



Memorandum

To: SAWPA

From: CDM

Date: January 20, 2011

Subject: Review of MSAR Indicator Bacteria TMDL: Triennial Report –
Response to Comments from Santa Ana RWQCB

This memorandum provides additional data and information in response to requests by the Santa Ana Regional Water Quality Control Board (RWQCB) in a comment letter dated April 8, 2010 and in a follow-up letter with additional comments April 27, 2010, regarding review of the subject report.

Response to Letter Comment, dated April 8, 2010

- RWQCB requested monitoring data in Excel spreadsheet format. CDM regularly provides digital data updates to SAWPA for storage in the SAWPA database. SAWPA currently has received data for the period from monitoring inception (2007 dry season) through the 2010 dry season.
- RWQCB requested running calculation of geometric means. Tables A-1 through A-5 in Attachment A summarize bacterial indicator data and geometric means for dry and wet seasons from 2007 through 2009/10. A separate Excel spreadsheet with bacterial indicator sample results and geometric means is also provided.

Response to Letter Comment, dated April 27, 2010

- RWQCB requested daily stream flow data, as available for MSAR TMDL waterbodies. In response to this request, the following United States Geological Survey (USGS) flow data are provided with USGS station number:
 - Santa Ana River at MWD Crossing (USGS Station No.: 11066460)
 - Chino Creek at Schaefer Avenue near Chino (USGS Station No.: 11073360)
 - Cucamonga Creek near Mira Loma (USGS Station No.: 11073495)

Attachment A, Table A-6 summarizes the daily mean flow observed at these flow gauges for July 1, 2007 to October 31, 2009.

- RWQCB requested daily and monthly rainfall totals from nearby gauge within the MSAR watershed. Table 1 lists the location of these rain gauges. Table 2 provides the monthly rainfall totals during the monitoring period. Daily rainfall totals are presented in Attachment A, Table A-7.

Table 1. Location of key rainfall gauges in Middle Santa Ana River Watershed

Station No.	Station Name	Latitude	Longitude
178	Riverside North	34.00277778	117.37777778
179	Riverside South	33.95111111	117.38750000
35	Corona	33.84500000	117.57444444
131	Norco	33.92147222	117.57244444

Table 2. Monthly rainfall totals (inches) at key rainfall gauges, July 2007 to October 2009 monitoring period (M = missing data)

Month	Riverside North	Riverside South	Corona	Norco ¹
Jul-07	0	0.01	0	0
Aug-07	0	0	0	0
Sep-07	0.32	0.21	0.27	M
Oct-07	0.18	0.15	0.44	M
Nov-07	0.04	0.1	0.07	M
Dec-07	2.81	2.61	2.08	M
Jan-08	3.14	2.42	4.67	M
Feb-08	0.93	0.69	1.46	M
Mar-08	0.14	0.16	0.09	M
Apr-08	0	0	0	0
May-08	0.53	0.5	0.26	M
Jun-08	0	0	0	0
Jul-08	0	0	0	0
Aug-08	0	0	0	0
Sep-08	0	0	0	0
Oct-08	0	0	0	0
Nov-08	0.95	0.99	1.38	M
Dec-08	2.59	2.7	3.85	M
Jan-09	0.15	0.09	0.16	M
Feb-09	3.61	2.77	3.81	M
Mar-09	0.14	0.06	0.32	M
Apr-09	0.02	0	0	0

Table 2. Monthly rainfall totals (inches) at key rainfall gauges, July 2007 to October 2009 monitoring period (M = missing data)

Month	Riverside North	Riverside South	Corona	Norco ¹
May-09	0.01	0.02	0	M
Jun-09	0.08	0.04	0	M
Jul-09	0	0	0	0
Aug-09	0	0	0	0
Sep-09	0	0	0	0
Oct-09	0	0.01	0.36	0.17

¹ Norco station rainfall data provided by RCFC&WCD had missing data

- RWQCB requested results of laboratory assays for water quality samples for *Bacteroides*. Samples collected at MSAR TMDL watershed-wide compliance sites are only analyzed for fecal coliform, *E. coli*, and total suspended solids (TSS). *Bacteroides* analysis was conducted only under the Urban Source Evaluation Plan Monitoring Program; the Triennial Report did not include these data.
- RWQCB requested all analytical results for TSS. Tables 3 through 7 present these data.

Table 3. TSS (mg/L) results by compliance site, 2007 dry season

Sample Date	Icehouse Canyon (WW-C1)	Prado Park Lake (WW-C3)	Chino Creek at Central Ave (WW-C7)	Mill-Cucamonga Creek (WW-M5)	SAR at MWD Crossing (WW-S1)	SAR at Pedley Ave (WW-S4)
7/12/07	NS	22.6	5.06	10.4	7	4.06
7/18/07	NS	21.2	5.3	11.13	10.5	4.62
7/25/07	NS	19	7.25	15.42	7.5	4.25
8/1/07	NS	90.1	7.5	25.8	6.56	3.56
8/8/07	NS	16.6	10.4	12.8	4	3.37
8/15/07	NS	16.8	20.6	6.63	7	3.33
8/22/07	NS	28.2	29.2	18.13	7.44	2.67
8/29/07	NS	19.04	20.57	8.67	6.2	3.89
9/5/07	NS	22.44	17	13	229.5	258.5
9/12/07	NS	19	14.22	17.78	21.9	23
9/19/07	NS	24.2	11.37	13.88	13.13	14.63
9/26/07	NS	11.6	0.00	8.8	19.33	13.33
10/3/07	NS	23.33	15.4	21	10.14	10.2
10/10/07	NS	14	55.25	18.6	12	8.8
10/17/07	NS	14	3.89	7.17	12	8.8

NS - No sample collected due to no flow

Table 4. TSS (mg/L) results by compliance site, 2007-2008 wet season

Sample Date	Icehouse Canyon (WW-C1)	Prado Park Lake (WW-C3)	Chino Creek at Central Ave (WW-C7)	Mill-Cucamonga Creek (WW-M5)	SAR at MWD Crossing (WW-S1)	SAR at Pedley Ave (WW-S4)
12/7/07	NS	25.6	8.4	101.6	3108	130.4
12/9/07	NS	21.2	7.2	10.5	92.3	143.3
12/10/07	NS	17	3	4.4	43	75.7
12/11/07	NS	23.6	6.5	6.5	29	35.63
12/19/07	NS	653.33	11.1	19.6	177	69.15
12/27/07	NS	24	7.67	9.4	21	31.2
1/2/08	NS	33.33	7.2	11.4	25	14.4
1/9/08	NS	8.2	10.8	8.2	22.7	20.8
1/16/08	NS	15.3	6	7.4	30.4	39.8
1/23/08	NS	13.5	29.2	9.6	10.4	23.8
1/30/08	NS	7	28.7	13.3	236	382
2/6/08	NS	14.7	14.7	10.7	75.3	115.3
2/13/08	NS	14.6	4	14.2	28	47.8
2/20/08	NS	10.6	3	111	27.6	71.8

NS - No sample collected (no flow)

Table 5. TSS (mg/L) results by compliance site, 2008 dry season

Sample Date	Icehouse Canyon (WW-C1)	Prado Park Lake (WW-C3)	Chino Creek at Central Ave (WW-C7)	Mill-Cucamonga Creek (WW-M5)	SAR at MWD Crossing (WW-S1)	SAR at Pedley Ave (WW-S4)
5/14/08	NS	17	13.4	3.8	8.7	9.2
5/21/08	1	8.4	8.33	4.67	6	8.33
5/28/08	0.88	9.6	4.2	5.75	31.75	43.6
6/4/08	1.29	12.6	6.8	4.74	23.06	65.2
6/11/08	0.5	21.25	6.8	4.5	24.4	25.8
6/18/08	1.5	21.2	10	6.4	10.57	14.14
6/25/08	1.6	21.6	12	7.8	12.2	14.8
7/2/08	2.25	14.69	9	5.6	9.2	6.43
7/9/08	0.56	14.2	11	7.5	9.8	16.6
7/16/08	0.8	13.4	3.6	8.8	5.6	7.6
9/3/08	2	20.29	6.5	12.33	8	4.8
9/10/08	1	12.67	4.57	9.2	7	6.8
9/17/08	0.8	20.8	5.33	10.4	4.29	6.33
9/24/08	0.44	21.6	15.14	11.2	4	4.5
10/1/08	1	39.6	10.8	9.2	4.2	16
10/8/08	0.2	26.4	3.6	6	4.29	7.71
10/15/08	7.5	27	15.33	11	7.65	21.41
10/22/08	2.4	24	11.78	8	6.44	9.11
10/29/08	2	26.67	10.89	6	9.6	6.78
11/5/08	0.8	25.6	93.7	13	6.87	7

NS: No sample collected due to no flow

Table 6. TSS (mg/L) results by compliance site, 2008-2009 wet season

Sample Date	Icehouse Canyon (WW-C1)	Prado Park Lake (WW-C3)	Chino Creek at Central Ave (WW-C7)	Mill-Cucamonga Creek (WW-M5)	SAR at MWD Crossing (WW-S1)	SAR at Pedley Ave (WW-S4)
12/10/08	0.47	52.8	5.78	9.8	9.25	14.71
12/15/08	6.6	44.3	108.3	119.25	21.71	291.75
12/17/08	202.3	29.0	54.75	3.2	162	296
12/18/08	NR	19.5	4.04	11	802	1516
12/19/08	3.8	18.4	0.63	4.5	287	344
12/23/08	5.4	12	4.38	15.25	13.5	31.72
12/30/08	13.5	13.5	1.25	2.63	15.1	25.31
1/7/09	1.4	13.8	2.4	5.87	11.4	17.63
1/14/09	1.06	21	6.8	8.8	10.75	15.8
1/21/09	0.56	22.4	5.44	10.5	8.38	14
1/28/09	2.5	39.8	4.82	6.13	10.38	17.4
2/4/09	0.44	16.5	5	10	7.5	14.63
2/13/09	0.67	31.4	4.38	10.14	42.6	47.8
2/18/09	0.66	39.5	37.67	17	137.4	306.5

NS: No sample collected due to no flow

NR: Sample result not reported by lab

- RWQCB requested a summary of results for field measured collected including conductivity, dissolved oxygen, pH, temperature, and turbidity. Tables A-8 through A-12 in Attachment A present these data.
- RWQCB requested a detailed QA/QC summary be provided. Attachment B provides the requested QA/QC Summary.

**Attachment A
Data Summary**

Table A-1. 2007 dry season bacterial indicator (cfu/100mL) sample results with calculated geometric means¹

Site ²	Bacterial Indicator	7/12/07	7/18/07	7/25/07	8/1/07	8/8/07	8/15/07	8/22/07	8/29/07	9/5/07	9/12/07	9/19/07	9/26/07	10/3/07	10/10/07	10/17/07
Prado Park Outlet at Chino Creek	Fecal coliform	30	9	60	>340	210	300	440	99	140	50	820	40	200	140	70
	Geomean					65	103	224	248	207	156	190	118	136	136	145
	<i>E. coli</i>	30	<9	60	230	110	170	440	30	150	30	990	50	140	180	40
	Geomean					53	75	163	142	130	100	143	92	126	130	138
Chino Creek at Central Ave	Fecal coliform	5200	3000	5900	2000	1500	2400	1100	>2400	1800	>720	1100	6000	510	440	>700
	Geomean					3,078	2,637	2,157	1,802	1,765	1,524	1,304	1,830	1,343	1,013	1,007
	<i>E. coli</i>	>1210	810	>2700	560	940	420	>1030	770	870	>720	>330	>800	320	260	440
	Geomean					1,069	865	907	706	771	731	697	662	556	436	395
Mill-Cucamonga Creek at Chino Corona Rd	Fecal coliform	5200	2600	>9000	>1600	2700	2200	2800	>1300	>1500	>2300	>1500	4200	1700	480	2400
	Geomean					3,501	2,947	2,991	2,031	2,005	1,942	1,799	1,951	2,058	1,639	1,653
	<i>E. coli</i>	2000	>1000	>5700	1170	>1150	720	>750	780	550	>1150	>760	>700	730	500	910
	Geomean					1,726	1,407	1,329	893	768	768	776	765	755	741	707
Santa Ana River at MWD Crossing	Fecal coliform	170	270	220	700	210	420	3100	>900	2600	1800	310	4900	600	280	110
	Geomean					272	326	531	703	915	1,405	1,323	1,449	1,337	856	489
	<i>E. coli</i>	30	290	99	70	140	280	>490	220	960	170	170	>380	200	220	360
	Geomean					97	151	168	197	332	346	313	297	292	217	252
Santa Ana River at Pedley Ave	Fecal coliform	150	220	2300	>240	550	560	1100	1110	18000	2200	510	3400	430	220	470
	Geomean					398	518	715	618	1,466	1,934	1,898	2,379	1,968	816	599
	<i>E. coli</i>	40	60	150	140	110	140	150	280	2800	180	170	>310	140	200	480
	Geomean					89	114	137	155	283	312	325	375	327	193	234

¹ For fecal coliform and *E.coli* result values that are reported with ">" qualifiers, the numeric value is assumed in calculating the geomean.

² No samples were collected at Icehouse Canyon compliance site during the 2007 dry season because of dry conditions (no flow).

Table A-2. 2007-08 wet season bacterial indicator (cfu/100mL) sample results with calculated geometric means¹

Site ²	Bacterial Indicator	12/7/07	12/9/07	12/10/07	12/11/07	12/19/07	12/27/07	1/2/08	1/9/08	1/16/08	1/23/08	1/30/08	2/6/08	2/13/08	2/20/08
Prado Park Outlet at Chino Creek	Fecal coliform	260	130	90	99	380	210	180	80	80	50	520	280	130	60
	Geomean					163	156	167	163	156	104	125	136	150	142
	<i>E. coli</i>	160	90	120	90	260	170	200	120	110	60	470	250	90	80
	Geomean					132	134	157	157	163	122	149	156	147	138
Chino Creek at Central Ave	Fecal coliform	10,000	3,100	230	240	80	320	230	310	200	4,100	210	70	130	150
	Geomean					672	338	201	213	205	451	415	327	275	259
	<i>E. coli</i>	5,100	2,200	200	230	120	240	210	220	260	2,100	260	110	50	150
	Geomean					573	311	194	198	203	360	366	322	239	214
Mill-Cucamonga Creek at Chino Corona Rd	Fecal coliform	22,000	790	200	170	730	170	180	480	180	230	340	160	70	7,700
	Geomean					845	320	238	283	286	227	261	255	174	368
	<i>E. coli</i>	>5000	520	130	120	1,500	150	200	360	100	200	360	50	110	5,200
	Geomean					571	283	234	287	277	185	220	167	132	290
Santa Ana River at MWD Crossing	Fecal coliform	43,000	420	190	210	2,200	120	40	160	50	40	180	120	40	60
	Geomean					1,097	338	211	204	153	69	75	93	70	73
	<i>E. coli</i>	22,000	310	110	120	3,800	120	130	140	40	30	190	40	40	40
	Geomean					807	285	239	251	201	77	84	66	52	52
Santa Ana River at Pedley Ave	Fecal coliform	9,000	2,000	190	190	2,600	80	60	520	80	9	390	90	40	140
	Geomean					1,111	432	214	262	220	71	97	106	63	71
	<i>E. coli</i>	7,200	780	120	170	4,600	130	70	490	70	50	260	30	80	80
	Geomean					880	394	243	322	270	109	126	106	74	76

¹ For fecal coliform and *E.coli* result values that are reported with ">" qualifiers, the numeric value is assumed in calculating the geomean.

² No samples were collected at Icehouse Canyon compliance site during the 2007-08 wet season because of dry conditions (no flow).

Table A-3. 2008 dry season bacterial indicator (cfu/100mL) sample results with calculated geometric means¹

Site	Bacterial Indicator	5/14/08	5/21/08	5/28/08	6/4/08	6/11/08	6/18/08	6/25/08	7/2/08	7/9/08	7/16/08	9/3/08	9/10/08	9/17/08	9/24/08	10/1/08	10/8/08	10/15/08	10/22/08	10/29/08	11/5/08
Icehouse Canyon ²	Fecal coliform		<9	<9	<9	<9	<9	<9	<9	<9	<9	<9	30	40	20	<9	<9	<9	<9	<9	<9
	Geomean																				
	<i>E. coli</i>		<9	<9	<9	<9	<9	<9	<9	<9	<9	<9	40	30	30	<9	<9	<9	<9	<9	<9
	Geomean																				
Prado Park Outlet at Chino Creek	Fecal coliform	99	60	60	90	30	40	>400	490	420	70	290	170	>500	230	260	200	200	160	110	180
	Geomean					63	52	76	116	158	187					271	252	260	207	179	166
	<i>E. coli</i>	100	40	80	20	70	90	340	670	360	140	160	50	350	230	240	240	220	50	40	99
	Geomean					54	53	81	123	220	253					173	188	252	171	120	101
Chino Creek at Central Ave	Fecal coliform	280	200	590	470	3,200	1,000	2,700	580	560	9,600	8,100	2,400	3,800	850	560	380	210	920	230	36,000
	Geomean					549	708	1,191	1,187	1,229	1,531					2,038	1,105	679	511	394	905
	<i>E. coli</i>	350	210	320	500	610	310	440	480	310	1,610	850	1,000	1,130	710	620	320	260	210	230	33,000
	Geomean					373	364	422	457	415	504					842	692	529	378	302	668
Mill-Cucamonga Creek at Chino Corona Rd	Fecal coliform	1,000	540	3,500	3,000	1,140	1,400	1,400	1,300	5,900	>3400	1,600	590	380	2,800	490	40	18,000	1,700	420	3,800
	Geomean					1,452	1,554	1,880	1,542	1,765	2,196					868	415	822	1,109	759	1,143
	<i>E. coli</i>	1,260	590	700	1,180	1,030	1,240	810	620	8,700	1,100	790	540	730	2,100	720	140	2,800	420	340	440
	Geomean					912	910	969	946	1,410	1,429					860	609	846	757	526	477
Santa Ana River at MWD Crossing	Fecal coliform	340	110	500	820	390	90	580	340	380	230	350	280	190	50	220	130	150	70	140	2,700
	Geomean					359	275	384	355	305	274					183	150	132	108	133	220
	<i>E. coli</i>	470	160	270	>160	150	110	180	180	200	40	180	140	130	80	150	60	120	90	200	340
	Geomean					218	163	167	154	161	123					131	106	102	95	114	135
Santa Ana River at Pedley Ave	Fecal coliform	180	40	690	670	380	280	3,900	240	210	190	2,300	320	210	140	60	110	70	90	160	5,600
	Geomean					263	288	719	582	461	402					265	144	106	90	92	228
	<i>E. coli</i>	110	90	200	>200	370	310	170	140	130	70	690	190	90	40	90	150	90	140	320	620
	Geomean					171	210	239	223	204	146					134	98	85	93	140	206

¹ For fecal coliform and *E.coli* result values that are reported with ">" qualifiers, the numeric value is assumed in calculating the geomean.

² Icehouse Canyon – No rolling geomeans are calculated since predominant results for fecal coliform and *E. coli* are below detection limit (< 9 cfu/100 mL).

Table A-4. 2008-09 wet season bacterial indicator (cfu/100mL) sample results with calculated geometric means

Site	Bacterial Indicator	12/10/08	12/15/08	12/17/08	12/18/08	12/19/08	12/23/08	12/30/08	1/7/09	1/14/09	1/21/09	1/28/09	2/4/09	2/13/09	2/18/09
Icehouse Canyon ¹	Fecal coliform	<9	<90	20	<9	<9	<9	<9	<9	<9	<9	<9	9	<9	<9
	Geomean														
	<i>E. coli</i>	<9	<90	9	<9	<9	<9	<9	<9	<9	<9	<9	9	<9	<9
	Geomean														
Prado Park Outlet at Chino Creek	Fecal coliform	410	1,700	480	400	40	40	60	40	120	99	220	40	2,100	10,500
	Geomean					351	221	113	69	54	65	91	84	185	454
	<i>E. coli</i>	510	2,000	290	600	260	80	100	110	90	120	310	40	2,700	15,000
	Geomean					541	373	205	169	116	99	130	108	205	570
Chino Creek at Central Ave	Fecal coliform	5,800	4,300	10,300	3,100	290	410	160	190	190	640	350	220	220	4,800
	Geomean					2,970	1,748	905	407	233	273	264	282	290	554
	<i>E. coli</i>	12,900	5,700	7,600	2,500	390	2,100	210	30	150	510	320	160	280	6,200
	Geomean					3,526	2,452	1,267	419	239	252	173	164	256	539
Mill-Cucamonga Creek at Chino Corona Rd	Fecal coliform	900	4,800	1,700	5,900	140	200	180	530	380	850	380	390	280	450
	Geomean					1,434	1,062	550	436	252	361	411	480	422	437
	<i>E. coli</i>	970	7,200	1,400	4,200	590	210	270	640	390	660	390	580	380	500
	Geomean					1,892	1,393	722	618	384	393	444	518	467	490
Santa Ana River at MWD Crossing	Fecal coliform	170	2,400	3,700	3,800	650	210	99	20	30	20	80	40	70	330
	Geomean					1,301	1,357	717	253	96	48	39	33	42	68
	<i>E. coli</i>	90	1,700	1,400	3,400	880	210	60	30	40	<9	110	20	60	220
	Geomean					915	1,084	555	257	106	62	53	40	48	73
Santa Ana River at Pedley Ave	Fecal coliform	150	4,200	4,700	3,900	1,300	320	99	40	70	50	99	50	80	330
	Geomean					1,719	2,000	945	364	163	85	67	59	67	92
	<i>E. coli</i>	260	3,800	2,500	4,600	2,400	340	60	9	40	120	120	80	70	340
	Geomean					1,937	2,044	891	289	112	62	50	53	80	122

¹ Icehouse Canyon – No rolling geomeans are calculated since predominant results for fecal coliform and *E. coli* are below detection limit (<9 cfu/100mL).

Table A-5. 2009 dry season bacterial indicator (cfu/100mL) sample results with calculated geometric means¹

Site ²	Bacterial Indicator	5/27/09	6/2/09	6/9/09	6/16/09	6/23/09	6/30/09	7/7/09	7/14/09	7/21/09	7/28/09	8/4/09	8/11/09	8/18/09	8/25/09	9/1/09	9/8/09	9/15/09	9/22/09	9/29/09	10/6/09
Prado Park Outlet at Chino Creek	Fecal coliform	120	40	140	140	20	90	50	<9	40	80	70	99	250	200	>180	120	>110	>790	150	80
	Geomean					72	68	71	41	44	62	58	69	89	123	136	156	182	155	134	113
	<i>E. coli</i>	180	80	90	90	50	50	40	<9	30	40	50	9	50	80	>50	110	>50	>730	40	30
	Geomean					90	69	60	38	42	39	39	27	31	37	37	45	76	94	66	51
Chino Creek at Central Ave	Fecal coliform	210	70	220	170	220	280	1,100	1,600	250	320	280	>520	200	>230	2,200	>240	1,000	>460	250	210
	Geomean					165	174	303	450	486	524	524	435	259	262	498	663	761	1,483	819	374
	<i>E. coli</i>		40	230	140	80	130	190	270	160	280	210	350	230	>410	740	370	360	220	140	110
	Geomean					101	106	145	150	154	197	217	245	238	262	334	385	388	384	314	214
Mill Creek at Chino Corona Rd	Fecal coliform	150	210	540	480	290	350	300	>220	280	1,500	280	>560	271	4,300	500	>450	3,000	>840	850	580
	Geomean					298	354	380	348	304	458	433	490	423	836	636	835	1,150	1,861	1,084	1,139
	<i>E. coli</i>	320	490	620	830	330	410	570	370	520	2,300	540	982	620	4,600	1,350	950	2,900	700	690	620
	Geomean					484	509	524	473	431	635	671	748	830	1,283	1,153	1,291	1,604	1,643	1,124	962
Santa Ana River at MWD Crossing	Fecal coliform	120	80	40	140	99	80	140	120	150	160	120	170	130	140	240	99	150	110	180	70
	Geomean					88	81	91	113	115	126	137	142	145	143	155	149	145	141	148	116
	<i>E. coli</i>		40	80	140	140	90	60	140	80	140	140	110	120	320	>220	180	220	210	110	100
	Geomean					89	89	97	108	97	97	106	119	116	153	156	166	197	227	174	156
Santa Ana River at Pedley Ave	Fecal coliform	99	50	140	90	120	99	120	160	170	220	220	140	140	90	460	230	180	90	220	200
	Geomean					94	94	112	115	131	148	174	179	174	154	178	180	189	173	207	175
	<i>E. coli</i>	140	40	110	100	130	99	140	70	130	90	120	140	130	>240	>210	210	150	120	140	110
	Geomean					96	89	115	105	110	103	107	107	121	118	130	156	160	156	152	142

¹ For fecal coliform and *E.coli* result values that are reported with ">" qualifiers, the numeric value is assumed in calculating the geomean.

² Icehouse Canyon compliance site was dropped prior to the 2009 dry season by agreement with the Santa Ana RWQCB

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
7/1/2007	59	1.2	49
7/2/2007	63	1.3	34
7/3/2007	62	1.2	47
7/4/2007	60	1.3	44
7/5/2007	62	1.3	36
7/6/2007	58	1.4	44
7/7/2007	62	1.3	48
7/8/2007	63	1.1	48
7/9/2007	60	1.2	40
7/10/2007	63	1.2	42
7/11/2007	62	1.2	33
7/12/2007	63	1.3	27
7/13/2007	59	1.3	28
7/14/2007	61	1.6	31
7/15/2007	61	1.7	34
7/16/2007	63	1.2	38
7/17/2007	63	1.2	39
7/18/2007	61	1.4	36
7/19/2007	64	1.8	24
7/20/2007	64	1	37
7/21/2007	62	1.1	45
7/22/2007	62	1.1	49
7/23/2007	64	1.3	41
7/24/2007	60	1.2	42
7/25/2007	64	1.2	50
7/26/2007	64	1.1	49
7/27/2007	63	1.2	47
7/28/2007	68	1.1	50
7/29/2007	63	1	50
7/30/2007	68	1.5	45
7/31/2007	72	1.5	41
8/1/2007	69	1.3	47
8/2/2007	71	1.4	38
8/3/2007	70	1.4	30
8/4/2007	71	1.4	34
8/5/2007	69	3	41
8/6/2007	75	2.1	35
8/7/2007	77	1.2	34
8/8/2007	75	1.6	27
8/9/2007	76	1.4	30

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
8/10/2007	76	1.4	33
8/11/2007	76	1.3	39
8/12/2007	74	1.2	50
8/13/2007	79	1.3	32
8/14/2007	74	1.2	29
8/15/2007	72	1.8	24
8/16/2007	66	1.4	25
8/17/2007	67	1.7	35
8/18/2007	63	1.4	38
8/19/2007	68	1.4	47
8/20/2007	66	1.4	37
8/21/2007	67	1.3	35
8/22/2007	68	1.6	40
8/23/2007	63	1.4	43
8/24/2007	63	1.8	39
8/25/2007	61	1.9	37
8/26/2007	64	2.2	50
8/27/2007	65	2	41
8/28/2007	62	1.7	34
8/29/2007	65	1.8	40
8/30/2007	62	1.7	32
8/31/2007	61	1.7	38
9/1/2007	58	2	42
9/2/2007	69	1.6	45
9/3/2007	89	1.9	38
9/4/2007	97	2.2	49
9/5/2007	81	1.4	45
9/6/2007	82	1.2	50
9/7/2007	79	1.3	39
9/8/2007	77	1.3	35
9/9/2007	76	1.1	32
9/10/2007	70	1.2	29
9/11/2007	72	1.2	35
9/12/2007	67	1.2	27
9/13/2007	72	1.3	31
9/14/2007	72	1.3	29
9/15/2007	72	1.2	39
9/16/2007	71	1.5	45
9/17/2007	73	1.3	43
9/18/2007	73	1.3	39

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
9/19/2007	74	1.6	36
9/20/2007	75	3.6	45
9/21/2007	70	2	40
9/22/2007	110	36	64
9/23/2007	83	2.3	52
9/24/2007	70	1.7	44
9/25/2007	67	1.9	43
9/26/2007	64	2	46
9/27/2007	65	1.9	43
9/28/2007	65	1.8	41
9/29/2007	63	1.7	41
9/30/2007	62	1.8	49
10/1/2007	61	1.9	41
10/2/2007	64	1.9	42
10/3/2007	59	1.8	40
10/4/2007	63	1.6	37
10/5/2007	61	1.3	35
10/6/2007	62	1.1	42
10/7/2007	64	1	39
10/8/2007	61	1.1	45
10/9/2007	61	1.1	46
10/10/2007	63	1.1	39
10/11/2007	65	1.1	42
10/12/2007	68	1.3	41
10/13/2007	86	43	99
10/14/2007	81	1.4	49
10/15/2007	74	1.5	37
10/16/2007	78	1.3	40
10/17/2007	78	1.2	57
10/18/2007	76	1.3	45
10/19/2007	70	1.2	39
10/20/2007	74	1.1	40
10/21/2007	71	1.2	47
10/22/2007	69	1.2	52
10/23/2007	69	1	57
10/24/2007	72	0.99	43
10/25/2007	73	1.2	32
10/26/2007	71	0.93	28
10/27/2007	72	0.93	31
10/28/2007	69	0.98	46

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
10/29/2007	65	0.99	37
10/30/2007	69	1.1	29
10/31/2007	66	1.2	27
11/1/2007	68	0.74	25
11/2/2007	68	0.76	26
11/3/2007	63	0.75	32
11/4/2007	66	1.1	52
11/5/2007	64	0.85	51
11/6/2007	71	0.68	50
11/7/2007	68	0.61	39
11/8/2007	67	0.59	43
11/9/2007	69	0.61	31
11/10/2007	71	0.67	32
11/11/2007	77	0.59	40
11/12/2007	67	0.58	29
11/13/2007	64	0.55	38
11/14/2007	62	0.53	35
11/15/2007	64	0.54	31
11/16/2007	63	0.54	34
11/17/2007	63	0.54	35
11/18/2007	65	0.54	35
11/19/2007	67	0.54	22
11/20/2007	69	0.54	24
11/21/2007	65	0.57	28
11/22/2007	64	0.52	42
11/23/2007	63	0.58	39
11/24/2007	59	0.51	31
11/25/2007	61	0.49	38
11/26/2007	63	0.54	33
11/27/2007	63	0.5	33
11/28/2007	59	0.5	36
11/29/2007	61	0.5	37
11/30/2007	1420	295	534
12/1/2007	1090	3.8	60
12/2/2007	169	1.7	45
12/3/2007	81	1.4	43
12/4/2007	82	1.6	48
12/5/2007	78	1.4	44
12/6/2007	74	2.7	48
12/7/2007	731	42	247

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
12/8/2007	216	3.1	62
12/9/2007	144	3.5	60
12/10/2007	83	2.1	52
12/11/2007	77	1.4	56
12/12/2007	71	1.5	55
12/13/2007	71	1.3	58
12/14/2007	67	1.4	59
12/15/2007	71	1.3	60
12/16/2007	69	1.3	63
12/17/2007	68	1.4	66
12/18/2007	66	21	97
12/19/2007	140	61	201
12/20/2007	87	18	121
12/21/2007	131	4.4	114
12/22/2007	79	2.1	59
12/23/2007	81	1.7	58
12/24/2007	83	1.4	57
12/25/2007	77	1.3	59
12/26/2007	89	1.5	59
12/27/2007	81	1.4	55
12/28/2007	83	1.5	53
12/29/2007	78	1.4	55
12/30/2007	75	1.4	56
12/31/2007	72	1.4	56
1/1/2008	67	1.4	55
1/2/2008	74	1.6	56
1/3/2008	74	1.4	56
1/4/2008	73	352	594
1/5/2008	3180	296	1310
1/6/2008	998	166	610
1/7/2008	1330	19	192
1/8/2008	199	2.2	73
1/9/2008	107	1.8	66
1/10/2008	103	1.8	62
1/11/2008	92	1.7	55
1/12/2008	82	1.6	58
1/13/2008	84	1.6	57
1/14/2008	84	1.9	52
1/15/2008	84	1.7	52
1/16/2008	72	1.4	52

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
1/17/2008	75	1.5	48
1/18/2008	84	1.6	49
1/19/2008	76	1.8	53
1/20/2008	73	1.5	59
1/21/2008	79	1.7	61
1/22/2008	81	3.4	64
1/23/2008	84	90	151
1/24/2008	139	37	94
1/25/2008	82	163	219
1/26/2008	78	28	91
1/27/2008	1310	205	489
1/28/2008	1330	107	613
1/29/2008	242	3.2	96
1/30/2008	145	2.3	72
1/31/2008	94	2	66
2/1/2008	95	1.9	63
2/2/2008	90	1.8	70
2/3/2008	797	61	151
2/4/2008	450	3.1	69
2/5/2008	194	2.1	64
2/6/2008	97	1.9	57
2/7/2008	85	2	56
2/8/2008	80	1.9	58
2/9/2008	77	1.9	62
2/10/2008	70	1.9	64
2/11/2008	72	1.8	62
2/12/2008	73	1.8	52
2/13/2008	68	1.8	50
2/14/2008	67	5	53
2/15/2008	65	1.9	43
2/16/2008	64	1.8	52
2/17/2008	71	1.8	57
2/18/2008	73	1.9	52
2/19/2008	72	1.8	56
2/20/2008	229	15	110
2/21/2008	164	2.1	34
2/22/2008	366	75	169
2/23/2008	160	6.1	48
2/24/2008	295	54	103
2/25/2008	231	3.2	43

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
2/26/2008	112	2.4	34
2/27/2008	89	1.8	31
2/28/2008	85	2.1	38
2/29/2008	87	1.8	39
3/1/2008	89	2	42
3/2/2008	86	2.2	40
3/3/2008	87	1.4	39
3/4/2008	86	1.4	41
3/5/2008	82	1.7	37
3/6/2008	78	1.7	37
3/7/2008	82	1.5	37
3/8/2008	86	1.6	38
3/9/2008	82	1.8	41
3/10/2008	84	1.8	31
3/11/2008	90	1.5	29
3/12/2008	88	1.3	30
3/13/2008	86	1.4	33
3/14/2008	83	1.2	33
3/15/2008	75	5.6	40
3/16/2008	93	1.8	31
3/17/2008	77	1.6	30
3/18/2008	73	1.4	26
3/19/2008	72	1.4	26
3/20/2008	76	1.4	30
3/21/2008	73	1.4	37
3/22/2008	70	1.5	34
3/23/2008	75	1.4	33
3/24/2008	78	1.6	30
3/25/2008	79	1.6	33
3/26/2008	68	1.6	35
3/27/2008	70	1.5	37
3/28/2008	75	1.6	31
3/29/2008	74	1.6	69
3/30/2008	71	2.1	61
3/31/2008	76	1.4	43
4/1/2008	77	1.7	43
4/2/2008	80	1.6	42
4/3/2008	85	1.8	38
4/4/2008	84	1.6	36
4/5/2008	85	1.7	41

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
4/6/2008	83	1.6	38
4/7/2008	83	1.6	38
4/8/2008	75	1.6	39
4/9/2008	71	1.6	41
4/10/2008	89	1.5	35
4/11/2008	86	1.4	37
4/12/2008	78	1.4	37
4/13/2008	74	1.5	38
4/14/2008	70	1.4	31
4/15/2008	74	1.5	23
4/16/2008	78	1.8	44
4/17/2008	76	1.4	38
4/18/2008	75	1.5	35
4/19/2008	71	1.6	37
4/20/2008	72	1.5	35
4/21/2008	71	1.4	34
4/22/2008	75	1.6	31
4/23/2008	75	1.6	32
4/24/2008	77	1.6	29
4/25/2008	73	1.7	27
4/26/2008	65	1.8	30
4/27/2008	64	1.7	28
4/28/2008	65	1.6	27
4/29/2008	62	1.7	28
4/30/2008	70	1.7	31
5/1/2008	65	1.7	36
5/2/2008	59	1.4	36
5/3/2008	62	1.4	39
5/4/2008	60	1.3	39
5/5/2008	66	1.4	39
5/6/2008	65	1.3	38
5/7/2008	67	1.3	37
5/8/2008	67	1.3	34
5/9/2008	67	1.3	32
5/10/2008	70	1.4	31
5/11/2008	67	1.3	28
5/12/2008	68	1.3	27
5/13/2008	67	1.4	25
5/14/2008	65	1.5	25
5/15/2008	65	1.5	22

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
5/16/2008	65	1.5	24
5/17/2008	60	1.5	28
5/18/2008	59	1.4	26
5/19/2008	61	1.3	29
5/20/2008	63	1.4	32
5/21/2008	60	1.2	28
5/22/2008	267	30	49
5/23/2008	443	7.7	248
5/24/2008	178	1.9	33
5/25/2008	70	1.5	24
5/26/2008	70	1.2	26
5/27/2008	71	1.4	25
5/28/2008	71	1.4	26
5/29/2008	77	1.3	22
5/30/2008	73	1.3	18
5/31/2008	66	1.3	22
6/1/2008	72	1.3	24
6/2/2008	76	1.2	28
6/3/2008	77	1.3	24
6/4/2008	80	1.3	24
6/5/2008	71	1.3	27
6/6/2008	74	1.4	22
6/7/2008	79	1.3	28
6/8/2008	72	1.4	31
6/9/2008	69	1.2	32
6/10/2008	75	1.4	29
6/11/2008	76	1.5	30
6/12/2008	72	1.6	26
6/13/2008	74	1.4	31
6/14/2008	64	1.5	37
6/15/2008	60	1.3	37
6/16/2008	61	1.3	31
6/17/2008	56	1.4	27
6/18/2008	59	1.4	31
6/19/2008	56	1.3	33
6/20/2008	54	1.3	26
6/21/2008	47	1.3	26
6/22/2008	49	1.3	28
6/23/2008	49	1.7	31
6/24/2008	51	1.4	28

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
6/25/2008	48	1.1	33
6/26/2008	49	1.1	25
6/27/2008	49	1.2	30
6/28/2008	51	1.2	38
6/29/2008	48	1.1	48
6/30/2008	51	1.2	29
7/1/2008	51	1.3	22
7/2/2008	50	1.4	27
7/3/2008	57	1.1	32
7/4/2008	52	1.3	35
7/5/2008	52	1.1	19
7/6/2008	50	0.97	32
7/7/2008	51	1	28
7/8/2008	51	1.1	51
7/9/2008	52	1.3	50
7/10/2008	52	1.3	46
7/11/2008	52	1.2	40
7/12/2008	54	6.9	40
7/13/2008	52	3.8	32
7/14/2008	52	1.9	28
7/15/2008	47	1.9	27
7/16/2008	48	1.8	25
7/17/2008	51	1.8	23
7/18/2008	52	1.8	20
7/19/2008	51	1.8	25
7/20/2008	51	1.7	23
7/21/2008	51	1.6	20
7/22/2008	51	1.7	23
7/23/2008	51	1.4	31
7/24/2008	52	1.5	26
7/25/2008	54	1.4	24
7/26/2008	50	1.5	28
7/27/2008	51	1.3	34
7/28/2008	52	1.3	25
7/29/2008	50	1.4	19
7/30/2008	51	1.9	27
7/31/2008	57	1.8	32
8/1/2008	52	1.6	28
8/2/2008	48	2.2	36
8/3/2008	55	1.6	30

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
8/4/2008	60	1.8	26
8/5/2008	52	2	25
8/6/2008	53	2	33
8/7/2008	54	1.8	25
8/8/2008	53	1.7	29
8/9/2008	52	1.7	27
8/10/2008	50	1.6	25
8/11/2008	50	1.5	22
8/12/2008	52	1.4	25
8/13/2008	51	1.4	22
8/14/2008	52	1.4	29
8/15/2008	56	1.5	37
8/16/2008	62	2.1	20
8/17/2008	57	1.6	20
8/18/2008	64	1.4	19
8/19/2008	60	1.7	29
8/20/2008	57	1.9	30
8/21/2008	61	1.9	29
8/22/2008	62	1.5	32
8/23/2008	55	1.6	35
8/24/2008	62	1.4	31
8/25/2008	54	1.6	24
8/26/2008	55	1.6	25
8/27/2008	55	1.5	34
8/28/2008	61	1.5	27
8/29/2008	60	3.6	19
8/30/2008	57	5	24
8/31/2008	57	4.9	31
9/1/2008	57	3.4	30
9/2/2008	57	1.5	30
9/3/2008	56	1.4	25
9/4/2008	49	1.3	16
9/5/2008	58	1.2	23
9/6/2008	56	1.4	28
9/7/2008	58	1.3	40
9/8/2008	57	1.2	36
9/9/2008	57	1.4	36
9/10/2008	58	1.5	37
9/11/2008	61	1.3	29
9/12/2008	64	3.3	21

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
9/13/2008	62	4.8	31
9/14/2008	66	4.6	26
9/15/2008	66	3	30
9/16/2008	72	1.6	18
9/17/2008	69	2.8	31
9/18/2008	82	5.5	19
9/19/2008	62	7.2	20
9/20/2008	72	7.2	23
9/21/2008	71	7.2	24
9/22/2008	60	4.1	27
9/23/2008	70	1.1	24
9/24/2008	67	0.91	18
9/25/2008	70	0.92	16
9/26/2008	69	0.88	25
9/27/2008	71	0.92	37
9/28/2008	66	0.88	49
9/29/2008	68	0.87	33
9/30/2008	63	0.93	25
10/1/2008	64	0.97	20
10/2/2008	65	0.91	24
10/3/2008	61	0.83	31
10/4/2008	68	1.1	43
10/5/2008	71	0.98	34
10/6/2008	77	0.71	27
10/7/2008	76	0.77	18
10/8/2008	65	0.83	14
10/9/2008	68	0.71	11
10/10/2008	71	0.85	20
10/11/2008	66	0.63	35
10/12/2008	65	0.6	31
10/13/2008	72	0.61	39
10/14/2008	76	0.66	40
10/15/2008	70	0.81	40
10/16/2008	80	0.73	26
10/17/2008	72	0.67	19
10/18/2008	75	0.66	28
10/19/2008	87	1.3	34
10/20/2008	74	0.69	39
10/21/2008	86	0.82	30
10/22/2008	74	0.77	25

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
10/23/2008	67	0.69	14
10/24/2008	74	0.7	17
10/25/2008	75	0.74	20
10/26/2008	77	0.71	28
10/27/2008	65	0.73	20
10/28/2008	74	0.75	23
10/29/2008	80	0.85	18
10/30/2008	78	0.73	35
10/31/2008	69	0.8	23
11/1/2008	73	1	37
11/2/2008	82	0.78	44
11/3/2008	67	0.7	50
11/4/2008	77	5.8	57
11/5/2008	66	0.68	34
11/6/2008	62	0.72	18
11/7/2008	56	0.59	16
11/8/2008	57	0.64	24
11/9/2008	58	0.73	48
11/10/2008	60	0.69	30
11/11/2008	58	0.82	37
11/12/2008	69	0.67	40
11/13/2008	62	0.68	32
11/14/2008	66	0.69	40
11/15/2008	58	0.66	33
11/16/2008	66	0.81	32
11/17/2008	68	0.68	27
11/18/2008	64	0.74	26
11/19/2008	71	1	25
11/20/2008	68	1	24
11/21/2008	70	0.99	25
11/22/2008	69	0.97	28
11/23/2008	66	0.93	45
11/24/2008	71	0.97	43
11/25/2008	71	1	42
11/26/2008	711	280	295
11/27/2008	459	6.6	59
11/28/2008	78	1.6	44
11/29/2008	68	1.4	46
11/30/2008	60	1.4	45
12/1/2008	58	1.2	44

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
12/2/2008	60	1.1	39
12/3/2008	63	1.3	44
12/4/2008	71	1.2	41
12/5/2008	66	1.2	33
12/6/2008	56	1.2	35
12/7/2008	56	3.4	38
12/8/2008	59	1.3	51
12/9/2008	55	1.2	51
12/10/2008	63	1.2	35
12/11/2008	58	1.1	49
12/12/2008	60	1.2	48
12/13/2008	63	1.2	48
12/14/2008	56	1.1	48
12/15/2008	1770	373	792
12/16/2008	514	3	75
12/17/2008	1600	145	303
12/18/2008	656	8.8	105
12/19/2008	186	1.5	58
12/20/2008	112	1.3	62
12/21/2008	104	1.2	66
12/22/2008	103	3.8	69
12/23/2008	99	1.3	72
12/24/2008	69	1.2	71
12/25/2008	477	60	176
12/26/2008	286	2.2	75
12/27/2008	86	1.5	53
12/28/2008	80	1.4	52
12/29/2008	84	1.3	46
12/30/2008	79	2.5	48
12/31/2008	77	1.4	48
1/1/2009	76	1.3	43
1/2/2009	79	1.4	42
1/3/2009	78	1.4	39
1/4/2009	79	1.3	34
1/5/2009	73	1.3	35
1/6/2009	80	1.2	31
1/7/2009	79	1.1	38
1/8/2009	91	1.2	32
1/9/2009	87	1.2	30
1/10/2009	76	1.1	26

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
1/11/2009	78	1.1	27
1/12/2009	73	1.2	25
1/13/2009	71	1.2	21
1/14/2009	70	1.2	17
1/15/2009	74	1.2	21
1/16/2009	78	1.1	14
1/17/2009	73	1.2	21
1/18/2009	70	1.1	16
1/19/2009	74	1.1	15
1/20/2009	75	1.4	25
1/21/2009	75	1.4	45
1/22/2009	73	1.3	34
1/23/2009	72	12	37
1/24/2009	74	2.3	41
1/25/2009	72	1.1	40
1/26/2009	71	4.9	60
1/27/2009	69	1.1	29
1/28/2009	73	1.1	34
1/29/2009	69	1.1	34
1/30/2009	71	1.2	55
1/31/2009	67	1.1	56
2/1/2009	73	0.97	63
2/2/2009	70	0.99	23
2/3/2009	70	1	20
2/4/2009	71	1.1	23
2/5/2009	75	62	148
2/6/2009	245	180	324
2/7/2009	1170	147	374
2/8/2009	518	26	88
2/9/2009	2020	237	411
2/10/2009	406	6.1	67
2/11/2009	151	3.8	66
2/12/2009	117	3.4	53
2/13/2009	275	63	171
2/14/2009	210	5.2	72
2/15/2009	124	3.1	57
2/16/2009	1110	167	360
2/17/2009	684	102	196
2/18/2009	322	6	58
2/19/2009	118	4.2	50

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
2/20/2009	94	3.7	47
2/21/2009	86	3.4	50
2/22/2009	85	3.1	50
2/23/2009	82	2.8	47
2/24/2009	85	2.6	46
2/25/2009	77	2.5	43
2/26/2009	75	2.5	37
2/27/2009	80	2.4	39
2/28/2009	78	2.5	43
3/1/2009	72	2.5	43
3/2/2009	80	2.4	35
3/3/2009	71	2.6	32
3/4/2009	65	11	63
3/5/2009	73	4.1	47
3/6/2009	77	2.4	46
3/7/2009	80	2	43
3/8/2009	81	2	46
3/9/2009	84	2	51
3/10/2009	72	2.1	49
3/11/2009	73	1.9	52
3/12/2009	74	1.7	46
3/13/2009	78	1.8	40
3/14/2009	73	1.7	43
3/15/2009	72	1.6	44
3/16/2009	74	1.6	39
3/17/2009	72	1.6	37
3/18/2009	76	1.7	35
3/19/2009	82	1.7	33
3/20/2009	89	1.6	46
3/21/2009	78	1.8	43
3/22/2009	85	20	71
3/23/2009	78	1.5	40
3/24/2009	74	1.5	39
3/25/2009	74	1.6	31
3/26/2009	76	2.9	34
3/27/2009	76	6.6	32
3/28/2009	63	6.1	32
3/29/2009	68	6	30
3/30/2009	68	3.4	29
3/31/2009	61	1.2	34

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
4/1/2009	62	1.1	24
4/2/2009	65	1.2	40
4/3/2009	60	0.99	28
4/4/2009	61	0.93	34
4/5/2009	53	0.89	34
4/6/2009	56	0.95	35
4/7/2009	61	1	30
4/8/2009	59	1	36
4/9/2009	58	0.97	37
4/10/2009	60	1.6	45
4/11/2009	57	0.91	32
4/12/2009	54	1	41
4/13/2009	61	1	34
4/14/2009	62	0.97	34
4/15/2009	58	0.78	36
4/16/2009	61	0.8	33
4/17/2009	56	0.9	37
4/18/2009	54	0.95	29
4/19/2009	54	0.98	37
4/20/2009	51	1.1	32
4/21/2009	53	1.1	22
4/22/2009	53	1.1	24
4/23/2009	56	0.95	25
4/24/2009	50	0.93	30
4/25/2009	52	1	39
4/26/2009	53	1	37
4/27/2009	50	1	36
4/28/2009	55	0.96	23
4/29/2009	52	0.82	23
4/30/2009	49	0.86	41
5/1/2009	56	0.83	33
5/2/2009	52	0.81	48
5/3/2009	49	0.88	47
5/4/2009	46	0.96	35
5/5/2009	46	0.92	34
5/6/2009	44	0.96	44
5/7/2009	47	0.93	38
5/8/2009	46	0.92	31
5/9/2009	44	0.87	38
5/10/2009	48	0.83	44

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
5/11/2009	48	0.81	41
5/12/2009	48	1	30
5/13/2009	48	0.61	37
5/14/2009	46	0.62	34
5/15/2009	48	0.74	34
5/16/2009	48	0.63	43
5/17/2009	48	0.66	46
5/18/2009	46	0.67	35
5/19/2009	50	0.68	33
5/20/2009	50	0.68	39
5/21/2009	51	0.68	40
5/22/2009	48	0.65	37
5/23/2009	46	0.67	44
5/24/2009	48	0.64	48
5/25/2009	48	0.65	32
5/26/2009	48	0.68	41
5/27/2009	48	0.71	35
5/28/2009	47	0.68	28
5/29/2009	48	0.64	23
5/30/2009	48	0.64	35
5/31/2009	53	0.66	37
6/1/2009	51	0.61	29
6/2/2009	48	0.65	24
6/3/2009	55	0.9	34
6/4/2009	51	0.57	33
6/5/2009	66	0.63	27
6/6/2009	65	0.57	29
6/7/2009	51	0.58	24
6/8/2009	57	0.61	14
6/9/2009	57	0.54	18
6/10/2009	59	0.73	26
6/11/2009	60	0.53	29
6/12/2009	61	0.52	36
6/13/2009	60	0.53	31
6/14/2009	58	0.51	44
6/15/2009	61	0.55	30
6/16/2009	58	0.65	7.9
6/17/2009	64	0.65	10
6/18/2009	62	0.69	19
6/19/2009	62	0.71	19

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
6/20/2009	62	0.67	25
6/21/2009	59	0.68	22
6/22/2009	59	0.67	19
6/23/2009	63	0.63	21
6/24/2009	61	0.66	20
6/25/2009	60	0.67	25
6/26/2009	62	0.79	16
6/27/2009	57	0.8	20
6/28/2009	57	0.79	24
6/29/2009	56	0.73	15
6/30/2009	56	0.67	20
7/1/2009	54	0.63	18
7/2/2009	56	0.69	9
7/3/2009	57	0.77	13
7/4/2009	57	0.71	17
7/5/2009	54	0.71	16
7/6/2009	56	0.72	18
7/7/2009	57	0.85	8.6
7/8/2009	55	0.75	13
7/9/2009	57	0.72	11
7/10/2009	58	0.69	13
7/11/2009	54	0.78	13
7/12/2009	53	0.72	19
7/13/2009	51	0.75	19
7/14/2009	50	0.75	14
7/15/2009	53	0.89	14
7/16/2009	51	0.74	7
7/17/2009	48	0.8	7.4
7/18/2009	57	0.72	16
7/19/2009	48	0.69	18
7/20/2009	47	0.78	11
7/21/2009	48	0.78	7.4
7/22/2009	47	0.82	10
7/23/2009	49	1	6.7
7/24/2009	48	0.95	9
7/25/2009	47	0.94	10
7/26/2009	46	1.1	15
7/27/2009	46	0.76	8.2
7/28/2009	50	0.68	12
7/29/2009	48	0.67	17

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
7/30/2009	51	0.68	23
7/31/2009	49	0.69	14
8/1/2009	45	0.7	19
8/2/2009	48	0.71	26
8/3/2009	48	0.77	24
8/4/2009	48	0.71	14
8/5/2009	47	0.75	9.1
8/6/2009	45	0.69	13
8/7/2009	47	0.71	13
8/8/2009	45	0.71	20
8/9/2009	47	0.71	23
8/10/2009	46	0.71	19
8/11/2009	45	0.72	18
8/12/2009	46	0.75	16
8/13/2009	47	0.72	15
8/14/2009	46	0.76	14
8/15/2009	44	0.61	18
8/16/2009	44	0.6	23
8/17/2009	47	0.62	22
8/18/2009	44	0.61	13
8/19/2009	47	0.62	14
8/20/2009	46	0.58	11
8/21/2009	46	0.68	11
8/22/2009	44	0.67	13
8/23/2009	42	0.68	21
8/24/2009	43	0.72	12
8/25/2009	43	0.72	8.8
8/26/2009	42	0.69	4.1
8/27/2009	40	0.8	4.5
8/28/2009	41	0.8	5
8/29/2009	38	0.81	4.5
8/30/2009	35	0.8	8.7
8/31/2009	39	0.85	7.7
9/1/2009	36	0.74	4.6
9/2/2009	40	0.8	6.3
9/3/2009	43	0.69	4.3
9/4/2009	39	0.67	3.5
9/5/2009	38	0.67	8.3
9/6/2009	39	0.68	7.6
9/7/2009	38	0.69	13

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
9/8/2009	39	0.68	13
9/9/2009	39	0.71	11
9/10/2009	37	0.73	13
9/11/2009	40	0.71	9.9
9/12/2009	39	0.73	15
9/13/2009	36	0.75	20
9/14/2009	39	0.76	30
9/15/2009	39	0.76	27
9/16/2009	40	0.77	32
9/17/2009	39	0.78	21
9/18/2009	39	0.8	13
9/19/2009	40	0.77	20
9/20/2009	38	0.79	26
9/21/2009	38	0.86	22
9/22/2009	37	0.78	25
9/23/2009	39	0.82	30
9/24/2009	39	0.71	29
9/25/2009	38	0.7	31
9/26/2009	39	0.7	33
9/27/2009	41	0.69	39
9/28/2009	43	0.83	18
9/29/2009	45	0.74	24
9/30/2009	44	0.94	19
10/1/2009	47	0.76	8.2
10/2/2009	48	0.87	5
10/3/2009	49	0.84	7.6
10/4/2009	49	0.77	16
10/5/2009	50	0.83	13
10/6/2009	52	0.78	7.2
10/7/2009	49	0.83	8
10/8/2009	53	0.77	9
10/9/2009	53	0.83	6.6
10/10/2009	49	0.76	8.3
10/11/2009	50	0.74	13
10/12/2009	53	0.76	11
10/13/2009	53	5.6	41
10/14/2009	49	37	144
10/15/2009	51	1.5	37
10/16/2009	49	1.3	18
10/17/2009	51	1.2	28

Table A-6. Daily mean flow (cfs) at selected USGS gauges, July 1, 2007 to October 31, 2009 (Note: some USGS data are currently provisional)

Date	USGS Gauge Name (ID)		
	Santa Ana River at MWD Crossing (11066460)	Chino Creek at Schaefer near Chino (11073360)	Cucamonga Creek near Mira Loma (11073495)
10/18/2009	51	1.1	32
10/19/2009	52	1.1	17
10/20/2009	51	1.1	15
10/21/2009	51	1	19
10/22/2009	52	1	12
10/23/2009	53	1	7
10/24/2009	53	0.97	16
10/25/2009	54	0.98	33
10/26/2009	54	1	28
10/27/2009	53	1	22
10/28/2009	53	0.87	21
10/29/2009	52	0.9	36
10/30/2009	52	0.91	35
10/31/2009	45	0.99	45

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
01-Jul-07	0	0	0	0
02-Jul-07	0	0	0	0
03-Jul-07	0	0	0	0
04-Jul-07	0	0	0	0
05-Jul-07	0	0	0	0
06-Jul-07	0	0	0	0
07-Jul-07	0	0	0	0
08-Jul-07	0	0	0	0
09-Jul-07	0	0	0	0
10-Jul-07	0	0	0	0
11-Jul-07	0	0	0	0
12-Jul-07	0	0	0	0
13-Jul-07	0	0	0	0
14-Jul-07	0	0	0	0
15-Jul-07	0	0	0	0
16-Jul-07	0	0	0	0
17-Jul-07	0	0	0	0
18-Jul-07	0	0	0	0
19-Jul-07	0	0	0	0
20-Jul-07	0	0	0	0
21-Jul-07	0	0	0	0
22-Jul-07	0	0	0	0
23-Jul-07	0	0.01	0	0
24-Jul-07	0	0	0	0
25-Jul-07	0	0	0	0
26-Jul-07	0	0	0	0
27-Jul-07	0	0	0	0
28-Jul-07	0	0	0	0
29-Jul-07	0	0	0	0
30-Jul-07	0	0	0	0
31-Jul-07	0	0	0	0
01-Aug-07	0	0	0	0
02-Aug-07	0	0	0	0
03-Aug-07	0	0	0	0
04-Aug-07	0	0	0	0
05-Aug-07	0	0	0	0
06-Aug-07	0	0	0	0
07-Aug-07	0	0	0	0
08-Aug-07	0	0	0	0
09-Aug-07	0	0	0	0
10-Aug-07	0	0	0	0
11-Aug-07	0	0	0	0
12-Aug-07	0	0	0	0
13-Aug-07	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
14-Aug-07	0	0	0	0
15-Aug-07	0	0	0	0
16-Aug-07	0	0	0	0
17-Aug-07	0	0	0	0
18-Aug-07	0	0	0	0
19-Aug-07	0	0	0	0
20-Aug-07	0	0	0	0
21-Aug-07	0	0	0	0
22-Aug-07	0	0	0	0
23-Aug-07	0	0	0	0
24-Aug-07	0	0	0	0
25-Aug-07	0	0	0	0
26-Aug-07	0	0	0	0
27-Aug-07	0	0	0	0
28-Aug-07	0	0	0	0
29-Aug-07	0	0	0	0
30-Aug-07	0	0	0	0
31-Aug-07	0	0	0	0
01-Sep-07	0	0	0	0
02-Sep-07	0	0	0	0
03-Sep-07	0	0	0	0
04-Sep-07	0	0	0	0
05-Sep-07	0	0	0	0
06-Sep-07	0	0	0	0
07-Sep-07	0	0	0	0
08-Sep-07	0	0	0	0
09-Sep-07	0	0	0	0
10-Sep-07	0	0	0	0
11-Sep-07	0	0	0	0
12-Sep-07	0	0	0	0
13-Sep-07	0	0	0	0
14-Sep-07	0	0	0	0
15-Sep-07	0	0	0	0
16-Sep-07	0	0	0	0
17-Sep-07	0	0	0	0
18-Sep-07	0	0	0	0
19-Sep-07	0	0	0.01	0
20-Sep-07	0.03	0.05	0.1	M
21-Sep-07	0.02	0	0	M
22-Sep-07	0.07	0.06	0.02	M
23-Sep-07	0.19	0.1	0.13	M
24-Sep-07	0.01	0	0.01	0
25-Sep-07	0	0	0	0
26-Sep-07	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
27-Sep-07	0	0	0	0
28-Sep-07	0	0	0	0
29-Sep-07	0	0	0	0
30-Sep-07	0	0	0	0
01-Oct-07	0	0	0	0
02-Oct-07	0	0	0	0
03-Oct-07	0	0	0	0
04-Oct-07	0	0	0	0
05-Oct-07	0	0	0	0
06-Oct-07	0	0	0	0
07-Oct-07	0	0	0	0
08-Oct-07	0	0	0	0
09-Oct-07	0	0	0	0
10-Oct-07	0	0	0	0
11-Oct-07	0	0	0	0
12-Oct-07	0	0	0	0
13-Oct-07	0.18	0.14	0.43	M
14-Oct-07	0	0.01	0.01	M
15-Oct-07	0	0	0	0
16-Oct-07	0	0	0	0
17-Oct-07	0	0	0	0
18-Oct-07	0	0	0	0
19-Oct-07	0	0	0	0
20-Oct-07	0	0	0	0
21-Oct-07	0	0	0	0
22-Oct-07	0	0	0	0
23-Oct-07	0	0	0	0
24-Oct-07	0	0	0	0
25-Oct-07	0	0	0	0
26-Oct-07	0	0	0	0
27-Oct-07	0	0	0	0
28-Oct-07	0	0	0	0
29-Oct-07	0	0	0	0
30-Oct-07	0	0	0	0
31-Oct-07	0	0	0	0
01-Nov-07	0	0	0	0
02-Nov-07	0	0	0	0
03-Nov-07	0	0	0	0
04-Nov-07	0	0	0	0
05-Nov-07	0	0	0	0
06-Nov-07	0	0	0	0
07-Nov-07	0	0	0	M
08-Nov-07	0	0	0	0
09-Nov-07	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
10-Nov-07	0	0	0	0
11-Nov-07	0	0	0	0
12-Nov-07	0	0	0	0
13-Nov-07	0	0	0	0
14-Nov-07	0	0	0	0
15-Nov-07	0	0	0	0
16-Nov-07	0	0	0	0
17-Nov-07	0	0	0	0
18-Nov-07	0	0	0	0
19-Nov-07	0	0	0	0
20-Nov-07	0	0	0	M
21-Nov-07	0	0	0	0
22-Nov-07	0	0	0	0
23-Nov-07	0	0	0	M
24-Nov-07	0	0	0	0
25-Nov-07	0	0	0	0
26-Nov-07	0	0	0	0
27-Nov-07	0	0	0	0
28-Nov-07	0	0	0	0
29-Nov-07	0	0	0	0
30-Nov-07	0.04	0.1	0.07	M
01-Dec-07	1.85	1.84	1.73	M
02-Dec-07	0	0	0	0
03-Dec-07	0.01	0	0	0
04-Dec-07	0	0	0	0
05-Dec-07	0	0	0	0
06-Dec-07	0	0	0	0
07-Dec-07	0.46	0.27	0.1	M
08-Dec-07	0.06	0.12	0.1	M
09-Dec-07	0.15	0.1	0.05	M
10-Dec-07	0	0	0	0
11-Dec-07	0	0	0	0
12-Dec-07	0	0	0	0
13-Dec-07	0	0	0	0
14-Dec-07	0	0	0	0
15-Dec-07	0	0	0	0
16-Dec-07	0	0	0	0
17-Dec-07	0	0	0	0
18-Dec-07	0	0	0	0
19-Dec-07	0.18	0.18	0.06	M
20-Dec-07	0	0	0	0
21-Dec-07	0.1	0.1	0.02	M
22-Dec-07	0	0	0.02	0
23-Dec-07	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
24-Dec-07	0	0	0	0
25-Dec-07	0	0	0	0
26-Dec-07	0	0	0	0
27-Dec-07	0	0	0	0
28-Dec-07	0	0	0	0
29-Dec-07	0	0	0	0
30-Dec-07	0	0	0	0
31-Dec-07	0	0	0	0
01-Jan-08	0	0	0	0
02-Jan-08	0	0	0	0
03-Jan-08	0	0	0	0
04-Jan-08	0	0	0	0
05-Jan-08	1.21	0.6	1.42	M
06-Jan-08	0.12	0.12	0.18	M
07-Jan-08	0.71	0.7	0.79	M
08-Jan-08	0.01	0	0	0
09-Jan-08	0	0.01	0.01	M
10-Jan-08	0	0	0	0
11-Jan-08	0	0	0	M
12-Jan-08	0	0	0	0
13-Jan-08	0	0	0	0
14-Jan-08	0	0	0	0
15-Jan-08	0	0	0	0
16-Jan-08	0	0.01	0	0
17-Jan-08	0	0	0	M
18-Jan-08	0	0	0	0
19-Jan-08	0	0	0	0
20-Jan-08	0	0	0	0
21-Jan-08	0	0	0	0
22-Jan-08	0.02	0.02	0.09	M
23-Jan-08	0	0	0.02	M
24-Jan-08	0.16	0.2	0.28	M
25-Jan-08	0.03	0.03	0.18	M
26-Jan-08	0	0	0.01	0
27-Jan-08	0.53	0.39	0.65	M
28-Jan-08	0.32	0.3	0.97	M
29-Jan-08	0.02	0.03	0.07	M
30-Jan-08	0.01	0.01	0	0
31-Jan-08	0	0	0	0
01-Feb-08	0	0	0	0
02-Feb-08	0	0	0	0
03-Feb-08	0.1	0.06	0.07	M
04-Feb-08	0.24	0.13	0.26	M
05-Feb-08	0	0	0	M

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
06-Feb-08	0	0	0	0
07-Feb-08	0	0	0	0
08-Feb-08	0	0	0	0
09-Feb-08	0	0	0	0
10-Feb-08	0	0	0	0
11-Feb-08	0	0	0	0
12-Feb-08	0	0	0	0
13-Feb-08	0	0	0	0
14-Feb-08	0	0	0	0
15-Feb-08	0	0	0	0
16-Feb-08	0	0	0	0
17-Feb-08	0	0	0	0
18-Feb-08	0	0	0	0
19-Feb-08	0	0	0	0
20-Feb-08	0.07	0.06	0.04	M
21-Feb-08	0.04	0.02	0.02	M
22-Feb-08	0.28	0.26	0.66	M
23-Feb-08	0.03	0.02	0.02	M
24-Feb-08	0.15	0.11	0.3	M
25-Feb-08	0.02	0.03	0.08	M
26-Feb-08	0	0	0.01	0
27-Feb-08	0	0	0	0
28-Feb-08	0	0	0	0
29-Feb-08	0	0	0	0
01-Mar-08	0	0.02	0	0
02-Mar-08	0.01	0	0	0
03-Mar-08	0	0	0	0
04-Mar-08	0	0	0	0
05-Mar-08	0	0	0	0
06-Mar-08	0	0	0	0
07-Mar-08	0	0	0	0
08-Mar-08	0	0	0	0
09-Mar-08	0	0.01	0	0
10-Mar-08	0	0	0	0
11-Mar-08	0	0	0	0
12-Mar-08	0	0	0	0
13-Mar-08	0	0	0	0
14-Mar-08	0	0	0	0
15-Mar-08	0	0	0	0
16-Mar-08	0.12	0.13	0.09	M
17-Mar-08	0.01	0	0	0
18-Mar-08	0	0	0	0
19-Mar-08	0	0	0	0
20-Mar-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
21-Mar-08	0	0	0	0
22-Mar-08	0	0	0	0
23-Mar-08	0	0	0	0
24-Mar-08	0	0	0	0
25-Mar-08	0	0	0	0
26-Mar-08	0	0	0	0
27-Mar-08	0	0	0	0
28-Mar-08	0	0	0	0
29-Mar-08	0	0	0	0
30-Mar-08	0	0	0	0
31-Mar-08	0	0	0	0
01-Apr-08	0	0	0	0
02-Apr-08	0	0	0	0
03-Apr-08	0	0	0	0
04-Apr-08	0	0	0	0
05-Apr-08	0	0	0	0
06-Apr-08	0	0	0	0
07-Apr-08	0	0	0	0
08-Apr-08	0	0	0	0
09-Apr-08	0	0	0	0
10-Apr-08	0	0	0	0
11-Apr-08	0	0	0	0
12-Apr-08	0	0	0	0
13-Apr-08	0	0	0	0
14-Apr-08	0	0	0	0
15-Apr-08	0	0	0	0
16-Apr-08	0	0	0	0
17-Apr-08	0	0	0	0
18-Apr-08	0	0	0	0
19-Apr-08	0	0	0	0
20-Apr-08	0	0	0	0
21-Apr-08	0	0	0	0
22-Apr-08	0	0	0	0
23-Apr-08	0	0	0	0
24-Apr-08	0	0	0	0
25-Apr-08	0	0	0	0
26-Apr-08	0	0	0	0
27-Apr-08	0	0	0	0
28-Apr-08	0	0	0	0
29-Apr-08	0	0	0	0
30-Apr-08	0	0	0	0
01-May-08	0	0	0	0
02-May-08	0	0	0	0
03-May-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
04-May-08	0	0	0	0
05-May-08	0	0	0	0
06-May-08	0	0	0	0
07-May-08	0	0	0	0
08-May-08	0	0	0	0
09-May-08	0	0	0	0
10-May-08	0	0	0	0
11-May-08	0	0	0	0
12-May-08	0	0	0	0
13-May-08	0	0	0	0
14-May-08	0	0	0	0
15-May-08	0	0	0	0
16-May-08	0	0	0	0
17-May-08	0	0	0	0
18-May-08	0	0	0	0
19-May-08	0	0	0	0
20-May-08	0	0	0	0
21-May-08	0	0	0	0
22-May-08	0	0	0	0
23-May-08	0.24	0.29	0.25	M
24-May-08	0.28	0.21	0.01	M
25-May-08	0.01	0	0	0
26-May-08	0	0	0	0
27-May-08	0	0	0	0
28-May-08	0	0	0	0
29-May-08	0	0	0	0
30-May-08	0	0	0	0
31-May-08	0	0	0	0
01-Jun-08	0	0	0	0
02-Jun-08	0	0	0	0
03-Jun-08	0	0	0	0
04-Jun-08	0	0	0	0
05-Jun-08	0	0	0	0
06-Jun-08	0	0	0	0
07-Jun-08	0	0	0	0
08-Jun-08	0	0	0	0
09-Jun-08	0	0	0	0
10-Jun-08	0	0	0	0
11-Jun-08	0	0	0	0
12-Jun-08	0	0	0	0
13-Jun-08	0	0	0	0
14-Jun-08	0	0	0	0
15-Jun-08	0	0	0	0
16-Jun-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
17-Jun-08	0	0	0	0
18-Jun-08	0	0	0	0
19-Jun-08	0	0	0	0
20-Jun-08	0	0	0	0
21-Jun-08	0	0	0	0
22-Jun-08	0	0	0	0
23-Jun-08	0	0	0	0
24-Jun-08	0	0	0	0
25-Jun-08	0	0	0	0
26-Jun-08	0	0	0	0
27-Jun-08	0	0	0	0
28-Jun-08	0	0	0	0
29-Jun-08	0	0	0	0
30-Jun-08	0	0	0	0
01-Jul-08	0	0	0	0
02-Jul-08	0	0	0	0
03-Jul-08	0	0	0	0
04-Jul-08	0	0	0	0
05-Jul-08	0	0	0	0
06-Jul-08	0	0	0	0
07-Jul-08	0	0	0	0
08-Jul-08	0	0	0	0
09-Jul-08	0	0	0	0
10-Jul-08	0	0	0	0
11-Jul-08	0	0	0	0
12-Jul-08	0	0	0	0
13-Jul-08	0	0	0	0
14-Jul-08	0	0	0	0
15-Jul-08	0	0	0	0
16-Jul-08	0	0	0	0
17-Jul-08	0	0	0	0
18-Jul-08	0	0	0	0
19-Jul-08	0	0	0	0
20-Jul-08	0	0	0	0
21-Jul-08	0	0	0	0
22-Jul-08	0	0	0	0
23-Jul-08	0	0	0	0
24-Jul-08	0	0	0	0
25-Jul-08	0	0	0	0
26-Jul-08	0	0	0	0
27-Jul-08	0	0	0	0
28-Jul-08	0	0	0	0
29-Jul-08	0	0	0	0
30-Jul-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
31-Jul-08	0	0	0	0
01-Aug-08	0	0	0	0
02-Aug-08	0	0	0	0
03-Aug-08	0	0	0	0
04-Aug-08	0	0	0	0
05-Aug-08	0	0	0	0
06-Aug-08	0	0	0	0
07-Aug-08	0	0	0	0
08-Aug-08	0	0	0	0
09-Aug-08	0	0	0	0
10-Aug-08	0	0	0	0
11-Aug-08	0	0	0	0
12-Aug-08	0	0	0	0
13-Aug-08	0	0	0	0
14-Aug-08	0	0	0	0
15-Aug-08	0	0	0	0
16-Aug-08	0	0	0	0
17-Aug-08	0	0	0	0
18-Aug-08	0	0	0	0
19-Aug-08	0	0	0	0
20-Aug-08	0	0	0	0
21-Aug-08	0	0	0	0
22-Aug-08	0	0	0	0
23-Aug-08	0	0	0	0
24-Aug-08	0	0	0	0
25-Aug-08	0	0	0	0
26-Aug-08	0	0	0	0
27-Aug-08	0	0	0	0
28-Aug-08	0	0	0	0
29-Aug-08	0	0	0	0
30-Aug-08	0	0	0	0
31-Aug-08	0	0	0	0
01-Sep-08	0	0	0	0
02-Sep-08	0	0	0	0
03-Sep-08	0	0	0	0
04-Sep-08	0	0	0	0
05-Sep-08	0	0	0	0
06-Sep-08	0	0	0	0
07-Sep-08	0	0	0	0
08-Sep-08	0	0	0	0
09-Sep-08	0	0	0	0
10-Sep-08	0	0	0	0
11-Sep-08	0	0	0	0
12-Sep-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
13-Sep-08	0	0	0	0
14-Sep-08	0	0	0	0
15-Sep-08	0	0	0	0
16-Sep-08	0	0	0	0
17-Sep-08	0	0	0	0
18-Sep-08	0	0	0	0
19-Sep-08	0	0	0	0
20-Sep-08	0	0	0	0
21-Sep-08	0	0	0	0
22-Sep-08	0	0	0	0
23-Sep-08	0	0	0	0
24-Sep-08	0	0	0	0
25-Sep-08	0	0	0	0
26-Sep-08	0	0	0	0
27-Sep-08	0	0	0	0
28-Sep-08	0	0	0	0
29-Sep-08	0	0	0	0
30-Sep-08	0	0	0	0
01-Oct-08	0	0	0	0
02-Oct-08	0	0	0	0
03-Oct-08	0	0	0	0
04-Oct-08	0	0	0	0
05-Oct-08	0	0	0	0
06-Oct-08	0	0	0	0
07-Oct-08	0	0	0	0
08-Oct-08	0	0	0	0
09-Oct-08	0	0	0	0
10-Oct-08	0	0	0	0
11-Oct-08	0	0	0	0
12-Oct-08	0	0	0	0
13-Oct-08	0	0	0	0
14-Oct-08	0	0	0	0
15-Oct-08	0	0	0	0
16-Oct-08	0	0	0	0
17-Oct-08	0	0	0	0
18-Oct-08	0	0	0	0
19-Oct-08	0	0	0	0
20-Oct-08	0	0	0	0
21-Oct-08	0	0	0	0
22-Oct-08	0	0	0	0
23-Oct-08	0	0	0	0
24-Oct-08	0	0	0	0
25-Oct-08	0	0	0	0
26-Oct-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
27-Oct-08	0	0	0	0
28-Oct-08	0	0	0	0
29-Oct-08	0	0	0	0
30-Oct-08	0	0	0	0
31-Oct-08	0	0	0	0
01-Nov-08	0	0	0	0
02-Nov-08	0.06	0.03	0.06	0
03-Nov-08	0	0	0	0
04-Nov-08	0.15	0.09	0.15	M
05-Nov-08	0.01	0.01	0	M
06-Nov-08	0	0	0	0
07-Nov-08	0	0	0	0
08-Nov-08	0	0	0	0
09-Nov-08	0	0	0.01	0
10-Nov-08	0.01	0	0	0
11-Nov-08	0	0.01	0	0
12-Nov-08	0	0	0	0
13-Nov-08	0	0	0	0
14-Nov-08	0	0	0	0
15-Nov-08	0	0	0	0
16-Nov-08	0	0	0	0
17-Nov-08	0	0	0	0
18-Nov-08	0	0	0	0
19-Nov-08	0	0	0	0
20-Nov-08	0	0	0	0
21-Nov-08	0	0	0	0
22-Nov-08	0	0	0	0
23-Nov-08	0	0	0	0
24-Nov-08	0	0	0	0
25-Nov-08	0	0	0	0
26-Nov-08	0.57	0.64	0.98	M
27-Nov-08	0.14	0.21	0.18	M
28-Nov-08	0.01	0	0	0
29-Nov-08	0	0	0	M
30-Nov-08	0	0	0	0
01-Dec-08	0.01	0	0	0
02-Dec-08	0	0	0	M
03-Dec-08	0	0	0	0
04-Dec-08	0	0	0	0
05-Dec-08	0	0	0	0
06-Dec-08	0	0	0	0
07-Dec-08	0	0	0	0
08-Dec-08	0	0	0	0
09-Dec-08	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
10-Dec-08	0	0	0	0
11-Dec-08	0	0	0	0
12-Dec-08	0	0	0	0
13-Dec-08	0	0	0	0
14-Dec-08	0	0	0	0
15-Dec-08	0.41	0.31	0.7	M
16-Dec-08	1.05	0.92	1.34	M
17-Dec-08	0.06	0.09	0.06	M
18-Dec-08	0.87	1.14	1.07	M
19-Dec-08	0	0	0	0
20-Dec-08	0	0	0	M
21-Dec-08	0	0	0	0
22-Dec-08	0	0	0	0
23-Dec-08	0.04	0.05	0.15	M
24-Dec-08	0	0	0.01	M
25-Dec-08	0.02	0.04	0.18	M
26-Dec-08	0.13	0.14	0.34	M
27-Dec-08	0	0	0	M
28-Dec-08	0	0.01	0	0
29-Dec-08	0	0	0	0
30-Dec-08	0	0	0	0
31-Dec-08	0	0	0	0
01-Jan-09	0	0	0	0
02-Jan-09	0	0	0	0
03-Jan-09	0	0	0.02	M
04-Jan-09	0.02	0.02	0	M
05-Jan-09	0	0	0	0
06-Jan-09	0	0	0	0
07-Jan-09	0	0	0	0
08-Jan-09	0	0	0	0
09-Jan-09	0	0	0	0
10-Jan-09	0	0	0	0
11-Jan-09	0	0	0	0
12-Jan-09	0	0	0	0
13-Jan-09	0	0	0	0
14-Jan-09	0	0	0	0
15-Jan-09	0	0	0	0
16-Jan-09	0	0	0	0
17-Jan-09	0	0	0	0
18-Jan-09	0	0	0	0
19-Jan-09	0	0	0	0
20-Jan-09	0	0	0	0
21-Jan-09	0	0	0.02	M
22-Jan-09	0.01	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
23-Jan-09	0	0.01	0	M
24-Jan-09	0.02	0.03	0.03	M
25-Jan-09	0.01	0.02	0.08	M
26-Jan-09	0	0	0.01	M
27-Jan-09	0.09	0.01	0	0
28-Jan-09	0	0	0	0
29-Jan-09	0	0	0	0
30-Jan-09	0	0	0	0
31-Jan-09	0	0	0	0
01-Feb-09	0	0	0	0
02-Feb-09	0	0	0	0
03-Feb-09	0	0	0	0
04-Feb-09	0	0	0	0
05-Feb-09	0	0	0	0
06-Feb-09	0.39	0.32	0.55	M
07-Feb-09	0.77	0.83	0.72	M
08-Feb-09	0.25	0.14	0.13	M
09-Feb-09	0.81	0.4	0.48	M
10-Feb-09	0.56	0.45	0.55	M
11-Feb-09	0	0	0	0
12-Feb-09	0.02	0	0	0
13-Feb-09	0.01	0	0	0
14-Feb-09	0.21	0.2	0.31	M
15-Feb-09	0	0.01	0	M
16-Feb-09	0.05	0.02	0.13	M
17-Feb-09	0.42	0.28	0.72	M
18-Feb-09	0.09	0.09	0.2	M
19-Feb-09	0.01	0.01	0	M
20-Feb-09	0	0	0	0
21-Feb-09	0	0	0	0
22-Feb-09	0	0	0	0
23-Feb-09	0	0	0	0
24-Feb-09	0.02	0.02	0.02	M
25-Feb-09	0	0	0	0
26-Feb-09	0	0	0	0
27-Feb-09	0	0	0	0
28-Feb-09	0	0	0	0
01-Mar-09	0	0	0	0
02-Mar-09	0	0	0	0
03-Mar-09	0	0	0	0
04-Mar-09	0	0	0	0
05-Mar-09	0.01	0.02	0.02	M
06-Mar-09	0	0	0	0
07-Mar-09	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
08-Mar-09	0	0	0	0
09-Mar-09	0	0	0	0
10-Mar-09	0	0	0	0
11-Mar-09	0	0	0	0
12-Mar-09	0	0	0	0
13-Mar-09	0	0	0	0
14-Mar-09	0	0	0	0
15-Mar-09	0	0	0	0
16-Mar-09	0	0	0	0
17-Mar-09	0	0	0	0
18-Mar-09	0	0	0	0
19-Mar-09	0	0	0	0
20-Mar-09	0	0	0	0
21-Mar-09	0	0	0	0
22-Mar-09	0.06	0.01	0.13	M
23-Mar-09	0.07	0.03	0.17	M
24-Mar-09	0	0	0	0
25-Mar-09	0	0	0	0
26-Mar-09	0	0	0	0
27-Mar-09	0	0	0	0
28-Mar-09	0	0	0	0
29-Mar-09	0	0	0	0
30-Mar-09	0	0	0	0
31-Mar-09	0	0	0	0
01-Apr-09	0	0	0	0
02-Apr-09	0	0	0	0
03-Apr-09	0.02	0	0	0
04-Apr-09	0	0	0	0
05-Apr-09	0	0	0	0
06-Apr-09	0	0	0	0
07-Apr-09	0	0	0	0
08-Apr-09	0	0	0	M
09-Apr-09	0	0	0	0
10-Apr-09	0	0	0	0
11-Apr-09	0	0	0	0
12-Apr-09	0	0	0	0
13-Apr-09	0	0	0	0
14-Apr-09	0	0	0	0
15-Apr-09	0	0	0	0
16-Apr-09	0	0	0	0
17-Apr-09	0	0	0	0
18-Apr-09	0	0	0	0
19-Apr-09	0	0	0	0
20-Apr-09	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
21-Apr-09	0	0	0	0
22-Apr-09	0	0	0	0
23-Apr-09	0	0	0	0
24-Apr-09	0	0	0	0
25-Apr-09	0	0	0	0
26-Apr-09	0	0	0	0
27-Apr-09	0	0	0	0
28-Apr-09	0	0	0	0
29-Apr-09	0	0	0	0
30-Apr-09	0	0	0	0
01-May-09	0	0	0	0
02-May-09	0	0	0	0
03-May-09	0	0	0	0
04-May-09	0	0	0	0
05-May-09	0	0	0	0
06-May-09	0	0	0	0
07-May-09	0	0	0	0
08-May-09	0	0	0	0
09-May-09	0	0	0	0
10-May-09	0	0	0	0
11-May-09	0	0	0	0
12-May-09	0	0	0	0
13-May-09	0	0	0	0
14-May-09	0	0	0	0
15-May-09	0	0	0	0
16-May-09	0	0	0	0
17-May-09	0	0	0	0
18-May-09	0	0	0	0
19-May-09	0	0	0	0
20-May-09	0	0	0	0
21-May-09	0	0	0	0
22-May-09	0	0	0	0
23-May-09	0	0	0	0
24-May-09	0	0	0	0
25-May-09	0	0	0	0
26-May-09	0	0	0	0
27-May-09	0	0	0	0
28-May-09	0	0	0	0
29-May-09	0	0	0	0
30-May-09	0.01	0.02	0	0
31-May-09	0	0	0	0
01-Jun-09	0	0	0	0
02-Jun-09	0	0	0	0
03-Jun-09	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
04-Jun-09	0.07	0.04	0	0
05-Jun-09	0.01	0	0	0
06-Jun-09	0	0	0	0
07-Jun-09	0	0	0	0
08-Jun-09	0	0	0	0
09-Jun-09	0	0	0	0
10-Jun-09	0	0	0	0
11-Jun-09	0	0	0	0
12-Jun-09	0	0	0	0
13-Jun-09	0	0	0	0
14-Jun-09	0	0	0	0
15-Jun-09	0	0	0	0
16-Jun-09	0	0	0	0
17-Jun-09	0	0	0	0
18-Jun-09	0	0	0	0
19-Jun-09	0	0	0	0
20-Jun-09	0	0	0	0
21-Jun-09	0	0	0	0
22-Jun-09	0	0	0	0
23-Jun-09	0	0	0	0
24-Jun-09	0	0	0	0
25-Jun-09	0	0	0	0
26-Jun-09	0	0	0	0
27-Jun-09	0	0	0	0
28-Jun-09	0	0	0	0
29-Jun-09	0	0	0	0
30-Jun-09	0	0	0	0
01-Jul-09	0	0	0	0
02-Jul-09	0	0	0	0
03-Jul-09	0	0	0	0
04-Jul-09	0	0	0	0
05-Jul-09	0	0	0	0
06-Jul-09	0	0	0	0
07-Jul-09	0	0	0	0
08-Jul-09	0	0	0	0
09-Jul-09	0	0	0	0
10-Jul-09	0	0	0	0
11-Jul-09	0	0	0	0
12-Jul-09	0	0	0	0
13-Jul-09	0	0	0	0
14-Jul-09	0	0	0	0
15-Jul-09	0	0	0	0
16-Jul-09	0	0	0	0
17-Jul-09	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
18-Jul-09	0	0	0	0
19-Jul-09	0	0	0	0
20-Jul-09	0	0	0	0
21-Jul-09	0	0	0	0
22-Jul-09	0	0	0	0
23-Jul-09	0	0	0	0
24-Jul-09	0	0	0	0
25-Jul-09	0	0	0	0
26-Jul-09	0	0	0	0
27-Jul-09	0	0	0	0
28-Jul-09	0	0	0	0
29-Jul-09	0	0	0	0
30-Jul-09	0	0	0	0
31-Jul-09	0	0	0	0
01-Aug-09	0	0	0	0
02-Aug-09	0	0	0	0
03-Aug-09	0	0	0	0
04-Aug-09	0	0	0	0
05-Aug-09	0	0	0	0
06-Aug-09	0	0	0	0
07-Aug-09	0	0	0	0
08-Aug-09	0	0	0	0
09-Aug-09	0	0	0	0
10-Aug-09	0	0	0	0
11-Aug-09	0	0	0	0
12-Aug-09	0	0	0	0
13-Aug-09	0	0	0	0
14-Aug-09	0	0	0	0
15-Aug-09	0	0	0	0
16-Aug-09	0	0	0	0
17-Aug-09	0	0	0	0
18-Aug-09	0	0	0	0
19-Aug-09	0	0	0	0
20-Aug-09	0	0	0	0
21-Aug-09	0	0	0	0
22-Aug-09	0	0	0	0
23-Aug-09	0	0	0	0
24-Aug-09	0	0	0	0
25-Aug-09	0	0	0	0
26-Aug-09	0	0	0	0
27-Aug-09	0	0	0	0
28-Aug-09	0	0	0	0
29-Aug-09	0	0	0	0
30-Aug-09	0	0	0	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
31-Aug-09	0	0	0	0
01-Sep-09	0	0	0	0
02-Sep-09	0	0	0	0
03-Sep-09	0	0	0	0
04-Sep-09	0	0	0	0
05-Sep-09	0	0	0	0
06-Sep-09	0	0	0	0
07-Sep-09	0	0	0	0
08-Sep-09	0	0	0	0
09-Sep-09	0	0	0	0
10-Sep-09	0	0	0	0
11-Sep-09	0	0	0	0
12-Sep-09	0	0	0	0
13-Sep-09	0	0	0	0
14-Sep-09	0	0	0	0
15-Sep-09	0	0	0	0
16-Sep-09	0	0	0	0
17-Sep-09	0	0	0	0
18-Sep-09	0	0	0	0
19-Sep-09	0	0	0	0
20-Sep-09	0	0	0	0
21-Sep-09	0	0	0	0
22-Sep-09	0	0	0	0
23-Sep-09	0	0	0	0
24-Sep-09	0	0	0	0
25-Sep-09	0	0	0	0
26-Sep-09	0	0	0	0
27-Sep-09	0	0	0	0
28-Sep-09	0	0	0	0
29-Sep-09	0	0	0	0
30-Sep-09	0	0	0	0
01-Oct-09	0	0	0	0
02-Oct-09	0	0	0	0
03-Oct-09	0	0	0	0
04-Oct-09	0	0	0	0
05-Oct-09	0	0	0	0
06-Oct-09	0	0	0	0
07-Oct-09	0	0	0	0
08-Oct-09	0	0	0	0
09-Oct-09	0	0	0	0
10-Oct-09	0	0	0	0
11-Oct-09	0	0	0	0
12-Oct-09	0	0	0	0
13-Oct-09	0	0	0.02	0

Table A-7. Daily rainfall data (inches) from selected rainfall gauges in MSAR watershed, July 1, 2007 through October 31, 2009 (M = missing data)

Date	Rainfall Gauge, inches			
	Riverside North	Riverside South	Corona	Norco
14-Oct-09	0	0	0.28	0.15
15-Oct-09	0	0.01	0.06	0.01
16-Oct-09	0	0	0	0.01
17-Oct-09	0	0	0	0
18-Oct-09	0	0	0	0
19-Oct-09	0	0	0	0
20-Oct-09	0	0	0	0
21-Oct-09	0	0	0	0
22-Oct-09	0	0	0	0
23-Oct-09	0	0	0	0
24-Oct-09	0	0	0	0
25-Oct-09	0	0	0	0
26-Oct-09	0	0	0	0
27-Oct-09	0	0	0	0
28-Oct-09	0	0	0	0
29-Oct-09	0	0	0	0
30-Oct-09	0	0	0	0
31-Oct-09	0	0	0	0

Table A-8. 2007 dry season water quality parameters

Site	Parameter	7/12/07	7/18/07	7/25/07	8/1/07	8/8/07	8/15/07	8/22/07	8/29/07	9/5/07	9/12/07	9/19/07	9/26/07	10/3/07	10/10/07	10/17/07
Prado Park Outlet at Chino Creek	Conductivity (µS/cm)	1045	742	740	792	740	745	739	744	781	766	781	805	1160	940	795
	Dissolved Oxygen (mg/L)	13.8	6.78	10.39	8.2	10.6	9.15	9.01	7.74	7.2	7.81	9.92	8.22	9.4	9.87	12.86
	pH (standard units)	7.5	8.5	8.7	8.3	9.3	8.4	8.9	8.6	8.7	8.3	8.8	8.6	8.8	8.4	9
	Temperature (°C)	28.5	27.2	28.2	26.8	27.8	28.2	27.5	27.4	29.1	25.9	24.1	23.6	23.2	21	20.4
	Turbidity (NTU)	9.48	9.26	7.89	35.5	8.8	11.2	16.7	10.4	27.2	10.6	8.03	6.3	9.91	8	8.12
	Flow (cfs)	8.42	5.17	11.16	4.20	0.11	5.81	6.87	7.49	7.90	9.81	7.39	8.99	6.07	7.90	12.19
Chino Creek at Central Ave	Conductivity (µS/cm)	1060	1130	1010	980	1020	1010	940	920	866	1120	940	960	960	980	960
	Dissolved Oxygen (mg/L)	10.14	9.59	9.17	8.87	8.6	9.32	8.98	9.19	8.84	9.55	9.1	8.57	9.77	12.01	9.47
	pH (standard units)	7.6	7.9	7.8	7.9	7.7	8.3	8.2	7.6	7.9	8.2	7.5	7.5	7.6	7.9	7.5
	Temperature (°C)	21	21.7	23.1	23.9	23.1	22.1	27	27.9	29.4	27	25.7	27	25.2	24.2	22.6
	Turbidity (NTU)	3.52	2.55	3.75	3.67	6	3.5	4.3	5.6	3.7	4.5	5.71	2.27	3.85	12.8	2.04
	Flow (cfs)	10.48	19.85	5.87	9.80	13.79	9.08	28.78	51.30	44.19	44.16	44.19	26.86	56.99	NS	44.01
Mill-Cucamonga Creek at Chino Corona Rd	Conductivity (µS/cm)	742	718	707	715	721	708	746	714	695	722	703	731	796	793	8550
	Dissolved Oxygen (mg/L)	10.65	1054	8.89	13.54	9.17	12.4	14.15	10.02	13.66	15.1	12.55	12.12	9.37	13.4	11.6
	pH (standard units)	7.5	7.9	7.9	8.2	7.8	8.3	8.7	8.2	8.2	8.7	8.1	8.2	7.8	7.9	8.1
	Temperature (°C)	23.6	23.5	25.3	25.8	24	24.7	24	25.6	27.8	24.3	21.7	22	20.5	19.8	19.6
	Turbidity (NTU)	3.5	3.79	5.15	4.68	5.3	6.1	5.6	2.8	3.9	5.73	4.68	3.7	9.3	6.52	3.83
	Flow (cfs)	65.98	69.33	62.58	124.13	37.90	102.21	102.21	41.76	113.52	76.06	79.73	NR	40.16	NS	34.84
Santa Ana River at MWD Crossing	Conductivity (µS/cm)	1170	1060	910	1060	850	1110	699	1130	840	1040	854	1000	930	1130	920
	Dissolved Oxygen (mg/L)	8.61	8.63	8.22	7.92	8.45	8	8.2	8.07	7.8	8.2	8.12	8.36	8.31	8.82	8.62
	pH (standard units)	7.6	7.7	7.5	7.6	8.2	7.5	7.8	7.8	8	7.6	7.8	7.7	7.9	7.5	7.9
	Temperature (°C)	20.6	20.5	21.9	27	20.5	22.2	20.2	21.4	22.8	20	21	0.04	18.6	16.2	18.3
	Turbidity (NTU)	3.67	3.96	2.77	3.07	2.7	3.5	2.7	2.6	330	19.5	9.25	13.1	7.89	7.45	3.86
	Flow (cfs)	115.45	34.29	109.96	145.40	116.61	58.11	69.54	96.79	41.23	244.16	113.06	122.84	158.83	128.10	122.39
Santa Ana River at Pedley Ave	Conductivity (µS/cm)	1040	920	1010	990	1040	1040	1010	990	963	1030	1040	1080	1090	1080	1060
	Dissolved Oxygen (mg/L)	8.48	8.63	7.93	7.8	8.4	7.9	7.32	7.8	7.66	8	8.46	8.25	8.03	8.63	8.7
	pH (standard units)	7.7	7.6	7.5	7.6	8.3	7.5	7.8	7.6	8	7.7	7.9	7.7	8	7.5	8
	Temperature (°C)	23	21.8	23.1	23.2	21.9	24.2	21.5	23.1	23.9	20.4	20.4	19.1	19.1	16.3	17.7
	Turbidity (NTU)	2.11	1.89	2.06	1.69	1.5	1.9	1.5	2	418	23.6	13.1	8.95	7.89	6.32	4.93
	Flow (cfs)	83.37	137.81	127.68	127.58	138.13	260.08	138.63	127.99	107.51	110.82	184.79	135.11	210.35	237.42	NR

Table A-9. 2007-08 wet season water quality parameters

Site	Parameter	12/7/07	12/9/07	12/10/07	12/11/07	12/19/07	12/27/07	1/2/08	1/9/08	1/16/08	1/23/08	1/30/08	2/6/08	2/13/08	2/20/08
Prado Park Outlet at Chino Creek	Conductivity (µS/cm)	1140	1050	1040	430	990	1000	1010	1160	1110	1030	1240	1010	980	1010
	Dissolved Oxygen (mg/L)	7.76	8.27	8.88	8.87	10	12.32	9.44	9.74	10.1	10.84	6.76	8.83	11.23	9.5
	pH (standard units)	6.7	6.9	7.4	7.6	7.2	7.2	7	6.8	6.7	6.6	6.6	7.1	6.9	6.5
	Temperature (°C)	15.8	14.9	14.5	14.1	14.6	12.7	11.6	13.9	13.8	13.6	13	13.3	15.4	15
	Turbidity (NTU)	84.4	9.09	11.1	12.2	19.8	16.8	20.2	12.9	10.2	9.77	8.78	9.22	8.56	7.68
	Flow (cfs)	11.82	20.86	15.11	17.82	12.14	14.14	NR	22.18	15.15	16.44	11.34	16.14	14.72	8.60
Chino Creek at Central Ave	Conductivity (µS/cm)	421	670	910	911	940	960	960	857	1110	735	980	990	950	960
	Dissolved Oxygen (mg/L)	10.29	10.82	10.48	9.93	9.9	11.82	10.2	10.63	10.66	11.06	10.46	10.71	11.66	9.91
	pH (standard units)	6.7	7.2	7.4	7.6	7.1	7.2	6.8	7.2	7.3	6.9	7.5	7.7	7.5	6.5
	Temperature (°C)	16.5	12.3	17.7	17	19.7	15.8	14.9	16.3	16.6	16.8	15.5	17.6	20.2	19
	Turbidity (NTU)	14.5	8.39	2.3	2.66	2.06	3.88	2.36	147	3.51	22	40.7	9.9	2	2.09
	Flow (cfs)	130.00	52.00	59.23	57.47	28.24	15.32	39.03	47.16	21.07	69.00	78.49	48.81	37.34	34.58
Mill-Cucamonga Creek at Chino Corona Rd	Conductivity (µS/cm)	290	557	920	950	240	885	824	480	810	822	200	667	748	260
	Dissolved Oxygen (mg/L)	9.43	8.77	9.86	8.97	11.17	10.64	8.28	11.01	14.38	11.52	12.12	17.93	15.12	10.03
	pH (standard units)	6.8	6.9	7.4	7.6	7.3	6.8	6.6	6.9	8.33	8.2	7.5	8.4	8	6.7
	Temperature (°C)	14.9	13.3	14.8	14.2	14.3	12.5	15	13	14.7	15.8	14.5	15.2	16.7	14.3
	Turbidity (NTU)	84.1	13.2	1.97	2.38	16.7	3.1	3.15	19.8	2.74	4.65	10.7	4.57	3.54	69.1
	Flow (cfs)	408.63	190.42	189.19	357.63	595.99	310.00	143.11	94.79	62.09	66.29	195.27	103.05	78.00	134.00
Santa Ana River at MWD Crossing	Conductivity (µS/cm)	362	824	837	745	836	920	1090	360	810	1040	668	920	559	990
	Dissolved Oxygen (mg/L)	8.1	7.48	9.2	9.11	7.55	11.2	9.2	9.72	9.33	9.37	9.43	9.87	9.12	8.94
	pH (standard units)	6.9	6.6	7.1	7.6	7.2	6.5	6.4	6.8	7.5	7.6	7.4	7.7	7.4	7.1
	Temperature (°C)	15.9	14.4	12.5	13.3	16.3	8.1	12.5	11.4	11.7	11.9	NR	12	12.9	15.2
	Turbidity (NTU)	NR	82.4	29.7	18.3	92.7	9.5	7.64	919	7.88	5.96	259	78.6	11.3	9.95
	Flow (cfs)	841.00	50.00	379.00	NR	130.00	187.18	104.37	350.00	226.89	101.24	334.26	NR	140.50	121.17
Santa Ana River at Pedley Ave	Conductivity (µS/cm)	491	735	940	1030	462	1070	1080	625	1060	1050	667	843	802	970
	Dissolved Oxygen (mg/L)	8.94	8.88	9.58	9.58	9.14	11.26	10	9.66	9.57	9.32	9.2	9.87	9.31	9.1
	pH (standard units)	6.9	7.2	7.5	7.7	7.2	6.9	6.9	6.8	7.6	7.7	7.4	7.7	7.4	7.1
	Temperature (°C)	15.3	13.6	12.4	13.3	14.2	8.7	11.6	12.2	12.7	13.2	13.3	12	14.6	15.9
	Turbidity (NTU)	87.3	97.3	39.8	24.6	40.9	10.6	6.09	745	12.1	9.11	328	78.6	16.9	19.2
	Flow (cfs)	1,267.00	543.00	572.66	311.11	1,221.00	248.54	224.09	1,332.00	273.94	152.69	629.50	139.05	363.74	417.02

Table A-10. 2008 dry season water quality parameters

Site	Parameter	5/14/08	5/21/08	5/28/08	6/4/08	6/11/08	6/18/08	6/25/08	7/2/08	7/9/08	7/16/08	9/3/08	9/10/08	9/17/08	9/24/08	10/1/08	10/8/08	10/15/08	10/22/08	10/29/08	11/5/08
Icehouse Canyon	Conductivity (µS/cm)	NS	174	175	180	177	177	176	175	156	185	200	202	197	201	202	204	2020	205	204	197
	Dissolved Oxygen (mg/L)	NS	9.89	9.9	9.55	9.25	9.48	9.05	9.07	8.45	8.75	8.65	8.89	10.17	9.21	8.43	9.01	8.73	7.22	8.9	8.35
	pH (standard units)	NS	7.7	6.1	6.7	6.9	6.5	6.8	5.9	6.3	6.3	6	7.7	6.8	7.6	6.8	7.1	6	6.4	7.1	5.5
	Temperature (°C)	NS	10.4	8.4	9	9.8	10.1	10.1	10.3	11.2	11.4	0.9	11.5	11.2	10	11.2	10.1	8	8.8	9	9.1
	Turbidity (NTU)	NS	0.54	0.51	0.82	0.8	1.12	0.62	0.93	0.57	0.84	0.9	0.77	2.36	0.76	1.05	1.46	1.9	0.88	1.8	1.76
	Flow (cfs)	NS	5.60	6.16	8.47	10.18	3.25	2.26	2.94	1.50	2.50	0.90	0.30	0.40	0.80	0.70	0.60	0.20	0.40	0.40	0.50
Prado Park Outlet at Chino Creek	Conductivity (µS/cm)	753	738	748	940	710	684	665	704	570	619	720	739	720	743	763	784	773	520	702	739
	Dissolved Oxygen (mg/L)	8.31	10.61	10.85	7.57	7.7	7.39	5.5	5.52	10.7	5.89	5.3	6.67	7.8	7.92	6.02	6.48	7.97	8.31	9.19	9.1
	pH (standard units)	7	8.3	7.3	7.3	8.1	7.5	7.8	7.1	7.6	7.8	7.8	8.3	7.8	7.7	7.9	7.8	8.3	8	8.4	7.1
	Temperature (°C)	22.9	25.4	21.3	21.7	23.2	25	26.2	25.7	21.1	26.8	26.7	26.1	25.3	24	24.4	22.7	18.2	19.8	19.6	20.2
	Turbidity (NTU)	12.5	6.66	5.6	6.74	8.1	11.2	9.14	8.98	6.4	12	11.6	7.63	14.2	20.2	25.3	22	21.9	17.8	1.77	19.6
	Flow (cfs)	7.90	9.50	9.70	5.20	23.30	6.20	NR	6.40	5.60	5.30	3.20	6.30	3.80	5.20	2.00	2.80	1.60	10.20	NR	9.60
Chino Creek at Central Ave	Conductivity (µS/cm)	910	910	614	980	903	910	824	783	731	1010	880	1150	250	940	1090	1120	876	930	833	452
	Dissolved Oxygen (mg/L)	9.78	10.6	9.85	10.38	9.95	8.9	8.57	NR	9.07	6.37	7.95	8.11	9.64	7.99	8.08	8.93	8.9	8.98	9.51	8.63
	pH (standard units)	7.4	8.2	7.2	7.7	8	7.5	7.8	7.6	8.1	8.2	8	8.5	7.9	8	7.9	7.5	8	7.8	8.1	6.9
	Temperature (°C)	22.7	27.8	24.5	22.1	21	26.8	25.4	28	29.1	23.5	25.1	20.4	21.2	24.7	20.6	18.6	22.1	22.3	20.8	20.6
	Turbidity (NTU)	4.48	5.53	2.02	3.7	4.84	5.54	6.5	4.73	6.97	3.37	5.49	3.34	5.56	9.59	3.91	3.37	7.94	5.46	6.76	72.7
	Flow (cfs)	48.40	46.02	55.96	39.52	21.55	44.37	30.79	27.69	23.80	10.30	13.80	10.70	13.50	17.60	7.80	10.10	57.80	38.10	38.20	217.40
Mill-Cucamonga Creek at Chino Corona Rd	Conductivity (µS/cm)	647	611	590	652	658	649	535	619	562	614	697	717	704	655	600	752	707	723	691	685
	Dissolved Oxygen (mg/L)	11.2	12.81	13.6	6.85	5.61	7.89	5.5	NR	NR	6.16	4.93	6.78	2.3	8.41	8.66	6.8	6.3	6.23	8.01	10.99
	pH (standard units)	7.8	8.2	7.9	7.3	7.4	7.5	7.6	7.6	7.6	8.2	7.5	8.5	7.6	8.9	8.2	7.7	8.2	7.7	8	7.9
	Temperature (°C)	18.7	21.3	19.6	18.3	20.7	22.8	21.9	22.4	23.8	25	22.5	22.7	22.8	21.8	21.9	18.8	18	17.2	17.5	20.7
	Turbidity (NTU)	2.54	1.85	2.81	2.27	7.33	7.28	3.95	2.64	4.61	4.77	8.22	3.34	4.94	8.26	5.58	6.59	7.87	6.85	3.74	9
	Flow (cfs)	93.18	50.60	80.97	57.53	74.60	30.49	23.60	30.56	42.90	26.00	13.50	22.80	27.30	11.40	78.20	31.90	39.80	19.30	25.10	66.50
Santa Ana River at MWD Crossing	Conductivity (µS/cm)	355	104	726	659	637	698	484	654	614	700	948	642	772	789	644	679	700	755	808	550
	Dissolved Oxygen (mg/L)	8.88	9.37	9.57	8.56	8.4	8.83	8.56	8.15	NR	7.97	8.3	8.3	9.29	8.77	8.27	8.7	8.82	8.74	8.56	8.5
	pH (standard units)	6.9	7.5	7	7	7.1	6.8	7.2	7.1	7.2	7.7	7.5	8	7.6	8.1	7.7	7.5	7.8	7.4	7.6	7
	Temperature (°C)	16.6	19.2	16.3	17.8	19.8	20.3	20.1	20.9	21.8	22.8	20	20.1	20.9	18.5	20.1	17.6	15.8	16.3	16.6	15.7
	Turbidity (NTU)	3	3.54	13.2	9.47	11.2	5.39	4.52	5.88	3.92	3.71	4.35	3.95	3.01	5.13	3.99	6.64	3.82	5.1	5.63	5.79
	Flow (cfs)	59.49	61.16	69.42	77.04	135.79	55.57	62.70	62.69	99.00	60.90	53.90	57.40	81.40	73.50	64.00	58.80	63.50	74.20	100.90	58.90
Santa Ana River at Pedley Ave	Conductivity (µS/cm)	940	556	622	940	742	910	811	787	731	920	1010	758	844	1040	857	807	990	802	859	717
	Dissolved Oxygen (mg/L)	8.78	8.99	9.22	8.3	8.29	8.26	8.07	7.91	NR	7.52	7.32	7.89	9.29	7.16	8.03	8.36	8.6	8.03	8.57	8.22
	pH (standard units)	7.1	7.7	7.1	7.1	7.2	7.1	7.4	7.3	7.3	7.9	7.7	8.2	7.8	8.1	7.8	7.7	8.2	7.6	7.8	7.3
	Temperature (°C)	18	21.2	18.3	19.4	21.2	22.6	21.9	23.2	23.5	24.7	22.6	22	22.3	21.2	22.1	19.4	16.9	18	17.8	17
	Turbidity (NTU)	5.02	3.35	25.4	16.1	12.5	5.23	6.19	6.31	5.67	3.64	4.13	4.79	3.33	4.91	5.55	5.05	3.18	4.3	4.08	6.72
	Flow (cfs)	143.32	137.90	283.67	86.79	203.98	167.14	200.26	115.64	157.80	154.20	79.80	114.00	156.10	142.70	160.10	109.10	152.40	NR	172.80	190.10

Table A-11. 2008-09 wet season water quality parameters

Site	Parameter	12/10/08	12/15/08	12/17/08	12/18/08	12/19/08	12/23/08	12/30/08	1/7/09	1/14/09	1/21/09	1/28/09	2/4/09	2/13/09	2/18/09
Icehouse Canyon	Conductivity (µS/cm)	208	185	193	206	195	192	199	232	196	195	195	196	191	183
	Dissolved Oxygen (mg/L)	9.69	10.77	10.09	9.18	9.92	9.21	9.59	8.06	9.42	9.04	10.36	10.56	10.66	10.63
	pH (standard units)	8.5	8.5	8.7	8.6	8.7	8.1	7.9	8.4	7.4	7.9	8	8.2	8.1	8.4
	Temperature (°C)	4.9	1.7	5	4.1	4.5	6.4	5.8	5.3	7.4	7.7	4.8	6.4	NR	4.6
	Turbidity (NTU)	2.82	6.13	28.2	12	7.33	5	4.9	0.57	4.97	0.89	1.42	1.46	1.29	6.62
	Flow (cfs)	0.30	0.80	0.10	0.30	0.30	0.60	0.50	1.40	0.70	1.00	0.90	1.50	5.60	3.80
Prado Park Outlet at Chino Creek	Conductivity (µS/cm)	761	772	1100	1130	1130	1020	950	930	950	690	733	758	1050	720
	Dissolved Oxygen (mg/L)	8.85	8.54	8.02	8.24	8.82	8.56	9.93	10.73	10.26	11.16	11.99	13.35	10.7	9.5
	pH (standard units)	8.6	8.3	8	8	8.2	8	8	8.2	8	8.4	8.1	8.5	7.5	7.6
	Temperature (°C)	15.8	14.7	14.6	13.3	13.7	14.2	14	14.1	14.5	15.6	15	15.1	14.3	13
	Turbidity (NTU)	5.83	49.6	80.1	23.9	45.2	16	17.4	10.7	14	16.2	24.9	20.1	20.7	9.99
	Flow (cfs)	19.10	58.00	3.40	28.80	19.00	17.50	15.00	15.50	9.10	14.60	21.40	7.10	21.50	23.20
Chino Creek at Central Ave	Conductivity (µS/cm)	930	530	130	658	759	1270	950	910	739	753	722	747	714	132
	Dissolved Oxygen (mg/L)	9.99	11.26	11.11	10.37	10.46	10.7	10.2	10.15	10.54	10.52	11.11	11.1	10.72	11.09
	pH (standard units)	8.9	8.1	7.8	8.4	8.6	8.9	8.7	8.4	8.3	8.4	8	8.2	8.2	7.6
	Temperature (°C)	21.4	8.6	10.6	14.6	16.9	12.9	17.9	19	21.2	21.2	18.7	20.7	17.6	11.7
	Turbidity (NTU)	7	91.8	134	13.7	22.5	8.65	4.72	8.1	3.27	5.27	2.88	4.29	8.56	9.99
	Flow (cfs)	36.90	994.30	407.90	116.80	130.10	15.10	12.30	40.60	36.70	33.90	39.40	47.50	31.60	377.70
Mill-Cucamonga Creek at Chino Corona Rd	Conductivity (µS/cm)	1050	650	625	317	636	690	659	670	700	652	160	3000	603	518
	Dissolved Oxygen (mg/L)	9.38	11.53	9	11.36	10.13	10.38	10.33	12.04	10.89	10.3	11.58	13.63	10.26	10.07
	pH (standard units)	8.7	8	8.4	8.4	8.6	8.6	8.5	8.7	8.1	8.4	8.1	8.3	8.1	8.6
	Temperature (°C)	12	8.5	14.8	10.1	12.9	14.8	14.6	13.8	12.3	19	12	13	14.8	16.7
	Turbidity (NTU)	10.1	107	108	24.8	86.6	42.9	7.85	4.92	6.82	5.49	5.74	5.12	NR	NR
	Flow (cfs)	35.40	1,732.50	185.00	350.40	149.00	63.90	73.50	81.70	30.90	95.70	46.60	44.30	219.00	273.90
Santa Ana River at MWD Crossing	Conductivity (µS/cm)	1110	697	558	318	577	746	731	737	196	738	910	552	718	495
	Dissolved Oxygen (mg/L)	9.55	8.4	8.75	8.82	9.74	8.82	9.47	9.6	9.63	8.62	10.53	10.28	9.79	9.53
	pH (standard units)	8.6	8.2	8.4	8.2	8.5	8.4	8.3	8.3	8.2	8	8	8	7.8	7.6
	Temperature (°C)	12.4	14.3	13.6	8.9	10	12.7	12.4	12	13.4	16	11.3	12.7	12.1	11.7
	Turbidity (NTU)	7.39	12.8	258	NR	50.5	34.6	29.2	7.27	7.28	9.91	8.77	6.26	NR	NR
	Flow (cfs)	64.50	125.40	96.10	354.50	157.80	120.90	79.10	100.30	59.70	86.30	80.80	46.00	111.60	291.70
Santa Ana River at Pedley Ave	Conductivity (µS/cm)	1050	263	624	344	594	724	843	1020	854	863	840	1000	669	493
	Dissolved Oxygen (mg/L)	9.38	9.82	9.19	10.18	10.06	9.16	9.37	9.71	9.2	8.31	10.5	1040	9.81	9.86
	pH (standard units)	8.7	8.4	8.5	8.3	8.6	8.5	8.5	8.4	8.2	8.2	7.9	8.1	8.1	7.6
	Temperature (°C)	12	11	13.5	8.8	10.7	13.3	13.2	13.2	13.8	17.3	11.5	14	12.7	12.5
	Turbidity (NTU)	10.1	188	575	NR	518	43	29.9	10.08	7.66	6.97	10.3	8.28	NR	NR
	Flow (cfs)	115.90	1,678.70	639.20	639.20	244.10	234.70	101.70	213.60	101.40	141.10	126.20	75.10	165.00	405.70

Table A-12. 2009 dry season water quality parameters

Site	Parameter	5/27/09	6/2/09	6/9/09	6/16/09	6/23/09	6/30/09	7/7/09	7/14/09	7/21/09	7/28/09	8/4/09	8/11/09	8/18/09	8/25/09	9/1/09	9/8/09	9/15/09	9/22/09	9/29/09	10/6/09	
Prado Park Outlet at Chino Creek	Conductivity (µS/cm)	687	644	669	766	758	750	569	607	846	826	674	637	812	761	802	813	756	789	799	736	
	Dissolved Oxygen (mg/L)	7.42	7.9	8.29	8.88	10.93	5.1	9.4	7.53	6.06	7.87	8.09	6.25	7.71	9.13	4.96	7.11	6.3	8.44	8.93	8.17	
	pH (standard units)	8.6	8.8	8.8	8.5	8.2	8.1	8	8.1	8.8	9.2	9	8.7	8.9	9.2	8.1	8.4	8.4	8.4	8.4	8.8	8.5
	Temperature (°C)	23	23.8	22.2	22.1	25.3	25.3	27.3	27.8	27.95	28.3	28.9	26.5	25.1	27.5	27.2	26.9	25.7	25.4	25.4	25.4	22.1
	Turbidity (NTU)	NR	27	NR	NR	NR	9.47	9.38	9	8.88	NR	9.73	8.59	9.43	17.6	10	9.41	9.64	93.8	16	12.1	
	Flow (cfs)	NR	4.40	3.4	5.90	5.30	3.70	4.20	5.60	5.30	4.10	5.30	4.50	5.80	3.80	5.00	4.50	4.40	9.10	11.80	9.50	
Chino Creek at Central Ave	Conductivity (µS/cm)	1000	910	910	926	841	787	770	769	1060	966	1020	1040	953	1050	978	940	603	990	926	856	
	Dissolved Oxygen (mg/L)	8.73	10.23	9.76	9.13	9.48	7.67	9.31	7.6	8.69	7.89	8.48	8.41	7.8	7.22	6.71	7.54	6.453	8.45	9.76	9.44	
	pH (standard units)	8.2	8.3	8	8.9	8.1	8.7	7.3	6.2	9.1	8.8	8.8	8.7	8.4	8.7	8.6	8.4	8.7	8.4	8.9	8.7	
	Temperature (°C)	21.5	25.6	24	27	27.8	29.6	23.5	28.2	27	28.5	28.4	23.5	26.9	NR	28.7	26.4	25.5	25.1	26.2	20.5	
	Turbidity (NTU)	4.95	5.5	6.64	5.17	4.32	7.08	3.7	6.13	7.25	6.38	7.9	4.3	4.88	4.52	5.37	3.45	3.72	3.86	6.2	3.46	
	Flow (cfs)	NR	30.80	49.40	22.80	12.30	20.80	3.60	11.80	5.00	2.90	10.30	7.80	18.30	11.90	11.90	6.10	7.80	9.70	13.70	4.50	
Mill-Cucamonga Creek at Chino Corona Rd	Conductivity (µS/cm)	670	657	614	634	644	639	488	572	781	760	714	631	727	658	834	721	420	716	744	629	
	Dissolved Oxygen (mg/L)	6.67	7.76	4.81	7.74	7.16	9.36	8.86	6.87	4.71	7.75	6.48	6.58	8.55	10.51	3.22	8.55	10.6	8.12	10.36	6.92	
	pH (standard units)	8.6	8	8	8.2	7.9	8.9	7	7.7	8	8.4	8	8.3	8.6	8.6	7.9	8.1	8.4	8.3	8.7	7.9	
	Temperature (°C)	20.9	20.7	18.7	19.9	21	23	20.1	24.1	21.2	21.7	21.6	21.1	20.5	19.8	22.7	20.5	20.2	21.4	20.9	12.8	
	Turbidity (NTU)	2.53	3.84	5.69	3.27	3.99	2.82	3.91	5.95	6.5	5	4.1	4.09	4.63	7.97	4.77	3.87	4.06	4.06	6.38	3.9	
	Flow (cfs)	16.80	88.20	42.20	128.70	45.00	48.80	28.60	56.10	22.80	34.40	30.70	54.30	41.40	55.60	21.00	40.70	76.40	64.50	134.70	25.90	
Santa Ana River at MWD Crossing	Conductivity (µS/cm)	797	529	878	920	874	903	628	699	984	958	1009	1040	856	900	950	916	879	883	881	797	
	Dissolved Oxygen (mg/L)	8.88	8.55	8.6	8.66	9.54	8.1	9.69	8.56	11.32	8.96	7.3	8.31	9.33	9.12	8.91	9.69	9.28	8.97	9.03	9.23	
	pH (standard units)	8.3	7.7	7.7	7.9	7.19	8	7.9	6.9	8.1	8	7.8	7.8	8	7.9	7.8	7.8	7.9	7.7	8.1	7.9	
	Temperature (°C)	18.8	19.6	18.7	19.6	19	20.7	19.7	20.5	21.3	21	20.7	20.2	19	19.3	22.2	19.2	19	18.7	19.5	15.3	
	Turbidity (NTU)	4.25	5.69	4.43	3.31	3.54	3.78	3.21	4.01	4.24	2.39	2.15	2.76	3.16	3.43	3.04	2.58	2.62	2.67	3.73	3.52	
	Flow (cfs)	42.10	41.30	51.50	83.60	54.40	98.80	41.30	58.60	49.50	45.80	71.90	61.60	54.10	48.30	57.30	186.00	64.40	36.90	47.50	65.70	
Santa Ana River at Pedley Ave	Conductivity (µS/cm)	609	940	724	849	832	863	685	740	948	844	920	990	906	936	941	916	863	866	913	700	
	Dissolved Oxygen (mg/L)	8.06	5.84	7.92	7.99	8.77	7.45	9.1	7.88	10.18	8	7.41	7.71	8.68	8.46	7.86	7.41	8.2	8.44	8.04	9.11	
	pH (standard units)	8.4	7.8	7.8	7.9	7.19	8	8	7.06	8.1	8	8.1	7.8	8	7.9	7.9	7.8	7.9	7.8	8	7.9	
	Temperature (°C)	20.2	20.7	19.7	20.1	20.3	21.9	21.1	22.8	22.8	22.5	22.1	21.2	20.2	20.3	23.6	20.6	20.6	19.8	20.5	16	
	Turbidity (NTU)	5.09	5.58	8.77	8.35	7.33	5.45	4.19	4.31	5.2	5.33	4.12	3.12	4.16	5.04	3.93	3.18	2.65	2.19	5.54	3.95	
	Flow (cfs)	47.50	126.10	81.70	3.30	123.90	88.80	76.00	94.30	66.40	80.10	90.70	69.30	125.20	97.50	101.20	79.80	127.70	101.10	NR	149.50	

Attachment B
QA/QC Summary

Attachment B QA/QC Summary

Introduction

This section provides the Quality Assurance/Quality Control (QA/QC) evaluation for samples and data collected during the following monitoring periods:

- 2007 dry season
- 2007-08 wet season
- 2008 dry season
- 2008-09 wet season
- 2009 dry season

Field measurements were made for the following constituents: Dissolved oxygen, pH, conductivity, turbidity, water temperature, and flow. Field data were checked to ensure that all required data were gathered and recorded. This check included a data review to ensure correct units of measurements were reported and that reported values were within expected ranges.

Laboratory analyses were conducted for three constituents: fecal coliform, *E. coli*, and TSS. Data validation included a check to ensure that samples were delivered to laboratories within required holding times and that all sample handling and custody protocols were followed. Field blank and duplicate results were evaluated against various reporting requirements and data were checked to ensure correct units of measurement were reported.

The following sections summarize the results of the QA/QC evaluation for the triennial monitoring period.

Field Measured Parameters

Completeness

Tables B-1 through B-5 summarize the planned versus collected field measurements from each of the watershed-wide compliance sites. Completeness was above the required 90% requirement for all parameters.

Table B-1. Summary of watershed-wide compliance field measurement collection activity, 2007 dry season

Water Quality Parameter	Icehouse Canyon (WW-C1)		Prado Park Lake (WW-C3)		Chino Creek (WW-C7)		Mill-Cucamonga Creek (WW-M5)		SAR at MWD Crossing (WW-S1)		SAR at Pedley Ave (WW-S4)		Summary
	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Completeness (%)
Dissolved Oxygen	15	NS	15	15	15	15	15	15	15	15	15	15	100
pH	15	NS	15	15	15	15	15	15	15	15	15	15	100
Conductivity	15	NS	15	15	15	15	15	15	15	15	15	15	100
Water Temperature	15	NS	15	15	15	15	15	15	15	15	15	15	100
Turbidity	15	NS	15	15	15	15	15	15	15	15	15	15	100
Flow	15	NS	15	15	15	15	15	14	15	15	15	14	97.3
Total	90	0	90	90	90	90	90	89	90	90	90	89	

NS: No samples collected (no flow at site)

Table B-2. Summary of watershed-wide compliance field measurement collection activity, 2007-08 wet season/storm event sampling

Water Quality Parameter	Icehouse Canyon (WW-C1)		Prado Park Lake (WW-C3)		Chino Creek (WW-C7)		Mill-Cucamonga Creek (WW-M5)		SAR at MWD Crossing WW-S1		SAR at Pedley Ave (WW-S4)		Summary
	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Completeness (%)
Dissolved Oxygen	14	NS	14	14	14	14	14	14	14	14	14	14	100
pH	14	NS	14	14	14	14	14	14	14	14	14	14	100
Conductivity	14	NS	14	14	14	14	14	14	14	14	14	14	100
Water Temperature	14	NS	14	14	14	14	14	14	14	13	14	14	98.6
Turbidity	14	NS	14	14	14	14	14	14	14	13	14	14	98.6
Flow	14	NS	14	13	14	14	14	14	14	12	14	14	97.1
Total	84	NS	84	83	84	84	84	84	84	80	84	84	

NS: No sample collected (no flow at site)

Table B-3. Summary of watershed-wide compliance field measurement collection activity, 2008 dry season

Water Quality Parameter	Icehouse Canyon (WW-C1)		Prado Park Lake (WW-C3)		Chino Creek (WW-C7)		Mill-Cucamonga Creek (WW-M5)		SAR at MWD Crossing WW-S1		SAR at Pedley Ave (WW-S4)		Summary
	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Completeness (%)
Dissolved Oxygen	20	19	20	20	20	19	20	18	20	19	20	19	95
pH	20	19	20	20	20	20	20	20	20	20	20	20	99.1
Conductivity	20	19	20	20	20	20	20	20	20	20	20	20	99.1
Water Temperature	20	19	20	20	20	20	20	20	20	20	20	20	99.1
Turbidity	20	19	20	20	20	20	20	20	20	20	20	20	99.1
Flow	20	19	20	18	20	20	20	20	20	20	20	19	96.7
Total	120	114	120	119	120	119	120	118	120	119	120	118	

Attachment B
QA/QC Summary

Table B-4. Summary of watershed-wide compliance field measurement collection activity, 2008-09 wet season/storm event sampling

Water Quality Parameter	Icehouse Canyon (WW-C1)		Prado Park Lake (WW-C3)		Chino Creek (WW-C7)		Mill-Cucamonga Creek (WW-M5)		SAR at MWD Crossing WW-S1		SAR at Pedley Ave (WW-S4)		Summary
	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Completeness (%)
Dissolved Oxygen	14	14	14	14	14	14	14	14	14	14	14	14	100
pH	14	14	14	14	14	14	14	14	14	14	14	14	100
Conductivity	14	14	14	14	14	14	14	14	14	14	14	14	100
Water Temperature	14	13	14	14	14	14	14	14	14	14	14	14	98.8
Turbidity	14	14	14	14	14	14	14	12	14	11	14	11	90.5
Flow	14	14	14	14	14	14	14	14	14	14	14	14	100
Total	84	83	84	84	84	84	84	82	84	81	84	81	

Table B-5. Summary of watershed-wide compliance field measurement collection activity, 2009 dry season

Water Quality Parameter	Icehouse Canyon (WW-C1)		Prado Park Lake (WW-C3)		Chino Creek (WW-C7)		Mill-Cucamonga Creek (WW-M5)		SAR at MWD Crossing WW-S1		SAR at Pedley Ave (WW-S4)		Summary
	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Completeness (%)
Dissolved Oxygen	NA	NA	20	20	20	20	20	20	20	20	20	20	100
pH	NA	NA	20	20	20	20	20	20	20	20	20	20	100
Conductivity	NA	NA	20	20	20	20	20	20	20	20	20	20	100
Water Temperature	NA	NA	20	20	20	19	20	20	20	20	20	20	99.2
Turbidity	NA	NA	20	15	20	20	20	20	20	20	20	20	95
Flow	NA	NA	20	19	20	19	20	20	20	20	20	19	97
Total	NA	NA	120	114	120	118	120	120	120	120	120	119	

NA: Icehouse Canyon was removed as a compliance monitoring site by agreement with RWQCB prior to the 2009 dry season

Accuracy and Precision

Field staff used a Horiba multi-parameter probe to collect *in situ* field measurements for conductivity, dissolved oxygen, pH, and water temperature at all sample locations during each sample event. Turbidity and flow were measured with a Hach Turbidity meter and Marsh-McBirney Flo-Mate meter with top-setting rod, respectively. Field staff calibrated each of the water quality meters prior to each sample event to ensure accuracy and precision of the measurements. Table B-6 summarizes the accuracy and repeatability associated with the use of each meter.

Table B-6. Summary of accuracy and repeatability expectations for field measurement meters

Water6Quality Constituent	Accuracy	Repeatability
Dissolved Oxygen	±0.2 mg/L	± 0.1 mg/L
pH	± 0.1 units	± 0.05 units
Conductivity	±1%	± 0.05%
Water Temperature	±0.3°C	± 0.1°C
Turbidity	± 2%	±1%
Flow	± 2%	NA

Laboratory Constituents

Table B-7 describes the number of samples planned for collection versus the actual number collected. For the 2007 dry season, the Icehouse Canyon (WW-C1) compliance site was dry on 15 site visits which resulted in collection of 75 of 90 planned samples.

The 2008 dry season sampling included a single missed sample because of a road closure in Icehouse Canyon due to a fire. During 2008, dry season sampling began as scheduled. However, laboratory contract issues, which prevented the laboratory from accepting samples for analysis, resulted in the suspension of sampling for a six week period from the week of July 20 through the end of August. Once the contract issues were resolved, weekly sample collection resumed the week of September 1. To ensure the collection of 20 warm, dry season samples in 2008 (as required by the Monitoring Plan), the TMDL Task Force (which provides oversight to the monitoring program) agreed to extend the dry season sample period into the first week of November.

With RWQCB approval, Icehouse Canyon (WW-C1) was eliminated as a watershed-wide compliance site prior to the 2009 dry season. For the 2009 dry season, all 100 planned samples were collected.

Table B-7. Summary of watershed-wide compliance sample collection activity

Sample Period	Planned	Collected	Site Dry	Sample Missed
Dry Season 2007	90	75	15 ¹	0
Storm Event Sampling 2007-08	24	20	4 ¹	0
Wet Season 2007-08	60	50	10 ¹	0
Dry season 2008	120	119	0	1 ²
Storm Event Sampling 2008-09	24	24	0	0
Wet Season 2008-09	66	66	0	0
Dry Season 2009	100 ³	100	0	0
Total	484	454	29	1

1 - Icehouse Canyon (WW-C1) was dry - no sample collected

2 - Sample missed - road closure in Icehouse Canyon due to fire

3 - Icehouse Canyon compliance site was eliminated – decision approved by RWQCB

Field Blanks

The QAPP calls for a single field blank to be collected per sample event. Table B-8 shows the number of field blanks collected during each monitoring period.

Table B-8. Summary of field blanks collected

Sample Period	Planned	Collected
Dry Season 2007	15	15
Storm Event Sampling 2007-08	4	4
Wet Season 2007-08	10	10
Dry season 2008	20	20
Storm Event Sampling 2008-09	4	4
Wet Season 2008-09	10	10
Dry Season 2009	20	20
Total	83	83

Per the QAPP, the reporting target limits for TSS and bacterial indicators were 1.0 mg/L and 10 cfu/100 mL, respectively. These method sensitivity guidelines were met. Field blank results were all below detectable counts (< 9 cfu/100 mL) for *E. coli* and fecal coliform, except for one sample (8/29/07, WW-C3) for fecal coliform, which was reported at 70 cfu/100 mL. For TSS, all field blanks results were reported below the target reporting limit, except for three results: (1) 1.33 mg/L on 10/16/07 at WW-C7; 1.50 mg/L on 9/19/07 at WW-S4; and 10.0 mg/L on 5/21/08 at WW-S4.

Field Duplicates

The QAPP requires the collection of a field duplicate at a minimum frequency of at least 5% of the total samples collected. Field staff collected a total of 77 field duplicates (Table B-9). The

frequency of field duplicate collection was 17% of total samples collected (454 samples), which is well above the required frequency. Field duplicates were not collected on three sample events at Icehouse Canyon during the 2007 dry season due to lack of flowing conditions. Two duplicate samples were also not collected at Icehouse Canyon during the 2007-08 wet season due to no flow conditions.

Table B-9. Summary of field duplicates collected

Sample Period	Planned	Collected
Dry Season 2007	15	12 ¹
Storm Event Sampling 2007-08	4	4
Wet Season 2007-08	10	8 ¹
Dry season 2008	20	20
Storm Event Sampling 2008-09	4	4
Wet Season 2008-09	10	10
Dry Season 2009	20	20
Total	83	77

1 - Icehouse Canyon site not flowing (no samples collected)

Each duplicate sample was analyzed for the same parameters as its paired field sample. Results of the field duplicate analyses can be used to assess adherence to field sampling collection protocols and laboratory precision.

Tables B-10 through B-14 summarize the field duplicate analysis results for TSS. All duplicate pairs were within the QAPP's relative percent difference (RPD) goal of $\pm 25\%$, except for the following duplicate pairs which exceeded the RPD goal.

- 2007-08 Wet Season
 - Field duplicate pair collected 12/10/07 at Mill-Cucamonga Creek
- 2008 Dry Season
 - Field duplicate pair collected 6/25/08 at Mill-Cucamonga Creek
 - Field duplicate pair collected 7/2/08 at SAR at Pedley Avenue
- 2008-09 Wet Season
 - Field duplicate pair collected 12/15/08 at Prado Park Lake
 - Field duplicate pair collected 12/22/08 at Icehouse Canyon
 - Field duplicate pair collected 2/13/09 at Icehouse Canyon

- 2009 Dry Season
 - Field duplicate pair collected 6/16/09 at Prado Park Lake

To determine the precision of the duplicate analysis for fecal coliform and *E. coli*, the following method was applied¹:

- Calculate the logarithm of each sample and associated duplicate (“duplicate pair”)
- Determine the range for each duplicate pair (R_{\log})
- Calculate the mean of the ranges (Mean R_{\log})
- Calculate the precision criterion, where the precision criteria = $3.27 * \text{Mean } R_{\log}$
- Compare R_{\log} for each duplicate pair with the calculated precision criterion for the data set to determine if R_{\log} is less than the precision criteria.

Tables B-15 through B-24 summarize the field duplicate analysis results for fecal coliform and *E. coli*. For fecal coliform and *E. coli*, duplicate analysis results were within expectations based on the calculated precision criteria. The only exceptions for range of logs to exceed the precision criteria are described as follows according to seasonal monitoring periods:

- 2007 Dry Season
 - Field duplicate pair collected 7/18/07 at Prado Park Lake (*E. coli*)
- 2008 Dry Season
 - Field duplicate pair collected 5/21/08 at SAR at Pedley Ave (fecal coliform)
 - Field duplicate pair collected 6/3/08 at Icehouse Canyon (fecal coliform)
 - Field duplicate pair collected 9/24/08 at SAR at Pedley Ave (*E. coli*)
- 2008-09 Wet Season
 - Field duplicate pair collected 1/6/2009 at Chino Creek at Central Ave (*E. coli*)
- 2009 Dry Season
 - Field duplicate pair collected 9/29/09 at Prado Park Lake (fecal coliform)
 - Field duplicate pair collected 7/21/09 at Prado Park lake (*E. coli*)

¹ Standard Methods, Section 9020B, 18th, 19th, or 20th Editions

Table B-10. Results of Field Duplicate Analysis for TSS, 2007 Dry Season

Sample Date	Site	Duplicate	Sample	RPD (%)
7/11/2007	Icehouse Canyon (WW-C1)	NS	NS	-
7/18/2007	Prado Park Lake (WW-C3)	23.2	21.2	-9.4
7/24/2007	Chino Creek at Central Ave (WW-C7)	7.11	7.25	1.9
7/31/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	24.25	25.8	6.0
8/8/2007	SAR at Pedley Ave (WW-S4)	4	3.37	-18.7
8/15/2007	SAR at MWD Crossing (WW-S1)	7.22	7	-3.1
8/21/2007	Icehouse Canyon (WW-C1)	NS	NS	-
8/29/2007	Prado Park Lake (WW-C3)	18.67	19.04	1.9
9/4/2007	Chino Creek at Central Ave (WW-C7)	17.67	17	-3.9
9/11/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	18.8	17.78	-5.7
9/19/2007	SAR at Pedley Ave (WW-S4)	16.67	14.63	-13.9
9/26/2007	SAR at MWD Crossing (WW-S1)	19.4	19.33	-0.4
10/2/2007	Icehouse Canyon (WW-C1)	NS	NS	-
10/10/2007	Prado Park Lake (WW-C3)	14	14	0.0
10/16/2007	Chino Creek at Central Ave (WW-C7)	4	3.89	-2.8

NS: No sample (no flow)

Table B-11. Results of Field Duplicate Analysis for TSS, 2007-08 Wet Season

Sample Date	Site	Duplicate	Sample	RPD (%)
12/7/2007	Icehouse Canyon (WW-C1)	NS	NS	-
12/7/2007	Prado Park Lake (WW-C3)	25.6	25.6	0.0
12/9/2007	Chino Creek at Central Ave (WW-C7)	7.4	7.2	-2.8
12/10/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	3.6	5.2	30.8
12/11/2007	SAR at Pedley Ave (WW-S4)	34.17	35.63	4.1
12/19/2007	SAR at Pedley Ave (WW-S4)	100.2	107	6.4
12/27/2007	SAR at MWD Crossing (WW-S1)	19.78	21	5.8
1/2/2008	Icehouse Canyon (WW-C1)	NS	NS	-
1/9/2008	Prado Park Lake (WW-C3)	5.4	8.2	34.1
1/15/2008	Chino Creek at Central Ave (WW-C7)	6.2	6	-3.3
1/23/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	10.5	9.6	-9.4
1/30/2008	SAR at Pedley Ave (WW-S4)	378	382	1.0
2/6/2008	SAR at MWD Crossing (WW-S1)	69	75.3	8.4
2/12/2008	Icehouse Canyon (WW-C1)	NS	NS	-
2/19/2008	Prado Park Lake (WW-C3)	11.4	10.6	-7.5

NS: No sample (no flow)

Table B-12. Results of Field Duplicate Analysis for TSS, 2008 Dry Season

Sample Date	Site	Duplicate	Sample	RPD (%)
5/14/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	4	3.8	-5.3
5/21/2008	SAR at Pedley Ave (WW-S4)	6.67	8.33	19.9
5/28/2008	SAR at MWD Crossing (WW-S1)	32.9	31.75	-3.6
6/3/2008	Icehouse Canyon (WW-C1)	1.33	1.29	-3.1
6/10/2008	Prado Park Lake (WW-C3)	20.33	21.25	4.3
6/17/2008	Chino Creek at Central Ave (WW-C7)	10.4	10	-4.0
6/25/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	5.6	7.8	28.2
7/2/2008	SAR at Pedley Ave (WW-S4)	8.5	6.43	-32.2
7/9/2008	SAR at MWD Crossing (WW-S1)	9.8	9.8	0.0
7/15/2008	Icehouse Canyon (WW-C1)	0.78	0.8	2.5
9/2/2008	Prado Park Lake (WW-C3)	21.5	20.29	-6.0
9/9/2008	Chino Creek at Central Ave (WW-C7)	4.86	4.57	-6.3
9/17/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	10.86	10.4	-4.4
9/24/2008	SAR at Pedley Ave (WW-S4)	4.6	4.5	-2.2
10/1/2008	SAR at MWD Crossing (WW-S1)	4.4	4.2	-4.8
10/7/2008	Icehouse Canyon (WW-C1)	2.8	2.4	-16.7
10/14/2008	Prado Park Lake (WW-C3)	28	27	-3.7
10/21/2008	Chino Creek at Central Ave (WW-C7)	11.67	11.78	0.9
10/29/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	6.32	6	-5.3
11/5/2008	SAR at Pedley Ave (WW-S4)	6.74	7	3.7

Table B-13. Results of Field Duplicate Analysis for TSS, 2008-09 Wet Season

Sample Date	Site	Duplicate	Sample	RPD (%)
12/10/2008	SAR at MWD Crossing (WW-S1)	NR	9.25	-
12/15/2008	Prado Park Lake (WW-C3)	72.381	44.286	-63.4
12/17/2008	Chino Creek at Central Ave (WW-C7)	56.286	54.75	-2.8
12/18/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	9.857	11	10.4
12/19/2008	SAR at Pedley Ave (WW-S4)	359	344	-4.4
12/22/2008	Icehouse Canyon (WW-C1)	3.375	5.429	37.8
1/6/2009	Chino Creek at Central Ave (WW-C7)	2.63	2.4	-9.6
1/14/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	7.8	8.8	11.4
1/21/2009	SAR at Pedley Ave (WW-S4)	14.11	14	-0.8
1/28/2009	SAR at MWD Crossing (WW-S1)	10.5	10.38	-1.2
2/3/2009	Icehouse Canyon (WW-C1)	34.59	NR	-
2/10/2009	Prado Park Lake (WW-C3)	32	31.4	-1.9
2/17/2009	Chino Creek at Central Ave (WW-C7)	39	37.67	-3.5

NR: no result reported from lab

Table B-14. Results of Field Duplicate Analysis for TSS, 2009 Dry Season

Sample Date	Site	Duplicate	Sample	RPD (%)
5/27/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	3.6	3.5	-2.9
6/2/2009	SAR at Pedley Ave (WW-S4)	19.83	19	-4.4
6/9/2009	SAR at MWD Crossing (WW-S1)	7.1	7.7	7.8
6/16/2009	Prado Park Lake (WW-C3)	6.29	9.2	31.6
6/23/2009	Chino Creek at Central Ave (WW-C7)	4.67	4.8	2.7
6/30/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	3.56	3.19	-11.6
7/7/2009	SAR at Pedley Ave (WW-S4)	9.71	9.75	0.4
7/14/2009	SAR at MWD Crossing (WW-S1)	3.78	4.06	6.9
7/21/2009	Prado Park Lake (WW-C3)	10.5	9.31	-12.8
7/28/2009	Chino Creek at Central Ave (WW-C7)	6.22	6.28	1.0
8/4/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	8.22	8.67	5.2
8/11/2009	SAR at Pedley Ave (WW-S4)	5.56	5.61	0.9
8/18/2009	SAR at MWD Crossing (WW-S1)	4.83	4.17	-15.8
8/25/2009	Prado Park Lake (WW-C3)	11.31	11.3	-0.1
9/1/2009	Chino Creek at Central Ave (WW-C7)	7.62	7.94	4.0
9/8/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	7.5	7.2	-4.2
9/15/2009	SAR at Pedley Ave (WW-S4)	6.35	6.15	-3.3
9/22/2009	SAR at MWD Crossing (WW-S1)	4.72	4.4	-7.3
9/29/2009	Prado Park Lake (WW-C3)	15.4	14.8	-4.1
10/6/2009	Chino Creek at Central Ave (WW-C7)	5.6	5.3	-5.7

Table B-15. Results of field duplicate analysis for fecal coliform, 2007 dry season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}	
7/11/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
7/18/2007	Prado Park Lake (WW-C3)	9	9	0.9542	0.9542	0.0000	
7/24/2007	Chino Creek at Central Ave (WW-C7)	5100	5900	3.7076	3.7709	0.0633	
7/31/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	2900	1600	3.4624	3.2041	0.2583	
8/8/2007	SAR at Pedley Ave (WW-S4)	930	550	2.9685	2.7404	0.2281	
8/15/2007	SAR at MWD Crossing (WW-S1)	430	420	2.6335	2.6232	0.0102	
8/21/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
8/29/2007	Prado Park Lake (WW-C3)	90	99	1.9542	1.9956	0.0414	
9/4/2007	Chino Creek at Central Ave (WW-C7)	1800	1800	3.2553	3.2553	0.0000	
9/11/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	1500	2300	3.1761	3.3617	0.1856	
9/19/2007	SAR at Pedley Ave (WW-S4)	530	510	2.7243	2.7076	0.0167	
9/26/2007	SAR at MWD Crossing (WW-S1)	4700	4900	3.6721	3.6902	0.0181	
10/2/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
10/10/2007	Prado Park Lake (WW-C3)	160	140	2.2041	2.1461	0.0580	
10/16/2007	Chino Creek at Central Ave (WW-C7)	380	700	2.5798	2.8451	0.2653	
						Sum of R_{log}	1.1450
						Mean of R_{log}	0.0954
						Precision Criteria	0.3120

NS: No sample collected (no flow)

Table B-16. Results of field duplicate analysis for *E. coli*, 2007 dry season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}	
7/11/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
7/18/2007	Prado Park Lake (WW-C3)	40	9	1.6021	0.9542	0.6478	
7/24/2007	Chino Creek at Central Ave (WW-C7)	2200	2700	3.3424	3.4314	0.0889	
7/31/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	1180	1170	3.0719	3.0682	0.0037	
8/8/2007	SAR at Pedley Ave (WW-S4)	90	110	1.9542	2.0414	0.0872	
8/15/2007	SAR at MWD Crossing (WW-S1)	220	280	2.3424	2.4472	0.1047	
8/21/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
8/29/2007	Prado Park Lake (WW-C3)	30	30	1.4771	1.4771	0.0000	
9/4/2007	Chino Creek at Central Ave (WW-C7)	940	870	2.9731	2.9395	0.0336	
9/11/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	2000	1150	3.3010	3.0607	0.2403	
9/19/2007	SAR at Pedley Ave (WW-S4)	160	170	2.2041	2.2304	0.0263	
9/26/2007	SAR at MWD Crossing (WW-S1)	300	380	2.4771	2.5798	0.1027	
10/2/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
10/10/2007	Prado Park Lake (WW-C3)	200	180	2.3010	2.2553	0.0458	
10/16/2007	Chino Creek at Central Ave (WW-C7)	310	440	2.4914	2.6435	0.1521	
NS: No sample collected (no flow)						Sum of R_{log}	1.5331
						Mean of R_{log}	0.1278
						Precision Criteria	0.4178

Table B-17. Results of field duplicate analysis for fecal coliform, 2007-08 wet season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}	
12/7/2007	Prado Park Lake (WW-C3)	90	260	1.9542	2.4150	0.4607	
12/9/2007	Chino Creek at Central Ave (WW-C7)	3300	3100	3.5185	3.4914	0.0272	
12/10/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	220	200	2.3424	2.3010	0.0414	
12/11/2007	SAR at Pedley Ave (WW-S4)	200	190	2.3010	2.2788	0.0223	
12/19/2007	SAR at Pedley Ave (WW-S4)	2900	2600	3.4624	3.4150	0.0474	
12/27/2007	SAR at MWD Crossing (WW-S1)	130	120	2.1139	2.0792	0.0348	
1/2/2008	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
1/9/2008	Prado Park Lake (WW-C3)	110	80	2.0414	1.9031	0.1383	
1/15/2008	Chino Creek at Central Ave (WW-C7)	180	200	2.2553	2.3010	0.0458	
1/23/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	250	230	2.3979	2.3617	0.0362	
1/30/2008	SAR at Pedley Ave (WW-S4)	300	390	2.4771	2.5911	0.1139	
2/6/2008	SAR at MWD Crossing (WW-S1)	40	120	1.6021	2.0792	0.4771	
2/12/2008	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
2/19/2008	Prado Park Lake (WW-C3)	20	60	1.3010	1.7782	0.4771	
NS: No sample collected (no flow)						Sum of R_{log}	1.9222
						Mean of R_{log}	0.1602
						Precision Criteria	0.5238

Table B-18. Results of field duplicate analysis for *E. coli*, 2007-08 wet season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}	
12/7/2007	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
12/7/2007	Prado Park Lake (WW-C3)	140	160	2.1461	2.2041	0.0580	
12/9/2007	Chino Creek at Central Ave (WW-C7)	2000	2200	3.3010	3.3424	0.0414	
12/10/2007	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	90	130	1.9542	2.1139	0.1597	
12/11/2007	SAR at Pedley Ave (WW-S4)	140	170	2.1461	2.2304	0.0843	
12/19/2007	SAR at Pedley Ave (WW-S4)	5700	4600	3.7559	3.6628	0.0931	
12/27/2007	SAR at MWD Crossing (WW-S1)	140	120	2.1461	2.0792	0.0669	
1/2/2008	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
1/9/2008	Prado Park Lake (WW-C3)	140	120	2.1461	2.0792	0.0669	
1/15/2008	Chino Creek at Central Ave (WW-C7)	240	260	2.3802	2.4150	0.0348	
1/23/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	200	200	2.3010	2.3010	0.0000	
1/30/2008	SAR at Pedley Ave (WW-S4)	330	260	2.5185	2.4150	0.1035	
2/6/2008	SAR at MWD Crossing (WW-S1)	50	40	1.6990	1.6021	0.0969	
2/12/2008	Icehouse Canyon (WW-C1)	NS	NS	--	--	--	
2/19/2008	Prado Park Lake (WW-C3)	50	80	1.6990	1.9031	0.2041	
NS: No sample collected (no flow)						Sum of R_{log}	1.0097
						Mean of R_{log}	0.0841
						Precision Criteria	0.2752

Table B-19. Results of field duplicate analysis for fecal coliform, 2008 dry season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
5/14/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	880	1000	2.9445	3.0000	0.0555
5/21/2008	SAR at Pedley Ave (WW-S4)	110	40	2.0414	1.6021	0.4393
5/28/2008	SAR at MWD Crossing (WW-S1)	590	500	2.7709	2.6990	0.0719
6/3/2008	Icehouse Canyon (WW-C1)	20	9	1.3010	0.9542	0.3468
6/10/2008	Prado Park Lake (WW-C3)	30	30	1.4771	1.4771	0.0000
6/17/2008	Chino Creek at Central Ave (WW-C7)	1500	1000	3.1761	3.0000	0.1761
6/25/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	1200	1400	3.0792	3.1461	0.0669
7/2/2008	SAR at Pedley Ave (WW-S4)	300	240	2.4771	2.3802	0.0969
7/9/2008	SAR at MWD Crossing (WW-S1)	290	380	2.4624	2.5798	0.1174
7/15/2008	Icehouse Canyon (WW-C1)	9	9	2.4624	0.9542	0.1174
9/2/2008	Prado Park Lake (WW-C3)	260	290	2.4150	2.4624	0.0474
9/9/2008	Chino Creek at Central Ave (WW-C7)	2100	2400	3.3222	3.3802	0.0580
9/17/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	370	380	2.5682	2.5798	0.0116
9/24/2008	SAR at Pedley Ave (WW-S4)	130	140	2.1139	2.1461	0.0322
10/1/2008	SAR at MWD Crossing (WW-S1)	160	220	2.2041	2.3424	0.1383
10/7/2008	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
10/14/2008	Prado Park Lake (WW-C3)	160	200	2.2041	2.3010	0.0969
10/21/2008	Chino Creek at Central Ave (WW-C7)	920	920	2.9638	2.9638	0.0000
10/29/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	430	420	2.6335	2.6232	0.0102
11/5/2008	SAR at Pedley Ave (WW-S4)	5800	5600	3.7634	3.7482	0.0152
Sum of R_{log}						1.8981
Mean of R_{log}						0.0949
Precision Criteria						0.3103

Table B-20. Results of field duplicate analysis for *E. coli*, 2008 Dry Season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
5/14/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	1240	1260	3.0934	3.1004	0.0069
5/21/2008	SAR at Pedley Ave (WW-S4)	90	90	1.9542	1.9542	0.0000
5/28/2008	SAR at MWD Crossing (WW-S1)	230	270	2.3617	2.4314	0.0696
6/3/2008	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
6/10/2008	Prado Park Lake (WW-C3)	40	70	1.6021	1.8451	0.2430
6/17/2008	Chino Creek at Central Ave (WW-C7)	290	310	2.4624	2.4914	0.0290
6/25/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	690	810	2.8388	2.9085	0.0696
7/2/2008	SAR at Pedley Ave (WW-S4)	130	140	2.1139	2.1461	0.0322
7/9/2008	SAR at MWD Crossing (WW-S1)	120	200	2.0792	2.3010	0.2218
7/15/2008	Icehouse Canyon (WW-C1)	9	9	2.0792	0.9542	0.2218
9/2/2008	Prado Park Lake (WW-C3)	300	160	2.4771	2.2041	0.2730
9/9/2008	Chino Creek at Central Ave (WW-C7)	1300	1000	3.1139	3.0000	0.1139
9/17/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	530	730	2.7243	2.8633	0.1390
9/24/2008	SAR at Pedley Ave (WW-S4)	90	40	1.9542	1.6021	0.3522
10/1/2008	SAR at MWD Crossing (WW-S1)	190	150	2.2788	2.1761	0.1027
10/7/2008	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
10/14/2008	Prado Park Lake (WW-C3)	240	220	2.3802	2.3424	0.0378
10/21/2008	Chino Creek at Central Ave (WW-C7)	170	210	2.2304	2.3222	0.0918
10/29/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	360	340	2.5563	2.5315	0.0248
11/5/2008	SAR at Pedley Ave (WW-S4)	510	620	2.7076	2.7924	0.0848
Sum of R_{log}						2.1141
Mean of R_{log}						0.1057
Precision Criteria						0.3457

Table B-21. Results of field duplicate analysis for fecal coliform, 2008-09 wet season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
12/10/2008	SAR at MWD Crossing (WW-S1)	110	170	2.0414	2.2304	0.1891
12/15/2008	Prado Park Lake (WW-C3)	1400	1700	3.1461	3.2304	0.0843
12/17/2008	Chino Creek at Central Ave (WW-C7)	9500	10300	3.9777	4.0128	0.0351
12/18/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	4400	5900	3.6435	3.7709	0.1274
12/19/2008	SAR at Pedley Ave (WW-S4)	2100	1300	3.3222	3.1139	0.2083
12/22/2008	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
1/6/2009	Chino Creek at Central Ave (WW-C7)	130	190	2.1139	2.2788	0.1648
1/14/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	310	380	2.4914	2.5798	0.0884
1/21/2009	SAR at Pedley Ave (WW-S4)	130	50	2.1139	1.6990	0.4150
1/28/2009	SAR at MWD Crossing (WW-S1)	130	80	2.1139	1.9031	0.2109
2/3/2009	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
2/10/2009	Prado Park Lake (WW-C3)	2600	2100	3.4150	3.3222	0.0928
2/17/2009	Chino Creek at Central Ave (WW-C7)	5800	4800	3.7634	3.6812	0.0822
Sum of R_{log}						1.6982
Mean of R_{log}						0.1306
Precision Criteria						0.4272

Table B-22. Results of field duplicate analysis for *E. coli*, 2008-09 wet season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
12/10/2008	SAR at MWD Crossing (WW-S1)	110	90	2.0414	1.9542	0.0872
12/15/2008	Prado Park Lake (WW-C3)	1800	2000	3.2553	3.3010	0.0458
12/17/2008	Chino Creek at Central Ave (WW-C7)	7600	7600	3.8808	3.8808	0.0000
12/18/2008	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	4800	4200	3.6812	3.6232	0.0580
12/19/2008	SAR at Pedley Ave (WW-S4)	2000	2400	3.3010	3.3802	0.0792
12/22/2008	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
1/6/2009	Chino Creek at Central Ave (WW-C7)	110	30	2.0414	1.4771	0.5643
1/14/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	320	390	2.5051	2.5911	0.0859
1/21/2009	SAR at Pedley Ave (WW-S4)	70	120	1.8451	2.0792	0.2341
1/28/2009	SAR at MWD Crossing (WW-S1)	90	110	1.9542	2.0414	0.0872
2/3/2009	Icehouse Canyon (WW-C1)	9	9	0.9542	0.9542	0.0000
2/10/2009	Prado Park Lake (WW-C3)	3000	2700	3.4771	3.4314	0.0458
2/17/2009	Chino Creek at Central Ave (WW-C7)	8700	6200	3.9395	3.7924	0.1471
Sum of R_{log}						1.4344
Mean of R_{log}						0.1103
Precision Criteria						0.3608

Table B-23. Results of field duplicate analysis for fecal coliform, 2009 dry season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
5/27/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	210	150	2.3222	2.1761	0.1461
6/2/2009	SAR at Pedley Ave (WW-S4)	30	50	1.4771	1.6990	0.2218
6/9/2009	SAR at MWD Crossing (WW-S1)	40	40	1.6021	1.6021	0.0000
6/16/2009	Prado Park Lake (WW-C3)	60	140	1.7782	2.1461	0.3680
6/23/2009	Chino Creek at Central Ave (WW-C7)	190	220	2.2788	2.3424	0.0637
6/30/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	450	350	2.6532	2.5441	0.1091
7/7/2009	SAR at Pedley Ave (WW-S4)	140	120	2.1461	2.0792	0.0669
7/14/2009	SAR at MWD Crossing (WW-S1)	110	120	2.0414	2.0792	0.0378
7/21/2009	Prado Park Lake (WW-C3)	40	40	1.6021	1.6021	0.0000
7/28/2009	Chino Creek at Central Ave (WW-C7)	280	320	2.4472	2.5051	0.0580
8/4/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	410	280	2.6128	2.4472	0.1656
8/11/2009	SAR at Pedley Ave (WW-S4)	170	140	2.2304	2.1461	0.0843
8/18/2009	SAR at MWD Crossing (WW-S1)	99	130	1.9956	2.1139	0.1183
8/25/2009	Prado Park Lake (WW-C3)	240	200	2.3802	2.3010	0.0792
9/1/2009	Chino Creek at Central Ave (WW-C7)	1300	2200	3.1139	3.3424	0.2285
9/8/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	520	450	2.7160	2.6532	0.0628
9/15/2009	SAR at Pedley Ave (WW-S4)	150	180	2.1761	2.2553	0.0792
9/22/2009	SAR at MWD Crossing (WW-S1)	80	110	1.9031	2.0414	0.1383
9/29/2009	Prado Park Lake (WW-C3)	40	150	1.6021	2.1761	0.5740
10/6/2009	Chino Creek at Central Ave (WW-C7)	140	210	2.1461	2.3222	0.1761
Sum of R_{log}						2.7778
Mean of R_{log}						0.1389
Precision Criteria						0.4542

Table B-24. Results of field duplicate analysis for *E. coli*, 2009 dry season

Date	Site	Duplicate Result (cfu/100 mL)	Sample Result (cfu/100 mL)	Log of Duplicate (L ₁)	Log of Sample Result (L ₂)	Range of Logs (L ₁ - L ₂) or R _{log}
5/27/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	400	320	2.6021	2.5051	0.0969
6/2/2009	SAR at Pedley Ave (WW-S4)	90	40	1.9542	1.6021	0.3522
6/9/2009	SAR at MWD Crossing (WW-S1)	60	80	1.7782	1.9031	0.1249
6/16/2009	Prado Park Lake (WW-C3)	110	90	2.0414	1.9542	0.0872
6/23/2009	Chino Creek at Central Ave (WW-C7)	110	80	2.0414	1.9031	0.1383
6/30/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	470	410	2.6721	2.6128	0.0593
7/7/2009	SAR at Pedley Ave (WW-S4)	100	140	2.0000	2.1461	0.1461
7/14/2009	SAR at MWD Crossing (WW-S1)	150	140	2.1761	2.1461	0.0300
7/21/2009	Prado Park Lake (WW-C3)	9	30	0.9542	1.4771	0.5229
7/28/2009	Chino Creek at Central Ave (WW-C7)	270	280	2.4314	2.4472	0.0158
8/4/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	530	540	2.7243	2.7324	0.0081
8/11/2009	SAR at Pedley Ave (WW-S4)	130	140	2.1139	2.1461	0.0322
8/18/2009	SAR at MWD Crossing (WW-S1)	110	120	2.0414	2.0792	0.0378
8/25/2009	Prado Park Lake (WW-C3)	90	80	1.9542	1.9031	0.0512
9/1/2009	Chino Creek at Central Ave (WW-C7)	740	740	2.8692	2.8692	0.0000
9/8/2009	Mill-Cucamonga Creek at Chino Corona Road (WW-M5)	880	950	2.9445	2.9777	0.0332
9/15/2009	SAR at Pedley Ave (WW-S4)	160	150	2.2041	2.1761	0.0280
9/22/2009	SAR at MWD Crossing (WW-S1)	130	210	2.1139	2.3222	0.2083
9/29/2009	Prado Park Lake (WW-C3)	20	40	1.3010	1.6021	0.3010
10/6/2009	Chino Creek at Central Ave (WW-C7)	150	110	2.1761	2.0414	0.1347
Sum of R_{log}						2.4081
Mean of R_{log}						0.1204
Precision Criteria						0.3937