY OUT SMRW 2/	TOTAL EXPORT	TOTAL IN SMRW 3/	RECLAIMED USE IN SMRW 4/	RECLAIMED USE OUT SMRW 4/	EXPORTED TO OCEANSIDE OUTFALL	TOTAL 5/	TOTAL 6/	WASTE WATER RETURNS 7/	NET EXPORT
2011																
OCT	0	428	428	0	0	171	257	257	171	0	26	222	248	505	153	352
NOV	0	270	270	0	0	108	162	162	108	0	9	260	269	431	97	334
DEC	0	311	311	0	0	124	187	187	124	0	10	242	252	439	111	328
2012																
JAN	0	366	366	0	0	146	220	220	146	0	10	229	239	459	131	328
FEB	0	238	238	0	0	95	143	143	95	0	12	240	252	395	85	310
MAR	0	238	238	0	0	95	143	143	95	0	21	232	253	396	85	311
APR	0	260	260	0	0	104	156	156	104	0	21	210	231	387	93	294
MAY	0	370	370	0	0	148	222	222	148	0	50	192	242	464	132	332
JUNE	0	531	531	0	0	212	319	319	212	0	60	134	194	513	190	323
JULY	0	565	565	0	0	226	339	339	226	0	61	147	208	547	202	345
AUG	0	567	567	0	0	227	340	340	227	0	61	144	205	545	203	342
SEPT	0	532	532	0	0	213	319	319	213	0	52	143	195	514	190	324
TOTAL	0	4,676	4,676	0	0	1,869	2,807	2,807	1,869	0	393	2,395	2,788	5,595	1,672	3,923

1/ There was no Agricultural Irrigation in Water Year 2012.
2/ Camp Supply water use is divided with 40% used inside the SMRW and 60% used outside the SMRW.
3/ Assumes no losses.
4/ Reclaimed use for irrigation of golf course, landscaping and park areas.
5/ All wastewater treated at Southern Regional Tertiary Treatment Plant (SRTTP) beginning December 2008.
6/ Agriculture and Camp Supply use outside the SMRW, reclaimed use outside the SMRW, plus Outfall to Oceanside.
7/ Percent Camp Supply reclaimed estimated as 2,788 AF divided by 4,676 AF equals 59.60%. Wastewater returns estimated at 59.60% of Camp Supply use outside of SMRW.

TABLE A-9

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

U. S. NAVAL WEAPONS STATION, FALLBROOK ANNEX
2011-12
Quantities in Acre Feet

	PRODUCTION			USE				WASTEWATER
MONTH YEAR	LOCAL	IMPORT TO WATERSHED 1/	TOTAL	AG	COMM/ DOM	LOSS 2/	TOTAL USE	EXPORTED
2011								
OCT	0.0	3.2	3.2	0.0	2.9	0.3	3.2	0.0
NOV	0.0	4.8	4.8	0.0	4.4	0.4	4.8	0.0
DEC	0.0	10.7	10.7	0.0	9.7	1.0	10.7	0.0
2012								
JAN	0.0	2.7	2.7	0.0	2.5	0.2	2.7	1.0
FEB	0.0	2.0	2.0	0.0	1.8	0.2	2.0	1.0
MAR	0.0	6.7	6.7	0.0	6.1	0.6	6.7	1.0
APR	0.0	2.7	2.7	0.0	2.5	0.2	2.7	1.0
MAY	0.0	2.0	2.0	0.0	1.8	0.2	2.0	1.0
JUNE	0.0	4.3	4.3	0.0	3.9	0.4	4.3	1.0
JULY	0.0	3.1	3.1	0.0	2.8	0.3	3.1	1.0
AUG	0.0	3.1	3.1	0.0	2.8	0.3	3.1	0.0
SEPT	0.0	3.1	3.1	0.0	2.8	0.3	3.1	2.0
TOTAL	0.0	48.4	48.4	0.0	44.0	4.4	48.4	9.0

1/ Import via Fallbrook Public Utility District
2/ Loss = 10% of Use

TABLE A-10

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION
2011-12
Quantities in Acre Feet

	PRODUCTION			USE					
MONTH YEAR	WELLS	IMPORT	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS *	TOTAL USE
2011									
OCT	81	144	225	29	18	122	169	56	225
NOV	50	67	117	17	15	105	137	(20)	117
DEC	8	52	60	10	14	67	91	(31)	60
2012									
JAN	59	41	100	12	12	74	98	2	100
FEB	56	78	134	13	15	81	109	25	134
MAR	48	65	113	14	15	69	98	15	113
APR	45	76	121	15	34	75	124	(3)	121
MAY	48	148	196	8	27	139	174	22	196
JUNE	80	172	252	39	43	148	230	22	252
JULY	81	181	262	19	49	161	229	33	262
AUG	83	194	277	27	50	211	288	(11)	277
SEPT	111	153	264	47	48	166	261	3	264
TOTAL	750	1,371	2,121	250	340	1,418	2,008	113	2,121

* Loss = Total production less total delivered

TABLE A-11

SANTA MARGARITA RIVER WATERSHED

MISCELLANEOUS WATER PRODUCTION AND IMPORTS

2011-12

Quantities in Acre Feet

	IMPORT	PRODUCTION					
MONTH YEAR	WESTERN MWD IMPORTS TO IMPROVEMENT DISTRICT A	ANZA MUTUAL WATER COMPANY	RANCHO CALIFORNIA OUTDOOR RESORTS	QUIET OAKS MOBILE HOME PARK	LAKE RIVERSIDE ESTATES	HAWTHORN WATER SYSTEM	JOJOBA HILLS SKP RESORT
2011							
OCT	3.70	2.19	7.70	1.50	18.87	2.97	6.39
NOV	3.10	0.95	6.50	1.30	1.75	2.37	4.13
DEC	3.40	1.74	5.10	1.00	18.03	1.63	4.17
2012							
JAN	4.20	1.28	4.90	0.90	2.80	1.63	5.19
FEB	3.30	1.61	4.50	0.90	10.71	1.47	4.88
MAR	3.50	1.30	5.20	1.00	2.84	1.63	4.28
APR	3.10	1.74	5.70	1.10	31.56	2.42	6.85
MAY	5.70	2.30	6.60	1.30	32.12	2.93	6.47
JUNE	4.30	3.17	7.20	1.40	56.05	2.84	6.64
JULY	4.40	3.77	7.90	1.50	59.54	2.29	7.39
AUG	5.40	3.32	8.10	1.60	42.79	2.13	6.65
SEPT	4.40	2.85	7.60	1.50	33.25	2.06	6.08
SUBTOTAL			77.00 *	15.00 *			
			429.40 **	8.30 **			
TOTAL	48.50	26.22	506.40	23.30	310.31	26.37	69.12

* Annual production estimated due to meter malfunction, monthly quantities calculated assuming typical monthly distribution.

** Estimated non-metered use.

SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX B

WATER PRODUCTION AND USE

WATER YEAR 1965-66 TO WATER YEAR 2011-12

July 2013

TABLE B-1

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

EASTERN MUNICIPAL WATER DISTRICT
Quantities in Acre Feet

	PRODUCTION					USE 2/						RECLAIMED WASTEWATER					
WATER YEAR	WELLS	IMPORT 1/	EXPORT FROM SMRW	NET IMPORT	TOTAL	AG	COMM	DOM	TOTAL	LOSS	TOTAL USE	REUSE IN SMRW 3/	REUSE OUTSIDE SMRW	OTHER REUSE 4/	RELEASE TO RIVER	RECHARGE	TOTAL
1966	0	1,604	0	1,604	1,604	1,520	0	4	1,524	80	1,604	0	0		0	100	100
1967	0	1,630	0	1,630	1,630	1,544	0	4	1,548	82	1,630	0	0		0	100	100
1968	0	1,464	0	1,464	1,464	1,386	0	5	1,391	73	1,464	0	0		0	100	100
1969	0	1,741	0	1,741	1,741	1,648	0	6	1,654	87	1,741	0	0		0	100	100
1970	0	1,417	0	1,417	1,417	1,340	0	7	1,346	71	1,417	0	0		0	101	101
1971	0	1,383	0	1,383	1,383	1,306	0	8	1,314	69	1,383	0	0		0	119	119
1972	0	1,470	0	1,470	1,470	1,388	0	8	1,396	74	1,470	0	0		0	242	242
1973	0	1,533	0	1,533	1,533	1,447	0	10	1,456	77	1,533	0	0		0	217	217
1974	0	1,601	0	1,601	1,601	1,511	0	10	1,521	80	1,601	0	0		0	193	193
1975	0	1,969	0	1,969	1,969	1,859	0	11	1,871	98	1,969	0	0		0	253	253
1976	145	2,493	0	2,493	2,638	2,356	0	150	2,506	132	2,638	134	0		0	155	289
1977	431	2,947	0	2,947	3,378	2,723	64	423	3,209	169	3,378	244	0		0	70	314
1978	375	2,551	0	2,551	2,926	2,409	0	371	2,780	146	2,926	300	0		0	75	375
1979	289	1,894	0	1,894	2,183	1,784	0	290	2,074	109	2,183	350	0		0	147	497
1980	281	1,192	0	1,192	1,473	1,116	0	283	1,399	74	1,473	375	0		0	220	595
1981	282	716	0	716	998	663	0	285	948	50	998	375	0		0	304	679
1982	321	1,112	0	1,112	1,433	1,038	0	323	1,361	72	1,433	375	0		0	386	761
1983	106	1,211	0	1,211	1,317	1,131	0	120	1,251	66	1,317	375	0		0	466	841
1984	236	699	0	699	935	644	0	244	888	47	935	400	0		0	525	925
1985	314	679	0	679	993	624	0	319	943	50	993	450	0		0	565	1,015
1986	229	760	0	760	989	700	0	239	940	49	989	600	0		0	509	1,109
1987	89	1,155	0	1,155	1,244	638	0	543	1,182	62	1,244	650	0		0	554	1,204
1988	4	2,047	0	2,047	2,051	524	0	1,424	1,948	103	2,051	650	0		0	650	1,300
1989	685	3,746	0	3,746	4,431	1,146	0	3,064	4,209	222	4,431	1,058	0		0	1,636	2,694
1990	492	8,578	2,977	5,601	6,093	978	0	4,810	5,788	305	6,093	1,567	0		0	2,160	3,727
1991	456	16,621	7,142	9,479	9,935	851	0	8,587	9,438	497	9,935	1,282	0		0	2,272	3,554
1992	527	13,486	4,893	8,593	9,120	29	0	8,635	8,664	456	9,120	1,323	0		245	2,385	3,953
1993	524	7,287	1,894	5,393	5,917	36	0	5,585	5,621	296	5,917	1,709	990	(285)	192	2,020	4,626
1994	232	10,082	2,932	7,150	7,382	0	0	7,013	7,013	369	7,382	2,687	2,465	694	0	0	5,846
1995	182	11,539	6,914	4,625	4,807	16	0	4,551	4,567	240	4,807	2,154	1,357	2,551	0	0	6,062
1996	299	11,730	6,770	4,960	5,259	0	0	4,996	4,996	263	5,259	2,979	2,473	520	0	0	5,972
1997	408	5,093	1,809	3,284	3,692	0	0	5,226	5,226	(1,534)	3,692	3,126	2,319	882	0	0	6,327
1998	240	6,609	1,492	5,117	5,357	0	0	5,090	5,090	267	5,357	2,949 5/	2,139	2,374	0	0	7,462
1999	669	7,118	2,719	4,327	4,996	0	0	4,746	4,746	250	4,996	3,741 6/	3,070	1,063	0	0	7,874
2000	630	9,179	1,923	7,256	7,886	0	0	7,493	7,493	393	7,886	4,669 7/	3,664	(15)	0	0	8,318
2001	355	9,219	3,271	5,948	6,303	0	0	5,989	5,989	314	6,303	4,571 8/	3,249	1,208	0	0	9,028
2002	13	12,777	4,954	8,117	8,130	0	0	7,724	7,724	406	8,130	4,843 9/	4,863	462	0	0	10,168
2003	0	14,175	5,113	9,062	9,062	0	0	8,610	8,610	452	9,062	3,542 10/	2,955	4,681	0	0	11,178
2004	0	17,381	8,243	9,138	9,138	0	0	8,960	8,960	178	9,138	3,221	3,688	5,427	0	0	12,336
2005	0	16,336	5,478	10,858	10,858	0	0	10,749	10,749	109	10,858	2,664 11/	2,690	8,986	0	0	14,340
2006	0	21,034	6,873	14,161	14,161	0	0	13,453	13,453	708	14,161	3,108 12/	3,510	7,396	0	0	14,014
2007	0	21,161	5,763	15,398	15,398	0	0	14,628	14,628	770	15,398	3,550 13/	5,960	4,593	0	0	14,103
2008	0	18,714	3,762	14,952	14,952	0	0	14,204	14,204	748	14,952	1,450	5,925	6,864	0	0	14,239
2009	0	16,919	2,447	14,472	14,472	0	0	13,748	13,748	724	14,472	2,615	6,786	5,241	0	0	14,642
2010	0	15,024	1,472	13,552	13,552	0	0	12,874	12,874	678	13,552	2,882	7,026	4,803	0	0	14,711
2011	0	14,675	283	14,392	14,392	131	2,879	10,662	13,672	720	14,392	2,561	7,241	5,140	0	0	14,942
2012	0	16,419	1,356	15,063	15,063	96	3,137	11,076	14,309	754	15,063	2,364	8,025	4,525	0	0	14,914

1/ Does not include deliveries to RCWD, Elsinore Valley MWD and Western MWD.

2/ Beginning in 2011, Use reported based on metered customer demands. Prior years reporting based on supply meter data and is not complete for all categories.

3/ Reuse within Watershed includes noted amount of sewage distributed to RCWD for treatment by RCWD, reclaimed wastewater sold to RCWD for delivery to RCWD customers, and beginning in 2009, reclaimed wastewater sold to the Pechanga Band.

4/ Other Reuse includes changes in storage in Winchester and Sun City storage ponds, evaporation and percolation losses, and discharges to the Santa Ana Watershed.

5/ Includes 905 AF of sewage diverted to RCWD.

6/ Includes 1,159 AF of sewage diverted to RCWD.

7/ Includes 1,162 AF of sewage diverted to RCWD.

8/ Includes 1,201 AF of sewage diverted to RCWD.

9/ Includes 1,219 AF of sewage diverted to RCWD.

10/ Includes 1,056 AF of sewage diverted to RCWD.

11/ Includes 574 AF of sewage diverted to RCWD.

12/ Includes 910 AF of sewage diverted to RCWD.

13/ Includes 797 AF of sewage diverted to RCWD.

TABLE B-2

SANTA MARGARITA RIVER WATERSHED
MONTHLY WATER PRODUCTION AND USE

ELSINORE VALLEY MUNICIPAL WATER DISTRICT
Quantities in Acre Feet

	PRODUCTION			USE						
WATER YEAR	WELLS	IMPORT	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS *	TOTAL USE	WASTEWATER EXPORTED
1966										
1967										
1968										
1969										
1970										
1971										
1972										
1973										
1974										
1975										
1976										
1977										
1978										
1979										
1980										
1981										
1982										
1983										
1984										
1985										
1986										
1987										
1988										
1989	0	1,341	1,341				1,341	0	1,341	74
1990	0	2,255	2,255				2,255	0	2,255	114
1991	0	2,421	2,421				2,421	0	2,421	134
1992	0	2,190	2,190				2,190	0	2,190	140
1993	0	2,964	2,964	539	84	2,341	2,964	0	2,964	150
1994	0	3,232	3,232	687	93	2,452	3,232	0	3,232	170
1995	0	3,127	3,127	520	100	2,507	3,127	0	3,127	185
1996	0	4,197	4,197	871	109	3,217	4,197	0	4,197	213
1997	0	4,296	4,296	848	118	3,330	4,296	0	4,296	226
1998	0	5,100	5,100	667	1,396	3,037	5,100	0	5,100	247
1999	0	6,133	6,133	921	1,626	3,586	6,133	0	6,133	254
2000	0	7,174	7,174	1,089	1,971	4,114	7,174	0	7,174	279
2001	0	6,215	6,215	925	1,815	3,475	6,215	0	6,215	310
2002	0	7,596	7,596	1,173	1,902	4,521	7,596	0	7,596	412
2003	0	7,091	7,091	63	2,665	4,363	7,091	0	7,091	483
2004	0	8,438	8,438	96	3,238	5,104	8,438	0	8,438	600
2005	0	8,215	8,215	104	3,044	5,067	8,215	0	8,215	927
2006	0	9,819	9,819	127	4,118	5,574	9,819	0	9,819	938
2007	0	10,811	10,811	150	4,509	6,152	10,811	0	10,811	837
2008	0	9,951	9,951	115	4,149	5,687	9,951	0	9,951	901
2009	0	9,075	9,075	147	2,015	6,913	9,075	0	9,075	1,069
2010	0	7,926	7,926	133	1,718	6,075	7,926	0	7,926	1,120
2011	0	7,425	7,425	94	1,517	5,539	7,150	275	7,425	1,130
2012	0	7,398	7,398	27	1,723	5,426	7,176	222	7,398	1,205

* For period prior to 2011, assumes no loss. Beginning in 2011, loss percentage within the Santa Margarita River Watershed is determined using the calculation to determine District-wide unaccounted for water by comparing District-wide annual supply and customer deliveries, and is assumed to be constant for all months.

TABLE B-3.1

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

FALLBROOK PUBLIC UTILITY DISTRICT

Quantities in Acre Feet

	PRODUCTION									USE				
WATER YEAR	TOTAL LAKE SKINNER DIVERSIONS	LAKE SKINNER DIVERSIONS DELIVERED	WELLS	TOTAL DISTRICT IMPORT	DELUZ AREA IMPORT	FALLBROOK AREA IMPORT	SMRW IMPORT 1/	TOTAL SMRW IMPORT	TOTAL SMRW PRODUCTION	AG	COMM/ DOM	TOTAL IN SMRW	LOSS 2/	TOTAL USE IN SMRW
1966			176	11,169	0	11,169	3,351	3,351	3,404	2,735	328	3,063	341	3,404
1967			16	9,508	0	9,508	2,852	2,852	2,857	2,253	319	2,572	285	2,857
1968			13	11,411	0	11,411	3,423	3,423	3,427	2,554	531	3,085	342	3,427
1969			178	9,458	0	9,458	2,837	2,837	2,891	1,787	814	2,601	290	2,891
1970			305	11,794	0	11,794	3,538	3,538	3,630	2,649	617	3,266	364	3,630
1971			7	11,350	0	11,350	3,405	3,405	3,407	2,386	681	3,067	340	3,407
1972			0	13,054	0	13,054	3,916	3,916	3,916	2,749	775	3,524	392	3,916
1973			0	10,610	38	10,572	3,172	3,210	3,210	2,156	732	2,888	322	3,210
1974			0	12,911	134	12,777	3,833	3,967	3,967	2,703	868	3,571	396	3,967
1975			0	11,492	213	11,279	3,384	3,597	3,597	2,420	816	3,236	361	3,597
1976			0	13,147	431	12,716	4,196	4,627	4,627	3,200	965	4,165	462	4,627
1977			20	13,435	587	12,848	4,625	5,212	5,232	3,536	1,174	4,710	522	5,232
1978			97	12,626	651	11,975	4,551	5,202	5,299	3,504	1,265	4,769	530	5,299
1979			187	12,865	961	11,904	4,762	5,723	5,910	3,820	1,498	5,318	592	5,910
1980			192	13,602	1,191	12,411	5,213	6,404	6,596	4,258	1,678	5,936	660	6,596
1981			87	16,878	1,994	14,884	6,549	8,543	8,630	5,688	2,144	7,832	798	8,630
1982			0	13,270	1,805	11,465	5,274	7,079	7,079	4,614	1,862	6,476	603	7,079
1983			0	12,298	1,969	10,329	4,751	6,720	6,720	4,320	1,871	6,191	529	6,720
1984			0	15,429	2,609	12,820	5,897	8,506	8,506	5,814	2,077	7,891	615	8,506
1985			0	14,256	2,358	11,898	5,473	7,831	7,831	5,187	2,135	7,322	509	7,831
1986			0	15,383	2,794	12,589	5,791	8,585	8,585	5,698	2,319	8,017	568	8,585
1987			0	15,313	2,986	12,327	5,670	8,656	8,656	5,793	2,281	8,074	582	8,656
1988			28	14,460	2,559	11,901	5,474	8,033	8,061	5,181	2,348	7,529	532	8,061
1989			94	16,179	3,007	13,172	6,059	9,066	9,160	5,620	2,706	8,326	834	9,160
1990			15	17,568	3,745	13,823	6,358	10,103	10,118	6,275	2,878	9,153	965	10,118
1991			46	13,939	2,871	11,068	5,091	7,962	8,008	5,146	2,314	7,460	548	8,008
1992			45	13,698	2,950	10,748	4,943	7,893	7,938	5,285	2,201	7,486	452	7,938
1993			86	12,695	2,010	10,685	4,915	6,925	7,011	4,329	2,349	6,678	333	7,011
1994			83	13,124	2,246	10,878	5,004	7,250	7,333	4,282	2,666	6,948	385	7,333
1995			3	11,620	2,208	9,412	4,330	6,538	6,541	3,818	2,798	6,316	225	6,541
1996			0	14,168	2,733	11,435	5,260	7,993	7,993	4,411	3,247	7,658	335	7,993
1997			0	14,005	2,688	11,317	5,206	7,894	7,894	4,351	3,249	7,600	294	7,894
1998			0	11,757	1,803	9,954	4,579	6,382	6,382	3,245	2,798	6,043	339	6,382
1999			0	14,307	1,572	12,735	5,858	7,430	7,430	3,748	3,271	7,019	411	7,430
2000			0	15,983	2,705	14,478	6,660	9,365	9,365	5,138	3,903	9,041	324	9,365
2001			0	15,249	2,562	12,687	5,836	8,398	8,398	4,413	3,537	7,950	448	8,398
2002			0	17,422	2,900	14,522	6,680	9,580	9,580	5,185	4,036	9,221	359	9,580
2003			0	15,864	3,393	12,471	5,737	9,130	9,130	6,041	3,737	9,778	(648)	9,130
2004			0	19,640	5,027	14,613	6,722	11,749	11,749	7,018	4,222	11,240	509	11,749
2005 R	1,261	1,261	0	13,986	3,101	10,885	5,007	8,108	9,369	4,654	3,581	8,235	1,134	9,369
2006 R	106	106	0	18,297	3,994	14,303	6,579	10,573	10,679	5,958	4,019	9,977	702	10,679
2007	0	0	0	20,750	5,087	15,664	7,205	12,292	12,292	7,271	4,500	11,771	521	12,292
2008 R	31	31	0	15,508	3,307	12,202	5,613	8,920	8,951	4,492	3,962	8,454	497	8,951
2009	0	0	0	15,355	2,767	12,588	5,790	8,557	8,557	4,151	3,896	8,047	510	8,557
2010 R	20	20	0	12,752	2,438	10,314	4,754	7,183	7,203	3,576	3,195	6,771	432	7,203

1/ Total SMRW production equals SMRW Import plus 30% local (1966-1971).
2/ Loss = Total production less total use.
R - Revised

TABLE B-3.2

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

FALLBROOK PUBLIC UTILITY DISTRICT

Quantities in Acre Feet

	DISTRICT WIDE PRODUCTION				SMRW PRODUCTION			SMRW USE					
WATER YEAR	TOTAL LAKE SKINNER DIVERSIONS 1/	LAKE SKINNER DIVERSIONS DELIVERED	TOTAL DISTRICT IMPORT 2/	TOTAL DISTRICT SUPPLY 3/	SMRW LAKE SKINNER	SMRW IMPORT	TOTAL SMRW PRODUCTION	AG	COMM	DOM	TOTAL DELIVERED IN SMRW	LOSS 4/	TOTAL USE IN SMRW
2011	284	284	11,264	11,548	284	6,234	6,518	3,742	327	1,990	6,059	459	6,518
2012	0	0	12,579	12,579	0	7,254	7,254	4,261	337	2,060	6,658	596	7,254

1/ Diverted under Permit No. 11356.
2/ Includes production from Capra Well located in San Luis Rey Watershed and supply from San Diego County Water Authority.
3/ A portion of the District is outside the Santa Margarita River Watershed.
4/ Loss percentage within the Santa Margarita River Watershed is determined using the calculation to determine District-wide unaccounted for water by comparing District-wide annual supply and customer deliveries, and is assumed to be constant for all months.

TABLE B-4

SANTA MARGARITA RIVER WATERSHED

ANNUAL WASTEWATER PRODUCTION AND DISTRIBUTION

FALLBROOK PUBLIC UTILITY DISTRICT

Quantities in Acre Feet

WATER YEAR	TOTAL WASTEWATER PRODUCTION	PRECENT WASTEWATER FROM SMRW	WASTEWATER FROM SMRW	WASTEWATER REUSED IN SMRW	WASTEWATER FROM U.S. NWS 1/		WASTEWATER EXPORTED FROM SMRW	PERCENT WASTEWATER FROM SLR WATERSHED 2/	WASTEWATER IMPORTED FROM SLR WATERSHED
1966	395	81	320		0		0	19	75
1967	460	80	368		0		0	20	92
1968	524	80	419		0		0	20	105
1969	588	79	465		0		0	21	123
1970	652	78	509		0		0	22	143
1971	717	78	559		0		0	22	158
1972	782	77	602		0		0	23	180
1973	847	76	644		0		0	24	203
1974	912	75	684		0		0	25	228
1975	976	75	732		0		0	25	244
1976	1,040	74	770		0		0	26	270
1977	1,105	73	807		0		0	27	298
1978	1,170	72	842		0		0	28	328
1979	1,234	72	888		0		0	28	346
1980	1,298	71	922		0		0	29	376
1981	1,363	70	954		0		0	30	409
1982	1,428	69	985		0		0	31	443
1983	1,492	69	1,029		26	E	1,003	0	0
1984	1,556	68	1,058		26	E	1,032	0	0
1985	1,621	67	1,086		26	E	1,060	0	0
1986	1,685	66	1,112		18	P	1,094	0	0
1987	1,750	66	1,155		27		1,128	0	0
1988	1,815	65	1,180		25		1,155	0	0
1989	1,881	64	1,204		22		1,182	0	0
1990	1,952	66	1,298		27		1,271	0	0
1991	1,622	60	973		11		962	0	0
1992	1,730	63	1,090		7		1,083	0	0
1993	2,051	62	1,271		16		1,255	0	0
1994	1,834	58	1,073		5		1,068	0	0
1995	1,941	60	1,165		12		1,153	0	0
1996	1,799	58	1,040		5		1,035	0	0
1997	1,780	58	1,027		6		1,021	0	0
1998	2,297	65	1,490		8		1,482	0	0
1999	2,175	64	1,382		5		1,377	0	0
2000	2,164	66	1,426		7		1,419	0	0
2001	2,191	65	1,424	24	8		1,392	0	0
2002	2,061	61	1,262	28	9		1,225	0	0
2003	2,276	61	1,390	21	10		1,359	0	0
2004	2,199	62	1,363	26	8		1,329	0	0
2005	2,505	58	1,457	24	16		1,417	0	0
2006	2,479	58	1,429	26	8		1,395	0	0
2007	1,951	48	932	29	12		891	0	0
2008	1,940	43	838	28	11		799	0	0
2009	1,900	46	872	31	12		829	0	0
2010	1,972	49	960	27	7		926	0	0
2011	2,006	46	930	21	8		901	0	0
2012	1,955	49	958	21	9		928	0	0

NOTE: Measured quantities available for Total Wastewater in Water Year 1969 and July 1989. All other quantities are estimated (1966-1989). Prior to 1983, Wastewater was discharged into Fallbrook Creek. After 1983, Wastewater was discharged into an ocean outfall.

1/ United States Naval Weapons Station

2/ San Luis Rey Watershed

E - Estimated

P - Partial Year Data

TABLE B-5

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

METROPOLITAN WATER DISTRICT
DELIVERIES IN DOMENIGONI VALLEY

Quantities in Acre Feet

	PRODUCTION			USE						
WATER YEAR	WELLS	IMPORT TO SMRW	TOTAL IN SMRW	AG	COMM/ DOM*	GW RECHARGE	TOTAL DELIVERED	LOSS **		TOTAL USE
1966	0	0	0	0	0	0	0	0		0
1967	0	0	0	0	0	0	0	0		0
1968	0	0	0	0	0	0	0	0		0
1969	0	0	0	0	0	0	0	0		0
1970	0	0	0	0	0	0	0	0		0
1971	0	0	0	0	0	0	0	0		0
1972	0	0	0	0	0	0	0	0		0
1973	0	0	0	0	0	0	0	0		0
1974	0	0	0	0	0	0	0	0		0
1975	0	0	0	0	0	0	0	0		0
1976	0	0	0	0	0	0	0	0		0
1977	0	0	0	0	0	0	0	0		0
1978	0	0	0	0	0	0	0	0		0
1979	0	0	0	0	0	0	0	0		0
1980	0	0	0	0	0	0	0	0		0
1981	0	0	0	0	0	0	0	0		0
1982	0	0	0	0	0	0	0	0		0
1983	0	0	0	0	0	0	0	0		0
1984	0	0	0	0	0	0	0	0		0
1985	0	0	0	0	0	0	0	0		0
1986	0	0	0	0	0	0	0	0		0
1987	0	0	0	0	0	0	0	0		0
1988	0	0	0	0	0	0	0	0		0
1989	0	0	0	0	0	0	0	0		0
1990	0	0	0	0	0	0	0	0		0
1991	0	0	0	0	0	0	0	0		0
1992	0	0	0	0	0	0	0	0		0
1993	0	0	0	0	0	0	0	0		0
1994	0	0	0	0	0	0	0	0		0
1995	0	547	547	354	193	0	547	0	R	547
1996	0	1,005	1,005	763	242	0	1,005	0	R	1,005
1997	0	3,521	3,521	591	2,891	39	3,521	0	R	3,521
1998	0	5,023	5,023	193	4,403	427	5,023	0	R	5,023
1999	0	3,781	3,781	404	2,978	399	3,781	0	R	3,781
2000	0	712	712	92	356	264	712	0	R	712
2001	0	689	689	505	0	184	689	0	R	689
2002	0	595	595	569	26	0	595	0	R	595
2003	0	496	495	495	0	0	495	0	R	495
2004	0	766	766	766	0	0	766	0	R	766
2005	0	556	556	556	0	0	556	0	R	556
2006	0	506	506	506	0	0	506	0	R	506
2007	0	660	660	660	0	0	660	0	R	660
2008	0	493	493	493	0	0	493	0	R	493
2009	0	465	465	465	0	0	465	0	R	465
2010	0	372	372	372	0	0	372	0	R	372
2011	0	336	336	336	0	0	336	0	R	336
2012	0	466	466	466	0	0	466	0		466

* Construction Water
** Points of delivery located at metered pumps on San Diego Canal and thus the losses in the MWD system are zero.
R - Revised

TABLE B-6

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

PECHANGA INDIAN RESERVATION

Quantities in Acre Feet

	PRODUCTION 1/					USE 2/					
WATER YEAR	SURFACE DIVERSION	WELLS ON RESERVATION	DELIVERED GROUNDWATER FROM RCWD	RECLAIMED WASTEWATER FROM EMWD	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS 3/	TOTAL USE
1966											
1967											
1968											
1969											
1970											
1971											
1972											
1973											
1974											
1975											
1976											
1977											
1978											
1979											
1980											
1981											
1982											
1983											
1984											
1985											
1986											
1987											
1988											
1989											
1990											
1991	0	58	0	0	58	0	0	58	N/R	N/R	58
1992	0	66	0	0	66	0	0	66	N/R	N/R	66
1993	0	91	0	0	91	0	0	91	N/R	N/R	91
1994	0	70	0	0	70	0	0	70	N/R	N/R	70
1995	0	63	0	0	63	0	4	59	N/R	N/R	63
1996	0	145	0	0	145	0	45	100	N/R	N/R	145
1997	4	167	0	0	171	0	25	146	N/R	N/R	171
1998	4	175	0	0	179	0	62	117	N/R	N/R	179
1999	4	241	0	0	245	33	84	128	N/R	N/R	245
2000	4	370	0	0	374	51	182	141	N/R	N/R	374
2001	4	291	0	0	295	56	85	154	N/R	N/R	295
2002	4	460	0	0	464	73	194	174	441	23	464
2003	4	600	0	0	604	78	354	148	580	24	604
2004	4	721	0	0	725	81	537	71	689	36	725
2005	0	608	0	0	608	140	401	61	602	6	608
2006	0	754	0	0	754	159	401	194	N/R	N/R	754
2007	0	919	154	0	1,073	275	517	229	1,021	52	1,073
2008	0	865	412	0	1,277	599	370	282	1,251	26	1,277
2009	0	702	250	268	1,220	548	441	195	1,184	36	1,220
2010	0	561	230	394	1,185	531	364	235	1,130	55	1,185
2011	0	632	201	326	1,159	468	418	257	1,143	16	1,159
2012	0	669	177	329	1,175	513	405	215	1,133	42	1,175

1/ Records prior to 1991 not available.
2/ For period 1991 through 2006, use shown as reported to Watermaster and published in prior Watermaster reports.
3/ For 2007, loss assumed to be 5% for all use types; for prior years any losses shown as reported to Watermaster.
For 2008 to present, loss determined as Total Production less Total Delivered.
N/R--Not reported.

TABLE B-7

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

RAINBOW MUNICIPAL WATER DISTRICT
Quantities in Acre Feet

	PRODUCTION			USE				
WATER YEAR	LOCAL	IMPORT TO DISTRICT	TOTAL IN WATERSHED 1/	AG 2/	COMMERCIAL/ DOMESTIC 3/	TOTAL DELIVERIES	LOSS 4/	TOTAL USE
1966	0	14,538	1,308	1,049	140	1,189	119	1,308
1967	0	12,167	1,095	878	117	995	100	1,095
1968	0	15,301	1,377	1,104	147	1,252	125	1,377
1969	0	13,917	1,253	1,005	134	1,139	114	1,252
1970	0	18,764	1,689	1,354	181	1,535	154	1,689
1971	0	18,338	1,650	1,324	177	1,500	150	1,650
1972	0	22,633	2,037	1,634	218	1,852	185	2,037
1973	0	17,955	1,616	1,296	173	1,469	147	1,616
1974	0	22,768	2,049	1,643	219	1,863	186	2,049
1975	0	13,856	1,247	1,000	133	1,134	113	1,247
1976	0	24,878	2,239	1,796	240	2,035	204	2,239
1977	0	26,038	2,343	1,879	251	2,130	213	2,343
1978	0	24,312	2,188	1,755	234	1,989	199	2,188
1979	0	26,084	2,348	1,883	251	2,134	213	2,347
1980	0	27,660	2,489	1,997	266	2,263	226	2,489
1981	0	35,036	3,153	2,529	337	2,866	287	3,153
1982	0	27,334	2,460	1,973	263	2,236	224	2,460
1983	0	24,957	2,190	1,735	256	1,991	199	2,190
1984	0	32,526	3,068	2,483	306	2,789	279	3,068
1985	0	28,612	3,410	2,798	302	3,100	310	3,410
1986	0	29,023	2,945	2,353	324	2,677	268	2,945
1987	0	29,449	3,390	2,765	317	3,082	308	3,390
1988	0	29,070	2,985	2,372	342	2,714	271	2,985
1989	0	32,034	3,003	2,385	345	2,730	273	3,003
1990	0	34,612	3,818	3,003	468	3,471	347	3,818
1991	0	27,754	2,904	2,276	364	2,640	264	2,904
1992	0	26,056	2,277	1,877	193	2,070	207	2,277
1993	0	23,766	1,965	1,655	132	1,787	178	1,965
1994	0	22,173	1,651	1,368	133	1,501	150	1,651
1995	0	20,935	1,661	1,398	112	1,510	151	1,661
1996	0	24,835	1,815	1,487	163	1,650	165	1,815
1997	0	24,638	1,429	1,139	160	1,299	130	1,429
1998	0	19,693	1,601	1,315	141	1,456	145	1,601
1999	0	24,961	1,727	1,411	159	1,570	157	1,727
2000	0	30,446	2,217	1,861	154	2,015	202	2,217
2001	0	27,214	1,804	1,439	202	1,641	163	1,804
2002	0	32,854	1,676	1,368	156	1,524	152	1,676
2003	0	29,156	1,510	1,237	136	1,373	137	1,510
2004	0	33,686	1,888	1,567	149	1,716	172	1,888
2005	0	25,135	1,610	1,331	133	1,464	146	1,610
2006	0	29,797	1,851	1,529	154	1,683	168	1,851
2007	0	32,939	2,262	1,871	185	2,056	206	2,262
2008	0	24,390	1,790	1,461	167	1,628	162	1,790
2009	0	27,075	1,852	1,463	220	1,683	169	1,852
2010	0	20,769	1,453	1,147	174	1,321	132	1,453
2011	0	18,599	1,492	1,251	105	1,356	136	1,492
2012	0	21,152	1,892	1,602	118	1,720	172	1,892

1/ 1966 through 1982 estimated to be 9% of total district imports
2/ 1966 through 1982 estimated to be 80.2% of total deliveries to watershed
3/ 1966 through 1982 estimated to be 10.7% of total deliveries to watershed
4/ Loss = 10% of use

TABLE B-8

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

RANCHO CALIFORNIA WATER DISTRICT

Quantities in Acre Feet

	PRODUCTION							USE									VAIL LAKE		RECLAIMED WASTEWATER	
YEAR	WELLS	EXPORT 1/	NET WELLS	IMPORT	EXPORT 2/	NET IMPORT	TOTAL	AG	AG/ DOM	COMM	DOM	SMR RELEASE	IMPORT RECHARGE TO STORAGE	TOTAL USE	LOSS 3/	TOTAL	RELEASE AND RECHARGE	IRRIGATION 4/	REUSE IN SMRW	MURRIETA CREEK DISCHARGE 5/
1966				0	0	0	0						0				0	185	0	0
1967	4,288			0	0	0	4,288						0				0	1,136	0	0
1968	5,100			0	0	0	5,100						0				0	398	0	0
1969	3,617			0	0	0	3,617						0				0	697	0	0
1970	6,721			0	0	0	6,721						0				0	540	0	0
1971	7,960			0	0	0	7,960						0				0	1,541	0	0
1972	8,369			0	0	0	8,369						0				0	203	0	0
1973	7,726			0	0	0	7,726						0				0	524	0	0
1974	10,163			0	0	0	10,163						0				0	1,066	0	0
1975	10,357			0	0	0	10,357						0				0	369	0	0
1976	11,809			119	0	119	11,928						0				0	50	0	0
1977	10,522			1,845	0	1,845	12,367						0				0	0	0	0
1978	8,930			5,774	0	5,774	14,704						0				0	0	0	0
1979	11,371			7,009	0	7,009	18,380						0				0	0	0	0
1980	12,621			10,126	0	10,126	22,747						0				10,944	0	0	0
1981	15,612			15,282	0	15,282	30,894						0				6,802	0	0	0
1982	12,631			13,378	0	13,378	26,009						0				6,058	0	0	0
1983	16,675 6/			5,752	0	5,752	22,427						0				12,113	715	0	0
1984	25,660			6,716	0	6,716	32,376						0				6,612	1,144	0	0
1985	24,373			7,158	0	7,158	31,531						0				5,027	1,201	0	0
1986	26,997			11,174	0	11,174	38,171						0				8,722	1,053	0	0
1987	33,735			7,564	0	7,564	41,299						0				8,089	273	48	0
1988	21,367			17,854	0	17,854	39,221						0				4,844	0	82	0
1989	26,131			22,895	0	22,895	49,026	25,333		3,316	13,198	852	0 7/	42,699	6,327	49,026	0	0	168	0
1990	33,241			22,030	0	22,030	55,271	27,643		3,940	14,916	902	0	47,401	7,870	55,271	0	0	133	0
1991	26,503			21,238	0	21,238	47,741	32,924		2,941	10,603	785	0 8/	47,253	488	47,741	6,253	0	352	0
1992	29,968			16,931	0	16,931	46,899	30,651		2,406	9,672	683	0	43,412	3,487	46,899	2,244	0	374	0
1993	31,029			11,411	0	11,411	42,440	29,265		2,141	10,618	519	0	42,543	(103)	42,440	31,704	0	378	0
1994	32,725			16,386	0	16,386	49,111	32,534		2,322	12,370	467	0	47,693	1,418	49,111	8,469	0	1,936	0
1995	33,111			15,108	0	15,108	48,219	31,081		2,526	13,779	1,464	0	48,850	(631)	48,219	11,158	0	1,753	0
1996	36,086			23,600	0	23,600	59,686	35,912		2,752	16,330	2,149	0	57,143	2,543	59,686	9,427	0	2,264	0
1997	33,980			26,992	0	26,992	60,972	38,287		3,350	18,635	2,978	164	63,414	(2,442)	60,972	1,725	0	693 9/	0
1998	26,851			19,584	0	19,584	46,435	28,307		2,805	16,273	459	0	47,844	(1,409)	46,435	4,514	0	1,376 9/	1,179
1999	30,598			34,490	0	34,490	65,088	37,157		3,674	19,610	1,044	2,286	63,771	1,317	65,088	1,010	0	1,524 9/	1,654
2000	27,938			55,409	0	55,409	83,347	40,672	3,339	2,162	23,783	1,067	8,008	79,031	4,316	83,347	(49)	0	3,550 9/	1,854
2001	26,421			41,823	0	41,823	68,244	30,383	4,525	4,053	22,866	514	2,374	64,715	3,529	68,244	(361)	0	3,719 9/	2,015
2002	24,895			54,148	0	54,148	79,043	35,747	5,345	5,285	26,573	715	1,454	75,119	3,924	79,043	(314)	0	4,519 9/	2,180
2003	25,238	64	25,174	50,927	183	50,744	75,918	30,277	4,645	4,457	26,044	4,896	2,750	73,069	2,849	75,918	(658)	0	3,780 9/	104
2004	25,353	312	25,041	63,170	762	62,408	87,449	33,467	5,549	4,883	29,314	3,201	5,094	81,508	5,941	87,449	(101)	0	3,257 9/	0
2005	27,606	319	27,287	48,192	578	47,614	74,901	25,819	5,083	4,790	26,656	3,384	5,162	70,894	4,007	74,901	(1,269)	0	4,284 9/	0
2006	27,559	317	27,242	61,336	725	60,611	87,853	30,888	6,448	5,190	30,209	4,923	6,163	83,821	4,032	87,853	1,399	0	4,796 9/	0
2007	27,645	364	27,281	64,792	974	63,818	91,099	34,810	7,049	5,063	31,820	3,859	2,247	84,848	6,251	91,099	704	0	4,730 9/	0
2008	26,239	361	25,878	51,453	770	50,683	76,561	26,388	5,621	4,785	31,759	4,092	1,417	74,062	2,499	76,561	4,845	0	4,355 9/	0
2009	27,820	367	27,453	50,988	718	50,270	77,723	26,811	5,986	4,306	30,159	5,302	2,357	74,921	2,802	77,723	1,236	0	4,191 9/	0
2010	25,685	318	25,367	41,407	513	40,894	66,261	21,456	4,886	3,766	26,778	3,913	2,075	62,874	3,387	66,261	801	0	3,998 9/	0
2011	27,725	302	27,423	39,842	431	39,411	66,834	20,954	5,010	3,847	25,747	4,399	5,239	65,196	1,638	66,834	2,470	0	3,488 9/	0
2012	24,942	284	24,658	42,395	495	41,900	66,558	22,871	5,785	4,217	26,604	3,708	702	63,887	2,671	66,558	(5)	0	3,237 9/	0

1/ Groundwater used in San Mateo Watershed.
2/ Import used in San Mateo Watershed.
3/ Loss = Total production less total use.
4/ Irrigation 1966 to 1976 by pumping from Vail Lake.
Figures from 1966 to 1972 supplied by USGS; 1972 to 2002 supplied by RCWD.
5/ Discharge from 2MGD Demonstration project.
6/ Includes 98 acre feet from wells out of groundwater area.
7/ Import recharge was 2,294 AF but portion remaining in storage was not computed due to lack of data.
8/ Import recharge was 701 AF but portion remaining in storage was not computed due to lack of data.
9/ Does not include EMWD reclaimed wastewater production.

TABLE B-9

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

U.S.M.C. - CAMP PENDLETON
EXCLUDING NAVAL WEAPONS STATION SHOWN ON B-10

Quantities in Acre Feet

	PRODUCTION			USE						RECLAIMED WASTEWATER				
WATER YEAR	AG LOCAL	CAMP SUPPLY	TOTAL	AGRICULTURE IN SMRW 1/	AGRICULTURE OUT SMRW	CAMP SUPPLY IN SMRW 2/	CAMP SUPPLY OUT SMRW 2/	TOTAL EXPORT	TOTAL IN SMRW 3/	RECLAIMED USE IN SMRW 4/	RECLAIMED USE OUT SMRW 5/	EXPORTED TO OCEANSIDE OUTFALL	TOTAL 6/	NET EXPORT 7/
1966	1,101	4,605	5,706	429	672	2,026	2,579	3,251	2,455	1,893			1,893	
1967	796	4,811	5,607	310	486	2,117	2,694	3,180	2,427	2,156			2,156	
1968	986	4,939	5,925	385	601	2,172	2,767	3,368	2,557	2,080			2,080	
1969	940	4,821	5,761	367	573	2,058	2,763	3,276	2,485	2,189			2,189	
1970	1,106	5,481	6,587	431	675	2,347	3,134	3,809	2,778	2,145			2,145	
1971	819	5,291	6,110	319	500	2,264	3,028	3,527	2,583	2,011			2,011	
1972	817	5,323	6,140	319	498	2,278	3,045	3,543	2,597	2,068			2,068	
1973	1,003	5,121	6,124	391	612	2,189	2,932	3,544	2,580	2,137			2,137	
1974	909	5,202	6,111	355	554	2,224	2,978	3,532	2,579	2,055			2,055	
1975	757	4,593	5,350	295	462	1,957	2,636	3,098	2,252	2,519			2,519	
1976	885	5,384	6,269	345	540	2,305	3,079	3,619	2,650	2,447			2,447	
1977	994	4,506	5,500	388	606	1,918	2,588	3,194	2,306	2,358			2,358	
1978	176	5,177	5,353	69	107	2,213	2,964	3,071	2,282	2,446			2,446	
1979	1,070	7,213	8,283	417	653	3,109	4,104	4,756	3,527	2,493			2,493	
1980	835	5,495	6,330	326	509	2,353	3,142	3,651	2,679	2,506			2,506	
1981	1,464	5,240	6,704	571	893	2,241	2,999	3,892	2,812	2,368			2,368	
1982	1,447	5,024	6,471	564	883	2,146	2,878	3,761	2,710	2,254			2,254	
1983	942	4,215	5,157	367	575	1,790	2,425	3,000	2,157	2,494			2,494	
1984	1,078	4,501	5,579	420	658	1,916	2,585	3,243	2,336	2,443			2,443	
1985	1,069	4,764	5,833	417	652	2,039	2,725	3,377	2,456	2,619			2,619	
1986	953	4,807	5,760	372	581	2,062	2,745	3,326	2,434	2,240			2,240	
1987	1,098	4,838	5,936	428	670	2,064	2,774	3,444	2,492	3,166			3,166	
1988	1,223	4,721	5,944	477	746	2,010	2,711	3,457	2,487	3,396			3,396	
1989	856	5,044	5,900	334	522	2,148	2,896	3,418	2,482	2,747			2,747	
1990	855	4,228	5,083	333	522	1,779	2,449	2,971	2,112	2,728			2,728	
1991	554	3,159	3,713	216	338	1,329	1,830	2,168	1,545	2,289	362		2,651	
1992	898	3,254	4,152	350	548	1,376	1,878	2,426	1,726	2,481	279		2,760	
1993	1,067	2,879	3,946	416	651	1,201	1,678	2,329	1,617	2,975	205		3,180	
1994	1,471	3,150	4,621	574	897	1,345	1,805	2,702	1,919	2,535	279		2,814	
1995	985	3,768	4,753	384	601	1,588	2,180	2,781	1,972	2,453	280		2,733	
1996	1,000	5,199	6,199	390	610	2,232	2,967	3,577	2,622	2,444	330		2,774	
1997	1,066	5,238	6,304	416	650	2,244	2,994	3,644	2,660	2,920	509		3,429	
1998	1,026	5,468	6,494	400	626	2,352	3,116	3,742	2,752	3,008	222		3,230	
1999	1,064	5,054	6,118	415	649	2,145	2,909	3,558	2,560	3,023	205		3,228	
2000	1,296	5,765	7,061	506	790	2,483	3,282	4,072	2,989	3,152	411		3,563	
2001	1,025	5,341	6,366	399	626	2,314	3,027	3,653	2,713	3,140	454		3,594	
2002	1,184	5,269	6,453	462	722	2,290	2,979	3,701	2,752	2,900	469		3,369	
2003	1,270	5,210	6,480	495	775	2,218	2,992	3,767	2,713	2,687	415		3,102	
2004	1,227	5,538	6,765	479	748	2,396	3,142	3,890	2,875	0	444	2,544	2,988	
2005	1,317	4,902	6,219	514	803	2,134	2,768	3,571	2,648	0	489	2,526	3,015	
2006	1,530	5,311	6,841	597	933	2,301	3,010	3,943	2,898	0	449	2,298	2,747	
2007	1,385	5,850	7,235	540	845	2,535	3,315	4,160	3,075	0	416	2,309	2,725	
2008	1,606	5,315	6,921	579	1,027	2,603	2,712	3,739	3,182	0	357	2,430	2,787	
2009	882	5,516	6,398	273	609	2,593	2,923	3,532	2,866	49	488	1,966	2,503	4,243
2010	645	5,137	5,782	202	443	2,672	2,465	2,908	2,874	6	396	1,839	2,241	4,068
2011	76	5,165	5,241	24	52	2,583	2,582	2,634	2,607	0	320	2,562	2,882	4,075
2012	0	4,676	4,676	0	0	1,869	2,807	2,807	1,869	0	393	2,395	2,788	3,923

1/ For years 1966 - 2007, agricultural water use is divided with 39% used inside SMRW and 61% used outside SMRW, thereafter proportions are provided by Camp Pendleton.

2/ Prior to 1969, 44% used inside the SMRW and 56% used outside the SMRW. For years 1969 - 2007, Camp Supply water use inside SMRW equals 44% of sum of Camp Supply production plus Naval Weapons Station Import, less the NWS Import. Annual proportions provided by Camp Pendleton beginning 2008.

3/ Assumes no losses.

4/ For years 1966 - 2003, reclaimed use inside SMRW reported as recharged wastewater from ponds and recharge areas. See prior reports from 2008 and earlier for additional information.

5/ Reclaimed use for irrigation of golf course, landscaping and park areas.

6/ All wastewater treated at Southern Regional Tertiary Treatment Plant (SRTTP) beginning December 2008.

7/ Net Export equals the sum of Agriculture Out, Camp Supply Out, Reclaimed Out and Export to Oceanside Outfall, minus Wastewater Return, as shown on Table A-8.

TABLE B-10

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

U. S. NAVAL WEAPONS STATION, FALLBROOK ANNEX

Quantities in Acre Feet

	PRODUCTION			USE				WASTEWATER
WATER YEAR	LOCAL	IMPORT TO WATERSHED 1/	TOTAL	AG	COMM/ DOM	LOSS 2/	TOTAL USE	EXPORTED
1966	87	0	87	0	79	9	87	0
1967	92	0	92	0	83	9	92	0
1968	108	0	108	0	97	11	108	0
1969	138	0	138	0	113	25	138	0
1970	152	0	152	0	125	27	152	0
1971	39	76	115	0	100	15	115	0
1972	0	115	115	0	105	10	115	0
1973	0	115	115	0	105	10	115	0
1974	0	115	115	0	105	10	115	0
1975	0	115	115	0	105	10	115	0
1976	0	115	115	0	105	10	115	0
1977	0	115	115	0	105	10	115	0
1978	0	115	115	0	105	10	115	0
1979	0	115	115	0	105	10	115	0
1980	0	115	115	0	105	10	115	0
1981	0	115	115	0	105	10	115	0
1982	0	115	115	0	105	10	115	0
1983	0	115	115	0	105	10	115	26
1984	0	115	115	0	105	10	115	26
1985	0	102	102	0	93	9	102	26
1986	0	94	94	0	85	9	94	18
1987	0	116	116	0	105	11	116	27
1988	0	120	120	0	109	11	120	25
1989	0	128	128	0	116	12	128	22
1990	0	145	145	0	132	13	145	27
1991	0	109	109	0	99	10	109	11
1992	0	99	99	0	90	9	99	7
1993	0	117	117	0	106	11	117	16
1994	0	73	73	0	66	7	73	5
1995	0	125	125	0	114	11	125	12
1996	0	100	100	0	91	9	100	5
1997	0	109	109	0	99	10	109	6
1998	0	97	97	0	88	9	97	8
1999	0	111	111	0	101	10	111	5
2000	0	104	104	0	95	9	104	7
2001	0	73	73	0	66	7	73	8
2002	0	97	97	0	88	9	97	9
2003	0	88	88	0	80	8	88	10
2004	0	73	73	0	66	7	73	8
2005	0	40	40	0	36	4	40	16
2006	0	64	64	0	58	6	64	8
2007	0	70	70	0	64	6	70	12
2008	0	82	82	0	75	7	82	11
2009	0	74	74	0	67	7	74	12
2010	0	69	69	0	63	6	69	7
2011	0	45	45	0	41	4	45	8
2012	0	48	48	0	44	4	48	9

1/ Estimate 1969-1984 - Records not available
2/ Loss = 10% of Use

E - Estimate
P - Partial year data

TABLE B-11

SANTA MARGARITA RIVER WATERSHED
ANNUAL WATER PRODUCTION AND USE

WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION
Quantities in Acre Feet

	PRODUCTION			USE					
WATER YEAR	WELLS	IMPORT	TOTAL	AG	COMM	DOM	TOTAL DELIVERED	LOSS *	TOTAL USE
1966	41	0	41	0	0	37	37	4	41
1967	45	0	45	0	0	41	41	4	45
1968	54	0	54	0	0	49	49	5	54
1969	54	0	54	0	0	49	49	5	54
1970	73	0	73	0	0	66	66	7	73
1971	83	0	83	3	0	72	75	8	83
1972	111	0	111	10	0	91	101	10	111
1973	92	0	92	11	0	72	84	8	92
1974	132	0	132	14	0	107	120	12	132
1975	153	0	153	18	0	121	139	14	153
1976	117	0	117	22	0	84	106	11	117
1977	170	0	170	21	0	134	155	15	170
1978	169	0	169	19	0	135	154	15	169
1979	197	0	197	19	0	160	179	18	197
1980	218	0	218	20	0	178	198	20	218
1981	265	0	265	30	0	211	241	24	265
1982	230	0	230	21	0	188	209	21	230
1983	216	0	216	14	0	182	196	20	216
1984	304	0	304	26	0	250	276	28	304
1985	308	0	308	19	0	261	280	28	308
1986	305	0	305	22	0	255	277	28	305
1987	326	0	326	23	0	273	296	30	326
1988	303	0	303	13	35	262	275	28	303
1989	286	0	286	11	72	262	344	(4)	286
1990	465	0	465	13	76	266	355	110	465
1991	459	0	459	15	88	250	353	106	459
1992	492	0	492	6	122	302	430	62	492
1993	508	0	508	4	105	323	432	76	508
1994	512	0	512	10	103	324	437	75	512
1995	521	0	521	12	99	321	432	89	521
1996	629	0	629	88	113	384	585	44	629
1997	638	0	638	76	99	392	567	71	638
1998	603	0	603	79	90	362	531	72	603
1999	827	0	827	79	125	548	752	75	827
2000	1,123	0	1,123	199	365	519	1,083	40	1,123
2001	1,389	0	1,389	163	414	740	1,317	72	1,389
2002	1,679	0	1,679	230	348	1,115	1,693	(14)	1,679
2003	1,748	102	1,850	272	275	1,340	1,887	(37)	1,850
2004	1,979	330	2,309	282	407	1,479	2,168	141	2,309
2005	2,098	75	2,173	262	274	1,539	2,075	98	2,173
2006	2,233	316	2,549	338	396	1,696	2,430	119	2,549
2007	1,978	723	2,701	467	276	1,980	2,723	(22)	2,701
2008	210	2,180	2,390	408	251	1,827	2,486	(96)	2,390
2009	861	1,654	2,515	396	219	1,723	2,338	177	2,515
2010	753	1,462	2,215	264	140	1,642	2,046	169	2,215
2011	559	1,642	2,201	324	239	1,497	2,060	141	2,201
2012	750	1,371	2,121	250	340	1,418	2,008	113	2,121

* Loss = Total production less total delivered

TABLE B-12

SANTA MARGARITA RIVER WATERSHED
MISCELLANEOUS WATER PRODUCTION AND IMPORTS

Quantities in Acre Feet

	IMPORT	PRODUCTION					
WATER YEAR	WESTERN MWD IMPORTS TO IMPROVEMENT DISTRICT A	ANZA MUTUAL WATER COMPANY	OUTDOOR RESORTS RANCHO CALIFORNIA, INC.	QUIET OAKS MOBILE HOME PARK	LAKE RIVERSIDE ESTATES	HAWTHORN WATER SYSTEM	JOJOBA HILLS SKP RESORT
1966	23.50						
1967	20.40						
1968	27.00						
1969	24.60						
1970	30.60						
1971	34.40						
1972	34.10						
1973	30.20						
1974	36.40						
1975	34.20						
1976	35.00						
1977	24.20						
1978	26.00						
1979	24.00						
1980	24.70						
1981	34.30						
1982	34.20						
1983	26.00						
1984	26.00						
1985	27.00						
1986	34.40						
1987	35.50						
1988	35.70						
1989	22.80	33.00	42.00	23.50	249.52		
1990	21.90	37.00	50.69	23.50	247.42		
1991	20.70	35.06	50.59	12.21	339.77		
1992	24.60	31.21	42.86	12.24	279.04		
1993	31.40	32.16	42.44	12.20	192.09		
1994	36.60	37.32	38.04	23.82	262.69		
1995	29.10	45.69	69.54	22.60	130.06		
1996	35.10	45.53	58.59	21.96	219.73		
1997	30.40	43.87	83.42	30.25	233.56		
1998	31.00	39.54	87.42	24.41	134.96		
1999	40.70	33.30	70.74	25.70	209.55		
2000	41.90	44.67	90.10	24.58	316.57		53.28
2001	58.70	45.00	208.64	23.21	274.25		74.87
2002	64.40	41.10	216.13	24.43	323.65	82.87	91.83
2003	42.40	44.04	201.63	34.56	255.93	81.61	74.70
2004	50.30	40.44	216.77	32.20	350.80	94.19	74.89
2005	62.20	38.26	187.06	18.09	208.08	55.87	66.95
2006	65.80	51.36	198.92	27.30	268.60	40.25	64.68
2007	45.30	39.33	480.70	19.80	421.56	37.22	66.98
2008	53.90	34.13	483.69	23.30	334.31	21.56	65.50
2009	50.90	34.13	492.26	23.30	347.51	25.36	67.86
2010	62.30	36.97	510.42	23.30	255.19	24.01	55.39
2011	52.10	27.17	494.40	23.30	270.44	19.27	56.97
2012	48.50	26.22	506.40	23.30	310.31	26.37	69.12

SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX C

SUBSTANTIAL USERS OUTSIDE

ORGANIZED WATER SERVICE AREAS

July 2013

APPENDIX C

SANTA MARGARITA RIVER WATERSHED
SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
AGUANGA GROUNDWATER AREA								
Vail Custodial Services	43425 Sage Road	917-050-007	82.19	Total				
and	44175 Sage Road	917-050-009	309.74	|				
Vail Lake	Aguanga, CA 92536	581-070-013	43.10	of				
Rancho California		581-070-015	2.73	|				
		581-070-016	157.21	|				
		581-150-013	120.56	|				
		581-150-016	25.37	|				
				30.00	Alfalfa	8S/1E-7N(1)	Total	
						8S/1E-7N(2)	of	
						8S/1E-7Q(1)	|	
						8S/1E-7Q(2)	90.00	
Val Verde Partners	43023 Hwy 79	583-040-022	97.78	** Total		8S/1E-19Q(1)	** 0.00	
	Aguanga, CA 92536	583-040-021	13.45	|	Oats and	8S/1E-19Q(2)	** 0.00	
	m/t P.O. Box 1974	583-130-055	40.00	of	Pasture			
	Rancho Santa Fe	583-120-092	160.00	|				
	CA 92067	583-060-003-9	41.60	13.45				
						8S/1E-29L - Diversion		** 56.8
Zen-Kamata, LLC	42551 Hwy 79	583-040-028	25.52	0.00				
Kamata, Nobuo	Aguanga, CA 92536	583-040-029	19.89	0.00		8S/1E-19K	0.00	
and Osamu	m/t 2635 N. First St., Ste. 213					8S/1E-19G4	0.00	
	San Jose, CA 95134	583-040-024	23.48	0.00				
		583-040-025	23.12	0.00				
		583-040-026	23.16	0.00				
		583-040-027	22.64	0.00				
						8S/1E-29L - Diversion		0.00
Aguanga	44201 Hwy 79	583-120-091	39.57	10.00	Row Crops	8S/1E-33D	Total	
Properties, LLC	44735 Hwy 79	583-120-083	68.09	60.00	Row Crops	8S/1E-28N1	|	
	Aguanga, CA 92536					8S/1E-28N(2)	|	
(Twin Creek Ranch)	m/t Chester Mason						|	
	P. O. Box 892378	583-120-090	132.82	40.00	Row Crops	8S/1E-29H	of	
	Temecula, CA 92589	583-150-001	80.00	20.00	Row Crops		|	
							|	
		583-140-014	48.03	15.00	Row Crops	8S/1E-33F	|	
		583-140-015	40.00	35.00	Row Crops	8S/1E-33G1	|	
		583-140-016	40.00	35.00	Row Crops	8S/1E-33B	900.00	
		583-140-018	10.09	0.00				
		583-140-019	10.12	0.00				
		583-140-020	10.15	0.00				

Well number in parentheses designated by Watermaster
** Water Use Report Form not submitted to Watermaster for Water Year 2011-12, indicated value assumed to be the same as prior year.

APPENDIX C

SANTA MARGARITA RIVER WATERSHED
SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
AGUANGA GROUNDWATER AREA (Cont)								
Yanik, Robert	41750 Highway 79	917-050-006	233.57	60.00	Row Crops	8S/1W-13Q1	Total of	
	Aguanga, CA 92536					8S/1W-13Q2	696.00	
		917-170-003	80.81	38.00	Row Crops			
		917-290-001	126.26	38.00	Row Crops			
		917-290-002	82.25	38.00	Row Crops			
Harris, Dolores G.	44444 Sage Road	581-160-025	18.10	17.00	Citrus & Grass	8S/1E-18J(1)	0.00	
	Aguanga, CA 92536					8S/1E-18J(2)	0.00	
		581-160-015	7.42	10.00	Fruit			
		581-150-009	7.00	6.00	Fruit	8S/1E-18H(1)	6.26	
						8S/1E-18H(2)	0.00	
		581-180-022	30.00	0.00				
		581-180-004	20.00	0.00				
		581-180-020	20.00	0.00		8S/1E-17M	19.75	
		581-180-021	2.15	0.00		8S/1E-17E	39.08	
Valley-Wide Recreation and Parks District	901 W. Esplanade Ave San Jacinto, CA 92582	581-170-009	7.82	7.82	Grass	Used 8S/1E-17E owned by Harris		
Wilson Creek Farms	44200 Sage Road	581-170-012	190.40	20.00	Row Crops	8S/1E-17B	300.00	
	Aguanga, CA 92536	581-170-013	99.63	60.00	Row Crops			
	m/t P. O. Box 2921	581-180-005	2.76					
	Hemet, CA 92546	581-180-009	120.00	60.00	Pasture			
		581-190-013	280.00	110.00	Row Crops			
		581-190-014	40.00					
Wilson Creek Development, LLC	44200 Sage Road	581-070-002	160.00					
	Aguanga, CA 92536	581-070-005	640.00			8S/1E-9Q - Diversion		410.00
	m/t P. O. Box 2921	581-100-013	80.00					
	Hemet, CA 92546	581-100-019	30.00					
		581-100-020	10.00					
		581-100-022	20.00					
		581-100-038	9.53					
		581-100-039	9.23					
		581-100-040	8.91					
TOTAL AGUANGA GROUNDWATER AREA				**723.27**			**2,051.09**	**466.80**

Well number in parentheses designated by Watermaster
** Water Use Report Form not submitted to Watermaster for Water Year 2011-12, indicated value assumed to be the same as prior year.

APPENDIX C

SANTA MARGARITA RIVER WATERSHED
SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
TEMECULA CREEK ABOVE AGUANGA GROUNDWATER AREA								
Agri-Empire, Inc.	m/t P. O. Box 490	113-090-01***	377.07	95.00	Potatoes			
	San Jacinto, CA 92383	113-130-01***	150.09	0.00		9S/2E-17D - Spring		0.00
		113-140-03	196.54	0.00		9S/2E-16N2	20.00	
						9S/2E-16M	165.00	
						9S/2E-16F1	112.00	
						9S/2E-16N1	70.00	
						9S/2E-16F2	0.00	
						9S/2E-16K - Diversion		0.00
		114-020-09	37.16	0.00				
		114-030-07	93.38	0.00				
*** Land leased from the		114-030-34	137.50	0.00				
State of California		114-030-36	29.55	0.00				
* Land leased from	37126 Hwy 79	113-140-01 *	358.62	80.00	Potatoes	9S/2E-16B(1)	241.00	
Arlie W. and	Warner Springs, CA 92086					9S/2E-16B(2)	0.00	
Coral R. Bergman						9S/2E-16G	0.00	
		113-140-02 *	38.75	0.00				
Hill Springs Farm, LLC	38642 Highway 79	113-060-012	63.21	0.00		9S/2E-7D	0.00	
	Warner Springs, CA 92086					9S/2E-7E - Diversion		0.00
	m/t P.O. Box 1946	112-030-72	129.90	0.00		9S/1E-1M - Diversion		0.00
	Duarte, CA 91009	112-030-74	70.50	65.00	Grapes	9S/1E-1Q(1)	0.00	
						9S/1E-1Q(2)	71.50	
		112-030-38	40.00	0.00		9S/1E-12A	Domestic	
		112-030-67	67.41	0.00				
Lovingier Family Trust	35490 Highway 79	114-120-042	78.41	Total		9S/2E-35D1	Total	
	Warner Springs, CA 92086			|		9S/2E-35D1	|	
		114-070-007	76.42	|		9S/2E-27R1	of	
				|		9S/2E-27R2	|	
				|		9S/2E-27J	645.81	
		114-070-27	19.15	of				
		114-070-28	19.15	|				
		114-070-34	167.94	|				
		114-080-014	42.51	|				
		114-080-013	21.30	169.95	Pasture			
TOTAL TEMECULA CREEK ABOVE AGUANGA GROUNDWATER AREA				**409.95**			**1,325.31**	**0.00**

Well number in parentheses designated by Watermaster
** Water Use Report Form not submitted to Watermaster for Water Year 2011-12, indicated value assumed to be the same as prior year.

APPENDIX C

SANTA MARGARITA RIVER WATERSHED
SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
WILSON CREEK ABOVE AGUANGA GROUNDWATER AREA								
ANZA VALLEY								
Greenwald, Alvin G.	55255 Mitchell Road Anza. CA 92539 m/t 6010 Wilshire Blvd., #500 Los Angeles, CA 90036	573-180-001	156.38	0.00		7S/3E-17E	0.00	0.00
Miller, Frank C. Grabowski-Miller, Jane	55520 Hwy 371 Anza, CA 92539	573-200-009	36.40	5.00	Grapes	7S/3E-17(N) 7S/3E-17(M) 7S/3E-17(P)	5.00 0.00 44.10	
Anza Development Corp Lanik, Gordon	m/t P.O. Box 391273 Anza, CA 92539	573-200-004 573-200-005 573-200-006 573-200-007 573-200-008 573-200-010	18.24 18.50 18.89 18.88 18.31 18.68	18.00	Potatoes	Note: This property is leased by Agri-Empire and irrigated from Well # 7S/3E-17(P) located on Frank Miller's property listed above.		
Agri-Empire, Inc.	P.O. Box 490 San Jacinto, CA 92383							
	Section 10	575-050-044	14.36	0.00				
	Section 11	575-060-002	133.93	0.00		7S/3E-11N4 7S/3E-11P3	269.00 179.00	
	Section 13	575-100-009	19.94	0.00				
		575-100-032	89.02	0.00				
		575-100-033	89.08	0.00				
		575-100-034	37.63	0.00				
		575-100-035	157.20	0.00				
		575-100-036	27.91	0.00				
		575-100-037	57.80	0.00				
		575-100-039	7.91	0.00				
		575-100-040	0.88	0.00				
		575-100-041	19.93	0.00				
		575-100-042	60.00	0.00				
	Section 14	575-110-021	143.75	110.00	Row Crops	7S/3E-14D1	73.00	
		575-110-027	54.45	0.00				
		575-110-030	74.86	0.00				
		575-310-002	39.09	0.00		7S/3E-14C2	211.00	
		575-310-011	80.00	17.00	Potatoes			
		575-310-012	80.00	0.00				
		575-310-013	17.46	0.00				
		575-310-014	0.75	0.00				
		575-310-027	17.46	0.00				
		575-310-028	0.92	0.00				
	Section 15	575-080-010	4.77	0.00				
		575-080-014	9.92	0.00				
		575-080-015	4.35	0.00				
		575-080-017	9.75	0.00				
		575-080-018	10.13	0.00				
		575-080-019	31.29	0.00				
		575-080-021	20.00	0.00				
		575-080-022	20.00	0.00				
		575-080-024	20.00	0.00				
		575-080-027	20.00	0.00				
		575-090-010	38.80	0.00				

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APPENDIX C

SANTA MARGARITA RIVER WATERSHED
SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
WILSON CREEK ABOVE AGUANGA GROUNDWATER AREA								
ANZA VALLEY (Cont)								
Agri-Empire, Inc. (Cont)	Section 17	573-180-011	39.74	0.00				
	Section 20	576-060-009	8.26	Total				
		576-060-031	16.09	|				
		576-060-033	79.45	|				
		576-060-038	5.41	of				
		576-070-003	80.00	|				
		576-070-005	116.57	94.00	Potatoes			
	Section 21	576-100-061	37.71	40.00	Row Crops			
		576-110-001	160.00	39.00	Potatoes	7S/3E-21P(1)	390.00	
				40.00	Row Crops	7S/3E-21P(2)	0.00	
		576-110-002	28.00	0.00				
		576-110-003	2.00	0.00				
		576-110-004	50.00	30.00	Row Crops			
		576-110-006	19.29	Total				
		576-110-007	17.82	|				
		576-110-008	17.00	of		7S/3E-21R3	251.00	
				|		7S/3E-21R(4)	505.00	
		576-110-009	18.41	72.52	Row Crops			
	Section 22	575-130-003	19.55	0.00				
		575-130-006	40.89	0.00				
		575-130-008	18.56	Total				
		575-130-009	20.06	|				
		575-130-010	20.07	|				
		575-130-011	19.19	of				
		575-130-012	18.18	|				
		575-130-013	19.02	|				
		575-130-014	19.00	|				
		575-130-015	17.58	77.00	Potatoes			
		575-120-012	88.03	0.00				
		575-120-018	20.45	0.00				
		575-120-019	20.45	0.00				
		575-120-032	4.69	0.00				
		575-120-033	4.68	0.00				
		575-120-034	4.68	0.00				
		575-120-035	4.28	0.00				
	Section 23	575-140-006	9.90	0.00				
		575-140-020	90.48	57.00	Potatoes			

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CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
WILSON CREEK ABOVE AGUANGA GROUNDWATER AREA								
ANZA VALLEY (Cont)								
Burnett, Gregory V.	36990 Bonita Vista	573-040-001	235.20	0.00		7S/3E-5	4.00	
	Anza, CA 92539	573-040-002	30.00	0.00				
	m/t P. O. Box 391111	573-050-001	246.33	0.00				
	Anza, CA 92539							
Cahuilla Indian Reservation	Domestic and Commercial Wells Reported by Bureau of Indian Affairs						Total	
	Wells in Basement Complex	Wells out of Watershed	Wells with QYAL and/or QTOAL					
	7S/2E-14L1	8S/3E-2A1	7S/2E-14J1	7S/2E-28Q1	7S/3E-31L			
	7S/2E-25D1	8S/3E-2B1	7S/2E-14M1	7S/2E-33C1	7S/3E-31L2			
	7S/2E-26B1	8S/3E-2D1	7S/2E-14M2	7S/2E-33E1	7S/3E-34E1			
	7S/2E-26B2	8S/3E-2E1	7S/2E-14R1	7S/2E-33N1	7S/3E-34N1			
	7S/2E-26B3	8S/3E-2G1	7S/2E-23A1	7S/3E-27C1	7S/3E-34Q1			
	7S/2E-34E1	8S/3E-2H1	7S/2E-23D1	7S/3E-27C2	8S/2E-4D1			
	7S/2E-36A1	8S/3E-2K1	7S/2E-23F1	7S/3E-27H1	8S/2E-4N1			
	7S/2E-36J1		7S/2E-23G1	7S/3E-27M1	8S/2E-4N2			
	7S/2E-36R1		7S/2E-23H1	7S/3E-28A1	8S/2E-4P1			
	7S/3E-26A1		7S/2E-23K1	7S/3E-28A2	8S/2E-4R1			
	7S/3E-29Q1		7S/2E-23M1	7S/3E-28D1	8S/2E-4R2		of	
	7S/3E-30H1		7S/2E-23P1	7S/3E-29C1	8S/3E-5Q1			
	7S/3E-31A1		7S/2E-23Q1	7S/3E-29M1	8S/3E-6J1			
	7S/3E-31N1		7S/2E-25C1	7S/3E-30P1				
	7S/3E-31Q1		7S/2E-25F1	7S/3E-30Q1				
	7S/3E-32D1		7S/2E-25R1	7S/3E-30R1				
	7S/3E-32D2		7S/2E-26E1	7S/3E-30R2				
	8S/3E-6B1		7S/2E-26L1	7S/3E-30R3				
	8S/3E-6B2		7S/2E-27A1	7S/3E-31C1				
	8S/3E-6G1		7S/2E-27H1	7S/3E-31F1				
	8S/3E-6R1		7S/2E-28N1			Domestic	46.00	
						Stock Watering		5.60
SUBTOTAL ANZA VALLEY				**599.52**			**1,977.10**	**5.60**
WILSON CREEK ABOVE AGUANGA GROUNDWATER AREA								
LEWIS VALLEY								
Green Shell Company	39850 Sage Road	571-080-012	80.00	** 40.00	Olive Trees	7S/1E-20Q	** 44.00	
Shellaberger, James L.	Hemet, CA 92343							
SUBTOTAL LEWIS VALLEY				**40.00**			**44.00**	**0.00**
TOTAL WILSON CREEK ABOVE AGUANGA GROUNDWATER AREA				**639.52**			**2,021.10**	**5.60**

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APPENDIX C

SANTA MARGARITA RIVER WATERSHED

SUBSTANTIAL USERS OUTSIDE ORGANIZED WATER SERVICE AREAS

CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
MURRIETA-TEMECULA GROUNDWATER AREA								
Louidar	c/o McMillan Farm Mgt.	943-040-011	19.22	** 18.00	Citrus	7S/2W-28L	** 249.00	
	29379 Rancho Cal. Rd	943-060-010	90.76	** 89.00	Citrus			
	#201	943-060-011	26.47	** 24.00	Citrus			
	Temecula, CA 92390							
Anza Grove	c/o McMillan Farm Mgt.	942-180-002	40.00	Total				
Cavaletto, Selina J.	29379 Rancho Cal. Rd, #201	942-240-003	40.00	of				
Lassalette Enterprise	Temecula, CA 92390	942-240-004	40.00	|				
		942-240-005	35.00	155.00	Citrus	7S/2W-26B1		
						7S/2W-26B2	294.00	
Vail Lake USA, LLC	38695 Highway 79	917-240-019	54.13	** 0.00				
Mendoza, Bertha	Warner Springs, CA 92086	917-240-015	20.00	** 0.00				
	m/t 29400 Rancho Cal. Road	917-150-006	120.00	** 110.00	Citrus	8S/1W-21K(1)	** 262.00	
	Temecula, CA 92593	917-150-002	117.76	** 0.00		8S/1W-21K(2)	** 0.00	
						8S/1W-21P(1)	** 0.00	
						8S/1W-21P(2)	** 0.00	
Wild Horse Peak	Highway 79 S	943-230-001	109.34	75.00	Grapes	7S/2W-26L	0.00	
Vineyard Mountain	Temecula, CA	917-250-004	80.00	Total		8S/1W-25Q(1)	0.00	
	m/t 3719 South Plaza Drive	917-250-005	80.00	of		8S/1W-25P(1)	28.00	
	Santa Ana, CA 92704			|		8S/1W-25N(1)Spring 3		0.00
		917-250-007	240.00	220.00	Grapes	8S/1W-36K Spring 4		0.00
						8S/1W-36H Spring 6		0.00
						8S/1W-36K(1)	59.00	
						8S/1W-36K(2)	56.00	
						8S/1W-36K(3)	94.00	
						8S/1W-36L - Stream Diversion		52.00
Regency Properties	44051 Rainbow Cyn Rd.	922-220-002	86.11	Total		8S/2W-19(D)	275.98	
Temecula Creek Golf	Temecula, CA 92592	922-220-003	5.75	|				
		922-220-004	52.18	|				
		922-220-007	14.36	|				
		922-220-008	3.99	of				
		922-230-002	59.29	|				
		922-230-003	1.00	|				
		922-230-004	40.00	|				
		922-230-007	25.00	|				
		922-230-008	16.11	150.00	Grass			
Carson, Carol J.	25471 Hayes Ave	909-260-036	8.87	7.00	Pasture	7S/3W-29G	39.90	
	Murrieta, CA 92562	909-260-042	4.31	3.50	Pasture			
TOTAL MURRIETA-TEMECULA GROUNDWATER AREA				**851.50**			**1,357.88**	**52.00**

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CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
SANTA MARGARITA RIVER BELOW GORGE								
DE LUZ CREEK								
Stehly Family Holdings, LLC	40922 DeLuz Road Fallbrook, CA 92028 m/t 13268 McNally Road Valley Center, CA 92082	101-271-28	45.01	** 10.00	Avocados and Citrus	8S/4W-29D(1) 8s/4W-29D(2)	** 1.00 ** 8.00	
Prestininzi, Pete and Dorothy N.	2525 E. Mission Road Fallbrook, CA 92028 Richmond Truck Trail and DeLuz Murrieta Road	101-220-12 101-210-53	31.63 50.44	6.00 12.00	Pasture & Flowers Avocados and Citrus	8S/4W-20A(1) 8S/4W-20H(1) 8S/4W-20H(2) 8S/4W-20A - Diversion	16.00 16.00 14.00	0.00
Alfred Varela Sr. Family Living Trust Varela, Alfred	41125 DeLuz Road Fallbrook, CA 92028	101-210-11	15.23	8.50 0.50	Avocados Citrus	8S/4W-20Q(1) 8S/4W-20Q(2)	Total of 21.60	
Lake Forest, LLC	41257 DeLuz Road Fallbrook, CA 92028 m/t 26051 Glen Canyon Dr. Laguna Hills, CA 92653	101-210-12	30.28	9.00 15.00 1.00	Avocados Citrus Row crops	8S/4W-20Q(1) 8S/4W-20Q(2) 8S/4W-20Q(3)	Total of 50.00	
Wagner Family Trust	41128 DeLuz Road Fallbrook, CA 92028	101-210-23 101-210-22	17.19 4.55	15.00 3.00	Avocados Persimmons	8S/4W-20P(1) 8S/4W-20P(2) 8S/4W-20P(3)	0.00 0.00 39.30	
Chambers Family, LLC	40888 Deluz-Murrieta Road 38664 DeLuz Road Fallbrook, CA 92028 m/t Thomas Montllor 910 N. Pacific St., Apt. 38 Oceanside, CA 92054	101-571-03 102-130-42	41.72 54.37	40.00 5.00	Flowers Fruit	8S/4W-28A 8S/4W-28A - Diversion	52.00	8.00
Welburn Family Trust Wellburn, Douglas and Sue	40787 DeLuz-Murrieta Rd. Fallbrook, CA 92028	101-571-19 101-571-20 101-571-21	4.01 4.00 14.28	6.00 4.00 2.00	Gourds Melons Fruit Trees and Avocados	8S/4W-28G1	40.00	
Poladian, Jacqueline Bluebird Ranch	2193 Calle Rociada Fallbrook, CA m/t P. O. Box 1089 Fallbrook, CA 92088	101-312-01 101-312-02	82.29 58.17	42.00 45.00 5.00	Flowers Flowers Avocados	8S/4W-31L 8S/4W-31L - Diversion 8S/4W-31K(1) 8S/4W-31K(2) 8S/4W-31K(3)	Total of I 162.18	31.48
Norman and Deborah Vanginkel Trust	39452 DeLuz Road Fallbrook, CA 92028 m/t 21136 Trailside Drive Yorba Linda, CA 92887	101-312-03 102-052-04 102-731-02	80.00 22.04 4.26	10.00 15.00	Nursery Stock Avocados	8S/4W-31J(2) 8S/4W-31J(3) 8S/4W-31J(4) 8S/4W-31J(5)	10.00 0.00 40.00 0.00	
Ross Lake, LLC Rose, William and Joanne	39985 Daily Road Fallbrook, CA 92028	101-430-30 101-500-01 101-480-14	16.39 16.62 13.20	Total of I I 21.00	Avocados Limes Flowers	8S/4W-34- Lake Diversion		7.00
SUBTOTAL DELUZ CREEK				**275.00**			**470.08**	**46.48**

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CURRENT OWNER	ADDRESS	ASSESSOR PARCEL NO.	PARCEL ACREAGE	ACRES IRRIGATED 2011-12	IRRIGATED CROP 2011-12	WELL/ DIVERSION LOCATION TWP/RNG/SEC	WELL PRODUCTION AC. FT	SURFACE DIVERSION AC. FT
SANTA MARGARITA RIVER BELOW GORGE (Cont)								
SANDIA CREEK								
Cal June, Inc.	40376 Sandia Creek Fallbrook, CA 92028 m/t P. O. Box 9551 No. Hollywood, CA 91609	101-360-40	126.32	55.00	Avocados	8S/4W-25P(1) 8S/4W-25P(2) 8S/4W-25P(3) 8S/4W-25P(4) 8S/4W-25P(5) 8S/4W-25P - Diversion	Total | of | 9.00	
SUBTOTAL SANDIA CREEK				**55.00**			**9.00**	**0.00**
SANTA MARGARITA RIVER								
San Diego State University Foundation	47981 Willow Glen Rd. Temecula, CA 92592 m/t Matt Rahn, Director SDSU Foundation 5500 Campanile Dr. San Diego, CA 92182-4614	918-040-011 918-060-017	120.00 40.00	5.00 15.00	Citrus Avocados	8S/3W-33Q1 8S/3W-33Q(2) 8S/3W-33Q - Diversion	4.31 0.00	41.30
SUBTOTAL SANTA MARGARITA RIVER				**20.00**			**4.31**	**41.30**
TOTAL SANTA MARGARITA RIVER BELOW GORGE				**350.00**			**483.39**	**87.78**
LOWER MURRIETA								
Ronnenberg Family Trust (Sage Ranch Nursery)	42522 E. Benton Rd. Aguanga, CA 92536 m/t c/o Cliff Ronnenberg 11292 Western Avenue Stanton, CA 90680	571-020-046 571-020-047 571-020-048 571-020-049 571-020-004 571-520-007 571-520-008 571-520-009 571-520-012 915-140-069 915-140-070 470-210-007 470-220-004	81.09 40.80 36.75 148.86 1.50 109.50 99.43 80.23 77.54 91.56 21.39 53.62 109.23	0.00 0.00 0.00 0.00 0.00 Total | of | | | | 300.00	Olive trees	7S/1E-7D 7S/1E-7E - Diversion	5.50	100.00
EG High Desert Properties LLC	39800 E. Benton Rd. Temecula, CA 92390 m/t 12881 Bradley Avenue Sylmar, CA 91342	915-120-045	37.45	10.00	Pasture	7S/1W-10R(1) 7S/1W-10R(2) 7S/1W-10R(3) 7S/1W-10R(4) 7S/1W-10R(5) 7S/1W-10R(6) 7S/1W-10R(7)	Total of | 38.00 Domestic 0.00 0.00	
TOTAL LOWER MURRIETA				**310.00**			**43.50**	**100.00**
GRAND TOTAL				**3,284.24**			**7,282.27**	**712.18**
GRAND TOTAL	Not including Cahuilla Indian Reservation			**3,284.24**			**7,236.27**	**706.58**

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SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX D

WATER QUALITY DATA

July 2013

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
Holiday Well	06/16/89	1300	775	122	39	100	2	178	66	372	40
7S/3W-20C09	10/18/91	---	---	---	---	---	---	---	---	---	25
	11/15/91	---	---	---	---	---	---	---	---	---	26
	12/13/91	---	---	---	---	---	---	---	---	---	28
	01/10/92	---	---	---	---	---	---	---	---	---	27
	02/07/92	---	---	---	---	---	---	---	---	---	27
	05/01/92	---	---	---	---	---	---	---	---	---	32
	05/29/92	---	---	---	---	---	---	---	---	---	28
	08/21/92	---	---	---	---	---	---	---	---	---	27
	01/22/93	960	605	83	29	83	2	130	84	278	33
	10/15/93	---	---	---	---	---	---	---	---	---	32
	03/30/94	---	---	---	---	---	---	---	---	---	44
	06/22/94	---	---	---	---	---	---	---	---	---	35
	09/14/94	---	---	---	---	---	---	---	---	---	31
	12/07/94	---	---	---	---	---	---	---	---	---	30
	03/01/95	---	---	---	---	---	---	---	---	---	32
	06/21/95	---	---	---	---	---	---	---	---	---	11
	09/13/95	---	---	---	---	---	---	---	---	---	27
	12/06/95	---	---	---	---	---	---	---	---	---	26
	03/27/96	---	---	---	---	---	---	---	---	---	15
	06/06/96	---	---	---	---	---	---	---	---	---	24
	09/11/96	---	---	---	---	---	---	---	---	---	22
	11/08/96	---	---	---	---	---	---	---	---	---	55
	11/14/96	---	---	---	---	---	---	---	---	---	25
	12/05/96	---	---	---	---	---	---	---	---	---	24
	03/27/97	---	---	---	---	---	---	---	---	---	20
	06/18/97	---	---	---	---	---	---	---	---	---	21
	12/03/97	---	---	---	---	---	---	---	---	---	18
	03/25/98	---	---	---	---	---	---	---	---	---	21
	04/22/98	1090	680	89	29	85	1	150	76	290	22
	06/17/98	---	---	---	---	---	---	---	---	---	23
	10/01/98	---	---	---	---	---	---	---	---	---	25
	12/02/98	---	---	---	---	---	---	---	---	---	28
	02/24/99	---	---	---	---	---	---	---	---	---	33
	03/24/99	---	---	---	---	---	---	---	---	---	26
	09/09/99	---	---	---	---	---	---	---	---	---	36
	12/03/99	---	---	---	---	---	---	---	---	---	32
	07/12/00	---	---	---	---	---	---	---	---	---	21
	08/04/00	1290	790	110	36	99	---	180	110	320	21
	10/24/01	---	---	---	---	---	---	---	---	---	17
	03/06/02	---	---	---	---	---	---	---	---	---	15
	07/11/02	---	780	---	---	---	---	---	---	310	---
	10/03/03	---	800	113	---	---	---	---	---	332	---
	04/21/04	---	---	---	---	---	---	---	---	---	11
	01/27/05	---	980	160	47	---	---	---	---	440	---

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
Holiday Well	03/30/05	---	---	---	---	---	---	---	---	---	35
7S/3W-20C09	01/26/06	1700	1000	160	48	130	1.6	240	130	---	46
(Cont)	01/30/06	---	---	---	---	---	---	---	---	---	49
House Well	06/16/89	660	345	34	3	95	2	87	60	153	<1
7S/3W-20G06	02/27/91	770	---	---	---	---	---	110	65	168	<1
	03/01/91	730	---	---	---	---	---	110	---	---	<1
	03/08/91	680	420	42	5	90	2	110	68	122	<1
	05/10/91	750	---	---	---	---	---	---	---	---	<1
	10/11/91	---	---	---	---	---	---	---	---	---	<1
	11/08/91	---	---	---	---	---	---	---	---	---	<1
	05/22/92	---	---	---	---	---	---	---	---	---	<1
	08/14/92	---	---	---	---	---	---	---	---	---	<1
	01/22/93	720	415	40	5	106	2	100	68	168	<1
	09/07/94	---	---	---	---	---	---	---	---	---	<1
	12/27/95	---	---	---	---	---	---	---	---	---	<1
	03/22/95	---	---	---	---	---	---	---	---	---	<1
	06/14/95	---	---	---	---	---	---	---	---	---	<1
	09/06/95	---	---	---	---	---	---	---	---	---	<1
	12/27/95	---	---	---	---	---	---	---	---	---	<1
	03/20/96	---	---	---	---	---	---	---	---	---	<2
	06/12/96	---	---	---	---	---	---	---	---	---	<2
	09/04/96	---	---	---	---	---	---	---	---	---	<2
	12/26/96	---	---	---	---	---	---	---	---	---	<2
	03/19/97	---	---	---	---	---	---	---	---	---	<2
	06/12/97	---	---	---	---	---	---	---	---	---	<2
	12/30/97	---	---	---	---	---	---	---	---	---	<2
	03/18/98	---	---	---	---	---	---	---	---	---	<2
	04/15/98	660	360	30	3	94	1	91	62	130	<2
	06/10/98	---	---	---	---	---	---	---	---	---	<2
	10/01/98	---	---	---	---	---	---	---	---	---	<2
	12/23/98	---	---	---	---	---	---	---	---	---	<2
	02/17/99	---	---	---	---	---	---	---	---	---	<2
	03/17/99	---	---	---	---	---	---	---	---	---	<2
	06/09/99	---	---	---	---	---	---	---	---	---	<2
	09/01/99	---	---	---	---	---	---	---	---	---	<2
	12/22/99	---	---	---	---	---	---	---	---	---	ND
	03/15/00	640	370	29	3	92	2	82	61	130	<2
	06/07/00	---	---	---	---	---	---	---	---	---	<2
	09/27/00	---	---	---	---	---	---	---	---	---	<2
	10/24/01	---	---	---	---	---	---	---	---	---	<2
	03/06/02	---	---	---	---	---	---	---	---	---	<2
	07/11/02	---	440	---	---	---	---	---	---	170	---
	10/03/03	630	380	34	3	103	---	87	---	140	ND
	04/21/04	---	---	---	---	---	---	---	---	---	<2

ND - None Detected

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
South Well	09/07/90	690	405	62	17	68	2	83	56	229	4
7S/3W-20D	10/04/91	---	---	---	---	---	---	---	---	---	2
	11/01/91	---	---	---	---	---	---	---	---	---	3
	11/26/91	---	---	---	---	---	---	---	---	---	2
	05/15/92	---	---	---	---	---	---	---	---	---	<1
	10/01/93	---	---	---	---	---	---	---	---	---	2
	09/28/94	---	---	---	---	---	---	---	---	---	1
	12/21/94	---	---	---	---	---	---	---	---	---	3
	03/15/95	---	---	---	---	---	---	---	---	---	2
	06/07/95	---	---	---	---	---	---	---	---	---	2
	09/27/95	---	---	---	---	---	---	---	---	---	2
	12/20/95	---	---	---	---	---	---	---	---	---	3
	03/13/96	---	---	---	---	---	---	---	---	---	2
	06/15/96	---	---	---	---	---	---	---	---	---	3
	09/25/96	---	---	---	---	---	---	---	---	---	3
	12/18/96	---	---	---	---	---	---	---	---	---	3
	04/09/97	---	---	---	---	---	---	---	---	---	2
	06/04/97	---	---	---	---	---	---	---	---	---	2
	03/11/98	---	---	---	---	---	---	---	---	---	<2
	04/08/98	820	500	73	18	67	2	92	73	250	3
	06/03/98	---	---	---	---	---	---	---	---	---	3
	10/01/98	---	---	---	---	---	---	---	---	---	3
	12/16/98	---	---	---	---	---	---	---	---	---	2
	03/10/98	---	---	---	---	---	---	---	---	---	2
	06/09/99	---	---	---	---	---	---	---	---	---	2
	09/22/99	---	---	---	---	---	---	---	---	---	<2
	12/15/99	---	---	---	---	---	---	---	---	---	ND
	02/09/00	810	460	55	14	84	1	99	63	210	<2
	05/03/00	---	---	---	---	---	---	---	---	---	<2
	08/04/00	780	440	47	9	100	---	99	48	210	<2
	08/23/00	---	---	---	---	---	---	---	---	---	<2
	10/24/01	---	---	---	---	---	---	---	---	---	<2
	03/20/02	---	---	---	---	---	---	---	---	---	4
	07/11/02	---	460	---	---	---	---	---	---	180	---
	10/03/03	---	460	59	---	---	---	---	---	207	---
	04/21/04	---	---	---	---	---	---	---	---	---	<2
	01/27/05	---	610	110	28	---	---	---	---	300	---
	03/30/05	---	---	---	---	---	---	---	---	---	5
	01/26/06	800	440	42	9.1	110	1.2	120	65	---	1.2
	04/12/06	---	---	---	---	---	---	---	---	---	6.1
	05/10/06	---	---	---	---	---	---	---	---	---	1.6
	06/14/06	---	---	---	---	---	---	---	---	---	1.4

ND - None Detected

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
South Well 7S/3W-20D (Cont)	07/12/06	---	---	---	---	---	---	---	---	---	<1
	08/09/06	---	---	---	---	---	---	---	---	---	1.4
	09/13/06	---	---	---	---	---	---	---	---	---	1.5
	10/11/06	---	---	---	---	---	---	---	---	---	1.4
	11/08/06	---	---	---	---	---	---	---	---	---	1.3
	12/13/06	---	---	---	---	---	---	---	---	---	1.3
	01/10/07	---	---	---	---	---	---	---	---	---	1.4
	02/13/07	---	---	---	---	---	---	---	---	---	5.3
	03/14/07	---	---	---	---	---	---	---	---	---	1.2
	04/11/07	---	---	---	---	---	---	---	---	---	<2
	05/09/07	---	---	---	---	---	---	---	---	---	<2
	06/13/07	---	---	---	---	---	---	---	---	---	1.2
	07/11/07	---	---	---	---	---	---	---	---	---	4.7
	08/15/07	800	480	40	8.5	100	<1	110	61	200	1.1
	09/12/07	---	---	---	---	---	---	---	---	---	5.6
	11/14/07	---	---	---	---	---	---	---	---	---	1.4
	12/04/07	---	---	---	---	---	---	---	---	---	1.2
	01/24/08	---	---	---	---	---	---	---	---	---	4.6
	03/26/08	---	---	---	---	---	---	---	---	---	3.9
	04/23/08	---	---	---	---	---	---	---	---	---	4.1
	06/09/08	---	---	---	---	---	---	---	---	---	4.1
	07/14/08	---	---	---	---	---	---	---	---	---	5.1
	09/08/08	---	---	---	---	---	---	---	---	---	4.9
	01/19/09	---	---	---	---	---	---	---	---	---	6.7
	11/13/09	1300	820	120	34	110	1.8	200	140	320	---
	11/17/09	---	---	---	---	---	---	---	---	---	5.8
	11/09/11	---	---	---	---	---	---	---	---	---	1.6
	01/26/12	---	---	---	---	---	---	---	---	---	1.5
North Well 7S/3W-18J02	06/16/89	730	390	40	7	98	2	98	45	201	<1
	10/25/91	---	---	---	---	---	---	---	---	---	<1
	11/22/91	---	---	---	---	---	---	---	---	---	<1
	05/08/92	---	---	---	---	---	---	---	---	---	<1
	08/28/92	---	---	---	---	---	---	---	---	---	<1
	01/22/93	680	405	39	8	99	2	100	51	183	<1
	10/22/93	---	---	---	---	---	---	---	---	---	<1
	07/08/94	810	520	---	---	87	---	130	53	---	<1
	09/21/94	---	---	---	---	---	---	---	---	---	<1
	12/14/94	---	---	---	---	---	---	---	---	---	<1
	03/08/95	---	---	---	---	---	---	---	---	---	<1
	06/28/95	---	---	---	---	---	---	---	---	---	<1
	09/20/95	---	---	---	---	---	---	---	---	---	<1
	12/13/95	---	---	---	---	---	---	---	---	---	<1
	03/06/96	---	---	---	---	---	---	---	---	---	<2
	06/26/96	---	---	---	---	---	---	---	---	---	<2

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
North Well	09/18/96	---	---	---	---	---	---	---	---	---	<2
7S/3W-18J02	12/11/96	---	---	---	---	---	---	---	---	---	<2
(Cont)	06/25/97	---	---	---	---	---	---	---	---	---	<2
	07/08/98	760	460	49	9	100	2	110	51	220	<2
	10/01/98	---	---	---	---	---	---	---	---	---	<2
	12/09/98	---	---	---	---	---	---	---	---	---	<2
	02/03/99	---	---	---	---	---	---	---	---	---	<2
	03/03/99	---	---	---	---	---	---	---	---	---	<2
	06/23/99	---	---	---	---	---	---	---	---	---	<2
	09/22/99	---	---	---	---	---	---	---	---	---	<2
	12/08/99	---	---	---	---	---	---	---	---	---	<2
	01/05/00	780	440	47	9	100	---	99	48	210	<2
	05/03/00	---	---	---	---	---	---	---	---	---	<2
	07/19/00	---	---	---	---	---	---	---	---	---	<2
	10/24/01	---	---	---	---	---	---	---	---	---	<2
	03/06/02	---	---	---	---	---	---	---	---	---	<2
	07/11/02	---	420	---	---	---	---	---	---	180	---
	10/03/03	---	440	53	---	---	---	---	---	---	---
	04/21/04	---	---	---	---	---	---	---	---	---	<2
	01/27/05	---	440	59	10	---	---	---	---	230	---
	03/30/05	---	---	---	---	---	---	---	---	---	<2
	01/26/06	820	450	60	11	96	2	120	52	---	1
	05/10/06	---	---	---	---	---	---	---	---	---	<1
	07/19/06	---	---	---	---	---	---	---	---	---	<1
	08/16/06	---	---	---	---	---	---	---	---	---	<1
	09/20/06	---	---	---	---	---	---	---	---	---	<1
	10/18/06	---	---	---	---	---	---	---	---	---	<1
	11/15/06	---	---	---	---	---	---	---	---	---	<1
	01/17/07	---	---	---	---	---	---	---	---	---	<1
	02/21/07	---	---	---	---	---	---	---	---	---	<2
	03/21/07	---	---	---	---	---	---	---	---	---	<2
	04/18/07	---	---	---	---	---	---	---	---	---	<2
	05/16/07	---	---	---	---	---	---	---	---	---	<2
	07/23/07	---	500	---	---	---	---	---	---	---	---
	07/26/07	---	540	---	---	---	---	---	---	---	---
	08/15/07	830	520	59	11	89	1.2	110	54	230	<2
	09/19/07	---	---	---	---	---	---	---	---	---	<2
	12/04/07	---	---	---	---	---	---	---	---	---	1.5
	01/24/08	---	---	---	---	---	---	---	---	---	1.8
	03/26/08	---	---	---	---	---	---	---	---	---	2.5
	04/23/08	---	---	---	---	---	---	---	---	---	2.0
	05/19/08	---	---	---	---	---	---	---	---	---	2.2
	06/16/08	---	---	---	---	---	---	---	---	---	2.1
	07/21/08	---	---	---	---	---	---	---	---	---	<2

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
North Well	09/15/08	---	---	---	---	---	---	---	---	---	2.0
7S/3W-18J02	01/19/09	---	---	---	---	---	---	---	---	---	1
(Cont)	02/23/09	---	---	---	---	---	---	---	---	---	<2
	03/16/09	---	---	---	---	---	---	---	---	---	<2
	04/20/09	---	---	---	---	---	---	---	---	---	<2
	05/18/09	---	---	---	---	---	---	---	---	---	<2
	06/02/09	830	470	54	11	92	1.6	100	54	230	<2
	06/08/09	830	410	57	10	89	1.6	110	54	230	<2
	06/15/09	---	---	---	---	---	---	---	---	---	<1
	07/07/09	870	490	51	10	87	1.5	110	56	220	---
	07/20/09	830	460	54	10	90	1.7	110	52	220	<2
	08/03/09	820	480	49	9	82	1.4	120	49	220	<2
	08/25/09	---	---	---	---	---	---	---	---	---	1.2
	09/08/09	800	460	55	11	97	1.7	120	52	220	<2
	09/21/09	---	---	---	---	---	---	---	---	---	1.1
	10/05/09	780	470	55	11	97	1.8	110	53	220	<2
	10/19/09	---	---	---	---	---	---	---	---	---	<2
	11/02/09	790	470	55	11	91	1.7	110	53	220	<2
	11/16/09	---	---	---	---	---	---	---	---	---	<2
	12/07/09	810	480	56	11	94	1.8	110	52	220	<1
	12/21/09	---	---	---	---	---	---	---	---	---	<2
	01/04/10	810	470	57	11	91	1.7	110	52	220	<2
	01/18/10	---	---	---	---	---	---	---	---	---	<2
	02/01/10	860	460	59	13	87	1.7	110	54	240	1.2
	02/17/10	---	---	---	---	---	---	---	---	---	1.1
	03/01/10	810	460	56	11	88	1.7	110	55	220	<2
	03/15/10	---	---	---	---	---	---	---	---	---	<2
	04/07/10	820	450	56	11	92	1.5	110	52	220	<2
	04/19/10	---	---	---	---	---	---	---	---	---	<2
	05/03/10	810	450	57	11	92	1.5	110	52	220	<2
	05/17/10	---	---	---	---	---	---	---	---	---	1.1
	06/01/10	820	520	52	11	90	1.9	100	50	220	<2
	06/21/10	---	---	---	---	---	---	---	---	---	<2
	07/19/10	---	---	---	---	---	---	---	---	---	<2
	08/02/10	830	470	52	10	88	1.7	100	47	220	<2
	08/16/10	---	---	---	---	---	---	---	---	---	<2
	11/17/10	830	510	51	20	78	3.6	94	160	120	<2
	02/01/11	860	480	59	12	95	1.7	110	54	220	<2
	04/04/11	800	460	53	11	93	1.6	110	52	210	<2
	04/18/11	---	---	---	---	---	---	---	---	---	<2
	06/21/11	---	---	---	---	---	---	---	---	---	<2
	07/18/11	---	---	---	---	---	---	---	---	---	<1.0
	08/16/11	---	---	---	---	---	---	---	---	---	<1.0

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
North Well	09/19/11	---	---	---	---	---	---	---	---	---	<1.0
7S/3W-18J02	10/03/11	770	470	55	11	97	1.9	110	54	210	<1.0
(Cont)	10/17/11	---	---	---	---	---	---	---	---	---	<1.0
	11/02/11	820	440	55	11	92	1.8	110	54	200	<1.0
	11/15/11	---	---	---	---	---	---	---	---	---	1.1
	12/06/11	820	510	52	10	95	1.6	120	55	200	1.0
	12/19/11	---	---	---	---	---	---	---	---	---	1.1
	12/28/11	820	440	53	11	93	1.8	110	54	200	<1.0
	01/04/12	810	480	53	10	94	1.7	110	57	200	<1.0
	01/16/12	---	---	---	---	---	---	---	---	---	<1.0
	02/01/12	830	510	57	11	93	2.1	120	58	220	<1.0
	02/06/12	---	---	---	---	---	---	---	---	---	<1.0
	02/15/12	810	450	52	10	88	1.7	120	55	210	<1.0
	03/01/12	760	460	62	13	87	1.8	120	57	230	1.0
	03/19/12	---	---	---	---	---	---	---	---	---	<1.0
	04/16/12	---	---	---	---	---	---	---	---	---	1.1
	04/17/12	---	---	---	---	---	---	---	---	---	1.2
	05/02/12	800	460	52	11	96	1.8	120	61	210	<1.0
	05/14/12	---	---	---	---	---	---	---	---	---	<1.0
	06/04/12	820	460	50	10	92	1.8	88	110	200	1.2
	06/19/12	---	---	---	---	---	---	---	---	---	<1.0
	07/02/12	830	510	54	11	93	1.7	120	55	210	1.0
	07/17/12	---	---	---	---	---	---	---	---	---	<1.0
	07/25/12	---	---	---	---	---	---	---	---	---	<1.0
	08/01/12	830	470	56	11	98	1.7	110	54	210	<1.0
	08/13/12	---	---	---	---	---	---	---	---	---	<1.0
	09/10/12	830	440	52	10	96	1.9	110	54	210	<1.0
	09/17/12	---	---	---	---	---	---	---	---	---	<1.0
New Clay Well	03/09/04	480	340	23	1	87	1	79	64	98	<2
7S/3W-20	01/26/06	590	310	20	1.2	93	1.2	85	57	---	<1
	01/31/06	---	---	---	---	---	---	---	---	---	7.2
	01/31/06	---	---	---	---	---	---	---	---	---	6.9
	04/04/06	---	---	---	---	---	---	---	---	---	<1
	04/12/06	---	---	---	---	---	---	---	---	---	<1
	05/10/06	---	---	---	---	---	---	---	---	---	<1
	06/07/06	---	---	---	---	---	---	---	---	---	<1
	07/05/06	---	---	---	---	---	---	---	---	---	<1
	08/02/06	---	---	---	---	---	---	---	---	---	<1
	09/06/06	---	---	---	---	---	---	---	---	---	<1
	10/04/06	---	---	---	---	---	---	---	---	---	<1
	11/01/06	---	---	---	---	---	---	---	---	---	<1
	12/06/06	---	---	---	---	---	---	---	---	---	<1
	01/04/07	---	---	---	---	---	---	---	---	---	<1
	02/07/07	---	---	---	---	---	---	---	---	---	<1
	03/07/07	---	---	---	---	---	---	---	---	---	<2
	04/04/07	---	---	---	---	---	---	---	---	---	<2
	05/02/07	---	---	---	---	---	---	---	---	---	<2
	06/06/07	---	---	---	---	---	---	---	---	---	<2

ND - None Detected

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
New Clay Well	07/05/07	---	---	---	---	---	---	---	---	---	<2
7S/3W-20	08/01/07	---	---	---	---	---	---	---	---	---	<2
(Cont)	08/15/07	510	270	13	<1	91	1	65	50	83	<2
	09/05/07	---	---	---	---	---	---	---	---	---	<2
	12/04/07	---	---	---	---	---	---	---	---	---	<2
	03/26/08	---	---	---	---	---	---	---	---	---	<1
	04/23/08	---	---	---	---	---	---	---	---	---	<1
	05/05/08	---	---	---	---	---	---	---	---	---	<1
	06/02/08	---	---	---	---	---	---	---	---	---	<1
	07/07/08	---	---	---	---	---	---	---	---	---	<1
	09/02/08	---	---	---	---	---	---	---	---	---	<2
	01/19/09	---	---	---	---	---	---	---	---	---	<2
	11/13/09	630	350	25	4.7	97	1.5	84	76	110	---
	11/17/09	---	---	---	---	---	---	---	---	---	<2
	08/25/11	700	380	30	2.7	110	1.8	97	62	150	<1.0
	05/21/12	---	---	---	---	---	---	---	---	---	<0.20
	06/01/12	590	340	19	<1.0	93	1.4	83	56	110	<1.0
Lynch Well 7S/3W-17R02	06/16/89	760	410	70	17	55	1	86	30	262	8
Morris Well 7S/3W-19R	09/07/90	530	280	38	7	68	3	50	49	168	3
Alson Well	06/06/90	1520	915	138	46	110	1	250	81	433	31
7S/3W-7M	07/21/98	1260	880	100	37	120	<1	180	92	330	23
	09/09/98	1200	850	110	39	120	<1	180	100	320	23
	05/03/00	---	---	---	---	---	---	---	---	---	20
	05/19/00	1290	800	97	36	110	<1	180	96	330	19
	11/28/01	1290	750	93	33	110	<1	180	96	310	17
	03/06/02	---	---	---	---	---	---	---	---	---	20
	07/01/02	---	650	---	---	---	---	---	---	270	---
	10/03/03	880	550	80	26	95	---	ND	ND	259	ND
	01/27/05	1100	640	100	32	110	---	150	81	320	---
	01/26/06	1500	870	120	41	120	1.2	230	120	---	18
	04/12/06	---	---	---	---	---	---	---	---	---	19
	05/10/06	---	---	---	---	---	---	---	---	---	18
	06/28/06	---	---	---	---	---	---	---	---	---	20
	07/26/06	---	---	---	---	---	---	---	---	---	20
	08/23/06	---	---	---	---	---	---	---	---	---	18
	09/27/06	---	---	---	---	---	---	---	---	---	21
	10/25/06	---	---	---	---	---	---	---	---	---	22
	11/22/06	---	---	---	---	---	---	---	---	---	22
	12/27/06	---	---	---	---	---	---	---	---	---	21

ND - None Detected

TABLE D-3

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY WESTERN MUNICIPAL WATER DISTRICT
MURRIETA DIVISION

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
Alson Well	01/24/07	---	---	---	---	---	---	---	---	---	22
7S/3W-7M	02/28/07	---	---	---	---	---	---	---	---	---	22
(Cont)	03/29/07	---	---	---	---	---	---	---	---	---	23
	04/25/07	---	---	---	---	---	---	---	---	---	19

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TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 101	06/01/88	810	495	76	15	79	8	116	16	314	---
7S/3W-34G1	08/05/88	---	---	---	---	---	---	---	---	---	<1
	05/23/90	630	365	30	6	91	2	101	35	107	3
	08/04/93	860	465	76	14	78	2	120	22	275	<1
	08/09/96	820	480	69	14	83	2	110	15	310	<2
	10/16/97	---	---	---	---	---	---	---	---	---	<2
	08/11/99	840	510	70	14	85	2	110	17	300	<2
	06/25/02	---	---	---	---	---	---	---	---	---	<2
	08/14/02	870	500	66	14	85	2.5	120	15	250	<2
	06/11/03	---	---	---	---	---	---	---	---	---	<2
	06/15/04	---	---	---	---	---	---	---	---	---	<2
	06/14/05	---	---	---	---	---	---	---	---	---	<1
	08/09/05	880	440	75	15	87	2.5	140	22	300	<1
	06/07/06	---	---	---	---	---	---	---	---	---	<1
	06/01/07	---	---	---	---	---	---	---	---	---	<2
	06/03/08	---	620	---	---	---	---	---	---	---	<2
	08/11/08	1000	550	91	18	110	2.9	150	36	300	<2
	09/09/08	---	620	---	---	---	---	---	---	---	---
	01/08/09	---	840	---	---	---	---	---	---	---	
	06/25/09	---	810	---	---	---	---	---	---	---	<2
	03/24/10	---	620	---	---	---	---	---	---	---	---
	06/02/10	---	670	---	---	---	---	---	---	---	<2
	09/01/11	---	620	---	---	---	---	---	---	---	---
	12/09/11	---	610	---	---	---	---	---	---	---	---
	03/07/12	---	650	---	---	---	---	---	---	---	---
	06/12/12	---	650	---	---	---	---	---	---	---	<1
	09/13/12	---	650	---	---	---	---	---	---	---	---
No. 102	01/04/89	695	370	9	2	134	1	101	25	195	<1
8S/3W-2Q1	01/15/92	930	615	38	4	160	3	160	55	250	<1
	05/17/95	850	475	21	1	144	1	120	130	98	<1
	06/20/95	1190	700	26	2	207	2	150	220	131	<1
	06/09/97	---	---	---	---	---	---	---	---	---	<2
No. 105	07/06/89	500	280	30	6	66	2	71	22	134	14
7S/3W-25M1	03/17/93	480	310	17	2	80	2	67	22	110	14
No. 106	06/29/88	920	485	38	5	143	3	182	66	70	16
7S/3W-26R1	05/13/92	880	515	35	4	142	2	180	72	110	17
	05/16/95	870	495	32	3	138	2	160	57	116	14
	07/07/97	---	---	---	---	---	---	---	---	---	8
	07/20/98	---	---	---	---	---	---	---	---	---	9
	07/20/99	---	---	---	---	---	---	---	---	---	9
	07/06/00	---	---	---	---	---	---	---	---	---	8

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 106	05/01/01	490	300	7	<1	96	<1	70	23	100	8
7S/3W-26R1	07/10/01	---	---	---	---	---	---	---	---	---	12
(Cont)	07/03/02	---	---	---	---	---	---	---	---	---	8
	07/07/03	---	---	---	---	---	---	---	---	---	6.8
	05/11/04	530	310	9	<1	93	1	80	25	88	8
	07/13/04	---	---	---	---	---	---	---	---	---	8
	07/07/05	---	---	---	---	---	---	---	---	---	6.5
	07/19/06	---	---	---	---	---	---	---	---	---	6.1
	05/02/07	550	290	8.8	<1	91	<1	84	26	85	3.7
	07/03/07	---	---	---	---	---	---	---	---	---	6
	07/07/08	---	370	---	---	---	---	---	---	---	12
	01/13/09	---	440	---	---	---	---	---	---	---	---
	04/16/09	---	310	---	---	---	---	---	---	---	---
	07/01/09	---	340	---	---	---	---	---	---	---	6.8
	03/18/10	---	440	---	---	---	---	---	---	---	---
	05/06/10	720	410	23	1.6	120	1.5	130	57	100	12
	06/02/10	---	390	---	---	---	---	---	---	---	---
	07/13/10	---	---	---	---	---	---	---	---	---	2
	09/01/10	---	340	---	---	---	---	---	---	---	---
	12/09/10	---	410	---	---	---	---	---	---	---	---
	04/15/11	---	400	---	---	---	---	---	---	---	---
	07/06/11	---	300	---	---	---	---	---	---	---	6
	10/04/11	---	320	---	---	---	---	---	---	---	---
	01/31/12	---	430	---	---	---	---	---	---	---	---
	04/09/12	---	430	---	---	---	---	---	---	---	---
No. 107	04/11/88	490	365	19	4	73	2	69	22	116	15
7S/3W-26J1	05/29/91	950	535	63	15	104	3	130	120	171	11
No. 108	05/25/88	780	455	51	11	96	2	120	68	153	14
7S/3W-25E1	05/29/91	930	500	59	14	104	3	130	110	153	10
	05/13/94	640	395	23	5	100	2	120	51	104	7
	05/16/95	---	---	---	---	---	---	---	---	---	5
	05/13/97	540	300	7	<1	110	<1	110	15	85	4
	05/05/99	---	---	---	---	---	---	---	---	---	8
	05/16/00	630	350	7	<1	110	<1	130	12	65	3
	05/02/01	---	---	---	---	---	---	---	---	---	2
	11/19/02	---	---	---	---	---	---	---	---	---	2
	04/14/05	---	---	---	---	---	---	---	---	---	2
	04/18/06	---	---	---	---	---	---	---	---	---	1
	05/12/06	750	360	8.2	<1	140	<1	190	7.9	50	1.1
	02/13/08	---	---	---	---	---	---	---	---	---	1.4
	08/06/08	---	400	---	---	---	---	---	---	---	---
	02/05/09	---	340	---	---	---	---	---	---	---	2.2
	05/08/09	730	380	7.2	<1	130	<1	170	9.4	60	<2.0
	08/05/09	---	370	---	---	---	---	---	---	---	---
	02/03/10	---	---	---	---	---	---	---	---	---	3

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 108	05/06/10	---	380	---	---	---	---	---	---	---	---
7S/3W-25E1	08/13/10	---	350	---	---	---	---	---	---	---	---
(Cont)	11/03/10	---	380	---	---	---	---	---	---	---	---
	02/02/11	---	350	---	---	---	---	---	---	---	2
	05/05/11	---	380	---	---	---	---	---	---	---	---
	08/02/11	---	400	---	---	---	---	---	---	---	---
	11/01/11	---	350	---	---	---	---	---	---	---	---
	02/08/12	---	350	---	---	---	---	---	---	---	<2.0
	05/02/12	700	380	7.2	<1	130	1.2	180	10	63	2.3
No. 109	06/01/88	1400	920	136	35	120	4	100	300	296	---
8S/2W-17J1	08/05/88	---	---	---	---	---	---	---	---	---	10
	06/12/91	1330	800	110	26	120	5	120	270	275	9
	06/22/94	1370	1010	138	32	124	5	140	320	287	7
	06/06/95	---	---	---	---	---	---	---	---	---	8
	06/13/97	1440	1010	130	31	140	4	140	330	280	10
	07/16/97	---	---	---	---	---	---	---	---	---	2.2 as N
	04/14/99	---	---	---	---	---	---	---	---	---	12
	04/11/00	---	---	---	---	---	---	---	---	---	13
	06/21/00	1330	870	120	28	130	4	120	280	270	3.2
	04/10/01	---	---	---	---	---	---	---	---	---	13
	06/11/03	1400	970	140	32	130	4	130	340	290	12
	06/19/03	1400	970	150	32	120	4.2	130	340	290	12
	01/07/04	---	---	---	---	---	---	---	---	---	13
	01/11/05	---	---	---	---	---	---	---	---	---	13
	01/04/06	---	---	---	---	---	---	---	---	---	12
	07/12/06	1300	930	130	30	130	4.8	130	280	280	12
	01/10/07	---	---	---	---	---	---	---	---	---	13
	01/04/08	---	---	---	---	---	---	---	---	---	13
	07/07/08	---	810	---	---	---	---	---	---	---	---
	01/13/09	---	860	---	---	---	---	---	---	---	16
	04/02/09	---	810	---	---	---	---	---	---	---	---
	07/06/09	---	770	---	---	---	---	---	---	---	---
	01/05/10	---	---	---	---	---	---	---	---	---	14
	04/07/10	---	930	---	---	---	---	---	---	---	---
	07/01/10	---	1000	---	---	---	---	---	---	---	---
	10/06/10	---	830	---	---	---	---	---	---	---	---
	01/12/11	---	920	---	---	---	---	---	---	---	14
	01/25/12	---	880	---	---	---	---	---	---	---	12
	04/03/12	---	910	---	---	---	---	---	---	---	---
No. 110	03/31/88	1100	630	70	23	132	6	115	163	268	3
8S/1W-06K1	03/11/93	1010	610	60	21	124	5	110	200	201	3
	04/27/95	---	---	---	---	---	---	---	---	---	1
	07/20/99	---	---	---	---	---	---	---	---	---	<2
	07/06/00	---	---	---	---	---	---	---	---	---	2
	07/10/01	---	---	---	---	---	---	---	---	---	2

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 110	03/11/02	850	500	58	20	81	5	74	190	160	<2
8S/1W-06K1	07/03/02	---	---	---	---	---	---	---	---	---	<2
(Cont)	09/16/03	---	---	---	---	---	---	---	---	---	2
	09/01/04	---	---	---	---	---	---	---	---	---	2
	03/02/05	810	510	56	21	79	4.9	76	170	150	<2
	09/07/05	---	---	---	---	---	---	---	---	---	1.8
	09/06/07	---	---	---	---	---	---	---	---	---	2
	03/04/08	980	560	59	21	95	4.6	110	160	190	2.5
	01/20/09	---	610	---	---	---	---	---	---	---	---
	04/02/09	---	550	---	---	---	---	---	---	---	---
	07/09/09	---	560	---	---	---	---	---	---	---	---
	01/06/10	---	560	---	---	---	---	---	---	---	---
	04/07/10	---	630	---	---	---	---	---	---	---	---
	07/01/10	---	730	---	---	---	---	---	---	---	---
	09/01/10	---	---	---	---	---	---	---	---	---	<2
	10/07/10	---	600	---	---	---	---	---	---	---	---
	01/12/11	---	520	---	---	---	---	---	---	---	---
	04/05/11	---	560	---	---	---	---	---	---	---	---
	07/06/11	---	530	---	---	---	---	---	---	---	---
	09/02/11	---	---	---	---	---	---	---	---	---	3.8
	10/13/11	---	470	---	---	---	---	---	---	---	---
	02/16/12	---	440	---	---	---	---	---	---	---	---
	04/04/12	---	400	---	---	---	---	---	---	---	---
	09/05/12	---	---	---	---	---	---	---	---	---	1.5
No. 113	03/28/88	700	400	41	12	87	2	11	20	192	18
7S/2W-25H01	03/21/91	570	290	21	5	79	2	88	17	119	11
	03/03/94	700	410	46	13	86	2	120	25	189	19
	04/27/95	---	---	---	---	---	---	---	---	---	24
	03/20/97	880	500	53	15	96	2	140	33	200	22
	07/20/98	---	---	---	---	---	---	---	---	---	23
	09/16/98	---	---	---	---	---	---	---	---	---	22
	02/25/99	---	---	---	---	---	---	---	---	---	19
	04/14/99	---	---	---	---	---	---	---	---	---	17
	06/03/99	---	---	---	---	---	---	---	---	---	21
	09/14/99	---	---	---	---	---	---	---	---	---	22
	10/21/99	---	---	---	---	---	---	---	---	---	25
	11/02/99	---	---	---	---	---	---	---	---	---	22
	12/14/99	---	---	---	---	---	---	---	---	---	23
	01/11/00	---	---	---	---	---	---	---	---	---	18
	03/07/00	810	470	75	16	59	2	70	94	200	11
	04/11/00	---	---	---	---	---	---	---	---	---	23
	05/03/00	---	---	---	---	---	---	---	---	---	24
	06/21/00	---	---	---	---	---	---	---	---	---	23
	09/13/00	---	---	---	---	---	---	---	---	---	23
	10/06/00	---	---	---	---	---	---	---	---	---	21

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 113	02/14/01	---	---	---	---	---	---	---	---	---	16
7S/2W-25H01	05/30/01	---	---	---	---	---	---	---	---	---	23
(Cont)	06/12/01	---	---	---	---	---	---	---	---	---	22
	08/01/01	---	---	---	---	---	---	---	---	---	22
	11/13/01	---	---	---	---	---	---	---	---	---	22
	05/01/02	---	---	---	---	---	---	---	---	---	19
	08/06/02	---	---	---	---	---	---	---	---	---	20
	11/05/02	---	---	---	---	---	---	---	---	---	21
	02/07/03	---	---	---	---	---	---	---	---	---	22
	03/05/03	1000	610	65	19	110	2.5	160	41	260	26
	08/05/03	---	---	---	---	---	---	---	---	---	21
	11/13/03	---	---	---	---	---	---	---	---	---	24
	02/10/04	---	---	---	---	---	---	---	---	---	24
	05/04/04	---	---	---	---	---	---	---	---	---	23
	08/10/04	---	---	---	---	---	---	---	---	---	24
	11/17/04	---	---	---	---	---	---	---	---	---	25
	02/09/05	---	---	---	---	---	---	---	---	---	25
	05/12/05	---	---	---	---	---	---	---	---	---	23
	11/02/05	---	---	---	---	---	---	---	---	---	25
	02/14/06	---	---	---	---	---	---	---	---	---	24
	03/08/06	880	540	54	15	100	2.3	140	31	210	24
	05/11/06	---	---	---	---	---	---	---	---	---	24
	08/03/06	---	---	---	---	---	---	---	---	---	21
	11/08/06	---	---	---	---	---	---	---	---	---	23
	02/07/07	---	---	---	---	---	---	---	---	---	24
	05/01/07	---	---	---	---	---	---	---	---	---	23
	08/07/07	---	---	---	---	---	---	---	---	---	23
	02/12/08	---	---	---	---	---	---	---	---	---	22
	05/06/08	---	540	---	---	---	---	---	---	---	21
	08/11/08	---	530	---	---	---	---	---	---	---	21
	11/06/08	---	570	---	---	---	---	---	---	---	24
	02/05/09	---	530	---	---	---	---	---	---	---	21
	03/03/09	930	520	56	15	97	2.1	150	41	210	22
	05/11/09	---	---	---	---	---	---	---	---	---	19
	08/04/09	---	520	---	---	---	---	---	---	---	20
	02/02/10	---	510	---	---	---	---	---	---	---	22
	05/07/10	---	600	---	---	---	---	---	---	---	22
	08/10/10	---	540	---	---	---	---	---	---	---	22
	11/03/10	---	520	---	---	---	---	---	---	---	21
	02/15/11	---	550	---	---	---	---	---	---	---	20
	05/04/11	---	550	---	---	---	---	---	---	---	20
	08/03/11	---	540	---	---	---	---	---	---	---	20
	11/02/11	---	540	---	---	---	---	---	---	---	21
	02/02/12	---	580	---	---	---	---	---	---	---	21
	05/03/12	---	570	---	---	---	---	---	---	---	20
	08/09/12	---	---	---	---	---	---	---	---	---	20

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 118	08/08/90	715	480	14	1	162	1	120	79	101	1
8S/3W-11B	09/26/90	---	---	---	---	---	---	---	---	---	1
	09/10/93	860	525	19	1	178	1	130	94	198	<1
	06/20/95	---	---	---	---	---	---	---	---	---	<1
	09/16/96	970	560	33	2	180	2	120	120	230	<2
	07/23/97	---	---	---	---	---	---	---	---	---	0.2 as N
	09/16/98	---	---	---	---	---	---	---	---	---	2
	11/02/99	1040	580	46	4	170	2	130	100	240	<2
	09/20/00	---	---	---	---	---	---	---	---	---	<2
	08/18/02	---	---	---	---	---	---	---	---	---	<2
	11/08/02	1100	590	46	4.5	160	1.3	140	94	240	<2
	09/23/03	---	---	---	---	---	---	---	---	---	<2
	12/30/04	---	---	---	---	---	---	---	---	---	<2
	01/25/05	---	---	---	---	---	---	---	---	---	<2
	09/07/05	---	---	---	---	---	---	---	---	---	<1
	11/03/05	980	590	55	5	150	1.7	140	110	240	<1
	09/05/07	---	---	---	---	---	---	---	---	---	1.1
	09/08/08	---	670	---	---	---	---	---	---	---	<2
	11/06/08	1100	640	71	150	150	1.9	150	140	250	ND
	12/05/08	---	660	---	---	---	---	---	---	---	---
	03/03/09	---	620	---	---	---	---	---	---	---	---
	06/04/09	---	610	---	---	---	---	---	---	---	---
	03/03/10	---	640	---	---	---	---	---	---	---	---
	06/02/10	---	630	---	---	---	---	---	---	---	---
	09/02/10	---	640	---	---	---	---	---	---	---	2.2
	12/08/10	---	640	---	---	---	---	---	---	---	---
	03/02/11	---	650	---	---	---	---	---	---	---	---
	06/08/11	---	640	---	---	---	---	---	---	---	---
	09/02/11	---	620	---	---	---	---	---	---	---	2
	12/06/11	---	610	---	---	---	---	---	---	---	---
	06/12/12	---	640	---	---	---	---	---	---	---	---
No. 119	07/16/96	450	280	44	9	35	<1	39	18	180	15
8S/2W-19J	08/14/97	---	---	---	---	---	---	---	---	---	12
	12/24/97	---	320	---	---	---	---	---	---	---	3.1 as N
	03/04/98	---	380	---	---	---	---	---	---	---	3.3 as N
	06/04/98	---	---	---	---	---	---	---	---	---	3.8 as N
	06/12/98	---	400	---	---	---	---	---	---	---	---
	09/16/98	---	---	---	---	---	---	---	---	---	3.7 as N
	01/08/99	---	430	---	---	---	---	---	---	---	---
	04/13/99	---	---	---	---	---	---	---	---	---	28
	06/02/99	---	560	---	---	---	---	---	---	---	4.8 as N
	07/27/99	940	640	103	21	58	1	70	150	264	30
	09/14/99	---	---	---	---	---	---	---	---	---	22

ND - None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 119	09/14/99	---	---	---	---	---	---	---	---	---	4.8 as N
8S/2W-19J	10/26/99	---	---	---	---	---	---	---	---	---	24
(Cont)	11/02/99	---	---	---	---	---	---	---	---	---	22
	12/14/99	---	560	---	---	---	---	---	---	---	22
	04/04/00	---	---	---	---	---	---	---	---	---	20
	12/14/00	---	---	---	---	---	---	---	---	---	4.6 as N
	03/29/01	---	---	---	---	---	---	---	---	---	20
	06/20/01	---	---	---	---	---	---	---	---	---	4.2 as N
	09/14/01	---	---	---	---	---	---	---	---	---	4.2 as N
	09/28/01	---	---	---	---	---	---	---	---	---	18
	11/16/01	---	---	---	---	---	---	---	---	---	16
	05/23/02	---	480	---	---	---	---	---	---	---	18
	07/24/02	770	490	81	15	49	1.1	51	90	240	19
	11/08/02	---	---	---	---	---	---	---	---	---	15
	02/19/03	---	---	---	---	---	---	---	---	---	17
	02/10/04	---	---	---	---	---	---	---	---	---	15
	02/28/05	---	---	---	---	---	---	---	---	---	10
	07/06/05	820	600	95	20	63	1.4	64	140	260	13
	02/07/06	---	---	---	---	---	---	---	---	---	15
	02/07/07	---	---	---	---	---	---	---	---	---	15
	02/12/08	---	---	---	---	---	---	---	---	---	15
	05/14/08	---	520	---	---	---	---	---	---	---	13
	07/08/08	810	520	88	17	57	1.4	66	120	250	14
	08/11/08	---	480	---	---	---	---	---	---	---	13
	11/17/08	---	520	---	---	---	---	---	---	---	16
	02/05/09	---	460	---	---	---	---	---	---	---	13
	05/11/09	---	560	---	---	---	---	---	---	---	12
	08/04/09	---	540	---	---	---	---	---	---	---	14
	01/12/10	---	580	---	---	---	---	---	---	---	15
	04/09/10	---	560	---	---	---	---	---	---	---	13
	07/01/10	---	620	---	---	---	---	---	---	---	14
	10/07/10	---	610	---	---	---	---	---	---	---	14
	01/12/11	---	480	---	---	---	---	---	---	---	13
	04/12/11	---	560	---	---	---	---	---	---	---	12
	07/07/11	840	560	85	18	60	1.9	84	120	250	16
	10/13/11	---	610	---	---	---	---	---	---	---	15
	01/10/12	---	520	---	---	---	---	---	---	---	14
	04/03/12	---	550	---	---	---	---	---	---	---	---
No. 120	06/20/90	570	330	6	1	116	1	82	31	113	11
8S/2W-17G	06/10/93	590	340	6	<1	122	1	85	35	104	12
	07/19/96	630	360	6	<1	120	1	88	42	120	14
	06/16/97	---	---	---	---	---	---	---	---	---	10
	08/14/97	---	---	---	---	---	---	---	---	---	9
	06/02/99	620	360	6	<1	122	<1	84	45	120	10

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 120	06/06/00	---	---	---	---	---	---	---	---	---	11
8S/2W-17G	06/13/01	---	---	---	---	---	---	---	---	---	12
(Cont)	06/01/02	670	370	8.1	<1	130	1	86	46	130	11
	06/11/03	---	---	---	---	---	---	---	---	---	12
	06/22/04	---	---	---	---	---	---	---	---	---	15
	06/15/05	720	410	11	<1	140	1.3	90	62	140	12
	06/07/06	---	---	---	---	---	---	---	---	---	11
	06/01/07	---	---	---	---	---	---	---	---	---	10
	06/05/08	690	400	11	<1	140	104	89	66	140	10
	06/05/08	---	400	---	---	---	---	---	---	---	10
	09/15/08	---	350	---	---	---	---	---	---	---	---
	08/21/09	---	500	---	---	---	---	---	---	---	11
	02/02/10	---	440	---	---	---	---	---	---	---	---
	05/05/10	---	440	---	---	---	---	---	---	---	---
	08/09/10	---	430	---	---	---	---	---	---	---	11
	11/03/10	---	400	---	---	---	---	---	---	---	---
	02/02/11	---	440	---	---	---	---	---	---	---	---
	05/04/11	---	450	---	---	---	---	---	---	---	---
	08/02/11	---	420	---	---	---	---	---	---	---	10
	11/03/11	---	380	---	---	---	---	---	---	---	---
	02/07/12	---	430	---	---	---	---	---	---	---	---
	05/03/12	---	410	---	---	---	---	---	---	---	---
	08/09/12	---	400	---	---	---	---	---	---	---	10
No. 121	10/27/89	900	475	63	14	99	2	109	28	290	<1
7S/3W-34J	05/19/92	1000	560	72	17	120	3	170	56	270	<1
	07/18/97	---	---	---	---	---	---	---	---	---	ND
	07/24/97	---	640	---	---	---	---	---	---	---	ND
	08/20/97	---	---	---	---	---	---	---	---	---	ND
	09/03/97	---	---	---	---	---	---	---	---	---	ND
	06/19/02	---	---	---	---	---	---	---	---	---	ND
No. 122	06/23/97	---	---	---	---	---	---	---	---	---	6
8S/2W-20P1	07/25/97	660	460	64	13	44	1	61	65	190	8
	10/10/97	---	---	---	---	---	---	---	---	---	9
	12/23/97	---	400	---	---	---	---	---	---	---	1.8 as N
	03/25/98	---	450	---	---	---	---	---	---	---	2.2 as N
	06/03/98	---	---	---	---	---	---	---	---	---	2.4 as N
	06/05/98	---	460	---	---	---	---	---	---	---	---
	09/17/98	---	---	---	---	---	---	---	---	---	2.2 as N
	01/08/99	---	450	---	---	---	---	---	---	---	---
	06/03/99	---	470	---	---	---	---	---	---	---	2.1 as N
	04/13/99	---	---	---	---	---	---	---	---	---	9
	09/21/99	---	---	---	---	---	---	---	---	---	2.1 as N
	03/07/00	---	---	---	---	---	---	---	---	---	16
	04/04/00	---	---	---	---	---	---	---	---	---	9

ND - None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 122	06/28/00	780	470	79	16	62	1	73	100	210	11
8S/2W-20P1	12/13/00	---	---	---	---	---	---	---	---	---	2.5 as N
(Cont)	03/27/01	---	---	---	---	---	---	---	---	---	2.5 as N
	04/18/01	---	---	---	---	---	---	---	---	---	10
	06/20/01	---	---	---	---	---	---	---	---	---	2.4 as N
	09/13/01	---	---	---	---	---	---	---	---	---	2.7 as N
	12/13/01	---	550	---	---	---	---	---	---	---	---
	05/14/02	---	570	---	---	---	---	---	---	---	9
	03/05/03	---	---	---	---	---	---	---	---	---	10
	03/16/04	---	---	---	---	---	---	---	---	---	12
	03/17/05	---	---	---	---	---	---	---	---	---	9
	03/21/06	---	---	---	---	---	---	---	---	---	9.4
	03/06/07	---	---	---	---	---	---	---	---	---	9.7
	03/03/08	---	---	---	---	---	---	---	---	---	8.5
	03/07/08	---	620	---	---	---	---	---	---	---	---
	10/08/08	---	620	---	---	---	---	---	---	---	---
	01/20/09	---	680	---	---	---	---	---	---	---	---
	03/10/09	---	---	---	---	---	---	---	---	---	8.9
	04/16/09	---	660	---	---	---	---	---	---	---	---
	07/14/09	---	670	---	---	---	---	---	---	---	---
	03/15/10	---	640	---	---	---	---	---	---	---	10
	03/10/11	---	---	---	---	---	---	---	---	---	9.6
	05/25/11	---	670	---	---	---	---	---	---	---	---
	08/04/11	---	680	---	---	---	---	---	---	---	---
	01/10/12	---	680	---	---	---	---	---	---	---	---
	03/06/12	---	---	---	---	---	---	---	---	---	9.1
	04/03/12	---	730	---	---	---	---	---	---	---	---
	08/07/12	1100	710	110	20	87	1.9	84	190	260	8.0
No. 123	06/06/90	1100	690	69	27	132	6	130	170	281	4
8S/1W-7B	06/10/93	1120	690	74	25	136	6	120	190	250	5
	02/05/97	930	550	55	18	110	5	83	130	250	1.3
	04/27/99	---	---	---	---	---	---	---	---	---	3
	06/02/99	---	---	---	---	---	---	---	---	---	3
	07/20/99	---	---	---	---	---	---	---	---	---	2
	08/11/99	---	---	---	---	---	---	---	---	---	2
	09/14/99	---	---	---	---	---	---	---	---	---	2
	10/21/99	---	---	---	---	---	---	---	---	---	2
	11/02/99	---	---	---	---	---	---	---	---	---	2
	02/09/00	1150	610	59	20	100	5	83	150	240	3
	02/09/01	---	---	---	---	---	---	---	---	---	3
	03/10/03	880	550	59	20	87	4.5	80	180	170	<2
	02/03/04	---	---	---	---	---	---	---	---	---	2
	02/14/05	---	---	---	---	---	---	---	---	---	2
	02/14/06	---	---	---	---	---	---	---	---	---	3.6
	03/14/06	890	530	65	22	88	5	91	180	180	2.3
	04/24/07	---	---	---	---	---	---	---	---	---	1.4

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 123	05/01/07	---	---	---	---	---	---	---	---	---	2.7
8S/1W-7B	06/05/07	---	---	---	---	---	---	---	---	---	2.2
(Cont)	07/05/07	---	---	---	---	---	---	---	---	---	2.5
	08/07/07	---	---	---	---	---	---	---	---	---	2.2
	09/05/07	---	---	---	---	---	---	---	---	---	2.1
	09/06/07	---	---	---	---	---	---	---	---	---	2
	10/03/07	---	---	---	---	---	---	---	---	---	2
	12/13/07	---	---	---	---	---	---	---	---	---	1.9
	01/10/08	---	---	---	---	---	---	---	---	---	1.4
	02/13/08	---	---	---	---	---	---	---	---	---	1.1
	03/03/08	---	---	---	---	---	---	---	---	---	1.3
	03/07/08	---	540	---	---	---	---	---	---	---	---
	04/08/08	---	---	---	---	---	---	---	---	---	2.2
	05/12/08	---	---	---	---	---	---	---	---	---	2.4
	06/23/08	---	---	---	---	---	---	---	---	---	2.7
	07/08/08	---	---	---	---	---	---	---	---	---	2.9
	08/12/08	---	---	---	---	---	---	---	---	---	2.6
	09/15/08	---	---	---	---	---	---	---	---	---	2.7
	11/06/08	---	---	---	---	---	---	---	---	---	2.6
	12/05/08	---	---	---	---	---	---	---	---	---	2
	01/07/09	---	640	---	---	---	---	---	---	---	ND
	02/04/09	---	---	---	---	---	---	---	---	---	1.6
	03/09/09	980	610	62	21	97	5	98	180	110	<2.0
	04/02/09	---	600	---	---	---	---	---	---	---	<2.0
	05/07/09	---	---	---	---	---	---	---	---	---	<2.0
	06/01/09	---	---	---	---	---	---	---	---	---	<2.0
	07/09/09	---	590	---	---	---	---	---	---	---	<2.0
	08/05/09	---	---	---	---	---	---	---	---	---	<2.0
	01/06/10	---	590	---	---	---	---	---	---	---	1.4
	02/02/10	---	---	---	---	---	---	---	---	---	1.1
	03/03/10	---	---	---	---	---	---	---	---	---	1.2
	04/08/10	---	600	---	---	---	---	---	---	---	1.2
	05/06/10	---	---	---	---	---	---	---	---	---	1.5
	06/02/10	---	---	---	---	---	---	---	---	---	<2
	07/01/10	---	750	---	---	---	---	---	---	---	<2
	08/10/10	---	---	---	---	---	---	---	---	---	2.4
	09/01/10	---	---	---	---	---	---	---	---	---	2.1
	10/07/10	---	630	---	---	---	---	---	---	---	<2
	11/01/10	---	---	---	---	---	---	---	---	---	<2
	12/02/10	---	---	---	---	---	---	---	---	---	<2
	01/12/11	---	570	---	---	---	---	---	---	---	2
	02/15/11	---	---	---	---	---	---	---	---	---	2
	03/09/11	---	---	---	---	---	---	---	---	---	2
	04/05/11	---	580	---	---	---	---	---	---	---	2

ND - None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 123	05/05/11	---	---	---	---	---	---	---	---	---	2
8S/1W-7B	06/07/11	---	---	---	---	---	---	---	---	---	2
(Cont)	07/06/11	---	600	---	---	---	---	---	---	---	2
	08/03/11	---	---	---	---	---	---	---	---	---	2
	09/02/11	---	---	---	---	---	---	---	---	---	2.3
	10/13/11	---	550	---	---	---	---	---	---	---	2.2
	11/10/11	---	---	---	---	---	---	---	---	---	<2
	12/07/11	---	---	---	---	---	---	---	---	---	<2
	01/06/12	---	540	---	---	---	---	---	---	---	<2.0
	09/05/12	---	---	---	---	---	---	---	---	---	1.4
No. 124	06/20/90	660	380	38	4	92	3	97	48	153	13
8S/2W-11R1	07/22/93	690	430	42	5	89	3	90	57	159	17
	07/18/95	---	---	---	---	---	---	---	---	---	11
	10/26/99	700	420	45	4	94	3	97	61	160	16
	07/06/00	---	---	---	---	---	---	---	---	---	17
	07/10/01	---	---	---	---	---	---	---	---	---	16
	07/03/02	---	---	---	---	---	---	---	---	---	10
	10/02/02	600	330	24	2.4	92	1.9	75	38	150	10
	01/08/03	---	---	---	---	---	---	---	---	---	2.3 as N
	07/01/03	---	---	---	---	---	---	---	---	---	8.3
	07/07/04	---	---	---	---	---	---	---	---	---	9.4
	07/06/05	---	---	---	---	---	---	---	---	---	8.4
	10/05/05	580	360	19	2.4	96	1.6	74	35	140	7.8
	09/26/06	---	---	---	---	---	---	---	---	---	17
	09/05/07	---	---	---	---	---	---	---	---	---	8.2
	10/28/08	780	490	52	6.5	84	3.1	91	84	150	1.8
	01/13/09	---	390	---	---	---	---	---	---	---	---
	04/07/09	---	330	---	---	---	---	---	---	---	---
	07/09/09	---	320	---	---	---	---	---	---	---	---
	01/06/10	---	390	---	---	---	---	---	---	---	---
	04/08/10	---	360	---	---	---	---	---	---	---	---
	07/01/10	---	390	---	---	---	---	---	---	---	---
	10/06/10	---	320	---	---	---	---	---	---	---	10
	01/04/11	---	390	---	---	---	---	---	---	---	---
	04/05/11	---	390	---	---	---	---	---	---	---	---
	07/06/11	---	350	---	---	---	---	---	---	---	---
	10/12/11	610	390	23	2.5	95	2.2	80	44	150	9.8
	10/12/11	---	320	---	---	---	---	---	---	---	10
	01/10/12	---	330	---	---	---	---	---	---	---	---
	04/04/12	---	410	---	---	---	---	---	---	---	---
No. 125	06/20/90	740	425	17	5	132	3	99	54	186	4
8S/2W-12H	06/10/93	770	450	18	5	140	3	150	60	131	3
	06/20/95	---	---	---	---	---	---	---	---	---	2
	06/09/97	---	---	---	---	---	---	---	---	---	2
	09/17/98	---	---	---	---	---	---	---	---	---	3

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 125	06/03/99	720	440	10	3	135	2	89	76	170	<2
8S/2W-12H	11/02/99	---	---	---	---	---	---	---	---	---	3
(Cont)	11/15/00	---	---	---	---	---	---	---	---	---	2
	07/24/01	---	---	---	---	---	---	---	---	---	4
	06/19/02	700	400	8.8	2.3	130	1.8	87	54	170	<2
	07/03/02	---	---	---	---	---	---	---	---	---	2
	01/13/03	---	---	---	---	---	---	---	---	---	.38 as N
	07/01/03	---	---	---	---	---	---	---	---	---	<2
	06/09/04	---	---	---	---	---	---	---	---	---	<2
	06/14/05	650	350	8.3	2.1	130	1.6	82	52	180	1.8
	06/13/06	---	---	---	---	---	---	---	---	---	2.8
	06/05/07	---	---	---	---	---	---	---	---	---	1.6
	06/10/08	770	460	17	4.6	150	2.4	93	64	190	2.7
	09/15/08	---	370	---	---	---	---	---	---	---	---
	12/05/08	---	450	---	---	---	---	---	---	---	---
	03/04/09	---	440	---	---	---	---	---	---	---	---
	06/01/09	---	560	---	---	---	---	---	---	---	<2.0
	07/27/10	---	480	---	---	---	---	---	---	---	3.7
	10/06/10	---	430	---	---	---	---	---	---	---	---
	01/14/11	---	420	---	---	---	---	---	---	---	---
	04/05/11	---	390	---	---	---	---	---	---	---	---
No. 126	05/04/88	480	290	4	<1	106	<1	53	14	64	<1
8S/2W-15H	07/06/89	500	270	2	1	108	<1	55	11	98	<1
	07/18/95	540	315	1	<1	122	<1	72	11	122	<1
	07/07/97	---	---	---	---	---	---	---	---	---	<2
	07/16/97	---	---	---	---	---	---	---	---	---	0.2 as N
	07/23/97	---	---	---	---	---	---	---	---	---	0.2 as N
	08/20/97	---	---	---	---	---	---	---	---	---	0.4 as N
	09/03/97	---	---	---	---	---	---	---	---	---	0.2 as N
	09/17/97	---	---	---	---	---	---	---	---	---	0.2 as N
	07/20/98	520	330	2	<1	120	<1	56	11	130	<2
	09/16/98	---	300	---	---	---	---	---	---	---	0.4 as N
	04/14/99	---	---	---	---	---	---	---	---	---	2
	04/11/00	---	---	---	---	---	---	---	---	---	<2
	04/11/01	---	---	---	---	---	---	---	---	---	2
	07/12/01	530	300	2	<1	100	<1	53	12	140	<2
	06/20/02	---	---	---	---	---	---	---	---	---	<2
	08/06/02	---	---	---	---	---	---	---	---	---	<2
	01/08/03	---	---	---	---	---	---	---	---	---	0.25 as N
	11/04/03	---	---	---	---	---	---	---	---	---	<2
	07/22/04	520	310	1.5	ND	110	ND	59	10	120	0.27 as N
	11/03/04	---	---	---	---	---	---	---	---	---	<2
	11/02/05	---	---	---	---	---	---	---	---	---	<1
	11/08/06	---	---	---	---	---	---	---	---	---	<1
	07/03/07	530	330	1.4	<1	110	<1	62	10	140	<2
	11/14/07	---	---	---	---	---	---	---	---	---	1.9
	08/07/08	---	280	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 126	02/04/09	---	280	---	---	---	---	---	---	---	---
8S/2W-15H	05/06/09	---	280	---	---	---	---	---	---	---	---
(Cont)	08/04/09	---	270	---	---	---	---	---	---	---	---
	02/03/10	---	290	---	---	---	---	---	---	---	---
	05/06/10	---	390	---	---	---	---	---	---	---	---
	07/13/10	530	300	1.6	<1	110	<1	58	11	130	<2
	08/24/10	---	330	---	---	---	---	---	---	---	---
	11/03/10	---	300	---	---	---	---	---	---	---	1.5
	02/04/11	---	280	---	---	---	---	---	---	---	---
	05/03/11	---	300	---	---	---	---	---	---	---	---
	08/02/11	---	280	---	---	---	---	---	---	---	---
	11/01/11	---	270	---	---	---	---	---	---	---	<2
	02/06/12	---	350	---	---	---	---	---	---	---	---
	05/02/12	---	330	---	---	---	---	---	---	---	---
	08/06/12	---	290	---	---	---	---	---	---	---	---
No. 128	07/06/89	400	230	27	3	54	2	59	7	101	25
7/3W-36M	07/08/92	390	230	21	2	59	2	55	1	110	24
	07/20/95	380	275	16	2	66	1	65	10	101	19
	07/07/97	---	---	---	---	---	---	---	---	---	15
	07/20/98	370	260	12	<1	71	1	48	11	110	14
	06/02/99	---	---	---	---	---	---	---	---	---	13
	06/08/01	---	---	---	---	---	---	---	---	---	14
	07/10/01	400	230	10	<1	68	<1	44	12	100	12
	06/20/02	---	---	---	---	---	---	---	---	---	12
	01/08/03	---	---	---	---	---	---	---	---	---	12
	01/14/04	---	---	---	---	---	---	---	---	---	10
	07/14/04	390	240	8.3	1	67	1	48	11	92	13
	01/11/05	---	---	---	---	---	---	---	---	---	6
	01/10/06	---	---	---	---	---	---	---	---	---	7.9
No. 129	11/29/89	430	260	16	3	66	2	71	16	92	9
7S/2W-20L	08/08/90	440	280	20	5	64	2	72	14	119	10
	04/01/92	---	---	---	---	---	---	---	---	---	12
	09/10/93	470	275	24	6	60	2	74	16	110	13
	08/09/96	460	270	19	3	67	2	70	15	100	11
	02/04/97	---	---	---	---	---	---	---	---	---	53
	12/20/00	550	330	44	13	47	2	81	14	130	20
	03/22/01	---	---	---	---	---	---	---	---	---	20
	04/17/01	---	---	---	---	---	---	---	---	---	20
	05/02/01	---	---	---	---	---	---	---	---	---	18
	06/08/01	---	---	---	---	---	---	---	---	---	20
	10/16/01	---	---	---	---	---	---	---	---	---	19
	11/13/01	---	---	---	---	---	---	---	---	---	18
	02/26/02	---	---	---	---	---	---	---	---	---	16
	05/23/02	---	---	---	---	---	---	---	---	---	14
	09/18/02	---	---	---	---	---	---	---	---	---	15

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 130	02/17/88	650	365	16	1	132	1	69	64	0	4
8S/2W-11R	02/14/91	640	365	4	<1	132	1	68	56	122	---
	04/24/91	---	---	---	---	---	---	---	---	---	3
	02/09/94	650	410	3	<1	148	1	81	72	146	4
	05/16/95	---	---	---	---	---	---	---	---	---	4
	02/05/97	780	450	4	<1	170	<1	78	82	150	5
	05/14/97	---	---	---	---	---	---	---	---	---	4
	04/14/99	---	---	---	---	---	---	---	---	---	5
	02/10/00	750	440	4	<1	170	<1	76	77	170	5
	04/12/00	---	---	---	---	---	---	---	---	---	5
	05/25/00	---	---	---	---	---	---	---	---	---	6
	05/24/01	---	---	---	---	---	---	---	---	---	6
	05/24/02	---	---	---	---	---	---	---	---	---	5
	02/19/03	820	460	4.1	<1	170	<1	87	96	180	5
	05/04/04	---	---	---	---	---	---	---	---	---	5.1
	05/12/05	---	---	---	---	---	---	---	---	---	5
	02/14/06	800	450	4.1	<1	170	<1	83	91	200	5.1
	05/12/06	---	---	---	---	---	---	---	---	---	4.5
	05/01/07	---	---	---	---	---	---	---	---	---	4.5
	05/07/08	---	440	---	---	---	---	---	---	---	4.1
	08/12/08	---	470	---	---	---	---	---	---	---	---
	11/09/08	---	560	---	---	---	---	---	---	---	---
	02/11/09	840	440	4.6	<1	170	<1	91	110	150	4.8
	05/11/09	---	480	---	---	---	---	---	---	---	3.5
	08/31/09	---	470	---	---	---	---	---	---	---	---
	02/04/10	---	480	---	---	---	---	---	---	---	---
	05/06/10	---	410	---	---	---	---	---	---	---	4.5
	08/11/10	---	460	---	---	---	---	---	---	---	---
	11/01/10	---	480	---	---	---	---	---	---	---	---
	12/02/10	---	400	---	---	---	---	---	---	---	---
	07/15/11	---	480	---	---	---	---	---	---	---	---
	08/04/11	---	---	---	---	---	---	---	---	---	4.7
	10/13/11	---	490	---	---	---	---	---	---	---	---
	01/10/12	---	460	---	---	---	---	---	---	---	---
	02/09/12	810	480	4.4	<1.0	160	1.2	80	100	180	4.0
	08/08/12	---	---	---	---	---	---	---	---	---	4.2
No. 131	03/10/88	530	270	4	<1	108	1	57	52	31	1
8S/1W-12J	03/21/91	630	335	7	<1	120	1	74	65	98	3
	03/03/94	660	345	9	<1	124	2	86	73	119	2
	03/30/95	---	---	---	---	---	---	---	---	---	2
	03/20/97	660	370	6	<1	125	1	81	73	100	2
	07/07/97	---	---	---	---	---	---	---	---	---	<2
	07/27/98	---	---	---	---	---	---	---	---	---	2
	06/03/99	---	---	---	---	---	---	---	---	---	<2
	03/07/00	720	380	9	<1	140	2	81	80	130	3
	06/21/00	---	---	---	---	---	---	---	---	---	2

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 131	06/27/01	---	---	---	---	---	---	---	---	---	2
8S/1W-12J	06/05/02	---	---	---	---	---	---	---	---	---	<2
(Cont)	03/13/03	700	390	8	<1	130	1.4	88	88	130	3
	06/11/03	---	---	---	---	---	---	---	---	---	<2
	06/09/04	---	---	---	---	---	---	---	---	---	<2
	06/15/05	---	---	---	---	---	---	---	---	---	2
	03/07/06	710	420	9	<1	140	1.5	93	93	130	3
	06/07/06	---	---	---	---	---	---	---	---	---	1.7
	06/26/07	---	---	---	---	---	---	---	---	---	2.4
	06/04/08	---	390	---	---	---	---	---	---	---	1.5
	09/15/08	---	330	---	---	---	---	---	---	---	---
	12/03/08	---	430	---	---	---	---	---	---	---	---
	03/04/09	640	370	6	<1	130	1.2	71	77	130	<2.0
	03/04/09	---	380	---	---	---	---	---	---	---	---
	06/02/09	---	360	---	---	---	---	---	---	---	<2.0
	03/03/10	---	380	---	---	---	---	---	---	---	---
	06/02/10	---	360	---	---	---	---	---	---	---	2
	09/01/10	---	360	---	---	---	---	---	---	---	---
	03/02/11	---	430	---	---	---	---	---	---	---	---
	06/07/11	---	360	---	---	---	---	---	---	---	2
	09/02/11	---	330	---	---	---	---	---	---	---	---
	12/07/11	---	420	---	---	---	---	---	---	---	---
	03/02/12	---	410	---	---	---	---	---	---	---	---
	06/05/12	---	350	---	---	---	---	---	---	---	1.5
	09/05/12	---	370	---	---	---	---	---	---	---	---
No. 132	04/18/88	1000	620	94	13	103	6	109	153	235	2
8S/1W-07D	05/08/91	920	590	64	19	110	5	100	160	201	<1
	05/13/94	730	460	50	15	78	5	73	110	195	1
	05/16/95	---	---	---	---	---	---	---	---	---	<1
	07/18/95	860	520	59	17	100	4	90	130	223	1
	07/20/98	900	590	69	20	110	5	89	150	230	2
	01/06/99	---	---	---	---	---	---	---	---	---	2
	02/03/99	---	---	---	---	---	---	---	---	---	2
	04/14/99	---	---	---	---	---	---	---	---	---	3
	06/03/99	---	---	---	---	---	---	---	---	---	3
	07/27/99	---	---	---	---	---	---	---	---	---	5
	08/11/99	---	---	---	---	---	---	---	---	---	4
	09/15/99	---	---	---	---	---	---	---	---	---	4
	10/21/99	---	---	---	---	---	---	---	---	---	4
	11/02/99	---	---	---	---	---	---	---	---	---	3
	12/15/99	---	---	---	---	---	---	---	---	---	3
	05/03/00	---	---	---	---	---	---	---	---	---	2
	05/16/01	800	500	57	17	74	5	63	180	150	3
	05/01/02	---	---	---	---	---	---	---	---	---	2
	05/03/05	---	---	---	---	---	---	---	---	---	<2
	05/12/06	---	---	---	---	---	---	---	---	---	3.2

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 132	05/01/07	---	---	---	---	---	---	---	---	---	4.7
8S/1W-07D	05/03/07	820	500	53	16	64	4.4	72	150	160	3.2
(Cont)	05/06/08	---	670	---	---	---	---	---	---	---	3.6
	08/12/08	---	690	---	---	---	---	---	---	---	---
	11/06/08	---	650	---	---	---	---	---	---	---	---
	02/05/09	---	570	---	---	---	---	---	---	---	---
	05/11/09	---	590	---	---	---	---	---	---	---	<2.0
	08/05/09	---	600	---	---	---	---	---	---	---	---
	02/03/10	---	580	---	---	---	---	---	---	---	---
	05/06/10	960	600	67	22	88	5.6	96	220	170	1.2
	08/10/10	---	570	---	---	---	---	---	---	---	---
	11/01/10	---	610	---	---	---	---	---	---	---	---
	02/15/11	---	580	---	---	---	---	---	---	---	---
	05/04/11	---	590	---	---	---	---	---	---	---	2
	08/03/11	---	580	---	---	---	---	---	---	---	---
	11/02/11	---	510	---	---	---	---	---	---	---	---
	02/08/12	---	450	---	---	---	---	---	---	---	---
	05/02/12	---	420	---	---	---	---	---	---	---	3.3
	08/08/12	---	360	---	---	---	---	---	---	---	---
No. 133	03/28/90	970	605	50	20	112	5	120	131	235	3
8S/1W-7C	03/11/93	970	580	48	19	120	4	110	140	204	3
	06/06/95	---	---	---	---	---	---	---	---	---	2
	07/18/95	850	680	26	10	142	2	120	100	174	2
	06/23/97	---	---	---	---	---	---	---	---	---	3
	07/20/98	790	500	24	9	140	2	96	93	170	2
	08/02/00	---	---	---	---	---	---	---	---	---	3
	03/28/01	800	460	22	10	130	2	98	100	170	<2
	08/02/01	---	---	---	---	---	---	---	---	---	<2
	09/18/02	---	---	---	---	---	---	---	---	---	2
	09/16/03	---	---	---	---	---	---	---	---	---	2
	03/12/04	810	500	25	10	130	2.4	95	99	180	2
	03/07/07	820	500	26	9.7	140	2.4	94	98	160	2.3
	03/03/08	---	---	---	---	---	---	---	---	---	2.1
	03/07/08	---	480	---	---	---	---	---	---	---	---
	07/08/08	---	470	---	---	---	---	---	---	---	---
	01/07/09	---	540	---	---	---	---	---	---	---	---
	03/04/09	---	---	---	---	---	---	---	---	---	2.6
	04/02/09	---	460	---	---	---	---	---	---	---	---
	07/09/09	---	450	---	---	---	---	---	---	---	---
	01/06/10	---	490	---	---	---	---	---	---	---	---
	03/03/10	860	460	37	16	110	3.1	110	110	200	3
	04/08/10	---	490	---	---	---	---	---	---	---	---
	07/08/10	---	470	---	---	---	---	---	---	---	---
	10/06/10	---	460	---	---	---	---	---	---	---	---
	01/12/11	---	490	---	---	---	---	---	---	---	---
	03/09/11	---	---	---	---	---	---	---	---	---	2.9

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 133	04/05/11	---	460	---	---	---	---	---	---	---	---
8S/1W-7C	07/06/11	---	440	---	---	---	---	---	---	---	---
(Cont)	10/13/11	---	470	---	---	---	---	---	---	---	---
No. 135	05/24/89	2450	1390	122	65	300	2	410	225	464	33
7S/3W-27M	06/06/90	1540	945	73	36	215	1	250	150	323	13
	12/11/90	4400	2670	270	109	480	4	1030	380	314	<1
	08/06/92	1800	810	63	33	170	1	200	160	281	---
	01/16/97	---	---	---	---	---	---	---	---	---	3.7 as N
	02/04/97	---	---	---	---	---	---	---	---	---	3.5 as N
	02/12/97	---	---	---	---	---	---	---	---	---	4.0 as N
	02/20/97	---	---	---	---	---	---	---	---	---	3.4 as N
	02/25/97	---	---	---	---	---	---	---	---	---	3.4 as N
	03/04/97	---	---	---	---	---	---	---	---	---	3.7 as N
	03/18/97	---	---	---	---	---	---	---	---	---	3.3 as N
	03/25/97	---	---	---	---	---	---	---	---	---	3.5 as N
	04/08/97	---	---	---	---	---	---	---	---	---	3.4 as N
	04/15/97	---	---	---	---	---	---	---	---	---	3.4 as N
	04/22/97	---	---	---	---	---	---	---	---	---	3.5 as N
	05/06/97	1930	1050	97	48	220	2	340	190	360	3.3 as N
	05/14/97	---	---	---	---	---	---	---	---	---	3.4 as N
	05/21/97	---	---	---	---	---	---	---	---	---	3.3 as N
	06/04/97	---	---	---	---	---	---	---	---	---	3.3 as N
	06/11/97	---	---	---	---	---	---	---	---	---	3.3 as N
	06/18/97	---	---	---	---	---	---	---	---	---	3.3 as N
	06/25/97	---	---	---	---	---	---	---	---	---	3.3 as N
	07/02/97	---	---	---	---	---	---	---	---	---	3.3 as N
	09/17/97	1960	1260	---	---	---	---	430	220	---	13
No. 138	10/30/90	460	240	19	2	74	2	71	13	113	18
8S/2W-6F	10/06/93	420	240	11	<1	70	1	56	10	92	14
	10/11/96	430	270	9	<1	78	1	55	8.9	100	15
	04/14/99	---	---	---	---	---	---	---	---	---	5
	06/03/99	---	---	---	---	---	---	---	---	---	3
	10/26/99	430	240	10	<1	76	1	60	11	100	19
	03/13/00	---	---	---	---	---	---	---	---	---	5
	03/22/01	---	---	---	---	---	---	---	---	---	17
	03/13/02	---	---	---	---	---	---	---	---	---	21
	06/20/02	---	---	---	---	---	---	---	---	---	16
	10/02/02	440	220	10	<1	75	1.2	58	7.8	96	17
	06/12/03	---	---	---	---	---	---	---	---	---	16
	12/30/04	---	---	---	---	---	---	---	---	---	5
	01/27/05	---	---	---	---	---	---	---	---	---	12
	10/18/05	430	280	11	<1	72	1.3	65	8.3	110	18
	01/06/06	---	---	---	---	---	---	---	---	---	17
	01/10/07	---	---	---	---	---	---	---	---	---	16
	01/08/08	---	---	---	---	---	---	---	---	---	16

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 138	10/08/08	430	220	12	59	82	1.1	59	11	32	18
8S/2W-6F	01/08/09	---	---	---	---	---	---	---	---	---	18
(Cont)	01/12/09	---	280	---	---	---	---	---	---	---	---
	04/08/09	---	250	---	---	---	---	---	---	---	---
	07/06/09	---	240	---	---	---	---	---	---	---	---
	01/06/10	---	250	---	---	---	---	---	---	---	16
	04/08/10	---	270	---	---	---	---	---	---	---	---
	07/14/10	---	260	---	---	---	---	---	---	---	---
	10/05/10	---	230	---	---	---	---	---	---	---	---
	01/12/11	---	190	---	---	---	---	---	---	---	17
	04/06/11	---	290	---	---	---	---	---	---	---	---
	07/07/11	---	250	---	---	---	---	---	---	---	---
	10/04/11	440	240	10	1.0	78	1.9	62	10	110	17
	10/04/11	---	200	---	---	---	---	---	---	---	---
	01/17/12	---	260	---	---	---	---	---	---	---	16
	04/03/12	---	280	---	---	---	---	---	---	---	---
No. 139	12/29/87	460	295	24	7	65	1	60	11	104	7
7S/2W-32G	11/23/92	450	275	32	9	46	2	60	13	134	20
	12/19/95	500	298	36	12	50	2	72	12	156	2.8
	03/25/97	---	---	---	---	---	---	---	---	---	10
	03/13/00	---	---	---	---	---	---	---	---	---	9
	03/28/01	---	---	---	---	---	---	---	---	---	8
	03/11/02	530	280	29	10	57	2	73	13	140	9
	03/09/04	---	---	---	---	---	---	---	---	---	8
	03/09/05	520	310	21	7.7	72	1.3	78	13	150	6
	03/09/06	---	---	---	---	---	---	---	---	---	9.9
	03/07/07	---	---	---	---	---	---	---	---	---	6.9
	04/15/08	550	340	40	14	43	1.9	80	10	150	14
	07/17/08	---	330	---	---	---	---	---	---	---	---
	10/08/08	---	320	---	---	---	---	---	---	---	---
	01/13/09	---	390	---	---	---	---	---	---	---	---
	07/06/09	---	290	---	---	---	---	---	---	---	---
	04/08/09	---	310	---	---	---	---	---	---	---	5.8
	05/17/10	---	320	---	---	---	---	---	---	---	---
	08/09/10	---	340	---	---	---	---	---	---	---	---
	10/21/10	---	---	---	---	---	---	---	---	---	8.9
	11/03/10	---	290	---	---	---	---	---	---	---	---
	02/09/11	---	340	---	---	---	---	---	---	---	---
	04/21/11	570	340	39	15	45	2.3	97	16	140	12
	05/04/11	---	340	---	---	---	---	---	---	---	---
	07/07/11	---	350	---	---	---	---	---	---	---	---
	08/04/11	---	320	---	---	---	---	---	---	---	---
	10/05/11	---	---	---	---	---	---	---	---	---	6.1
	11/02/11	---	310	---	---	---	---	---	---	---	---
	02/09/12	---	330	---	---	---	---	---	---	---	---
	05/02/12	---	320	---	---	---	---	---	---	---	---
	08/09/12	---	310	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 140	02/18/88	560	325	33	10	65	2	77	14	153	13
7S/2W-33F	01/15/92	450	235	11	2	88	1	68	18	107	2
	02/28/95	560	325	36	11	58	2	94	14	140	12
	03/25/97	---	---	---	---	---	---	---	---	---	8
	02/27/98	650	360	31	11	76	2	95	16	130	5
	09/17/98	---	---	---	---	---	---	---	---	---	8
	05/16/01	---	---	---	---	---	---	---	---	---	11
	02/01/01	650	370	31	12	72	2	110	21	150	4
	05/24/02	---	---	---	---	---	---	---	---	---	7
	04/05/05	680	390	37	16	69	2.3	140	18	150	4
	04/06/06	---	---	---	---	---	---	---	---	---	4.4
	04/24/07	---	---	---	---	---	---	---	---	---	3
	04/08/08	630	340	26	9.5	79	1.9	110	21	140	2.7
	04/08/08	---	350	---	---	---	---	---	---	---	2.7
	07/07/08	---	360	---	---	---	---	---	---	---	---
	01/07/09	---	400	---	---	---	---	---	---	---	---
	04/15/09	---	380	---	---	---	---	---	---	---	4.6
	07/06/09	---	360	---	---	---	---	---	---	---	---
	01/06/10	---	350	---	---	---	---	---	---	---	---
	04/08/10	---	350	---	---	---	---	---	---	---	2.1
	07/14/10	---	360	---	---	---	---	---	---	---	---
	10/05/10	---	350	---	---	---	---	---	---	---	---
	01/12/11	---	280	---	---	---	---	---	---	---	---
	04/05/11	640	360	26	9.4	82	1.9	100	19	130	2.4
	04/05/11	---	340	---	---	---	---	---	---	---	2.7
	10/05/11	---	360	---	---	---	---	---	---	---	---
	01/17/12	---	380	---	---	---	---	---	---	---	---
	04/03/12	---	390	---	---	---	---	---	---	---	---
No. 141	01/06/88	780	440	64	11	82	3	65	91	217	13
8S/2W-11P	01/30/92	820	500	63	13	95	3	79	110	238	19
	03/30/95	840	490	58	11	100	3	70	97	241	14
	03/25/97	---	---	---	---	---	---	---	---	---	15
	03/26/98	760	480	62	12	90	3	69	86	230	16
	01/04/99	---	---	---	---	---	---	---	---	---	14
	02/12/99	---	---	---	---	---	---	---	---	---	19
	10/21/99	---	---	---	---	---	---	---	---	---	17
	11/03/99	---	---	---	---	---	---	---	---	---	14
	12/14/99	---	---	---	---	---	---	---	---	---	14
	06/20/00	---	---	---	---	---	---	---	---	---	15
	01/04/01	700	450	52	6	84	3	75	70	190	15
	09/28/01	---	---	---	---	---	---	---	---	---	18
	11/08/02	---	---	---	---	---	---	---	---	---	15
	09/16/03	---	---	---	---	---	---	---	---	---	19
	01/13/04	760	490	65	11	84	3.1	70	90	220	21
	01/06/05	---	---	---	---	---	---	---	---	---	18

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 141	01/06/06	---	---	---	---	---	---	---	---	---	16
8S/2W-11P	06/04/08	---	410	---	---	---	---	---	---	---	11
(Cont)	12/05/08	---	480	---	---	---	---	---	---	---	---
	03/04/09	---	440	---	---	---	---	---	---	---	---
	06/02/09	---	390	---	---	---	---	---	---	---	10
	01/05/10	760	450	62	8.1	84	3.5	77	68	200	16
	03/03/10	---	480	---	---	---	---	---	---	---	---
	06/02/10	---	400	---	---	---	---	---	---	---	13
	09/01/10	---	370	---	---	---	---	---	---	---	---
	01/12/11	---	460	---	---	---	---	---	---	---	---
	04/05/11	---	420	---	---	---	---	---	---	---	---
	06/07/11	---	---	---	---	---	---	---	---	---	12
	07/06/11	---	360	---	---	---	---	---	---	---	---
	10/11/11	---	420	---	---	---	---	---	---	---	---
	01/10/12	---	400	---	---	---	---	---	---	---	---
	04/03/12	---	510	---	---	---	---	---	---	---	---
	06/05/12	---	---	---	---	---	---	---	---	---	12
No. 143	01/15/88	670	345	8	2	134	1	91	57	95	11
8S/2W-17J	10/17/90	660	345	25	4	112	2	89	62	140	12
	03/03/94	690	370	24	3	114	2	93	68	131	11
	03/30/95	---	---	---	---	---	---	---	---	---	11
	03/25/97	600	330	15	2	110	1	87	44	89	9
	07/18/97	---	---	---	---	---	---	---	---	---	2.0 as N
	07/23/97	---	---	---	---	---	---	---	---	---	2.0 as N
	08/20/97	---	---	---	---	---	---	---	---	---	2.3 as N
	09/03/97	---	---	---	---	---	---	---	---	---	2.2 as N
	09/17/97	---	---	---	---	---	---	---	---	---	2.0 as N
	09/17/98	---	350	---	---	---	---	---	---	---	2.3 as N
	10/21/99	---	---	---	---	---	---	---	---	---	13
	03/07/00	730	400	21	3	120	2	84	68	140	12
	10/13/00	---	---	---	---	---	---	---	---	---	8
	10/10/01	---	---	---	---	---	---	---	---	---	8
	11/19/02	---	---	---	---	---	---	---	---	---	10
	01/13/03	---	---	---	---	---	---	---	---	---	2.1 as N
	03/10/03	650	370	14	1.9	110	1	92	52	130	10
	01/07/04	---	---	---	---	---	---	---	---	---	12
	01/18/05	---	---	---	---	---	---	---	---	---	10
	01/06/06	---	---	---	---	---	---	---	---	---	8.7
	06/08/06	560	270	9.5	1.3	100	1	86	<0.5	100	7.2
	01/10/07	---	---	---	---	---	---	---	---	---	7.3
	01/04/08	---	---	---	---	---	---	---	---	---	7.1
	01/08/09	---	---	---	---	---	---	---	---	---	9
	02/04/09	---	300	---	---	---	---	---	---	---	---
	05/11/09	---	290	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 143	08/05/09	---	300	---	---	---	---	---	---	---	---
8S/2W-17J	01/05/10	---	---	---	---	---	---	---	---	---	6.5
(Cont)	02/04/10	---	320	---	---	---	---	---	---	---	---
	05/06/10	---	330	---	---	---	---	---	---	---	---
	08/13/10	---	280	---	---	---	---	---	---	---	---
	11/01/10	---	350	---	---	---	---	---	---	---	---
	01/13/11	---	---	---	---	---	---	---	---	---	9.1
	02/09/11	---	320	---	---	---	---	---	---	---	---
	05/04/11	---	300	---	---	---	---	---	---	---	---
	08/03/11	---	320	---	---	---	---	---	---	---	---
	11/02/11	---	370	---	---	---	---	---	---	---	---
	01/06/12	---	---	---	---	---	---	---	---	---	7.2
	02/09/12	---	300	---	---	---	---	---	---	---	---
	05/10/12	---	300	---	---	---	---	---	---	---	---
	06/05/12	540	320	7.3	1.1	100	1.0	73	21	100	5.9
	08/07/12	---	310	---	---	---	---	---	---	---	---
No. 144	09/14/88	610	335	8	<1	114	1	95	33	92	<1
7S/3W-27D3	12/19/95	730	420	34	1	124	1	120	33	186	<1
	12/20/00	690	400	28	1	120	<1	120	35	170	<2
	05/22/01	---	---	---	---	---	---	---	---	---	<2
	08/20/02	---	---	---	---	---	---	---	---	---	<2
	08/27/03	---	---	---	---	---	---	---	---	---	<2
	12/16/03	630	420	33	1.8	110	1	110	28	170	<2
	08/12/04	---	---	---	---	---	---	---	---	---	<2
	10/11/05	---	---	---	---	---	---	---	---	---	2
	12/07/06	670	370	21	1	98	1.2	110	27	150	<1
	08/07/07	---	---	---	---	---	---	---	---	---	<2
	08/11/08	---	320	---	---	---	---	---	---	---	<2
	02/09/09	---	340	---	---	---	---	---	---	---	---
	05/08/09	---	360	---	---	---	---	---	---	---	---
	08/05/09	---	370	---	---	---	---	---	---	---	<2
	02/04/10	---	380	---	---	---	---	---	---	---	---
	05/06/10	---	410	---	---	---	---	---	---	---	---
	08/10/10	---	370	---	---	---	---	---	---	---	<2
	11/10/10	---	400	---	---	---	---	---	---	---	---
	02/02/11	---	340	---	---	---	---	---	---	---	---
	05/04/11	---	350	---	---	---	---	---	---	---	---
	08/09/11	---	340	---	---	---	---	---	---	---	<2
	11/02/11	---	320	---	---	---	---	---	---	---	---
	02/08/12	---	320	---	---	---	---	---	---	---	---
	05/03/12	---	340	---	---	---	---	---	---	---	---
	08/09/12	---	330	---	---	---	---	---	---	---	<1.0

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 145	10/04/90	800	490	43	8	110	2	110	78	171	<1
7S/3W-28C	10/06/93	650	375	23	3	106	1	85	58	146	<1
	11/27/96	650	340	26	2	110	1	87	48	150	<2
	02/04/97	670	370	24	2	110	1	87	55	160	<2
	01/28/98	---	---	---	---	---	---	---	---	---	<2
	01/04/99	---	---	---	---	---	---	---	---	---	<2
	10/26/99	690	400	29	3	110	1	96	61	170	<2
	01/06/00	---	---	---	---	---	---	---	---	---	<2
	01/25/01	---	---	---	---	---	---	---	---	---	<2
	01/18/02	---	---	---	---	---	---	---	---	---	<2
	10/09/02	690	390	26	2.3	110	1.2	94	52	160	<2
	01/15/03	---	---	---	---	---	---	---	---	---	<2
	01/07/04	---	---	---	---	---	---	---	---	---	<2
	01/13/05	---	---	---	---	---	---	---	---	---	<2
	10/11/05	680	430	33	2.7	120	1.4	100	54	180	<1
	10/18/05	700	440	34	2.8	120	1.5	100	59	180	<1
	04/13/06	---	---	---	---	---	---	---	---	---	<1
	01/19/07	---	---	---	---	---	---	---	---	---	<1
	01/04/08	---	---	---	---	---	---	---	---	---	<2
	08/11/08	---	360	---	---	---	---	---	---	---	---
	10/08/08	720	400	37	3.2	100	1.3	95	56	150	ND
	01/06/09	---	---	---	---	---	---	---	---	---	ND
	02/03/09	---	390	---	---	---	---	---	---	---	---
	05/08/09	---	410	---	---	---	---	---	---	---	---
	08/05/09	---	400	---	---	---	---	---	---	---	---
	01/07/10	---	---	---	---	---	---	---	---	---	<2
	02/04/10	---	400	---	---	---	---	---	---	---	---
	05/07/10	---	470	---	---	---	---	---	---	---	---
	08/10/10	---	390	---	---	---	---	---	---	---	---
	11/10/10	---	410	---	---	---	---	---	---	---	---
	01/12/11	---	---	---	---	---	---	---	---	---	<2
	02/09/11	---	390	---	---	---	---	---	---	---	---
	05/05/11	---	380	---	---	---	---	---	---	---	---
	08/04/11	---	360	---	---	---	---	---	---	---	---
	10/05/11	670	380	28	2.6	110	1.6	100	49	160	<2
	11/10/11	---	400	---	---	---	---	---	---	---	---
	01/12/12	---	---	---	---	---	---	---	---	---	<1.0
	02/08/12	---	510	---	---	---	---	---	---	---	---
	05/17/12	---	440	---	---	---	---	---	---	---	---
	08/09/12	---	410	---	---	---	---	---	---	---	---
No. 146	12/10/96	900	500	57	23	98	<1	100	64	280	15
7S/3W-28	03/02/00	---	---	---	---	---	---	---	---	---	4

ND- None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 149	06/15/93	---	---	---	---	---	---	---	---	---	5
8S/1W-2C	10/10/01	---	---	---	---	---	---	---	---	---	4
	03/11/02	1040	610	61	23	120	4	100	170	250	4
	12/11/02	---	---	---	---	---	---	---	---	---	3.2
	01/23/03	---	---	---	---	---	---	---	---	---	4
	03/12/03	1000	600	59	22	120	3.7	100	170	230	3
	01/13/04	---	---	---	---	---	---	---	---	---	4
	01/11/06	---	---	---	---	---	---	---	---	---	2.5
	03/09/06	940	580	56	21	110	3.8	87	160	220	2.7
	01/24/07	---	---	---	---	---	---	---	---	---	2.4
	03/11/08	---	550	---	---	---	---	---	---	---	---
	07/08/08	---	590	---	---	---	---	---	---	---	---
	01/08/09	---	590	---	---	---	---	---	---	---	2.6
	03/04/09	900	590	52	20	100	3.6	93	170	210	2.5
	04/02/09	---	570	---	---	---	---	---	---	---	---
	07/13/09	---	560	---	---	---	---	---	---	---	---
	01/07/10	---	570	---	---	---	---	---	---	---	2.6
	04/08/10	---	570	---	---	---	---	---	---	---	---
	05/12/11	---	570	---	---	---	---	---	---	---	2
	08/03/11	---	600	---	---	---	---	---	---	---	---
	11/09/11	---	620	---	---	---	---	---	---	---	---
	02/09/12	---	580	---	---	---	---	---	---	---	---
	03/02/12	970	600	59	20	99	4.4	95	180	190	2.3
	05/03/12	---	600	---	---	---	---	---	---	---	2.0
	08/08/12	---	610	---	---	---	---	---	---	---	---
No. 149A	08/26/88	950	540	71	211	96	1	115	47	302	18
7S/3W-28A	10/31/91	800	480	36	13	122	3	93	110	195	---
No. 150	09/29/88	1950	1235	134	29	225	2	290	220	390	15
7S/3W-27P	12/21/91	1000	590	74	17	108	4	130	110	207	---
No. 151	07/25/91	860	485	53	16	103	4	90	130	183	---
8S/2W-2G	07/28/91	730	400	39	12	100	3	91	58	177	---
	07/29/91	600	340	9	2	122	5	63	34	204	---
	10/17/91	510	295	3	<1	118	1	45	10	137	---
	08/10/94	550	340	3	<1	110	1	59	22	119	<1
	06/16/97	---	---	---	---	---	---	---	---	---	<2
	08/14/97	540	300	2	<1	110	<1	44	10	160	<2
	09/16/98	---	---	---	---	---	---	---	---	---	<2
	01/06/00	510	300	1	<1	110	<1	33	4.6	180	<2
	01/06/05	---	---	---	---	---	---	---	---	---	<2
	05/12/09	530	380	1	1	110	<1	36	7.7	140	<2.0
	05/05/10	---	---	---	---	---	---	---	---	---	<2
	10/28/10	---	290	---	---	---	---	---	---	---	---
	12/01/10	---	290	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 151	03/09/11	---	310	---	---	---	---	---	---	---	---
8S/2W-2G	05/03/11	---	---	---	---	---	---	---	---	---	<2
(Cont)	06/02/11	---	280	---	---	---	---	---	---	---	---
	09/06/11	---	310	---	---	---	---	---	---	---	---
	12/06/11	---	300	---	---	---	---	---	---	---	---
	03/05/12	---	290	---	---	---	---	---	---	---	---
	05/02/12	490	300	1.3	<1	110	<1	38	4.2	180	<1
	06/05/12	---	240	---	---	---	---	---	---	---	---
	09/04/12	---	300	---	---	---	---	---	---	---	---
No. 151	09/20/88	5780	3410	280	114	840	5	1660	670	369	<1
7S/3W-34B	Abandoned										
No. 152	01/11/02	860	550	64	20	77	6	75	190	160	<2
8S/1W-5K2	01/08/03	---	---	---	---	---	---	---	---	---	<2
	01/07/04	---	---	---	---	---	---	---	---	---	<2
	01/24/05	850	510	71	25	77	4.6	85	190	160	<2
	01/04/06	---	---	---	---	---	---	---	---	---	1.1
	01/10/07	---	---	---	---	---	---	---	---	---	<1
	04/08/08	---	510	---	---	---	---	---	---	---	---
	01/02/09	---	580	---	---	---	---	---	---	---	ND
	04/06/09	---	620	---	---	---	---	---	---	---	---
	07/13/09	---	610	---	---	---	---	---	---	---	---
	01/06/10	---	740	---	---	---	---	---	---	---	1.7
	04/19/10	---	670	---	---	---	---	---	---	---	---
	07/08/10	---	620	---	---	---	---	---	---	---	---
	10/07/10	---	580	---	---	---	---	---	---	---	---
	01/11/11	---	710	---	---	---	---	---	---	---	3.8
	04/13/11	---	490	---	---	---	---	---	---	---	---
	07/12/11	---	460	---	---	---	---	---	---	---	---
	10/06/11	---	420	---	---	---	---	---	---	---	---
	01/11/12	---	270	---	---	---	---	---	---	---	<1.1
	04/12/12	---	330	---	---	---	---	---	---	---	---
No. 153	12/29/93	804	485	53	18	92	5	86	120	214	<1
8S/1W-5K3	04/13/99	880	540	63	23	79	5	68	220	150	<2
	04/11/00	---	---	---	---	---	---	---	---	---	2
	06/14/01	---	---	---	---	---	---	---	---	---	<2
	04/02/02	820	500	63	22	75	4.2	80	190	140	<2
	04/14/05	700	410	44	17	65	3	76	110	140	3
	04/04/06	---	---	---	---	---	---	---	---	---	2.3
	04/04/07	---	---	---	---	---	---	---	---	---	<2
	04/08/08	920	560	62	23	79	4.3	100	170	170	1.9
	01/02/09	---	570	---	---	---	---	---	---	---	---

ND - None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 153	04/06/09	---	610	---	---	---	---	---	---	---	<2.0
8S/1W-5K3	07/13/09	---	590	---	---	---	---	---	---	---	---
(Cont)	01/06/10	---	560	---	---	---	---	---	---	---	---
	04/08/10	---	610	---	---	---	---	---	---	---	1
	07/08/10	---	590	---	---	---	---	---	---	---	---
	10/07/10	---	540	---	---	---	---	---	---	---	---
	01/11/11	---	640	---	---	---	---	---	---	---	---
	04/13/11	850	520	45	17	93	3.8	92	130	170	2
	04/13/11	---	490	---	---	---	---	---	---	---	2
	07/12/11	---	450	---	---	---	---	---	---	---	---
	10/06/11	---	380	---	---	---	---	---	---	---	---
	01/11/12	---	280	---	---	---	---	---	---	---	---
	04/12/12	---	300	---	---	---	---	---	---	---	<1.0
No. 154	01/28/94	930	530	46	20	106	6	89	130	214	3
8S/1W-5L2											
No. 155	09/16/93	680	355	22	2	108	1	90	64	104	<1
7S/3W-28C	02/23/95	760	445	30	3	126	1	120	82	140	4
	06/06/95	---	---	---	---	---	---	---	---	---	5
	08/14/97	---	---	---	---	---	---	---	---	---	4
	02/25/98	880	540	43	5	130	1	100	100	190	5
	07/27/98	---	---	---	---	---	---	---	---	---	3
	02/09/00	---	---	---	---	---	---	---	---	---	2
	09/13/00	690	410	23	2	120	<1	100	72	130	2
	02/14/01	---	---	---	---	---	---	---	---	---	5
	02/21/02	---	---	---	---	---	---	---	---	---	2
	02/28/03	---	---	---	---	---	---	---	---	---	<2
	01/07/04	600	360	10	<1	120	<1	100	60	100	<2
	02/23/04	---	---	---	---	---	---	---	---	---	6
	10/11/05	---	---	---	---	---	---	---	---	---	2
	02/16/05	---	---	---	---	---	---	---	---	---	5
	02/07/06	---	---	---	---	---	---	---	---	---	4.9
	02/07/07	---	---	---	---	---	---	---	---	---	2.5
No. 156	08/11/08	670	350	48	13	78	2.2	70	62	190	1.9
7S/3W-18	08/11/08	---	370	---	---	---	---	---	---	---	1.7
	05/08/09	---	400	---	---	---	---	---	---	---	---
	08/05/09	---	410	---	---	---	---	---	---	---	1.5
	02/03/10	---	370	---	---	---	---	---	---	---	---
	05/07/10	---	470	---	---	---	---	---	---	---	---
	08/10/10	---	390	---	---	---	---	---	---	---	<2
	11/10/10	---	410	---	---	---	---	---	---	---	---
	02/09/11	---	410	---	---	---	---	---	---	---	---
	05/04/11	---	400	---	---	---	---	---	---	---	---
	08/04/11	660	380	44	11	72	1.8	75	53	180	2

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 156	08/04/11	---	380	---	---	---	---	---	---	---	1.4
7S/3W-18	11/10/11	---	390	---	---	---	---	---	---	---	---
(Cont)	02/08/12	---	340	---	---	---	---	---	---	---	---
	05/03/12	---	360	---	---	---	---	---	---	---	---
	08/09/12	---	360	---	---	---	---	---	---	---	1.3
No. 157	04/13/99	930	600	59	21	110	7	95	150	240	<2
8S/1W-5L	04/11/00	---	---	---	---	---	---	---	---	---	2
	06/14/01	---	---	---	---	---	---	---	---	---	<2
	04/02/02	830	520	60	22	78	4.1	78	190	150	<2
	04/14/05	720	420	47	18	69	3.2	74	120	150	2
	04/04/07	---	---	---	---	---	---	---	---	---	<2
	04/08/08	1100	640	68	24	110	4.3	130	170	230	2.6
	07/08/08	---	580	---	---	---	---	---	---	---	---
	01/02/09	---	560	---	---	---	---	---	---	---	---
	04/06/09	---	640	---	---	---	---	---	---	---	<2.0
	07/13/09	---	590	---	---	---	---	---	---	---	---
	01/07/10	---	660	---	---	---	---	---	---	---	---
	04/08/10	---	620	---	---	---	---	---	---	---	<2
	07/08/10	---	610	---	---	---	---	---	---	---	---
	10/07/10	---	540	---	---	---	---	---	---	---	---
	01/11/11	---	590	---	---	---	---	---	---	---	---
	04/13/11	830	520	49	17	84	3.4	89	120	180	<2
	04/13/11	---	490	---	---	---	---	---	---	---	<2
	07/12/11	---	460	---	---	---	---	---	---	---	---
	10/06/11	---	370	---	---	---	---	---	---	---	---
	01/11/12	---	260	---	---	---	---	---	---	---	---
	04/12/12	---	330	---	---	---	---	---	---	---	<1.0
No. 158	06/21/94	1090	620	67	23	124	7	120	170	259	---
8S/1W-5K	04/14/99	1050	660	63	24	120	7	110	160	270	<2
	04/11/00	---	---	---	---	---	---	---	---	---	2
	06/14/01	---	---	---	---	---	---	---	---	---	2
	04/02/02	900	550	61	22	92	5.7	93	190	180	<2
	04/14/05	800	450	51	19	79	4.6	83	150	160	2
	04/04/06	---	---	---	---	---	---	---	---	---	3.9
	04/04/07	---	---	---	---	---	---	---	---	---	4.6
	04/08/08	1300	760	77	25	140	6.4	150	180	280	3.5
	07/08/08	---	750	---	---	---	---	---	---	---	---
	01/02/09	---	640	---	---	---	---	---	---	---	---
	04/06/09	---	650	---	---	---	---	---	---	---	<2.0
	07/13/09	---	670	---	---	---	---	---	---	---	---
	01/06/10	---	810	---	---	---	---	---	---	---	---
	04/08/10	---	800	---	---	---	---	---	---	---	1.5
	07/08/10	---	680	---	---	---	---	---	---	---	---
	10/07/10	---	750	---	---	---	---	---	---	---	---
	01/11/11	---	710	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 158	04/13/11	870	510	43	16	100	4.8	97	130	180	2
8S/1W-5K	04/13/11	---	530	---	---	---	---	---	---	---	2
(Cont)	07/12/11	---	610	---	---	---	---	---	---	---	---
	10/06/11	---	570	---	---	---	---	---	---	---	---
	02/09/12	---	520	---	---	---	---	---	---	---	---
	04/12/12	---	---	---	---	---	---	---	---	---	<1.0
	05/02/12	---	460	---	---	---	---	---	---	---	---
	08/08/12	---	550	---	---	---	---	---	---	---	---
No. 201	03/28/91	530	315	19	6	83	2	83	16	110	2
7S/2W-27J	03/11/93	460	300	8	2	87	1	51	20	146	<1
No. 202	12/11/88	740	440	47	18	84	3	97	48	223	17
7S/2W-36J1											
No. 203	05/18/88	960	580	50	39	110	4	96	115	275	---
8S/1W-6P1	06/29/88	970	530	44	36	112	4	120	123	250	5
	06/12/91	800	415	21	17	108	3	91	90	174	2
	06/22/94	980	645	59	38	99	4	130	130	256	4
	06/07/95	---	---	---	---	---	---	---	---	---	5
	06/23/97	880	530	31	26	120	3	100	110	230	4
	08/14/97	---	---	---	---	---	---	---	---	---	3
	11/02/99	---	---	---	---	---	---	---	---	---	5
	06/22/00	820	580	94	18	58	<1	63	110	250	22
	07/12/00	880	570	43	33	120	3	100	130	240	7
	08/08/00	---	---	---	---	---	---	---	---	---	6
	11/22/00	---	---	---	---	---	---	---	---	---	5
	11/20/01	---	---	---	---	---	---	---	---	---	5
	11/08/02	---	---	---	---	---	---	---	---	---	4
	01/08/03	---	---	---	---	---	---	---	---	---	.90 as N
	06/10/03	850	460	31	23	100	2.2	92	100	220	5
	11/04/03	---	---	---	---	---	---	---	---	---	5
	11/18/04	---	---	---	---	---	---	---	---	---	7
	06/08/06	940	540	39	32	110	3	100	130	220	5.5
	06/01/07	---	---	---	---	---	---	---	---	---	5.1
	06/04/08	---	520	---	---	---	---	---	---	---	4.3
	09/16/08	---	450	---	---	---	---	---	---	---	---
	12/02/08	---	500	---	---	---	---	---	---	---	---
	03/04/09	---	470	---	---	---	---	---	---	---	---
	06/01/09	---	440	---	---	---	---	---	---	---	2.7
	03/03/10	---	460	---	---	---	---	---	---	---	---
	06/02/10	---	490	---	---	---	---	---	---	---	3.3
	09/01/10	---	440	---	---	---	---	---	---	---	---
	12/08/10	---	450	---	---	---	---	---	---	---	---
	03/31/11	---	490	---	---	---	---	---	---	---	---
	06/02/11	---	430	---	---	---	---	---	---	---	3.2
	09/02/11	---	420	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 203	12/07/11	---	450	---	---	---	---	---	---	---	---
8S/1W-6P1	06/05/12	740	430	19	15	110	2.3	72	94	180	3.2
(Cont)	09/05/12	---	440	---	---	---	---	---	---	---	---
No. 204	05/22/91	740	425	50	12	85	3	120	18	198	19
7S/2W-26G	05/13/94	690	375	37	7	85	3	130	19	125	19
No. 205	03/28/88	500	290	23	3	81	2	83	27	107	21
7S/3W-35A	03/13/91	490	275	22	3	75	2	62	23	113	21
	03/03/94	510	275	20	2	72	2	72	24	104	20
	04/26/95	---	---	---	---	---	---	---	---	---	22
	03/25/97	480	270	20	2	75	2	66	18	110	21
	05/09/01	410	270	21	3	67	1	60	17	120	23
	11/13/01	---	---	---	---	---	---	---	---	---	21
	02/19/02	---	---	---	---	---	---	---	---	---	20
	05/14/02	---	---	---	---	---	---	---	---	---	18
	08/27/02	---	---	---	---	---	---	---	---	---	20
	11/20/02	---	---	---	---	---	---	---	---	---	18
	01/08/03	---	---	---	---	---	---	---	---	---	4.5 as N
	03/31/03	---	---	---	---	---	---	---	---	---	18
	06/11/03	---	---	---	---	---	---	---	---	---	18
	09/16/03	---	---	---	---	---	---	---	---	---	21
	12/04/03	---	---	---	---	---	---	---	---	---	20
	03/09/04	---	---	---	---	---	---	---	---	---	18
	06/09/04	---	---	---	---	---	---	---	---	---	18
	09/01/04	---	---	---	---	---	---	---	---	---	19
	12/07/04	---	---	---	---	---	---	---	---	---	20
	03/08/05	---	---	---	---	---	---	---	---	---	21
	06/07/05	---	---	---	---	---	---	---	---	---	17
	09/13/05	---	---	---	---	---	---	---	---	---	16
	12/05/05	---	---	---	---	---	---	---	---	---	15
	03/09/06	---	---	---	---	---	---	---	---	---	17
	06/07/06	---	---	---	---	---	---	---	---	---	17
	04/15/09	500	290	19	2	71	1.4	68	18	120	20
	07/14/09	---	270	---	---	---	---	---	---	---	20
	01/06/10	---	280	---	---	---	---	---	---	---	17
	04/08/10	---	---	---	---	---	---	---	---	---	14
	04/20/10	---	290	---	---	---	---	---	---	---	---
	07/20/10	---	260	---	---	---	---	---	---	---	16
	10/05/10	---	240	---	---	---	---	---	---	---	15
	01/04/11	---	210	---	---	---	---	---	---	---	19
	04/12/11	---	280	---	---	---	---	---	---	---	15
	07/08/11	---	260	---	---	---	---	---	---	---	14
	10/04/11	---	260	---	---	---	---	---	---	---	16
	01/12/12	---	250	---	---	---	---	---	---	---	16
	04/03/12	---	300	---	---	---	---	---	---	---	18
	04/24/12	470	260	16	1.4	73	1.6	70	18	98	16

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 207	09/01/88	510	245	1	<1	108	<1	54	26	82	<1
8S/2W-14B	09/14/88	480	305	3	<1	106	<1	58	23	24	1
	08/14/91	480	245	1	<1	100	<1	52	28	55	<1
	08/10/94	440	285	2	<1	91	1	56	29	76	2
	08/15/97	510	280	2	<1	97	<1	52	25	98	<2
	07/27/98	---	---	---	---	---	---	---	---	---	2
	12/27/00	480	280	2	<1	100	<1	53	30	120	2
No. 208	09/01/88	680	415	44	15	77	3	119	14	186	18
7S/2W-35M	09/14/88	690	440	44	14	77	3	129	14	183	16
	08/14/91	600	340	23	7	89	2	85	18	162	4
	08/10/94	560	370	22	6	89	2	93	20	156	5
	06/06/95	---	---	---	---	---	---	---	---	---	4
	08/12/96	---	---	---	---	---	---	---	---	---	2
	07/27/99	---	---	---	---	---	---	---	---	---	15
	08/18/99	---	---	---	---	---	---	---	---	---	20
No. 209	05/22/91	790	435	40	14	105	2	150	35	162	8
7S/2W-28J	05/13/94	760	525	64	22	48	3	150	15	153	25
	06/20/95	---	---	---	---	---	---	---	---	---	5
	05/15/97	690	390	10	3	130	<1	110	56	130	1.3
No. 210	04/15/59	1366	---	101	23	150	10	149	200	275	3
8S/2W-12K	01/18/63	400	926	99	30	17.5	4.5	145	255	329	4
	11/30/67	1415	890	136	5	152	10	146	230	305	3
	07/26/68	1250	825	96	22	144	8	130	190	290	5
	09/06/68	1310	840	82	26	132	5	142	222	276	12
	07/19/73	1200	579	84	21.4	149	6.8	122	237	301	19.7
	08/08/75	1140	695	84	14	150	6	101	190	287	15
	06/22/76	1240	675	76	26	142	7	101	205	278	36
	10/13/76	1120	640	92	22	100	6	110	170	262	5
	06/16/77	1130	610	84	18	114	6	110	170	259	11
	05/20/80	580	340	30	8	75	4	51	67	152	9
	04/03/86	800	540	65	17	86	4.5	75	112	235	3.5
	07/15/86	830	560	72	19	86	4	87	118	250	4
	03/28/88	1030	575	76	22	93	5	99	143	247	4
	09/25/91	1040	600	74	20	120	5	120	160	238	5
	09/19/94	645	460	52	14	79	4	70	100	198	2
	09/16/96	---	---	---	---	---	---	---	---	---	3
	09/16/98	---	---	---	---	---	---	---	---	---	3
	12/15/98	---	---	---	---	---	---	---	---	---	2
	01/04/99	---	---	---	---	---	---	---	---	---	2
	02/03/99	---	---	---	---	---	---	---	---	---	2
	04/08/99	---	---	---	---	---	---	---	---	---	3
	06/02/99	---	---	---	---	---	---	---	---	---	3
	09/07/99	---	---	---	---	---	---	---	---	---	4

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 210	10/21/99	---	---	---	---	---	---	---	---	---	5
8S/2W-12K	12/15/99	---	---	---	---	---	---	---	---	---	5
(Cont)	05/03/00	---	---	---	---	---	---	---	---	---	5
	09/13/00	830	560	64	17	100	4	74	190	180	4
	05/08/01	---	---	---	---	---	---	---	---	---	4
	05/13/02	---	---	---	---	---	---	---	---	---	3
	01/08/03	---	---	---	---	---	---	---	---	---	.52 as N
	08/20/03	---	---	---	---	---	---	---	---	---	2.2
	09/16/03	830	560	65	18	78	4.5	76	180	160	2
	08/10/04	---	---	---	---	---	---	---	---	---	3.2
	08/02/05	---	---	---	---	---	---	---	---	---	5.4
	08/15/06	---	---	---	---	---	---	---	---	---	6.7
	08/14/07	---	---	---	---	---	---	---	---	---	12.0
	08/12/08	---	590	---	---	---	---	---	---	---	7.6
	03/05/09	---	520	---	---	---	---	---	---	---	---
	06/02/09	---	570	---	---	---	---	---	---	---	---
	08/05/09	---	---	---	---	---	---	---	---	---	4.9
	03/03/10	---	600	---	---	---	---	---	---	---	---
	06/02/10	---	600	---	---	---	---	---	---	---	---
	08/11/10	---	---	---	---	---	---	---	---	---	3.6
	09/08/10	---	600	---	---	---	---	---	---	---	---
	12/08/10	---	590	---	---	---	---	---	---	---	---
	03/09/11	---	620	---	---	---	---	---	---	---	---
	06/08/11	---	600	---	---	---	---	---	---	---	---
	11/10/11	---	600	---	---	---	---	---	---	---	3.8
	02/09/12	---	560	---	---	---	---	---	---	---	---
	05/02/12	---	540	---	---	---	---	---	---	---	---
	08/09/12	---	490	---	---	---	---	---	---	---	---
	09/05/12	840	530	60	19	84	5.6	86	150	180	12
No. 211	04/08/97	720	400	67	14	54	1	59	65	220	13
8S/2W-20R1	12/23/97	---	410	---	---	---	---	---	---	---	3.1 as N
	03/25/98	---	620	---	---	---	---	---	---	---	3.6 as N
	06/03/98	---	---	---	---	---	---	---	---	---	3.4 as N
	06/05/98	---	480	---	---	---	---	---	---	---	---
	09/17/98	---	---	---	---	---	---	---	---	---	3.3 as N
	12/17/98	---	430	---	---	---	---	56	66	---	16
	06/03/99	---	430	---	---	---	---	---	---	---	3.4 as N
	12/14/99	---	310	---	---	---	---	---	---	---	10
	04/04/00	700	430	71	14	52	1	57	66	220	17
	06/22/00	---	400	---	---	---	---	---	---	---	15
	12/13/00	---	---	---	---	---	---	---	---	---	4.5 as N
	03/27/01	---	---	---	---	---	---	---	---	---	4.5 as N
	06/20/01	---	---	---	---	---	---	---	---	---	2.7 as N
	09/13/01	---	---	---	---	---	---	---	---	---	4.7 as N
	11/13/01	---	450	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 211	05/14/02	---	370	---	---	---	---	---	---	---	12
8S/2W-20R1	07/15/03	630	370	61	11	46	1.2	46	51	220	11
(Cont)	12/09/08	---	480	---	---	---	---	---	---	---	22
	03/09/09	---	560	---	---	---	---	---	---	---	17
	06/02/09	---	480	---	---	---	---	---	---	---	14
	01/12/10	---	360	---	---	---	---	---	---	---	6.3
	04/15/10	---	500	---	---	---	---	---	---	---	16
	07/21/10	---	510	---	---	---	---	---	---	---	15
	10/07/10	---	540	---	---	---	---	---	---	---	14
	01/18/11	---	550	---	---	---	---	---	---	---	15
	04/06/11	---	560	---	---	---	---	---	---	---	16
	07/07/11	---	520	---	---	---	---	---	---	---	13
	09/01/11	840	460	86	16	56	1.2	66	100	260	13
	10/12/11	---	420	---	---	---	---	---	---	---	14
	01/10/12	---	520	---	---	---	---	---	---	---	14
	04/18/12	---	510	---	---	---	---	---	---	---	14
No. 212	03/28/88	640	330	42	2	74	3	81	33	146	14
8S/2W-11N	09/25/91	600	320	41	2	82	4	86	35	146	14
No. 215	08/15/90	650	380	40	13	71	3	100	14	162	11
7S/2W-34M	09/26/90	---	---	---	---	---	---	---	---	---	13
	06/22/94	630	400	41	13	67	2	110	16	159	11
	06/16/97	630	370	29	9	81	2	110	16	160	6
	08/15/97	---	---	---	---	---	---	---	---	---	7
	08/11/04	630	380	35	12	76	2.6	100	14	150	<2
	09/09/04	---	---	---	---	---	---	---	---	---	9
	06/26/06	---	---	---	---	---	---	---	---	---	6.6
	06/05/07	---	---	---	---	---	---	---	---	---	2.4
	08/14/07	590	320	22	7.3	85	2.2	88	16	150	2.2
	12/02/08	---	370	---	---	---	---	---	---	---	---
	03/09/09	---	380	---	---	---	---	---	---	---	---
	06/04/09	---	300	---	---	---	---	---	---	---	---
	03/04/10	---	340	---	---	---	---	---	---	---	---
	06/18/10	---	340	---	---	---	---	---	---	---	---
	08/18/10	580	330	20	6.5	79	1.9	82	16	150	2.5
	09/03/10	---	330	---	---	---	---	---	---	---	2.2
	12/17/10	---	350	---	---	---	---	---	---	---	---
	03/15/11	---	250	---	---	---	---	---	---	---	---
	06/07/11	---	320	---	---	---	---	---	---	---	---
	12/06/11	---	320	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 216	06/01/88	480	280	25	4	65	2	71	11	134	---
8S/2W-7W	06/29/88	480	275	29	5	59	3	81	7	110	26
	06/12/91	500	285	30	5	59	2	76	9	113	23
	05/27/92	470	285	33	6	53	2	72	10	119	20
	04/25/01	490	300	28	4	55	2	74	13	120	12
	09/21/04	540	320	31	5.6	53	2.1	74	10	130	14
	10/26/04	---	---	---	---	---	---	---	---	---	15
	11/02/04	---	---	---	---	---	---	---	---	---	15
	11/10/04	---	---	---	---	---	---	---	---	---	16
	10/18/05	---	---	---	---	---	---	---	---	---	19
	10/12/06	---	---	---	---	---	---	---	---	---	19
	09/07/07	510	300	28	4.7	57	3.5	82	12	110	18
	10/03/07	---	---	---	---	---	---	---	---	---	17
	04/23/09	---	---	---	---	---	---	---	---	---	14
	03/18/10	---	370	---	---	---	---	---	---	---	---
	04/08/10	---	---	---	---	---	---	---	---	---	12
	06/10/10	---	380	---	---	---	---	---	---	---	---
	09/01/10	---	340	---	---	---	---	---	---	---	---
	09/01/10	570	320	41	6.9	58	2.3	86	16	130	16
	12/08/10	---	360	---	---	---	---	---	---	---	---
	12/14/10	---	390	---	---	---	---	---	---	---	---
	06/08/11	---	390	---	---	---	---	---	---	---	---
	08/10/11	---	---	---	---	---	---	---	---	---	15
	12/08/11	---	400	---	---	---	---	---	---	---	---
	06/08/12	---	420	---	---	---	---	---	---	---	---
No. 217	03/28/88	580	285	8	1	108	1	81	20	113	15
8S/2W-17M1	08/10/88	570	280	8	1	105	1	82	20	55	13
	08/14/91	570	305	17	2	99	2	74	28	134	16
	08/10/94	610	365	20	3	97	2	82	38	134	16
	08/15/97	660	370	20	3	107	1	80	41	130	13
	05/09/00	---	---	---	---	---	---	---	---	---	15
	10/12/00	650	380	19	2	110	1	81	49	150	16
	05/14/01	---	---	---	---	---	---	---	---	---	17
	05/14/02	---	---	---	---	---	---	---	---	---	12
	10/15/03	690	400	25	3.3	110	1.6	84	58	150	16
	05/06/04	---	---	---	---	---	---	---	---	---	17
	05/11/06	---	---	---	---	---	---	---	---	---	15
	05/15/07	---	---	---	---	---	---	---	---	---	16
	05/06/08	---	400	---	---	---	---	---	---	---	14
	08/12/08	---	430	---	---	---	---	---	---	---	---
	05/11/09	---	400	---	---	---	---	---	---	---	13
	08/05/09	---	400	---	---	---	---	---	---	---	---
	02/02/10	---	390	---	---	---	---	---	---	---	---
	05/06/10	---	480	---	---	---	---	---	---	---	17
	08/09/10	---	470	---	---	---	---	---	---	---	---
	11/16/10	---	420	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 217	02/02/11	---	410	---	---	---	---	---	---	---	---
8S/2W-17M1	05/04/11	---	440	---	---	---	---	---	---	---	15
(Cont)	08/02/11	---	440	---	---	---	---	---	---	---	---
	11/03/11	---	400	---	---	---	---	---	---	---	---
	02/07/12	---	420	---	---	---	---	---	---	---	---
	05/02/12	---	440	---	---	---	---	---	---	---	16
	08/07/12	---	450	---	---	---	---	---	---	---	---
No. 231	08/15/90	1280	805	126	18	120	5	100	310	244	9
8S/2W-20B6	09/26/90	---	---	---	---	---	---	---	---	---	6
	03/04/92	1700	1270	180	51	160	6	140	510	332	5
	06/20/95	1640	1300	171	44	124	6	75	520	287	5.3
	02/27/98	---	---	---	---	---	---	---	---	---	3
	05/16/00	---	---	---	---	---	---	---	---	---	5
	05/24/01	1490	1080	140	35	120	5	120	340	330	3
	05/13/02	---	---	---	---	---	---	---	---	---	2
	07/12/05	---	---	---	---	---	---	---	---	---	2.2
	07/20/06	---	---	---	---	---	---	---	---	---	3.7
	05/02/07	1400	830	120	27	110	4	130	250	300	2.1
	03/07/08	---	900	---	---	---	---	---	---	---	2.4
No. 232	08/15/90	960	590	71	19	110	5	98	130	235	30
8S/2W-11J3	09/26/90	---	---	---	---	---	---	---	---	---	35
	09/25/91	980	565	74	19	106	5	98	120	244	37
	09/19/94	805	495	54	14	92	4	80	110	207	15
	09/13/96	---	---	---	---	---	---	---	---	---	22
	11/04/97	1000	660	76	20	110	4	97	130	230	29
	07/27/98	---	---	---	---	---	---	---	---	---	38
	12/10/98	---	---	---	---	---	---	---	---	---	22
	01/06/98	---	---	---	---	---	---	---	---	---	30
	01/29/99	---	---	---	---	---	---	---	---	---	10
	02/03/99	---	---	---	---	---	---	---	---	---	26
	02/24/99	---	---	---	---	---	---	---	---	---	37
	04/08/99	---	---	---	---	---	---	---	---	---	33
	04/21/99	---	---	---	---	---	---	---	---	---	34
	06/23/99	---	---	---	---	---	---	---	---	---	33
	07/08/99	---	---	---	---	---	---	---	---	---	36
	08/25/99	---	---	---	---	---	---	---	---	---	33
	09/21/99	---	---	---	---	---	---	---	---	---	31
	10/06/99	---	---	---	---	---	---	---	---	---	30
	11/17/99	---	---	---	---	---	---	---	---	---	32
	12/14/99	---	---	---	---	---	---	---	---	---	32
	01/18/00	---	---	---	---	---	---	---	---	---	31
	02/29/00	---	---	---	---	---	---	---	---	---	10
	03/21/00	---	---	---	---	---	---	---	---	---	25
	04/11/00	---	---	---	---	---	---	---	---	---	29

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
	05/25/00	---	---	---	---	---	---	---	---	---	26
No. 232	06/21/00	---	---	---	---	---	---	---	---	---	26
8S/2W-11J3	07/11/00	---	---	---	---	---	---	---	---	---	25
(Cont)	09/13/00	920	590	65	17	105	4	91	150	210	21
	10/06/00	---	---	---	---	---	---	---	---	---	18
	11/08/00	---	---	---	---	---	---	---	---	---	17
	12/13/00	---	---	---	---	---	---	---	---	---	20
	01/04/01	---	---	---	---	---	---	---	---	---	19
	02/28/01	---	---	---	---	---	---	---	---	---	10
	04/10/01	---	---	---	---	---	---	---	---	---	20
	10/10/01	---	---	---	---	---	---	---	---	---	26
	05/14/02	---	---	---	---	---	---	---	---	---	22
	08/06/02	---	---	---	---	---	---	---	---	---	4*
	01/08/03	---	---	---	---	---	---	---	---	---	6.0 as N
	03/31/03	---	---	---	---	---	---	---	---	---	11
	06/10/03	---	---	---	---	---	---	---	---	---	31
	07/08/03	---	---	---	---	---	---	---	---	---	30
	08/20/03	---	---	---	---	---	---	---	---	---	28
	09/16/03	1100	680	67	18	110	4.3	100	150	240	33
	10/14/03	---	---	---	---	---	---	---	---	---	31
	01/14/04	---	---	---	---	---	---	---	---	---	23
	02/10/04	---	---	---	---	---	---	---	---	---	21
	04/14/04	---	---	---	---	---	---	---	---	---	25
	05/06/04	---	---	---	---	---	---	---	---	---	26
	06/22/04	---	---	---	---	---	---	---	---	---	25
	07/14/04	---	---	---	---	---	---	---	---	---	25
	08/10/04	---	---	---	---	---	---	---	---	---	31
	09/08/04	---	---	---	---	---	---	---	---	---	26
	10/26/04	---	---	---	---	---	---	---	---	---	15
	11/18/04	---	---	---	---	---	---	---	---	---	26
	12/07/04	---	---	---	---	---	---	---	---	---	16
	01/10/05	---	---	---	---	---	---	---	---	---	20
	02/14/05	---	---	---	---	---	---	---	---	---	14
	03/11/05	---	---	---	---	---	---	---	---	---	11
	04/13/05	---	---	---	---	---	---	---	---	---	25
	06/08/05	---	---	---	---	---	---	---	---	---	24
	07/12/05	---	---	---	---	---	---	---	---	---	22
	08/02/05	---	---	---	---	---	---	---	---	---	18

* Sample may have been switched with Well 233

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 232	09/20/05	---	---	---	---	---	---	---	---	---	19
8S/2W-11J3	10/18/05	---	---	---	---	---	---	---	---	---	18
(Cont)	11/08/05	---	---	---	---	---	---	---	---	---	18
	12/06/05	---	---	---	---	---	---	---	---	---	19
	01/04/06	---	---	---	---	---	---	---	---	---	15
	02/14/06	---	---	---	---	---	---	---	---	---	18
	03/13/06	---	---	---	---	---	---	---	---	---	8.3
	04/18/06	---	---	---	---	---	---	---	---	---	12
	05/12/06	---	---	---	---	---	---	---	---	---	15
	06/22/06	---	---	---	---	---	---	---	---	---	11
	07/19/06	---	---	---	---	---	---	---	---	---	13
	08/15/06	---	---	---	---	---	---	---	---	---	14
	11/02/06	---	---	---	---	---	---	---	---	---	15
	01/10/07	---	---	---	---	---	---	---	---	---	13
	02/07/07	---	---	---	---	---	---	---	---	---	15
	03/14/07	---	---	---	---	---	---	---	---	---	15
	04/17/07	---	---	---	---	---	---	---	---	---	14
	05/01/07	---	---	---	---	---	---	---	---	---	13
	06/01/07	---	---	---	---	---	---	---	---	---	11
	07/05/07	---	---	---	---	---	---	---	---	---	12
	08/14/07	---	---	---	---	---	---	---	---	---	14
	10/03/07	---	---	---	---	---	---	---	---	---	13
	12/05/07	---	---	---	---	---	---	---	---	---	12
	01/08/08	---	---	---	---	---	---	---	---	---	11
	02/13/08	---	---	---	---	---	---	---	---	---	6.9
	03/04/08	---	---	---	---	---	---	---	---	---	9.7
	03/07/08	---	610	---	---	---	---	---	---	---	---
	04/08/08	---	---	---	---	---	---	---	---	---	13
	05/07/08	---	---	---	---	---	---	---	---	---	12
	07/10/08	---	580	---	---	---	---	---	---	---	---
	07/28/08	---	---	---	---	---	---	---	---	---	12
	08/12/08	---	---	---	---	---	---	---	---	---	13
	12/03/08	---	---	---	---	---	---	---	---	---	14
	01/13/09	---	660	---	---	---	---	---	---	---	14
	02/05/09	---	---	---	---	---	---	---	---	---	13
	03/04/09	---	---	---	---	---	---	---	---	---	12
	04/02/09	---	580	---	---	---	---	---	---	---	13
	05/11/09	---	---	---	---	---	---	---	---	---	11
	06/02/09	---	---	---	---	---	---	---	---	---	11
	07/13/09	---	580	---	---	---	---	---	---	---	12
	08/05/09	---	---	---	---	---	---	---	---	---	12
	01/06/10	---	590	---	---	---	---	---	---	---	12
	02/03/10	---	---	---	---	---	---	---	---	---	10
	03/10/10	---	---	---	---	---	---	---	---	---	8.5

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 232	04/08/10	---	570	---	---	---	---	---	---	---	12
8S/2W-11J3	05/07/10	---	---	---	---	---	---	---	---	---	13
(Cont)	06/03/10	---	---	---	---	---	---	---	---	---	13
	07/08/10	---	570	---	---	---	---	---	---	---	13
	08/10/10	---	---	---	---	---	---	---	---	---	14
	09/02/10	---	---	---	---	---	---	---	---	---	3.6
	10/06/10	---	590	---	---	---	---	---	---	---	15
	11/16/10	---	---	---	---	---	---	---	---	---	13
	12/01/10	---	---	---	---	---	---	---	---	---	14
	01/04/11	---	490	---	---	---	---	---	---	---	7.9
	03/09/11	---	---	---	---	---	---	---	---	---	8.4
	04/05/11	---	560	---	---	---	---	---	---	---	13
	05/03/11	---	---	---	---	---	---	---	---	---	11
	06/08/11	---	---	---	---	---	---	---	---	---	11
	07/06/11	---	590	---	---	---	---	---	---	---	10
	08/03/11	---	---	---	---	---	---	---	---	---	10
	09/02/11	---	---	---	---	---	---	---	---	---	10
	10/14/11	---	610	---	---	---	---	---	---	---	11
	11/02/11	---	---	---	---	---	---	---	---	---	11
	12/07/11	---	---	---	---	---	---	---	---	---	11
	01/11/12	---	590	---	---	---	---	---	---	---	9.9
	02/02/12	---	---	---	---	---	---	---	---	---	9.4
	03/07/12	---	---	---	---	---	---	---	---	---	9.7
	04/04/12	---	580	---	---	---	---	---	---	---	8.4
	05/02/12	---	---	---	---	---	---	---	---	---	9.4
	06/05/12	---	---	---	---	---	---	---	---	---	9.6
	08/08/12	---	---	---	---	---	---	---	---	---	10
	09/05/12	950	610	69	19	100	4.5	99	200	190	11
No. 233 (Old 112)	06/15/88	900	535	71	21	100	5	96	136	247	4
8S/2W-12K2	03/27/91	1020	580	66	19	114	5	95	140	247	12
	03/03/94	740	425	50	14	75	4	71	100	186	2
	04/27/95	---	---	---	---	---	---	---	---	---	6
	03/27/97	880	510	57	15	100	4	81	120	220	4
	01/04/99	---	---	---	---	---	---	---	---	---	5
	02/03/99	---	---	---	---	---	---	---	---	---	4
	04/08/99	---	---	---	---	---	---	---	---	---	4
	06/03/99	---	---	---	---	---	---	---	---	---	4
	07/20/99	---	---	---	---	---	---	---	---	---	5
	08/11/99	---	---	---	---	---	---	---	---	---	4
	09/07/99	---	---	---	---	---	---	---	---	---	4
	10/21/99	---	---	---	---	---	---	---	---	---	5
	11/03/99	---	---	---	---	---	---	---	---	---	4
	04/11/00	970	570	64	18	110	4	85	150	230	4
	10/06/00	---	---	---	---	---	---	---	---	---	3
	10/10/01	---	---	---	---	---	---	---	---	---	4
	08/06/02	---	---	---	---	---	---	---	---	---	26*
	01/13/03	---	---	---	---	---	---	---	---	---	1 as N
	07/07/03	---	---	---	---	---	---	---	---	---	2.7
	07/13/04	---	---	---	---	---	---	---	---	---	3
	07/12/05	---	---	---	---	---	---	---	---	---	2.8
	04/04/06	960	600	75	20	87	4.5	93	180	180	7.3

* Sample might have been switched with Well 232

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 233 (Old 112)	08/04/06	---	---	---	---	---	---	---	---	---	11
8S/2W-12K2	08/14/07	---	---	---	---	---	---	---	---	---	8.1
(Cont)	08/13/08	---	530	---	---	---	---	---	---	---	6.1
	02/05/09	---	570	---	---	---	---	---	---	---	---
	04/02/09	960	580	70	20	88	4.7	100	160	200	6.8
	05/11/09	---	610	---	---	---	---	---	---	---	---
	08/04/09	---	570	---	---	---	---	---	---	---	5
	02/02/10	---	560	---	---	---	---	---	---	---	---
	05/06/10	---	660	---	---	---	---	---	---	---	---
	08/10/10	---	580	---	---	---	---	---	---	---	5.1
	07/02/11	---	630	---	---	---	---	---	---	---	---
	08/03/11	---	---	---	---	---	---	---	---	---	4.2
	10/14/11	---	620	---	---	---	---	---	---	---	---
	01/10/12	---	580	---	---	---	---	---	---	---	---
	04/12/12	930	560	67	20	93	5.5	91	190	180	4.7
	04/12/12	---	570	---	---	---	---	---	---	---	---
	08/08/12	---	---	---	---	---	---	---	---	---	5.3
No. 234 (Old 114)	03/31/88	840	480	54	15	100	4	61	109	241	18
8S/2W-11P	03/27/91	1020	605	69	19	114	5	77	138	256	37
	06/20/95	---	---	---	---	---	---	---	---	---	11
	09/26/96	---	---	---	---	---	---	---	---	---	9
	02/04/97	---	---	---	---	---	---	---	---	---	12
	04/25/97	840	500	56	15	95	4	77	120	230	8
	01/19/99	---	---	---	---	---	---	---	---	---	12
	02/12/99	---	---	---	---	---	---	---	---	---	16
	04/21/99	---	---	---	---	---	---	---	---	---	15
	06/03/99	---	---	---	---	---	---	---	---	---	16
	07/27/99	---	---	---	---	---	---	---	---	---	18
	08/19/99	---	---	---	---	---	---	---	---	---	17
	09/21/99	---	---	---	---	---	---	---	---	---	16
	10/26/99	---	---	---	---	---	---	---	---	---	13
	04/13/00	900	550	64	18	10	4	70	150	220	13
	07/06/00	---	---	---	---	---	---	---	---	---	12
	07/12/01	---	---	---	---	---	---	---	---	---	7
	08/02/01	---	---	---	---	---	---	---	---	---	<2
	11/20/02	---	---	---	---	---	---	---	---	---	3
	12/11/02	850	520	62	17	80	3.7	74	170	170	4
	11/04/03	---	---	---	---	---	---	---	---	---	10
	11/05/04	---	---	---	---	---	---	---	---	---	10
	11/03/05	---	---	---	---	---	---	---	---	---	12
	12/06/05	890	620	70	19	89	4.1	85	180	200	12
	11/08/06	---	---	---	---	---	---	---	---	---	14
	11/16/07	---	---	---	---	---	---	---	---	---	16
	08/12/08	---	610	---	---	---	---	---	---	---	---
	11/06/08	---	570	---	---	---	---	---	---	---	20
	12/03/08	960	660	83	21	89	4.9	87	160	230	20
	02/05/09	---	590	---	---	---	---	---	---	---	---
	05/07/09	---	620	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 234 (Old 114)	08/04/09	---	590	---	---	---	---	---	---	---	---
8S/2W-11P	02/03/10	---	610	---	---	---	---	---	---	---	---
(Cont)	05/06/10	---	680	---	---	---	---	---	---	---	---
	08/10/10	---	610	---	---	---	---	---	---	---	---
	08/11/10	---	610	---	---	---	---	---	---	---	---
	11/01/10	---	610	---	---	---	---	---	---	---	21
	02/09/11	---	620	---	---	---	---	---	---	---	---
	05/03/11	---	620	---	---	---	---	---	---	---	---
	08/03/11	---	570	---	---	---	---	---	---	---	---
	11/02/11	---	560	---	---	---	---	---	---	---	20
	12/06/11	990	660	71	20	99	4.2	91	160	240	21
	05/03/12	---	620	---	---	---	---	---	---	---	---
	08/08/12	---	620	---	---	---	---	---	---	---	---
No. 235 (Old 137)	06/24/88	460	310	40	10	41	2	58	10	140	15
8S/3W-1Q1	06/20/90	420	230	22	4	56	2	50	6	128	18
	06/10/93	370	235	15	2	65	2	51	9	113	17
	07/16/96	410	230	16	2	60	1	48	8.9	110	20
	06/09/97	---	---	---	---	---	---	---	---	---	17
	06/03/99	390	240	13	1	63	1	46	6.7	98	17
	11/03/99	---	---	---	---	---	---	---	---	---	16
	11/09/00	---	---	---	---	---	---	---	---	---	15
	11/20/01	---	---	---	---	---	---	---	---	---	13
	06/11/02	380	210	10	<1	62	1.2	48	7.2	100	16
	11/05/02	---	---	---	---	---	---	---	---	---	17
	11/18/03	---	---	---	---	---	---	---	---	---	11
	11/18/05	---	---	---	---	---	---	---	---	---	18
	06/22/05	380	230	9	<1	68	1.1	49	7.3	96	16
	11/08/05	---	---	---	---	---	---	---	---	---	17
	11/14/06	---	---	---	---	---	---	---	---	---	16
	06/11/08	400	210	11	1	72	1.4	48	8.4	100	15
	07/07/08	---	200	---	---	---	---	---	---	---	---
	01/13/09	---	260	---	---	---	---	---	---	---	---
	04/07/09	---	210	---	---	---	---	---	---	---	---
	07/13/09	---	200	---	---	---	---	---	---	---	---
	01/06/10	---	230	---	---	---	---	---	---	---	---
	04/08/10	---	220	---	---	---	---	---	---	---	---
	07/14/10	---	220	---	---	---	---	---	---	---	---
	10/05/10	---	180	---	---	---	---	---	---	---	---
	11/16/10	---	---	---	---	---	---	---	---	---	15
	01/12/11	---	170	---	---	---	---	---	---	---	---
	08/17/11	380	210	13	1.2	65	1.7	48	8.4	100	16
	08/17/11	---	230	---	---	---	---	---	---	---	---
	11/02/11	---	200	---	---	---	---	---	---	---	15
	02/09/12	---	200	---	---	---	---	---	---	---	---
	05/03/12	---	220	---	---	---	---	---	---	---	---
	08/09/12	---	200	---	---	---	---	---	---	---	---

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 301	07/29/92	500	290	20	6	80	1	45	56	143	<1
7S/3W-18Q1	02/27/97	580	350	45	16	48	2	49	54	200	4
	08/15/97	---	---	---	---	---	---	---	---	---	6
	12/27/00	570	360	49	15	53	2	55	57	180	7
	02/22/02	---	---	---	---	---	---	---	---	---	<2
	05/14/02	550	340	---	---	---	---	57	50	---	3
	12/11/02	580	350	---	---	---	---	---	---	---	2.5
No. 302	04/11/88	690	360	36	6	100	1	77	65	192	<1
7S/3W-18H	05/15/91	760	425	58	9	87	2	83	72	220	<1
	05/14/92	---	270	12	2	90	<1	48	48	---	---
	05/05/94	870	530	69	16	84	2	110	88	238	<1
	05/16/95	---	---	---	---	---	---	---	---	---	<1
	07/16/96	530	320	---	---	---	---	60	54	---	2
	05/13/97	560	500	73	14	94	2	110	86	240	<2
	07/27/99	---	---	---	---	---	---	---	---	---	<2
	05/17/00	520	320	11	1	99	<1	51	50	130	<2
	06/13/00	520	310	---	---	---	---	---	---	---	<2
	07/11/00	---	---	---	---	---	---	---	---	---	<2
	12/20/01	790	500	---	---	---	---	110	140	---	<2
	12/11/02	870	510	---	---	---	---	---	---	---	ND
	06/19/03	620	370	22	3.8	95	<1	77	63	140	<2
	03/17/04	830	510	---	---	---	---	110	85	---	<2
	06/22/04	---	---	---	---	---	---	---	---	---	<2
	09/21/04	900	550	---	---	---	---	110	82	---	<2
No. 309	08/15/90	690	370	19	3	119	2	140	25	73	5
7S/3W-27H	04/11/91	---	---	---	---	---	---	---	---	---	<.001
	09/25/91	730	365	19	2	122	2	150	27	82	5
	08/11/94	730	430	20	2	120	2	160	30	73	5
	02/16/95	---	---	---	---	---	---	---	---	---	18
	07/16/97	---	---	---	---	---	---	---	---	---	1.1 as N
	07/23/97	---	---	---	---	---	---	---	---	---	1.2 as N
	08/20/97	---	---	---	---	---	---	---	---	---	1.1 as N
	09/03/97	---	---	---	---	---	---	---	---	---	1.1 as N
	09/18/97	---	---	---	---	---	---	---	---	---	1.1 as N
	10/03/97	790	520	21	2	130	2	170	33	85	6
	08/06/98	---	---	---	---	---	---	---	---	---	6
	09/16/98	---	460	---	---	---	---	---	---	---	1.4 as N
	07/20/99	---	---	---	---	---	---	---	---	---	6
	05/10/00	---	450	20	2	130	<1	---	---	85	---
	07/06/00	---	---	---	---	---	---	---	---	---	6

ND - None Detected

TABLE D-4

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS SAMPLED BY RANCHO CALIFORNIA WATER DISTRICT

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
No. 309	08/02/00	740	450	21	2	140	1	180	38	87	7
7S/3W-27H	07/19/01	---	---	---	---	---	---	---	---	---	7
(Cont)	11/19/02	---	---	---	---	---	---	---	---	---	5
	01/13/03	---	---	---	---	---	---	---	---	---	1.1 as N
	08/20/03	880	490	21	2.1	140	1.5	190	33	83	5
	01/07/04	---	---	---	---	---	---	---	---	---	6
	11/11/05	---	---	---	---	---	---	---	---	---	6
	01/04/06	---	---	---	---	---	---	---	---	---	5.4
	12/07/06	870	470	21	1.9	140	2	190	36	84	5.4
	01/10/07	---	---	---	---	---	---	---	---	---	5.3
	01/08/08	---	---	---	---	---	---	---	---	---	5.4
	08/12/08	---	470	---	---	---	---	---	---	---	---
	01/06/09	---	---	---	---	---	---	---	---	---	6.7
	02/03/09	---	450	---	---	---	---	---	---	---	---
	04/01/09	---	---	25	2.9	---	---	---	---	---	---
	05/11/09	---	460	---	---	---	---	---	---	---	---
	08/04/09	---	450	---	---	---	---	---	---	---	---
	01/07/10	---	---	---	---	---	---	---	---	---	5.7
	02/02/10	---	480	---	---	---	---	---	---	---	---
	05/06/10	---	500	---	---	---	---	---	---	---	---
	08/09/10	---	490	---	---	---	---	---	---	---	---
	11/10/10	---	460	---	---	---	---	---	---	---	---
	01/04/11	---	---	---	---	---	---	---	---	---	5.8
	02/02/11	---	480	---	---	---	---	---	---	---	---
	05/04/11	---	470	---	---	---	---	---	---	---	---
	08/04/11	---	480	---	---	---	---	---	---	---	---
	11/02/11	---	460	---	---	---	---	---	---	---	---
	01/17/12	---	---	---	---	---	---	---	---	---	5.5
	02/08/12	---	480	---	---	---	---	---	---	---	---
	05/03/12	---	490	---	---	---	---	---	---	---	---
	08/09/12	---	440	---	---	---	---	---	---	---	---

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Pechanga Indian Reservation											
8S/2W-28M03	08/26/99	562	319	38	13	52	0.77	68	15	---	2.59 as N
	08/12/03	534	344	40.7	14.7	53.5	0.86	58.9	14.1	---	4.21 as N
	08/19/04	708	440	61.4	22.5	51	0.93	87.6	52	---	6.16 as N
	08/02/05	746	459	69.7	26.9	44.3	1.01	87.8	61.8	---	5.09 as N
	08/02/06	678	413	55.9	21	42.6	0.85	74.9	43.1	153	8.25 as N
	09/04/07	663	392	53.7	19.5	51.1	0.92	70.1	32.1	158	8.32 as N
8S/2W-28M05	09/01/09	457	253	10.7	0.483	77.7	0.53	65.6	17.4	91	0.08 as N
	07/26/10	---	261	11	0.942	83.3	0.53	78.3	17.1	---	E 0.048
	08/31/11	482	272	10.7	0.999	86.0	0.49	77.8	16.9	88	0.052
8S/2W-28Q02	10/05/89	629	378	48	19	49	0.7	76	14	169	4.2 as N
	07/26/90	613	383	48	18	47	0.6	75	12	171	3.9 as N
	07/18/91	618	379	49	18	49	0.7	83	14	172	3.0 as N
	07/28/93	620	400	51	20	47	0.7	63	15	174	9.6 as N
	08/17/94	641	396	51	21	50	0.8	60	17	179	11.0 as N
	08/31/95	653	396	53	21	48	0.7	60	19	184	12.0 as N
	08/28/96	---	---	---	---	---	---	---	---	---	11.0 as N
	08/12/97	614	411	47	19	47	0.7	63	15	176	8.9 as N
	08/19/98	625	402	47	20	47	0.7	60	14	---	9.85 as N
	08/21/02	598	394	47	19	46	0.7	64	15	---	8.5 as N
	08/12/03	604	405	48.8	19.8	47.8	0.7	69.1	14.0	---	7.1 as N
	08/18/04	615	386	51.6	20.2	45.6	0.9	78.8	16.5	---	4.03 as N
	08/02/05	822	514	76.8	30.2	54	0.8	93.7	30.9	---	14.7 as N
8S/2W-28R01	08/03/89	495	286	41	4.0	60	0.9	37	13	177	1.1 as N
	07/26/90	525	296	48	4.8	54	1.0	45	14	191	1.5 as N
	07/17/91	462	261	31	3.2	66	0.8	44	12	155	.8 as N
	07/27/93	445	269	44	4.4	43	0.5	28	14	170	1.9 as N
	08/15/94	421	232	32	3.3	55	0.9	28	11	156	1.5 as N
	08/30/95	375	200	21	2.2	55	0.6	31	11	129	.7 as N
	08/27/96	---	---	---	---	---	---	---	---	---	1.5 as N
	08/13/97	398	241	20	2.1	59	0.62	37	11	130	.572 as N
	08/20/98	481	282	36	3.9	60	0.85	38	14	167	1.1 as N
	08/25/99	446	252	28	3.1	59	0.66	41	12	---	.758 as N
	08/22/00	456	265	29	3.3	61	0.73	39	14	---	.759 as N
	08/21/01	522	320	51	5.9	48	1.0	42	16	---	1.73 as N
	08/21/02	457	284	33	3.7	61	0.87	41	13	---	1.09 as N
	08/12/03	518	330	55	6.5	50.4	1.1	39.7	14.3	---	1.94 as N
	08/18/04	516	317	56.8	6.2	47.9	1.4	42.6	14.2	---	1.64 as N

* - Alkalinity as CaC03
E - estimated

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Pechanga Indian Reservation (Continued)											
8S/2W-28R01 (Cont)	08/03/05	541	333	60.5	6.5	45.3	1.2	40.2	14.1	---	2.23 as N
	09/10/08	480	278	37.2	4.67	62.4	1.14	41.2	11.4	160	---
	08/04/09	543	329	50	5.49	55.5	1.12	38.7	18.4	194	1.78 as N
	07/26/10	564	335	58.3	6.57	49.9	1.12	41.9	18.7	203	9.89
	08/22/11	548	357	55.0	6.75	52.9	1.07	41.3	18.8	187	10.5
	08/21/12	507	287	44.7	5.19	60.5	0.95	39.2	17.4	178	8.33
8S/2W-29A01	08/02/89	346	207	31	11	24	0.4	18	7.0	131	2.0 as N
	07/24/90	354	193	32	11	25	0.4	24	6.7	133	2.0 as N
	07/18/91	361	194	32	10	26	0.4	25	6.0	134	1.8 as N
	08/15/94	363	216	33	12	25	0.5	24	7.7	132	2.6 as N
	08/31/95	363	208	32	11	23	0.4	21	8.1	137	2.6 as N
	08/28/96	---	---	---	---	---	---	---	---	---	2.9 as N
	08/12/97	368	238	32	12	24	0.44	22	7.4	138	3.05 as N
	08/19/98	411	246	36	11	31	0.45	25	8.2	153	2.94 as N
	08/25/99	375	222	33	12	23	0.39	20	6.7	---	3.81 as N
	08/22/00	374	237	33	12	24	0.42	18	7.3	---	3.48 as N
	08/21/01	374	236	34	12	24	0.46	20	7.3	---	3.56 as N
	08/02/05	382	243	38.7	11.6	27.1	0.53	27.6	7.7	---	2.79 as N
8S/2W-29A02	08/02/06	392	242	36.2	10.9	26.6	0.43	29.4	7.94	139	2.64 as N
	08/04/09	394	245	29.8	11.3	32.2	0.64	34.5	7.38	133	0.81 as N
	07/26/10	---	268	37.5	11.9	32.5	0.55	38.5	12.9	---	E 10.8
	08/22/11	434	299	35.9	12.0	35.7	0.59	41.9	12.7	132	9.30
	08/21/12	465	298	42.0	13.2	38.1	0.55	42.4	15.8	148	11.8
8S/2W-29B02	03/01/90	456	257	5.5	0.14	89	0.8	66	22	100	---
	03/06/90	456	256	5.9	0.13	90	0.7	66	20	99	<0.1 as N
8S/2W-29B03	03/06/90	478	275	14	1.9	84	0.8	65	16	123	<0.1 as N
8S/2W-29B05	03/02/90	397	229	29	9.5	43	1.2	35	4.9	141	1.8 as N
8S/2W-29B06	03/02/90	406	259	34	11	38	0.8	38	10	143	---
	03/06/90	427	240	32	11	40	1.0	40	8.1	148	1.2 as N
8S/2W-29B07	03/07/90	396	230	8.6	2.5	71	0.9	51	11	102	<0.1 as N
	08/16/90	371	199	8.4	1.8	69	0.8	50	14	106	<0.1 as N

* - Alkalinity as CaC03
E - estimated

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Pechanga Indian Reservation (Continued)											
8S/2W-29B08	03/07/90	464	272	31	9.4	52	1.2	58	12	134	0.45 as N
	08/16/90	458	261	34	9.1	48	1.1	59	17	135	0.4 as N
8S/2W-29B09	03/07/90	343	210	21	9.2	39	1.0	24	6.7	131	1.3 as N
	08/17/90	317	197	26	10	26	1.1	22	3.4	130	1.6 as N
8S/2W-29B10	08/19/98	367	223	12	0.64	75	0.62	50	10	121	<.05 as N
	08/26/99	393	219	12	0.72	68	0.56	46	11	---	<.05 as N
	08/22/00	393	228	12	0.76	69	0.58	43	11	---	<.05 as N
	08/21/01	398	231	11	0.62	72	0.57	49	15	---	.04 as N
	08/12/03	387	239	11.3	0.65	75.1	0.57	47.2	18.4	---	2.41as N
	08/18/04	390	232	11.2	0.64	72.6	0.64	48	20.8	---	<.06 as N
	08/02/05	404	242	12.5	0.67	69.9	0.65	47.2	23.2	---	<.06 as N
	08/03/06	381	222	12.3	0.77	62.8	0.54	40.3	17.3	110	<.06 as N
	09/04/07	430	237	12.1	0.70	78.3	0.65	47.2	27.5	107	<.06 as N
	09/15/08	420	242	11.2	0.664	77.3	0.59	45.3	29.6	106	E .03 as N
	08/04/09	381	217	12.1	0.76	66	0.64	39.9	23.7	108	E .03 as N
	07/26/10	394	220	11.4	0.67	71.6	0.64	42.2	26	107	E 0.079
	08/22/11	421	265	11.5	0.697	75.5	0.58	45.5	31.0	99	0.115
	08/21/12	432	245	12.8	0.734	82.4	0.62	47.1	34.9	106	<.177
8S/2W-29B11	08/02/06	483	285	30.1	7.84	51.5	0.93	57.1	11.8	138	1.44 as N
	08/04/09	497	281	33	8.51	51	0.98	52.6	16.6	140	2.33 as N
	07/26/10	---	287	34.7	9.09	53.4	1.05	56.8	15.3	---	E 10.3
	08/22/11	482	308	32.7	9.52	53.0	1.00	54.2	16.0	131	10.9
	08/21/12	492	300	35.9	10.0	55.9	1.03	54.3	17.9	142	11.9
8S/2W-29F3	08/03/06	378	251	21.9	7.67	38.9	1.9	47.2	10.4	104	0.46 as N
8S/2W-29J02	08/26/99	565	329	39	15	47	1.6	66	14	---	2.67 as N
	08/22/00	562	337	39	15	47	1.5	65	14	---	2.70 as N
	08/21/01	574	351	40	15	50	1.6	70	15	---	2.63 as N
	08/21/02	554	345	41	16	50	1.8	68	14	---	2.93 as N
	08/12/03	592	372	45.4	16.6	54.2	1.65	78.2	15.4	---	2.41 as N
	08/19/04	598	362	48.8	16.9	---	1.88	80	17	---	3.06 as N
8S/2W-29J03	08/02/06	532	337	40.3	13.2	43.1	1.34	44.8	17.5	152	8.48 as N

* - Alkalinity as CaC03
E - estimated

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Pechanga Indian Reservation (Continued)											
8S/2W-34B04	10/05/89	617	371	51	8.2	67	1	58	30	192	.47 as N
	07/26/90	605	341	50	8	65	1	61	31	194	.50 as N
	07/18/91	564	339	46	7.4	67	1	53	27	185	.87 as N
	07/27/93	267	170	18	2.8	34	0.5	14	9.7	96	1.10 as N
8S/2W-35D01	08/03/89	660	358	43	5.5	87	1.2	78	35	169	.35 as N
	07/26/90	669	384	41	4.9	92	1.5	82	36	176	.40 as N
	07/17/91	641	371	40	4.4	98	1.7	81	36	175	.39 as N
	07/27/93	638	374	49	5.9	79	1.8	71	27	199	.34 as N
	08/16/94	601	334	30	3.2	95	1.5	71	29	163	.16 as N
	08/30/95	587	322	33	4	81	1.5	68	25	178	.11 as N
	08/27/96	596	352	28	3.3	92	1.4	72	29	167	.10 as N

* - Alkalinity as CaC03

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Cahuilla Indian Reservation											
7S/2E14M01	12/14/83	1220	708	130	40	45	11	53	390	98	0.04 as N
7S/2E-23H01	05/18/06	428	288	39.6	5.7	33.7	3.1	31	14	---	8.26 as N
7S/2E-23Q01	05/18/06	245	160	15.6	2.55	26.6	2.5	29.5	5.4	---	1.07 as N
7S/2E-26B03	07/11/07	296	197	23.7	3.04	31	2.94	33.9	7.64	76	1.79 as N
7S/2E-33N1	08/02/89	355	206	16	2.1	53	3.5	48	15	78	.73 as N
7S/2E-36J01	02/03/84	---	252	43	4.4	36	4.8	32	5.4	---	3.40 as N
7S-3E-14P03	08/10/05	1080	741	113	42.4	70	9.7	66.8	296	---	.15 as N
7S-3E-20J05	08/23/07	753	466	49.4	7.09	89.2	3.19	87.9	83.6	110	6.88 as N
7S/3E-21L01	05/27/53	750	---	66	20	70	---	67	76	---	---
	08/02/89	1050	675	90	19	100	3.5	84	190	216	3.1 as N
	08/01/90	1020	610	87	18	100	3.4	85	180	217	3.0 as N
	07/17/91	995	636	93	18	100	3.7	95	180	206	2.5 as N
	08/23/07	1040	677	96.1	20.2	90.9	3.67	96.2	169	190	3.42 as N
7S/3E-31L02	02/03/84	---	184	23	4.8	24	2.9	24	0	---	2.0 as N
7S/3E-31N01	07/27/84	684	412	69	12	37	---	75	12	---	---
7S/3E-34E01	07/07/76	---	---	25	4.6	21	4.2	26	7.3	---	4.0 as N
	09/22/77	---	---	25	4.9	23	4.4	25	6.9	---	---
	07/19/78	---	---	26	5.1	22	4.5	24	6.5	---	3.7 as N
	06/28/79	---	190	26	5	22	4.3	24	6	---	---
	07/02/80	---	---	26	4.9	23	4.7	28	6.9	---	3.7 as N
	07/08/81	309	---	27	5	23	4.7	26	7.7	81	4.1 as N
	06/29/82	311	---	27	5.3	27	4.9	27	10	88	4.0 as N
	08/10/83	306	---	27	5	23	4.8	29	7.7	90	3.8 as N
	08/21/84	319	---	30	5.3	24	4.3	29	7.2	92	3.7 as N
	08/01/85	321	---	28	5.2	24	4.6	29	7.0	86	3.5 as N

* - Alkalinity as CaC03

TABLE D-5

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON INDIAN RESERVATIONS

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3*	NO3
Cahuilla Indian Reservation (Continued)											
7S/3E-34E01	08/14/87	332	207	29	5.6	25	4.8	28	8.0	96	3.5 as N
	07/20/89	338	204	30	5.6	26	5.0	29	7.0	98	3.3 as N
	07/31/91	337	109	31	5.5	25	4.5	31	6.3	99	3.5 as N
	07/16/91	335	209	31	5.9	26	4.7	32	6.3	99	3.5 as N
8S/2E-4P01	01/21/86	1870	---	190	54	64	7.9	480	13	136	4.0 as N
	05/18/06	794	441	59.8	19.3	44.1	4.44	101	10.4	---	5.45 as N
8S/3E-2A01	02/05/86	591	---	54	11	43	3.2	93	21	103	3.4 as N
8S/3E-2D01	07/08/81	293	---	17	2.2	39	1.7	30	8.8	68	2.5 as N
	07/24/85	279	---	11	1.2	42	1.5	28	8	71	2.1 as N
8S/3E-2E01	12/07/50	---	---	30	10	53	---	50	14	---	---
	11/15/51	---	---	38	8	43	---	50	6	---	---
	05/27/76	---	---	39	9.4	32	2.2	49	12		4.9 as N
	09/22/77	---	280	39	9.6	33	2.6	42	8.4	---	---
	07/19/78	---	---	42	10	36	2.4	57	13		5.7 as N
	06/28/79	---	284	40	9	32	2.8	42	9	---	---
	07/02/80	---	---	34	6.5	22	2.4	27	7.4	---	0
	07/08/81	296	---	33	4.8	19	1.9	36	1	61	2.0 as N
	06/29/82	494	---	43	9.7	41	3	54	14	127	5.7 as N
	07/26/83	427	---	40	9.6	32	3	42	9.7	131	4.8 as N
	08/21/84	428	---	42	9.3	32	2.9	39	9.6	129	4.7 as N
	08/13/87	428	276	39	9.4	32	3.2	37	9.6	129	4.6 as N
	08/10/05	424	283	42.4	10.2	33.6	3.4	39.9	9.14	---	4.88 as N
8S/3E-2K01	09/22/77	---	---	43	10	48	3.2	65	18	---	---
	07/19/78	---	---	42	9.8	48	3.4	68	17	---	3.7 as N
	06/28/79	---	342	46	10	46	3.1	69	19	---	---
	07/02/80	---	---	64	12	92	2.7	140	48	---	4.1 as N
	06/29/82	454	---	41	10	38	3.7	46	13	129	3.6 as N
	08/10/83	435	---	39	9.5	32	3.6	43	13	133	3.6 as N
	08/21/84	561	---	50	11	48	3.1	68	27	139	4.0 as N
	08/01/85	472	---	41	9.7	34	3.4	48	15	125	3.7 as N
	08/13/87	451	282	40	9.9	31	3.4	41	16	133	3.6 as N
	07/20/89	531	323	46	11	41	3.4	60	22	136	3.6 as N
	08/01/90	508	310	46	11	38	3.3	60	19	134	3.8 as N
	07/16/91	522	306	50	10	39	3.3	61	21	139	3.7 as N

* - Alkalinity as CaC03

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-26C1	10/60	1060	639	66.5	24.0	116.0	4.5	160	110.0	264.0	trace
(Bldg 220001)	06/62	1190	718	60.0	33.2	123.0	3.8	190	124.0	232.0	1.4
	07/64	1217	734	79.2	27.8	144.0	1.6	180	150.0	248.9	---
	05/65	1485	896	75.2	30.3	158.0	2.4	180	120.0	253.8	0
	01/66	---	808	76.8	33.2	157.0	3.4	170	180.0	292.8	0.62
	06/66	---	684	75.2	26.8	112.0	2.4	128	148.0	263.5	3.9
	01/67	---	856	81.6	26.3	138.0	3.5	162	140.0	310.0	3
	08/67	---	880	99.2	38.1	156.0	3.6	160	230.0	322.1	5.3
	02/68	---	768	65.6	25.4	156.0	3.4	160	164.0	236.7	0
	04/69	---	852	66.0	32.0	162.0	3.2	166	210.0	249.0	0
	11/69	---	844	87.0	31.0	140.0	3.6	164	180.0	262.0	0
	07/70	---	672	99.0	32.0	139.0	3.0	158	205.0	259.0	2.7
	12/70	1180	712	83.0	28.0	138.0	3.0	166	170.0	266.0	0
	09/71	1062	640	83.0	27.0	128.0	2.8	136	175.0	278.0	0.4
	05/72	1130	681	56.0	24.0	140.0	2.8	136	165.0	220.0	0
	10/72	1165	703	64.0	27.0	159.0	3.6	132	180.0	293.0	1.8
	10/73	1140	688	72.0	27.0	131.0	3.8	144	190.0	200.0	0.3 as N
	02/76	1140	688	70.4	28.3	143.0	3.1	132	182.0	273.3	1.8 as N
	09/76	1100	663	67.0	25.0	152.0	2.5	152	131.0	327.0	2.8 as N
	03/77	1080	651	67.0	28.0	173.0	3.1	128	160.0	254.0	4.4 as N
	10/78	1150	694	70.0	25.0	120.0	3.5	139	145.0	253.8	<1 as N
	06/79	1100	663	72.0	27.3	125.0	3.0	134	142.0	258.6	<1 as N
	10/80	1200	693	78.8	23.7	136.0	3.3	172	136.0	273.3	0.2 as N
	04/81	1160	737	82.4	22.4	126.0	3.6	140	134.0	268.4	<0.5 as N
	11/81	1300	863	97.6	31.5	169.0	2.2	204	209.0	248.9	0.8 as N
	11/81	950	573	74.0	18.3	120.0	2.1	144	130.0	224.5	0.3 as N
	05/82	1100	663	80.8	26.6	140.0	1.5	181	138.0	268.4	<0.5 as N
	03/83	1000	603	84.0	20.5	144.0	3.2	152	143.0	273.3	<0.5 as N
	05/84	1150	694	80.0	27.6	126.0	3.1	133	150.0	283.0	0.2 as N
	06/85	1100	680	89.0	26.0	140.0	3.0	150	64.0	440.0	<0.4
	09/85	1242	724	78.0	28.0	122.0	6.0	154	149.1	244.4	<0.4
	05/86	1387	750	85.2	29.1	130.7	4.3	166	130.8	242.6	<1
	06/89	1302	734	78.1	23.0	85.9	---	136	145.0	212.0	<0.4
	01/91	1271	---	81.0	36.1	152.0	---	166	---	---	<0.04
	06/91	1290	752	99.0	32.4	133.0	---	167	136.0	237.0	<0.4
	03/92	1210	792	91.0	29.8	146.0	---	159	135.0	279.0	<0.4
	06/93	1290	764	68.3	27.5	149.0	---	168	130.0	265.0	<0.4
	03/94	1210	783	100.0	37.1	100.0	---	145	167.0	---	2.2
	08/94	1160	741	87.5	35.5	96.1	---	141	187.0	---	4.23
	06/95	1330	806	97.7	37.4	142.0	---	207	166.0	---	<0.04
	01/96	1300	764	91.0	33.0	140.0	---	177	142.0	363.0	---
	06/96	1300	751	93.0	30.0	130.0	---	164	156.0	252.0	---
	06/97	1215	758	88.0	29.0	130.0	<2.0	151	148.0	292.0	<2 as N
	12/97	1200	690	81.0	29.0	140.0	3.0	155	150.0	250.0	ND
	04/98	1200	790	83.0	31.0	101.0	3.0	165	156.0	240.0	ND
	06/98	1230	714	85.0	30.0	136.0	3.0	163	158.0	293.0	ND
	02/99	1250	731	84.0	29.0	127.0	3.0	160	140.0	281.0	ND
	04/99	1220	769	88.0	30.0	127.0	3.0	168	160.0	317.0	ND
	05/01	1300	794	98.0	36.0	130.0	3.0	173	179.0	317.0	ND

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-18M5	06/89	1156	688	74.6	24.4	67.9	---	130	138.0	197.0	8.9
(Bldg 23073)	01/90	1120	630	86.4	32.3	101.0	---	156	166.0	210.0	<0.05
(Previously	04/90	1160	720	98.8	34.8	107.0	---	152	146.0	218.0	1.4
reported as	01/91	1202	---	84.1	40.5	117.0	---	162	153.0	---	<0.04
10S/4W-18M4)	06/91	1180	736	102.0	37.1	106.0	---	163	138.0	197.0	<0.4
	03/94	1020	658	69.6	27.8	104.0	---	135	140.0	---	0.89
	08/94	1110	684	81.4	32.2	178.0	---	144	157.0	---	<0.44
	06/95	1170	679	95.3	35.2	113.0	---	145	116.0	---	13.8
	06/96	1100	682	86.0	32.0	95.0	---	155	261.0	210.0	<0.0
	02/97	1180	640	79.0	32.0	110.0	---	142	162.0	190.0	<2 as N
	06/97	1117	709	85.0	33.0	110.0	<5.0	150	164.0	223.0	<2 as N
	12/97	1100	700	82.0	33.0	110.0	3.0	141	157.0	220.0	ND
	03/98	1100	710	83.0	33.0	100.0	3.0	182	158.0	150.0	ND
	06/98	1200	720	85.0	34.0	119.0	4.0	159	154.0	281.0	ND
	02/99	1020	613	70.0	30.0	85.0	4.0	130	85.0	179.0	8
	05/00	1020	709	81.0	33.0	94.0	4.0	146	149.0	220.0	ND
	08/00	1160	728	83.0	33.0	89.0	4.0	161	178.0	232.0	ND
	02/01	1200	736	85.0	35.0	116.0	4.0	164	180.0	244.0	0.7
	04/01	1200	606	85.0	34.0	112.0	4.0	154	177.0	232.0	ND
	09/01	1250	761	90.0	37.0	115.0	4.0	166	188.0	232.0	ND
	11/01	1290	737	91.0	37.0	118.0	3.0	181	207.0	256.0	0
	02/02	1260	781	89.0	36.0	123.0	4.6	170	189.0	255.0	1.3
	04/02	1250	755	90.0	37.0	116.0	4.1	175	195.0	200.0	1
	05/02	1290	750	92.0	38.0	110.0	4.0	157	194.0	180.0	0.6
	07/02	1260	753	90.0	37.0	114.0	4.0	171	196.0	200.0	0
	01/03	1350	816	96.0	40.0	131.0	4.6	160	201.0	193.0	0
	04/03	1210	738	95.0	27.0	118.0	3.9	175	210.0	192.0	0
	10/03	1290	752	91.0	37.0	134.0	5.0	167	193.0	199.0	0
	01/04	1230	717	93.0	38.0	111.0	6.0	159	194.0	173.0	0
	04/04	1280	722	82.0	36.0	112.0	6.0	168	213.0	180.0	2.2
	07/04	1080	739	88.0	37.0	92.0	7.0	156	198.0	190.0	0
	11/04	1230	563	91.0	38.0	124.0	4.8	172	215.0	175.0	0
	01/05	1240	687	96.0	39.0	124.0	4.0	172	215.0	190.0	0
	04/07	1240	770	98.0	40.0	100.0	3.8	160	220.0	240.0	0
	04/08	1370	908	100	42	110	3.7	180	240	234	<2
	04/09	1300	800	97	39	120	3.7	140	200	220	8.7
	8/11/10	1300	780	97	39	110	3.6	180	220	220	<2
	4/22/11	1300	810	90	37	110	3.6	170	230	220	<2
	4/20/12	1200	810	94	38	120	3.8	160	220	240	2.0

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-23J1 (Bldg 23001)	05/56	1090	685	61.5	24.3	142.0	---	142	110.0	293.0	0.06
	12/56	1060	666	67.0	27.0	96.0	---	124	85.0	274.0	---
	12/57	---	780	66.3	23.9	159.0	---	138	155.0	308.0	10.6
	05/59	1100	691	75.2	25.3	112.0	---	136	152.0	297.7	---
	01/60	1120	704	72.7	27.3	116.5	---	112	144.0	291.0	---
	10/60	1045	657	63.2	21.4	99.0	3.6	140	112.0	242.0	0
	05/61	1280	770	76.0	36.5	136.0	3.0	124	195.0	299.6	0
	05/62	1133	712	68.8	30.3	136.0	2.0	128	175.0	275.7	---
	01/63	1111	698	72.0	35.1	127.0	2.8	128	199.0	268.4	---
	06/63	1108	696	78.4	25.4	118.0	2.9	148	130.0	258.6	0 as N
	07/64	1165	732	74.4	27.8	128.0	1.2	139	160.0	268.4	---
	05/65	1130	710	80.0	26.4	145.0	2.1	148	120.0	268.4	0.14
	01/66	---	736	88.0	18.1	142.0	2.8	124	155.0	263.5	1.8
	06/66	---	736	75.2	29.3	138.0	2.7	145	175.0	295.2	4.8
	01/67	---	744	76.8	25.9	118.0	3.0	136	125.0	287.9	2.2
	08/67	---	680	70.4	28.3	128.0	2.3	140	100.0	292.8	8.4
	02/68	---	660	48.0	19.5	130.0	2.8	124	119.0	234.0	6.1
	04/69	---	708	70.0	28.0	126.0	2.5	128	170.0	278.0	0
	11/69	---	684	73.0	28.0	126.0	2.8	138	165.0	273.0	0
	05/70	---	716	74.0	25.0	122.0	0.1	134	170.0	210.0	4.4
	12/70	1090	385	78.0	25.0	126.0	2.6	142	170.0	250.0	3.1
	09/71	1025	644	75.0	38.0	120.0	2.7	124	190.0	229.0	0.9
	05/72	1050	660	75.0	21.0	124.0	2.3	124	155.0	244.0	2.2
	10/73	1140	716	74.0	22.0	128.0	2.8	136	160.0	220.0	0.5 as N
	06/74	1060	680	74.0	13.0	131.0	2.9	158	138.0	220.0	0.01 as N
	02/76	1050	660	73.6	25.4	136.0	2.9	119	170.0	248.9	2.0 as N
	09/76	1100	691	58.0	32.0	146.0	2.6	140	148.0	321.8	2.6 as N
	03/77	1080	679	69.0	29.0	110.0	3.0	128	155.0	259.0	4.3 as N
	01/78	1100	691	70.0	23.0	147.0	3.0	140	135.0	259.0	4.4 as N
	10/78	1150	723	74.0	22.0	120.0	2.9	134	149.0	248.9	<1 as N
	04/79	1000	628	70.4	22.4	118.0	2.6	122	138.0	239.1	<1 as N
	10/80	1150	745	74.0	22.5	128.0	3.0	152	138.0	239.1	0.2 as N
	05/81	1020	580	67.2	17.3	116.0	3.1	132	111.0	205.0	<0.5 as N
	03/83	900	599	65.6	19.5	129.0	2.8	136	129.0	234.2	<0.5 as N
	12/83	1000	628	72.4	22.4	127.0	2.6	140	150.0	249.0	<0.1 as N
	05/84	1100	691	78.8	25.9	120.0	2.8	130	150.0	254.0	0.2 as N
	06/85	1100	691	59.0	26.0	130.0	3.0	140	70.0	440.0	3.5
	09/85	1203	705	66.0	26.0	110.0	6.0	150	144.0	226.6	<0.4
	06/89	1139	662	71.5	21.7	80.8	---	117	128.0	209.0	<0.4
	01/90	1150	632	90.6	32.4	102.0	---	160	170.0	214.0	<0.5
	01/91	1112	---	73.7	32.0	128.0	---	136	136.0	---	<0.04
	06/91	1090	662	87.4	29.7	117.0	---	140	121.0	204.0	<0.4
	03/92	1080	644	74.2	25.8	133.0	---	127	118.0	282.0	1.3
	03/93	1210	674	72.8	24.5	117.0	---	127	124.0	261.0	<0.4
	06/93	1090	670	63.9	25.7	119.0	---	117	128.0	237.0	<0.4
	03/94	1120	683	73.9	27.0	121.0	---	141	130.0	---	<0.4

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-23J1	08/94	1160	707	78.9	28.2	129.0	---	139	153.0	---	<0.44
(Bldg 23001)	06/95	1160	742	88.2	28.8	131.0	---	165	147.0	---	<0.04
(Cont)	01/96	1300	690	79.0	29.0	140.0	---	147	131.0	292.0	---
	06/96	1020	674	82.0	29.0	120.0	---	134	129.0	204.0	---
	02/97	1100	650	74.0	27.0	150.0	---	126	172.0	245.0	<2 as N
	03/97	1073	630	77.0	28.0	130.0	---	142	134.0	254.0	<2 as N
	02/99	1180	647	75.0	27.0	125.0	3.0	150	130.0	272.0	ND
	04/99	1240	722	81.0	30.0	124.0	3.0	157	150.0	293.0	ND
	08/99	1180	735	79.0	29.0	120.0	3.0	190	183.0	281.0	ND
	12/99	1190	699	83.0	30.0	118.0	3.0	100	158.0	278.0	ND
	02/00	1110	723	81.0	30.0	116.0	3.0	90	163.0	293.0	ND
	05/00	1070	714	81.0	29.0	115.0	3.0	170	152.0	273.0	ND
	08/00	1200	735	80.0	29.0	117.0	3.0	150	118.0	275.0	ND
	02/01	1230	730	84.0	31.0	132.0	---	158	158.0	293.0	ND
	04/01	1190	636	81.0	30.0	123.0	3.0	146	148.0	287.0	ND
	09/01	1300	751	88.0	32.0	132.0	3.0	155	160.0	293.0	ND
	10/01	1380	757	88.0	33.0	133.0	3.0	152	159.0	311.0	ND
	02/02	1220	724	86.0	31.0	124.0	2.6	146	156.0	293.0	ND
	04/02	1210	726	89.0	32.0	124.0	2.8	151	162.0	240.0	---
	07/02	1280	735	85.0	31.0	129.0	3.1	155	165.0	236.0	ND
	10/02	1300	701	87.0	31.0	141.0	2.9	157	170.0	257.0	ND
	01/03	1260	760	88.0	32.0	139.0	3.5	146	162.0	239.0	ND
	02/03	---	---	68.0	32.0	139.0	3.5	---	---	---	---
	04/03	1200	708	87.0	32.0	127.0	2.8	158	175.0	245.0	ND
	10/03	1210	696	82.0	30.0	144.0	3.0	167	177.0	232.0	0 as N
	01/04	1170	678	87.0	31.0	121.0	4.0	151	175.0	227.0	0 as N
	04/04	1270	697	82.0	31.0	120.0	4.0	155	171.0	250.0	0 as N
	07/04	1030	702	87.0	31.0	98.0	5.0	138	151.0	245.0	0 as N
	10/04	1230	879	89.0	31.0	102.0	5.0	158	176.0	---	0 as N
	02/05	1170	704	88.0	31.0	134.0	3.1	157	171.0	235.0	0 as N
	04/05	1220	755	88.0	30.0	121.0	2.7	132	167.0	213.0	0 as N
	07/05	1190	725	83.0	29.0	117.0	2.8	153	---	206.0	0 as N
	04/07	1200	708	89.0	32.0	120.0	2.6	150	170.0	270.0	0
	04/08	1210	718	90	32	100	2.5	150	170	274	<2
	04/09	1200	720	90	32	110	2.6	130	160	250	<2
	04/14/10	1200	740	92	33	120	2.6	150	180	260	<2
	04/22/11	1200	770	90	32	110	2.6	160	190	260	<2
	04/20/12	1200	790	96	34	120	2.9	160	190	250	<2
10S/4W-18E3	06/89	1166	758	80.5	28.1	67.4	---	132	157	198.0	9.5
(Bldg 230093)	01/90	1230	748	97.4	39.7	106.0	---	178	179	226.0	<0.05
	04/90	1190	733	99.6	37.5	112.0	---	159	156	207.0	2.5
	06/91	1130	680	97.6	37.6	100.0	---	139	142	166.0	2.7
	02/94	1180	731	83.3	35.5	104.0	---	142	159	---	11.1
	08/94	1150	725	84.3	35.2	102.0	---	147	164	---	1
	06/95	932	636	75.4	29.1	86.6	---	102	140	---	14

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-18E3	06/96	1117	710	92.0	36.0	93.0	---	180	297	206.0	---
(Bldg 230093)	02/97	1100	686	89.0	38.0	110.0	---	157	166	220.0	<2 as N
(Cont)	03/97	1116	673	87.0	36.0	110.0	---	147	113	213.0	<2 as N
	06/97	1131	779	90.0	37.0	99.0	<5.0	151	177	199.0	<2 as N
	09/98	1160	727	83.0	36.0	90.0	3.0	160	181	232.0	ND
	10/99	1200	325	88.0	39.0	117.0	4.0	130	180	268.0	ND
	02/00	1100	739	84.0	37.0	100.0	4.0	130	180	281.0	ND
	05/00	1030	717	80.0	35.0	96.0	4.0	168	183	229.0	2
	02/01	1360	798	97.0	44.0	111.0	4.0	184	212	244.0	ND
	04/01	1310	728	94.0	42.0	114.0	4.0	168	208	232.0	ND
	09/01	1330	791	96.0	42.0	115.0	4.0	173	209	224.0	1
	03/02	1320	778	102.0	44.0	123.0	4.4	196	229	242.0	1
	04/02	1300	808	101.0	44.0	117.0	4.0	183	220	200.0	1.1
	07/02	1390	778	96.0	42.0	114.0	3.7	180	214	209.0	ND
	10/02	1360	763	97.0	41.0	126.0	4.0	180	207	214.0	ND
	01/03	1290	749	96.0	40.0	116.0	3.7	172	200	200.0	ND
	04/03	1210	783	99.0	42.0	129.0	3.9	176	229	191.0	1.3
	10/03	1320	775	97.0	41.0	126.0	5.0	168	231	174.0	0
	01/04	1270	763	101.0	42.0	106.0	6.0	162	220	180.0	0
	04/04	1320	781	96.0	43.0	105.0	6.0	179	250	195.0	0
	07/04	1370	784	100.0	43.0	89.0	6.0	169	219	203.0	0
	10/04	1300	857	99.0	42.0	88.0	6.0	188	245	210.0	0
	01/05	1270	760	99.0	42.0	115.0	4.3	170	234	185.0	2.7
	07/05	1120	724	89.0	36.0	91.0	3.5	133	---	203.0	0 as N
	11/05	1230	815	101.0	40.0	113.0	4.1	153	213	174.0	0 as N
	04/06	1350	832	110.0	44.0	120.0	3.8	180	250	220.0	0 as N
	04/07	1298	806	100.0	45.0	110.0	3.7	180	247	230.0	0
	04/08	1270	816	92	40	100	3.4	150	220	202	4.7
	04/09	1300	840	100	43	120	3.8	150	220	230	<2
	04/28/10	1200	700	83	36	99	3.4	140	200	190	2.8
	07/27/11	1200	810	88	39	98	3.4	160	230	190	4.3
	04/25/12	1200	830	95	42	100	4.0	170	240	190	<2
10S/4W-7R2	06/89	1281	765	76.5	25.1	82.4	---	149	153	209.0	10.3
(Bldg 260003)	04/89	1270	788	104.0	36.5	126.0	---	173	161	215.0	2.6
	06/91	1400	836	111.0	41.1	130.0	---	195	155	215.0	0.04
	02/94	1260	738	83.3	32.0	131.0	---	169	155	---	<0.04
	08/94	1260	738	84.3	33.7	129.0	---	166	149	---	<0.44
	06/95	1290	897	93.6	35.2	129.0	---	202	164	---	0.69
	02/97	1200	720	84	36	130	---	150	152	240	<1 as N
	03/97	1143	708	83	35	130	---	152	137	240	<2 as N
	06/97	1227	831	94	34	120	<5.0	185	147	247	<2 as N
	12/97	1200	700	84	36	120	3.0	150	173	240	ND
	12/97	1200	700	84	36	120	3.0	150	173	240	ND
	03/98	1200	780	85	36	110	3.0	187	162	180	ND
	06/98	1190	734	83	35	110	3.0	160	167	275	ND
	02/99	1160	663	76	32	102	3.0	150	150	214	ND

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7R2	08/99	1120	727	76	33	99	3.0	156	230	281	ND
(Bldg 260003)	10/99	1130	660	78	33	120	3.0	110	160	262	ND
(Cont)	02/00	1030	592	79	35	96	3.0	120	160	244	ND
	05/00	1010	699	76	33	96	3.0	129	127	229	ND
	08/00	1140	720	77	33	87	3.0	---	157	232	ND
	12/02	1120	617	73	32	102	3.6	132	164	174	0.4
	01/03	1150	689	76	34	113	3.6	135	165	185	ND
	04/03	1190	717	82	37	122	4.0	164	182	209	ND
	05/03	1190	---	---	---	---	---	156	182	---	---
	10/03	1250	737	81	37	130	5.0	163	201	192	0
	01/04	1240	694	86	39	107	6.0	153	182	185	0
	04/04	1320	750	84	40	108	6.0	170	210	220	0
	07/04	1100	761	92	41	88	7.0	172	204	205	0
	10/04	1280	893	93	41	88	6.0	179	222	---	0
	02/05	1270	839	99	44	121	5.2	180	215	198	0
	04/05	1300	880	98	41	109	3.8	158	216	183	0 as N
	07/05	1380	870	101	43	109	4.0	430	540	176	0 as N
	11/05	1310	865	104	43	115	3.8	164	221	181	0 as N
	04/06	1220	810	100	43	110	3.8	170	240	206	0 as N
	04/07	1400	856	99	44	110	3.6	170	250	210	0
	04/08	1290	888	91	39	100	3.4	160	230	207	2.6
10S/4W-7R3	04/09	1300	830	100	45	110	4.5	170	240	220	<2
(Bldg 260002)	04/13/10	1300	800	100	43	100	3.6	160	240	200	<2
	04/13/11	1300	870	96	42	98	3.7	160	240	200	<2
	04/25/12	1300	860	100	44	110	3.6	170	260	200	<2
10S/4W-7H2	08/56	1060	882	78.0	30.0	112.0	---	150	82	326.0	---
(Bldg 260071)	01/60	820	500	55.2	14.7	85.0	---	76	98	224.0	---
	10/60	1300	793	74.5	20.5	126.0	4.3	182	116	320.0	---
	05/61	1390	840	100.0	29.2	170.0	3.3	170	135	362.0	---
	05/62	1220	744	70.4	39.0	142.0	2.4	184	86	312.3	---
	01/63	1300	740	65.6	26.4	162.0	2.4	166	153	259.0	0.7
	07/63	1100	671	64.0	25.4	118.0	2.7	148	97	280.6	0.0 as N
	01/64	1020	622	70.4	33.2	117.0	2.7	172	98	302.6	3.3
	07/64	1400	854	83.2	27.3	134.0	1.4	164	98	322.1	---
	04/65	1490	909	97.6	23.4	152.0	4.7	196	110	346.5	0.9
	01/66	---	832	102.0	28.0	166.0	3.1	194	88	414.8	6.6
	06/66	---	768	86.4	26.3	150.0	3.1	184	110	331.8	6.9
	01/67	---	768	72.0	29.3	128.0	3.1	174	72	324.5	6.9
	08/67	---	608	57.6	24.4	116.0	2.4	132	70	251.3	10.2
	02/68	---	572	67.2	17.6	105.0	2.4	118	94	251.0	0
	09/68	---	636	74.0	19.0	112.0	3.0	144	96	268.0	0.4
	04/69	---	820	72.0	33.0	138.0	2.8	180	140	285.0	0.9
	11/69	---	604	66.0	24.0	116.0	2.8	140	110	259.0	1.8
	05/70	---	640	65.0	26.0	115.0	2.4	142	120	183.0	3.1
	09/71	1075	656	77.0	24.0	120.0	2.8	144	125	273.0	1.3

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7H2	05/72	1000	610	46.0	24.0	117.0	2.4	140	130	141.0	0
(Bldg 260071)	10/72	1110	677	88.0	26.0	105.0	3.6	144	126	283.0	3.5
(Cont)	10/73	1120	683	75.0	23.0	118.0	2.7	132	130	200.0	0.6 as N
	06/74	1210	712	72.0	19.0	150.0	3.1	208	112	195.0	0.01 as N
	01/75	850	519	61.0	21.0	93.0	2.4	102	95	212.0	2.3 as N
	02/76	1200	732	91.2	20.5	126.0	3.2	176	130	244.0	2.6 as N
	09/76	1200	732	48.0	29.0	180.0	2.4	192	123	336.7	4.2 as N
	03/77	1400	854	94.0	33.0	158.0	2.8	216	140	342.0	2.8 as N
	01/78	1000	610	66.0	23.0	100.0	2.7	128	123	205.0	4.4 as N
	10/78	1300	793	82.0	31.0	134.0	2.7	160	157	258.6	<1 as N
	04/79	1200	732	84.8	28.3	144.0	3.1	164	116	312.3	<1 as N
	01/80	1450	885	93.0	30.0	163.0	3.0	196	200	273.0	<1 as N
	10/80	1050	591	70.4	21.7	104.0	3.7	140	125	219.6	2.0 as N
	05/81	1000	645	72.4	21.7	105.0	3.5	128	123	209.8	<0.5 as N
	05/82	1330	811	100.8	35.9	176.0	1.6	269	198	263.5	<0.5 as N
	03/83	890	669	77.2	23.7	95.0	3.4	132	136	209.8	0.65 as N
	12/83	1000	610	70.4	23.7	123.0	2.6	136	150	224.0	0.5 as N
	05/84	1100	671	77.2	24.6	116.0	2.7	133	155	244.0	0.2 as N
	09/84	1300	650	6.6	29.0	120.0	2.6	200	170	250.0	12
	11/84	1100	671	81.6	23.4	124.0	2.7	149	175	249.0	1.2 as N
	05/86	1592	994	104.7	39.7	167.3	4.4	232	167	301.8	<1 as N
	06/89	1137	826	79.1	28.5	85.5	---	157	158	246.0	12.6
	01/90	1290	772	96.3	38.6	116.0	---	184	179	252.0	0.9/1.2
	04/90	1320	817	109.0	42.1	128.0	---	177	167	249.0	5.4
	01/91	401	---	87.3	44.4	103.1	---	205	179	---	1.1
	03/93	1500	824	92.6	33.1	136.0	---	194	154	277.0	1.8
	03/94	1370	827	103.0	36.4	135.0	---	163	145	---	0.9
	08/94	1270	762	91.1	35.5	129.0	---	162	172	---	5.64
	06/95	1260	771	100.0	35.8	127.0	---	197	178	---	2.8
	06/96	1300	751	96.0	36.0	120.0	---	162	174	247.0	1.1
	02/97	1300	830	100.0	41.0	150.0	---	186	161	186.0	<2 as N
	06/97	1323	831	94.0	36.0	140.0	<5.0	158	149	271.0	2 as N
	12/97	1200	670	91.0	36.0	120.0	3.0	150	169	220.0	ND
	12/97	1200	710	87.0	35.0	120.0	2.0	152	182	220.0	1.5
	03/98	1200	810	89.0	36.0	120.0	3.0	201	168	240.0	ND
	06/98	1390	830	91.0	36.0	140.0	2.0	185	150	366.0	ND
	02/99	1130	663	75.0	31.0	106.0	3.0	150	150	238.0	5
	05/99	1170	711	75.0	32.0	85.0	4.0	---	180	268.0	ND
	08/99	1040	692	74.0	30.0	94.0	2.0	100	400	207.0	ND
	10/99	1210	757	86.0	35.0	120.0	3.0	154	100	295.0	3
	08/00	1290	766	83.0	33.0	89.0	2.0	184	150	323.0	ND
	02/01	1140	707	85.0	35.0	107.0	2.0	152	179	232.0	4.9
	04/01	1190	718	88.0	37.0	112.0	3.0	153	193	218.0	5
	09/01	1200	729	89.0	38.0	106.0	3.0	158	192	201.0	4.6
	11/01	1210	693	90.0	38.0	106.0	3.0	169	209	214.0	5.4

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7H2	02/02	1190	726	94.0	39.0	106.0	2.7	147	184	218.0	5.9
(Bldg 260071)	04/02	1190	724	91.0	38.0	107.0	2.9	153	204	173.0	6.6
(Cont)	07/02	1200	755	88.0	37.0	107.0	3.1	162	201	180.0	6
	10/02	1250	722	91.0	38.0	99.0	2.6	150	197	177	6.2
	01/03	1260	781	95.0	39.0	119.0	3.2	144	204	169	4.5
	04/03	1310	776	93.0	38.0	125.0	3.0	178	217	185	4.1
	04/04	1660	890	112.0	47.0	143.0	4.0	208	162	370	ND
	07/04	1460	785	98.0	38.0	109.0	4.0	186	191	275	3.4
	05/06	1380	870	100.0	41.0	110.0	2.3	180	240	210	3.0
	04/07	1300	812	99.0	41.0	110.0	2.5	160	230	220	5.2
	04/09	1300	830	100	43	110	2.9	170	260	190	4.7
	04/22/10	1300	790	100	42	110	2.7	170	230	210	4.2
	04/20/11	1400	860	97	42	110	3.2	180	250	210	2.4
	04/20/12	1200	840	93	40	110	3.3	160	220	200	5.1
10S/4W-7A2	05/56	920	651	59.0	22.0	100.0	---	104	94	213.0	---
(Bldg 260073)	05/59	---	745	52.8	16.5	60.3	---	84	41	207.4	---
	01/60	---	840	51.2	17.6	95.0	---	98	92	210.0	---
	10/60	870	566	62.0	23.0	80.0	4.2	110	104	234.0	0
	05/61	1180	710	72.0	34.0	114.0	3.3	104	150	227.0	---
	05/62	797	518	63.2	23.4	75.0	2.0	100	96	214.7	---
	01/63	1195	730	64.0	24.9	157.0	3.1	162	183	220.0	0
	07/63	574	610	57.6	19.5	85.0	2.7	102	100	244.0	0.3 as N
	01/64	760	494	59.2	19.3	82.0	3.3	100	85	253.7	0.5 as N
	07/64	980	637	64.0	21.5	94.0	1.4	100	95	241.6	---
	04/65	1230	800	73.3	22.5	106.0	4.5	120	110	248.9	1.3
	01/66	---	448	---	---	86.0	2.5	82	75	190.3	9.7
	06/66	---	540	60.8	21.0	81.0	2.5	102	95	222.0	9.1
	01/67	---	544	60.8	19.5	88.0	2.9	106	69	229.4	6.9
	08/67	---	504	54.4	20.0	79.0	2.1	96	58	214.7	8
	02/68	---	456	60.8	17.6	86.0	2.7	94	78	222.0	0
	09/68	---	600	67.0	18.0	90.0	3.0	110	96	232.0	0
	04/69	---	428	46.0	18.0	73.0	---	76	90	183.0	3.1
	11/69	---	476	59.0	18.0	88.0	2.7	98	110	198.0	0.9
	05/70	---	416	54.0	18.0	79.0	2.6	92	90	151.0	2.9
	12/70	780	507	64.0	16.0	89.0	2.7	100	90	222.0	10.1
	05/72	990	644	77.0	24.0	86.0	2.8	116	135	207.0	0
	10/72	965	627	77.0	27.0	94.0	2.9	104	145	239.0	5.3
	10/73	960	624	72.0	19.0	105.0	2.8	112	140	195.0	0.9 as N
	06/74	950	548	68.0	19.0	101.0	3.1	138	102	207.0	0.35 as N
	01/75	840	546	58.0	22.0	87.0	2.7	98	95	217.0	2.2 as N
	02/76	820	533	68.8	20.5	76.0	3.0	106	88	214.7	2.2 as N
	09/76	900	585	48.0	45.0	98.0	2.3	116	112	258.6	3.0 as N
	03/77	900	585	70.0	23.0	76.0	2.8	123	113	195.0	2.6 as N
	01/78	950	618	64.0	24.0	100.0	2.7	124	108	200.0	4.3 as N
	10/78	1050	683	74.0	20.0	80.0	3.0	113	128	205.0	<1 as N
	04/79	950	618	65.6	19.5	98.0	3.1	109	118	190.3	<1 as N

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7A2	01/80	1000	650	67.0	23.0	99.0	3.1	128	111	187.0	<1 as N
(Bldg 260073)	10/80	900	546	67.2	20.5	86.0	3.4	108	86	205.0	2.3 as N
(Cont)	05/81	810	585	57.2	14.4	83.0	3.4	92	84	180.6	0.7 as N
	11/81	800	451	57.2	16.3	85.0	2.0	92	110	185.4	0.5 as N
	05/82	930	605	68.8	21.5	97.0	1.6	115	96	205.0	<0.5 as N
	03/83	900	663	78.8	23.7	95.0	3.4	132	135	209.8	0.7 as N
	09/84	1000	530	51.0	23.0	80.0	2.9	110	110	200.0	4.2
	11/84	850	553	67.2	28.3	73.0	2.9	111	137	190.0	1.7 as N
	09/85	1007	593	66.0	26.0	64.0	5.8	124	139	180.6	6
	05/86	1051	623	72.6	26.5	79.5	3.5	131	124	153.6	8.8
	06/89	1073	688	72.1	23.9	59.6	---	120	140	184	15.9
	01/89	1080	572	91.2	34.2	80.2	---	151	178	174	1.4
	04/90	1130	718	111.0	42.1	91.0	---	148	167	175	9.1
	06/91	1190	718	113.0	40.3	93.8	---	173	180	160	7.5
	03/93	1370	708	86.9	32.8	93.3	---	147	93.3	200	4.9
	03/94	1210	783	100.0	37.1	100.0	---	145	167	---	2.2
	08/94	1160	741	87.5	35.5	96.1	---	141	184	---	4.23
	06/95	1200	788	99.4	37.5	101.0	---	173	200	---	2.9
	06/96	1129	739	91.0	37.0	90.0	---	188	312	206	---
	02/97	1100	690	82.0	35.0	140.0	---	127	131	180	<2 as N
	03/97	1109	695	91.0	39.0	93.0	---	137	191	166	2.2 as N
	06/97	1096	749	89.0	36.0	90.0	<5.0	138	178	187	2 as N
	12/97	1100	690	84.0	36.0	83.0	4.0	140	181	160	<.2 as N
	05/99	1050	648	78.0	32.0	111.0	3.0	171	---	207	ND
	08/99	1040	696	78.0	33.0	84.0	4.0	120	390	146	ND
	10/99	1070	663	78.0	34.0	90.0	4.0	132	120	195	6 as N
	02/00	1010	559	83.0	36.0	82.0	4.0	140	190	220	4 as N
	05/00	972	688	80.0	34.0	79.0	4.0	144	167	190	4 as N
	02/01	1200	753	92.0	40.0	100.0	3.0	164	212	195	ND
	04/01	1210	736	91.0	40.0	103.0	5.0	159	217	183	4.2
	09/01	1200	741	93.0	41.0	98.0	4.0	153	202	183	7.6
	11/01	1220	750	92.0	41.0	106.0	4.0	170	228	189	8.0
	02/02	1230	769	99.0	43.0	101.0	4.2	173	218	195	7.9
	04/02	1260	793	101.0	45.0	102.0	4.5	170	229	160	8.5
	07/02	1350	784	98.0	43.0	103.0	4.3	183	239	159	4.8
	10/02	1370	788	102.0	45.0	104.0	4.3	175	241	167	3.4
	01/03	1330	825	108.0	45.0	121.0	5.4	180	231	168	2.4
	04/03	1260	721	90.0	40.0	102.0	4.3	170	228	153	9.9
	10/03	1340	791	94.0	41.0	121.0	6.0	180	268	144	3
	01/04	1390	800	99.0	46.0	105.0	7.0	173	264	136	4.1
	04/04	1270	739	86.0	42.0	98.0	6.0	160	252	160	5.1
	07/04	1390	764	97.0	45.0	87.0	7.0	176	262	163	3.7
	10/04	1290	943	95.0	44.0	84.0	7.0	178	267	---	3.6
	01/05	1030	610	76.0	35.0	93.0	3.8	136	194	155	6.9
	04/05	1060	630	77.0	34.0	82.0	3.2	125	174	139	2.71
	07/05	1120	750	81.0	35.0	84.0	3.4	129	---	129	0 as N

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7A2	11/05	1170	790	94.7	41.2	97.9	3.7	138	199	156	7.53
(Bldg 260073)	04/06	1140	704	91.0	39.0	98.0	4.5	150	220	180	7.3
(Cont)	04/07	1200	716	97	44	97	3.7	160	240	190	4.2
	04/08	1270	900	98	45	97	3.8	180	260	170	14
	04/09	1200	780	94	42	100	3.7	130	230	180	22
	04/13/10	1300	770	93	42	100	3.8	160	240	180	8.7
	04/13/11	1200	780	83	38	93	3.5	150	220	170	3.9
	04/19/12	1300	790	92	42	94	3.8	160	240	260	6.2
10S/5W-23G3	06/91	1160	684	83.4	28.3	125.0	---	145	124	223	<0.04
(Bldg 33926)	03/92	1060	674	75.9	24.1	127.0	---	139	111	269	<0.4
	03/93	1182	584	67.8	21.1	110.0	---	135	101	274	<0.4
	06/93	1020	623	60.5	22.4	116.0	---	125	107	225	<0.4
	03/94	1120	665	80.0	25.0	122.0	---	129	117	---	1.8
	08/94	1150	699	78.7	26.4	125.0	---	141	118	---	<0.44
	06/95	1060	673	75.9	23.1	118.0	---	158	114	---	<0.04
	01/96	1200	619	71.0	24.0	120.0	---	139	107	262	---
	07/96	---	---	---	---	---	---	---	---	---	---
10S/5W-23K2	06/89	1207	698	75.6	22.8	84.0	---	138	137	231	<0.4
(Bldg 33924)	04/89	1240	728	100.0	32.9	129.0	---	158	148	245	1.3
	01/91	1193	---	80.6	35.2	131.0	---	21	146	---	<0.04
	06/91	1160	676	88.1	29.6	118.0	---	141	129	224	<0.04
	03/92	1130	705	76.7	26.0	126.0	---	149	125	279	<0.4
	06/92	1130	717	66.8	26.7	124.0	---	146	140	232	<0.4
	03/93	1285	331	72.1	23.8	115.0	---	131	122	273	<0.4
	02/97	1200	780	89.0	32.0	130.0	---	166	165	250	<2 as N
	03/97	1230	700	94.0	34.0	140.0	---	187	162	264	<2 as N
	06/97	1231	778	91.0	31.0	130.0	<2.0	171	165	264	<2 as N
	12/97	1200	710	82.0	30.0	130.0	2.0	156	162	230	ND
	03/98	1200	710	82.0	30.0	110.0	2.0	191	146	240	ND
	06/98	1170	658	79.0	28.0	123.0	2.0	157	151	293	ND
	02/99	1170	698	75.0	27.0	123.0	3.0	160	130	259	ND
	04/99	1210	667	76.0	27.0	118.0	3.0	148	140	268	ND
	08/99	1140	714	79.0	27.0	116.0	3.0	180	165	268	ND
	10/99	1150	721	80.0	28.0	131.0	3.0	110	150	281	ND
	02/00	1050	619	82.0	28.0	108.0	3.0	100	140	293	ND
	05/00	1060	716	80.0	29.0	112.0	3.0	173	141	268	ND
	08/00	1210	722	82.0	29.0	105.0	3.0	162	156	268	ND
	04/01	1210	705	85.0	30.0	130.0	3.0	163	157	281	ND
	09/01	1190	672	81.0	30.0	125.0	3.0	152	149	275	ND
	10/01	1200	680	81.0	29.0	143.0	3.0	162	159	281	ND
	02/02	1160	675	80.0	29.0	129.0	3.5	143	152	268	ND
	04/02	1180	682	84.0	31.0	124.0	2.9	151	155	230	ND
	07/02	1210	706	80.0	29.0	127.0	2.9	156	156	221	ND
	10/02	1210	669	83.0	30.0	122.0	2.9	151	162	206	8
	01/03	1320	801	97.0	34.0	140.0	2.8	154	180	245	ND

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-23K2	04/03	1330	743	89.0	32.0	133.0	2.8	165	183	234	ND
(Bldg 33924)	10/03	1210	712	87.0	31.0	135.0	4.0	155	177	204	ND
(Cont)	04/04	1320	713	85.0	32.0	121.0	5.0	165	167	228	ND
	07/04	1070	703	89.0	32.0	101.0	5.0	147	173	230	ND
	10/04	1230	806	91.0	33.0	102.0	5.0	166	183	---	ND
	02/05	1310	837	104.0	37.0	136.0	4.2	175	191	253	0 as N
	07/05	1170	750	83.0	29.0	114.0	2.7	139	---	210	ND
	11/05	1260	750	91.9	29.6	119.0	3.1	144	171	225	ND
	04/06	1220	774	92.0	32.0	120.0	2.8	160	180	284	ND
	04/07	1010	706	86.0	29.0	120.0	2.7	150	170	260	0
	04/08	1270	792	91	30	110	2.6	160	190	175	<2
	04/09	1300	800	100	34	120	2.7	160	200	260	<2
	04/15/10	1200	740	95	34	120	2.8	150	180	260	<2
	04/27/11	1200	740	87	29	110	2.7	160	170	230	<2
	04/30/12	1200	800	92	32	110	2.6	170	190	220	<2
10S/5W-13R2	01/90	1030	540	96.0	26.6	94.8	---	141	130	200	0.7
(Bldg 230063)	06/91	1150	702	98.7	32.0	109.0	---	149	125	288	1.3
	06/93	1130	705	72.0	28.4	107.0	---	140	139	262	0.9
	03/94	1020	658	69.6	27.8	104.0	---	135	140	---	0.89
	06/95	1140	636	92.5	30.7	115.0	---	149	151	---	14.2
	06/96	1103	680	91.0	31.0	100.0	---	148	251	233	---
	06/97	1082	708	85.0	29.0	110.0	<5.0	135	145	244	<2 as N
	12/97	1000	640	81.0	28.0	100.0	2.0	119	128	250	ND
	03/98	1100	620	85.0	31.0	110.0	2.0	161	144	220	ND
	06/98	1100	680	83.0	30.0	109.0	3.0	137	140	275	0.68
	09/98	1160	662	81.0	28.0	90.0	3.0	144	90	256	ND
	04/01	1100	612	83.0	29.0	106.0	3.0	131	146	238	3.5
	09/01	1150	679	89.0	31.0	103.0	2.0	142	156	241	3.2
	11/01	1130	658	87.0	30.0	104.0	2.0	148	169	262	3.4
	02/02	1120	674	85.0	30.0	112.0	3.2	140	160	257	3.1
	04/02	1120	682	89.0	32.0	106.0	2.7	142	167	205	2.8
	07/02	1150	676	83.0	30.0	111.0	2.7	145	64	205	2.3
	10/02	1220	711	87.0	31.0	110.0	2.7	149	175	203	ND
	01/03	1210	713	91.0	33.0	106.0	2.7	138	165	197	2
	05/03	1230	728	93.0	33.0	112.0	2.9	155	183	181	2.2
	10/03	1190	741	93.0	33.0	123.0	3.0	188	212	179	0 as N
	04/04	1270	701	87.0	32.0	103.0	4.0	163	186	220	ND
	07/04	1270	701	220.0	32.0	103.0	4.0	163	186	220	0 as N
	4/25/12	1200	790	100	37	120	2.8	160	220	220	<2
10S/4W-7D1	03/99	1280	765	91.0	34.0	127.0	2.0	190	160	272	ND
(Previously reported	06/99	1080	706	76.0	31.0	88.0	2.2	163	118	220	ND
as 10S/4W-7A3	08/99	1080	690	76.0	32.0	93.0	3.0	160	191	244	ND
(Bldg 260072)	10/99	1070	660	76.0	32.0	100.0	3.0	131	120	232	4
	05/00	1010	702	79.0	34.0	94.0	3.0	177	164	254	ND
	08/00	1170	732	84.0	36.0	89.0	3.0	155	188	201	5

ND - None Detected

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/4W-7D1	02/01	1230	753	89.0	39.0	113.0	2.0	170	198	220	2.7
(Previously reported	04/01	1230	726	89.0	39.0	115.0	4.0	160	191	243	2.9
as 10S/4W-7A3	09/01	1210	735	89.0	39.0	107.0	4.0	153	185	217	5.3
(Bldg 260072)	11/01	1240	725	89.0	39.0	117.0	3.0	168	205	220	5.6
(Cont)	02/02	1250	765	97.0	43.0	109.0	3.4	155	198	234	4.7
	04/02	1290	790	98.0	44.0	109.0	3.4	158	208	200	3.9
	07/02	1320	809	96.0	43.0	117.0	3.7	182	217	200	ND
	10/02	1380	787	99.0	43.0	113.0	3.7	170	216	203	2.8
	01/03	1370	810	101.0	44.0	134.0	4.0	155	194	217	ND
	04/03	1440	789	93.0	40.0	125.0	3.6	177	205	216	2.1
	10/03	1370	820	91.0	40.0	130.0	4.0	175	235	180	4.3
	01/04	1350	747	97.0	42.0	114.0	6.0	168	226	184	2.1
	04/04	1400	766	92.0	42.0	112.0	6.0	162	228	198	2
	07/04	1410	784	98.0	43.0	92.0	6.0	171	231	200	3.8
	11/04	1290	831	100.0	43.0	134.0	4.2	176	224	203	ND
	01/05	1310	804	102.0	44.0	125.0	3.7	184	241	200	2.7
	04/05	1100	690	78.0	34.0	84.0	3.2	128	177	162	2.6
	07/05	1160	716	84.0	35.0	96.0	3.0	136	---	166	0 as N
	11/05	1180	785	92.5	40.4	97.1	3.8	138	202	174	5.93 as N
	04/06	1280	786	98.0	43.0	110.0	3.3	160	220	233	7.1
	04/07	1400	784	98.0	43.0	110.0	3.4	165	230	230	5
	04/08	1230	840	88	40	98	3.4	160	250	169	7.1
	11/09	---	---	---	---	---	---	---	---	---	<2
	04/13/10	1300	820	96	42	120	3.5	170	240	220	4.5
	07/27/11	1200	800	89	39	110	3.2	150	200	220	5.0
	04/19/12	1200	860	97	42	120	3.8	180	210	160	<2
10S/5W-23G4	06/99	1070	668	69	23	106	1.7	163	144	305	ND
(Bldg 330925)	08/99	1090	657	72	25	115	2.0	180	153	317	ND
	10/99	1150	716	79	27	140	2.0	120	140	305	ND
	02/00	956	522	67	23	117	2.0	90	120	268	ND
	05/00	1040	686	77	27	116	2.0	181	141	307	ND
	08/00	1180	722	80	28	105	2.0	155	143	232	ND
	02/01	1100	706	73	25	125	2.0	149	164	268	ND
	04/01	1170	701	81	29	128	2.0	154	149	282	ND
	09/01	1180	671	80	28	126	2.0	149	142	271	ND
	10/01	1180	678	81	28	132	2.0	161	156	281	ND
	02/02	1170	685	80	28	134	2.8	143	144	279	ND
	04/02	1200	711	87	31	127	2.3	150	204	235	ND
	07/02	1180	730	83	29	130	2.5	158	151	230	ND
	10/02	1180	649	78	27	115	2.1	135	138	217	ND
	01/03	1210	740	87	30	129	2.2	145	154	225	ND
	04/03	1200	681	79	27	128	2.5	150	152	215	ND
	10/03	1160	647	80	27	136	3.0	152	155	216	ND
	04/04	1140	604	66	24	117	3.0	147	133	215	ND
	08/04	1180	657	68	24	99	4.0	140	114	245	ND
	10/04	1170	712	85	29	97	5.0	160	172	---	ND
	02/05	1070	661	84	29	125	3.3	154	148	185	ND
ND - None Detected	07/05	1050	655	72	23	118	2.0	127	---	202	ND

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-23G4	11/05	1080	665	76	23	121	2.0	135	125	227	ND
(Bldg 330925)	05/06	1110	650	71	24	120	1.9	140	130	217	ND
(Cont)	04/07	950	632	72	25	120	1.9	140	130	260	0
	04/08	1150	672	73	25	120	1.8	150	130	250	<2
	04/09	1100	670	76	26	120	2.1	150	140	250	<2
	04/22/10	1100	660	71	24	120	1.8	140	120	250	<2
	04/20/11	1200	720	83	29	110	2.1	150	170	240	<2
	04/30/12	1100	720	83	29	120	2.0	150	160	230	<2
10S/5W-23K3	06/99	1150	700	75.0	27.0	106.0	2.2	163	155	317	ND
(Bldg 330923)	08/99	1170	722	79.0	28.0	114.0	3.0	330	161	342	ND
	10/99	1170	723	78.0	28.0	140.0	3.0	120	140	293	ND
	02/00	1120	712	83.0	30.0	117.0	3.0	120	157	293	ND
	02/01	1240	758	85.0	31.0	136.0	3.0	167	152	305	ND
	04/01	1220	735	85.0	31.0	135.0	3.0	162	154	293	ND
	09/01	1240	682	81.0	29.0	132.0	3.0	162	144	281	ND
	10/01	1330	746	87.0	32.0	134.0	3.0	166	156	293	ND
	02/02	1190	720	83.0	29.0	140.0	3.5	150	155	281	ND
	04/02	1210	691	82.0	29.0	127.0	2.7	145	142	231	ND
	07/02	1230	738	81.0	29.0	134.0	3.1	167	151	240	ND
	10/02	1270	716	85.0	30.0	137.0	2.9	150	162	221	ND
	01/03	1340	826	100.0	35.0	141.0	2.6	156	185	252	0.4
	04/03	1350	733	85.0	30.0	129.0	2.6	162	171	235	ND
	10/03	887	800	84.0	30.0	141.0	3.0	160	173	224	ND
	02/04	1250	698	83.0	29.0	120.0	4.0	154	172	233	ND
	04/04	1240	706	78.0	28.0	121.0	4.0	163	170	220	ND
	07/04	1040	729	84.0	30.0	99.0	5.0	158	169	240	ND
	10/04	1180	857	86.0	30.0	97.0	5.0	159	172	235	ND
	02/05	1160	685	87.0	31.0	125.0	3.7	159	168	210	ND
	04/05	1230	760	91.0	30.0	122.0	2.6	149	148	213	ND
	07/05	1170	755	83.0	29.0	115.0	2.6	135	---	210	ND
	11/05	1230	735	92.8	29.5	123.0	3.0	141	165	332	ND
	04/06	1190	720	89.0	31.0	120.0	2.7	160	170	233	ND
	04/07	1010	718	87.0	30.0	120.0	2.6	160	170	250	0
	04/08	1250	754	91	32	110	2.5	160	180	184	ND
	04/09	1200	760	92	33	120	2.7	160	180	250	<2
	04/15/10	1200	760	98	34	120	2.6	160	180	240	<2
	04/13/11	1300	760	88	30	110	2.6	160	180	240	<2
	04/16/12	1200	760	98	34	120	2.9	170	190	230	<2
10S/5W-26C3	09/01	1410	819	101.0	38.0	138.0	3.0	173	175	296	ND
(Bldg 220002)	10/01	1370	814	104.0	38.0	131.0	3.0	199	198	317	ND
	02/02	1380	834	99.0	36.0	128.0	3.0	172	183	318	ND
	04/02	1370	808	104.0	39.0	124.0	3.2	180	184	258	ND
	07/02	1450	829	101.0	37.0	137.0	3.3	187	193	260	ND
	10/02	1400	793	98.0	35.0	143.0	3.4	179	195	248	ND
	01/03	1300	806	94.0	33.0	144.0	2.0	163	180	235	ND
	04/03	1290	759	94.0	33.0	137.0	3.1	182	198	230	ND
ND - None Detected	04/03	1290	759	94.0	32.0	137.0	3.1	182	198	230	ND

TABLE D-6

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

WELLS ON CAMP PENDLETON

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
10S/5W-26C3	10/03	1340	761	90.0	31.0	146.0	4.0	162	188	210	ND
(Bldg 220002)	01/04	1320	743	94.0	32.0	124.0	5.0	182	212	203	ND
(Cont)	04/04	1350	731	90.0	32.0	127.0	5.0	184	197	235	ND
	07/04	1100	773	91.0	32.0	98.0	5.0	167	197	215	ND
	10/04	1290	826	93.0	32.0	106.0	5.0	187	185	---	ND
	02/05	1260	735	101.0	35.0	127.0	3.7	175	188	215	ND
	04/05	1300	760	98.0	33.0	122.0	2.8	160	184	200	ND
	07/05	1450	1260	97.0	33.0	119.0	2.9	154	---	200	ND
	11/05	1240	795	99.0	32.0	122.0	2.9	159	169	202	ND
	06/06	1300	796	95.0	34.0	140.0	2.9	180	170	250	ND
	04/07	1080	764	91.0	31.0	130.0	2.9	190	190	250	0
	04/08	1260	694	80	29	140	2.7	180	150	286	<2
10S/5W-18B1	04/01/10	1400	840	100	42	110	3.6	170	230	240	<2
(Bldg 260018)	04/20/11	1400	880	100	41	100	3.4	180	250	220	<2
	04/25/12	1300	910	100	44	120	3.8	180	---	230	<2

ND - None Detected

TABLE D-12

SANTA MARGARITA RIVER WATERSHED
WATER QUALITY DATA

SURFACE STREAMS SAMPLED BY USGS ON CAHUILLA CREEK

Site Location	Date Tested	Specific Conductance umhos	Total Dissolved Solids (mg/l)	Chemical Constituents - mg/l							
				Ca	Mg	Na	K	Cl	SO4	HCO3	NO3
Cahuilla Creek	02/28/05	644	446	41.90	11.20	76.90	10.10	---	---	---	.23 @N
Cahuilla Creek Below Highway 371	02/28/05	476	337	34.20	10.10	51.90	3.69	36.9	---	---	.64 @N
Unnamed Tributary to Cahuilla Creek	02/14/05	783	529	64.00	17.50	80.70	8.94	35.2	---	---	3.05 @N

SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX E

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS CALENDAR YEAR 2012

July 2013

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

JANUARY 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement 1/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	11.0	11.0				10.9	21.7	7.1	14.0	0.6	1.2	0.0	0.0	5,000.0
2	11.0	11.0				10.9	21.7	7.1	14.0	0.6	1.2	0.0	0.0	5,000.0
3	11.0	11.0				10.8	21.5	7.0	13.8	0.6	1.2	0.0	0.0	5,000.0
4	11.0	11.0				10.7	21.2	6.8	13.5	0.6	1.2	0.0	0.0	5,000.0
5	11.0	11.0				10.5	20.9	6.7	13.2	0.6	1.2	0.0	0.0	5,000.0
6	11.0	11.0				10.4	20.7	6.6	13.0	0.6	1.2	0.0	0.0	5,000.0
7	11.0	11.0				10.3	20.4	6.4	12.7	0.6	1.2	0.0	0.0	5,000.0
8	11.0	11.0				10.3	20.5	6.5	12.8	0.6	1.2	0.0	0.0	5,000.0
9	11.0	11.0				10.4	20.6	6.5	12.9	0.6	1.2	0.0	0.0	5,000.0
10	11.0	11.0				10.4	20.7	6.6	13.0	0.6	1.2	0.0	0.0	5,000.0
11	11.0	11.0	11.0	10.9	0.1	10.4	20.6	6.5	12.9	0.6	1.2	0.0	0.0	5,000.0
12	11.0	11.0	11.0	10.9	0.1	10.3	20.5	6.5	12.8	0.6	1.2	0.0	0.0	5,000.0
13	11.0	11.0	11.0	10.9	0.1	10.4	20.6	6.5	12.9	0.6	1.2	0.0	0.0	5,000.0
14	11.0	11.0	11.0	10.9	0.1	10.4	20.6	6.5	12.9	0.6	1.2	0.0	0.0	5,000.0
15	11.0	11.0	11.0	10.9	0.1	10.4	20.6	6.5	12.9	0.6	1.2	0.0	0.0	5,000.0
16	11.0	11.0	11.0	10.9	0.1	10.1	20.0	6.2	12.3	0.6	1.2	0.0	0.0	5,000.0
17	11.0	11.0	11.0	10.9	0.1	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
18	11.0	11.0	11.0	10.9	0.1	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
19	11.0	11.0	11.0	10.9	0.1	10.1	20.0	6.2	12.3	0.6	1.2	0.0	0.0	5,000.0
20	11.0	11.0	11.0	10.9	0.1	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
21	11.0	11.0	11.0	10.9	0.1	9.5	18.8	5.6	11.1	0.6	1.2	0.0	0.0	5,000.0
22	11.0	11.0	11.0	10.9	0.1	8.5	16.9	4.6	9.2	0.6	1.2	0.0	0.0	5,000.0
23	12.0	12.0	11.1	10.9	0.2	9.4	18.6	5.5	10.9	0.6	1.2	0.0	0.0	5,000.0
24	16.0	16.0	11.6	10.9	0.7	2.6	5.2	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
25	11.0	11.0	11.6	10.9	0.7	8.9	17.7	5.0	10.0	0.6	1.2	0.0	0.0	5,000.0
26	11.0	11.0	11.6	10.9	0.7	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
27	11.0	11.0	11.6	10.9	0.7	10.0	19.9	6.1	12.2	0.6	1.2	0.0	0.0	5,000.0
28	10.0	10.0	11.5	10.9	0.6	9.6	19.1	5.7	11.4	0.6	1.2	0.0	0.0	5,000.0
29	11.0	11.0	11.5	10.9	0.6	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
30	11.0	11.0	11.5	10.9	0.6	10.1	20.0	6.2	12.3	0.6	1.2	0.0	0.0	5,000.0
31	11.0	11.0	11.5	10.9	0.6	10.2	20.2	6.3	12.5	0.6	1.2	0.0	0.0	5,000.0
TOTAL SFD	346.0	346.0	235.5	228.9	6.6	306.8		187.7		19.1		0.0		
TOTAL AF	686.3	686.3	467.1	454.0	13.1		608.6		372.3		37.9		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.
2 - Climatic Credits equal the WR-34 Discharge less the Actual Flow Maintenance Requirement which is the Flow indicated in Section 5 of the CWRMA less applicable credits, but not less than 3.0 cfs.
3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

FEBRUARY 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement 1/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	11.0	11.0	11.5	10.9	0.6	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
2	11.0	11.0	11.4	10.9	0.5	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
3	11.0	11.0	10.9	10.9	0.0	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
4	11.0	11.0	10.9	10.9	0.0	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
5	11.0	11.0	10.9	10.9	0.0	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
6	11.0	11.0	10.9	10.9	0.0	10.1	20.1	6.2	12.4	0.6	1.2	0.0	0.0	5,000.0
7	10.0	10.0	10.9	10.9	0.0	9.4	18.7	5.5	11.0	0.6	1.2	0.0	0.0	5,000.0
8	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
9	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
10	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
11	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
12	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
13	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
14	11.0	11.0	10.9	10.9	0.0	9.7	19.3	5.8	11.6	0.6	1.2	0.0	0.0	5,000.0
15	35.0	35.0	13.3	10.9	2.4	7.8	15.5	3.9	7.8	0.6	1.2	0.0	0.0	5,000.0
16	69.0	69.0	19.1	10.9	8.2	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
17	15.0	15.0	19.6	10.9	8.7	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
18	9.8	9.8	19.5	10.9	8.6	6.8	13.5	2.9	5.8	0.6	1.2	0.0	0.0	5,000.0
19	11.0	11.0	19.5	10.9	8.6	10.0	19.9	6.1	12.2	0.6	1.2	0.0	0.0	5,000.0
20	11.0	11.0	19.5	10.9	8.6	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
21	11.0	11.0	19.5	10.9	8.6	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
22	11.0	11.0	19.5	10.9	8.6	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
23	11.0	11.0	19.5	10.9	8.6	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
24	11.0	11.0	19.5	10.9	8.6	10.0	19.9	6.1	12.2	0.6	1.2	0.0	0.0	5,000.0
25	11.0	11.0	17.1	10.9	6.2	10.0	19.9	6.1	12.2	0.6	1.2	0.0	0.0	5,000.0
26	11.0	11.0	11.3	10.9	0.4	10.0	19.9	6.1	12.2	0.6	1.2	0.0	0.0	5,000.0
27	19.0	19.0	11.7	10.9	0.8	7.6	15.0	3.7	7.3	0.6	1.2	0.0	0.0	5,000.0
28	54.0	54.0	16.1	10.9	5.2	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
29	11.0	11.0	16.1	10.9	5.2	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL SFD	453.8	453.8	414.3	316.1	98.2	240.8		143.1		17.9		0.0		
TOTAL AF	900.1	900.1	821.8	627.0	194.8		477.7		285.1		35.4		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.
2 - Climatic Credits equal the WR-34 Discharge less the Actual Flow Maintenance Requirement which is the Flow indicated in Section 5 of the CWRMA less applicable credits, but not less than 3.0 cfs.
3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

MARCH 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website	Minimum Flow Maintenance Requirement 1/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	10.0	10.0	16.0	10.9	5.1	6.9	13.6	3.0	5.9	0.6	1.2	0.0	0.0	5,000.0
2	11.0	11.0	16.0	10.9	5.1	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
3	11.0	11.0	16.0	10.9	5.1	9.7	19.3	5.8	11.6	0.6	1.2	0.0	0.0	5,000.0
4	11.0	11.0	16.0	10.9	5.1	9.6	19.1	5.7	11.4	0.6	1.2	0.0	0.0	5,000.0
5	11.0	11.0	16.0	10.9	5.1	9.8	19.5	5.9	11.8	0.6	1.2	0.0	0.0	5,000.0
6	11.0	11.0	16.0	10.9	5.1	9.9	19.6	6.0	11.9	0.6	1.2	0.0	0.0	5,000.0
7	11.0	11.0	16.0	10.9	5.1	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
8	11.0	11.0	15.2	10.9	4.3	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
9	11.0	11.0	10.9	10.9	0.0	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
10	11.0	11.0	10.9	10.9	0.0	9.9	19.6	6.0	11.9	0.6	1.2	0.0	0.0	5,000.0
11	10.0	10.0	10.9	10.9	0.0	9.2	18.2	5.3	10.5	0.6	1.2	0.0	0.0	5,000.0
12	11.0	11.0	10.9	10.9	0.0	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
13	11.0	11.0	10.9	10.9	0.0	9.9	19.7	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
14	11.0	11.0	10.9	10.9	0.0	9.9	19.6	6.0	11.9	0.6	1.2	0.0	0.0	5,000.0
15	11.0	11.0	10.9	10.9	0.0	9.9	19.6	6.0	11.9	0.6	1.2	0.0	0.0	5,000.0
16	11.0	11.0	10.9	10.9	0.0	9.9	19.7 *	6.0	12.0	0.6	1.2	0.0	0.0	5,000.0
17	117.0	117.0	21.5	10.9	10.6	6.1	12.0 **	2.2	4.3	0.6	1.2	0.0	0.0	5,000.0
18	152.0	152.0	35.6	10.9	24.7	0.0	0.0 **	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
19	44.0	44.0	38.9	10.9	28.0	0.0	0.0 **	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
20	12.0	12.0	39.0	10.9	28.1	0.0	0.0 **	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
21	11.0	11.0	39.1	10.9	28.2	6.6	13.0 **	2.7	5.3	0.6	1.2	0.0	0.0	5,000.0
22	14.0	14.0	39.4	10.9	28.5	8.6	17.0 **	4.7	9.3	0.6	1.2	0.0	0.0	5,000.0
23	12.0	12.0	39.5	10.9	28.6	10.0	19.8 ***	6.1	12.0	0.6	1.2	0.0	0.0	5,000.0
24	11.0	11.0	39.5	10.9	28.6	9.0	17.8	5.1	10.1	0.6	1.2	0.0	0.0	5,000.0
25	34.0	34.0	41.8	10.9	30.9	6.8	13.5	2.9	5.8	0.6	1.2	0.0	0.0	5,000.0
26	185.0	185.0	59.2	10.9	48.3	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
27	34.0	34.0	50.9	10.9	40.0	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
28	10.0	10.0	36.7	10.9	25.8	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
29	11.0	11.0	33.4	10.9	22.5	6.9	13.7	3.0	6.0	0.6	1.2	0.0	0.0	5,000.0
30	11.0	11.0	33.3	10.9	22.4	9.0	17.8	5.1	10.1	0.6	1.2	0.0	0.0	5,000.0
31	11.0	11.0	33.3	10.9	22.4	9.0	17.8	5.1	10.1	0.6	1.2	0.0	0.0	5,000.0
TOTAL SFD	843.0	843.0	795.5	337.9	457.6	225.9		128.8		19.1		0.0		
TOTAL AF	1,672.1	1,672.1	1,577.9	670.2	907.6		448.2		255.5		37.9		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.
2 - Climatic Credits equal the WR-34 Discharge less the Actual Flow Maintenance Requirement which is the Flow indicated in Section 5 of the CWRMA less applicable credits, but not less than 3.0 cfs.
3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.
* 8.2 AF supplied from WR-34 and 11.5 AF supplied from potable connection to WR-34 because of MWD operational shutdown.
** Discharge supplied from potable connection to WR-34 because of MWD operational shutdown.
*** 7.5 AF supplied from WR-34 and 12.3 AF supplied from potable connection to WR-34 because of MWD operational shutdown. Total supplied from potable connection for Mar. 16-23 was 65.8 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

APRIL 2012 - CRITICALLY DRY YEAR

DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement 1/, 2/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 3/		CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE: Input 4/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	11.0	11.0	33.0	10.9	22.1	9.0	17.8	5.1	10.1	0.6	1.2	0.0	0.0	5,000.0
2	11.0	11.0	32.9	10.9	22.0	9.1	18.1	5.2	10.4	0.6	1.2	0.0	0.0	5,000.0
3	11.0	11.0	32.9	10.9	22.0	9.5	18.8	5.6	11.1	0.6	1.2	0.0	0.0	5,000.0
4	11.0	11.0	30.6	10.9	19.7	9.5	18.9	5.6	11.2	0.6	1.2	0.0	0.0	5,000.0
5	11.0	11.0	13.2	10.9	2.3	9.6	19.0	5.7	11.3	0.6	1.2	0.0	0.0	5,000.0
6	11.0	11.0	10.9	10.9	0.0	9.8	19.4	5.9	11.7	0.6	1.2	0.0	0.0	5,000.0
7	10.0	10.0	10.9	10.9	0.0	9.3	18.4	5.4	10.7	0.6	1.2	0.0	0.0	5,000.0
8	11.0	11.0	10.9	10.9	0.0	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
9	11.0	11.0	10.9	10.9	0.0	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
10	11.0	11.0	10.9	10.9	0.0	10.0	19.8	6.1	12.1	0.6	1.2	0.0	0.0	5,000.0
11	16.0	16.0	11.4	10.9	0.5	6.7	13.3	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
12	7.8	7.8	11.1	5.0	6.1	3.2	6.3	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
13	48.0	48.0	11.1	5.0	6.1	4.3	8.6	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
14	80.0	80.0	11.1	5.0	6.1	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
15	13.0	13.0	11.1	5.0	6.1	0.0	0.0	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
16	5.3	5.3	11.1	5.0	6.1	2.3	4.5	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
17	5.0	5.0	11.4	5.0	6.4	3.9	7.7	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
18	5.1	5.1	11.5	5.0	6.5	4.2	8.3	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
19	5.0	5.0	11.6	5.0	6.6	4.3	8.5	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
20	5.1	5.1	11.9	5.0	6.9	4.3	8.6	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
21	5.0	5.0	7.8	5.0	2.8	4.3	8.6	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
22	5.0	5.0	48.0	5.0	43.0	4.3	8.6	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
23	5.0	5.0	80.0	5.0	75.0	4.2	8.4	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
24	3.8	3.8	13.0	3.8	9.2	3.3	6.6	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
25	3.8	3.8	5.3	3.8	1.5	3.4	6.7	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
26	22.0	22.0	5.0	3.8	1.2	0.9	1.8	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
27	11.0	11.0	5.1	3.8	1.3	0.5	0.9	0.0	0.0	0.6	1.2	0.0	0.0	5,000.0
28	5.2	5.2	5.0	3.8	1.2	2.9	5.8	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
29	4.2	4.5	5.1	3.8	1.3	3.1	6.1	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
30	3.2	4.1	5.0	3.8	1.2	2.2	4.4	7.0	13.9	0.6	1.2	0.0	0.0	5,000.0
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL SFD	367.5	368.7	489.6	206.5	283.1	158.1		168.8		18.5		0.0		
TOTAL AF	728.9	731.3	971.2	409.6	561.6		313.5		334.9		36.6		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.

2 - In April 2012, Camp Pendleton requested that the District reduce remaining winter-time releases and postpone that portion of the winter-time releases until May and June. For April 12-23, 2012, the Flow Requirement was reduced from 10.9 cfs to 5.0 cfs; for April 24-30, the requirement was further reduced to 3.8 cfs. For April, the District has been credited with Climatic Credit as if they had released according to the original schedule. Flow Requirements in May and June were increased as follows: 7.8 cfs for May 21-31 and 7.3 cfs for June 1-18.

3 - Climatic Credits equal the WR-34 Discharge less the Actual Flow Maintenance Requirement which is the Flow indicated in Section 5 of the CWRMA less applicable credits, but not less than 3.0 cfs.

4 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

MAY 2012 - CRITICALLY DRY YEAR

DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement 1/, 2/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 3/		CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE: Input 4/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.3	3.9				2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	4.1	3.9				3.2	6.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	4.0	4.0				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.8	3.8				3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.8	3.8				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.9	3.9				3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.8	3.8				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.8	3.8				3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.8	3.8				3.2	6.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.8	3.8				3.3	6.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.8	3.8	3.8	3.8	0.0	3.3	6.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.8	3.8	3.8	3.8	0.0	3.4	6.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	3.9	3.9	3.8	3.8	0.0	3.4	6.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.8	3.8	3.8	3.8	0.0	3.4	6.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	3.8	3.8	3.8	3.8	0.0	3.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.9	3.9	3.8	3.8	0.0	3.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.8	3.8	3.8	3.8	0.0	3.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	3.9	3.9	3.8	3.8	0.0	3.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.8	3.8	3.8	3.8	0.0	3.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.8	3.8	3.8	3.8	0.0	3.6	7.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	5.8	5.8	4.0	7.8	(3.8)	5.5	10.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	5.8	5.8	4.2	7.8	(3.6)	5.5	11.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	7.9	7.9	4.6	7.8	(3.2)	7.6	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	8.0	8.0	5.1	7.8	(2.8)	7.6	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	7.9	7.9	5.5	7.8	(2.3)	7.5	14.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	7.8	7.8	5.9	7.8	(2.0)	7.4	14.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	7.7	7.7	6.2	7.8	(1.6)	7.4	14.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	7.8	7.8	6.6	7.8	(1.2)	7.5	14.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	7.7	7.7	7.0	7.8	(0.8)	7.5	14.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	7.7	7.7	7.4	7.8	(0.4)	7.6	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	7.8	7.8	7.6	7.8	(0.2)	7.6	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	158.3	158.7	102.4	123.8	(21.4)	143.8		0.0		0.0		0.0		
TOTAL AF	314.0	314.8	203.1	245.6	(42.4)		285.2		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.

2 - In April 2012, Camp Pendleton requested that the District reduce remaining winter-time releases and postpone that portion of the winter-time releases until May and June. For April 12-23, 2012, the Flow Requirement was reduced from 10.9 cfs to 5.0 cfs; for April 24-30, the requirement was further reduced to 3.8 cfs. For April, the District has been credited with Climatic Credit as if they had released according to the original schedule. Flow Requirements in May and June were increased as follows: 7.8 cfs for May 21-31 and 7.3 cfs for June 1-18.

3 - Art. 7(b) not applicable for months of May through December.

4 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

JUNE 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement 1/, 2/	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 3/		Input 4/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	7.3	7.3				7.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	7.4	7.4				7.1	14.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	7.3	7.3				7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	7.3	7.3				7.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	7.3	7.3				7.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	7.2	7.2				6.9	13.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	7.3	7.3				7.1	14.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	7.3	7.3				7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	7.3	7.3				7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	7.3	7.3				7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	7.3	7.3	7.3	7.3	0.0	7.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	7.4	7.4	7.3	7.3	0.0	7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	7.2	7.2	7.3	7.3	(0.0)	7.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	7.3	7.3	7.3	7.3	(0.0)	7.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	7.3	7.3	7.3	7.3	(0.0)	7.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	7.3	7.3	7.3	7.3	0.0	6.9	13.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	5.4	5.4	7.1	7.3	(0.2)	5.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	5.3	5.3	6.9	7.3	(0.4)	4.9	9.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.3	3.3	6.5	3.3	3.2	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.3	3.3	6.1	3.3	2.8	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.4	3.4	5.7	3.3	2.4	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.3	3.3	5.3	3.3	2.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.3	3.3	4.9	3.3	1.6	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.3	3.3	4.5	3.3	1.2	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.3	3.3	4.1	3.3	0.8	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	3.3	3.3	3.7	3.3	0.4	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.3	3.3	3.5	3.3	0.2	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	3.3	3.3	3.3	3.3	0.0	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.3	3.3	3.3	3.3	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	3.3	3.3	3.3	3.3	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	—	—	—	—	—	—		—	—	—	—	—	—	—
TOTAL SFD	167.2	167.2	112.2	98.0	14.2	158.5		0.0		0.0		0.0		
TOTAL AF	331.6	331.6	222.5	194.4	28.1		314.4		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - Minimum Flow Maintenance Requirement equals 11.5 cfs less 0.6 cfs CAP Credit carried over from 2011.

2 - In April 2012, Camp Pendleton requested that the District reduce remaining winter-time releases and postpone that portion of the winter-time releases until May and June. For April 12-23, 2012, the Flow Requirement was reduced from 10.9 cfs to 5.0 cfs; for April 24-30, the requirement was further reduced to 3.8 cfs. For April, the District has been credited with Climatic Credit as if they had released according to the original schedule. Flow Requirements in May and June were increased as follows: 7.8 cfs for May 21-31 and 7.3 cfs for June 1-18.

3 - Art. 7(b) not applicable for months of May through December.

4 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

JULY 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 1/		Input 2/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.0	3.0				2.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.0	3.0				2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.0	3.0	3.0	3.0	0.0	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.0	3.0	3.0	3.0	0.0	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	3.1	3.1	3.0	3.0	0.0	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.0	3.0	3.0	3.0	0.0	2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.5	3.5	3.1	3.0	0.1	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	5.6	5.6	3.3	3.0	0.3	5.5	10.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	2.0	2.0	3.2	3.0	0.2	2.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.0	3.0	3.2	3.0	0.2	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.0	3.0	3.2	3.0	0.2	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.1	3.1	3.2	3.0	0.2	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.1	3.1	3.2	3.0	0.2	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.1	3.1	3.2	3.0	0.2	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.2	3.2	3.3	3.0	0.3	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	3.1	3.1	3.3	3.0	0.3	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.0	3.0	3.2	3.0	0.2	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	3.0	3.0	3.0	3.0	(0.0)	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.1	3.1	3.1	3.0	0.1	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	3.0	3.0	3.1	3.0	0.1	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	3.0	3.0	3.1	3.0	0.1	2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	95.9	95.9	65.7	63.0	2.7	89.7		0.0		0.0		0.0		
TOTAL AF	190.2	190.2	130.3	125.0	5.4		178.0		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Art. 7(b) not applicable for months of May through December.
2 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

AUGUST 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge 1/		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.0	3.0				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.0	3.0				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.0	3.0				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.0	3.0				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.0	3.0				2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.1	3.1				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.1	3.1				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.0	3.0	3.0	3.0	0.0	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	2.9	2.9	3.0	3.0	0.0	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	2.9	2.9	3.0	3.0	0.0	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.0	3.0	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	3.0	3.0	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.0	3.0	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.1	3.1	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	3.1	3.1	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.1	3.1	3.0	3.0	0.0	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.0	3.0	3.0	3.0	0.0	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.0	3.0	3.0	3.0	0.0	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.1	3.1	3.0	3.0	0.0	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.1	3.1	3.1	3.0	0.1	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.0	3.0	3.1	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.0	3.0	3.1	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.0	3.0	3.0	3.0	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	3.1	3.1	3.0	3.0	0.0	3.4	6.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.0	3.0	3.0	3.0	0.0	3.3	6.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	2.9	2.9	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	93.5	93.5	63.4	63.0	0.4	90.3		0.0		0.0		0.0		
TOTAL AF	185.5	185.5	125.8	125.0	0.8		179.1		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - From August 6-19, 2012, and from November 19-December 12, 2012, the District conducted flow tests in which the instantaneous release rate at WR-34 varied from 0 to 13 cfs throughout the day. However, the average daily release rate remained at 3.0 cfs.

2 - Art. 7(b) not applicable for months of May through December.

3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

SEPTEMBER 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 1/		Input 2/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.0	3.0				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.0	3.0				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.0	3.0				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.0	3.0				3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.0	3.0				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.0	3.0				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.0	3.0				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.0	3.0				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.0	3.0				3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.0	3.0				3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.0	3.0	3.0	3.0	0.0	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.0	3.0	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	3.0	3.0	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.0	3.0	3.0	3.0	0.0	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	2.9	2.9	3.0	3.0	(0.0)	3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.0	3.0	3.0	3.0	(0.0)	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.0	3.0	3.0	3.0	(0.0)	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.0	3.0	3.0	3.0	(0.0)	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.0	3.0	3.0	3.0	(0.0)	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.1	3.1	3.0	3.0	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	3.0	3.0	3.0	3.0	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.0	3.0	3.0	3.0	0.0	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	3.0	3.0	3.0	3.0	0.0	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.0	3.0	3.0	3.0	0.0	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	3.0	3.0	3.0	3.0	0.0	3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL SFD	90.0	90.0	60.0	60.0	(0.0)	91.1		0.0		0.0		0.0		
TOTAL AF	178.5	178.5	118.9	119.0	(0.1)		180.6		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Art. 7(b) not applicable for months of May through December.
2 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

OCTOBER 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge		Climatic Credits Earned 1/		Input 2/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.0	3.0				3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.0	3.0				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.0	3.0				3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.0	3.0				3.1	6.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.1	3.1				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.1	3.1				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.1	3.1				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.1	3.1				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.0	3.0				3.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.2	3.2				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.4	3.4	3.1	3.0	0.1	2.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.0	3.0	3.1	3.0	0.1	2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	3.0	3.0	3.1	3.0	0.1	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	3.0	3.0	3.1	3.0	0.1	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.3	3.3	3.1	3.0	0.1	3.0	5.9 *	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.7	3.7	3.1	3.0	0.1	3.0	6.0 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.7	3.7	3.2	3.0	0.2	3.0	6.0 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.0	3.0	3.2	3.0	0.2	2.8	5.6 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.0	3.0	3.2	3.0	0.2	2.8	5.6 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.0	3.0	3.2	3.0	0.2	2.8	5.6 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.0	3.0	3.2	3.0	0.2	2.8	5.6 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	3.0	3.0	3.2	3.0	0.2	2.8	5.6 **	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.0	3.0	3.2	3.0	0.2	2.8	5.6 ***	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	2.9	2.9	3.2	3.0	0.2	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	3.0	3.0	3.1	3.0	0.1	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	3.0	3.0	3.0	3.0	(0.0)	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	95.6	95.6	65.5	63.0	2.5	89.8		0.0		0.0		0.0		
TOTAL AF	189.6	189.6	129.8	125.0	4.9		178.1		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.
1 - Art. 7(b) not applicable for months of May through December.
2 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs.
Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.
* 3.4 AF supplied from WR-34 and 2.5 AF supplied from potable connection to WR-34 because of MWD operational shutdown.
** Discharge supplied from potable connection to WR-34 because of MWD operational shutdown.
*** 3.1 AF supplied from WR-34 and 2.5 AF supplied from potable connection to WR-34 because of MWD operational shutdown. Total supplied from potable connection for Oct. 19-27 was 45.0 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

NOVEMBER 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge 1/		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.0	3.0				2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.0	3.0				2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.0	3.0				2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	2.9	2.9				2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.0	3.0				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.0	3.0				2.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.1	3.1				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.0	3.0				2.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.0	3.0				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	3.0	3.0	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	3.1	3.1	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.0	3.0	3.0	3.0	0.0	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	3.0	3.0	3.0	3.0	0.0	2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	3.0	3.0	3.0	3.0	0.0	2.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	3.1	3.1	3.0	3.0	0.0	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.0	3.0	3.0	3.0	0.0	2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	2.9	2.9	3.0	3.0	0.0	2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	2.9	2.9	3.0	3.0	0.0	2.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.2	3.2	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.2	3.2	3.0	3.0	0.0	2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	2.9	2.9	3.0	3.0	0.0	2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	2.9	2.9	3.0	3.0	0.0	2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	3.0	3.0	3.0	3.0	0.0	2.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	3.1	3.1	3.0	3.0	0.0	2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	3.0	3.0	3.0	3.0	0.0	2.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	3.0	3.0	3.0	3.0	0.0	2.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	—	—	—	—	—	—	—			—	—	—	—	—
TOTAL SFD	90.3	90.3	60.3	60.0	0.3	82.5		0.0		0.0		0.0		
TOTAL AF	179.1	179.1	119.5	119.0	0.5		163.6		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - From August 6-19, 2012, and from November 19-December 12, 2012, the District conducted flow tests in which the instantaneous release rate at WR-34 varied from 0 to 13 cfs throughout the day. However, the average daily release rate remained at 3.0 cfs.

2 - Art. 7(b) not applicable for months of May through December.

3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED

COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS
SANTA MARGARITA RIVER NEAR TEMECULA

DECEMBER 2012 - CRITICALLY DRY YEAR

										CAMP PENDLETON GROUNDWATER ACCOUNT BALANCE				
DAY	USGS Official Discharge	USGS Daily Website Discharge	10-Day Running Average of Website Discharge	Minimum Flow Maintenance Requirement	Running Average Less Required Flow	WR-34 Make-Up Discharge 1/		Climatic Credits Earned 2/		Input 3/	Input	Output	Output	Cumulative GW Account Balance
	cfs	cfs	cfs	cfs	cfs	cfs	AF	cfs	AF	cfs	AF	cfs	AF	AF
1	3.6	3.6				3.2	6.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
2	3.1	3.1				2.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
3	3.4	3.4				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
4	3.4	3.4				3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
5	3.2	3.2				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
6	3.3	3.3				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
7	3.4	3.4				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
8	3.2	3.2				2.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
9	3.3	3.3				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
10	3.3	3.3				3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
11	3.4	3.4	3.3	3.3	0.0	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
12	3.3	3.3	3.3	3.3	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
13	195.0	195.0	22.5	3.3	19.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
14	90.0	90.0	31.1	3.3	27.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
15	14.0	14.0	32.2	3.3	28.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
16	3.1	3.1	32.2	3.3	28.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
17	6.4	6.4	32.5	3.3	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
18	7.6	7.6	32.9	3.3	29.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
19	4.9	4.9	33.1	3.3	29.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
20	3.0	3.0	33.1	3.3	29.8	2.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
21	3.6	3.6	33.1	3.3	29.8	2.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
22	3.4	3.4	33.1	3.3	29.8	2.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
23	3.4	3.4	13.9	3.3	10.6	2.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
24	3.3	3.3	5.3	3.3	2.0	2.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
25	3.3	3.3	4.2	3.3	0.9	2.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
26	8.2	8.2	4.7	3.3	1.4	2.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
27	8.7	8.7	4.9	3.3	1.6	0.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
28	1.1	1.1	4.3	3.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
29	1.3	1.3	3.9	3.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
30	24.0	24.0	6.0	3.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
31	9.4	9.4	6.6	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	433.6	433.6	376.4	69.3	307.1	54.1		0.0		0.0		0.0		
TOTAL AF	860.0	860.0	746.5	137.5	609.1		107.3		0.0		0.0		0.0	

Monthly totals are rounded to the nearest tenth of an acre foot.

1 - From August 6-19, 2012, and from November 19-December 12, 2012, the District conducted flow tests in which the instantaneous release rate at WR-34 varied from 0 to 13 cfs throughout the day. However, the average daily release rate remained at 3.0 cfs.

2 - Art. 7(b) not applicable for months of May through December.

3 - Art. 17 - Camp Pendleton rights to groundwater equal the Flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to groundwater account shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

SANTA MARGARITA RIVER WATERSHED

ANNUAL WATERMASTER REPORT

WATER YEAR 2011-12

APPENDIX F

ANNUAL REPORT ISSUES SUBORDINATED DURING EFFECTIVE PERIOD OF THE COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT

July 2013

APPENDIX F

SANTA MARGARITA RIVER WATERSHED

ANNUAL REPORT ISSUES SUBORDINATED DURING EFFECTIVE PERIOD OF THE COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT

Introduction

Prior to implementation of the Cooperative Water Resource Management Agreement (CWRMA) entered into by Rancho California Water District (RCWD) and the United States on behalf of Camp Pendleton, there were contentions raised by Camp Pendleton each year, with respect to various aspects of the Annual Watermaster Report. These contentions are settled so long as CWRMA is in effect. Accordingly, there is no need to raise those particular issues or publish them in the main text of the annual report or in related correspondence.

However, the respective positions on these issues need to be preserved and protected from any finding of waiver, and there is a need to continue to collect related data in the event of need in the future.

Therefore, the applicable textual material in the previous annual reports and related comments and responses have been gathered here for preservation and maintenance of rights, with the understanding that the previous annual exchange of applicable contentions in the process of preparing the annual report is no longer necessary.

Issues Reserved

Section 3, Surface Water Availability and Use: In the absence of CWRMA implementation, Camp Pendleton disputes the method of calculation used in the annual report in Subsection 3.2 (Surface Water Diversions) and Table 3.3 (Surface Water Diversions to Storage) for presentation of the information regarding Vail Lake and further asserts its belief that the Vail Dam impoundment fails to comply with the 1940 Stipulated Judgment.

Section 4, Subsurface Water Availability and Use: In the absence of CWRMA implementation, and with respect to Figure 4.1 (Water Level Elevations – Windmill Well) and to Subsections 4.3 (Water Levels) and 4.4 (Groundwater Storage), Camp Pendleton is concerned about the apparent excessive pumping in the Upper Basin, and further asserts its belief that the lengthy and significant drawdown and concomitant loss in storage adversely affect the water supply for adjacent and downstream users holding senior water rights.

Section 7, Water Production and Use: First, in the absence of CWRMA implementation, and with regard to the local production figures shown in Table 7.1 (Water Production and Use), Camp Pendleton is concerned about the high level of groundwater production from the Upper Basin, a level that Camp Pendleton believes to be substantially greater than the safe yield.

Second, in the absence of CWRMA implementation, and with regard to Footnote 4 of Table 7.1 (distinction between RCWD pumping of older alluvium water and of Vail recovery water), Camp Pendleton has serious reservations as to the accounting system that is being used as well as the legal and technical bases upon which such system has been formulated.

Third, in the absence of CWRMA implementation, and as to the RCWD part of Subsection 7.2 (Water Purveyors), Camp Pendleton has serious reservations as to the accounting system that is being used as well as the legal and technical bases upon which such system has been formulated. These reservations include the following:

1. As to the "Vail Appropriation" part: *Representatives of the United States contend that under the 1940 Stipulated Judgment storage of water in Vail Lake is limited to Rancho California Water District's share of the flood waters of the Santa Margarita River system. However, to date, the parties have not agreed on a definition of "flood waters."*

2. As to the "Division of Local Water" part: *In 1995 well logs and geophysical logs of all Rancho California WD wells were reviewed by representatives of the United States and Rancho California WD to determine the depths of the younger alluvium. There was general agreement between the parties about the depth of the younger alluvium in production wells, except for ten wells shown on Table 7.7 of the 1994-95 report. The remaining disagreements relate to differences about the magnitude of the clay layer needed to define the base of the younger alluvium, the importance of neighboring well logs, and general concepts about overall geologic setting.*

Section 8, Unauthorized Water Use: In the absence of CWRMA implementation, and with respect to water use by RCWD, Camp Pendleton asserts the following:

1. Such use is in violation of the 1940 Stipulated Judgment by reason of, among other things, Vail Lake operations in excess of entitlement and pumping from both younger and older alluvium in excess of entitlement, which contentions RCWD disputes;

2. Rediversion and use of water impounded by Vail Dam are not in accord with terms of Permit 7032;

3. Unauthorized pumping is being done, including pumping from the younger alluvium outside of Pauba Valley without a permit and pumping from the older alluvium in violation of Court adjudications.

Section 9, Threats to Water Supply: In the absence of CWRMA implementation, and with respect to Subsection 9.3 (Potential Overdraft Conditions) and as noted in the foregoing comments to Sections 4 and 7, Camp Pendleton is seriously concerned regarding the apparent excessive pumping in the Upper Basin.