

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

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NOVEMBER 2017

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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

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SECTION I - INTRODUCTION

The Monterey Peninsula Water Management District (District) is a special district created by the California legislature in 1977 and ratified by voters in 1978. Its mission is to “promote or provide for a long-term sustainable water supply, and to manage and protect water resources for the benefit of the community and the environment” of the greater Monterey Peninsula area. The District is responsible for regional water-supply planning within a 170-square mile area including the Monterey Peninsula and Carmel Valley (**FIGURE I-1**). The Monterey Peninsula relies entirely on local water resources to meet its water-supply needs, primarily surface and groundwater from the Carmel River Basin (CRB). Hydrologic data pertaining to surface and groundwater quantity and quality are essential tools to effectively manage these water resources.

Such information is obtained through the District’s Hydrologic Monitoring Program (HMP), which provides unbiased data for science-based decisions regarding management of the Monterey Peninsula Water Resources System. This report presents surface-water data, particularly Carmel River Basin streamflow, and serves as a compilation of these data from Water Years (WY) 2009 through 2013. The scope of this report is limited to documentation of CRB and vicinity rainfall, streamflow and lagoon hydrology data, and does not provide a detailed analysis of these data. Other types of water-resources related data collected by the District (e.g., groundwater levels, surface and groundwater quality, production, fisheries, vegetation and climatic data) are available in separate District documents or databases.

Since its inception, the District has collected streamflow measurements at approximately 15 mainstem sites on the Carmel River and at 16 Carmel River tributary sites. The data are used for water-supply and environmental project planning and operations, reservoir management, development of improved rainfall/runoff relationships, and quantification of tributary inflows to the Carmel River. In addition, the data support current District mitigation activities affected by streamflow such as fishery and erosion control programs. Additional information on the District’s mitigation programs is available in the report entitled, *Evaluation of the MPWMD Five-Year Mitigation Program 1991-1996* (MPWMD, 1996), and in subsequent annual reports available at: <http://www.mpwmd.net/environmental-stewardship/mitigation-program/>

Due to program modifications designed to improve efficiency, the District has reduced the overall number of streamflow measuring sites over time, but has increased the number of continuous stage recording sites. Over the WY 2009 – 2013 period, the District maintained a total of 19 continuous recording gaging stations, and collected measurements at two non-recording sites (**FIGURE I-1**). Of these, there are 17 continuous recording sites within the CRB, including four main-stem and ten tributary streamflow gaging stations, and three continuous water level monitoring sites (reservoirs and lagoon). The District also maintains two continuous recording gaging stations outside the CRB at San Jose Creek and Arroyo del Rey at Del Rey Oaks. A complete listing of these sites is presented as **TABLE III-3**.

Prior to October 1991 (i.e., the beginning of WY 1992), District streamflow monitoring primarily consisted of instantaneous measurements made by the “current meter” method. At the beginning of WY 1992, a concerted effort was undertaken to upgrade the streamflow monitoring network by gradually replacing non-recording sites (i.e., sites consisting of a staff gage only) with continuous

recording sites (i.e., sites that include automatic stage recording equipment). This upgrade effort significantly improved program efficiency and effectiveness as continuous records of streamflow replaced the former “spot” measurement methodology at the gaging stations.

OBJECTIVE

This report is the fifth in a series, documenting the surface-water resources data collected by the District during WY 2009 - 2013. The previous four reports in this series are titled as follows: *Carmel River Basin Surface Water Resources Data Report, Water Years 1992-1995* (James, 1996), *Carmel River Basin Surface Water Resources Data Report, Water Years 1996-1999* (James, 1999), *Carmel River Basin Surface Water Resources Data Report, Water Years 2000-2003* (James, 2004), *Carmel River Basin Surface Water Resources Data Report, Water Years 2004-2008* (James, 2009). It is planned to periodically compile additional reports in a similar format as part of the District’s ongoing HMP. A significant amount of surface-water quantity data (primarily streamflow) has been collected and processed by the District within the CRB and lagoon over the five-year period encompassing WY 2009 through 2013. This report consolidates and finalizes these data-collection efforts in summary form for the following uses related to surface water:

1. provides necessary information for current studies and programs,
2. allows further evaluation of the results of completed studies, and
3. provides baseline information to aid future investigations.

This report is divided into three major sections: (a) Rainfall, (b) CRB streamflow and (c) Lagoon water levels/cross sections. Each section provides a brief description of the data collection methods used, along with key information regarding its presentation within the appendices.

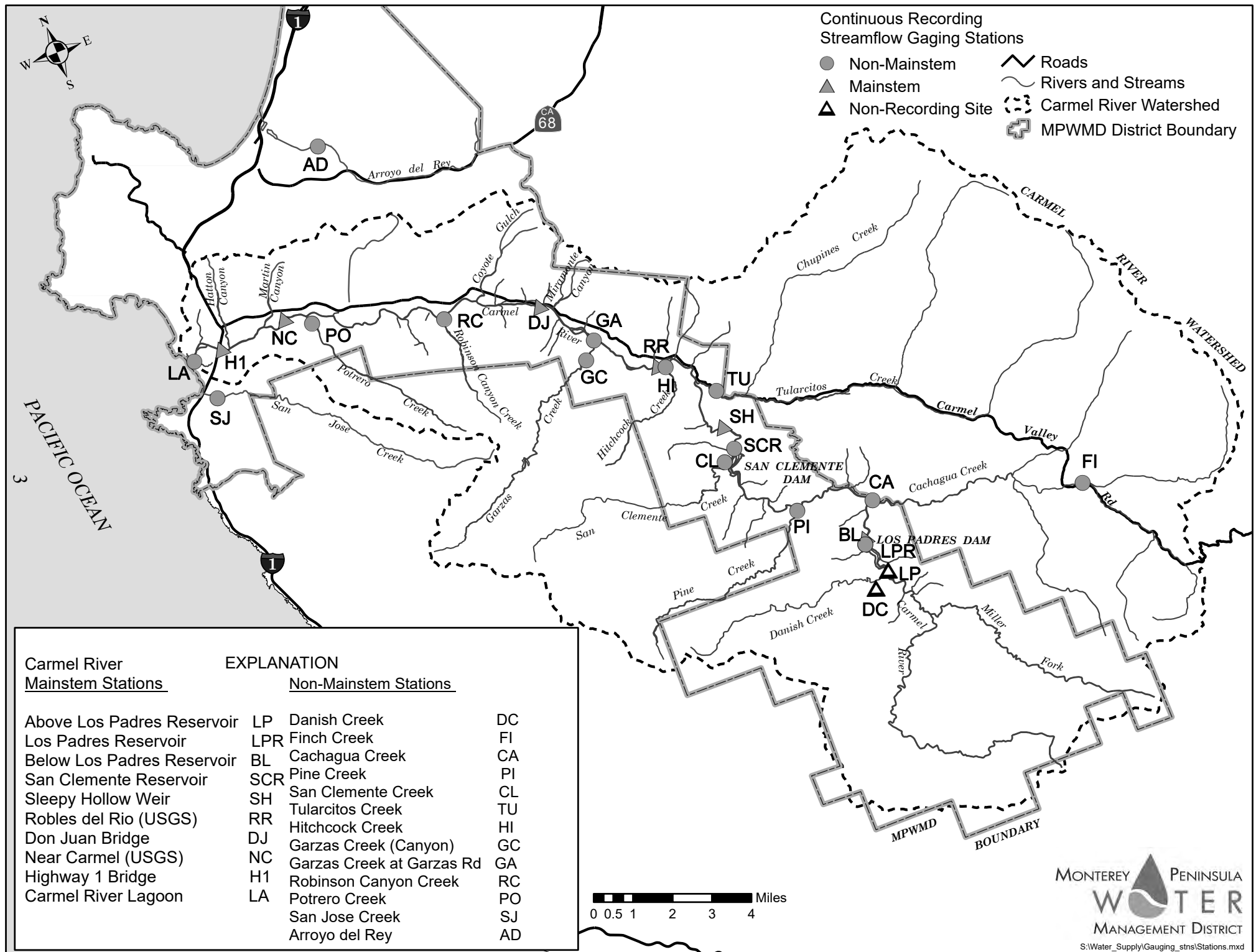


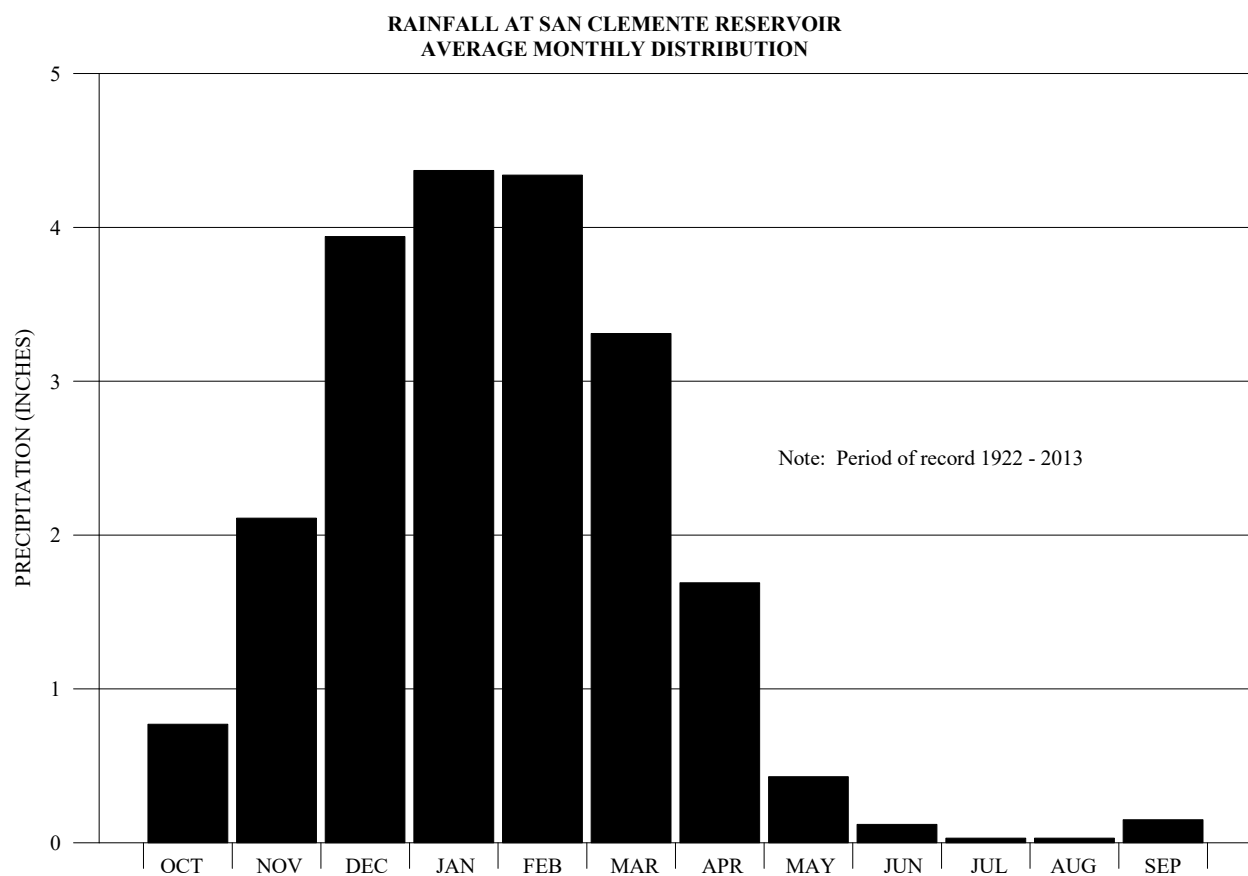
FIGURE I-1

SECTION II - RAINFALL

RAINFALL

The Mediterranean climate of the Carmel River Basin (CRB) is generally mild, with warm, dry summers and cool, wet winters. Mean annual rainfall varies from about 14 inches along the northeast perimeter of the basin, to over 40 inches in the high peaks of the southernmost portion of the basin. More than 90 percent of the annual rainfall occurs over the watershed during the six-month period between November and April as illustrated in **FIGURE II-1**. In addition, annual rainfall totals can vary significantly from year to year (**FIGURE II-2**).

FIGURE II-1



Rainfall values included in this report and in **APPENDIX A** were obtained from the following non-recording (i.e., manual daily rainfall readings only) precipitation measuring sites:

1. Los Padres Reservoir
2. San Clemente Reservoir
3. Pacific Grove Reservoir
4. Monterey

The Los Padres, San Clemente and Pacific Grove Reservoir sites are operated and maintained by California American Water (Cal-Am), while the Monterey site is maintained by R.J. Renard, meteorologist and volunteer weather observer for Monterey, California. These sites were selected for this report because they are readily available and reliable. It should be noted that two of these sites, Pacific Grove Reservoir and Monterey are located on the Monterey Peninsula and not in Carmel Valley, and are not directly representative of rainfall conditions in the CRB, which is the focus of this report. However, these sites are useful for comparative purposes.

Overall, rainfall within the CRB for the WY 2009 - 2013 period was slightly below the historical average (21.29 inches) with an average of 19.8 inches for the five-year period. However, within this period, WY 2012 and 2013 were well below average, 2010 and 2011 were above average, and 2009 was below average. The chart in **FIGURE II-2** illustrates this condition for the San Clemente Reservoir (SCR) site, and compares these recent years to historical annual rainfall data collected at this site during the WY 1922 - 2013 period. Charts and tables showing monthly and daily rainfall for the four rainfall measuring sites over the WY 2009 - 2013 period are provided in **APPENDIX A**.

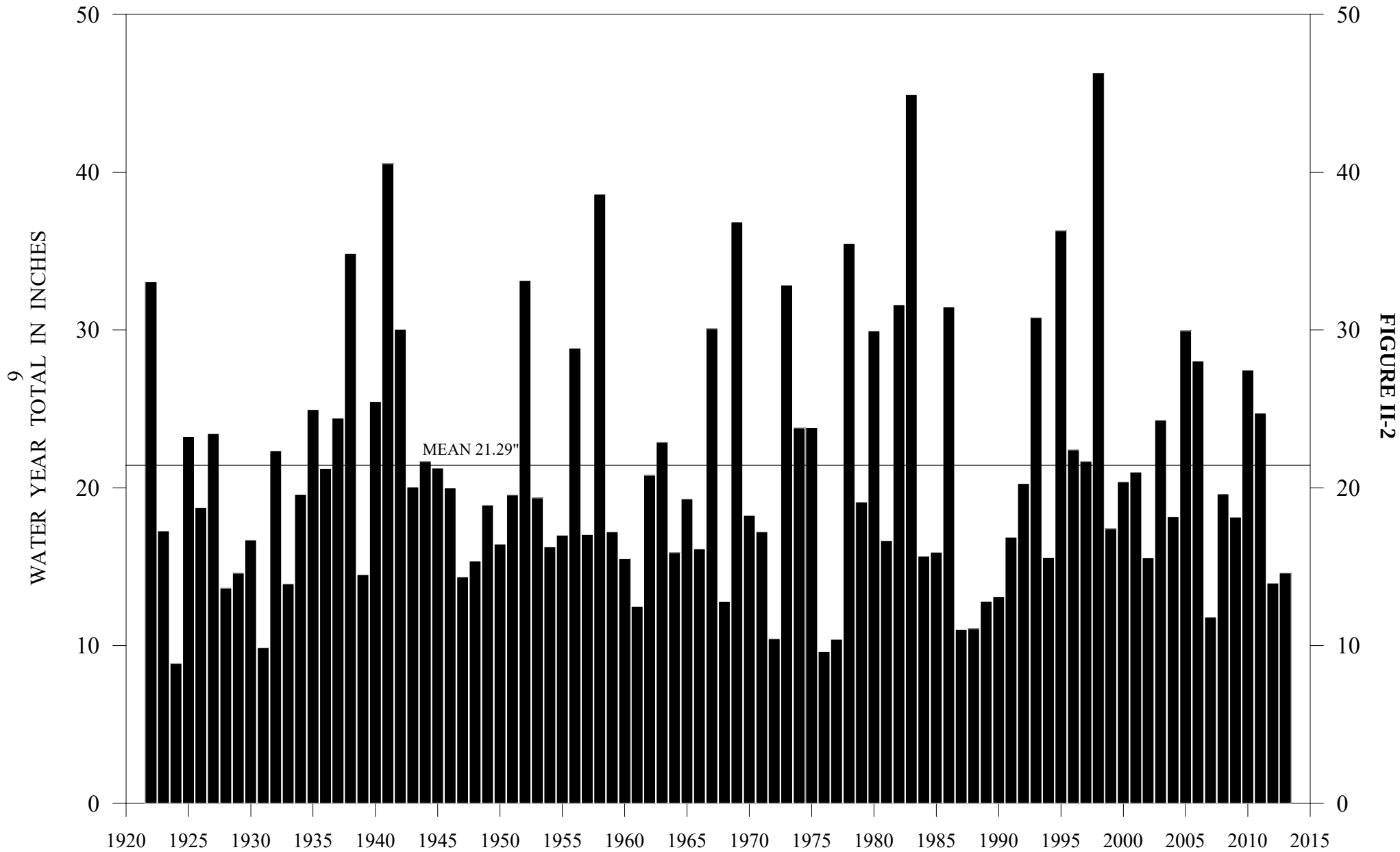
An historical summary of SCR rainfall for the WY 1922 - 2013 period is presented as **TABLE II-1**. The District uses the SCR precipitation gage to determine average rainfall figures because of its reliable long-term record, and its centralized location within the CRB. The mean annual rainfall at this site is 21.29 inches, which represents the arithmetic average of annual recorded values over the WY 1922 - 2013 period.

Seventeen monthly rainfall values within the WY 1923 -1926 period have been estimated in **TABLE II-1**, and appear in bold-italic. These values were previously listed as zeroes in the Cal-Am records for unknown reasons. Review of long-term records for Watsonville, Salinas and Pacific Grove all indicate some measurable rainfall during each of the 17 suspect months. Review of several local rainfall databases indicated that the Salinas long-term rainfall record would be best suited to estimate the missing SCR values. Salinas rainfall was compared to SCR rainfall for 55 selected (complete) years between 1931 and 1994, and 12 monthly linear-regression equations were developed and used to estimate the 17 suspect values.

Although rainfall over the 2009 - 2013 period as a whole was close to average, individual annual totals were quite variable. In particular, both WY 2010 and 2011 were two consecutive “above normal” years with approximately 25 inches and 27 inches of rain respectively, followed by two “dry” years, WY 2012 and 2013 with 13.9 and 14.6 inches of rain, respectively. It should be noted that WY 2012 through WY 2013 marked the beginning of a multi-year drought based on annual runoff (**TABLE III-2**).

The Storm of October 13-14, 2009 was by far the most unusual rainfall event of the WY 2009 – 2013 period, and defied local climatology. This event resulted from the moisture laden remnants of Super Typhoon Melor (made landfall in Japan on October 8), becoming entrained into an unseasonable strong (westerly) Jet Stream. Rainfall at SCR during October 2009 totaled 5.11 inches, or nearly seven times the monthly average of 0.77 inches. This was the highest October rainfall total since rainfall record keeping began at SCR in 1922. Interestingly, the monthly October rainfall record has been broken three times since WY 2001 (WY 2001 – 3.28 inches, WY 2005 – 4.13 inches and October 2009 – 5.11 inches).

RAINFALL AT SAN CLEMENTE RESERVOIR SITE WATER YEARS 1922 - 2013



Source: California American Water, Monterey Division

TABLE II-1

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

RAINFALL AT SAN CLEMENTE RESERVOIR SITE: WATER YEAR 1922 - 2013

(All Values in Inches)

WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1922	0.00	2.60	13.55	5.45	7.65	2.75	0.60	0.45	0.00	0.00	0.00	0.00	33.05
1923	1.06	4.05	4.20	3.01	1.45	0.00	2.70	0.00	0.20	0.00	0.00	0.60	17.27
1924	0.30	0.45	1.10	2.85	0.25	2.51	1.14	0.20	0.00	0.00	0.00	0.07	8.87
1925	0.60	2.42	4.14	4.17	4.71	3.17	2.04	1.77	0.08	0.00	0.00	0.14	23.24
1926	0.38	1.60	2.15	3.60	6.00	0.60	4.40	0.00	0.00	0.00	0.00	0.00	18.73
1927	0.42	8.36	1.64	2.44	7.58	1.39	1.07	0.28	0.10	0.00	0.00	0.15	23.43
1928	0.80	2.10	2.83	0.88	2.43	3.58	0.96	0.05	0.00	0.00	0.00	0.00	13.63
1929	0.02	3.12	3.41	1.26	1.37	2.89	1.29	0.00	1.23	0.00	0.00	0.00	14.59
1930	0.00	0.00	0.83	5.37	3.26	4.25	1.33	1.61	0.00	0.00	0.00	0.03	16.68
1931	0.05	1.48	0.05	4.26	1.56	0.92	0.49	0.66	0.40	0.00	0.00	0.00	9.87
1932	0.02	1.75	10.26	4.32	4.69	0.80	0.14	0.36	0.00	0.00	0.00	0.00	22.34
1933	0.00	0.18	3.12	6.92	0.92	1.57	0.33	0.82	0.04	0.00	0.00	0.00	13.90
1934	1.12	0.00	8.25	3.15	5.29	0.00	0.13	0.85	0.72	0.00	0.00	0.06	19.57
1935	0.15	2.89	2.69	7.00	0.77	4.88	5.91	0.00	0.00	0.00	0.65	0.00	24.94
1936	0.37	0.81	2.01	2.66	9.97	1.68	2.46	0.48	0.34	0.43	0.00	0.00	21.21
1937	0.43	0.00	4.16	4.62	6.77	7.78	0.52	0.00	0.13	0.00	0.00	0.00	24.41
1938	0.06	1.01	6.59	3.44	13.02	8.09	2.63	0.00	0.00	0.00	0.00	0.00	34.84
1939	0.81	1.04	2.48	3.54	2.70	3.08	0.42	0.22	0.10	0.00	0.00	0.10	14.49
1940	1.04	0.37	2.38	9.20	8.96	2.32	0.60	0.27	0.00	0.00	0.00	0.31	25.45
1941	0.45	0.33	9.45	5.18	10.42	8.92	5.08	0.61	0.10	0.00	0.00	0.00	40.54
1942	1.13	1.04	10.49	5.71	2.46	3.28	4.91	1.01	0.00	0.00	0.00	0.00	30.03
1943	0.74	1.96	1.63	8.40	2.42	3.74	1.07	0.00	0.09	0.00	0.00	0.00	20.05
1944	0.74	0.36	3.33	3.94	9.28	1.00	1.94	0.75	0.32	0.00	0.00	0.00	21.66
1945	1.08	3.24	2.39	1.33	7.61	4.88	0.28	0.20	0.00	0.00	0.24	0.00	21.25
1946	2.80	2.05	7.69	0.85	2.77	3.28	0.00	0.43	0.00	0.00	0.00	0.11	19.98
1947	0.31	5.16	2.24	1.19	2.42	1.58	1.00	0.23	0.22	0.00	0.00	0.00	14.35
1948	0.79	0.67	2.36	0.05	2.48	4.38	3.86	0.62	0.15	0.00	0.00	0.00	15.36
1949	1.74	0.15	6.11	1.18	3.04	5.96	0.15	0.51	0.00	0.02	0.03	0.00	18.89
1950	0.19	1.47	1.69	6.09	2.97	2.23	1.47	0.26	0.00	0.00	0.05	0.00	16.42
1951	2.72	6.33	3.04	2.95	1.94	1.04	1.37	0.07	0.05	0.00	0.00	0.03	19.54
1952	1.44	4.01	8.36	9.80	1.61	6.82	0.80	0.22	0.00	0.00	0.00	0.07	33.13
1953	0.07	3.00	8.76	2.68	0.00	2.09	1.89	0.62	0.10	0.06	0.09	0.00	19.36
1954	0.30	2.16	0.49	4.37	3.28	4.68	0.53	0.19	0.25	0.00	0.00	0.00	16.25
1955	0.00	1.98	2.98	5.53	1.99	0.31	2.84	1.36	0.00	0.00	0.00	0.00	16.99
1956	0.03	2.24	14.94	6.59	2.25	0.51	1.60	0.48	0.00	0.00	0.00	0.21	28.85
1957	0.79	0.02	0.53	5.21	5.11	1.57	1.72	1.93	0.09	0.00	0.00	0.07	17.04
1958	1.47	0.93	3.99	4.63	9.78	7.82	8.50	0.56	0.14	0.00	0.00	0.78	38.60
1959	0.03	1.01	0.27	6.35	6.92	0.23	0.11	0.09	0.00	0.00	0.09	2.10	17.20
1960	0.00	0.00	0.64	5.12	6.64	0.83	1.91	0.33	0.00	0.00	0.00	0.05	15.52
1961	0.05	3.53	2.14	1.91	0.91	2.49	0.86	0.49	0.10	0.00	0.00	0.00	12.48
1962	0.17	2.19	1.73	2.00	11.29	2.96	0.11	0.34	0.00	0.00	0.00	0.00	20.79
1963	1.81	0.10	2.29	5.37	4.53	4.27	4.14	0.23	0.05	0.00	0.00	0.09	22.88
1964	1.32	4.33	0.46	4.00	0.46	2.70	0.77	1.38	0.17	0.00	0.00	0.30	15.89
1965	0.87	3.89	4.77	2.92	1.05	2.45	2.92	0.14	0.02	0.00	0.25	0.00	19.28
1966	0.07	6.63	4.43	2.04	1.47	0.68	0.27	0.00	0.08	0.27	0.00	0.18	16.12
1967	0.00	3.74	6.41	5.99	0.53	5.82	6.75	0.19	0.52	0.00	0.00	0.13	30.08
1968	0.27	1.13	2.49	3.36	1.01	3.15	0.81	0.43	0.12	0.00	0.02	0.00	12.79
1969	0.33	1.77	4.24	15.13	11.10	1.92	2.14	0.12	0.10	0.00	0.00	0.00	36.85
1970	0.34	0.79	3.11	7.00	2.30	3.80	0.81	0.07	0.04	0.00	0.00	0.00	18.26
1971	0.11	5.68	6.62	1.20	0.53	1.49	1.21	0.15	0.00	0.00	0.04	0.17	17.20

TABLE II-1 (CONTINUED)
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

RAINFALL AT SAN CLEMENTE RESERVOIR SITE: WATER YEAR 1922 - 2013
(All Values in Inches)

WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1972	0.24	1.43	5.56	1.19	0.98	0.01	0.89	0.08	0.02	0.00	0.00	0.03	10.43
1973	2.85	5.79	2.66	7.59	9.20	4.38	0.29	0.02	0.00	0.00	0.00	0.07	32.85
1974	1.81	3.92	4.31	4.80	0.40	6.34	2.03	0.00	0.11	0.07	0.00	0.00	23.79
1975	1.79	0.81	3.57	0.65	6.88	8.20	1.66	0.02	0.04	0.07	0.12	0.00	23.81
1976	1.31	0.73	0.33	0.08	1.26	2.54	1.46	0.05	0.18	0.00	1.05	0.63	9.62
1977	1.57	0.60	1.85	2.45	0.41	1.85	0.00	1.11	0.08	0.00	0.00	0.48	10.40
1978	0.02	0.40	5.68	9.99	8.36	7.06	3.59	0.09	0.00	0.00	0.00	0.29	35.48
1979	0.00	2.51	1.41	5.72	4.32	4.35	0.38	0.26	0.00	0.12	0.03	0.00	19.10
1980	1.01	2.14	3.87	5.22	10.89	2.89	2.55	0.42	0.00	0.95	0.00	0.00	29.94
1981	0.02	0.04	2.76	7.09	1.29	4.95	0.49	0.00	0.00	0.00	0.00	0.00	16.64
1982	2.91	5.65	2.20	7.45	1.72	5.19	4.58	0.03	0.42	0.00	0.00	1.45	31.60
1983	1.96	5.15	6.69	8.10	5.86	11.16	4.11	0.21	0.25	0.00	0.17	1.25	44.91
1984	0.41	4.46	7.69	0.12	1.63	0.81	0.52	0.00	0.03	0.00	0.00	0.00	15.67
1985	0.98	5.77	1.86	0.75	1.72	4.20	0.51	0.09	0.01	0.00	0.00	0.03	15.92
1986	0.72	4.41	1.36	2.61	11.46	8.10	1.42	0.25	0.00	0.05	0.00	1.09	31.47
1987	0.00	0.53	0.98	2.19	4.05	2.65	0.36	0.26	0.00	0.00	0.00	0.00	11.02
1988	1.13	0.76	4.37	1.87	0.58	0.11	1.64	0.51	0.10	0.00	0.00	0.00	11.07
1989	0.00	1.42	4.18	1.37	1.84	2.24	0.60	0.35	0.00	0.00	0.00	0.80	12.80
1990	1.17	1.23	0.08	3.19	3.61	1.82	0.58	1.06	0.00	0.00	0.00	0.35	13.09
1991	0.00	0.42	1.99	0.18	2.11	11.38	0.30	0.45	0.01	0.00	0.03	0.00	16.87
1992	1.03	0.37	4.36	2.69	9.04	2.76	0.01	0.00	0.00	0.00	0.00	0.00	20.26
1993	0.72	0.05	5.75	12.12	8.58	2.19	0.45	0.37	0.55	0.00	0.00	0.00	30.78
1994	0.11	2.15	1.46	2.41	5.58	0.49	1.99	1.06	0.04	0.00	0.00	0.28	15.57
1995	0.83	2.15	1.57	16.05	0.67	10.88	1.53	1.44	0.97	0.20	0.00	0.00	36.29
1996	0.00	0.09	4.87	4.25	7.97	2.06	1.28	1.84	0.02	0.00	0.00	0.02	22.40
1997	1.22	3.30	7.83	8.61	0.29	0.08	0.10	0.05	0.04	0.00	0.15	0.00	21.67
1998	0.33	5.76	4.97	7.13	18.24	3.27	4.10	2.38	0.09	0.00	0.00	0.02	46.29
1999	0.42	2.00	1.97	3.37	3.68	3.36	2.18	0.01	0.30	0.00	0.02	0.10	17.41
2000	0.02	1.47	0.13	5.91	7.75	2.45	1.78	0.37	0.40	0.00	0.00	0.09	20.37
2001	3.28	0.33	0.27	6.54	5.02	3.00	2.44	0.00	0.00	0.00	0.00	0.11	20.99
2002	0.22	4.24	5.76	1.01	0.97	2.34	0.70	0.30	0.02	0.00	0.00	0.00	15.56
2003	0.00	5.26	9.73	1.58	1.46	1.55	3.50	1.20	0.00	0.00	0.01	0.00	24.29
2004	0.27	0.87	6.88	2.44	6.88	0.52	0.11	0.00	0.15	0.00	0.00	0.04	18.16
2005	4.13	0.90	6.87	5.43	4.91	4.97	1.73	0.75	0.20	0.06	0.00	0.00	29.95
2006	0.05	0.78	7.43	4.11	3.73	6.07	4.97	0.89	0.00	0.00	0.00	0.00	28.03
2007	0.16	1.16	3.22	0.84	3.52	1.36	1.05	0.06	0.00	0.02	0.00	0.42	11.81
2008	0.57	0.15	1.77	12.56	4.02	0.29	0.25	0.00	0.00	0.00	0.00	0.00	19.61
2009	0.11	2.13	2.28	1.76	7.07	3.86	0.43	0.42	0.02	0.00	0.00	0.06	18.14
2010	5.11	0.22	2.37	7.96	4.25	2.59	4.45	0.50	0.00	0.00	0.00	0.01	27.46
2011	0.62	2.26	5.47	2.06	5.31	6.38	0.37	0.97	1.29	0.00	0.00	0.00	24.73
2012	1.71	1.59	0.10	3.18	0.90	3.94	2.41	0.04	0.07	0.00	0.00	0.00	13.94
2013	0.64	2.77	7.70	1.52	0.90	0.46	0.48	0.00	0.00	0.00	0.00	0.13	14.60
SUMMARY STATISTICS FOR WATER YEARS 1922 -2013													
MEAN	0.77	2.11	3.94	4.37	4.34	3.31	1.69	0.43	0.12	0.03	0.03	0.15	21.29
MIN	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.87
MAX	5.11	8.36	14.94	16.05	18.24	11.38	8.50	2.38	1.29	0.95	1.05	2.10	46.29
STDEV	0.96	1.89	3.04	3.20	3.62	2.62	1.67	0.51	0.24	0.11	0.13	0.34	8.17

Note: Values in bold italic are estimates based on monthly regressions with rainfall at Salinas Airport. "Water Year" refers to the 12-month period beginning October 1 and ending September 30 of the indicated year.

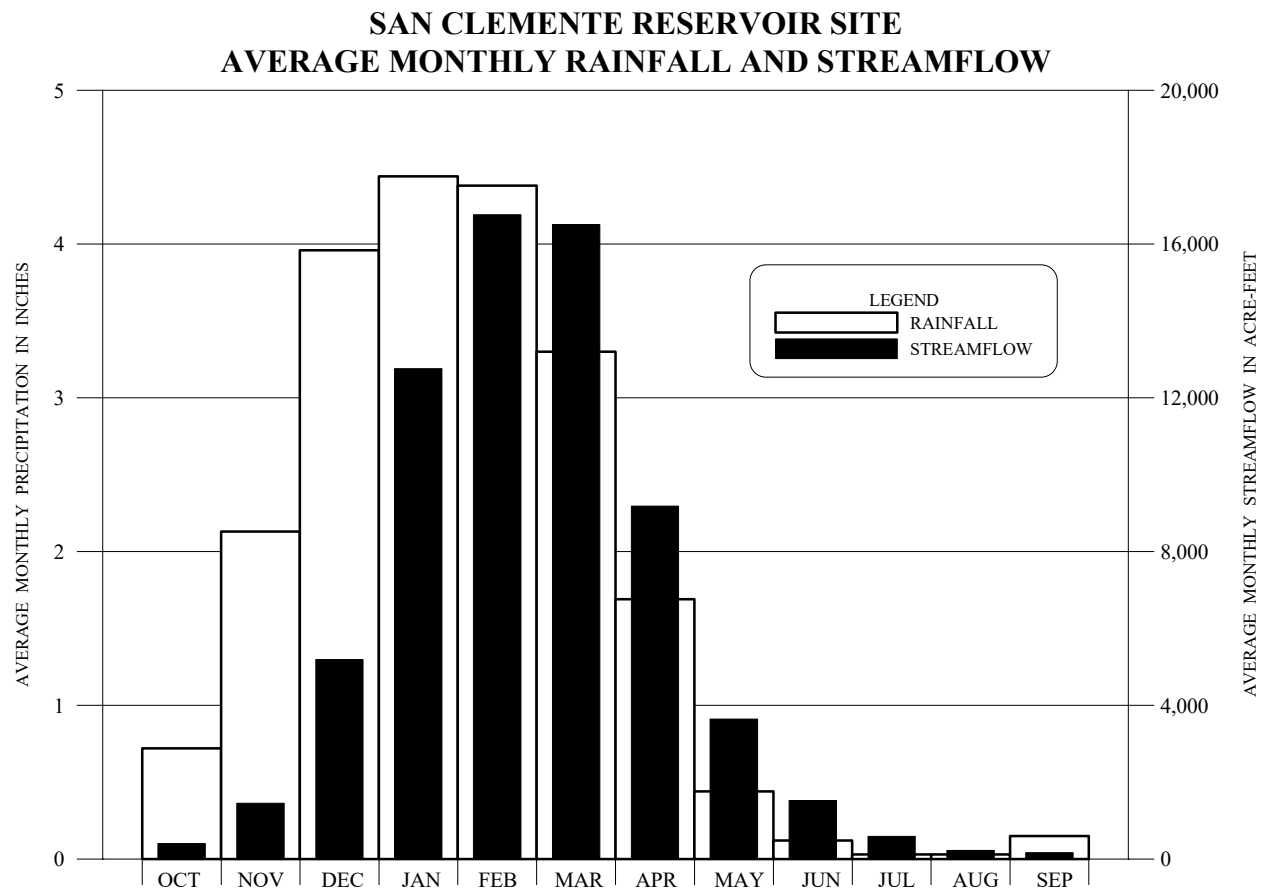
Source: California American Water, Monterey Division.

SECTION III - CARMEL RIVER BASIN STREAMFLOW

GENERAL

Although the first significant rains of the season typically begin in November, significant changes in streamflow resulting from these rains normally do not occur until December or January. Fall rains replenish soils that have dried out during the summer, and consequently little runoff occurs during this period. During the fall of each year, most of the Carmel River tributaries are dry at their confluence with the river. In addition, the lower reaches of the Carmel River are typically dry at this time. By December or January, winter rains begin to run off saturated soils and basin streamflow significantly increases. Monthly streamflow is typically the highest during the January through March period, as soils are moisture laden and rainstorms pass through the region on a consistent basis. **FIGURE III-1** relates rainfall to streamflow and illustrates fall rains (October - December), having a minimal effect on streamflow as rains soak into dry soil. Later in the season (February - May), saturated soil conditions (antecedent moisture) reverse this pattern, as a higher percentage of rain runs off into the river, enhancing streamflow. In addition, water stored in the soil from winter rains seeps back into the river, contributing to streamflow.

FIGURE III-1



Note: Rainfall averages obtained from Table II-1.

Streamflow averages based on unimpaired flows (Table III-2) for the 1902-2013 period simulated by MPWMD.

OVERVIEW: WATER YEARS 2009 - 2013

Overall, streamflow within the Carmel River Basin for the Water Year (WY) 2009 - 2013 period was below average. Within this period, WY 2009 was “normal”, WY 2010 and 2011 were “above normal”, and WY 2012 and WY 2013 were “dry”. **TABLE III-1** highlights the runoff classification for WY 2009 - 2013. The runoff classifications are based on selected exceedence frequency values computed for the long term, simulated unimpaired flow record at the SCR site for WY 1902 - 2013. Refer to **TABLE III-2** for a more complete tabulation of historical runoff classification at the SCR site. **FIGURE III-2** illustrates the runoff values presented in **TABLE III-2**.

TABLE III-1

CLASSIFICATION OF UNIMPAIRED CARMEL RIVER FLOWS AT SAN CLEMENTE RESERVOIR SITE: WATER YEARS 2009-2013

Water Year	Runoff (acre-feet)	Classification
2009	47,506	Normal
2010	98,419	Above Normal
2011	101,769	Above Normal
2012	20,025	Dry
2013	27,303	Dry
Average (1902-2013)	68,400	

FIGURE III-2

UNIMPAIRED CARMEL RIVER FLOW AT SAN CLEMENTE RESERVOIR: 1902-2013

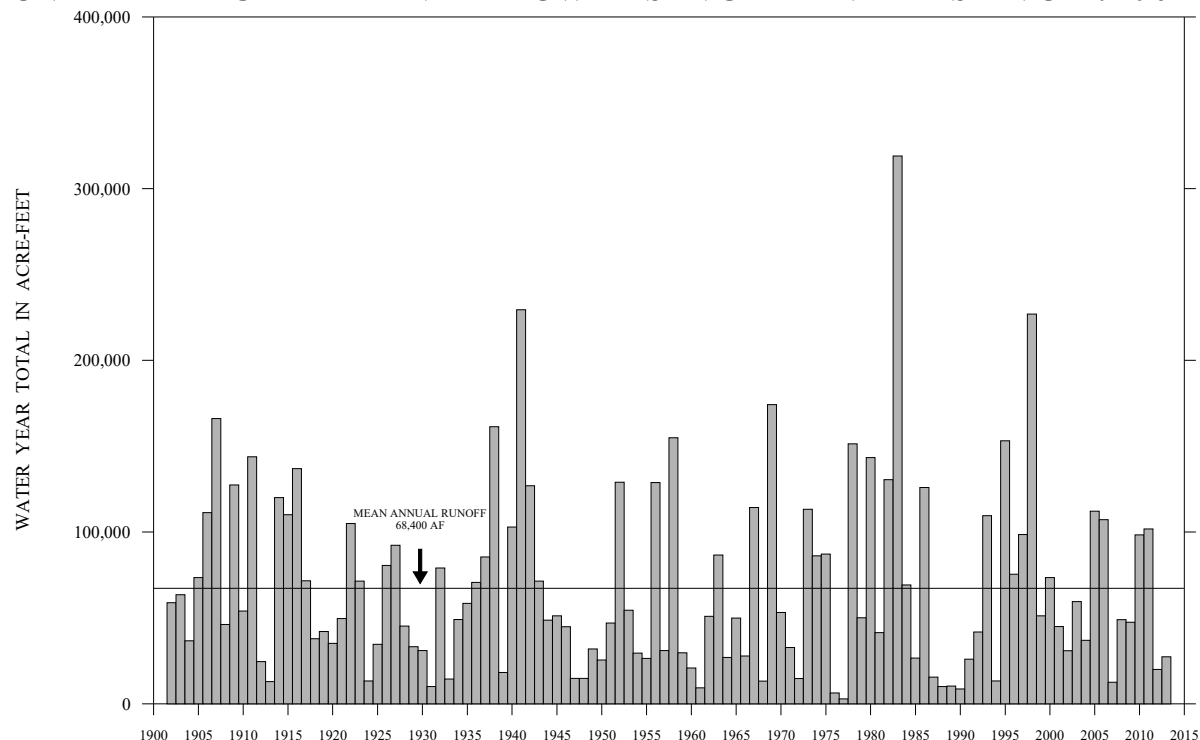


TABLE III-2

Monterey Peninsula Water Management District

**CLASSIFICATION OF UNIMPAIRED CARMEL RIVER FLOWS AT SAN CLEMENTE DAM SITE
(RUNOFF IN ACRE-FEET)**

Water Year	Runoff	Classification	Water Year	Runoff	Classification
1902	58,872	Normal	1959	29,702	Below Normal
1903	63,516	Normal	1960	20,780	Dry
1904	36,704	Below Normal	1961	9,278	Critically Dry
1905	73,489	Above Normal	1962	50,942	Normal
1906	111,242	Wet	1963	86,582	Above Normal
1907	166,057	Extremely Wet	1964	26,977	Dry
1908	46,177	Normal	1965	49,941	Normal
1909	127,394	Wet	1966	27,892	Dry
1910	53,977	Normal	1967	114,304	Wet
1911	143,892	Extremely Wet	1968	13,177	Critically Dry
1912	24,611	Dry	1969	174,213	Extremely Wet
1913	12,933	Critically Dry	1970	53,112	Normal
1914	120,075	Wet	1971	32,707	Below Normal
1915	110,110	Wet	1972	14,680	Critically Dry
1916	136,932	Extremely Wet	1973	113,269	Wet
1917	71,580	Above Normal	1974	86,102	Above Normal
1918	37,917	Below Normal	1975	87,211	Above Normal
1919	42,107	Normal	1976	6,358	Critically Dry
1920	35,198	Below Normal	1977	2,855	Critically Dry
1921	49,583	Normal	1978	151,421	Extremely Wet
1922	104,977	Wet	1979	50,087	Normal
1923	71,493	Normal	1980	143,395	Extremely Wet
1924	13,304	Critically Dry	1981	41,445	Below Normal
1925	34,626	Below Normal	1982	130,522	Extremely Wet
1926	80,608	Above Normal	1983	318,987	Extremely Wet
1927	92,274	Above Normal	1984	69,179	Normal
1928	45,261	Normal	1985	26,611	Dry
1929	33,188	Below Normal	1986	125,911	Wet
1930	30,988	Below Normal	1987	15,551	Dry
1931	9,988	Critically Dry	1988	10,083	Critically Dry
1932	79,097	Above Normal	1989	10,248	Critically Dry
1933	14,383	Critically Dry	1990	8,606	Critically Dry
1934	49,058	Normal	1991	25,965	Dry
1935	58,486	Normal	1992	41,777	Normal
1936	70,684	Normal	1993	109,505	Wet
1937	85,456	Above Normal	1994	13,313	Critically Dry
1938	161,366	Extremely Wet	1995	153,118	Extremely Wet
1939	18,297	Dry	1996	75,412	Above Normal
1940	102,907	Wet	1997	98,561	Above Normal
1941	229,468	Extremely Wet	1998	226,901	Extremely Wet
1942	126,930	Wet	1999	51,222	Normal
1943	71,489	Normal	2000	73,499	Above Normal
1944	48,730	Normal	2001	44,981	Normal
1945	51,264	Normal	2002	30,888	Below Normal
1946	44,886	Normal	2003	59,434	Normal
1947	14,743	Dry	2004	36,910	Below Normal
1948	14,703	Dry	2005	112,153	Wet
1949	31,955	Below Normal	2006	107,217	Wet
1950	25,543	Dry	2007	12,542	Critically Dry
1951	47,061	Normal	2008	49,017	Normal
1952	128,995	Wet	2009	47,506	Normal
1953	54,446	Normal	2010	98,419	Above Normal
1954	29,467	Dry	2011	101,769	Above Normal
1955	26,496	Dry	2012	20,025	Dry
1956	128,805	Wet	2013	27,303	Dry
1957	31,002	Below Normal			
1958	154,843	Extremely Wet			

Notes:

1. Year type classifications are based on the Carmel River Basin Runoff Index.
2. Outlined years indicate two or more consecutive dry or critically dry years and are defined as hydrologic droughts.
3. Runoff values for Water Years 1902-2005 were reconstructed by the Monterey Peninsula Water Management District based on records provided by the United States Geological Survey (USGS) and California American Water (Cal-Am). The runoff values for WY 2006 through WY 2013 were computed by the Monterey Peninsula Water Management District.

STATION DESCRIPTIONS

Descriptions of the 19 recording and two non-recording gaging stations are provided in **APPENDIX B**, and are presented in downstream order. Each station description consolidates key, site-specific information relevant to a particular gaging station, and allows an overview of the site.

The station descriptions are based on the United States Geological Survey (USGS) standard form 9-197 (Kennedy, 1983). Items which have been left blank on the station descriptions were either not available at the time of this publication or are not applicable.

DISCHARGE MEASUREMENT SUMMARIES

To compute continuous records of streamflow or document instantaneous flow conditions, it is necessary to collect streamflow measurements and stage (water level) readings. District streamflow measurements are collected by the “current-meter method” using either a “pygmy” meter for low flows, or a standard type “AA” meter for moderate to high flows. Both of these meters meet USGS meter specifications. Occasionally, very low flows (i.e., generally less than 0.15 cubic feet per second [cfs]) are measured using a three-inch modified Parshall Flume (flume) in order improve measurement accuracy. A summary of these measurements at each station are presented in **APPENDIX C**, and are listed in downstream order.

Streamflow measurements are obtained at the gage site either by attaching the meter to a wading rod and wading the stream, or in flows too swift to wade, measurements are obtained by suspending the current meter off a bridge using a bridge crane or bridge board. In general, the “0.6 method” of velocity measurement is used, which involves setting the meter six-tenths of the total measured depth below the water surface before recording velocities. The streamflow measurement methodology used by the District is described in various technical documents, most importantly in *Discharge Measurements at Gaging Stations* (Buchanan and Somers, 1969).

Discharge measurements obtained in the field are computed at the District office using spreadsheet software, and are input into the District’s streamflow measurement database from which the summary reports included in this document are produced. With a few exceptions explained below, most of the headings in these reports are self-explanatory. The “time” column of the summary sheet represents the beginning time of the streamflow measurement. The “rating” of the measurement is designated good, fair or poor. These ratings are somewhat qualitative, but in general, a 25-section current meter measurement with fairly uniform flow, where the highest partial section flow is approximately five percent of the total measured flow is considered “good”. Flume measurements are generally considered good. A “poor” rating is given to a measurement obtained with irregular velocities within the cross section, with the highest partial section of flow being greater than 10 percent of the total flow. A low-flow measurement when only several sections were obtained would also be considered “poor”. Most of the District’s streamflow measurements were rated “fair to good”.

A relatively new data field of “specific conductance (SC)” reported in micro Siemens per centimeter ($\mu\text{S}/\text{cm}$) is included in this report, as District staff began field measurement of this water-quality parameter at the gaging stations in WY 2004. Specific Conductance is an easily obtained parameter

that is a good indicator of dissolved solids in natural waters, and can be used as an indicator of water pollution. Total dissolved solids (TDS) in milligrams per liter is about 65 percent of the SC in $\mu\text{S}/\text{cm}$ ($\text{TDS}=0.65*\text{SC}$), but may vary from stream to stream depending on the chemical composition of the water. In general, streams originating from the highest peaks along the southwestern portion of the Carmel River Basin exhibited a relatively low SC as the geology is dominated by resistant granitic rock and anthropogenic impacts are low (e.g., Pine Creek). Streams originating from more shale-dominated watersheds, or watersheds influenced by road/urban runoff, possible septic inflow or other developmental impacts displayed higher SC values (e.g., Tularcitos Creek and Arroyo Del Rey at Del Rey Oaks). In addition, SC values at the gaging stations were found to be inversely proportional to volume of flow.

COMPUTED MEAN-DAILY DISCHARGE TABLES AND PLOTS

Computed mean-daily discharge tables and plots are provided in **APPENDIX D**, and are presented in downstream order. Daily discharge figures (cfs) in these tables represent the average flow rate for the day indicated. The daily discharge tables indicate a continuous record of streamflow at a station for all days of the year. For additional historic and real-time streamflow data visit:

<http://www.mpwmd.net/environmental-stewardship/carmel-river-basin/carmel-river-flows/>

In order to compute daily streamflow records at a gaging station, a continuous record of stage at the site must be collected. In addition, individual measurements of discharge over a range of stages as well as notations of factors that may affect the stage-discharge relationship must be collected. Continuous records of stage at District gaging stations are obtained using pressure transducer and data recorder systems or graphic recorder and float systems as indicated in **TABLE III-3**.

TABLE III-3

CONTINUOUS WATER LEVEL RECORDING TECHNOLOGY USED AT DISTRICT GAGING STATIONS

<u>PRESSURE TRANSDUCER/DATALOGGER</u>	<u>FLOAT/GRAPHIC RECORDER</u>
1. Los Padres Reservoir ¹	16. Carmel River at Sleepy Hollow Weir ^{1, 2}
2. Carmel River below Los Padres Reservoir ¹	17. Tularcitos Creek
3. Finch Creek ¹	18. Garzas Creek at Garzas Road
4. Cachagua Creek	19. Carmel River at Don Juan Bridge ^{1, 2}
5. Pine Creek	
6. San Clemente Creek	
7. San Clemente Reservoir ¹	
8. Hitchcock Creek	
9. Garzas Creek near Lower Garzas Canyon	
10. Robinson Canyon Creek	
11. Potrero Creek	
12. Carmel River at Highway 1 Bridge ¹	
13. Carmel River Lagoon ¹	
14. San Jose Creek	
15. Arroyo del Rey at Del Rey Oaks	

¹ Station includes telecommunications hardware

² Station also includes a pressure transducer

In computing discharge records, results of individual measurements (stage and discharge) are plotted on logarithmic paper and a stage-discharge relation curve is constructed. From these curves, rating tables are produced which indicate the approximate discharge for any given stage within the range of measurements. Mean daily discharges are then computed by applying the instantaneous stages (i.e., gage heights) to the stage-discharge tables. Typically, the stage-discharge relation varies due to changes in the channel at the gage from scour, deposition, aquatic-riparian vegetation growth, channel clearing, etc. These changes are accounted for by using the “shifting control” method prior to final record computation. These “shift” adjustments are applied to the gage heights before discharge figures are determined from the curves or tables. Other adjustments to the continuous-stage data include “datum adjustments” that are used to correct recorded-stage values to match stage values observed at the staff gage.

The streamflow and stage records presented in this report were produced using Hydstra Time Series Software (Hydstra), Kisters North America, Inc. Hydstra replaced the former surface water computation software Western Hydrologic Systems (WHS) in December 2014. This software upgrade included data migration from WHS to Hydstra. As in integral part of this report preparation, District Staff finalized all 95 continuous station-records for the WY 2009 – 2013 period utilizing Hydstra, rather than the retired WHS software.

For some gaging stations, there are periods when no continuous gage height record was obtained, and it was necessary to estimate the daily discharge. This is denoted by an “E” in the mean-daily discharge tables. Stage record is lost when a recorder malfunctions, intakes are plugged, the water surface drops below the water-level sensor, or for various other reasons. When this occurs, daily discharges are estimated, using comparison with other station records from nearby sub-basins, weather records, discharge measurements, stage readings, or other methods.

Accompanying each daily discharge record included in **APPENDIX D**, is a hydrograph based on daily values in the associated table. These hydrographs are plotted using a logarithmic (log) Y-axis and a linear X-axis. This is a standard procedure for plotting discharge hydrographs as it allows a wide range of discharge values (e.g., 0.10 to 1,000 cfs) to be plotted and still show definition throughout the range of flow. Because the number zero cannot be plotted on a log scale, periods of no flow are plotted as 0.01, the lowest discharge value indicated in these reports. If the reader has uncertainty whether a plotted value is zero or 0.01 cfs, the associated daily discharge table should be referenced. It should be noted that computed flows less than 0.005 cfs are rounded to zero in the Hydstra program, and flows greater than 0.005 cfs (but less than 0.015 cfs) round to 0.01 cfs. For this reason, a “trace of flow” may exist at a gaging station, although zero flow is reported. Furthermore, zero flow in the reports does not necessarily mean that the streambed at the station was completely dry. It is not uncommon to have pools of standing water along the gage reach with no observable surface flow.

It should be noted that, in addition to the District gaging stations, there are two USGS stations where continuous streamflow records are maintained:

1. Carmel River at Robles del Rio, and
2. Carmel River near Carmel.

These data are available online at <http://ca.water.usgs.gov/waterdata/>. The period of record for the “Robles del Rio” site is 1958 to present, and 1963 to present for the “near Carmel” site.

Refer to **FIGURE I-1** for the location of these sites. In addition, suspended and bedload sediment data are available in these reports for the “near Carmel” site for WY 1992 through 1996.

SUMMARY OF ANNUAL FLOWS

An annual summary of streamflow for the WY 1992 – 2013 period at both District and USGS stations is provided in **TABLE III-4**, reported in acre-feet (AF). This table contains both Carmel River mainstem and tributary flow values. The table begins in WY 1992 when the District began its effort to establish a network of continuous streamflow gaging stations.

Tributary Contribution

Relative tributary contribution varies from year to year, and it is postulated that the primary influences are spatial variations in sub-basin rainfall and differences in drainage areas between sub-basins. Other important factors affecting tributary runoff include: water extraction, urbanization, local terrain and soil type, and vegetal cover. In addition, antecedent moisture conditions (i.e., rainfall received in previous years) affect sub-basin runoff and baseflow in a given year.

San Clemente and Pine Creeks drain portions of the southwest border of the watershed. These areas receive relatively high annual rainfall (greater than 40 inches per year) as moist southerly airflow during storms comes in contact with the rising slopes of the Santa Lucia Mountain Range resulting in enhanced condensation and rainfall (orographic precipitation). Accordingly, these tributaries are high contributors of flow to the Carmel River. As indicated in **TABLES III-4 and III-5**, San Clemente Creek consistently contributed the highest volume of tributary inflow to the Carmel River over the period. Pine Creek, despite its relatively small drainage area, ranked second or third except during the extremely wet years of 1995 and 1998, in which Pine Creek ranked fourth and fifth, respectively. Garzas Creek headwaters also drain an area of high rainfall, and its flow contribution consistently ranks second or third. As shown in **TABLE III-5**, Garzas and Pine Creeks produced about the same total volume of flow over the WY 1993 – 2013 period. Cachagua and Tularcitos Creeks, the two largest sub-basins, located in the northeastern portion of the watershed, lie in a “rain-shadow”. Accordingly, they are moderate flow contributors in dry to average years. In extremely wet years such as 1995 and 1998, these large basins become saturated and their relative contributions increase significantly. The relatively small tributary drainages including Hitchcock, Robinson and Potrero Creeks, each drain approximately five square miles and are not located in a high rainfall region. Therefore, these tributaries are the lowest flow contributors of the eight gaged tributaries (**TABLE III-5**).

TABLE III-5 expresses tributary contribution as a percentage of the total annual flow measured at the Carmel River at Highway 1 Bridge (HWY 1) site. The HWY 1 site essentially represents the total catchment of the Carmel River Basin, with a drainage area of 252 square miles, as compared to 255 square miles at the lagoon. **TABLE III-5** shows how the various tributaries ranked in flow contribution over the past 21 years. In addition, the table shows that tributary runoff accounts for approximately 38 percent of the flow at HWY 1. It is important to note that **TABLE III-5** does not account for gains or losses that occur along the river, particularly Cal-Am groundwater extraction from the Lower Carmel Valley (LCV), which averaged approximately 9,100 AF annually over the 1993-2013 period. Consequently, percentages of

tributary flow contribution shown in the table are more exaggerated in critically dry years such as WY 1994 and 2007. In both of these years, Cal-Am LCV groundwater diversions totaled approximately 10,000 AF, significantly more than the total gaged flow at HWY 1 (7,410 AF and 6,470 AF) in both of these years.

Mainstem Flow

In general, total annual Carmel River streamflow generally gains in a downstream direction in above normal years through extremely wet years due to tributary inflow. In normal through critically dry years, losses in streamflow occur primarily due to LCV groundwater extraction. This is seen in more than half of the water years shown in **TABLE III-4** by comparing Upper Carmel Valley (UCV) gaging station flow values (Robles del Rio/Don Juan Bridge) against LCV values (near Carmel/Highway 1 Bridge). Refer to **TABLE III-2** for the runoff classifications for these years.

SUMMARY OF PEAK FLOWS

A summary of peak flows at the District's gaging stations for the report period is provided in **APPENDIX E**. The instantaneous peak flow or discharge (Q) typically corresponds to the highest stage (GHT) that occurred during a given storm. It is equivalent to "crest" stage of a flood event. While daily discharge values represent the mean (average) discharge over a 24-hour period, the instantaneous peak is the instant in time during a stormflow when the stream reached its highest level (and discharge) before receding.

Peak flows reported in **APPENDIX E** are obtained from the "primary computation report" within the Hydstra software program. The peak stage during a stormflow may be obtained by the recorder, crest stage gage or survey of high water marks at the gaging station. Peak flow rates can be determined by either extending the station rating curve beyond the high flow range of measurements, or by a slope-area channel survey after the event to indirectly determine the peak flow. It is rare to obtain an actual discharge measurement at the peak stage.

APPENDIX E lists the peak of the year at the mainstem or tributary site indicated. In some cases, when the two highest peaks of the year at a given station are within approximately ten percent of each other, both peaks are listed (e.g., see WY 2010, San Clemente Creek). For WY 2010, the highest peak of the year occurred on October 13-14, 2009 at the Los Padres Dam Spillway and Robles del Rio sites, and occurred on January 20, 2010 at the three downstream gage sites including Don Juan Bridge, near Carmel and HWY 1. For this reason, peak flows for both events are listed for the five main-stem sites.

RESERVOIR LEVELS

During the WY 2009 – 2013 period, there existed two significant reservoirs on the Carmel River, Los Padres Reservoir (LPR) and San Clemente Reservoir (SCR). Both reservoirs were constructed by the California Telephone and Water Company, now referred to as California American Water, the current owner and operator of both reservoirs. Both reservoirs were constructed for water supply and were not intended to provide flood-control benefits along the lower reaches of the Carmel River. Upon completion, LPR storage capacity was 3,070 acre-feet (AF), and SCR was 1,600 AF. Due to sedimentation over the years, LPR has lost about one half

of its capacity and SCR has lost nearly all of its capacity. Although beyond this reporting period, it should be noted that San Clemente Dam was completely removed as of August 2015 to enhance seismic safety and fish passage.

Los Padres Reservoir, completed in 1949 (river mile 24.8), is the largest reservoir on the Carmel River and still functions as a viable water storage facility. Its capacity based on a 2008 survey is approximately 1,750 AF (Smith, et. al., 2009). Currently, LPR is managed in such a way as to store water during the rainy season, and to release water from storage during the dry season to enhance instream flows below the reservoir. This operational mode is evident in the annual reservoir level plots presented in **APPENDIX F**. By December or January of each year, the reservoir is typically full and spilling (elevation 1040 feet or greater), and remains full through late spring/early summer before Cal-Am in cooperation with the District and federal and state resource agencies, begins to release water from storage and draw down the reservoir. Although minimum-pool elevation is 980 feet, the reservoir level normally is not reduced below elevation 1,000 feet in order to avoid sediment entrainment into the outlet works, and to maintain reserve storage to safeguard against dry winter conditions. It should be noted that, LPR has filled and spilled in all years since construction except WY 1977 when the reservoir reached a maximum fill level of 1,018 feet in May 1977.

San Clemente Reservoir, completed in 1921 (river mile 18.5) has lost nearly all of its storage volume due to sedimentation. Prior to August 1996, flashboards were installed at the beginning of the dry season to increase water storage over the summer, however, this practice has been discontinued. San Clemente Dam has been deemed seismically unsafe by the Department of Water Resources, Division of Safety of Dams (DSOD) that requires Cal-Am to reduce its dry-season level to elevation 515 feet (10 feet lower than the spillway elevation), thus reducing hydraulic pressure behind the dam. This is accomplished by releasing water through six ports (at approximate elevation 515 feet) that have been drilled through the dam, becoming active in June 2003. This annual “Draw-down Project” is evident in the SCR water-level plots in **APPENDIX F**. In the winter, high flows overwhelm the capacity of the ports and the reservoir spills uncontrolled at elevation 525 feet or higher, until the following dry season draw down.

CARMEL RIVER BASIN - ANNUAL STREAMFLOW SUMMARY
WATER YEARS 1992 - 2013
 (Values in Acre-Feet)

TRIBUTARY SITES	Drainage Area (Sq.Mi.)	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
FINCH CREEK	22.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2860	3420	558	290
CACHAGUA CREEK	46.3	1,780	7,340	560	16,320	3,840	4,990	23,800	2,590	1,730	1,500	245	1,270	1,250	4,340	5,210	261	2,200	1,020	5,030	5,320	695	237
PINE CREEK	7.8	3,750	9,800	1,230	11,110	6,550	8,300	15,610	4,540	5,300	3,270	2,300	4,250	2,350	8,910	8,020	849	3,840	2,830	6,140	6,950	1,310	1,870
SAN CLEMENTE CREEK	15.6	5,450	17,070	1,820	20,580	9,310	14,100	33,380	7,130	9,830	5,340	3,270	5,850	3,720	16,330	13,720	1,360	5,520	4,270	9,950	12,950	1,970	2,570
TULARCITOS CREEK	56.3	635	3,220	444	5,100	1,650	2,450	22,610	3,810	2,450	1,490	630	552	503	1,000	2,480	503	917	405	1,140	1,430	451	327
HITCHCOCK CREEK	4.6	*	*	52	1,820	451	716	2,970	169	482	214	18	274	234	863	691	2	383	152	550	629	7	56
GARZAS CREEK	13.2	3,700	11,170	746	12,140	4,890	8,570	24,610	5,050	4,980	3,070	1,200	2,760	1,810	8,590	7,420	381	3,010	2,500	5,720	7,620	641	1,320
ROBINSON CANYON CR.	5.4	619	2,360	89	2,230	619	1,430	6,890	545	823	433	82	448	354	1,710	1,010	25	455	450	1,120	1,150	40	152
POTRERO CREEK	5.2	*	*	30	1,790	506	1,210	5,970	855	1,020	310	43	210	164	1,470	1,050	13	308	356	985	1,170	14	50
SAN JOSE CREEK	14.2	*	*	*	*	*	*	*	6,400	6,260	2,890	1,100	1,880	1,480	7,640	6,870	862	1,740	2,330	5,220	5,760	1,200	1,540
ARROYO DEL REY	13.8	*	*	*	*	*	*	*	*	*	*	*	392	376	1150	843	213	572	449	772	726	252	255
MAINSTEM SITES																							
CR AT ROBLES DEL RIO	193	38,240	109,000	11,800	155,000	75,210	99,340	250,300	54,640	76,750	47,180	31,850	60,560	38,060	114,400	110,100	12,220	49,080	45,930	104,500	108,900	20,750	31,970
CR AT DON JUAN BRIDGE	216	*	122,000	12,760	173,600	83,090	111,800	252,200	53,570	73,960	49,360	31,330	60,420	38,330	121,800	118,300	12,150	52,510	47,710	107,000	114,400	20,920	28,530
CR NEAR CARMEL	246	35,570	123,400	8,200	177,400	74,500	104,100	261,100	55,000	76,190	47,790	28,340	55,400	35,220	119,200	119,200	7,440	43,960	41,590	105,800	115,700	17,120	24,390
CR AT HIGHWAY 1 BRIDGE	252	*	123,000	7,410	179,500	83,430	112,000	280,900	50,810	72,660	42,860	24,860	52,000	30,300	115,200	115,000	6,470	42,520	39,170	102,700	111,300	16,300	23,410

- Notes: 1. Carmel River (CR) at Robles del Rio and near Carmel sites are maintained by the USGS.
 2. (*) No continuous stage data collected.
 3. Streamflow sites listed in downstream order.
 4. San Jose Creek and Arroyo Del Rey are outside the Carmel River Basin, but are shown for comparison.

**PERCENTAGE OF CARMEL RIVER TRIBUTARY FLOW CONTRIBUTION
RELATIVE TO TOTAL FLOW AT THE CARMEL RIVER AT HIGHWAY 1 BRIDGE SITE**

TRIBUTARY SITES	DA (Sq. Mi.)	% of CRB Area	% of Total Tributary Flow Contribution: WY 1993 - 2013																					
			1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	1993-13
SAN CLEMENTE CREEK	15.6	6	14	25	11	11	13	12	14	14	12	13	11	12	14	12	21	13	11	10	12	12	11	12.3
GARZAS CREEK	13.2	5	9	10	7	6	8	9	10	7	7	5	5	6	7	6	6	7	6	6	7	4	6	7.2
PINE CREEK	7.8	3	8	17	6	8	7	6	9	7	8	9	8	8	8	7	13	9	7	6	6	8	8	7.1
CACHAGUA CREEK	46.3	18	6	8	9	5	4	8	5	2	3	1	2	4	4	5	4	5	3	5	5	4	1	5.5
TULARCITOS CREEK	56.3	22	3	6	3	2	2	8	7	3	3	3	1	2	1	2	8	2	1	1	1	3	1	3.3
ROBINSON CREEK	5.4	2	2	1	1	1	1	2	1	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1.4
POTRERO CREEK	5.2	2	---	0	1	1	1	2	2	1	1	0	0	1	1	1	0	1	1	1	1	0	0	1.1
HITCHCOCK CREEK	4.6	2	---	1	1	1	1	1	0	1	0	0	1	1	1	1	0	1	0	1	1	0	0	0.7
Total	154.4	60		67	40	33	37	48	49	37	36	31	30	34	38	34	52	39	31	30	33	31	28	38

NOTES:

1. Percent of Carmel River Basin (CRB) figures are based on a total drainage area (DA) of 252 square miles (Sq. Mi.).
2. Percent of total flow contribution figures are based on the total annual flow at Carmel River at HWY 1 Bridge site.
3. The above table does not account for gains or losses that occur along the river including but not limited to ground and surface water production, interflow, un-gaged drainage, local runoff, evapotranspiration etc.
4. Percentage values for the 1993-2013 period do not incorporate Water Year (WY) 1993 at the Hitchcock and Potrero Creek sites.
5. Total percentage values are calculated from actual values and are not derived from addition of individual, rounded percentage values.
6. Percentages of tributary flow contribution in "Critically Dry" years (1994 & 2007) are poorly represented as LCV groundwater production exceeds gaged HWY 1 flows in these years.

SECTION IV - CARMEL RIVER LAGOON

Data plots presented in this section have been completed as part of the District's Water Allocation Mitigation Program, which encompasses the Lagoon Vegetation and Wildlife Program. The primary goal of the Lagoon Vegetation and Wildlife Program is to identify feasible measures to quantify and understand changes to the vegetation and wildlife at the lagoon. Ongoing data-collection efforts related to this goal include: monitoring of lagoon vegetation and wildlife, water quality, topography, sediment transport, river inflow and water-surface elevation. This report presents data specific to lagoon water-surface elevation, bathymetry at established cross sections, and lagoon volume.

LAGOON WATER SURFACE ELEVATION PLOTS

Continuous lagoon water-surface elevation plots are presented in **APPENDIX G**. These data have been collected using a pressure-transducer/data-recorder system that was initially installed in November 1987 in the south arm of the lagoon to measure water-level fluctuations (**FIGURE IV-1**). The original instrumentation and installation were upgraded in November 1993, and the site was added to the Monterey County Water Resources Agency's (MCWRA) ALERT system in November 1995, to enhance flood warning for residents located along the northern margin of the lagoon and wetland. Accuracy of recorded data is verified by manual staff-gage readings taken at the site. Data collected at the site are downloaded remotely utilizing cellular based telecommunications hardware on a daily or weekly basis and monthly plots are constructed using graphics software. These plots are uploaded to the District's website at the following location:

<http://www.mpwmd.net/environmental-stewardship/carmel-river-lagoon/>

The plots in **APPENDIX G** represent a continuous record of lagoon water levels for the October 1, 2008 through September 30, 2013 period. As indicated, the Y-axis tick marks are referenced to National Geodetic Vertical Datum of 1929 or NGVD. The X-axis tick marks represent the beginning of the day indicated (i.e., zero hundred hours military time). The maximum recorded level during this five-year period was 11.27 feet on December 3, 2012. The lowest recorded level of approximately 1.3 feet occurred on many occasions throughout the period as this represents the elevation/lower limit of the water level measurement device (pressure transducer). Numerous lagoon staff gage site visits were made over the period at opportune times in order to verify actual minimum lagoon level. Of these field readings, the lowest observed water level was 0.75 feet documented on April 27, 2012. Given the above, the actual minimum level for the period is not known.

Generally, the highest lagoon levels are associated with a closed lagoon mouth with river inflow of at least 10 cfs, just prior to breaching. However, the two highest levels ever recorded (January 11, 2001 and January 5, 2008) were associated with (and likely caused by) unusually high surf and tide overtopping the beach berm at the lagoon mouth, thus filling the lagoon. The lowest lagoon levels typically occur during the lowest daily ocean tide with an open lagoon mouth, and low river inflow (i.e., generally less than 30 cfs).

Most of the dynamic lagoon water level fluctuations shown in **APPENDIX G** during the winter and spring result from the interaction of natural phenomena including ocean tides, river inflow, and lagoon mouth closures and openings. During the summer, the lagoon mouth typically closes and water levels recede due to reduced surface inflow related to the natural streamflow recession and

groundwater extraction upstream. Lagoon water levels generally increase during the fall months as high surf and tides overtop the beach berm, filling the lagoon. For additional information on lagoon characteristics, the reader is referred to a series of reports prepared by the Watershed Institute, California State University Monterey Bay (CSUMB). These reports and other lagoon information can be found at the Watershed Institute Publications web page at the following web site:
<http://ccows.csumb.edu/pubs/>

In years when significant streamflow reaches the lagoon for the first time of the rainy season, the Monterey County Public Works Department must artificially breach the lagoon mouth using bulldozers, to avoid flooding of homes bordering the north side of the lagoon. **TABLE IV-1** summarizes these initial (i.e., first of the season or first storm driven) mechanical breach events, and where they appear in **APPENDIX G**. In WY 2011 and 2012, the lagoon mouth was opened manually approximately three times in each year prior to the breach date listed in order to prevent lagoon levels from topping the 10-foot level (which starts to threaten homes). In these instances, the lagoon mouth was generally opened near the 10-foot level for a day or two, lowered to about seven feet and then manually closed. The breach dates listed for these two years are interpreted as the first storm driven breach of the season. A more complete listing of initial breaching events since 1988 is presented as **TABLE IV-2**. Following the initial seasonal breaching, documentation of subsequent breaching events is incomplete, as breaching has been accomplished by bulldozer, hand shovel (by public or private parties), or by nature. Lagoon filling and subsequent breaching sequences appear as “fin” shapes in the hydrographs. For additional information regarding the interpretation of these plots, the reader is referred to District Technical Memorandum 05-01, *Surface Water Dynamics at the Carmel River Lagoon Water Years 1991 through 2005* (James, 2005).

TABLE IV-1
INITIAL BREACHING OF THE CARMEL RIVER LAGOON MOUTH
BY THE MONTEREY COUNTY PUBLIC WORKS DEPARTMENT

Water Year	Date of Breaching	Figure in Appendix G
2009	February 16, 2009	Figure G-3
2010	October 14, 2009	Figure G-7
2011	*December 20, 2010	Figure G-14
2012	*January 22, 2012	Figure G-20
2013	December 3, 2012	Figure G-26

* Date shown interpreted as first storm driven breach of the season. Several prior mechanical non-storm related openings and closings were conducted in both years to manage/reduce high lagoon levels

LAGOON CROSS-SECTIONAL PLOTS

Lagoon cross-sectional plots are also presented in **APPENDIX G**. In January 1988, District staff selected four cross-section sites at the lagoon to monitor changes in the substrate (**FIGURE IV-1**). During a lagoon topographic survey by District staff in Fall 1994, these cross sections were re-surveyed using a Total Station surveying instrument, and established on the California Coordinate

System, Zone 4 to facilitate consistency in future surveys. Vertical control is based on NGVD 1929 datum. **FIGURE G-31** illustrates the annual cross-sectional surveys that have been conducted over the past six years. Based on the survey data, the sand supply at the cross sections remained relatively stable over the 2009 – 2013 period, as no significant substrate changes are evident in the plots. **FIGURES G-32 through G-36** are provided to highlight these minor year to year changes. It is planned that these cross sections will be surveyed annually to identify long-term changes in lagoon volume.

LAGOON STAGE-VOLUME AND STAGE-AREA RELATIONSHIPS

In Fall 1994, District staff conducted a survey of lagoon topography to update a topographic map of the Carmel River mouth area that was previously prepared in September 1988. In August 1997, the District retained Graham Matthews and Associates to help staff use the survey data to develop a computer-generated topographic map and develop a stage-volume and stage-area relationship for the lagoon. The report that documents this work, *Carmel River Lagoon Mapping and Development of Stage-Volume and Stage-Area Relationships*, was completed in November 1997 (Matthews and Associates, 1997).

Subsequent to completion of the 1997 lagoon volume analysis (which processed 1994 field data), the south arm of the lagoon was excavated in 1997 and again in 2004 to increase volume and restore wetland and riparian habitat. In order to obtain an updated estimate of lagoon volume, the District retained RMC water and environmental consultants, and in October 2007 a new lagoon stage-volume relationship was developed (Hope, 2007). This report indicates that when the lagoon is full (i.e., stage at 10 feet), it contains approximately 382 acre-feet (AF) of water, or about 100 AF more than the 1997 estimate as a result of the excavation work that was conducted. **TABLE IV-3** summarizes the lagoon stage-volume relationship documented in the 2007 report and compares it to the 1997 report results (1994 data). An additional lagoon volume estimate (not included in this report) was conducted by Whitson Engineers in 2013 reporting the lagoon volume at the 10-foot level NGVD 1929 as 440 AF, significantly greater than the 382 AF reported by RMC. These volume studies are of key importance in understanding the water balance of the lagoon under the variable hydrologic and oceanic conditions that occur seasonally.

FIGURE IV-1

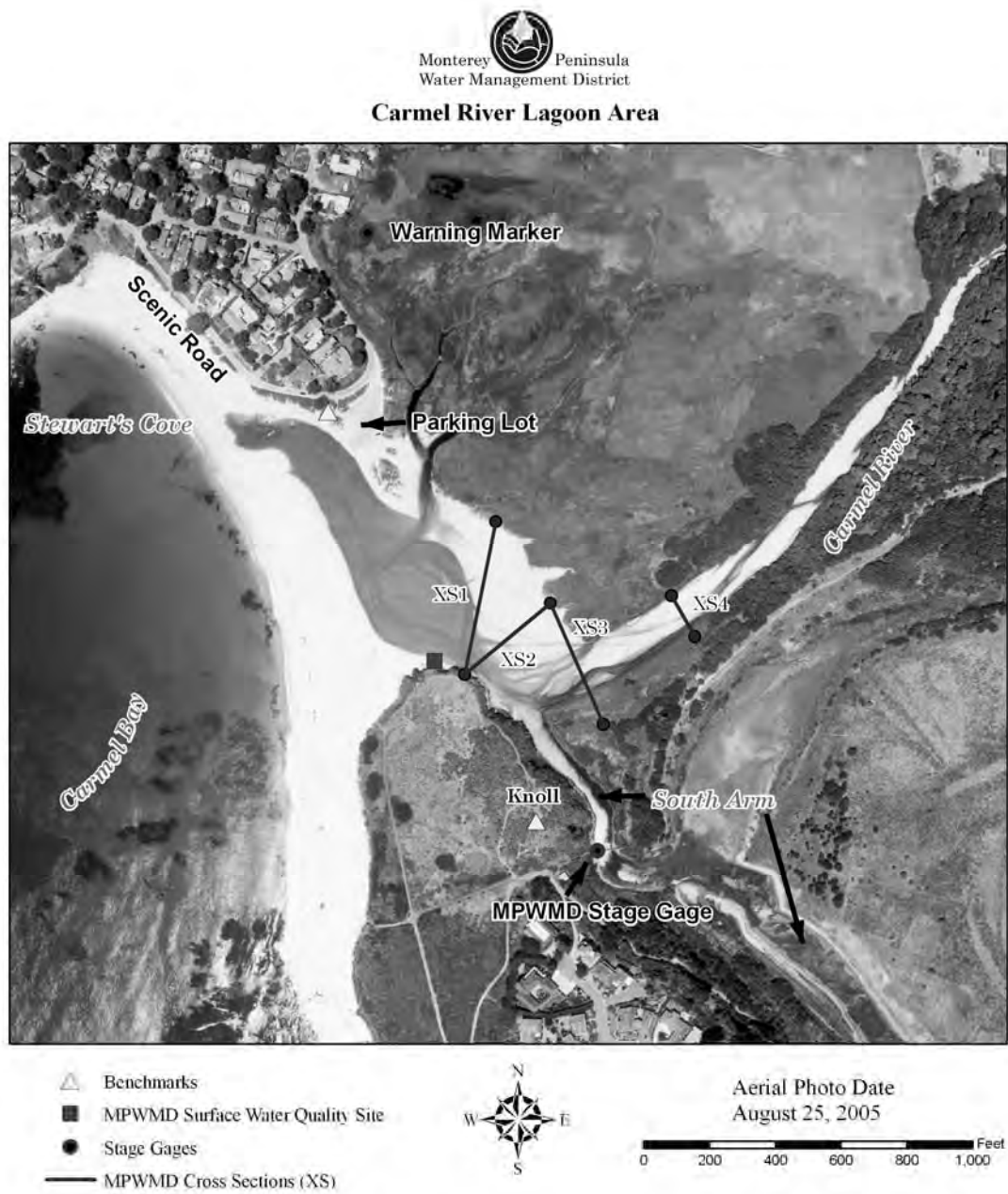


TABLE IV-2

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

SEASONAL CARMEL RIVER LAGOON OPENINGS
WATER YEARS 1988 – 2013

<u>WATER YEAR</u>	<u>SEASONAL OPENING</u>
1988	No river flow to ocean
1989	No river flow to ocean
1990	No river flow to ocean
1991	March 18, 1991
1992	February 11, 1992
1993	January 3, 1993
1994	February 17, 1994
1995	January 9, 1995
1996	December 13, 1995
1997	December 9, 1996
1998	December 6, 1997
1999	November 3, 1998
2000	January 24, 2000
2001	January 11, 2001
2002	December 3, 2001
2003	December 16, 2002
2004	December 30, 2003
2005	December 30, 2004
2006	December 27, 2005
2007	February 11, 2007
2008	January 5, 2008
2009	February 16, 2009
2010	October 14, 2009
2011	December 20, 2010
2012	January 22, 2012
2013	December 3, 2012

Notes:

1. Except as indicated all seasonal openings are assumed to coincide with emergency breaching activities conducted by the Monterey County Public Works Department (MCPWD).
2. In WY 2003, the MCPWD conducted an emergency breaching of the lagoon on December 15, 2002. However, high surf and tides (and other factors) precluded draining of the lagoon until the following day.
3. Following a peak lagoon flood level of 12.66 feet on January 5, 2008 the lagoon breached without the aid of bulldozers later that same day on the outgoing tide.
4. In both WY 2011 and 2012, the lagoon mouth was opened manually approximately three times prior to the date shown for these years. Date shown interpreted as first storm driven breach of the season.

TABLE IV-3

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

**CARMEL RIVER LAGOON STAGE-VOLUME RELATIONSHIPS
1994 AND 2007 ANALYSES**

ELEVATION (FEET NGVD 1929)	1994 VOLUME ACRE-FEET	2007 VOLUME ACRE-FEET
-2.0	0.002	1.52
-1.0	0.04	2.76
0.0	0.19	4.61
1.0	0.50	7.90
2.0	1.50	13.68
3.0	4.57	24.31
4.0	12.55	41.12
5.0	30.18	64.36
6.0	60.58	99.98
7.0	103.31	149.35
8.0	155.77	212.25
9.0	217.25	288.58
10.0	285.77	382.48
11.0		500.39
12.0		641.19
13.0		803.96
14.0		991.80
15.0		1217.14

Notes:

1994 lagoon volume data collected by MPWMD and processed by Graham Matthews & Associates, 1997.

2007 lagoon volume data collected between 2003 and 2007, and processed by RMC, 2007.

2013 survey data processed by Whitson Engineers (not shown) reports a 440 AF lagoon volume at the 10-foot level.

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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX A

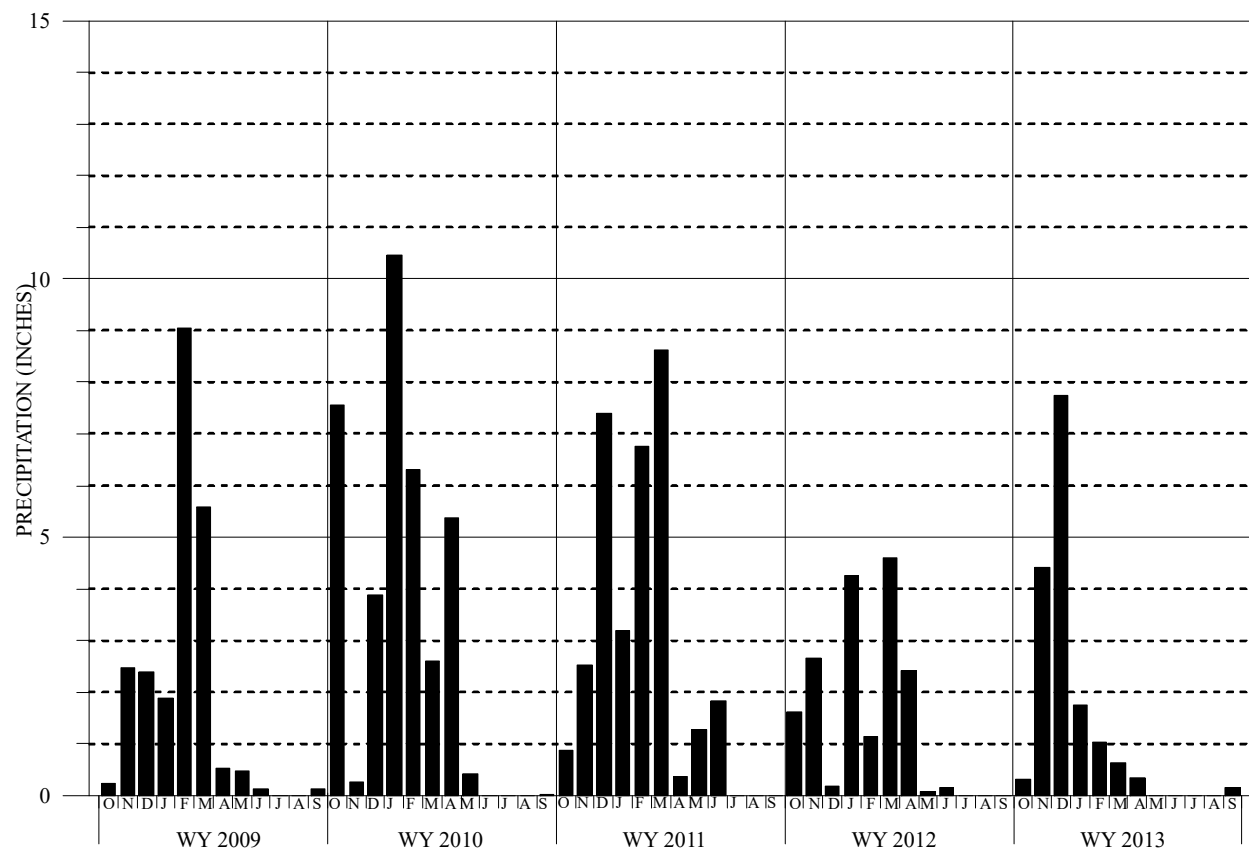
RAINFALL DATA

TABLE A-1

LOS PADRES RESERVOIR RAINFALL
WATER YEARS 2009 - 2013

(Values in Inches)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
2009	0.22	2.46	2.38	1.88	9.06	5.58	0.52	0.48	0.12	0.00	0.00	0.12	22.82
2010	7.56	0.26	3.88	10.46	6.31	2.61	5.38	0.42	0.00	0.00	0.00	0.01	36.89
2011	0.87	2.53	7.40	3.20	6.77	8.63	0.37	1.26	1.84	0.00	0.00	0.00	32.87
2012	1.63	2.66	0.17	4.26	1.14	4.61	2.43	0.06	0.14	0.00	0.00	0.00	17.10
2013	0.30	4.41	7.74	1.75	1.04	0.64	0.35	0.00	0.00	0.00	0.00	0.14	16.37

FIGURE A-1

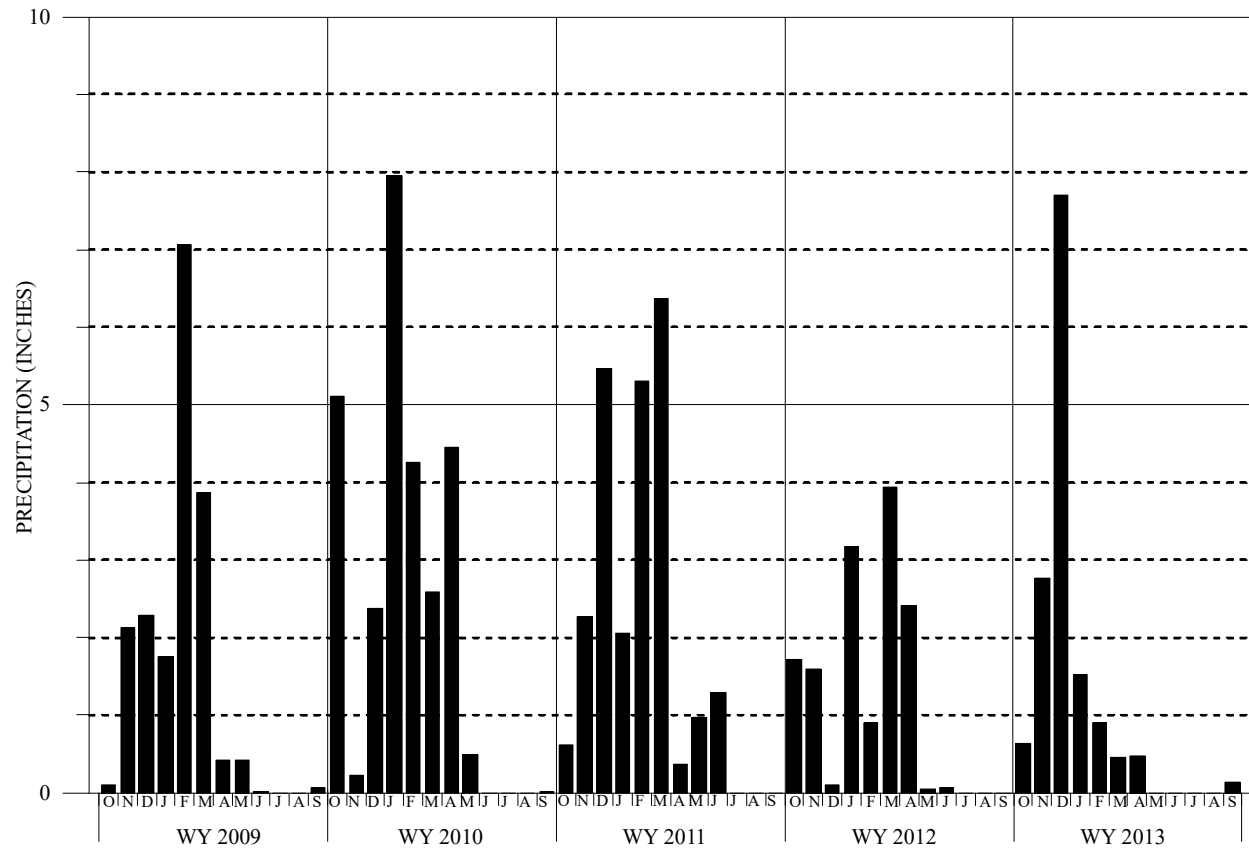
Source: California American Water, Monterey Division.

TABLE A-2

SAN CLEMENTE RESERVOIR RAINFALL
WATER YEARS 2009 - 2013

(Values in Inches)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
2009	0.11	2.13	2.28	1.76	7.07	3.86	0.43	0.42	0.02	0.00	0.00	0.06	18.14
2010	5.11	0.22	2.37	7.96	4.25	2.59	4.45	0.50	0.00	0.00	0.00	0.01	27.46
2011	0.62	2.26	5.47	2.06	5.31	6.38	0.37	0.97	1.29	0.00	0.00	0.00	24.73
2012	1.71	1.59	0.10	3.18	0.90	3.94	2.41	0.04	0.07	0.00	0.00	0.00	13.94
2013	0.64	2.77	7.70	1.52	0.90	0.46	0.48	0.00	0.00	0.00	0.00	0.13	14.60

FIGURE A-2

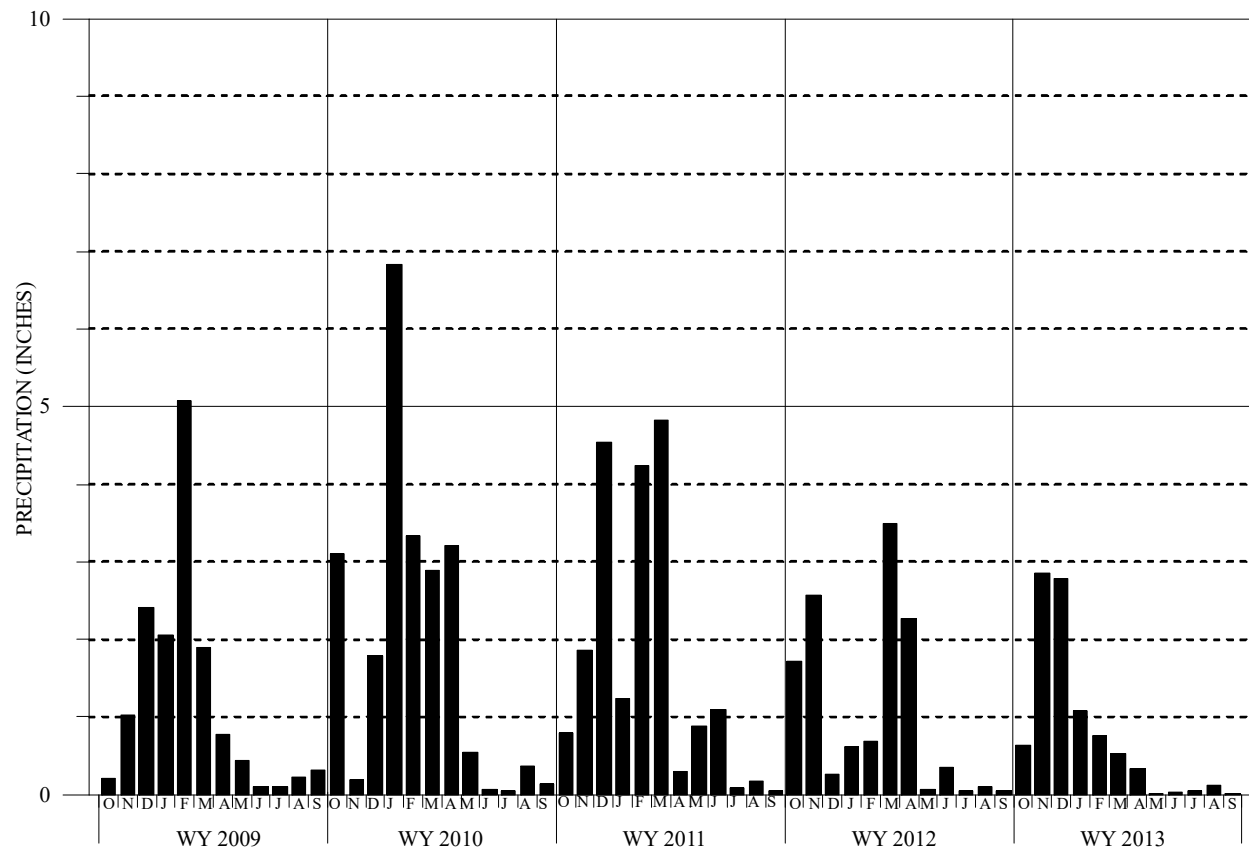
Source: California American Water, Monterey Division.

TABLE A-3

PACIFIC GROVE RESERVOIR RAINFALL
WATER YEARS 2009 - 2013

(Values in Inches)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
2009	0.21	1.02	2.41	2.05	5.07	1.89	0.77	0.44	0.10	0.11	0.23	0.32	14.62
2010	3.10	0.19	1.79	6.83	3.33	2.89	3.21	0.55	0.07	0.04	0.36	0.13	22.49
2011	0.80	1.86	4.54	1.24	4.24	4.82	0.30	0.88	1.10	0.08	0.17	0.05	20.08
2012	1.71	2.57	0.27	0.62	0.68	3.50	2.27	0.06	0.35	0.05	0.10	0.04	12.22
2013	0.64	2.85	2.78	1.07	0.75	0.53	0.33	0.02	0.03	0.05	0.12	0.02	9.19

FIGURE A-3

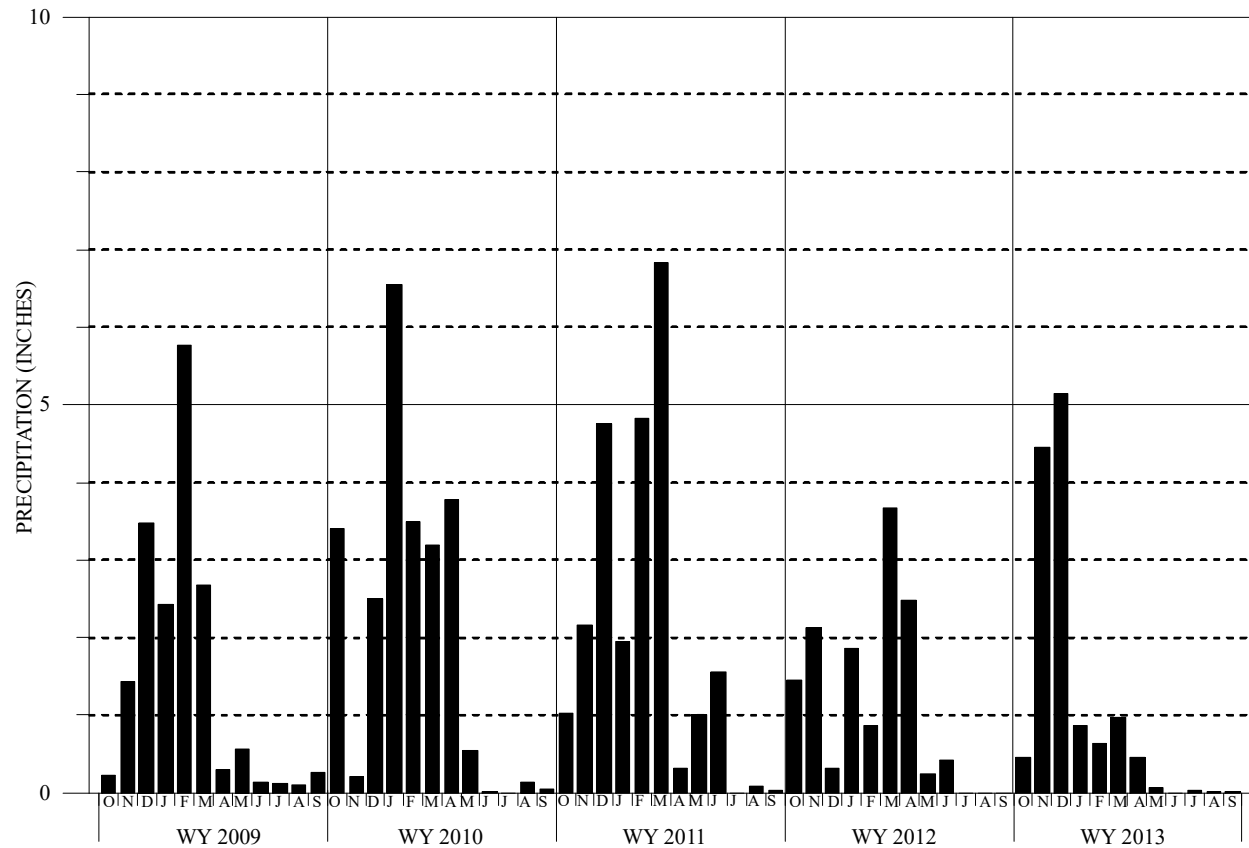
Source: California American Water, Monterey Division.

TABLE A-4

MONTEREY RAINFALL
WATER YEARS 2009 - 2013

(Values in Inches)

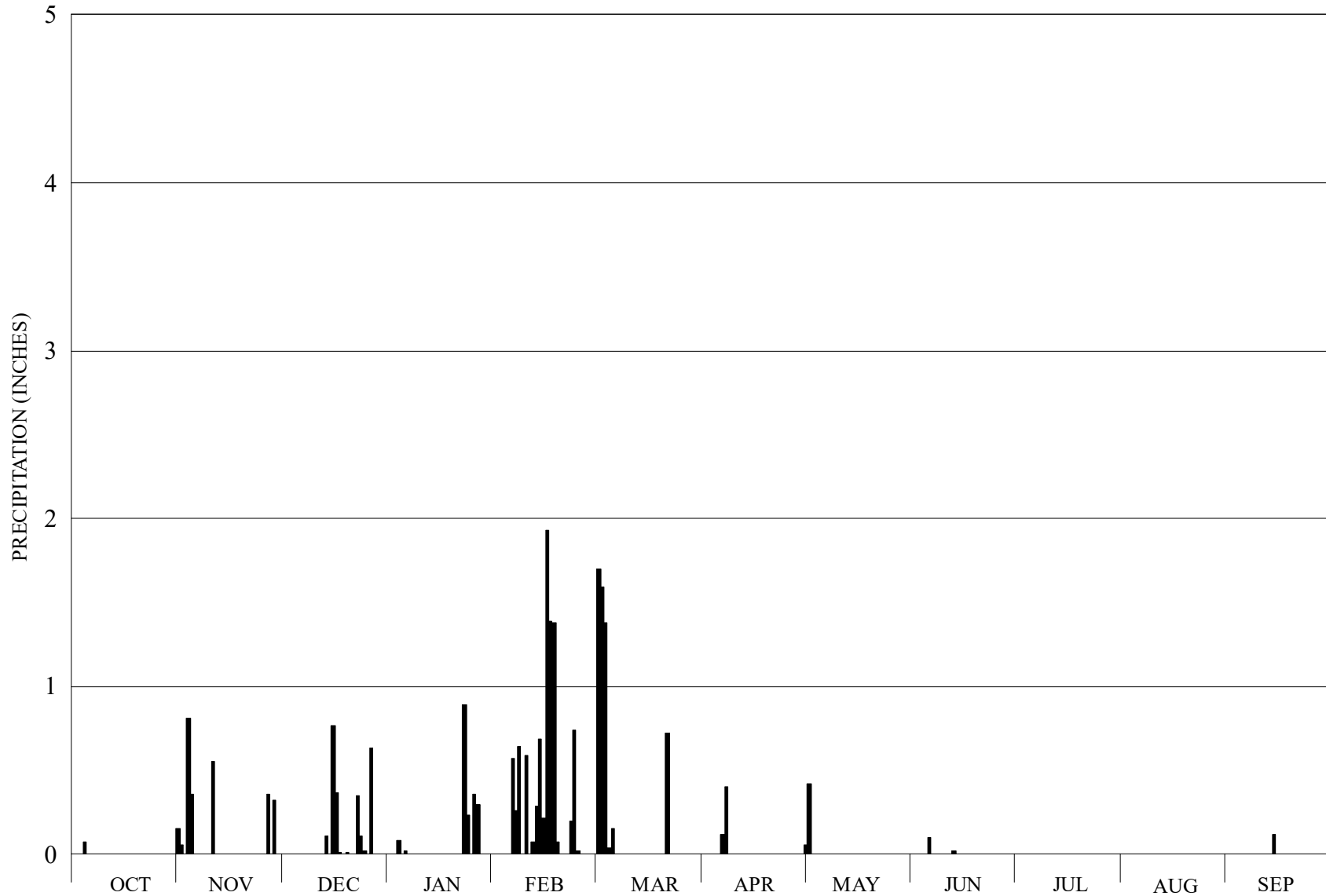
YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
2009	0.22	1.43	3.48	2.42	5.77	2.68	0.30	0.56	0.14	0.12	0.11	0.27	17.50
2010	3.41	0.21	2.50	6.54	3.50	3.19	3.78	0.54	0.02	0.00	0.13	0.05	23.87
2011	1.03	2.17	4.75	1.95	4.82	6.83	0.31	1.00	1.56	0.00	0.09	0.03	24.54
2012	1.46	2.12	0.32	1.86	0.86	3.68	2.49	0.25	0.42	0.00	0.00	0.00	13.46
2013	0.45	4.45	5.14	0.87	0.64	0.98	0.46	0.07	0.00	0.03	0.01	0.02	13.12

FIGURE A-4

Source: Robert J. Renard, Meteorologist/Volunteer Observer, Monterey, CA.

FIGURE A-5

**LOS PADRES RESERVOIR DAILY RAINFALL
WATER YEAR 2009**



Note: Monthly tick marks are approximate.

TABLE A-5 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Los Padres Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2008-2009

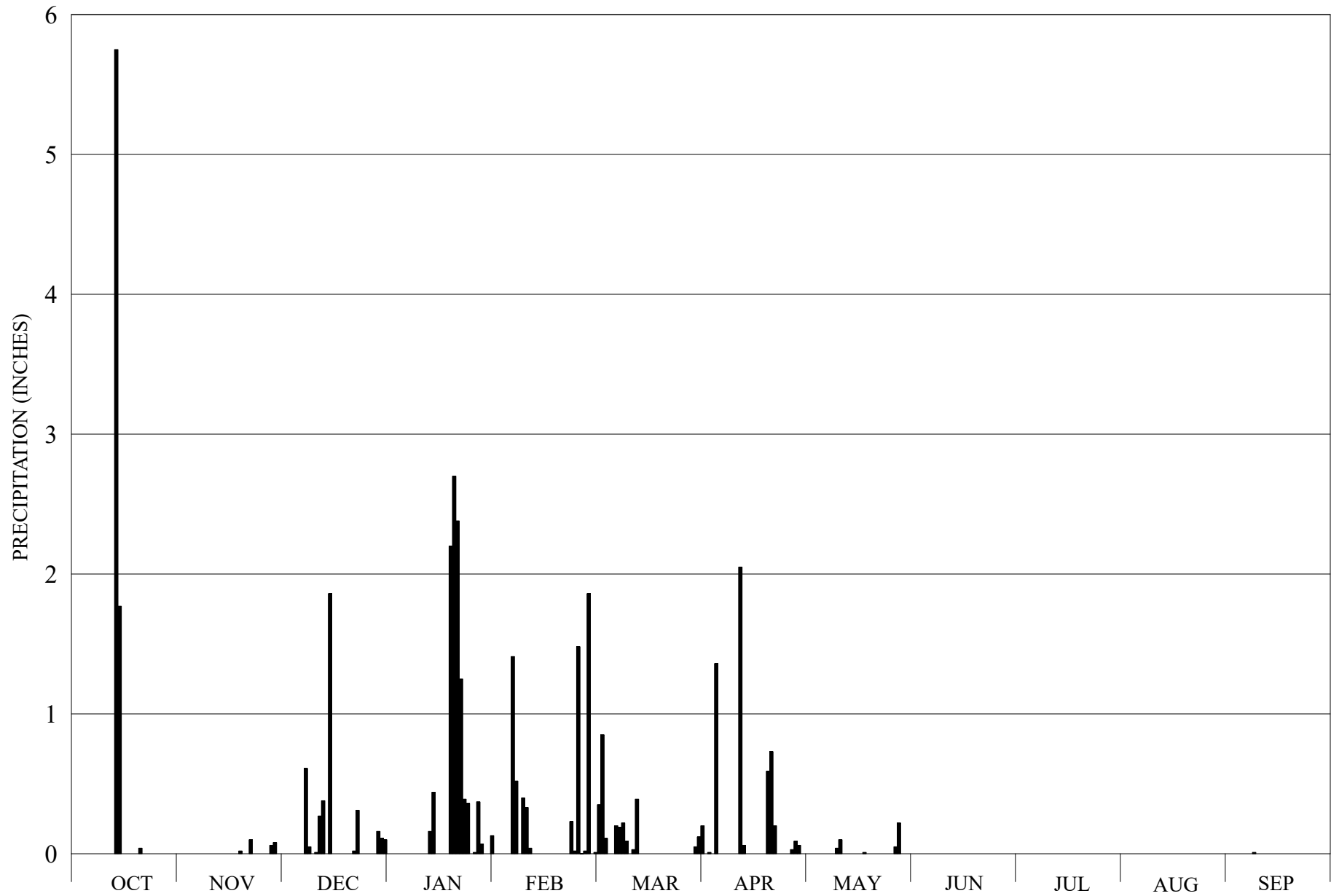
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.06						0.06				
2						1.70		0.42				
3		0.81		0.08		1.59			T			
4	0.07	0.36				1.38		T				
5				0.02	0.57	0.04						
6					0.26	0.15			0.10			
7					0.64		0.12					
8							0.40					
9					0.59							
10		0.55					T					
11					0.07							
12					0.29							
13			0.11		0.69				0.02			
14					0.22							0.12
15			0.77		1.93							
16			0.37		1.39							
17			0.01		1.38							
18					0.07							
19			0.01									
20												
21												
22			0.35	0.89	0.20	0.72						
23			0.11	0.23	0.74							
24			0.02		0.02							
25				0.36								
26		0.36	0.63	0.30								
27												
28		0.32										
29												
30												
31	0.15											
Total	0.22	2.46	2.38	1.88	9.06	5.58	0.52	0.48	0.12	0.00	0.00	0.12

Season Total: 22.82 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-6

LOS PADRES RESERVOIR DAILY RAINFALL
WATER YEAR 2010



Note: Monthly tick marks are approximate.

TABLE A-6 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Los Padres Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2009-2010

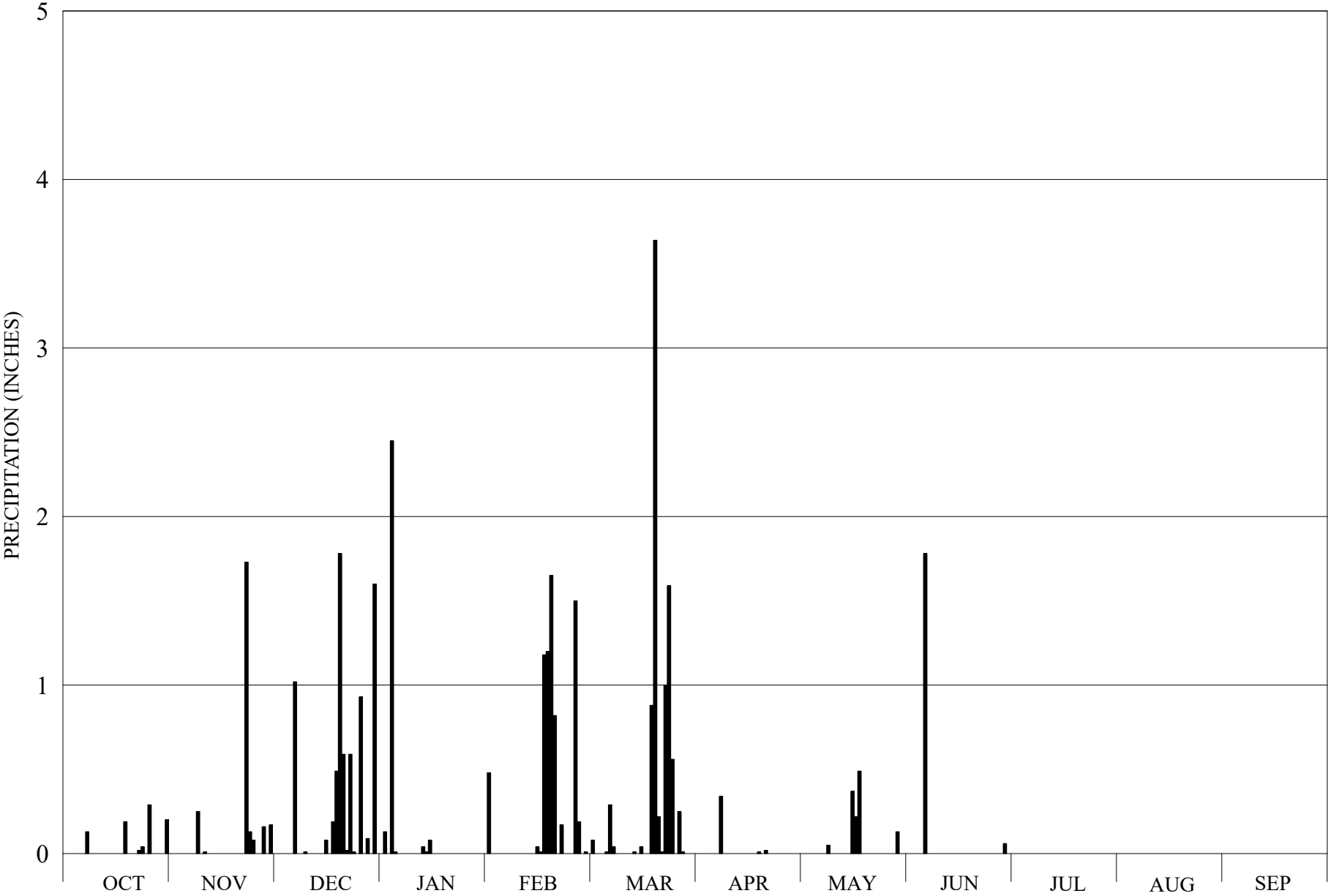
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0.01	0.20					
2						0.35	T					
3						0.85	0.01					
4						0.11						
5					1.41		1.36					
6					0.52		T					
7			0.61			0.20						
8			0.05		0.40	0.19						0.01
9					0.33	0.22			T		T	
10			0.01		0.04	0.09		0.04				
11			0.27					0.10				
12			0.38	0.16		0.03	2.05					
13	5.75			0.44		0.39	0.06					
14	1.77		1.86									
15	T											
16												
17								T				
18		0.02		2.20				0.01				
19				2.70								
20	0.04			2.38			0.59					
21		0.10	0.02	1.25			0.73					
22			0.31	0.39	0.23		0.20					
23				0.36	0.02							
24					1.48							
25				0.01	0.00							
26			T	0.37	0.02			T				
27		0.06		0.07	1.86		0.03	0.05				
28		0.08	0.16				0.09	0.22				
29			0.11				0.06					
30			0.10	0.13		0.05						
31						0.12						
Total	7.56	0.26	3.88	10.46	6.31	2.61	5.38	0.42	0.00	0.00	0.00	0.01

Season Total: 36.89 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-7

LOS PADRES RESERVOIR DAILY RAINFALL
WATER YEAR 2011



Note: Monthly tick marks are approximate.

TABLE A-7 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Los Padres Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2010-2011

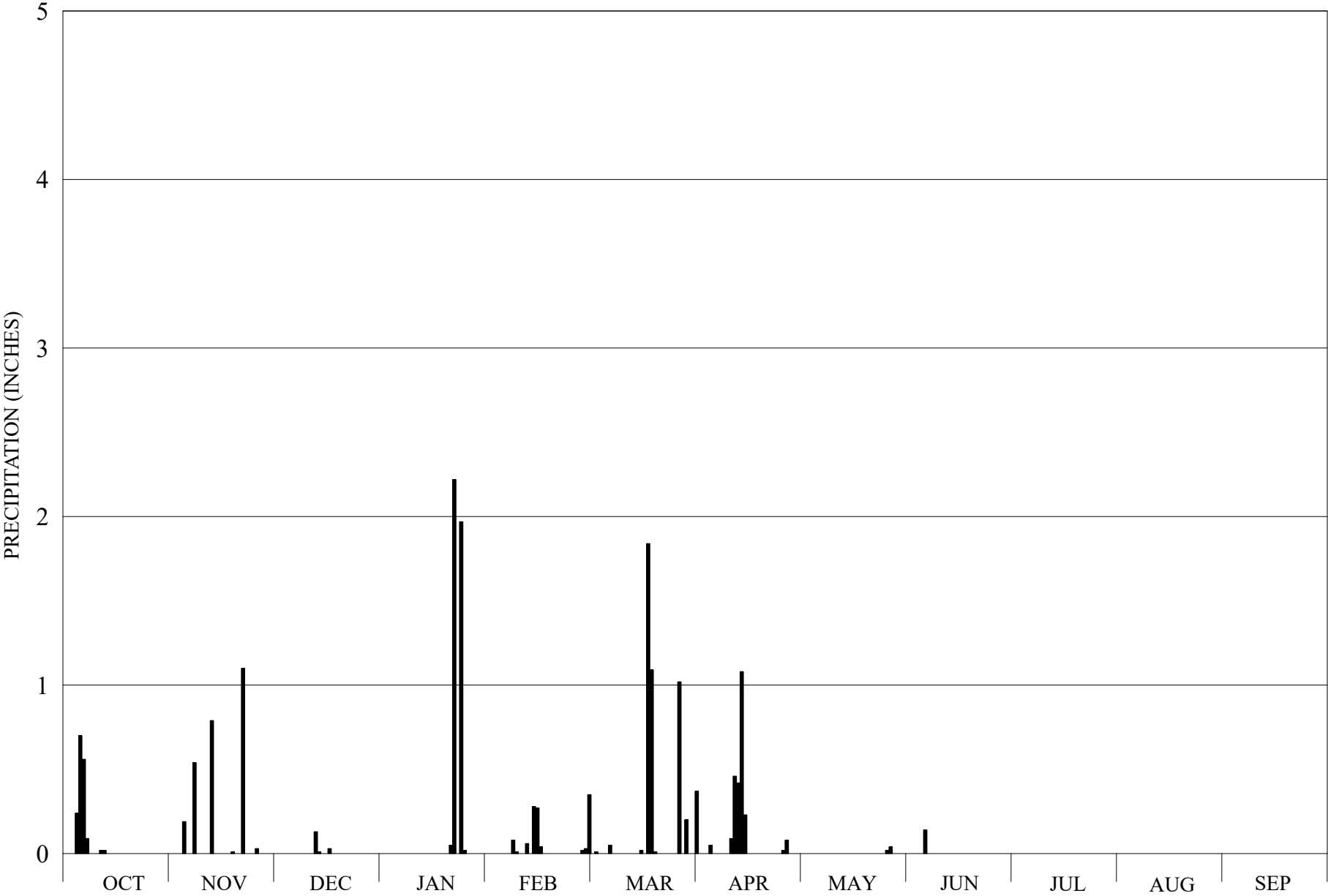
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0.13								
2						0.08						
3				2.45								
4				0.01								
5												
6		T	1.02			0.01			1.78			
7	0.13					0.29						
8		0.25				0.04	0.34					
9			0.01					0.05				
10		0.01										
11												
12				0.04								
13				0.01								
14			T	0.08	0.04	0.01						
15			0.08		0.01							
16					1.18	0.04		0.37				
17			0.19		1.20			0.22				
18	0.19		0.49		1.65			0.49				
19			1.78		0.82	0.88	0.01					
20			0.59			3.64						
21			0.02		0.17	0.22	0.02					
22	0.02	1.73	0.59			0.01						
23	0.04	0.13	0.01			1.00						
24		0.08				1.59						
25	0.29		0.93		1.50	0.56						
26					0.19							
27		0.16	0.09			0.25						
28					0.01	0.01						
29		0.17	1.60					0.13	0.06			
30	0.20		T									
31				0.48								
Total	0.87	2.53	7.40	3.20	6.77	8.63	0.37	1.26	1.84	0.00	0.00	0.00

Season Total: 32.87 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-8

LOS PADRES RESERVOIR DAILY RAINFALL
WATER YEAR 2012



Note: Monthly tick marks are approximate.

TABLE A-8 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Los Padres Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2011-2012

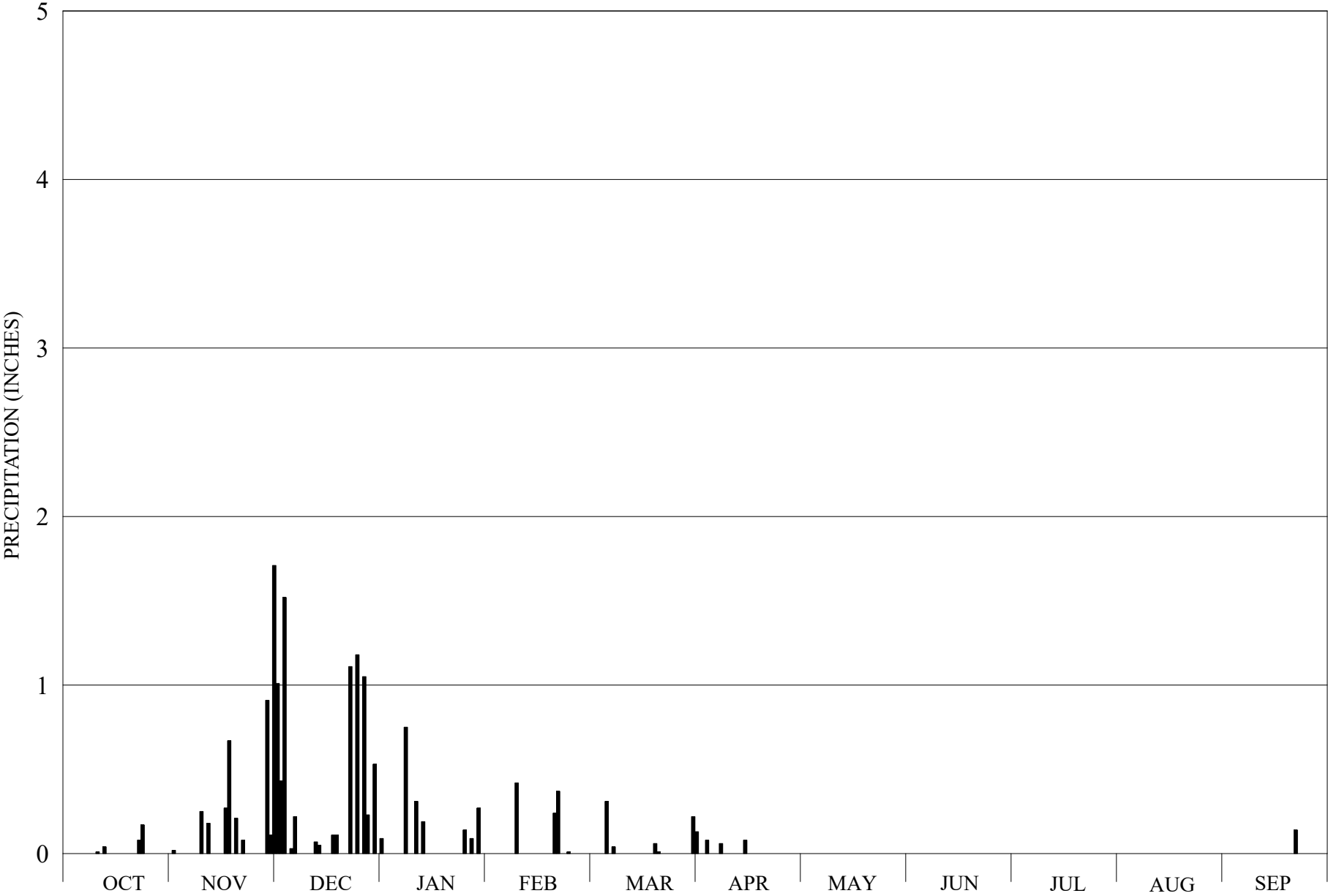
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2						0.01						
3												
4	0.24	0.19					0.05	T	T			
5	0.70								0.14			
6	0.56					0.05					T	
7	0.09	0.54			0.08							
8					0.01							
9												
10							0.09					
11	0.02				0.06		0.46					
12	0.02	0.79	0.13				0.42					
13			0.01		0.28		1.08					
14					0.27		0.23					
15					0.04	0.02						
16			0.03									
17						1.84						
18		0.01				1.09						
19						0.01						
20				0.05								
21		1.10		2.22								
22												
23				1.97								
24				0.02								
25		0.03					0.02	0.02				
26						1.02	0.08	0.04				
27					0.02	T						
28					0.03	0.20						
29					0.35							
30												
31						0.37						
Total	1.63	2.66	0.17	4.26	1.14	4.61	2.43	0.06	0.14	0.00	0.00	0.00

Season Total: 17.10 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-9

LOS PADRES RESERVOIR DAILY RAINFALL
WATER YEAR 2013



Note: Monthly tick marks are approximate.

TABLE A-9 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Los Padres Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2012-2013

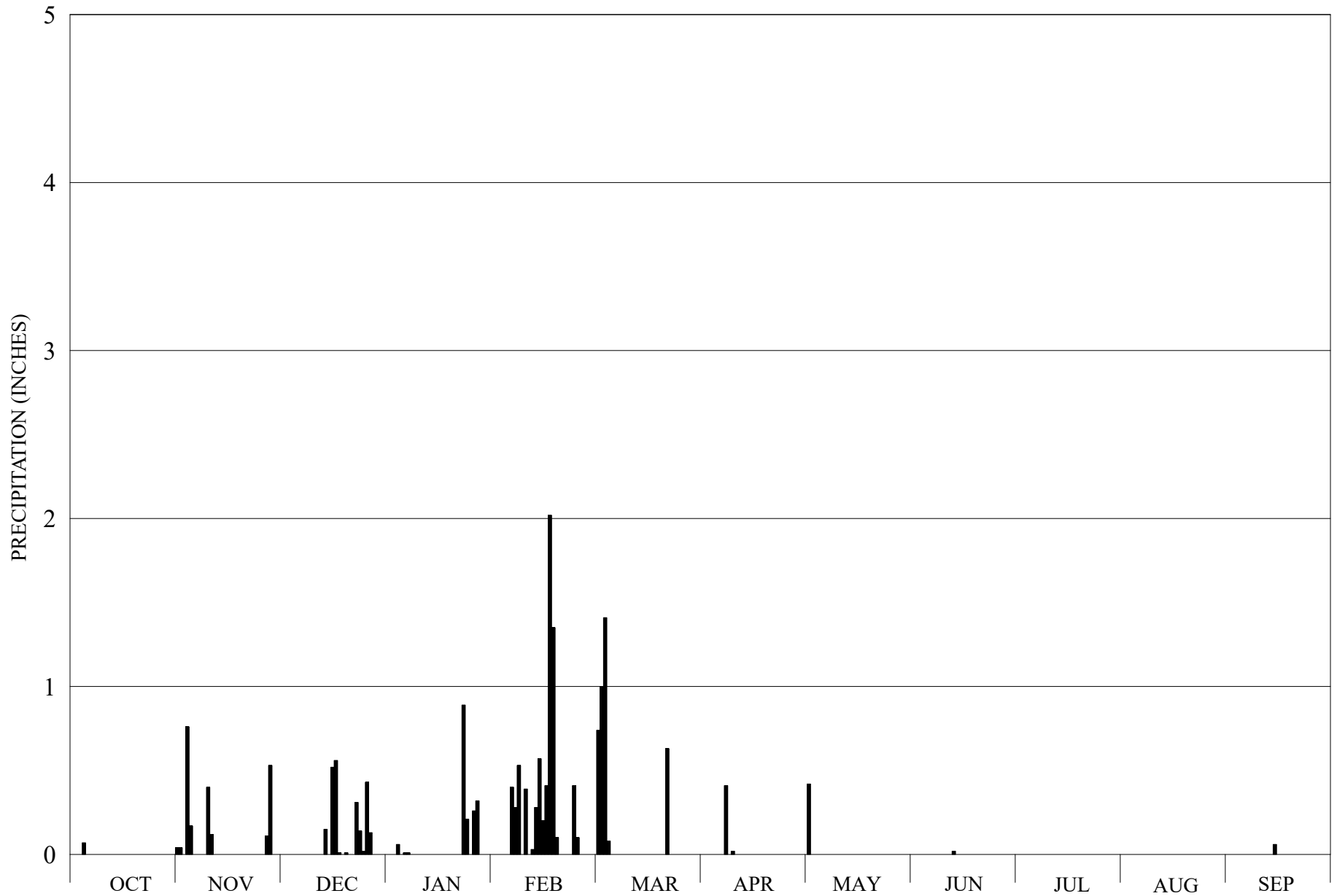
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.02	1.01				0.13					
2			0.43									
3			1.52									
4							0.08					
5			0.03				T					
6			0.22			0.31						
7			T	0.75								
8					0.42	0.04	0.06					
9		0.25										
10	0.01			0.31								
11		0.18										
12	0.04		0.07	0.19								
13			0.05									
14												
15							0.08					
16		0.27										
17		0.67	0.11									
18			0.11									
19		0.21			0.24							
20					0.37	0.06						
21		0.08				0.01						0.14
22	0.08		1.11									
23	0.17				0.01							
24			1.18	0.14								
25												
26			1.05	0.09								
27			0.23									
28		0.91		0.27		T		T				
29		0.11	0.53									
30		1.71										
31			0.09			0.22						
Total	0.30	4.41	7.74	1.75	1.04	0.64	0.35	0.00	0.00	0.00	0.00	0.14

Season Total: 16.37 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-10

**SAN CLEMENTE RESERVOIR DAILY RAINFALL
WATER YEAR 2009**



Note: Monthly tick marks are approximate.

TABLE A-10 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: San Clemente Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2008-2009

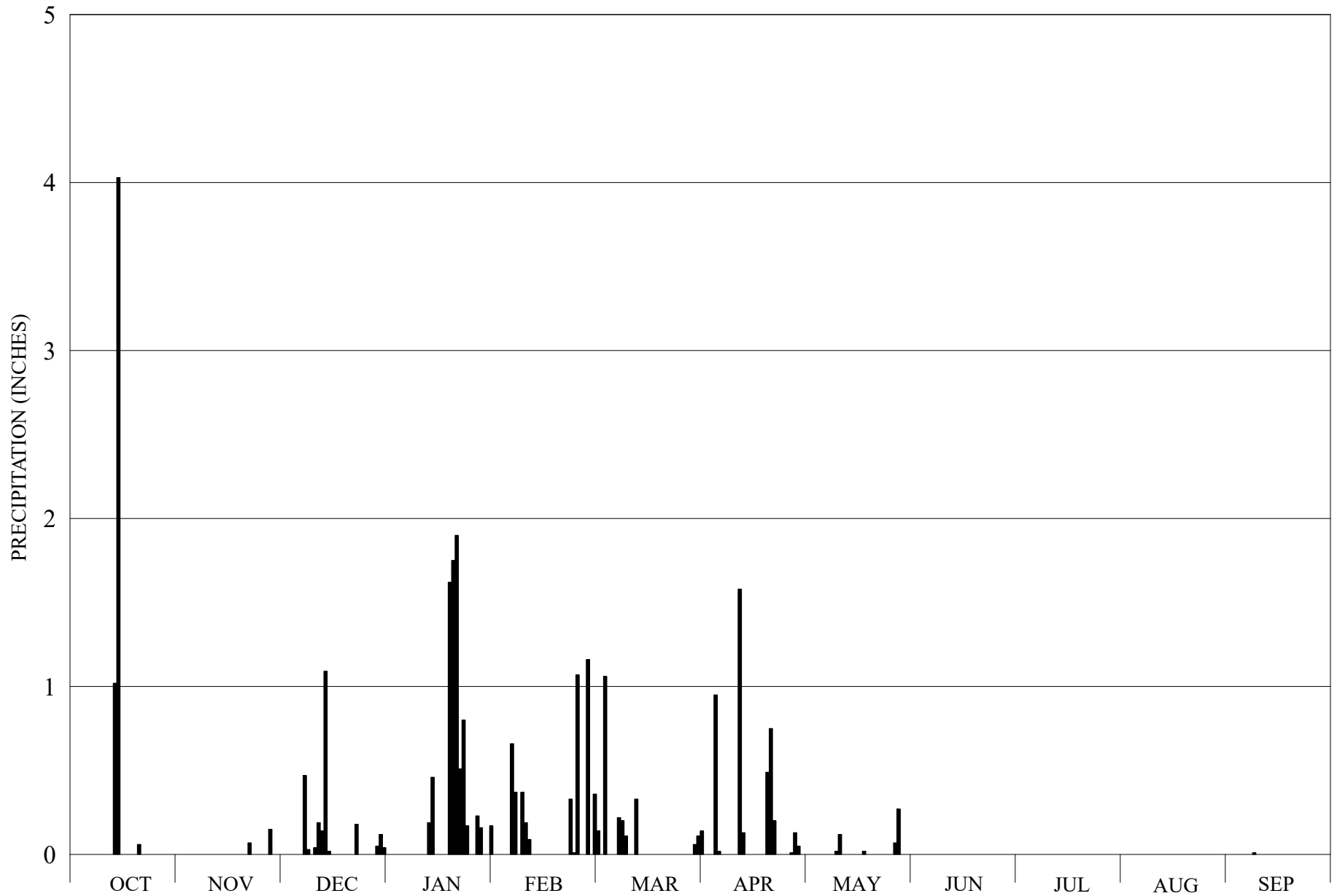
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.04										
2						0.74		0.42				
3		0.76		0.06		1.00						
4	0.07	0.17				1.41		T				
5				0.01	0.40	0.08						
6				0.01	0.28				T			
7					0.53							
8							0.41					
9		0.40			0.39							
10		0.12					0.02					
11					0.03							
12					0.28							
13			0.15		0.57				0.02			
14					0.20							0.06
15			0.52		0.41							
16			0.56		2.02							
17			0.01		1.35							
18					0.10							
19			0.01									
20												
21												
22			0.31	0.89		0.63						
23			0.14	0.21	0.41							
24			0.02		0.10							
25			0.43	0.26								
26		0.11	0.13	0.32								
27		0.53										
28												
29												
30												
31	0.04											
Total	0.11	2.13	2.28	1.76	7.07	3.86	0.43	0.42	0.02	0.00	0.00	0.06

Season Total: 18.14 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-11

**SAN CLEMENTE RESERVOIR DAILY RAINFALL
WATER YEAR 2010**



Note: Monthly tick marks are approximate.

TABLE A-11 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: San Clemente Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2009-2010

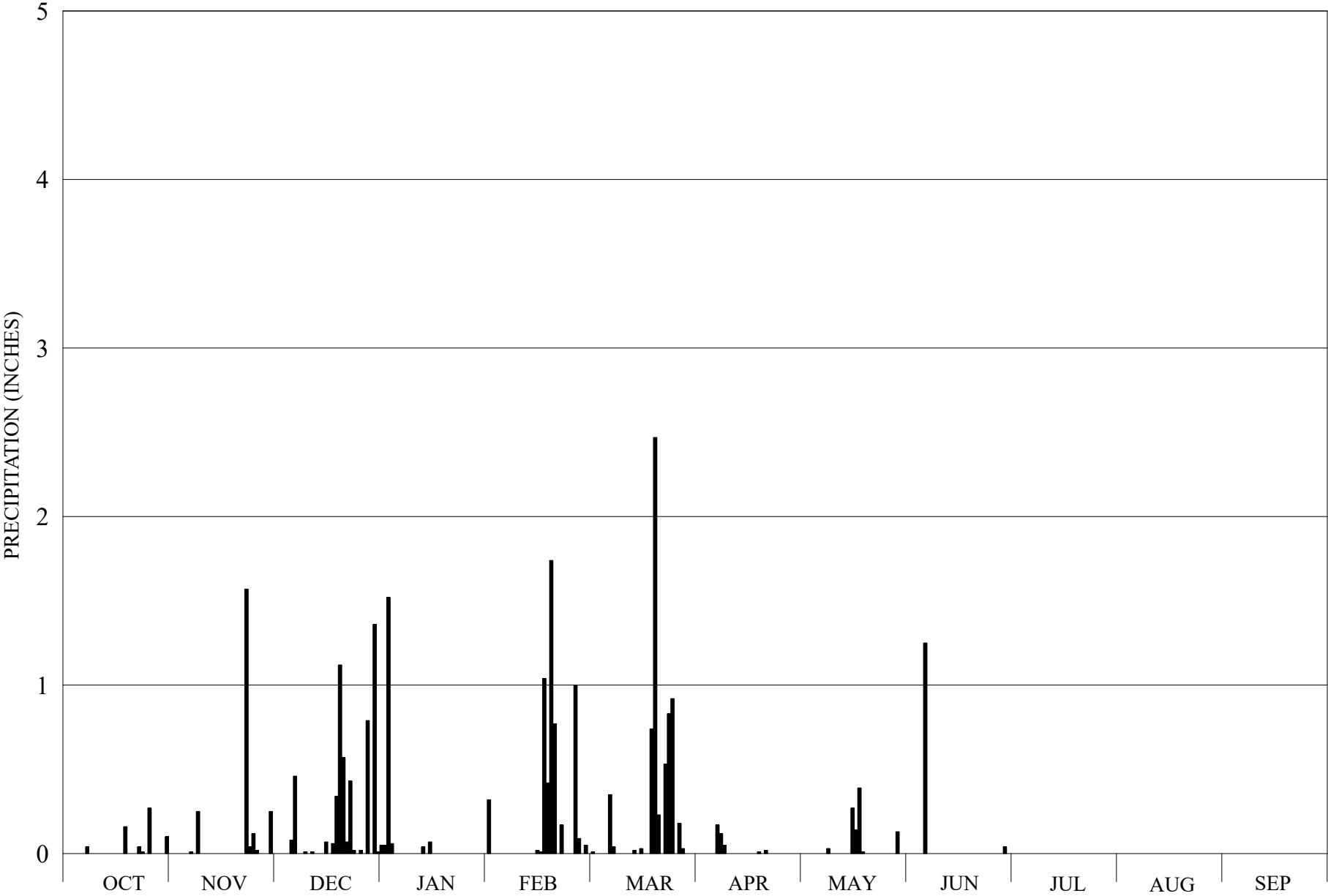
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0.36	0.14					
2						0.14	T					
3												
4						1.06						
5					0.66		0.95					
6					0.37		0.02					
7			0.47									
8			0.03		0.37	0.22						0.01
9					0.19	0.20						T
10			0.04		0.09	0.11		0.02				
11			0.19					0.12				
12			0.14	0.19		T	1.58					
13	1.02		1.09	0.46		0.33	0.13					
14	4.03		0.02									
15	T											
16												
17												
18		T		1.62				0.02				
19				1.75								
20	0.06			1.90			0.49					
21		0.07	T	0.51			0.75					
22			0.18	0.80	0.33		0.20					
23				0.17	0.01							
24					1.07							
25				T								
26				0.23								
27		0.15		0.16	1.16		0.01	0.07				
28			0.05				0.13	0.27				
29			0.12				0.05					
30			0.04	0.17		0.06						
31			T			0.11						
Total	5.11	0.22	2.37	7.96	4.25	2.59	4.45	0.50	0.00	0.00	0.00	0.01

Season Total: 27.46 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-12

**SAN CLEMENTE RESERVOIR DAILY RAINFALL
WATER YEAR 2011**



Note: Monthly tick marks are approximate.

TABLE A-12 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: San Clemente Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2010-2011

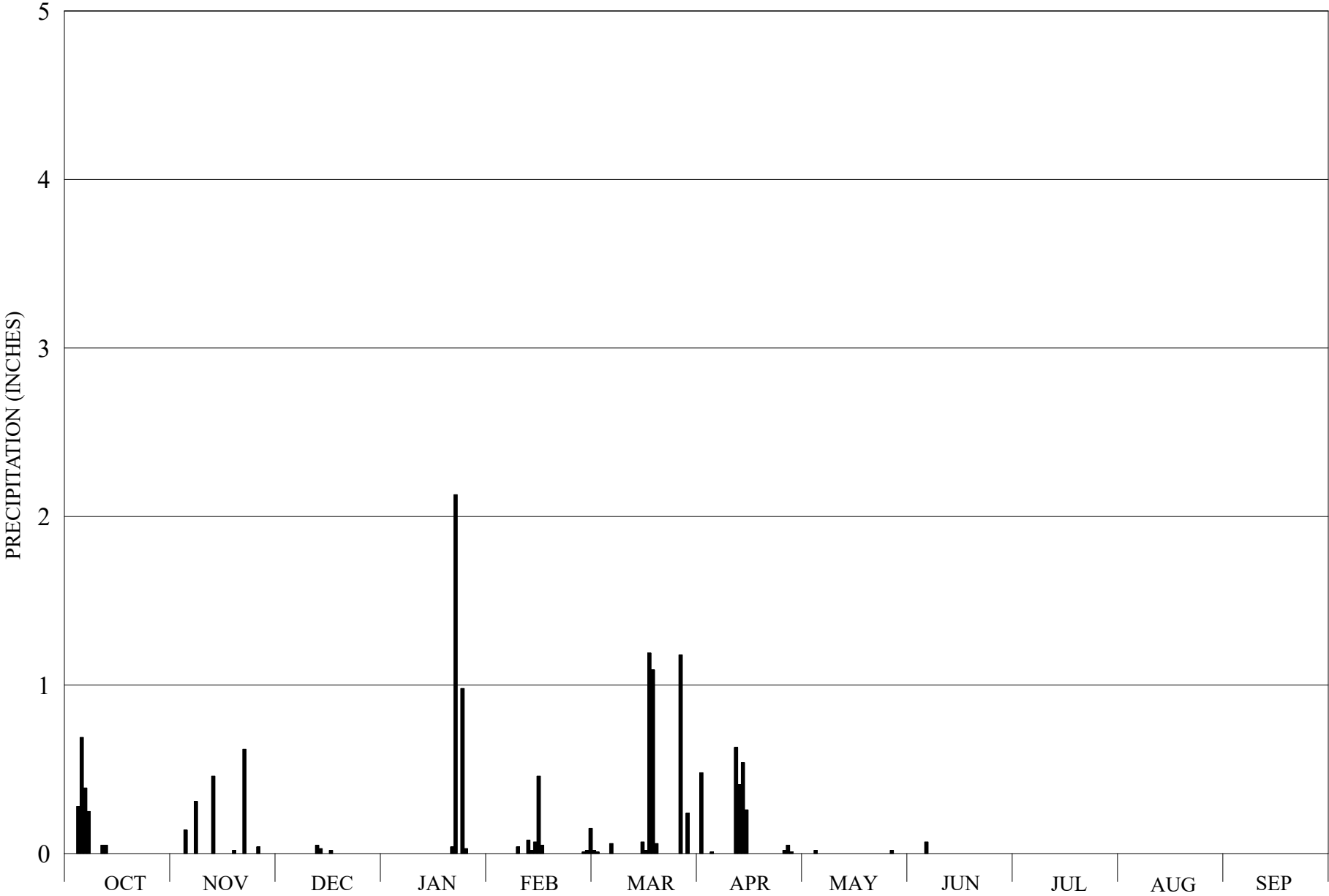
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0.05								
2				1.52		0.01						
3				0.06								
4												
5			0.08									
6		0.01	0.46						1.25			
7	0.04					0.35	0.17					
8		0.25				0.04	0.12					
9			0.01				0.05	0.03				
10		T										
11			0.01									
12				0.04								
13												
14				0.07	0.02	0.02						
15			0.07		0.01							
16					1.04	0.03		0.27				
17			0.06		0.42			0.14				
18	0.16		0.34		1.74			0.39				
19			1.12		0.77	0.74	0.01	0.01				
20			0.57			2.47						
21			0.07		0.17	0.23	0.02					
22	0.04	1.57	0.43			T						
23	0.01	0.04	0.02			0.53						
24		0.12				0.83						
25	0.27	0.02	0.02		1.00	0.92						
26					0.09							
27			0.79			0.18						
28					0.05	0.03						
29		0.25	1.36					0.13	0.04			
30	0.10		0.01									
31			0.05	0.32								
Total	0.62	2.26	5.47	2.06	5.31	6.38	0.37	0.97	1.29	0.00	0.00	0.00

Season Total: 24.73 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-13

**SAN CLEMENTE RESERVOIR DAILY RAINFALL
WATER YEAR 2012**



Note: Monthly tick marks are approximate.

TABLE A-13 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: San Clemente Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2011-2012

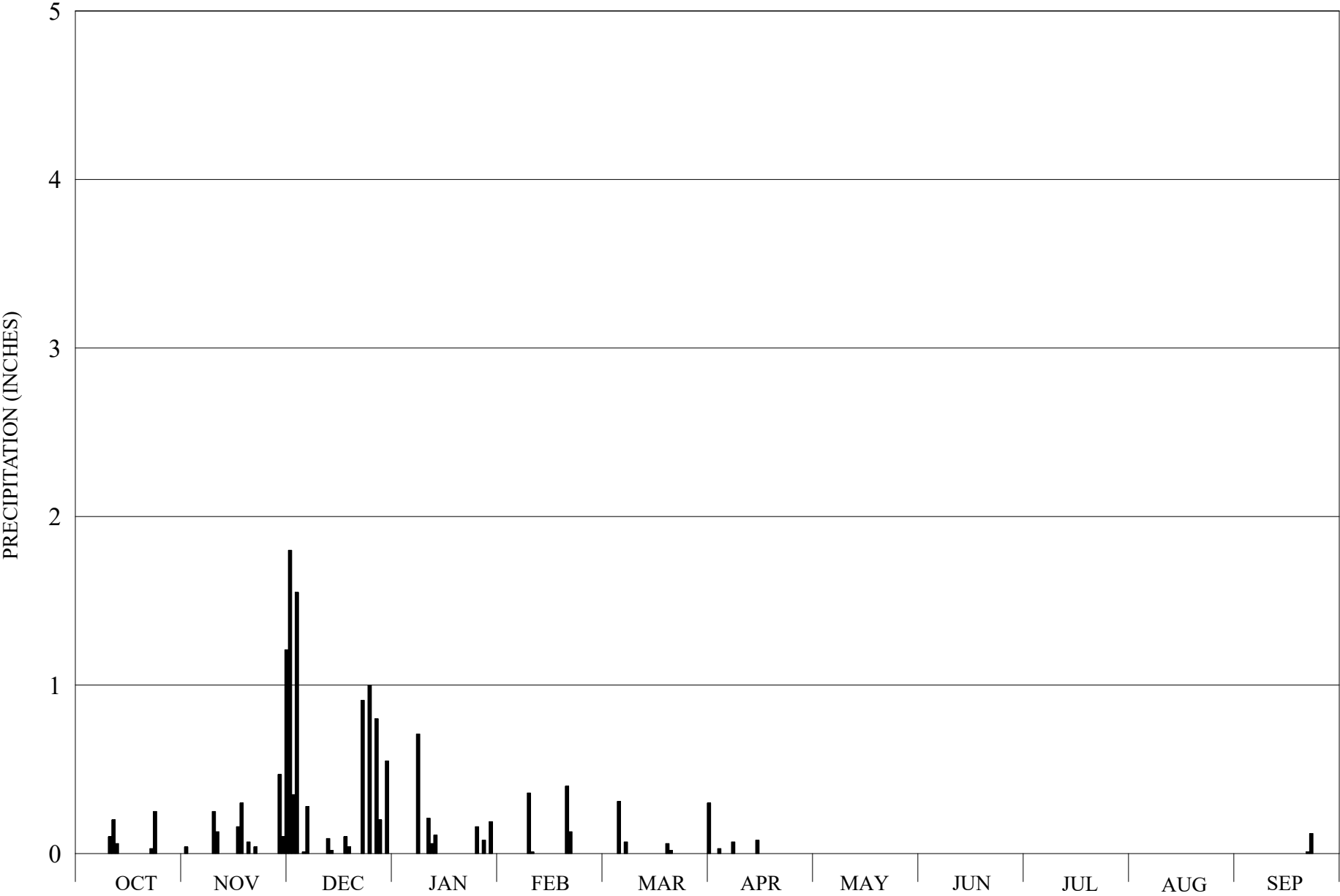
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0.02	0.48					
2						0.01						
3												
4	0.28	0.14					0.01	0.02				
5	0.69								0.07			
6	0.39					0.06						
7	0.25	0.31			T							
8					0.04							
9												
10												
11	0.05				0.08		0.63					
12	0.05	0.46	0.05		0.02		0.41					
13			0.03		0.07		0.54					
14					0.46		0.26					
15					0.05	0.07						
16			0.02			0.02						
17						1.19						
18		0.02				1.09						
19						0.06						
20				0.04								
21		0.62		2.13								
22												
23				0.98								
24				0.03								
25		0.04					0.02					
26						1.18	0.05	0.02				
27					0.01	T	0.01	T				
28					0.02	0.24						
29					0.15							
30												
31												
Total	1.71	1.59	0.10	3.18	0.90	3.94	2.41	0.04	0.07	0.00	0.00	0.00

Season Total: 13.94 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-14

**SAN CLEMENTE RESERVOIR DAILY RAINFALL
WATER YEAR 2013**



Note: Monthly tick marks are approximate.

TABLE A-14 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: San Clemente Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2012-2013

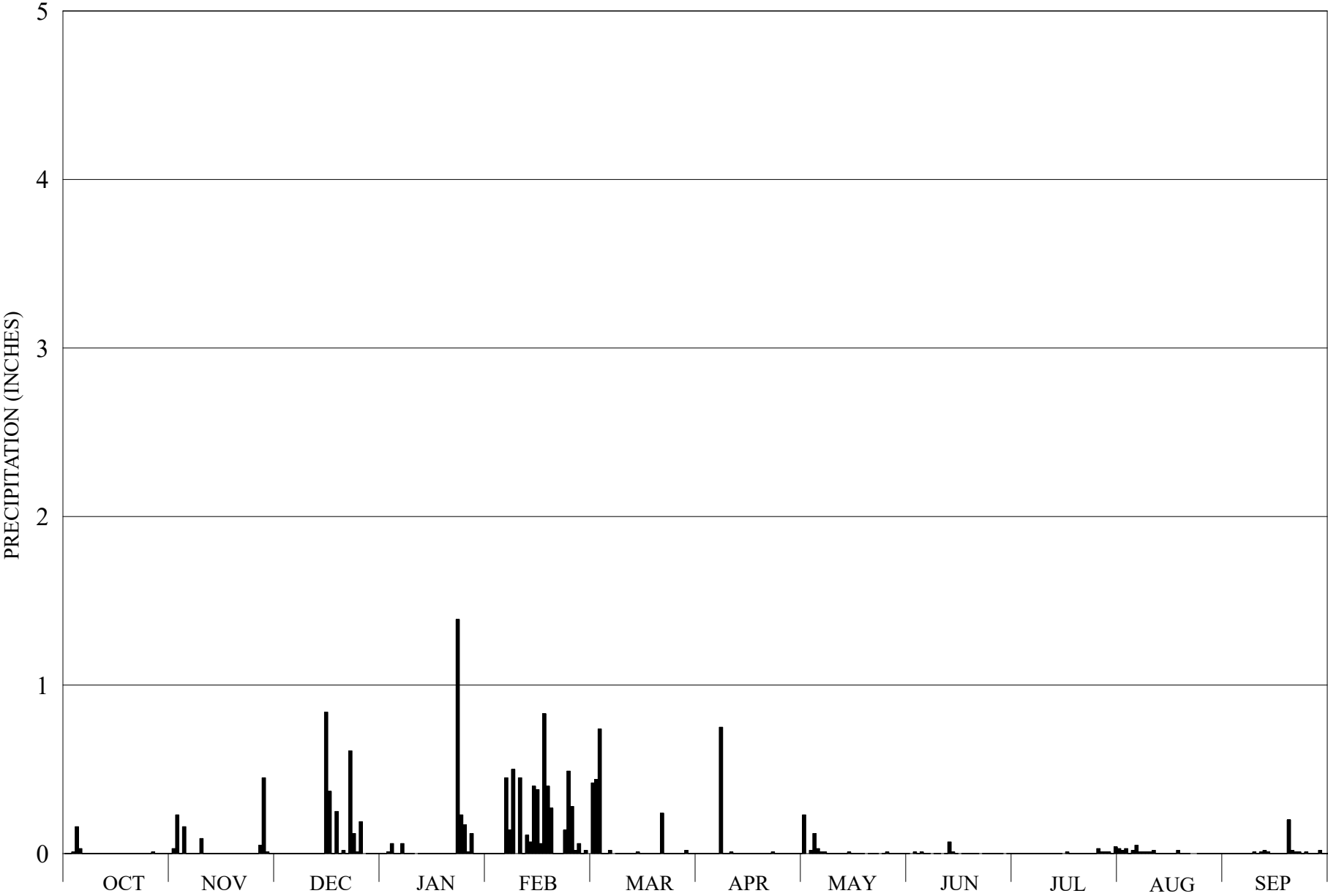
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.04	1.80				0.30					
2			0.35									
3			1.55									
4							0.03					
5			0.01				T					
6			0.28			0.31						
7				0.71								
8					0.36	0.07	0.07					
9		0.25			0.01							
10	0.10	0.13		0.21								
11	0.20			0.06								
12	0.06		0.09	0.11								
13			0.02									
14												
15							0.08					
16		0.16										
17		0.30	0.10									
18			0.04									
19		0.07			0.40							
20					0.13	0.06						
21		0.04				0.02						0.01
22	0.03		0.91									0.12
23	0.25				T							
24	T		1.00	0.16								
25												
26			0.80	0.08								
27			0.20									
28		0.47		0.19		T		T				
29		0.10	0.55									
30		1.21										
31			T									
Total	0.64	2.77	7.70	1.52	0.90	0.46	0.48	0.00	0.00	0.00	0.00	0.13

Season Total: 14.60 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-15

PACIFIC GROVE RESERVOIR DAILY RAINFALL
WATER YEAR 2009



Note: Monthly tick marks are approximate.

TABLE A-15 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Pacific Grove Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2008-2009

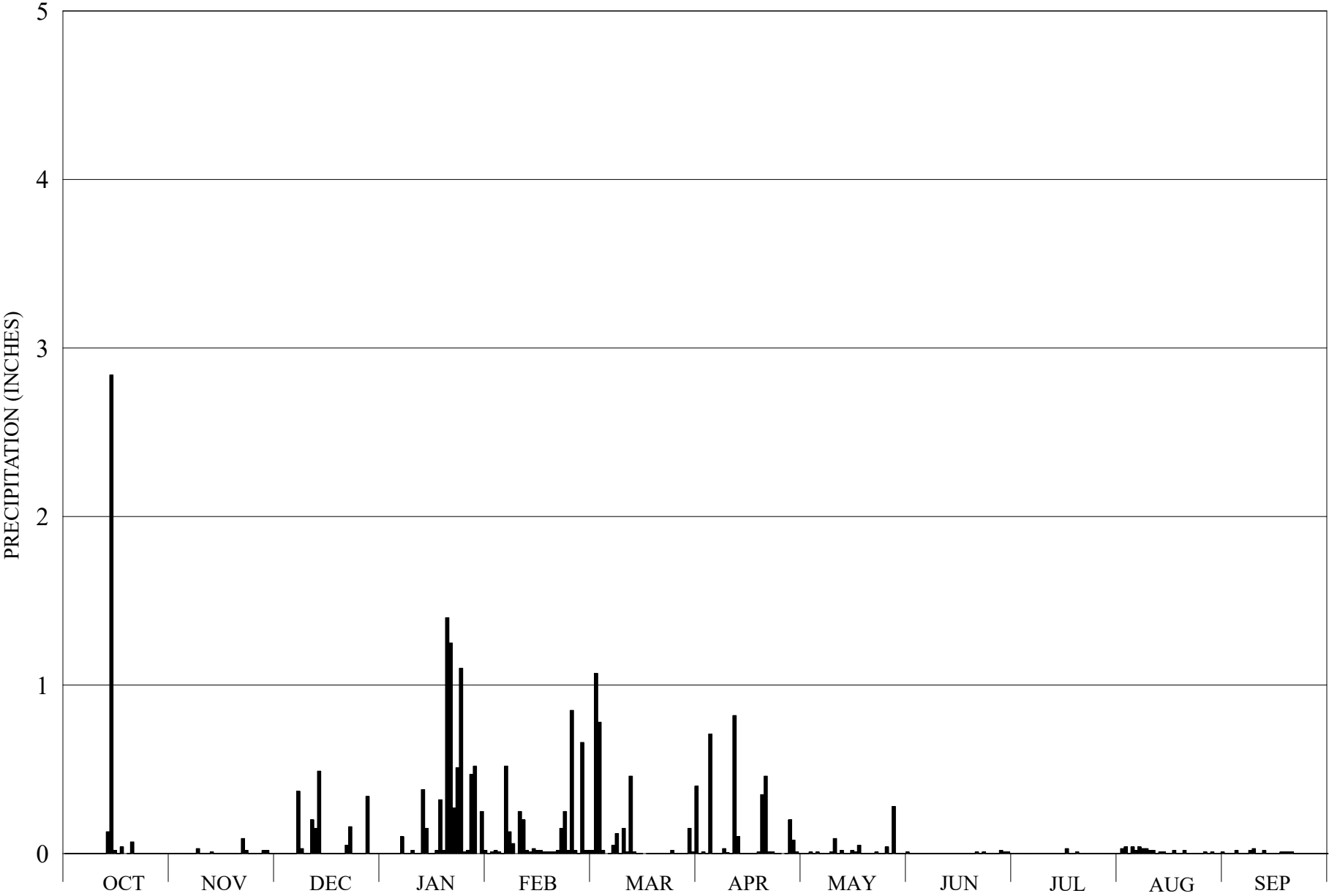
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.03				T					0.03	
2		0.23		0.01		0.42		0.23	T		0.02	
3	0.01			0.06		0.44		T	0.01		0.03	
4	0.16	0.16				0.74		0.02				
5	0.03				0.45			0.12	0.01		0.02	
6				0.06	0.14			0.03			0.05	
7					0.50	0.02		0.01			0.01	
8					T	T	0.75	0.01	T		0.01	
9		0.09			0.45						0.01	0.01
10				T							0.01	
11					0.11		0.01		T		0.02	0.01
12					0.07							0.02
13					0.40				0.07			0.01
14					0.38				0.01			
15			0.84		0.06	0.01		0.01				
16			0.37		0.83				T	T		
17					0.40					0.01		
18			0.25		0.27						0.02	
19												0.20
20			0.02					T				0.02
21												0.01
22			0.61	1.39	0.14	0.24			T		T	0.01
23			0.12	0.23	0.49		0.01				T	
24			0.01	0.17	0.28			T				0.01
25			0.19	0.01	0.02							
26	0.01	0.05	T	0.12	0.06			0.01		0.03		
27		0.45								0.01		
28		0.01			0.02					0.01		0.02
29						0.02			T	0.01		
30												
31										0.04		
Total	0.21	1.02	2.41	2.05	5.07	1.89	0.77	0.44	0.10	0.11	0.23	0.32

Season Total: 14.62 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-16

PACIFIC GROVE RESERVOIR DAILY RAINFALL
WATER YEAR 2010



Note: Monthly tick marks are approximate.

TABLE A-16 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Pacific Grove Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2009-2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0.01	0.02	0.40		0.01			
2					0.02	0.02					0.03	
3					0.01	1.07	0.01				0.04	
4						0.78		0.01				0.02
5					0.52	0.02	0.71				0.04	
6				0.10	0.13	T		0.01			0.02	
7			0.37		0.06						0.04	
8		0.03	0.03		T	0.05					0.03	0.02
9				0.02	0.25	0.12	0.03				0.03	0.03
10					0.20		0.01	0.01			0.02	
11			0.20		0.02	0.15		0.09			0.02	
12		0.01	0.15	0.38	0.01	0.01	0.82					0.02
13	0.13		0.49	0.15	0.03	0.46	0.10	0.02			0.01	
14	2.84				0.02	0.01					0.01	
15	0.02				0.02							
16				0.02	0.01			0.02				
17	0.04			0.32	0.01	T		0.01		0.03	0.02	0.01
18	T			0.02	0.01			0.05				0.01
19				1.40	0.01		0.01					0.01
20	0.07			1.25	0.02		0.35			0.01	0.02	0.01
21		0.09	0.05	0.27	0.15		0.46		0.01			
22		0.02	0.16	0.51	0.25		0.01					
23				1.10	0.02		0.01	0.01	0.01			
24				0.01	0.85							
25				0.02	0.02	0.02						
26				0.47			T	0.04			0.01	
27		0.02	0.34	0.52	0.66							
28		0.02		T	0.02		0.20	0.28	0.02		0.01	
29				0.25			0.08		0.01			
30				0.02		0.15	0.01		0.01			
31						0.01					0.01	
Total	3.10	0.19	1.79	6.83	3.33	2.89	3.21	0.55	0.07	0.04	0.36	0.13

Season Total: 22.49 Inches

Note: Rainfall recorded on day of measuring.

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PRECIPITATION (INCHES)

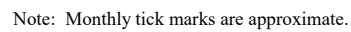


TABLE A-17 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Pacific Grove Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2010-2011

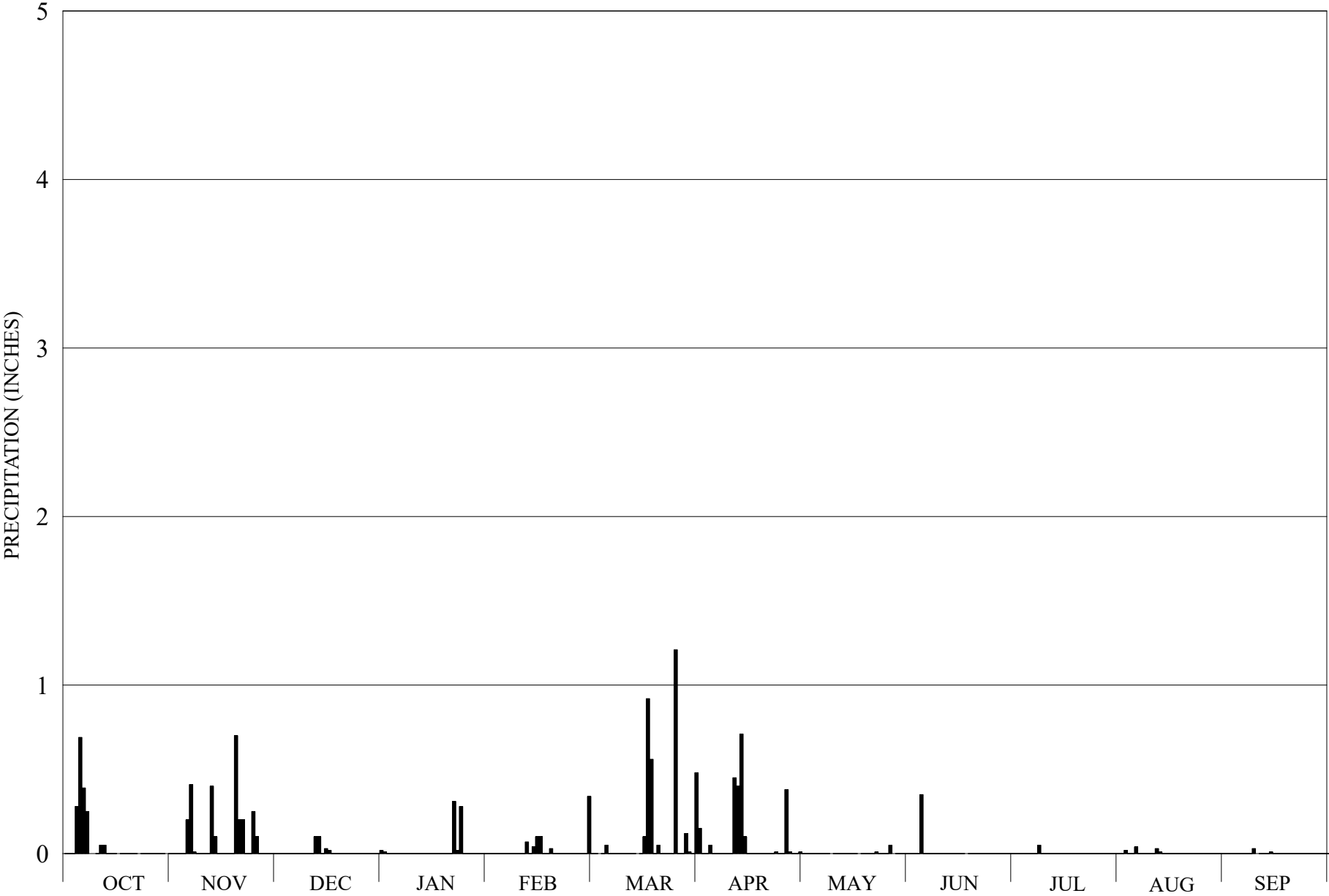
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0.10							0.01	
2				0.62		0.01	0.02					
3	0.03			0.03								
4									0.73			
5			0.20			T			0.02			
6			0.17			0.04					0.02	0.01
7		0.01					0.07					0.01
8		0.35		T		0.08		0.02			0.01	
9												T
10		0.02	0.12									0.01
11			0.04									
12				0.01								
13			0.03							0.01		
14				0.04		0.10						
15			0.10		0.08	0.02		0.46			0.01	
16	T			T	0.65	0.21	0.01	0.05			T	
17	0.01			0.01	0.35			0.12			0.01	0.02
18			0.43		1.23			0.12			0.01	
19			0.53		0.17	1.06			0.03		T	
20		0.54	0.40		0.44	0.89	0.05				0.00	
21		0.35	0.05		0.01	0.28	0.10				0.02	
22		0.10	0.51			0.02		0.01		0.02		
23	0.23	0.10	0.01			0.40					0.01	T
24	0.24	0.18				0.39	0.05					
25	0.23	0.02			0.85	0.75					0.02	
26			0.88		0.45	0.27					0.03	
27		0.19			0.01	0.30				0.02	0.02	
28								0.02			T	
29			1.05					0.04	0.32			
30			0.02	0.23								
31	0.06			0.20				0.04		0.03		
Total	0.80	1.86	4.54	1.24	4.24	4.82	0.30	0.88	1.10	0.08	0.17	0.05

Season Total: 20.08 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-18

PACIFIC GROVE RESERVOIR DAILY RAINFALL
WATER YEAR 2012



Note: Monthly tick marks are approximate.

TABLE A-18 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Pacific Grove Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2011-2012

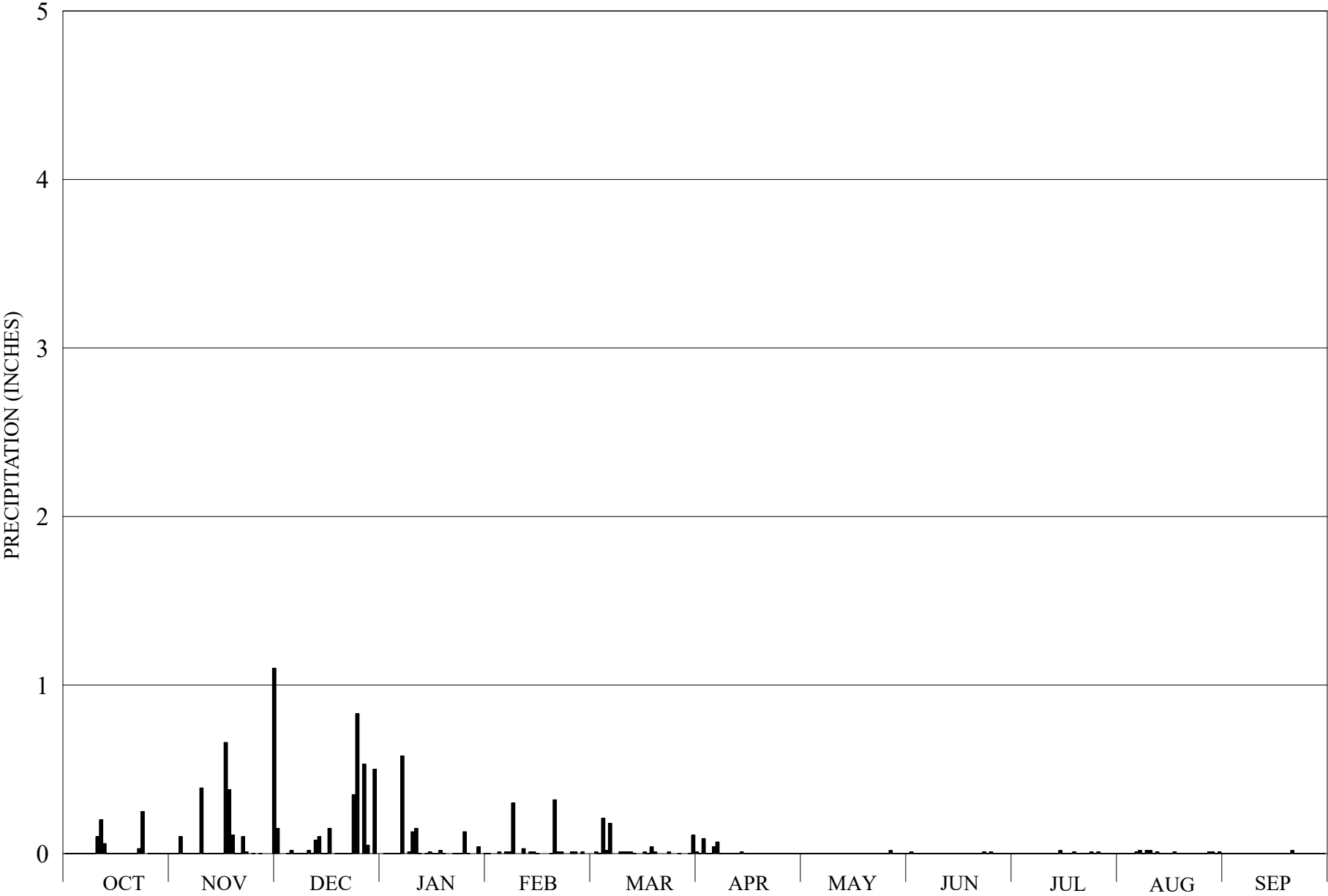
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0.01			0.15					
2											0.02	
3						T						
4	0.28						0.05		0.35			
5	0.69	0.20				0.05					0.04	
6	0.39	0.41										
7	0.25	0.01										
8										0.05		0.03
9								T				T
10												
11	0.05				0.07		0.45				0.03	
12	0.05	0.40	0.10				0.40				0.01	
13		0.10	0.10		0.04		0.71					0.01
14			0.00		0.10	T	0.10					
15			0.03		0.10							
16			0.02			0.10						
17						0.92		T	T			
18					0.03	0.56						
19		0.70										
20		0.20				0.05						
21		0.20		0.31								
22				0.02				0.01				
23				0.28			0.01					
24		0.25										
25		0.10				1.21						
26							0.38	0.05				
27							0.01	T				
28						0.12						
29					0.34	0.01						
30							0.01					
31			0.02			0.48						
Total	1.71	2.57	0.27	0.62	0.68	3.50	2.27	0.06	0.35	0.05	0.10	0.04

Season Total: 12.22 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-19

PACIFIC GROVE RESERVOIR DAILY RAINFALL
WATER YEAR 2013



Note: Monthly tick marks are approximate.

**TABLE A-19 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record**

Station: Pacific Grove Reservoir

County: Monterey

Observer: California-American Water Company

Record obtained from: California-American Water Company, Monterey District

Daily Precipitation in Inches - Season of 2012-2013

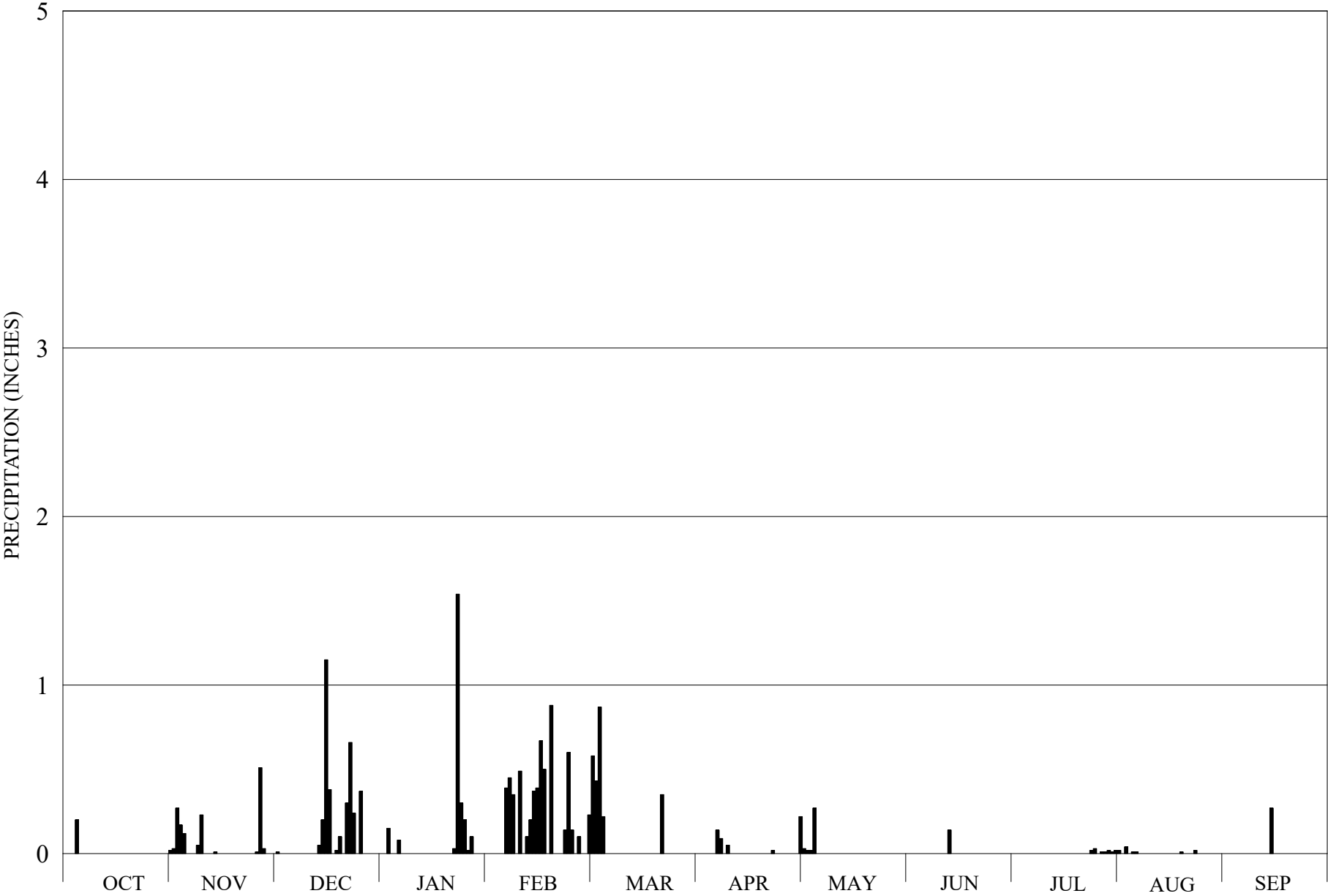
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0.15			T	0.11					
2							0.01					
3		0.10							0.01			
4					0.01	0.01	0.09					
5			0.02									
6				0.58	0.01	0.21						
7					0.01	0.02	0.04				0.01	
8				0.01	0.30	0.18	0.07				0.02	
9		0.39		0.13								
10	0.10		0.02	0.15							0.02	
11	0.20				0.03	0.01					0.02	
12	0.06		0.08			0.01						
13			0.10		0.01	0.01					0.01	
14				0.01	0.01	0.01						
15							0.01					
16		0.66	0.15							0.02		
17		0.38	T	0.02								
18		0.11				0.01					0.01	
19												
20					0.32	0.04				0.01		
21		0.10			0.01	0.01						0.02
22	0.03	0.01			0.01	T						
23	0.25	T	0.35									
24	T		0.83	0.13					0.01			
25		T			0.01	0.01				0.01		
26			0.53		0.01	T			0.01			
27		T	0.05		T	T				0.01		
28				0.04	0.01			0.02			0.01	
29			0.50								0.01	
30		1.10	T									
31			T								0.01	
Total	0.64	2.85	2.78	1.07	0.75	0.53	0.33	0.02	0.03	0.05	0.12	0.02

Season Total: 9.19 Inches

Note: Rainfall recorded on day of measuring.

FIGURE A-20

**MONTEREY DAILY RAINFALL
WATER YEAR 2009**



Note: Monthly tick marks are approximate.

**TABLE A-20 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record**

Station: Monterey

County: Monterey

Observer: Robert J. Renard

**Record obtained from: National Weather Service Climate Station, elevation 385 feet,
located in the western hilly section of Monterey, CA.**

Daily Precipitation in Inches - Season of 2008-2009

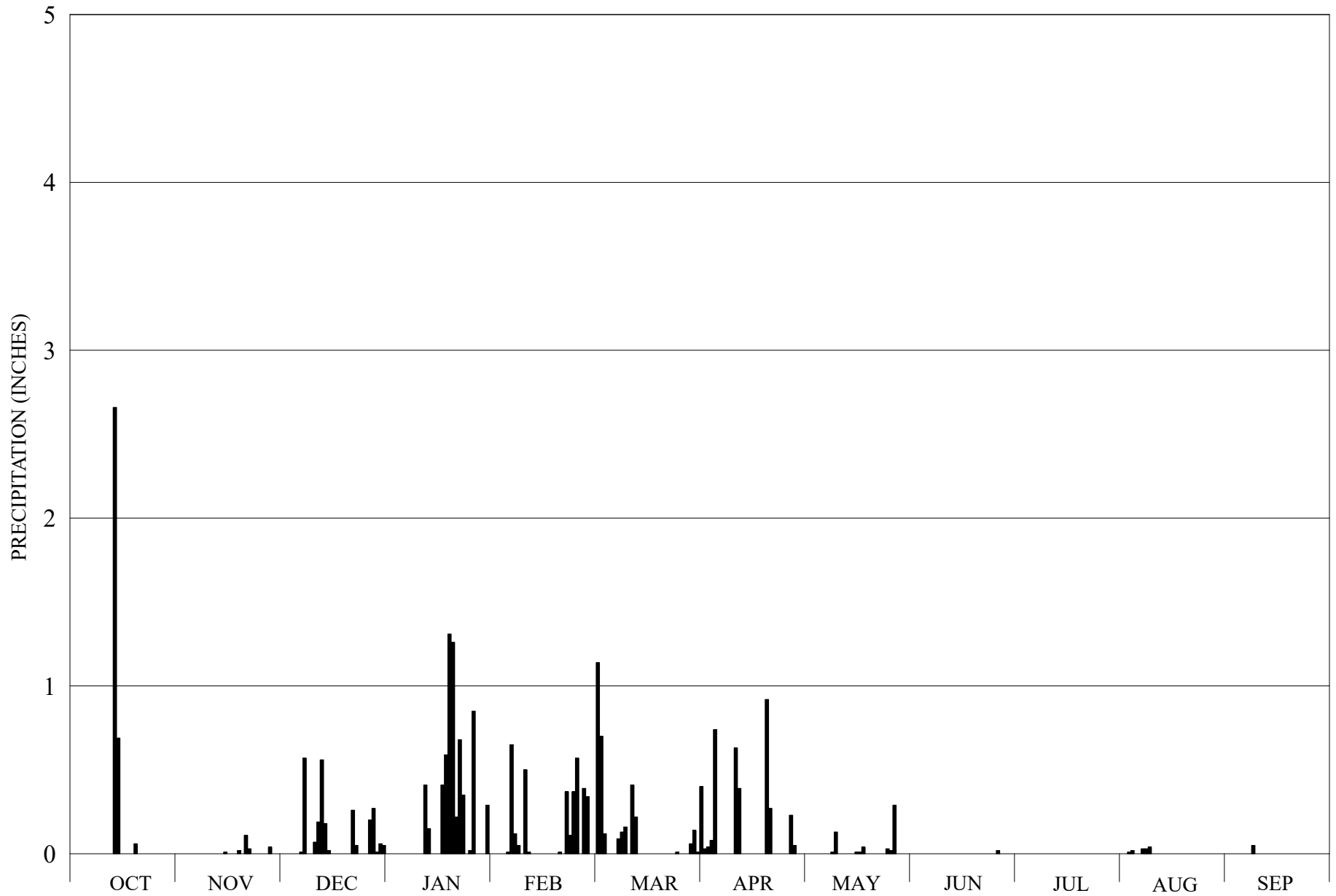
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.03	0.01	T		0.23		0.22			0.02	
2		0.27		0.15		0.58		0.03			T	
3	T	0.17				0.43		0.02	T		0.04	
4	0.20	0.12				0.87		0.02				
5				0.08	0.39	0.22		0.27	T		0.01	
6					0.45	T					0.01	
7					0.35		0.14					
8		0.05					0.09					
9		0.23			0.49		T					
10							0.05					
11					0.10				T	T		
12					0.20							T
13		0.01	0.05		0.37				0.14			
14			0.20		0.39							0.27
15			1.15		0.67	T			T			
16			0.38		0.50	T						
17												
18			0.02		0.88			T				
19			0.10								0.01	
20												
21			0.30	0.03		T						
22			0.66	1.54	0.14	0.35	T					
23			0.24	0.30	0.60		0.02	T		T	0.02	
24			T	0.20	0.14					0.02		
25		0.01	0.37	0.02						0.03		
26		0.51		0.10	0.10							
27		0.03								0.01		
28										0.01		T
29										0.02		T
30	T									0.01		
31	0.02									0.02		
Total	0.22	1.43	3.48	2.42	5.77	2.68	0.30	0.56	0.14	0.12	0.11	0.27

Season Total: 17.50 Inches

Note: Rainfall recorded at 1800 hours PST on day of measuring.

FIGURE A-21

**MONTEREY DAILY RAINFALL
WATER YEAR 2010**



Note: Monthly tick marks are approximate.

TABLE A-21 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Monterey

County: Monterey

Observer: Robert J. Renard

**Record obtained from: National Weather Service Climate Station, elevation 385 feet,
located in the western hilly section of Monterey, CA.**

Daily Precipitation in Inches - Season of 2009-2010

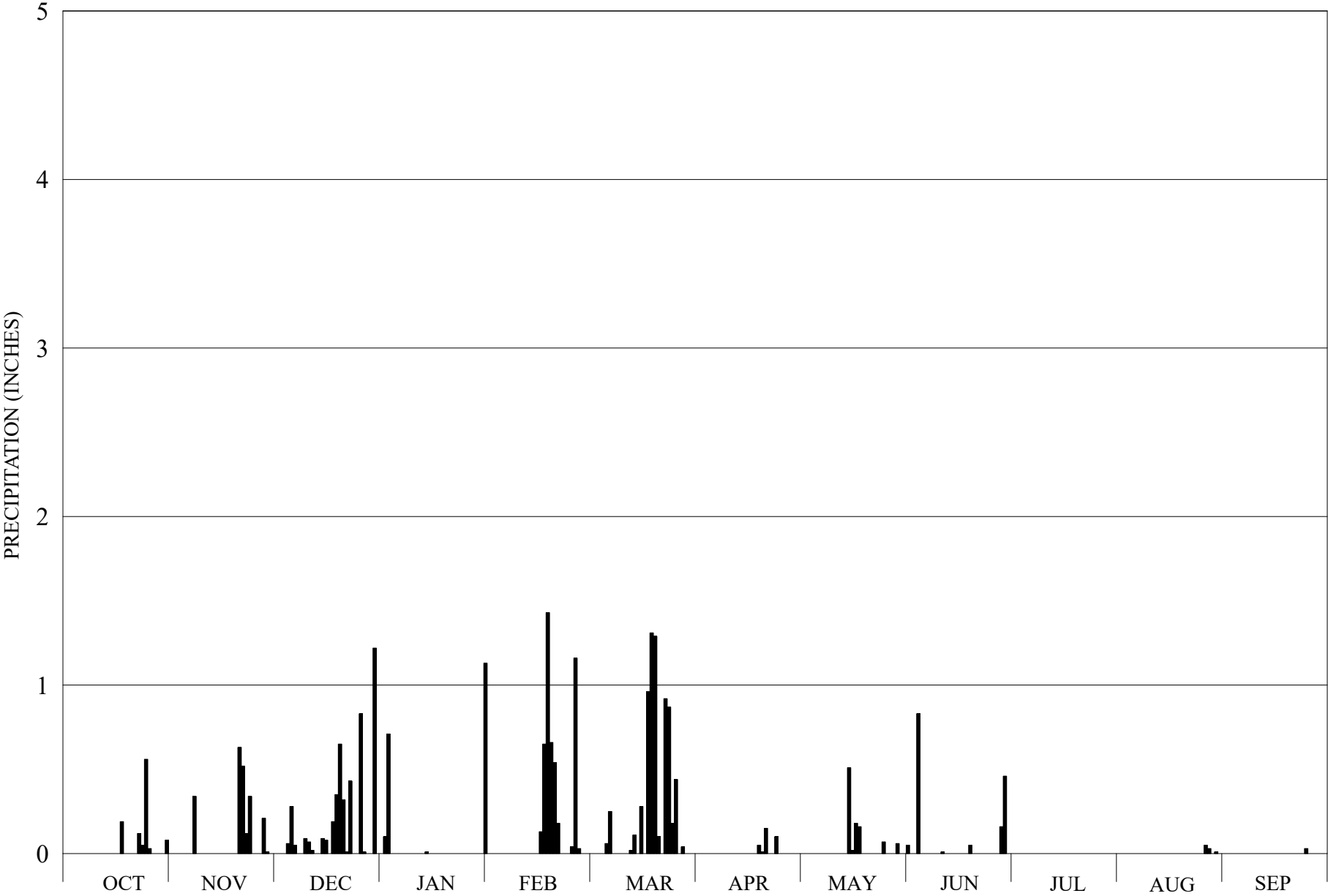
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						T	0.40					
2						1.14	0.03					
3						0.70	0.04				0.01	
4					0.01	0.12	0.08				0.02	
5					0.65		0.74					
6			0.01		0.12	T					T	
7		T	0.57		0.05	T					0.03	
8					T	0.09					0.03	0.05
9					0.50	0.13		0.01	T	T	0.04	T
10			0.07		0.01	0.16		0.13			T	
11			0.19				0.63				T	
12			0.56	0.41		0.41	0.39					
13	2.66		0.18	0.15		0.22					T	
14	0.69	0.01	0.02									
15	T										T	
16								0.01				
17				0.41	T			0.01				
18		0.02		0.59	T			0.04				
19	0.06			1.31	0.01							
20		0.11		1.26	T		0.92	T			T	
21		0.03	0.26	0.22	0.37		0.27				T	
22			0.05	0.68	0.11					T		
23				0.35	0.37							
24	T			T	0.57							
25				0.02		0.01		0.03	T			
26			0.20	0.85	0.39			0.02	0.02			
27		0.04	0.27	T	0.34		0.23	0.29	T			
28			0.01		T		0.05					
29			0.06	T		0.06						
30			0.05	0.29		0.14						
31						0.01				T		
Total	3.41	0.21	2.50	6.54	3.50	3.19	3.78	0.54	0.02	0.00	0.13	0.05

Season Total: 23.87 Inches

Note: Rainfall recorded at 1800 hours PST on day of measuring.

FIGURE A-22

MONTEREY DAILY RAINFALL
WATER YEAR 2011



Note: Monthly tick marks are approximate.

TABLE A-22 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Monterey

County: Monterey

Observer: Robert J. Renard

**Record obtained from: National Weather Service Climate Station, elevation 385 feet,
located in the western hilly section of Monterey, CA.**

Daily Precipitation in Inches - Season of 2010-2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0.10					0.05			
2				0.71		T						
3												
4	T		0.06						0.83			
5			0.28									
6		T	0.05			0.06			T			
7		0.34	T			0.25	T					
8			T					T				
9			0.09									
10		T	0.07									
11			0.02	T					0.01			
12												
13				0.01		0.02	T					
14			0.09			0.11			T			
15			0.08		0.13	T		0.51				
16					0.65	0.28		0.02				
17	0.19		0.19		1.43			0.18				
18			0.35		0.66	0.96	T	0.16				
19		T	0.65		0.54	1.31	0.05		0.05			
20		0.63	0.32		0.18	1.29	0.01				T	
21		0.52	0.01			0.10	0.15					
22	0.12	0.12	0.43						T			
23	0.05	0.34				0.92						
24	0.56				0.04	0.87	0.10					0.03
25	0.03		0.83		1.16	0.18	T	0.07				T
26			0.01		0.03	0.44					0.05	
27		0.21				T					0.03	
28		0.01	T			0.04		T	0.16			
29	T		1.22					0.06	0.46		0.01	
30	0.08			1.13								
31								T				
Total	1.03	2.17	4.75	1.95	4.82	6.83	0.31	1.00	1.56	0.00	0.09	0.03

Season Total: 24.54 Inches

Note: Rainfall recorded at 1800 hours PST on day of measuring.

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PRECIPITATION (INCHES)

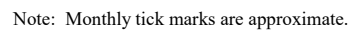


TABLE A-23 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record

Station: Monterey

County: Monterey

Observer: Robert J. Renard

**Record obtained from: National Weather Service Climate Station, elevation 385 feet,
located in the western hilly section of Monterey, CA.**

Daily Precipitation in Inches - Season of 2011-2012

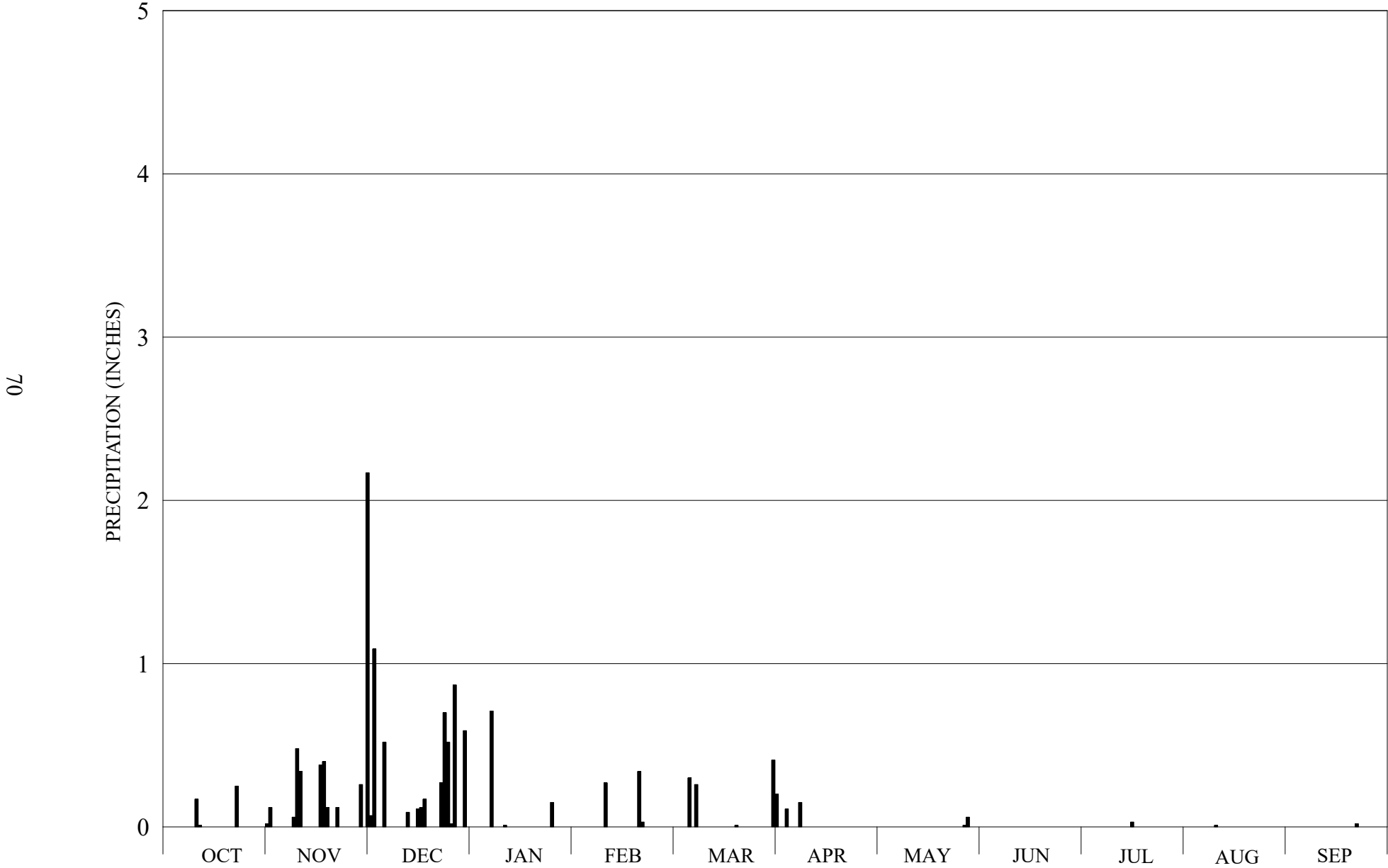
Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0.02	0.17		T		T	
2										T	T	
3	0.02	T							T		T	
4	0.27	0.21					0.01	0.23	0.42		T	
5	0.76										T	
6	0.35	0.46				0.08						
7					T							
8												
9												
10	0.06				0.08		0.31					
11	T	0.29	T		0.11		T					
12		0.22	0.24		T		0.60					
13					0.22		0.82					
14						T	T					
15			0.08									
16					T	0.13				T		
17					T	1.65			T			
18	T	0.05				0.10						
19		0.11		T		0.03						
20		0.54		0.34								
21		0.01		1.21								
22				0.06		T						
23				0.25								
24		0.23				0.17						
25		T				1.31	T					
26							0.58	0.02				T
27					0.04							
28					T	0.19				T		
29					0.41					T		
30											T	
31											T	
Total	1.46	2.12	0.32	1.86	0.86	3.68	2.49	0.25	0.42	0.00	0.00	0.00

Season Total: 13.46 Inches

Note: Rainfall recorded at 1800 hours PST on day of measuring.

FIGURE A-24

MONTEREY DAILY RAINFALL
WATER YEAR 2013



Note: Monthly tick marks are approximate.

**TABLE A-24 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Precipitation Record**

Station: Monterey

County: Monterey

Observer: Robert J. Renard

**Record obtained from: National Weather Service Climate Station, elevation 385 feet,
located in the western hilly section of Monterey, CA.**

Daily Precipitation in Inches - Season of 2012-2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0.12	0.07				0.20					
2		T	1.09				T					
3							T					
4							0.11					
5			0.52	T								
6			T	0.71		0.30						
7						T					T	
8		0.06				0.26	0.15				T	
9		0.48			0.27							
10	0.17	0.34		0.01							0.01	
11	0.01					T					T	
12			0.09								T	
13											T	T
14												T
15			0.11				T					
16		0.38	0.12							0.03		
17		0.40	0.17							T		
18		0.12	T								T	
19					0.34					T		
20	T				0.03	0.01				T		
21		0.12										0.02
22	0.25		0.27									
23			0.70							T		
24			0.52	0.15						T		
25			0.02									
26			0.87									
27		T						0.01				
28		0.26	T					0.06		T		
29		T	0.59									
30		2.17										
31	0.02					0.41						
Total	0.45	4.45	5.14	0.87	0.64	0.98	0.46	0.07	0.00	0.03	0.01	0.02

Season Total: 13.12 Inches

Note: Rainfall recorded at 1800 hours PST on day of measuring.

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX B

STATION DESCRIPTIONS

DESCRIPTION OF GAGING STATION ON DANISH CREEK

Location - Immediately upstream of Los Padres Reservoir at the approximate intersection of Danish Creek and the Carmel River (CR) Trail at the CR left bank (facing downstream).

Establishment - Streamflow measuring station established August 3, 2009 by G. W. James.

Drainage area – 8.1 sq. mi.

Gage - No staff gage exists at measuring site.

History - Beginning in August 2009, MPWMD has obtained “dry season” monthly discharge measurements at this site to define the base flow contribution from Danish Creek to the Carmel River.

Reference and benchmarks - None

Channel – One channel at all stages. Channel along measuring reach is composed of poorly sorted alluvium.

Control -

Discharge measurements - Obtained in conjunction with the CR above Los Padres Reservoir monthly “dry season” discharge measurements. Measurements normally are not collected once Los Padres Reservoir fills to capacity, but resume in May or June of most years in advance of “dry season” conditions.

Floods -

Point of zero flow -

Winter flow - No ice.

Regulation - None

Diversion - None

Accuracy - Discharge measurements are fair to good.

Cooperation -

DESCRIPTION OF GAGING STATION ON CARMEL RIVER ABOVE LOS PADRES RESERVOIR

Location - Immediately upstream of Los Padres Reservoir and downstream of the Carmel River/Danish Creek confluence.

Establishment - Streamflow measuring station established Sept. 25, 1985 by G. Matthews.

Drainage area - 44.8 sq. mi. (drainage area at Los Padres Dam).

Gage - Gage heights are obtained at Los Padres Spillway and are reservoir elevations. No staff gage exists at measuring site.

History - Beginning in Sept. 1985, MPWMD has obtained "dry season" monthly discharge measurements at this site to define the inflow to Los Padres Reservoir, which provides a basis for scheduling of reservoir operations at Los Padres and San Clemente Dams. In August 2001, MPWMD installed a Campbell Scientific CR10X data recorder/pressure transducer system (range 1023.5 ft.-spill) at the Los Padres Dam (LPD) Spillway abutment (left). On Nov. 15, 2005, a replacement 30 PSI pressure transducer was installed at LPD at approx. elev. 1003 ft. to record full range of reservoir levels. Cellular based telecommunications hardware added to CR10X Sept. 14, 2007.

California American Water (CAW) maintains a water level (graphic) recorder at Los Padres Reservoir (range 1038 ft.-spill).

Reference and benchmarks - Reservoir elevations are based on National Geodetic Vertical Datum (NGVD) of 1929.

Channel - Channel along measuring reach is composed primarily of cobble.

Control -

Discharge measurements - Obtained downstream of Danish Creek by wading. At flows above 100 cfs (i.e. during Winter flows), discharge measurements normally are not collected.

Floods -

Point of zero flow -

Winter flow - No ice.

Regulation - None

Diversion - None

Accuracy - Discharge measurements are fair to good.

Cooperation -

DESCRIPTION OF GAGING STATION ON LOS PADRES RESERVOIR

Location – Gage located on top of left (facing downstream) spillway abutment at Los Padres Dam or river mile 24.8.

Establishment – MPWMD installed continuous recording stage gage Aug. 28, 2001. California American Water continues to maintain a water level (graphic) recorder at Los Padres Reservoir, date of establishment unknown.

Drainage area - 44.8 sq. mi. (drainage area at Los Padres Dam).

Gage – Campbell Scientific (CS) CR10X data recorder linked to Druck 30 psi pressure transducer (PT). Staff gage readings are obtained at Los Padres Spillway left abutment or at staggered staff plate mounts in reservoir upstream of spillway. Spillway crest elevation is approx. 1040 ft. (NGVD 1929).

History - In August 2001, MPWMD installed a Campbell Scientific CR10X data recorder/pressure transducer system (approx. range 1023.5 ft.-spill) at the Los Padres Dam (LPD) Spillway abutment (left). On Nov. 15, 2005, a replacement 30 PSI pressure transducer was installed at LPD at approx. elev. 1003 ft. to record full range of reservoir levels. Cellular based telecommunications hardware added to CR10X Sept. 14, 2007.

California American Water (CAW) maintains a water level (graphic) recorder at Los Padres Reservoir (range 1038 ft.-spill).

Monterey County Water Resources Agency (MCWRA) maintains a flood warning stage sensor and tipping bucket raingage. All gages above located in steel shelters at top of left spillway abutment.

Reference and benchmarks – Benchmark at west end Los Padres Dam, next to utility shack, inside monitor well, top of square bolt, elevation 1,059.29 ft. (NGVD 1929), elev. from Base Line Land Surveys, Monterey, CA. Reservoir elevations are based on National Geodetic Vertical Datum (NGVD) of 1929.

Channel –

Control -

Discharge measurements –

Floods -

Point of zero flow -

Winter flow - No ice.

Regulation – Reservoir level drawn down during dry season to enhance instream flows downstream of reservoir.

Diversion - None

Accuracy –

Cooperation -

DESCRIPTION OF GAGING STATION ON CARMEL RIVER BELOW LOS PADRES RESERVOIR

Location - Below Los Padres Reservoir, approximately 100' downstream of the fish ladder.

Establishment - Staff gage station established Nov. 20, 1996 by G. W. James. Re-established as a recording station . October 26, 2001 by G.W. James.

Drainage area - 44.8 sq. mi. (drainage area at Los Padres Dam).

Gage – Campbell Scientific CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Enameled staff gage ranges from 3.33 to 6.66 ft. Cellular based telecommunications hardware added to CR510 in August 2007.

History - Staff gage installed to improve reservoir outflow estimates, particularly during periods when reservoir is not spilling. Recording equipment installed to obtain continuous record of reservoir outflow. California American Water (CAW) records daily staff gage readings at this site. CAW and MPWMD maintain water level recorders at Los Padres Reservoir.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - Channel along measuring reach is composed primarily of boulders.

Control - Boulder riffle approximately 40 ft. downstream of gage.

Discharge measurements - Obtained between the gage and 800 ft. downstream by wading. High flows above maximum wading stage (approx. 200 cfs) are estimated using the Los Padres Spillway rating table.

Floods -

Point of zero flow - 2.7 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - Flows regulated at Los Padres Dam immediately upstream of gage site.

Diversion - None

Accuracy - Discharge measurements are fair.

Cooperation -

DESCRIPTION OF GAGING STATION ON FINCH CREEK

Location – Approximately 600 ft. downstream of the Carmel Valley Rd/Martin Rd. intersection (main gate to Hastings Natural History Reservation), or immediately downstream of the Finch Creek, Big Creek, Robertson Creek confluence.

Establishment – Continuous recording station established September 24, 2009 by G. W. James.

Drainage area – 22.1 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage installation includes internet based telecommunications hardware (CS NL100). Gage housing consists of fiberglass recorder shelter with 1 ¼ inch galvanized pipe used as conduit and intake.

Enameled staff gages range from 0.45 to 6.66 ft.

History - No other gages have been operated on this stream.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Active channel banks are steep and rocky. Streambanks are gently sloped at concrete ford/dry crossing 100 ft. downstream of gage where channel is subject to overbank flow at approximately 500 cfs.

Control - Low flow control is riffle section 50 ft. downstream of gage. Medium to high stage control is the channel and concrete ford 100 ft. downstream of gage.

Discharge measurements - Low and medium stage measurements are made by wading within 100 ft. upstream or downstream of the gage. High flow measurements are taken off the downstream side of the existing footbridge at the gage site.

Floods – Flood of March 10, 1995 (stage and discharge unknown) reportedly flooded the residence located 200 ft. downstream of the gage as the creek flowed out of its banks during this event.

Point of zero flow -1.7 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion – Ground water production wells upstream of gage.

Accuracy - Stage records are fair. Stage discharge relationship should be fairly stable due to presence of concrete ford 100 ft. downstream of gage.

Cooperation – Gage installation was a cooperative effort between the MPWMD and Hastings Natural History Reservation (Hastings). MPWMD operates and maintains the gage, and Hastings maintains the telecommunications system.

DESCRIPTION OF GAGING STATION ON CACHAGUA CREEK

Location - 50 feet upstream (right bank) of Nason Rd. Bridge in Princes Camp, Cachagua.

Establishment - Staff gage station established Dec. 30, 1981 by G. Matthews. Re-established as a recording station Oct. 24, 1991 by G. W. James.

Drainage area - 46.3 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of a steel recorder shelter supported by 3-inch galvanized pipe. Two-inch pipe (conduit) runs approx. 40 ft. down right bank to active channel. Two enameled staff gages on the right bank along conduit range from 6.66 - 10.0 ft (upper), and 1.96-4.56 ft (lower, installed Dec. 22, 2000).

History - No other gages have been operated on this stream. This station, previously located on a bridge support at the Nason Rd. Bridge, was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. Two subsequent recorder upgrades/replacements include the installation of a CS BDR-320, and a CS CR510 on Oct. 13, 1994, and Nov. 9, 1999, respectively. The gage was inundated and destroyed during the March 10, 1995 flood when the creek flowed over the bridge and through the community of Princes Camp. The gage was re-activated/located approx. 50 ft. upstream of the former site Apr. 28, 1995, and a new arbitrary gage datum was established (current datum + 2.2 ft. = old datum).

Reference and benchmarks - Two inch galvanized coupler at base of recorder shelter riser is elevation 11.20 ft gage datum. Steel T-post at the upper orifice at elevation 6.30 ft. (top of post) was established Feb. 13, 1998. Top of lower staff gage post (4X6 redwood) is elevation 4.59 ft. surveyed Dec. 22, 2000.

Channel - One channel to stage 8 ft. (approximately) at which point creek flows over bank and becomes braided. Channel bed is composed of poorly sorted alluvial material.

Control - Low and medium stage control is gravel/cobble riffle approx. 20 ft. downstream of gage. Channel control at high flows subject to debris loading at bridge supports 50 ft. downstream of gage.

Discharge measurements - Low and medium stage measurements are made by wading within 300 ft. upstream or downstream of the gage. High flow measurements are taken from the Nason Bridge, or the bridge on Cachagua Rd. 3/4 miles upstream of the gaging station, or are determined by the slope area method. Maximum wading flow is approximately 200 cfs.

Floods - Flood of March 10, 1995 reached a stage of 9.8 ft., gage datum as indicated by high water marks (HWM) surveyed at the gage. Flood of February 3, 1998 reached a stage of 9.7 ft. as indicated by HWM at the gage.

Point of zero flow - 2.2 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - None

Diversion - Dry season flows affected by numerous small diversions for domestic and agricultural use.

Accuracy - Computed flows above 200 cfs are fair to poor due to un-favorable high flow measuring conditions at the bridges. Bridge piers, downstream of gage in channel, snag debris at high flows which can affect accuracy of record computation during periods of high flow.

Cooperation -

DESCRIPTION OF GAGING STATION ON PINE CREEK

Location - 565 feet upstream of the Pine Creek/Carmel River confluence, or approximately one mile downstream of Syndicate Camp, Cachagua, along the Carmel River.

Establishment - Staff gage station established February 1987 by G. Matthews. Re-established as a recording station Sept. 19, 1991 by G. W. James.

Drainage area - 7.8 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of a steel recorder shelter with two-inch galvanized pipe used as conduit and intake.

Enameled staff gage ranges from 0.00 to 3.33 ft. Replacement crest stage gage (pvc) installed Feb. 4, 1999, pin elev.=0.60 ft. Gage datum adjusted Sept. 19, 2000, new pin elev.=1.60 ft.

History - No other gages have been operated on this stream. Station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer was installed. Two subsequent recorder upgrades/replacements include the installation of a CS BDR-320, and a CS CR510 on July 6, 1994, and Nov. 5, 1999, respectively. Gage datum changed by 1.00 ft. on Sept. 19, 2000 as GHTs were negative at low flows (current datum – 1.00 ft. = old datum)

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Channel is straight for approximately 100 ft. upstream and 200 ft downstream from gage. Banks are steep and are covered with light to moderate vegetation. Streambed is composed primarily of boulders and large cobble.

Control - Low and medium stage control is boulder riffle 3 ft. downstream from gage. Channel control at high flows.

Discharge measurements - Low and medium stage measurements are made by wading within 300 ft. upstream or downstream of the gage. Gage is inaccessible at high flows and measurements are obtained by the slope-area method.

Floods - Flood of February 3, 1998 reached a stage of 4.29 ft., gage datum as indicated by the recorder. Flood of March 10, 1995 reached a stage of 4.10 ft. as indicated by crest stage gage and recorder. These floods at the current datum are 5.29 (1998) and 5.10 (1995) due to the Sept. 19, 2000 gage datum reset.

Point of zero flow – 0.80 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - None

Diversion - None

Accuracy - Stage discharge relationship is fairly stable and shifts during extreme flow events. Leafy build-up during Fall months results in backwater at gage, first significant storm flow eliminates build-up. Records of stage are fair and measuring conditions are fair. High flows are defined by the slope-area method and computed records above 100 cfs are considered poor.

Cooperation -

DESCRIPTION OF GAGING STATION ON SAN CLEMENTE CREEK

Location - Approximately one quarter mile upstream of San Clemente Reservoir.

Establishment - Staff gage station established November 23, 1981 by G. Matthews. Re-established as a recording station Sept. 19, 1991 by G. W. James.

Drainage area - 15.6 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter supported by 3-inch galvanized pipe. Two-inch pipe (conduit) runs approx. 30 ft. down left bank to active channel. A low flow enameled staff gage is located at the right bank. Two enameled staff gages staggered along left bank installed Nov. 28, 2000, ranges: 1.30-3.34 ft. (lower), 3.34-5.08 ft. (upper).

History - No other gages have been operated on this stream. This station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. Two subsequent recorder upgrades/replacements include the installation of a CS BDR-320, and a CS CR510 on Sept. 25, 1992, and Oct. 26, 1999, respectively. On Dec. 5, 1991 gage datum was permanently changed by lowering the staff gage 1.50 ft. This was done to prevent negative stage readings which occurred at low flows at the previous datum.

Reference and benchmarks - The top of the 3-inch galvanized 'T' at the base of the recorder shelter riser is elevation 8.06 ft. gage datum (surveyed Nov. 28, 2000). Following the February 1998 floods, two re-bar reference points were established to determine gage height. RP1 at upper orifice is elev. 3.95 ft, and RP2 at lower orifice is elev. 1.78 ft. gage datum. RP1 was removed upon Nov. 28, 2000 staff gage installation.

Channel - One channel at all stages. Right bank is steep and rocky, left bank is gently sloping with moderate vegetal cover. Channel bed is composed of boulder and cobble.

Control - Low and medium stage control is a cobble riffle approx. 80 ft. downstream from gage. Channel control at high flows.

Discharge measurements - Low and medium stage measurements are normally made by wading 300 to 500 ft. upstream of the gage. High flow measurements obtained by the slope area method as there is no high flow measuring facility. Maximum wading flow is approx. 250 cfs at upstream margin of San Clemente Reservoir (alluvial section), or approx. 130 cfs at site 300' upstream of gage.

Floods - Flood of February 3, 1998 reached a stage of 9.38 ft. gage datum as indicated by high water marks (HWM) at the gage. Floods on January 9, 1995 and March 10, 1995 reached stages of 7.92 ft., and 7.82 ft. respectively, based on HWM.

Point of zero flow - Approx. 1.00 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - Streamflow affected by diversion to storage and flow bypass requirements at several seasonal dams/lakes upstream. Water is stored/released at these lakes during the spring/fall, respectively.

Diversion - Diversion to storage at seasonal dams and numerous small diversions for domestic and riparian uses.

Accuracy - Stage records are fair to good. High flows are defined by the slope-area method and computed records above 250 cfs are considered poor.

Cooperation -

DESCRIPTION OF GAGING STATION ON SAN CLEMENTE RESERVOIR

Location – Gage located at left (facing downstream) side of San Clemente Dam on upstream side of dam or river mile 18.6.

Establishment – MPWMD installed continuous recording stage gage November 2, 2000. California American Water continues to maintain a water level (graphic) recorder at San Clemente Dam, date of establishment unknown.

Drainage area – 125 sq. mi.

Gage – Campbell Scientific (CS) CR510 data recorder linked to Druck 15 psi pressure transducer (PT) accessed via land line/modem system. Data recorder also logs fish counts at the fish ladder via a switch closure mechanism. Staff gage readings are obtained at left side dam at fish ladder entrance. Spillway crest elevation is approx. 525 ft. (NGVD 1929).

History – San Clemente Dam constructed in 1921. Prior to August 1996 flashboards (spillway gates) were raised to increase dry season storage (elev. 537 ft. with flashboards in). Spillway gates permanently lowered August 1996. Surface water diversions ceased in June 2003. Six holes or ports drilled through the left side of dam used to drawdown the dry season reservoir level to elev. 515 feet became active June 2003. Ports drilled to improve seismic safety.

Reference and benchmarks – Three brass tablets are imbedded in the catwalk at east, west and mid spillway locations. Following information stamped on tablets: west: “station 1 radius 131 feet”, mid spill: “station 15 axis line”, east: “station 29 radius 131 feet”. No elevations stamped on tablets.

Channel –

Control -

Discharge measurements –

Floods – Flood of March 10, 1995 flowed over the top of the spillway superstructure (catwalk) elevation 537 feet largely due to heavy debris loading upstream of the dam.

Point of zero flow -

Winter flow - No ice.

Regulation – Reservoir level drawn down to elevation 515 feet during dry season to improve seismic safety.

Diversion – No surface diversions from reservoir since May 2003.

Accuracy – Stage records are fair.

Cooperation -

DESCRIPTION OF GAGING STATION ON CARMEL RIVER AT SLEEPY HOLLOW WEIR

Location – Approximately one mile downstream of San Clemente Dam.

Establishment - Weir installed June 1988 by California American Water (CAW). Established as a continuous recording station Oct. 1, 1989 by MPWMD.

Drainage area - 126 sq. mi.

Gage – Campbell Scientific (CS) CR10X data recorder linked to Druck 5 psi pressure transducer (PT). Gage housing consists of steel recorder shelter at top of right bank (RB) at Cal-Am diversion pipeline with inch and a quarter galvanized pipe used as conduit and intake. PT conduit attached to diversion pipeline runs toward channel and down RB stanchion to river. Station includes landline/modem system for remote access to data. Stevens Type-F water level recorder/float system housed in a 24-inch CMP shelter (stilling well) maintained as back-up system. Enameled staff gage at stilling well ranges from 0.00 - 6.66 ft.

History – Initial stage recording equipment included a Stevens Type-F water level recorder/float system housed in a 24-inch CMP shelter. The existing data recorder and modem were installed Jan. 10, 2002. Water level recorder operated at San Clemente Dam (SCD) by CAW measures and records level of San Clemente Reservoir. MPWMD installed CR510 data recorder/PT system at SCD Nov. 2, 2000 that includes landline/modem system for remote access to reservoir stage data. Water level recorder operated at Old Carmel Dam 3/4 miles upstream of the weir operated by CAW and MPWMD was discontinued October 1991.

Reference and benchmarks - Low point in V-notch of weir is elevation 0.00 gage datum.

Channel - One channel at all stages. Right bank is steep and rocky, left bank is gently sloping with moderate to heavy vegetal cover. Channel bed is composed of boulder and cobble.

Control - Broad Crested V-notch weir located approx. 40 ft. downstream gage. V-notch is designed to pass 5 cfs of flow when full, rectangular notch above V-notch is designed to pass 16 cfs when full.

Discharge measurements - Low and medium discharge measurements are normally made by wading 200 ft. upstream of the gage. Maximum wading stage is approx. 3.5 ft. gage datum. High-end wading measurements usually taken 100 ft. downstream of the Sleepy Hollow Steelhead Rearing Facility tailworks.

Purpose of gaging station is to monitor low flow releases from San Clemente Dam, therefore flow measurements above wading stage are not obtained.

Floods - Gage not intended to measure flood flows.

Point of zero flow - 0.00 ft., gage datum (i.e. bottom of V-notch)

Winter flow - No ice.

Regulation - Flows regulated at Los Padres Dam seven miles upstream, and at San Clemente Dam one mile upstream of gage.

Diversion - Surface diversion from San Clemente Dam one mile upstream ceased May 2003.

Accuracy - Stage records are good. Computed flows are fair to good.

Cooperation - Weir installation was a cooperative effort between CAW, MPWMD and California Department Fish and Game, in order to accurately comply with release schedules established by these three agencies. MPWMD operates and maintains the gage.

DESCRIPTION OF GAGING STATION ON TULARCITOS CREEK

Location - Beneath bridge at San Clemente Drive, Carmel Valley, or approximately one half mile upstream from the Carmel River/Tularcitos Creek confluence.

Establishment - Staff gage station established Jan. 8, 1982 by G. Matthews. Re-established as a recording station Oct. 8, 1991 by G. W. James.

Drainage area - 56.3 sq. mi.

Gage - Stevens Type-F water level recorder/float system housed inside 1/8-inch steel recorder shelter attached to 12-inch CMP stilling well. Access door at base of well for silt removal. Two enameled staff gages at well attached to right bridge abutment range from 2.20 - 6.60 ft.

History - No other gages have been operated on this stream. This station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. This system was upgraded and replaced with the existing float gage (stilling well) Aug. 18, 1992, and the former installation, also located at the right bank was removed.

Prior to the flood of March 10, 1995, a remnant bridge pier (5 ft. high by 15 ft. long by 18 in. wide) split high flows at the gage. Following this flood, the pier fell over at the gage site and created single channel flow at the gage.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Right bank is vertical concrete bridge abutment, left bank moderately slopes to left concrete bridge abutment. Prior to March 10, 1995, channel at gage was split by mid-channel bridge pier at high flows. Channel bed is composed of mud and sand and remnant bridge pier that was deposited horizontally at gage.

Control - Low and medium stage control is a riffle approx. 30 ft. downstream from gage, affected by seasonal aquatic vegetation growth. High flow control is channel.

Discharge measurements - Low and medium stage measurements are normally made by wading 300 ft. upstream of the gage, or at the gage. High flow measurements are taken from the downstream side of the bridge at the gage, or by the slope area method. Maximum wading stage is 5.5 ft. gage datum, or 130 cfs.

Floods - Flood of February 7, 1998 reached a stage 10.77 ft. based on survey of high water marks (HWM) at the gage. Flood of March 10, 1995 reached a stage of 9.94 based on HWM and recorded stage.

Point of zero flow - Approx. 3.0 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion - Ground water production wells upstream of gage.

Accuracy - Stage records are good. Computed flows are fair to good.

Cooperation -

DESCRIPTION OF GAGING STATION ON HITCHCOCK CREEK

Location - One quarter mile southwest along Esquiline Road, Carmel Valley at second foot bridge crossing creek, or approximately 250 ft. upstream from the Carmel River/Hitchcock Creek confluence.

Establishment - Staff gage station established Apr. 2, 1986 by T. Lindberg. Re-established as a recording station Oct. 17, 1991 by G. W. James.

Drainage area - 4.6 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake.

Enameled staff gage ranges from 0.00 to 6.66 ft.

History - No other gages have been operated on this stream. Station was non-recording until Water Year (WY)1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer was installed. Due to technical difficulty with this recording equipment, continuous records of flow were not computed until WY 1994. The gage was relocated to the foot bridge immediately upstream from the former site, and was upgraded with a CS BDR-320 recorder Dec. 8, 1995. The BDR-320 was replaced with the existing CR510 recorder Nov. 15, 1999.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks are steep and rocky. Streambed is composed primarily of cobble. Creek flows over bank at approx. stage 6 ft.

Control - Low and medium stage control is the channel at the gage. High flow control is the bridge immediately downstream from the gage.

Discharge measurements - Low and medium stage measurements are made by wading within 100 ft. upstream or downstream of the gage. High flow measurements are taken off the upstream side of the bridge at gage.

Floods - Flood of February 7, 1998 reached a stage of 7.31 ft. current datum, and the creek flowed out of its banks during this event. At the former gage location approx. 100 ft. downstream of the current site, the Flood of March 10, 1995 reached a stage of 7.05 ft based on former gage datum, and also flowed over bank.

Point of zero flow -2.30 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion - Ground water production wells upstream of gage.

Accuracy - Stage records are fair. Stage discharge relationship should be fairly stable due to presence of bridge immediately downstream from gage.

Cooperation -

DESCRIPTION OF GAGING STATION ON GARZAS CREEK NEAR LOWER GARZAS CANYON

Location – Approximately 0.7 miles (along creek) upstream of West Garzas Road, Carmel Valley. Gage located at lower-most Monterey Peninsula Regional Park District permanent footbridge where Garzas Canyon Trail first crosses the creek.

Establishment - Continuous recording station established October 24, 2001 by G. W. James.

Drainage area – 12.9 sq. mi.

Gage – Campbell Scientific CR510 data recorder linked to a 5 psi Druck pressure transducer. Gage housing consists of 1/8 inch steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Three staff gages located on various sections of the bridge range from 2.30 to 6.74 ft.

History – Continuous recording gage operated 0.7 miles downstream at West Garzas Road by MCWRA 1968 – 1978, and by MPWMD 1981 – present (1981 through 1991 – non-recording, and 1991 through present - continuous recording). Purpose of gage is to monitor dry season low flows, particularly during periods when the lower station at West Garzas Road is dry.

Reference and benchmarks –

Channel - One channel at low to moderate stages. Channel splits around left bank during high flows. Channel is straight for approximately 30 ft. upstream and 30 ft. downstream from gage. Downstream from gage, banks are moderately sloped and vegetated. Streambed is composed primarily of boulder and cobble.

Control - Low and medium stage control is a boulder riffle 1 ft. downstream from gage. High flow control is the natural channel downstream from the gage.

Discharge measurements - Low and medium stage measurements are made by wading within 400 ft. upstream or downstream of the gage. To date no high flow measurements above wading stage have been obtained.

Floods – There are no known documented flood stage records in the Garzas Canyon.

Point of zero flow - Approximately 1.90 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - Flows affected by operation of Moore's Lake Dam.

Diversion - Flows affected by diversions surrounding Moore's Lake for riparian and domestic use.

Accuracy - Stage records are fair. Computed records are fair below 20 cfs, and poor above 20 cfs due to lack of discharge measurements and poor rating definition at medium/high end flows. Existing station Rating 3 used through WY 2008 ends at 130 cfs resulting in an incomplete record in some years.

Cooperation -

DESCRIPTION OF GAGING STATION ON GARZAS CREEK AT GARZAS ROAD

Location - At West Garzas Road, Carmel Valley on left bank, downstream side of bridge. Located approximately 300 ft. upstream from the Carmel River/Garzas Creek confluence.

Establishment - Continuous recording station established October 1968 by the Monterey County Water Resources Agency (MCWRA) was maintained through September 1978. Established as a staff gage station Nov. 30, 1981 by G. Matthews. Re-established as a recording station Sept. 20, 1991 by G. W. James.

Drainage area - 13.2 sq. mi.

Gage -Stevens Type-F water level recorder/float system housed inside 1/8-inch steel recorder shelter attached to 12-inch CMP stilling well. Access door at base of well for silt removal.

Enameled staff gage ranges from 0.00 to 10.0 ft.

History - Gage formerly operated as a continuous recording station by MCWRA 1968 - 1978. Operated by MPWMD as a non-recording station 1981 - 1991. Re-established as a continuous recording station by MPWMD Sept. 1991, which used an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system. This system was upgraded and replaced by the existing stilling well Jan. 17, 1992. The Garzas Creek near Lower Garzas Canyon gaging station located 0.7 miles upstream of West Garzas Road, installed Oct. 24, 2001, supplements the Garzas Creek streamflow record during periods of no flow at Garzas Road.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Channel is straight for approximately 200 ft. upstream and 200 ft downstream from gage. Channel at gage is split by center bridge pier, with vertical, concrete bridge abutments as banks. Downstream from gage, banks are moderately sloped and vegetated. Streambed is composed of poorly sorted alluvium.

Control - Low and medium stage control is a cobble riffle at upstream end mid-pier – right side, and riffle immediately downstream of stilling well. High flow control is the natural channel downstream from the gage.

Discharge measurements - Low and medium stage measurements are made by wading within 200 ft. upstream or downstream of the gage. High flow measurements are taken off the downstream side of the bridge at gage.

Floods - Flood of March 10, 1995 reached a stage of 9.28 ft based on recorded stage in the stilling well. Flood of January 10, 1995 reached a stage of 7.98 ft. based on recorded stage. Flood of February 3, 1998 reached a stage of 7.95 ft. also based on recorded stage.

Point of zero flow - Approximately 0.50 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - Flows affected by operation of Moore's Lake Dam.

Diversion - Flows affected by diversions surrounding Moore's Lake for riparian and domestic use, and by withdrawal of ground water from the Carmel Valley Alluvial Aquifer.

Accuracy - Stage records are good. Computed records are fair due to downstream channel conditions that shift in response to vegetation growth, scour and fill.

Cooperation -

DESCRIPTION OF GAGING STATION ON CARMEL RIVER AT DON JUAN BRIDGE

Location - At the Don Juan Bridge off Carmel Valley Road (authorized vehicle entrance to Garland Park), or river mile 10.8. Gage attached to north face of central bridge pier.

Establishment - Staff gage station established in 1982 by MPWMD staff. Re-established as a recording station Sept. 15, 1992 by G. W. James.

Drainage area - 216 sq. mi.

Gage - Stevens Type-F water level recorder/float system housed inside a steel recorder shelter attached to a 12-inch CMP stilling well (26 ft. long). Lexan windows within recorder shelter allow park visitors to observe instrumentation. Enamelled staff gages at three locations: (1) downstream end central bridge pier, range: 1.60 to 3.33 ft.; (2) south face of central bridge pier, range: 3.33 to 6.66 ft; and (3) left bank (LB) concrete bridge abutment, range: 6.66 to 20.0 ft. LB staff gage section read during high flows when turbulence precludes readings at the central pier staff gages. A wire-weight gage was installed Nov. 12, 1997 above right channel at gage to provide additional stage verification (check-bar elevation = 25.43 ft. gage datum). Crest stage gage (CSG) installed Nov. 21, 2000, pin elevation = 9.08 ft. at left bank staff gage.

History - Two USGS gaging stations located 3.6 miles upstream and 7.2 miles downstream are Carmel River at Robles del Rio and Carmel River near Carmel, respectively. Campbell Scientific CR510 data recorder linked to a Druck 5 psi pressure transducer installed at site Feb. 11, 2003 to improve high flow stage records. Recorder/float system retained as back-up/interpretive display. Cellular based telecommunications hardware added to CR510 July 26, 2004.

Reference and benchmarks - Brass tablet located at the left bank staff gages is elevation 8.55 ft. gage datum.

Channel - During extreme flood events channel upstream of gage will over-top the left bank and spread across the Garland Park floodplain. Channel is confined by bridge abutments at gage. Downstream of gage, right bank is steep, vegetated rip-rap. Left bank is gently sloped covered by moderately dense riparian forest. Channel bed material is cobble upstream of the gage, and sand and cobble downstream of the gage.

Control - Channel downstream of gage, affected by periodic rock dam building by park visitors.

Discharge measurements - Low and medium stage measurements are normally made by wading within 1/4 mile of the gage. Maximum wading stage is approximately 5.5 ft. gage datum (approx. 400 cfs). High flow measurements are taken off the upstream side of Randazzo's Bridge 0.6 miles downstream of gage.

Floods - Flood of March 10, 1995 reached a stage of 16.9 ft., gage datum as indicated by an average of several high water marks (HWM) surveyed at the gage. Flood of February 3, 1998 reached a stage of 15.3 ft based on HWM surveyed. Flood of January 10, 1995 reached a stage of 14.8 ft based on HWM surveyed.

Point of zero flow - 1.4 ft. gage datum, varies due to scour and fill.

Winter flow - No ice.

Regulation - Flows regulated at San Clemente Dam approximately eight miles upstream.

Diversion - Surface diversion through the Carmel Valley Filter Plant diversion pipeline from San Clemente Reservoir ceased May 2003. Flows also affected by production wells upstream of gage.

Accuracy - Stage records are good below 1,000 cfs and fair above 1,000 cfs.

Cooperation -

DESCRIPTION OF GAGING STATION ON ROBINSON CANYON CREEK

Location - On left bridge abutment of downstream-most bridge on Robinson Canyon Road, Carmel Valley.

Establishment - Staff gage station established Jan. 6, 1982 by G.M. Kondolf, cooperating with MPWMD. Re-established as a recording station Oct. 18, 1991 by G. W. James.

Drainage area - 5.4 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Enameled staff gage ranges from 0.00 to 6.66 ft. Crest stage gage (CSG) five ft. downstream from staff (pin elevation = 3.43 ft. gage datum).

History - No other gages have been operated on this stream. Station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. High flows in January & February 1993 severely scoured the control at the gage and prompted relocation of the gage to the current site upstream at the bridge on Mar. 11, 1993. A new gage datum was established as a result of this relocation. Two subsequent recorder upgrades/replacements include the installation of a CS BDR-320, and a CS CR510 on Oct. 26, 1993, and Nov. 16, 1999, respectively.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks at gage are vertical, concrete bridge abutments. Streambed is composed primarily of boulder, cobble and sand.

Control - Low flow control is a riffle 3 ft. downstream of gage. High and medium flow control is the natural channel downstream of the gage.

Discharge measurements - Low and medium stage measurements are normally made by wading within 100 ft. downstream of the gage. Station lacks a high flow measuring facility. Bridge at gage is not ideal due to horizontal skew, and traffic concerns. High flows defined by the slope area method. Maximum wading stage is 4.0 ft. gage datum (approx. 60 cfs).

Floods - Flood of February 3, 1998 reached a stage of 8.9 ft. (adjusted to current datum) based on the crest stage gage (CSG) at the former gage site 37 ft. downstream (this event overtopped the current CSG). Flood of March 10, 1995 reached a stage of 6.9 ft. gage datum based on CSG and recorder.

Point of zero flow - 1.80 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion - Ground water production wells upstream of gage.

Accuracy - Stage records are fair to good at current gage location. Stage discharge relationship is fairly stable, but will shift during high flow events due to scour.

Cooperation -

DESCRIPTION OF GAGING STATION ON POTRERO CREEK

Location - At Valley Greens Road, Carmel Valley upstream of culvert on right bank.

Establishment - Staff gage station established Jan. 4, 1982 by G. Matthews. Re-established as a recording station Nov. 30, 1993 by G. W. James.

Drainage area - 5.2 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake.

Enameled staff gage ranges from 0.00 to 4.10 ft.

History - Station was non-recording until Water Year 1994 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. The gage was relocated to the opposite (right) bank and upgraded with a CS BDR-320 recorder Nov. 28, 1995. The previous gage datum was maintained despite the gage relocation. The BDR-320 was replaced with the existing recorder Nov. 12, 1999.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks are steep composed of mud and clay. Streambed is sandy.

Control - Control at low and medium stages is a rip-rap riffle 15 ft. downstream of gage. High flow control is the twin culverts 30 ft. downstream of gage.

Discharge measurements - Low and medium stage measurements are made by wading within 100 ft. upstream of the gage. High flow measurements are taken off the upstream side of the golf cart bridge 200 ft. upstream of gage. Maximum wading stage is 2.4 ft. gage datum (approximately 90 cfs).

Floods - Flood of February 3, 1998 reached a stage of 9.1 ft. gage datum indicated by the recorder, and flowed over Valley Greens Road during the peak. Flood of March 10, 1995 reached a stage of 4.9 ft. based on recorder stage verified by high water marks.

Point of zero flow - 0.60 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion - Ground water production wells upstream of gage.

Accuracy - Stage records are fair. Stability of stage discharge relationship depends on condition of rip-rap riffle 15 ft. downstream of gage as it stabilizes sands at the gage, or debris loading at the twin culverts 30 ft. downstream.

Cooperation -

DESCRIPTION OF GAGING STATION ON CARMEL RIVER AT HIGHWAY 1 BRIDGE

Location - 50 feet upstream of Highway 1 bridge at top of right bank levee.

Establishment - Staff gage station established in 1982 by MPWMD. Re-established as a recording station Dec. 10, 1992 by G. W. James.

Drainage area - 252 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Conduit runs approximately 70 ft. down right bank to river. Nov. 29, 1995, MCWRA co-located its ALERT transmitter and pressure transducer at this installation to provide remote access to river levels. Four enameled staff gages staggered up the right bank range from 2.20 to 17.1 ft. Three CSGs installed Oct. 11, 2000, pin elev.= 8.74 ft. (lower), 11.92 ft. (mid), and 14.90 ft. (upper).

History - Station was non-recording until Water Year 1993 when a CS BDR-320 recorder was installed Dec. 10, 1992. Initially, gage was located on a mid-channel bridge pier at the former Highway 1 Bridge. This bridge collapsed in the aftermath of the March 10, 1995 flood and the gage was destroyed. A temporary gage was installed on the right bank at the damaged bridge site Apr. 7, 1995 at the former gage datum, and was relocated 400 ft. upstream May 8, 1995 at a new, arbitrary datum. This temporary station was removed Nov. 22, 1995. The current installation became operational Nov. 29, 1995 and a new datum was established (initial datum + 0.90 ft. = current datum). USGS maintains Carmel River near Carmel gage 2.5 miles upstream. The BDR-320 was replaced with the existing recorder Nov. 10, 1999. Cellular based telecommunications hardware added to CR510 Sept. 29 2004

Reference and benchmarks - Brass disc on northeast corner of new bridge is elevation 35.89 ft. North American Vertical Datum (NAVD) 1988. Gage datum has been established exactly 10.00 ft. less than this reference elevation. Top of "mid-brace" RP at lower (extended) orifice is 3.79 ft. verified by August 13, 2010 levels.

Channel - Channel is straight for at least 500 ft. upstream and 500 ft downstream from gage. Banks are moderately sloped and covered with thick vegetation. Streambed is coarse sand and gravel. In 1997, MCWRA excavated several notches in the south bank levee near the upstream margin of Odello East artichoke field to direct flood flows south, in order to protect residents along the north bank.

Control - Low and medium stage control is the sand channel. High flow control is channel at bridge 50 ft. downstream.

Discharge measurements - Low and medium stage measurements are made by wading within 500 ft. upstream or downstream of the gage. High flow measurements are taken off the upstream side of the bridge. Maximum wading stage is approximately 4.0 ft. gage datum (approx. 400 cfs – varies from year to year).

Floods - Flood of February 3, 1998 reached a stage of 14.8 ft. During this event the river flowed through levee cuts upstream and downstream of the gage and flowed over Highway 1 just south of the river. Flood of January 10, 1995 reached a stage of 15.8 ft. based on gage datum maintained at the former (initial) Highway 1 Bridge site. Flood of March 10, 1995 was not recorded at this site and the peak stage is not known.

Point of zero flow – 0.0 ft., gage datum. Varies due to scour and fill of sands downstream of gage.

Winter flow - No ice.

Regulation - Flows regulated at Los Padres Dam 23.7 river miles (RM) upstream, and at San Clemente Dam 17.5 RM upstream of gage.

Diversion - Surface diversion from San Clemente Dam 17.5 RM upstream ceased May 2003, numerous ground water production wells upstream of gage.

Accuracy - Stage records are good. Stability of stage discharge relationship depends on sand accumulation/depletion along gage reach. Shifting sand channel warrants frequent streamflow measurements during and between storms. Gage is subject to backwater at Carmel River Lagoon elevations greater than 7 feet (NGVD 29) resulting in many days of estimated record in dry years. Computed records are considered fair.

Cooperation – MCWRA maintains ALERT hardware at site.

DESCRIPTION OF GAGING STATION ON CARMEL RIVER LAGOON

Location - South arm of Carmel River Lagoon, Carmel, at the Carmel Area Wastewater District (CAWD) effluent pipeline.

Establishment - Continuous recording station established November 1987 by MPWMD.

Drainage area - 255 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Conduit runs approximately 50 ft. down west bank of south arm to lagoon. Nov. 28, 1995, the Monterey County Water Resources Agency (MCWRA) co-located its ALERT transmitter and pressure transducer at this installation to provide remote access to lagoon levels. MPWMD added telecommunications hardware to CR510 in Sept. 2007.

Enameled staff gage at orifice ranges from 2.00 to 10.0 ft. Additional staff gage at west bank ranges from 10.0 to 13.3 feet.

History - No other continuous recording water level gages have been operated at the Carmel River Lagoon. Reliable continuous water level data begins April 1991. Initially, recorder was located on the CAWD effluent pipeline and utilized an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system. Nov. 5, 1993 the station was upgraded by relocating the recorder site to the west bank of the gage site, and a CS BDR-320 recorder was installed. The BDR-320 was replaced with the existing recorder Nov. 4, 1999. In 1997, the South Arm of the Lagoon was dredged, and connected to the western-most portion of the Odello West artichoke field to enhance lagoon volume/habitat. In a 2004 California State Parks Department restoration project, the South Arm of the Lagoon was excavated and extended across the former Odello West artichoke field toward Highway 1. These two excavation projects increased lagoon volume by approx. 100 acre-feet at the 10-foot level (NGVD).

Reference and benchmarks - Brass disc at top of knoll above gage is elevation 59.34 ft. National Geodetic Vertical Datum (NGVD) of 1929. Gage datum is NGVD.

Channel -

Control -.

Discharge measurements -

Floods - High surf and tide washed over the beach berm and into the lagoon on Jan. 11, 2001, and Jan. 5, 2008, resulting in peak lagoon water levels of 12.04 ft. and 12.66 ft, respectively. These coastal flood events caused flooding of homes located along the northern margin of the lagoon, and are the two highest peak levels on record (since 1991).

Point of zero flow -

Winter flow - No ice.

Regulation -

Diversion -

Accuracy - Stage records are good.

Cooperation - MCWRA maintains ALERT hardware.

DESCRIPTION OF GAGING STATION ON SAN JOSE CREEK

Location - Approximately 0.50 miles upstream from Highway 1 at Monastery Beach, Carmel.

Establishment - Staff gage station established 1985 by MPWMD. Re-established as a recording station on Nov. 16, 1998 by G. W. James.

Drainage area - 14.2 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake.

Three enameled staff gages staggered up the left bank range from 2.34 to 10.08 ft (gage datum).

History - Two separate staff gage stations located approximately 0.25 miles upstream of Highway 1 have been installed and have since washed out. The initial installation washed out in February 1992. The replacement staff gage installed Nov. 16, 1993 at a new, arbitrary gage datum washed out in February 1998. Continuous recording gaging station utilizing a CS BDR-320 recorder was installed by District staff 0.5 miles upstream of Highway 1 near houses, in November 1998 (new arbitrary datum). The BDR-320 was replaced with the existing recorder on Oct. 29, 1999.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Channel is straight for approximately 100 ft. upstream and downstream of gage. Right bank is the toe of the canyon wall and is steep and rocky. Left bank is gently sloped composed of unconsolidated alluvium. Channel bed is composed of boulder and cobble with sand.

Control - Low and medium stage control is riffle 10 ft. downstream of gage. High flow control is natural channel.

Discharge measurements - Low and medium stage measurements are obtained between gage and the upper margin of the "Polo Field" one quarter mile downstream of gage. A high end wading measurement of 235 cfs was obtained April 5, 2006 in a northerly flowing channel between the sandy beach berm and Highway 1. High flow measurements could potentially be obtained off the Highway 1 bridge at Monastery Beach at low tide (i.e., none have been obtained).

Floods - Flood on February 3, 1998 reach a stage of 10.72 ft. current gage datum based on a surveyed mud line on the house adjacent to the gage shelter.

Point of zero flow - 2.10 ft. gage datum. Varies due to scour and fill.

Winter flow - No ice.

Regulation -

Diversion - Flow affected by diversion for domestic use upstream.

Accuracy - Discharge measurements are fair to good.

Cooperation -

DESCRIPTION OF GAGING STATION ON ARROYO DEL REY AT DEL REY OAKS

Location – Located in Del Rey Park in the city of Del Rey Oaks, CA, or approx. 500 ft. upstream of the parking lot at the end of Angelus Way.

Establishment - Continuous recording station established October 1966 by the United States Geological Survey (USGS) was maintained through September 1978, at which time it was discontinued. Re-established as a recording station on October 7, 2002 by G. W. James (MPWMD).

Drainage area – 13.8 sq. mi.

Gage - Campbell Scientific (CS) CR510 data recorder linked to Druck 5 psi pressure transducer. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Conduit runs approximately 10 ft. down right bank, attached to existing, partially submerged V-notch weir. Staff gage at left bank ranges from 2.8 to 6.7 ft.

History – Continuous recording station operated by the USGS during Water Years 1967 through 1978. Station re-occupied by MPWMD in October 2002.

Reference and benchmarks - Brass disc at partially submerged V-notch weir – elevation unknown.

Channel – One channel at low to medium stages. Channel at flows over right bank into park at high flows. Left bank is steep and heavily vegetated. Right bank is steep, composed mainly of mud.

Control - Low and medium stage control is the channel downstream of gage, and is prone to periodic, heavy vegetation growth that is cleared by crews several times per year. Low footbridge approx. 50 ft. downstream of gage likely causes backwater at high flows. Creek may also flow overbank (right bank) at high flows.

Discharge measurements – Low and medium stage measurements are made by wading within 500 ft. upstream or downstream of gage. To date no high flow measurements above wading have been obtained by MPWMD.

Floods – The Flood of February 3, 1998 flowed overbank flooding a portion of Del Rey Park.

Point of zero flow – 2.9 ft. gage datum, varies due to scour and fill.

Winter flow - No ice.

Regulation – none.

Diversion – Numerous ground water production wells upstream of gage.

Accuracy - Stage records are good. Computed records are fair below 20 cfs, and poor above 20 cfs due to lack of discharge measurements and poor rating definition at medium/high end flows

Cooperation -

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX C

DISCHARGE MEASUREMENT SUMMARIES

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-1

DISCHARGE MEASUREMENT SUMMARY

SITE: Danish Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/01/2008	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/03/2008	0930	GWJ	Estimate	na	--	--	--	--	2.00	--	--	--	--
12/01/2008	1145	GWJ	Estimate	na	--	--	--	--	1.00	--	--	--	--
01/02/2009	1030	GWJ	Estimate	na	--	--	--	--	2.00	--	--	--	--
02/03/2009	0945	GWJ	Estimate	na	--	--	--	--	2.00	--	--	--	--
05/01/2009	1140	GWJ	Estimate	na	--	--	--	--	5.00	--	--	--	--
06/01/2009	1155	GWJ	Estimate	na	--	--	--	--	3.00	--	--	--	--
07/01/2009	1120	GWJ	Estimate	na	--	--	--	--	2.50	--	--	--	--
08/03/2009	1230	GWJ	AA	Fair	21.0	17.0	208	--	1.80	6.5	0.5	3.57	0.51
09/01/2009	1415	GWJ	Pygmy	Fair	27.0	19.5	221	--	0.84	3.7	0.4	1.37	0.62
10/01/2009	1015	GWJ	Pygmy	Fair	--	--	219	--	0.94	3.7	0.4	1.38	0.69
11/02/2009	1155	GWJ	AA	Fair	--	--	--	--	4.23	13.5	0.5	6.91	0.61
12/02/2009	1010	GWJ	AA	Fair	6.5	6.0	178	--	3.05	14.5	0.6	8.87	0.34
06/01/2010	1235	GWJ	Estimate	na	--	--	--	--	8.00	--	--	--	--
07/01/2010	1130	GWJ	Estimate	na	--	--	--	--	4.50	--	--	--	--
08/02/2010	1055	GWJ	Estimate	na	--	--	--	--	3.00	--	--	--	--
09/01/2010	1115	GWJ	AA	Poor	22.0	14.0	204	--	2.18	5.1	0.5	2.48	0.88
10/01/2010	0930	GWJ	AA	Poor	12.0	13.0	211	--	1.31	5.0	0.4	1.97	0.67
11/01/2010	1210	GWJ	AA	Fair	16.0	10.0	198	--	1.94	5.0	0.5	2.42	0.80
12/01/2010	1015	GWJ	AA	Fair	4.0	5.5	180	--	3.24	9.7	0.6	6.01	0.54
06/01/2011	1240	GWJ	AA	Fair	14.0	10.0	170	--	8.96	13.2	0.6	8.46	1.06
07/01/2011	1000	GWJ	AA	Fair	22.0	13.0	173	--	7.56	12.6	0.6	7.84	0.96
08/01/2011	0750	GWJ	AA	Fair	7.0	12.5	186	--	4.88	11.0	1.0	10.74	0.46
09/01/2011	1145	GWJ	AA	Fair	20.0	13.0	190	--	2.74	7.7	0.9	6.59	0.42
10/03/2011	1305	GWJ	AA	Fair	18.0	12.0	189	--	2.09	7.7	0.9	6.64	0.31

Table C-1 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Danish Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
11/01/2011	1155	GWJ	AA	Fair	16.0	10.5	181	--	2.24	7.8	0.8	6.51	0.34
12/01/2011	1200	GWJ	AA	Fair	14.0	7.0	168	--	2.13	9.2	0.5	4.37	0.49
01/02/2012	1210	GWJ	AA	Fair	13.5	7.0	180	--	2.00	8.5	0.5	3.90	0.51
02/01/2012	1420	GWJ	AA	Fair	13.5	7.0	165	--	4.15	8.3	0.6	4.66	0.89
03/01/2012	1200	GWJ	AA	Fair	10.0	6.5	150	--	4.54	8.3	0.6	5.05	0.90
04/02/2012	1155	GWJ	AA	Fair	15.0	7.5	122	--	14.47	11.9	1.1	12.77	1.13
05/01/2012	1230	GWJ	AA	Good	17.5	12.0	147	--	7.42	11.8	0.9	10.45	0.71
06/01/2012	1030	GWJ	AA	Fair	22.0	13.0	170	--	3.37	9.3	0.5	4.98	0.68
07/02/2012	1140	GWJ	AA	Fair	21.0	14.5	180	--	1.85	8.6	0.4	3.72	0.50
08/01/2012	1235	GWJ	Pygmy	Fair	30.0	16.0	210	--	0.55	2.1	0.4	0.94	0.59
09/04/2012	1130	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2012	0935	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/01/2012	1305	GWJ	Pygmy	Fair	15.0	12.0	222	--	0.63	3.4	0.4	1.43	0.44
04/01/2013	1310	GWJ	AA	Fair	17.0	11.5	153	--	5.23	11.4	0.7	8.32	0.63
05/01/2013	1150	GWJ	AA	Fair	22.5	11.5	171	--	2.49	9.1	0.7	6.02	0.41
06/01/2013	1440	GWJ	Pygmy	Fair	29.0	16.0	187	--	1.30	9.1	0.6	5.28	0.25
07/01/2013	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/01/2013	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/04/2013	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-2

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River above Los Padres Reservoir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/01/2008	1045	GWJ	AA	Fair	19.0	14.0	307	1016.60	2.66	10.6	0.8	8.29	0.32
11/03/2008	0945	GWJ	AA	Good	15.5	10.0	343	1013.68	10.62	29.0	0.8	23.40	0.45
12/01/2008	1200	GWJ	AA	Good	15.5	8.5	328	1017.90	7.32	29.0	0.7	21.66	0.34
01/02/2009	1040	GWJ	AA	Good	8.5	5.0	271	1033.85	16.80	27.3	0.9	24.73	0.68
02/03/2009	1000	GWJ	AA	Good	5.5	5.5	--	1040.01	18.22	27.4	0.9	25.46	0.72
05/01/2009	1155	GWJ	AA	Good	19.0	10.5	220	1040.17	38.01	32.5	1.3	43.17	0.88
06/01/2009	1210	GWJ	AA	Good	22.5	14.0	246	1040.07	24.53	30.6	0.9	27.77	0.88
07/01/2009	1135	GWJ	AA	Good	23.0	16.0	261	1039.93	15.04	28.8	0.8	22.57	0.67
08/03/2009	1120	GWJ	AA	Fair	20.5	16.0	263	1035.20	8.81	25.6	0.6	15.93	0.55
09/01/2009	1310	GWJ	AA	Fair	28.5	18.0	275	1031.66	5.21	16.3	0.7	11.50	0.45
10/01/2009	0935	GWJ	AA	Fair	6.0	11.0	279	1026.00	5.51	16.3	0.7	11.56	0.48
11/02/2009	1040	GWJ	AA	Good	17.0	11.0	256	1040.24	28.09	35.4	1.4	50.65	0.55
12/02/2009	0910	GWJ	AA	Good	3.0	6.0	230	1040.06	18.31	34.2	1.3	43.40	0.42
06/01/2010	1250	GWJ	AA	Fair	19.0	13.0	214	1040.28	59.55	38.5	1.2	47.33	1.26
07/01/2010	1145	GWJ	AA	Good	22.0	13.0	234	1040.11	31.97	35.5	1.0	37.15	0.86
08/02/2010	1110	GWJ	AA	Good	22.5	13.5	251	1039.97	18.48	25.3	1.2	29.88	0.62
09/01/2010	1020	GWJ	AA	Good	17.0	13.0	277	1039.30	12.92	18.7	1.1	20.24	0.64
10/01/2010	0830	GWJ	AA	Good	11.0	14.0	295	1034.85	8.38	16.7	1.1	17.86	0.47
11/01/2010	1115	GWJ	AA	Good	15.0	10.0	270	1028.62	11.71	17.0	1.1	19.23	0.61
12/01/2010	0920	GWJ	AA	Good	3.0	5.0	255	1030.58	17.60	17.1	1.1	19.23	0.92
06/01/2011	1120	GWJ	AA	Good	11.5	9.0	217	1040.21	48.06	35.0	1.4	47.52	1.01
07/01/2011	0855	GWJ	AA	Good	13.5	13.0	218	1040.16	38.52	34.9	1.3	45.32	0.85
08/01/2011	0700	GWJ	AA	Good	8.0	14.0	249	1040.00	20.20	32.7	1.1	37.54	0.54
09/01/2011	1015	GWJ	AA	Good	15.5	13.0	254	1038.77	12.97	30.2	0.9	27.05	0.48
10/03/2011	1145	GWJ	AA	Good	18.0	12.5	254	1030.87	10.62	25.4	1.1	27.17	0.39

Table C-2 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River above Los Padres Reservoir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
11/01/2011	1100	GWJ	AA	Good	16.5	10.5	240	1025.08	11.81	23.5	1.0	24.44	0.48
12/01/2011	1100	GWJ	AA	Good	14.0	7.5	230	1026.13	13.77	23.5	1.1	25.09	0.55
01/02/2012	1115	GWJ	AA	Good	14.0	6.5	240	1023.85	11.86	23.5	1.0	24.17	0.49
02/01/2012	1155	GWJ	AA	Good	14.0	7.0	202	1040.06	27.17	30.5	1.3	40.36	0.67
03/01/2012	1100	GWJ	AA	Good	10.5	6.5	191	1039.10	29.05	26.5	1.0	26.90	1.08
04/02/2012	1045	GWJ	AA	Good	11.0	7.0	174	1040.37	90.79	46.0	1.3	60.38	1.50
05/01/2012	1130	GWJ	AA	Good	17.0	12.0	190	1040.14	38.14	30.1	1.4	43.25	0.88
06/01/2012	0930	GWJ	AA	Good	18.0	13.0	208	1040.00	17.48	30.0	1.3	37.92	0.46
07/02/2012	1035	GWJ	AA	Fair	12.5	14.0	225	1039.69	9.44	27.6	1.0	27.59	0.34
08/01/2012	1030	GWJ	AA	Fair	23.5	15.0	262	1035.57	3.29	9.2	0.8	7.10	0.46
09/04/2012	1100	GWJ	Pygmy	Fair	26.0	14.5	264	1025.49	1.74	3.9	0.6	2.33	0.75
10/01/2012	1000	GWJ	Pygmy	Fair	17.0	14.0	268	1016.95	1.66	3.9	0.6	2.26	0.73
11/01/2012	1100	GWJ	Pygmy	Fair	14.0	12.0	282	1011.72	4.11	4.4	0.7	3.20	1.29
04/01/2013	1210	GWJ	AA	Good	16.0	11.5	210	1040.05	23.85	34.7	1.4	47.05	0.51
05/01/2013	1050	GWJ	AA	Good	19.0	11.5	244	1037.82	12.04	29.1	0.7	20.58	0.59
06/01/2013	1345	GWJ	Pygmy	Fair	33.0	15.0	269	1037.64	7.89	19.7	0.6	11.51	0.69
07/01/2013	0850	GWJ	Pygmy	Fair	17.0	16.5	280	1035.61	2.60	4.8	0.5	2.24	1.16
08/01/2013	1300	GWJ	Pygmy	Fair	23.0	16.5	281	1029.20	0.92	4.3	0.4	1.57	0.59
09/04/2013	1050	GWJ	Pygmy	Fair	22.0	15.0	285	1020.95	0.82	3.6	0.5	1.62	0.51

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-3

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River below Los Padres Reservoir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/01/2008	1340	GWJ	AA	Fair	30.5	19.0	354	3.65	5.54	18.1	0.9	15.58	0.36
11/03/2008	1230	GWJ	AA	Fair	17.0	15.0	377	3.65	5.55	18.0	0.9	15.48	0.36
12/01/2008	0935	GWJ	AA	Fair	7.5	10.5	354	3.64	5.25	17.6	0.9	15.01	0.35
01/02/2009	1305	GWJ	AA	Fair	12.0	7.0	292	3.70	6.25	17.5	0.9	16.60	0.38
02/03/2009	1230	GWJ	AA	Good	16.0	8.0	292	4.05	17.15	18.6	1.2	22.38	0.77
02/27/2009	1030	GWJ	AA	Fair	11.0	9.0	227	5.53	173.28	46.1	1.8	83.75	2.07
03/24/2009	1100	GWJ	AA	Fair	14.0	11.0	200	4.99	92.21	39.6	1.4	57.26	1.61
05/01/2009	0920	GWJ	AA	Good	15.0	13.0	230	4.43	36.17	24.6	1.4	35.29	1.03
06/01/2009	0955	GWJ	AA	Good	17.5	18.0	255	4.17	24.44	22.5	1.2	27.68	0.88
07/01/2009	0855	GWJ	AA	Fair	17.5	17.0	265	3.91	12.39	18.2	1.1	20.52	0.60
08/03/2009	0855	GWJ	AA	Fair	14.0	16.0	260	3.85	11.08	18.0	1.1	19.37	0.57
09/01/2009	1040	GWJ	AA	Fair	21.0	17.5	273	3.78	8.77	17.8	1.0	17.45	0.50
10/01/2009	1210	GWJ	AA	Fair	21.5	17.5	292	3.76	8.50	17.9	1.0	17.79	0.48
11/02/2009	1345	GWJ	AA	Good	26.0	15.0	217	4.24	27.57	23.3	1.3	31.10	0.89
12/02/2009	1155	GWJ	AA	Fair	10.5	9.5	237	4.09	17.69	19.3	1.3	25.55	0.69
12/15/2009	1315	GWJ	AA	Good	12.5	9.0	191	5.16	106.63	40.1	1.5	62.06	1.72
01/11/2010	0955	GWJ	AA	Good	10.5	9.0	228	4.45	38.58	23.8	1.5	36.31	1.06
02/03/2010	0840	GWJ	AA	Good	4.5	9.0	189	5.46	173.16	46.3	1.7	80.75	2.14
03/10/2010	1400	GWJ	AA	Fair	11.0	9.0	180	5.78	224.71	46.7	2.0	93.70	2.40
03/24/2010	1045	GWJ	AA	Good	16.0	11.0	212	5.24	130.41	39.7	1.7	66.05	1.97
04/29/2010	0815	GWJ	AA	Good	8.0	11.0	208	5.37	141.22	39.4	1.8	72.79	1.94
06/01/2010	0855	GWJ	AA	Good	15.0	14.5	240	4.70	64.20	37.6	1.3	48.62	1.32
06/17/2010	0925	GWJ	AA	Fair	13.5	16.0	256	4.46	42.34	25.0	1.5	37.70	1.12
07/01/2010	0925	GWJ	AA	Good	13.0	18.0	265	4.30	31.63	24.1	1.4	33.47	0.95
08/02/2010	0840	GWJ	AA	Good	13.5	15.0	258	3.97	15.65	20.5	1.2	24.41	0.64

Table C-3 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River below Los Padres Reservoir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
09/01/2010	1235	GWJ	AA	Good	28.0	15.5	252	3.87	12.40	18.0	1.2	21.16	0.59
10/01/2010	1100	GWJ	AA	Good	20.0	17.5	293	4.00	16.33	18.8	1.3	23.79	0.69
11/01/2010	1345	GWJ	AA	Good	20.0	15.0	303	3.92	13.95	18.1	1.2	21.71	0.64
12/01/2010	1215	GWJ	AA	Good	11.0	9.0	280	3.92	13.71	18.0	1.2	21.91	0.63
01/12/2011	0920	GWJ	AA	Good	11.0	8.0	166	5.02	99.08	38.6	1.5	58.90	1.68
02/01/2011	0910	GWJ	AA	Good	4.5	8.0	201	4.59	49.63	26.6	1.5	40.33	1.23
03/04/2011	0800	GWJ	AA	Fair	3.0	9.0	168	5.81	248.78	46.3	2.1	95.04	2.62
04/22/2011	0830	GWJ	AA	Good	9.0	12.0	220	5.12	102.15	39.5	1.6	63.25	1.62
05/04/2011	0830	GWJ	AA	Good	9.5	13.0	227	4.84	77.81	27.9	1.8	49.65	1.57
06/01/2011	0840	GWJ	AA	Good	11.0	13.0	238	4.54	47.09	25.2	1.5	38.48	1.22
07/01/2011	1215	GWJ	AA	Good	26.0	18.5	229	4.38	36.50	23.7	1.5	34.75	1.05
08/01/2011	0945	GWJ	AA	Good	14.0	15.5	239	3.96	18.30	20.5	1.2	24.84	0.74
09/01/2011	0800	GWJ	AA	Good	8.0	16.5	251	3.79	13.49	18.9	1.2	22.22	0.61
10/03/2011	0855	GWJ	AA	Good	7.5	18.0	280	3.88	15.30	18.3	1.2	22.11	0.69
11/01/2011	0845	GWJ	AA	Good	8.5	15.0	260	3.90	15.88	18.4	1.2	22.89	0.69
12/01/2011	0820	GWJ	AA	Good	2.0	10.0	242	3.83	12.99	18.2	1.2	21.00	0.62
01/02/2012	0930	GWJ	AA	Good	9.0	7.0	267	3.84	13.29	18.3	1.2	21.60	0.62
02/01/2012	0840	GWJ	AA	Good	3.5	7.5	207	4.16	24.57	23.1	1.2	28.63	0.86
03/01/2012	0830	GWJ	AA	Good	7.0	7.5	202	3.89	15.46	18.4	1.2	22.44	0.69
03/28/2012	1300	GWJ	AA	Good	15.0	10.0	192	5.19	118.02	39.3	1.7	67.92	1.74
05/01/2012	0905	GWJ	AA	Good	11.5	13.0	194	4.38	35.61	23.1	1.5	34.11	1.04
06/01/2012	1230	GWJ	AA	Good	25.5	15.0	202	3.88	14.86	17.8	1.3	22.58	0.66
07/02/2012	0830	GWJ	AA	Good	12.5	14.0	225	3.61	9.24	16.8	1.1	18.94	0.49
08/01/2012	0830	GWJ	AA	Fair	10.0	16.5	251	3.60	9.13	16.7	1.1	18.96	0.48
09/04/2012	0845	GWJ	AA	Fair	11.0	20.0	275	3.54	8.03	16.7	1.1	18.41	0.44

Table C-3 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River below Los Padres Reservoir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/01/2012	1145	GWJ	AA	Fair	24.0	19.5	301	3.48	6.39	16.8	1.0	16.91	0.38
11/01/2012	0900	GWJ	AA	Fair	13.5	15.5	332	3.39	5.08	14.9	1.0	14.77	0.34
12/06/2012	1055	GWJ	AA	Fair	13.0	11.5	148	4.96	87.60	38.6	1.5	56.50	1.55
02/01/2013	1230	GWJ	AA	Good	15.0	8.5	192	4.50	44.31	25.5	1.6	39.98	1.11
04/01/2013	0945	GWJ	AA	Fair	13.0	13.0	224	4.14	19.77	24.4	1.3	32.25	0.61
05/01/2013	0900	GWJ	AA	Fair	10.0	14.0	237	3.82	12.76	18.2	1.2	21.44	0.59
06/03/2013	0850	GWJ	AA	Good	10.0	16.5	254	3.60	7.76	16.9	0.9	15.10	0.51
07/01/2013	1120	GWJ	AA	Fair	31.0	12.5	242	3.64	8.67	17.5	1.1	18.92	0.46
08/01/2013	0845	GWJ	AA	Fair	8.5	14.5	267	3.43	5.42	16.3	0.9	15.33	0.35
09/04/2013	0820	GWJ	AA	Fair	12.5	19.5	307	3.46	5.54	16.1	1.0	15.58	0.36

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-4

DISCHARGE MEASUREMENT SUMMARY

SITE: Finch Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/14/2009	1300	GWJ	AA	Fair	20.0	14.0	507	2.09	2.61	9.3	0.5	4.87	0.54
12/08/2009	1350	GWJ	Pygmy	Poor	8.0	5.0	900	1.88	0.09	1.0	0.2	0.18	0.51
12/13/2009	1425	GWJ	AA	Fair	11.0	9.0	591	2.20	4.57	8.5	0.7	5.87	0.78
01/07/2010	1215	GWJ	Pygmy	Fair	17.0	9.0	794	1.93	0.79	4.2	0.5	2.03	0.39
01/19/2010	1155	GWJ	AA	Fair	11.0	7.5	230	3.54	86.61	18.9	1.4	26.97	3.21
01/22/2010	1520	GWJ	AA	Good	12.5	8.0	393	2.81	25.68	13.3	1.0	12.71	2.02
02/03/2010	1220	GWJ	AA	Fair	16.0	8.0	538	2.22	4.67	9.3	0.7	6.16	0.76
02/17/2010	1035	GWJ	AA	Fair	18.0	8.0	530	2.26	5.36	9.3	0.7	6.56	0.82
03/09/2010	1115	GWJ	AA	Fair	9.0	7.0	478	2.46	10.22	10.5	0.8	8.74	1.17
04/06/2010	1300	GWJ	AA	Fair	15.5	9.0	529	2.29	6.09	9.7	0.7	7.04	0.86
05/10/2010	1510	GWJ	AA	Fair	11.5	11.0	556	2.27	5.77	9.4	0.7	6.68	0.86
06/10/2010	1055	GWJ	AA	Fair	12.5	11.5	600	2.14	3.29	8.6	0.6	4.99	0.66
07/08/2010	1415	GWJ	Pygmy	Fair	28.0	19.0	651	2.00	1.32	5.3	0.5	2.80	0.47
08/09/2010	1150	GWJ	Pygmy	Fair	21.0	14.5	701	1.93	0.77	4.7	0.5	2.21	0.35
08/30/2010	1215	GWJ	Pygmy	Poor	20.0	14.0	738	1.84	0.40	2.8	0.3	0.74	0.54
09/27/2010	1420	GWJ	Pygmy	Poor	39.0	19.5	803	1.64	0.03	0.6	0.1	0.09	0.28
10/11/2010	1130	GWJ	Pygmy	Poor	26.0	14.0	786	1.77	0.17	1.8	0.2	0.41	0.41
11/22/2010	1015	GWJ	Pygmy	Fair	13.0	8.5	707	1.97	1.10	5.0	0.5	2.47	0.44
12/29/2010	1150	GWJ	AA	Fair	6.5	8.0	497	2.48	7.65	10.1	0.9	8.95	0.85
01/14/2011	1415	GWJ	AA	Fair	15.0	9.5	590	2.09	2.61	8.9	0.5	4.61	0.57
02/15/2011	1025	GWJ	Pygmy	Fair	14.0	8.0	632	2.00	1.50	5.4	0.4	2.38	0.63
03/11/2011	1430	GWJ	AA	Fair	14.5	10.0	517	2.26	5.05	9.1	0.7	6.35	0.80
03/21/2011	1040	GWJ	AA	Fair	8.5	7.0	353	3.01	37.08	12.3	1.3	15.96	2.32
04/26/2011	1110	GWJ	AA	Fair	12.0	9.0	521	2.38	6.65	10.6	0.7	7.78	0.85
05/23/2011	1330	GWJ	AA	Fair	17.5	11.5	560	2.28	4.51	10.2	0.7	6.71	0.67

Table C-4 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Finch Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
06/27/2011	1020	GWJ	AA	Fair	19.5	12.0	602	2.19	3.06	9.6	0.7	6.25	0.49
07/20/2011	1050	GWJ	Pygmy	Fair	23.0	14.5	630	2.14	2.15	8.5	0.7	5.55	0.39
08/22/2011	1100	GWJ	Pygmy	Fair	22.5	13.0	670	2.05	0.96	4.8	0.5	2.27	0.42
09/30/2011	1125	GWJ	Pygmy	Fair	17.0	14.0	681	1.97	0.41	2.3	0.5	1.11	0.37
10/12/2011	1035	GWJ	Pygmy	Fair	18.0	12.0	655	2.04	1.00	3.6	0.5	1.86	0.54
11/29/2011	1050	GWJ	Pygmy	Fair	14.5	9.0	606	2.06	0.96	4.3	0.5	2.28	0.42
12/19/2011	1155	GWJ	Pygmy	Fair	12.0	7.0	645	2.08	0.96	4.4	0.6	2.43	0.40
01/19/2012	1400	GWJ	Pygmy	Fair	9.5	5.0	626	2.09	0.98	4.3	0.6	2.58	0.38
02/27/2012	1110	GWJ	Pygmy	Fair	7.0	6.5	621	2.07	1.06	4.3	0.6	2.37	0.45
04/10/2012	1040	GWJ	Pygmy	Fair	13.5	8.0	613	2.10	1.40	4.4	0.6	2.55	0.55
04/18/2012	1145	GWJ	AA	Fair	19.0	10.0	583	2.18	2.64	10.1	0.6	5.67	0.47
06/14/2012	1125	GWJ	Pygmy	Poor	22.0	13.5	680	1.91	0.24	2.2	0.4	0.96	0.25
06/27/2012	1225	GWJ	Pygmy	Poor	26.0	19.0	700	1.85	0.02	0.5	0.1	0.06	0.39
07/24/2012	1100	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/10/2012	1000	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/06/2012	1335	GWJ	Pygmy	Poor	10.5	11.5	788	1.94	0.24	2.1	0.4	0.91	0.26
01/03/2013	1050	GWJ	Pygmy	Good	6.0	4.5	691	2.15	1.85	8.7	0.5	4.60	0.40
02/11/2013	1305	GWJ	Pygmy	Fair	13.5	7.0	683	2.10	0.91	3.6	0.6	1.99	0.46
04/16/2013	1120	GWJ	Pygmy	Fair	11.5	9.0	703	2.06	0.51	2.8	0.5	1.46	0.35

DISCHARGE MEASUREMENT SUMMARY

SITE: Cachagua Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/01/2008	1440	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/03/2008	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/01/2008	0830	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/02/2009	0850	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/03/2009	0845	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/17/2009	1150	GWJ	AA	Fair	11.0	6.5	390	3.76	56.14	18.7	1.3	23.41	2.40
02/23/2009	1325	GWJ	AA	Good	17.0	11.5	728	2.94	6.44	16.0	0.5	7.64	0.84
03/04/2009	1515	GWJ	AA	Fair	12.5	11.0	335	3.71	59.95	18.7	1.2	23.01	2.61
03/24/2009	1235	GWJ	AA	Fair	15.0	12.0	688	2.78	3.42	14.8	0.4	5.58	0.61
04/30/2009	1115	GWJ	Pygmy	Fair	18.0	12.0	750	2.60	1.25	6.7	0.4	2.87	0.44
05/11/2009	1320	GWJ	Pygmy	Fair	24.5	20.0	786	2.50	0.65	2.5	0.4	1.10	0.59
05/28/2009	0910	GWJ	Pygmy	na	15.5	14.0	802	2.20	No Flow	--	--	--	--
06/01/2009	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/01/2009	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/03/2009	1500	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/01/2009	0940	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2009	1315	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/14/2009	1500	GWJ	Pygmy	Fair	24.0	17.0	435	2.61	1.47	7.2	0.4	3.03	0.48
11/02/2009	0815	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/02/2009	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2010	1450	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/14/2010	0815	GWJ	Pygmy	Poor	5.0	7.0	913	2.52	0.36	2.1	0.5	1.03	0.35
01/19/2010	1410	GWJ	AA	Fair	14.0	8.5	251	4.21	126.82	21.2	1.6	34.21	3.71
01/27/2010	0805	GWJ	AA	Good	8.0	8.5	518	3.28	18.89	16.7	0.7	11.30	1.67
02/17/2010	1215	GWJ	AA	Fair	22.0	10.5	575	3.05	9.99	13.5	0.7	8.86	1.13

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Cachagua Creek

Water Years: 2009-2013

Table C-5 (continued)

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
03/09/2010	0940	GWJ	AA	Good	8.0	8.0	460	3.33	22.53	16.3	0.9	15.25	1.48
04/13/2010	1300	GWJ	AA	Good	18.0	11.5	470	3.31	22.43	17.0	0.9	16.01	1.40
04/23/2010	0915	GWJ	AA	Fair	12.0	9.0	452	3.39	24.82	17.1	1.0	17.56	1.41
05/10/2010	1325	GWJ	AA	Good	15.0	13.0	555	3.02	8.99	14.3	0.7	10.24	0.88
06/10/2010	0905	GWJ	AA	Fair	13.0	13.0	620	2.81	4.17	9.3	0.6	5.69	0.73
07/08/2010	1300	GWJ	Pygmy	Fair	24.5	19.5	684	2.57	1.15	4.6	0.4	1.95	0.59
08/02/2010	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/01/2010	1340	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2010	1200	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/01/2010	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/01/2010	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/29/2010	1030	GWJ	AA	Fair	9.0	9.0	681	3.07	9.44	12.4	0.8	9.54	0.99
01/14/2011	1255	GWJ	AA	Fair	19.0	10.0	670	2.80	4.59	10.3	0.7	7.17	0.64
02/07/2011	1440	GWJ	Pygmy	Fair	24.0	11.5	720	2.66	2.40	7.6	0.6	4.69	0.51
02/23/2011	0830	GWJ	AA	Fair	8.0	7.0	535	3.12	11.67	14.5	0.9	12.77	0.91
03/11/2011	1240	GWJ	AA	Good	16.0	11.5	541	3.01	9.37	13.4	0.7	8.76	1.07
03/21/2011	0915	GWJ	AA	Fair	8.5	7.5	335	3.98	79.97	19.5	1.4	27.15	2.95
03/30/2011	0845	GWJ	AA	Good	8.5	8.0	415	3.55	35.05	16.8	1.2	20.52	1.71
04/26/2011	0935	GWJ	AA	Fair	12.5	9.5	530	3.04	9.51	13.5	0.8	10.85	0.88
05/26/2011	0910	GWJ	AA	Fair	12.0	9.5	574	2.90	5.34	10.9	0.7	7.46	0.72
06/27/2011	0840	GWJ	AA	Fair	13.0	12.0	618	2.77	3.02	7.1	0.8	5.52	0.55
07/20/2011	0855	GWJ	Pygmy	Fair	18.5	14.5	653	2.63	1.35	6.5	0.6	4.02	0.34
08/15/2011	1450	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/12/2011	0830	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/01/2011	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

Table C-5 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Cachagua Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
11/29/2011	1400	GWJ	Pygmy	Fair	20.0	11.0	714	2.55	0.77	3.5	0.5	1.85	0.41
12/19/2011	1045	GWJ	Pygmy	Fair	12.0	7.5	733	2.64	0.79	3.5	0.6	2.01	0.39
01/19/2012	1300	GWJ	Pygmy	Fair	14.5	5.0	702	2.66	0.93	3.5	0.6	2.10	0.44
01/30/2012	1200	GWJ	Pygmy	Fair	17.5	8.0	700	2.72	1.63	5.1	0.6	3.31	0.49
02/27/2012	0955	GWJ	Pygmy	Fair	8.0	7.5	681	2.67	1.17	4.6	0.6	2.72	0.43
03/09/2012	1100	GWJ	Pygmy	Fair	23.0	8.5	685	2.64	0.97	4.9	0.6	2.91	0.33
04/10/2012	0900	GWJ	Pygmy	Good	13.0	9.0	655	2.76	1.80	6.3	0.5	3.36	0.54
04/18/2012	1020	GWJ	AA	Fair	17.0	10.0	610	2.91	3.92	7.7	0.8	5.98	0.66
06/01/2012	1405	GWJ	na	na	--	--	--	2.34	No Flow	--	--	--	--
07/02/2012	1250	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/01/2012	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/04/2012	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2012	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/01/2012	0815	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/06/2012	1205	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/03/2013	1215	GWJ	AA	Fair	16.0	5.0	766	2.77	1.51	7.3	0.5	3.79	0.40
01/11/2013	1315	GWJ	AA	Fair	10.5	7.0	774	2.86	1.98	7.2	0.6	4.44	0.45
02/11/2013	1200	GWJ	AA	Fair	15.0	7.0	772	2.74	0.86	5.4	0.5	2.70	0.32
04/16/2013	1235	GWJ	Pygmy	Poor	17.0	15.0	803	2.50	0.36	2.0	0.4	0.74	0.48
04/24/2013	1245	GWJ	na	na	--	--	--	2.34	No Flow	--	--	--	--
05/01/2013	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/03/2013	0955	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/01/2013	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/01/2013	0800	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/04/2013	0730	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-6

DISCHARGE MEASUREMENT SUMMARY

SITE: Pine Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/10/2008	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/24/2008	1120	GWJ	Flume	Good	11.5	8.5	515	0.58	0.02	--	--	--	--
12/17/2008	1315	GWJ	Pygmy	Fair	3.5	5.5	418	1.02	0.74	4.2	0.7	2.73	0.27
01/14/2009	1215	GWJ	Pygmy	Fair	13.0	6.5	295	0.95	0.71	4.2	0.6	2.38	0.30
02/12/2009	1315	GWJ	AA	Fair	8.5	7.0	204	1.29	4.19	8.6	0.9	8.13	0.52
02/25/2009	1230	GWJ	AA	Good	14.0	9.0	152	1.87	14.41	15.1	1.2	17.47	0.82
03/19/2009	1400	GWJ	AA	Good	23.5	13.0	153	1.67	10.51	15.0	1.1	15.81	0.66
04/21/2009	1300	GWJ	Pygmy	Good	32.0	13.5	195	1.26	4.23	8.0	0.8	6.53	0.65
05/28/2009	1150	GWJ	Pygmy	Fair	21.0	13.0	222	1.03	2.11	5.4	0.7	3.63	0.58
07/02/2009	1325	GWJ	Pygmy	Poor	24.0	15.0	281	0.78	0.49	2.4	0.5	1.27	0.38
07/31/2009	1340	GWJ	Flume	Good	23.0	15.5	371	0.55	0.07	--	--	--	--
08/31/2009	1310	GWJ	Flume	na	25.0	16.5	486	0.38	No Flow	--	--	--	--
10/23/2009	0940	GWJ	Pygmy	Fair	10.5	12.0	274	1.01	1.78	5.0	0.8	4.16	0.43
11/30/2009	1315	GWJ	Pygmy	Fair	10.5	8.0	255	0.94	1.04	4.5	0.8	3.66	0.28
01/07/2010	0925	GWJ	Pygmy	Fair	6.5	8.0	219	1.04	1.91	4.7	0.9	4.17	0.46
02/11/2010	1145	GWJ	AA	Good	12.0	8.0	151	1.79	16.83	15.5	1.3	19.51	0.86
03/17/2010	1140	GWJ	AA	Good	16.0	10.0	153	1.87	19.11	15.5	1.3	19.88	0.96
04/30/2010	1300	GWJ	AA	Good	17.0	10.0	158	1.83	18.32	15.2	1.3	19.30	0.95
05/28/2010	0915	GWJ	AA	Good	11.0	9.5	178	1.46	8.35	15.0	1.0	15.06	0.55
06/23/2010	1300	GWJ	AA	Fair	22.0	13.5	210	1.20	3.64	14.4	0.8	10.96	0.33
07/29/2010	1300	GWJ	Pygmy	Fair	23.0	14.0	272	0.92	1.18	4.6	0.8	3.54	0.33
08/23/2010	1115	GWJ	Pygmy	Poor	21.0	13.0	329	0.75	0.30	1.6	0.3	0.53	0.56
09/29/2010	1140	GWJ	Flume	Good	22.5	14.5	404	0.65	0.09	--	--	--	--
10/27/2010	1000	GWJ	Pygmy	Poor	3.5	9.0	408	0.67	0.13	1.5	0.3	0.41	0.30
11/30/2010	1045	GWJ	Pygmy	Fair	4.5	7.0	252	1.03	1.47	4.7	0.9	4.31	0.34

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Pine Creek

Water Years: 2009-2013

Table C-6 (continued)

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/14/2011	0950	GWJ	AA	Good	7.0	8.5	174	1.41	6.97	14.9	1.1	16.67	0.42
02/10/2011	1345	GWJ	Pygmy	Good	16.0	8.0	190	1.19	3.23	8.5	0.9	7.34	0.44
03/16/2011	1245	GWJ	AA	Good	13.5	10.5	155	1.66	12.44	15.2	1.1	16.94	0.73
03/29/2011	1225	GWJ	AA	Fair	17.0	10.0	122	2.90	68.07	18.6	1.8	33.64	2.02
04/28/2011	1125	GWJ	AA	Good	18.0	10.5	169	1.74	9.98	15.2	1.1	16.66	0.60
05/26/2011	1130	GWJ	AA	Fair	14.5	10.0	188	1.51	5.78	14.4	1.0	14.03	0.41
06/23/2011	1125	GWJ	AA	Fair	19.5	13.0	190	1.42	4.30	13.8	0.9	12.50	0.34
07/27/2011	1145	GWJ	Pygmy	Fair	21.0	13.0	237	1.12	1.82	4.9	0.8	4.01	0.45
08/29/2011	1150	GWJ	Pygmy	Poor	20.0	13.0	308	0.78	0.39	1.6	0.4	0.69	0.57
09/22/2011	1235	GWJ	Flume	Good	25.0	13.5	352	0.67	0.17	--	--	--	--
10/07/2011	1245	GWJ	Pygmy	Fair	13.5	11.5	291	0.98	1.16	5.0	0.8	4.12	0.28
10/28/2011	1220	GWJ	Pygmy	Fair	13.0	10.0	280	0.89	0.56	3.6	0.6	2.14	0.26
11/28/2011	1245	GWJ	Pygmy	Fair	13.0	9.5	237	1.01	1.01	3.7	0.7	2.43	0.41
12/20/2011	1035	GWJ	Pygmy	Fair	2.0	6.0	254	1.01	0.88	3.7	0.6	2.36	0.38
01/24/2012	1240	GWJ	AA	Fair	10.0	8.0	167	1.64	7.68	9.6	0.9	9.07	0.85
02/24/2012	1240	GWJ	Pygmy	Fair	21.0	8.0	227	1.11	1.80	4.7	0.8	3.92	0.46
03/21/2012	1145	GWJ	AA	Good	18.0	9.0	175	1.51	5.76	13.9	1.1	14.63	0.39
04/30/2012	1230	GWJ	AA	Fair	24.0	12.0	186	1.41	4.14	9.6	0.8	7.56	0.55
06/07/2012	1200	GWJ	Pygmy	Fair	21.0	10.5	222	1.08	1.44	4.7	0.7	3.43	0.42
06/27/2012	1010	GWJ	Pygmy	Poor	21.0	11.0	265	0.90	0.58	2.7	0.5	1.43	0.41
07/23/2012	0940	GWJ	Pygmy	Poor	14.0	13.0	343	0.64	0.07	1.0	0.2	0.24	0.31
08/14/2012	1120	GWJ	Flume	Fair	24.0	15.5	420	0.40	0.01	--	--	--	--
09/28/2012	0945	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/29/2012	1130	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/27/2012	1115	GWJ	Pygmy	Poor	12.0	10.0	481	0.45	0.02	0.7	0.1	0.09	0.24

Table C-6 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Pine Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
12/10/2012	1225	GWJ	AA	Fair	10.0	9.0	198	1.53	4.28	10.0	0.7	7.45	0.57
01/16/2013	1300	GWJ	AA	Good	8.0	6.0	147	1.77	8.23	14.0	1.1	15.15	0.54
03/13/2013	1210	GWJ	Pygmy	Fair	19.0	9.0	188	1.41	3.03	5.7	0.8	4.74	0.64
04/11/2013	1250	GWJ	Pygmy	Fair	17.0	11.0	207	1.31	1.65	5.6	0.7	4.15	0.40
05/22/2013	1250	GWJ	Pygmy	Fair	14.5	11.0	256	1.03	0.49	3.0	0.7	2.02	0.24
06/25/2013	1245	GWJ	Flume	Good	24.0	15.0	324	0.82	0.13	--	--	--	--
07/24/2013	1125	GWJ	Flume	na	26.5	15.0	421	0.48	No Flow	--	--	--	--
08/28/2013	0900	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/25/2013	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-7

DISCHARGE MEASUREMENT SUMMARY

SITE: San Clemente Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/20/2008	1140	GWJ	Flume	Good	16.0	9.0	380	0.95	0.04	--	--	--	--
11/20/2008	1205	GWJ	Pygmy	Poor	17.0	8.5	402	1.15	0.16	2.1	0.3	0.53	0.29
12/10/2008	1320	GWJ	Pygmy	Poor	18.0	5.0	385	1.21	0.16	2.1	0.2	0.50	0.32
01/15/2009	1245	GWJ	Pygmy	Fair	16.0	4.5	269	1.43	0.98	3.6	0.6	2.02	0.48
02/11/2009	1105	GWJ	AA	Good	11.5	6.0	221	1.83	5.27	14.6	0.7	10.26	0.51
02/18/2009	1140	GWJ	AA	Good	10.0	6.5	142	2.86	54.76	18.6	1.6	29.89	1.83
03/05/2009	1005	GWJ	AA	Good	10.0	9.0	126	3.21	98.80	21.3	1.8	38.01	2.60
03/17/2009	1125	GWJ	AA	Good	20.0	10.0	163	2.26	18.06	17.7	1.0	18.23	0.99
04/06/2009	1015	GWJ	AA	Fair	13.5	8.5	200	1.80	5.25	8.5	1.0	8.91	0.59
05/18/2009	1420	GWJ	AA	Fair	23.0	17.0	205	1.64	3.29	8.3	0.9	7.48	0.44
07/03/2009	1315	GWJ	Pygmy	Poor	25.5	16.0	266	1.25	0.70	2.2	0.5	1.09	0.64
07/29/2009	1410	GWJ	Pygmy	Poor	23.0	16.0	317	1.11	0.18	2.3	0.3	0.60	0.31
08/17/2009	1255	GWJ	Flume	Good	23.0	15.5	338	0.95	0.03	--	--	--	--
10/08/2009	1325	GWJ	Flume	Good	18.0	10.5	369	0.94	0.02	--	--	--	--
10/20/2009	1355	GWJ	AA	Fair	20.0	12.5	247	1.64	2.61	9.3	0.9	8.23	0.32
11/24/2009	1220	GWJ	Pygmy	Fair	16.0	7.0	246	1.46	0.96	3.5	0.5	1.91	0.50
12/16/2009	1310	GWJ	AA	Fair	15.5	8.0	207	1.84	3.87	8.8	1.0	8.77	0.44
01/23/2010	1025	GWJ	AA	Good	9.5	8.0	142	3.03	73.77	19.3	1.7	32.26	2.29
02/12/2010	0840	GWJ	AA	Good	8.0	8.0	162	2.47	27.81	18.5	1.2	21.62	1.29
03/11/2010	0910	GWJ	AA	Good	3.0	7.0	156	2.73	44.57	18.6	1.4	26.08	1.71
04/15/2010	1230	GWJ	AA	Good	18.5	9.5	145	2.78	49.27	18.5	1.5	27.05	1.82
05/19/2010	1030	GWJ	AA	Good	17.5	11.5	176	2.22	16.69	18.3	0.9	17.07	0.98
06/16/2010	1015	GWJ	AA	Fair	16.5	13.0	194	1.90	6.92	8.1	1.1	8.78	0.79
07/26/2010	1230	GWJ	Pygmy	Fair	16.0	15.0	244	1.43	1.55	3.9	0.6	2.15	0.72
08/19/2010	1005	GWJ	Pygmy	Fair	16.0	12.5	265	1.29	0.59	3.2	0.5	1.52	0.38

Table C-7 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: San Clemente Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
09/21/2010	1130	GWJ	Pygmy	Poor	17.0	12.0	318	1.14	0.25	2.5	0.3	0.81	0.31
10/14/2010	1150	GWJ	Flume	Good	21.0	14.0	326	1.10	0.21	--	--	--	--
11/08/2010	1035	GWJ	Pygmy	Fair	13.0	11.0	329	1.30	0.52	2.5	0.5	1.22	0.43
01/04/2011	1400	GWJ	AA	Good	12.5	7.5	155	2.57	32.59	18.3	1.3	23.46	1.39
01/25/2011	0920	GWJ	AA	Fair	5.0	6.5	190	1.83	5.82	11.0	1.2	12.79	0.45
02/15/2011	0815	GWJ	AA	Fair	7.5	8.0	197	1.74	4.42	10.6	1.1	11.58	0.38
02/23/2011	1040	GWJ	AA	Good	11.5	7.5	155	2.59	34.28	18.3	1.2	22.47	1.53
03/26/2011	1150	GWJ	AA	Fair	16.0	10.0	107	3.89	249.94	67.5	2.4	164.30	1.52
04/21/2011	1440	GWJ	AA	Good	15.5	12.0	162	2.40	24.76	18.0	1.1	19.91	1.24
05/25/2011	1510	GWJ	AA	Good	16.0	11.5	178	2.07	11.02	16.4	0.8	13.87	0.79
06/22/2011	0930	GWJ	AA	Fair	20.0	16.0	189	1.93	7.55	11.7	1.1	13.31	0.57
07/28/2011	1145	GWJ	AA	Fair	22.0	15.0	225	1.54	2.10	7.7	0.8	6.41	0.33
08/30/2011	1000	GWJ	Pygmy	Poor	13.0	12.5	264	1.23	0.55	3.2	0.5	1.61	0.34
09/28/2011	1150	GWJ	Pygmy	Poor	25.0	14.5	290	1.27	0.56	3.3	0.5	1.72	0.32
10/12/2011	1235	GWJ	Pygmy	Fair	18.5	14.0	247	1.37	0.92	4.7	0.6	2.85	0.32
11/10/2011	1330	GWJ	Pygmy	Fair	15.5	8.0	245	1.42	1.22	3.9	0.6	2.29	0.53
12/21/2011	0830	GWJ	Pygmy	Fair	0.5	4.0	230	1.53	1.41	4.7	0.7	3.31	0.43
01/25/2012	1320	GWJ	AA	Fair	15.5	7.5	180	1.93	6.50	10.4	1.2	12.52	0.52
02/23/2012	1220	GWJ	Pygmy	Fair	19.0	8.5	210	1.61	2.13	7.5	0.8	6.35	0.34
03/26/2012	1240	GWJ	AA	Good	13.5	8.0	163	2.09	11.98	15.8	0.9	14.35	0.83
04/26/2012	1010	GWJ	AA	Good	12.5	12.5	178	1.91	7.44	15.5	0.7	11.60	0.64
05/02/2012	0815	GWJ	AA	Good	10.0	10.0	188	1.81	5.61	15.4	0.7	10.09	0.56
06/08/2012	0935	GWJ	Pygmy	Fair	15.0	12.0	230	1.40	1.21	3.6	0.5	1.91	0.64
06/28/2012	0830	GWJ	Pygmy	Fair	13.0	11.5	258	1.22	0.48	3.2	0.4	1.29	0.37
07/24/2012	1400	GWJ	Pygmy	Poor	24.0	15.5	296	0.99	0.10	0.9	0.4	0.32	0.32

Table C-7 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: San Clemente Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
08/16/2012	1015	GWJ	Flume	Good	19.5	13.0	330	0.82	0.01	--	--	--	--
09/21/2012	1200	GWJ	Flume	Good	22.0	12.0	340	0.85	0.02	--	--	--	--
10/30/2012	1250	GWJ	Pygmy	Good	23.5	11.5	362	0.94	0.02	--	--	--	--
11/26/2012	1350	GWJ	Pygmy	Poor	16.0	8.0	356	1.11	0.14	1.1	0.4	0.49	0.28
12/07/2012	1105	GWJ	AA	Good	10.0	9.0	185	1.95	7.66	15.6	0.8	12.07	0.63
01/02/2013	1400	GWJ	AA	Good	16.0	7.0	140	2.30	18.13	17.0	1.1	18.15	1.00
02/21/2013	1245	GWJ	AA	Good	11.5	7.5	180	1.83	5.57	14.4	0.7	10.04	0.55
04/20/2013	1455	GWJ	Pygmy	Fair	24.0	13.0	224	1.47	1.62	7.7	0.8	5.99	0.27
05/24/2013	1300	GWJ	Pygmy	Fair	16.0	11.5	250	1.25	0.52	3.3	0.5	1.50	0.34
06/24/2013	1145	GWJ	Flume	Good	19.0	15.0	288	1.06	0.22	--	--	--	--
07/25/2013	1245	GWJ	Flume	na	24.0	15.5	331	0.77	No Flow	--	--	--	--
08/27/2013	1145	GWJ	na	na	25.0	14.0	343	--	No Flow	--	--	--	--
09/26/2013	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-8

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Sleepy Hollow Weir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/02/2008	1430	GWJ	AA	Fair	23.0	17.0	361	1.50	5.36	8.6	1.1	9.54	0.56
11/04/2008	1255	GWJ	AA	Fair	14.0	12.0	370	1.53	5.83	8.6	1.2	10.29	0.57
12/01/2008	1445	GWJ	AA	Fair	16.5	9.5	380	1.53	5.84	8.6	1.2	9.96	0.59
01/06/2009	1105	GWJ	AA	Fair	10.0	6.0	337	1.69	9.73	8.9	1.3	11.67	0.83
02/04/2009	0900	GWJ	AA	Good	9.0	6.0	303	1.99	21.25	28.7	1.1	32.34	0.66
02/27/2009	1305	GWJ	AA	Good	19.0	9.0	184	3.29	220.38	39.8	2.4	95.57	2.31
03/17/2009	1355	GWJ	AA	Good	23.0	12.0	214	2.98	160.79	38.5	2.2	83.43	1.93
04/22/2009	1405	GWJ	AA	Good	23.0	16.5	246	2.37	56.81	32.9	1.6	51.46	1.10
06/03/2009	1330	GWJ	AA	Good	22.0	18.0	275	2.13	31.27	32.2	1.2	38.91	0.80
07/03/2009	1440	GWJ	AA	Good	25.0	19.5	300	1.83	12.70	27.4	1.0	26.59	0.48
08/05/2009	0940	GWJ	AA	Fair	19.0	17.5	292	1.67	9.47	9.5	1.3	12.34	0.77
09/03/2009	1125	GWJ	AA	Fair	27.0	19.0	300	1.61	8.20	9.3	1.3	11.88	0.69
10/02/2009	1145	GWJ	AA	Fair	23.0	14.0	306	1.60	7.84	9.3	1.3	12.09	0.65
11/03/2009	1135	GWJ	AA	Good	25.0	12.5	223	2.08	28.01	31.2	1.3	39.06	0.72
12/01/2009	1335	GWJ	AA	Good	18.0	8.0	241	1.98	20.26	30.2	1.1	34.62	0.59
01/04/2010	1215	GWJ	AA	Good	17.0	7.5	225	2.23	41.60	30.4	1.5	44.54	0.93
02/03/2010	1410	GWJ	AA	Good	14.0	9.5	205	3.29	223.68	39.4	2.5	97.59	2.29
03/11/2010	1200	GWJ	AA	Good	--	--	--	3.66	340.27	51.6	2.4	125.99	2.70
04/28/2010	1515	GWJ	AA	Good	18.5	12.0	222	3.29	225.54	38.9	2.5	98.97	2.28
06/02/2010	0815	GWJ	AA	Good	13.0	14.0	253	2.55	78.12	33.7	1.8	60.49	1.29
06/16/2010	0805	GWJ	AA	Good	9.5	14.5	273	2.38	57.19	33.0	1.6	52.11	1.10
07/02/2010	0810	GWJ	AA	Good	10.5	15.5	276	2.20	36.64	30.3	1.4	42.78	0.86
08/03/2010	0750	GWJ	AA	Good	9.0	15.0	309	1.96	17.91	29.2	1.1	33.58	0.53
09/02/2010	0740	GWJ	AA	Fair	15.5	16.0	297	1.79	12.45	28.0	1.0	29.28	0.43
10/01/2010	1355	GWJ	AA	Good	26.0	16.0	310	1.91	16.01	28.0	1.1	31.82	0.50

Table C-8 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Sleepy Hollow Weir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
11/02/2010	0800	GWJ	AA	Good	9.0	12.0	323	1.88	14.70	28.1	1.1	32.07	0.46
12/02/2010	1425	GWJ	AA	Fair	16.0	8.0	295	1.92	16.56	28.0	1.2	33.09	0.50
01/11/2011	1330	GWJ	AA	Fair	14.0	7.5	190	2.82	136.60	36.6	2.1	76.12	1.79
02/01/2011	1120	GWJ	AA	Good	16.0	8.0	220	2.41	65.34	32.4	1.7	56.48	1.16
03/08/2011	0930	GWJ	AA	Good	18.0	10.5	184	3.42	259.34	44.0	2.6	114.56	2.26
04/11/2011	1140	GWJ	AA	Good	16.0	10.0	207	3.35	244.18	44.5	2.4	106.52	2.29
05/02/2011	0920	GWJ	AA	Good	22.0	11.5	246	2.69	115.07	36.2	1.9	70.09	1.64
06/02/2011	0750	GWJ	AA	Good	6.5	11.5	272	2.42	67.53	32.7	1.7	54.49	1.24
07/05/2011	0810	GWJ	AA	Good	14.0	17.0	260	2.24	44.74	30.5	1.5	45.64	0.98
08/05/2011	0755	GWJ	AA	Good	11.5	16.0	276	2.02	23.23	27.7	1.3	35.77	0.65
09/06/2011	0900	GWJ	AA	Good	17.0	15.5	280	1.85	14.22	26.6	1.2	30.66	0.46
10/04/2011	0750	GWJ	AA	Good	14.5	15.0	277	1.96	18.46	26.6	1.2	32.75	0.56
11/02/2011	0800	GWJ	AA	Good	6.0	11.5	267	1.98	19.80	27.2	1.3	34.10	0.58
12/02/2011	0800	GWJ	AA	Good	4.0	7.5	273	1.93	16.78	27.1	1.3	34.14	0.49
01/03/2012	0800	GWJ	AA	Good	4.0	6.0	315	1.95	17.88	26.9	1.3	34.97	0.51
02/03/2012	0810	GWJ	AA	Good	3.0	6.5	266	2.13	34.35	28.8	1.5	42.97	0.80
03/05/2012	1100	GWJ	AA	Good	23.0	9.0	250	2.01	23.86	27.7	1.4	37.75	0.63
03/28/2012	1545	GWJ	AA	Good	18.0	11.0	200	2.93	150.77	36.4	2.3	82.89	1.82
05/02/2012	0950	GWJ	AA	Good	11.5	13.0	224	2.27	47.98	29.0	1.6	47.26	1.02
06/04/2012	0840	GWJ	AA	Good	14.5	15.0	245	1.91	16.72	27.3	1.2	32.94	0.51
07/03/2012	0810	GWJ	AA	Fair	13.0	17.0	288	1.70	9.80	11.4	1.3	14.30	0.69
08/02/2012	0940	GWJ	AA	Fair	18.0	16.0	277	1.62	8.16	11.3	1.2	13.99	0.58
09/04/2012	1325	GWJ	AA	Fair	26.0	17.0	290	1.52	6.31	10.5	1.2	12.62	0.50
10/02/2012	0810	GWJ	AA	Fair	16.0	15.0	308	1.50	5.81	10.4	1.2	12.46	0.47
11/02/2012	0800	GWJ	AA	Fair	8.0	12.0	346	1.46	5.33	9.4	1.2	11.69	0.46

Table C-8 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Sleepy Hollow Weir

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
12/07/2012	0855	GWJ	AA	Good	6.0	10.5	197	2.58	92.21	33.3	1.9	61.86	1.49
01/17/2013	0825	GWJ	AA	Good	3.0	5.0	195	2.56	90.76	34.1	1.8	62.19	1.46
02/13/2013	1030	GWJ	AA	Good	15.0	6.5	220	2.25	46.80	29.9	1.6	47.48	0.99
04/02/2013	0955	GWJ	AA	Good	13.0	12.5	249	2.11	30.18	28.5	1.4	41.27	0.73
06/03/2013	1100	GWJ	AA	Fair	16.0	15.5	289	1.63	8.19	10.9	1.3	14.17	0.58
07/02/2013	1025	GWJ	AA	Fair	24.0	18.5	320	1.59	7.48	10.8	1.3	13.91	0.54
08/02/2013	1030	GWJ	AA	Fair	16.0	16.0	321	1.40	3.72	15.2	0.8	11.47	0.32
09/04/2013	1250	GWJ	AA	Fair	24.0	17.5	316	1.43	3.91	15.2	0.8	12.16	0.32

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-9

DISCHARGE MEASUREMENT SUMMARY

SITE: Tularcitos Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/30/2008	1445	GWJ	Flume	Good	19.5	10.5	1870	3.16	0.17	--	--	--	--
11/20/2008	1345	GWJ	Pygmy	Fair	16.0	10.0	1770	3.22	0.34	3.9	0.4	1.54	0.22
12/16/2008	1445	GWJ	Pygmy	Fair	8.5	5.5	1610	3.30	1.08	4.0	0.5	2.09	0.52
01/13/2009	1515	GWJ	Pygmy	Fair	18.0	6.5	1710	3.34	0.62	4.0	0.5	1.97	0.31
02/11/2009	1300	GWJ	Pygmy	Fair	11.5	7.0	1712	3.31	0.79	3.9	0.5	2.08	0.38
02/17/2009	1335	GWJ	AA	Fair	10.0	8.0	1070	3.65	7.99	9.2	0.6	5.74	1.39
03/26/2009	0910	GWJ	Pygmy	Fair	11.0	10.0	1660	3.30	1.16	5.2	0.4	2.20	0.53
04/30/2009	1400	GWJ	Pygmy	Fair	21.0	11.5	1660	3.27	0.72	3.3	0.5	1.77	0.41
06/18/2009	1325	GWJ	Pygmy	Poor	29.0	16.5	1800	3.17	0.25	1.4	0.4	0.62	0.40
08/17/2009	1100	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/26/2009	1400	GWJ	Pygmy	Poor	23.5	13.0	2070	3.19	0.14	2.0	0.2	0.43	0.33
12/01/2009	1505	GWJ	Pygmy	Fair	15.0	8.0	1860	3.24	0.38	2.1	0.3	0.61	0.63
12/21/2009	1250	GWJ	Pygmy	Fair	16.0	10.0	1850	3.30	0.44	4.1	0.4	1.79	0.25
01/26/2010	1500	GWJ	Pygmy	Good	15.0	10.5	1570	3.39	2.17	6.2	0.6	3.62	0.60
02/17/2010	1330	GWJ	Pygmy	Good	23.0	11.0	1730	3.33	1.33	6.2	0.5	3.13	0.42
02/24/2010	1345	GWJ	AA	Fair	19.0	13.0	980	3.62	7.19	7.2	0.8	6.04	1.19
03/03/2010	1535	GWJ	AA	Fair	11.5	10.0	602	4.09	29.23	9.2	1.4	12.58	2.32
03/25/2010	1245	GWJ	Pygmy	Good	18.0	11.0	1455	3.40	2.46	6.2	0.6	3.78	0.65
04/23/2010	1200	GWJ	AA	Fair	17.5	10.0	1053	3.57	5.91	7.5	0.7	5.54	1.07
05/27/2010	1430	GWJ	Pygmy	Fair	15.0	12.0	1493	3.39	1.46	6.1	0.5	3.34	0.44
06/21/2010	1420	GWJ	Pygmy	Fair	21.0	14.5	1663	3.30	0.57	3.7	0.4	1.39	0.41
07/21/2010	1400	GWJ	Pygmy	Poor	20.5	15.0	1790	3.27	0.26	1.8	0.3	0.46	0.55
09/21/2010	1345	GWJ	Pygmy	Poor	22.5	13.0	1885	3.22	0.11	1.5	0.2	0.31	0.36
10/26/2010	1400	GWJ	Pygmy	Poor	18.0	11.0	1820	3.26	0.27	2.2	0.3	0.59	0.46
11/30/2010	1415	GWJ	Pygmy	Fair	15.5	6.0	1730	3.32	0.50	2.6	0.3	0.77	0.64

Table C-9 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Tularcitos Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/02/2011	1335	GWJ	Pygmy	Fair	12.0	9.5	1255	3.59	3.38	6.8	0.8	5.17	0.65
01/24/2011	1345	GWJ	Pygmy	Fair	20.0	8.0	1640	3.38	0.96	6.5	0.5	3.32	0.29
02/28/2011	1455	GWJ	AA	Fair	15.0	8.0	1285	3.52	2.81	7.0	0.6	4.36	0.64
03/20/2011	1515	GWJ	AA	Fair	11.5	9.5	400	4.51	55.20	12.0	1.5	17.71	3.12
04/11/2011	0905	GWJ	AA	Fair	12.5	8.0	1183	3.50	4.18	7.1	0.8	5.54	0.75
05/09/2011	1400	GWJ	Pygmy	Fair	17.5	13.0	1315	3.39	1.83	6.7	0.6	4.28	0.43
06/22/2011	1130	GWJ	Pygmy	Fair	22.5	15.0	1620	3.29	0.65	3.5	0.4	1.27	0.51
07/28/2011	1400	GWJ	Pygmy	Fair	23.0	16.0	1720	3.23	0.28	2.4	0.3	0.79	0.35
08/29/2011	1430	GWJ	Pygmy	Poor	22.5	14.0	1760	3.22	0.15	2.1	0.2	0.49	0.32
09/28/2011	1450	GWJ	Flume	Good	32.0	17.0	1830	3.18	0.03	--	--	--	--
11/02/2011	0930	GWJ	Pygmy	Poor	7.5	8.5	1438	3.29	0.32	2.2	0.3	0.67	0.48
12/07/2011	1335	GWJ	Pygmy	Fair	15.0	4.5	--	3.40	0.69	3.1	0.4	1.21	0.57
01/31/2012	1710	GWJ	Pygmy	Fair	15.5	10.0	1535	3.43	1.04	3.8	0.4	1.49	0.70
02/28/2012	1000	GWJ	Pygmy	Fair	11.0	8.0	1534	3.42	0.97	3.5	0.4	1.41	0.69
04/10/2012	1205	GWJ	Pygmy	Fair	12.0	9.5	1490	3.42	1.06	3.8	0.4	1.42	0.75
05/31/2012	1120	GWJ	Pygmy	Fair	22.0	12.0	1557	3.32	0.53	3.5	0.3	1.08	0.49
06/28/2012	1045	GWJ	Pygmy	Fair	21.0	12.0	1674	3.20	0.09	1.1	0.2	0.21	0.43
08/07/2012	1335	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/25/2012	1250	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/02/2012	0920	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/29/2012	1420	GWJ	Pygmy	Poor	22.5	12.5	1810	3.25	0.15	2.2	0.3	0.58	0.26
11/26/2012	1525	GWJ	Pygmy	Fair	15.5	9.0	1694	3.33	0.36	2.5	0.3	0.66	0.55
12/17/2012	1355	GWJ	Pygmy	Fair	16.5	10.0	1716	3.39	0.61	3.2	0.3	1.09	0.56
02/11/2013	1420	GWJ	Pygmy	Fair	15.0	7.0	1560	3.42	0.95	3.7	0.4	1.42	0.67
04/02/2013	1150	GWJ	Pygmy	Fair	17.0	11.5	1560	3.39	0.80	3.6	0.4	1.29	0.62

Table C-9 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Tularcitos Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
05/13/2013	1230	GWJ	Pygmy	Fair	21.0	13.5	1707	3.25	0.19	2.2	0.3	0.55	0.35
06/13/2013	1125	GWJ	Estimate	na	--	--	--	3.08	0.01	--	--	--	--
06/20/2013	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/09/2013	1510	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/06/2013	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/06/2013	1530	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

DISCHARGE MEASUREMENT SUMMARY

SITE: Hitchcock Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/20/2008	1350	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/06/2008	1145	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/08/2008	1250	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/09/2009	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/15/2009	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/16/2009	1425	GWJ	AA	Fair	13.0	8.0	315	3.13	7.38	6.3	0.8	5.06	1.46
02/20/2009	1115	GWJ	Pygmy	Fair	13.5	7.0	572	2.58	0.80	4.3	0.5	2.09	0.38
03/05/2009	1230	GWJ	AA	Fair	11.0	10.0	293	2.98	5.96	6.0	0.7	4.09	1.46
03/18/2009	1135	GWJ	Pygmy	Poor	20.5	11.0	600	2.45	0.13	1.6	0.4	0.58	0.23
07/07/2009	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/29/2009	1120	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/16/2009	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/14/2009	1605	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/21/2009	1325	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/19/2010	1535	GWJ	AA	Fair	12.5	10.0	273	3.14	11.39	7.4	0.7	5.42	2.10
01/27/2010	1005	GWJ	Pygmy	Fair	12.0	9.0	410	2.54	1.95	4.3	0.6	2.45	0.79
02/04/2010	0900	GWJ	Pygmy	Poor	11.0	8.0	559	2.34	0.27	1.5	0.3	0.43	0.61
02/12/2010	1025	GWJ	Pygmy	Fair	15.0	9.0	431	2.48	1.20	4.0	0.5	2.07	0.58
03/01/2010	1445	GWJ	AA	Fair	16.0	11.5	287	2.72	4.97	6.4	0.7	4.22	1.18
03/18/2010	1415	GWJ	Pygmy	Fair	23.0	13.0	406	2.48	1.23	3.7	0.5	1.82	0.67
04/16/2010	1330	GWJ	Pygmy	Fair	21.0	12.0	422	2.46	1.09	3.6	0.5	1.66	0.65
05/18/2010	1540	GWJ	Pygmy	Poor	20.0	18.0	584	2.18	0.01	0.4	0.1	0.05	0.28
06/09/2010	1310	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/02/2010	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/02/2010	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

Table C-10 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Hitchcock Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
09/07/2010	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/11/2010	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/02/2010	0915	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/22/2010	1200	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/02/2011	1245	GWJ	AA	Fair	11.0	9.0	291	2.86	7.11	5.9	0.8	4.57	1.56
02/22/2011	1515	GWJ	Pygmy	Fair	13.0	8.5	400	2.57	2.06	4.9	0.5	2.62	0.79
03/20/2011	1405	GWJ	AA	Fair	15.5	10.0	140	3.49	46.19	9.2	1.1	9.97	4.63
03/30/2011	1055	GWJ	Pygmy	Fair	16.0	9.5	311	2.69	4.68	6.2	0.7	4.48	1.04
04/08/2011	1050	GWJ	Pygmy	Fair	13.0	8.0	418	2.50	1.22	4.7	0.5	2.33	0.52
05/02/2011	1110	GWJ	Pygmy	Poor	21.5	11.5	572	2.27	0.05	0.8	0.2	0.18	0.30
05/16/2011	1415	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/22/2011	1555	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/14/2011	1115	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/26/2011	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/07/2011	1325	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/22/2012	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/18/2012	1430	GWJ	Pygmy	Poor	8.5	9.0	727	2.40	0.11	1.1	0.4	0.40	0.27
03/19/2012	1615	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
04/13/2012	0935	GWJ	Pygmy	Fair	12.5	9.5	630	2.59	1.83	4.5	0.9	4.17	0.44
04/17/2012	1125	GWJ	Pygmy	Poor	20.5	11.0	685	2.33	0.09	1.1	0.3	0.32	0.29
06/08/2012	1145	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/21/2012	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/22/2012	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/03/2012	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/28/2012	1445	GWJ	Pygmy	Fair	13.5	8.0	436	2.53	1.42	4.7	0.5	2.46	0.58

Table C-10 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Hitchcock Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/03/2013	1515	GWJ	Pygmy	Poor	15.5	7.0	595	2.40	0.27	1.5	0.3	0.39	0.68
02/21/2013	1425	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/13/2013	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
04/20/2013	1700	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/19/2013	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/06/2013	1420	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/30/2013	1250	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-11

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek near Lower Garzas Canyon

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/30/2008	1200	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/10/2008	1130	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/09/2009	1325	GWJ	Pygmy	Poor	9.0	5.5	510	2.00	0.05	0.5	0.2	0.12	0.41
01/29/2009	1150	GWJ	Pygmy	Fair	6.5	4.5	361	2.26	0.54	3.0	0.6	1.85	0.29
02/09/2009	1350	GWJ	Pygmy	Fair	8.0	7.0	302	2.38	0.87	3.7	0.6	2.10	0.41
03/20/2009	1420	GWJ	AA	Fair	19.0	13.0	178	2.75	6.55	13.8	1.0	14.47	0.45
04/06/2009	1300	GWJ	Pygmy	Fair	23.0	11.0	204	2.58	3.18	6.9	1.0	6.90	0.46
04/24/2009	1500	GWJ	Pygmy	Fair	18.0	13.5	234	2.43	1.33	3.6	0.6	2.01	0.66
05/06/2009	1520	GWJ	Pygmy	Fair	23.0	16.5	233	2.40	1.23	3.7	0.6	2.06	0.60
06/17/2009	1315	GWJ	Pygmy	Poor	24.0	17.0	273	2.15	0.30	2.2	0.3	0.77	0.39
07/06/2009	1310	GWJ	Flume	Good	21.5	16.0	321	1.99	0.05	--	--	--	--
07/27/2009	1240	GWJ	Flume	na	23.0	16.0	388	1.91	No Flow	--	--	--	--
08/14/2009	1205	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/27/2009	1345	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/21/2009	1325	GWJ	Pygmy	Fair	17.0	13.0	270	2.41	1.41	3.7	0.6	2.14	0.66
11/20/2009	1130	GWJ	Pygmy	Poor	16.0	7.5	330	2.08	0.09	1.8	0.3	0.47	0.19
12/31/2009	1435	GWJ	Pygmy	Fair	15.5	9.0	275	2.22	0.54	2.9	0.5	1.58	0.34
02/04/2010	1025	GWJ	AA	Fair	12.5	8.5	170	2.89	8.09	7.3	1.3	9.53	0.85
02/25/2010	1000	GWJ	AA	Fair	8.5	9.5	151	3.21	27.88	14.4	1.3	18.98	1.47
03/16/2010	1345	GWJ	AA	Fair	21.5	11.0	164	3.11	18.64	13.7	1.2	16.07	1.16
04/01/2010	1255	GWJ	AA	Fair	12.5	10.0	181	2.94	8.59	12.4	0.9	11.04	0.78
05/05/2010	0930	GWJ	AA	Fair	14.5	11.0	188	3.01	10.86	14.1	1.0	13.44	0.81
05/20/2010	1300	GWJ	AA	Fair	18.0	14.0	197	2.86	6.71	12.4	0.8	10.44	0.64
06/15/2010	1300	GWJ	AA	Fair	18.0	15.0	200	2.62	2.41	6.8	0.9	6.10	0.39
07/06/2010	1450	GWJ	Pygmy	Poor	21.5	18.0	249	2.38	0.43	2.3	0.2	0.50	0.87

Table C-11 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek near Lower Garzas Canyon

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
07/19/2010	1415	GWJ	Pygmy	Fair	19.5	17.0	246	2.45	0.74	3.3	0.3	1.09	0.69
08/16/2010	1100	GWJ	Pygmy	Fair	20.5	13.0	287	2.32	0.19	3.2	0.2	0.54	0.35
09/03/2010	1515	GWJ	Flume	Good	23.0	16.0	335	2.14	0.03	--	--	--	--
10/08/2010	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/07/2010	1035	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/14/2010	0930	GWJ	Pygmy	Fair	13.5	9.5	257	2.56	0.67	3.0	0.4	1.10	0.61
12/20/2010	1340	GWJ	AA	Fair	9.0	9.5	220	2.84	5.54	6.5	1.1	7.47	0.74
01/25/2011	1155	GWJ	AA	Fair	11.0	7.0	200	2.66	2.89	6.6	0.9	6.27	0.46
02/11/2011	1010	GWJ	Pygmy	Fair	6.0	5.5	219	2.59	1.83	5.0	0.7	3.51	0.52
03/22/2011	1425	GWJ	AA	Fair	15.0	9.5	125	3.50	59.98	21.4	1.6	34.81	1.72
04/01/2011	0900	GWJ	AA	Good	12.0	12.0	152	3.34	40.32	19.8	1.4	27.59	1.46
05/11/2011	0820	GWJ	AA	Fair	9.0	11.5	199	2.72	5.14	10.2	0.9	8.86	0.58
06/28/2011	1040	GWJ	Pygmy	Fair	19.5	14.5	207	2.51	2.12	6.7	0.8	5.65	0.38
07/15/2011	0905	GWJ	Pygmy	Fair	13.0	13.5	225	2.41	1.03	3.8	0.5	2.00	0.51
08/31/2011	1100	GWJ	Pygmy	Fair	15.5	13.5	242	2.34	0.46	3.1	0.3	1.04	0.45
09/30/2011	0950	GWJ	Flume	Good	16.0	15.0	283	2.16	0.01	--	--	--	--
10/27/2011	1335	GWJ	Pygmy	Fair	21.5	10.5	263	2.46	0.35	2.4	0.4	0.92	0.38
11/30/2011	1350	GWJ	Pygmy	Fair	15.0	8.0	229	2.62	0.33	2.4	0.4	0.97	0.34
12/21/2011	1440	GWJ	Pygmy	Fair	13.0	5.0	246	2.68	0.32	2.5	0.4	0.95	0.34
01/13/2012	1040	GWJ	Pygmy	Fair	3.5	4.5	215	2.81	1.20	6.0	0.8	4.71	0.25
02/12/2012	1100	GWJ	Pygmy	Fair	11.0	8.5	227	2.79	1.08	5.2	0.8	4.19	0.26
03/09/2012	1330	GWJ	Pygmy	Fair	22.5	9.0	231	2.76	1.04	5.1	0.8	4.17	0.25
03/20/2012	1155	GWJ	AA	Fair	16.0	9.5	200	2.83	6.97	10.9	1.0	10.61	0.66
04/25/2012	1550	GWJ	Pygmy	Fair	19.0	15.0	190	2.64	3.93	6.7	1.0	6.78	0.58
06/20/2012	1120	GWJ	Pygmy	Fair	22.0	13.5	271	2.25	0.22	2.4	0.2	0.56	0.38

Table C-11 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek near Lower Garzas Canyon

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
07/20/2012	1355	GWJ	Flume	Good	23.0	15.0	338	2.12	0.01	--	--	--	--
08/13/2012	1225	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/10/2012	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/05/2012	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/31/2012	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/07/2012	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/29/2012	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/31/2012	1335	GWJ	AA	Fair	6.5	6.0	155	3.10	13.72	15.2	1.0	15.35	0.89
01/18/2013	1235	GWJ	AA	Fair	12.5	5.5	172	2.76	5.27	11.0	0.8	9.29	0.57
03/01/2013	1220	GWJ	Pygmy	Fair	21.5	9.0	200	2.55	2.46	6.4	0.9	5.86	0.42
05/03/2013	1400	GWJ	Pygmy	Fair	30.0	16.0	290	2.29	0.22	2.5	0.3	0.70	0.32
05/28/2013	1410	GWJ	Pygmy	Poor	21.0	16.5	299	2.32	0.16	2.5	0.2	0.60	0.26
07/12/2013	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/09/2013	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/22/2013	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/27/2013	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-12

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek at Garzas Road

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/23/2008	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/20/2008	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/18/2008	1050	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/01/2009	1235	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/09/2009	1305	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/15/2009	1310	GWJ	AA	Poor	11.5	7.5	150	2.23	48.08	19.9	1.4	27.36	1.76
02/16/2009	1525	GWJ	AA	Fair	9.0	8.0	120	2.68	135.01	21.7	1.9	42.17	3.20
02/20/2009	1205	GWJ	AA	Good	16.0	7.0	142	1.95	19.62	16.7	0.9	14.81	1.33
03/05/2009	1330	GWJ	AA	Good	12.0	10.5	120	2.31	60.63	20.2	1.4	27.41	2.21
03/20/2009	1600	GWJ	AA	Fair	16.0	14.5	181	1.68	5.18	14.1	0.7	10.32	0.50
04/06/2009	1515	GWJ	Pygmy	Fair	21.0	14.0	--	1.50	1.91	5.7	0.6	3.69	0.52
04/22/2009	1240	GWJ	Pygmy	Fair	22.0	16.0	230	1.31	0.93	5.1	0.5	2.71	0.34
05/06/2009	1355	GWJ	Pygmy	Fair	25.0	20.0	240	1.08	0.55	3.2	0.5	1.68	0.33
05/11/2009	1520	GWJ	Pygmy	Poor	23.0	20.5	252	0.67	0.08	0.7	0.3	0.21	0.40
05/20/2009	1410	GWJ	Pygmy	Fair	19.5	17.0	236	1.21	0.95	5.1	0.6	3.10	0.31
05/29/2009	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/03/2009	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/07/2009	1015	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/05/2009	0835	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/03/2009	1245	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/06/2009	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/02/2009	1540	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/07/2009	1435	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/04/2010	1050	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/11/2010	1355	GWJ	Pygmy	Poor	17.5	10.0	250	1.04	0.16	0.9	0.3	0.24	0.67

Table C-12 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek at Garzas Road

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/20/2010	1230	GWJ	AA	Fair	13.5	9.5	97	4.26	527.49	31.7	3.2	101.39	5.20
01/25/2010	1205	GWJ	AA	Fair	15.0	9.0	131	1.92	22.88	18.6	1.3	23.59	0.97
02/12/2010	1135	GWJ	AA	Fair	17.0	9.5	162	1.72	13.49	15.0	1.2	17.35	0.78
02/24/2010	1545	GWJ	AA	Fair	17.0	12.0	150	2.25	47.30	17.2	1.6	28.04	1.69
03/16/2010	1500	GWJ	AA	Fair	24.0	12.5	164	1.78	16.98	13.6	1.2	16.72	1.02
04/01/2010	1420	GWJ	AA	Fair	14.0	11.0	185	1.54	8.11	13.4	1.0	13.03	0.62
05/05/2010	1055	GWJ	AA	Fair	15.0	12.0	188	1.60	10.85	13.2	1.1	14.13	0.77
05/18/2010	1425	GWJ	AA	Fair	17.5	15.0	196	1.47	6.14	12.8	0.9	11.66	0.53
06/08/2010	1030	GWJ	AA	Fair	18.0	15.0	210	1.31	3.01	9.0	0.7	6.18	0.49
06/15/2010	1520	GWJ	AA	Fair	15.5	18.0	218	1.17	1.29	5.5	0.7	3.65	0.35
07/02/2010	1020	GWJ	Pygmy	Poor	16.5	13.0	226	1.01	0.56	2.7	0.3	0.93	0.60
07/06/2010	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/08/2010	1025	GWJ	Pygmy	Poor	18.0	15.0	240	0.78	0.08	0.8	0.2	0.19	0.43
07/14/2010	2000	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/16/2010	1515	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/06/2010	1450	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/31/2010	1410	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/05/2010	1155	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/02/2010	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/16/2010	1140	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/20/2010	1150	GWJ	AA	Fair	10.0	9.5	239	1.33	2.23	8.3	0.9	7.09	0.31
12/29/2010	1420	GWJ	AA	Fair	8.5	9.0	159	2.32	62.76	21.0	1.6	32.84	1.91
01/25/2011	1255	GWJ	Pygmy	Fair	19.5	8.5	202	1.21	1.44	6.9	0.6	4.07	0.35
02/11/2011	1120	GWJ	Pygmy	Fair	16.0	5.5	219	1.15	0.79	3.1	0.4	1.21	0.65
02/18/2011	0820	GWJ	AA	Good	7.0	8.0	--	2.38	68.50	21.1	1.5	32.46	2.11

Table C-12 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek at Garzas Road

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
03/21/2011	1340	GWJ	AA	Fair	12.5	9.5	114	2.55	92.19	21.2	1.6	34.28	2.69
04/01/2011	1125	GWJ	AA	Good	25.0	13.0	151	2.02	39.71	17.2	1.4	24.29	1.63
05/10/2011	1420	GWJ	AA	Fair	16.0	14.0	200	1.27	4.60	9.3	0.8	7.78	0.59
06/28/2011	1200	GWJ	Pygmy	Fair	17.0	15.5	215	1.00	1.10	6.7	0.5	3.15	0.35
07/15/2011	1125	GWJ	Pygmy	Fair	17.5	15.0	228	0.75	0.29	3.7	0.4	1.31	0.22
08/12/2011	1345	GWJ	Pygmy	Fair	19.0	17.5	236	0.81	0.38	3.8	0.4	1.48	0.26
08/19/2011	1415	GWJ	Pygmy	Poor	19.0	19.0	247	0.68	0.15	1.2	0.3	0.39	0.39
08/31/2011	1215	GWJ	Pygmy	Poor	19.0	16.5	255	0.61	0.06	1.2	0.2	0.29	0.22
09/08/2011	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/30/2011	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/05/2011	1415	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/02/2011	1030	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/21/2011	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/03/2012	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/24/2012	1630	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/27/2012	1200	GWJ	Pygmy	Poor	17.0	9.0	225	1.05	0.13	1.1	0.3	0.32	0.42
01/31/2012	1620	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/07/2012	0820	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/14/2012	1500	GWJ	Pygmy	Poor	17.0	10.5	217	1.31	0.29	1.6	0.2	0.36	0.82
02/21/2012	1310	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/28/2012	1110	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/12/2012	1455	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/18/2012	1315	GWJ	AA	Fair	9.0	8.5	192	1.74	17.60	13.8	1.1	15.11	1.16
04/10/2012	1300	GWJ	Pygmy	Fair	12.5	10.0	214	1.09	1.36	4.6	0.5	2.51	0.54
04/13/2012	1045	GWJ	AA	Fair	11.0	10.0	156	2.26	53.12	19.1	1.8	34.49	1.54

Table C-12 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Garzas Creek at Garzas Road

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
04/25/2012	1040	GWJ	Pygmy	Good	16.0	13.5	200	1.26	3.29	6.0	0.7	4.41	0.75
05/14/2012	1205	GWJ	Pygmy	Fair	20.0	14.0	219	1.01	0.58	3.6	0.4	1.35	0.43
06/12/2012	1430	GWJ	Pygmy	Poor	20.5	21.0	253	0.61	0.04	0.5	0.2	0.09	0.45
06/14/2012	1420	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/18/2012	1450	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/14/2012	1540	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/11/2012	1405	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2012	1150	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/27/2012	1515	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/01/2012	1225	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/04/2012	1420	GWJ	AA	Good	15.0	11.5	182	1.54	10.59	13.0	1.1	13.90	0.76
12/31/2012	1535	GWJ	AA	Good	9.0	6.5	161	1.61	12.98	13.0	1.2	15.24	0.85
01/18/2013	1415	GWJ	AA	Fair	20.0	7.0	175	1.30	4.11	11.8	0.9	10.32	0.40
03/01/2013	1350	GWJ	Pygmy	Fair	23.0	11.5	216	1.04	1.31	5.0	0.6	3.05	0.43
04/02/2013	1425	GWJ	Pygmy	Fair	18.0	15.0	237	0.87	0.54	4.8	0.5	2.41	0.22
04/16/2013	1415	GWJ	Pygmy	Poor	17.0	14.0	245	0.69	0.13	1.1	0.3	0.28	0.48
04/23/2013	1950	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
05/31/2013	1310	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/27/2013	1520	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/23/2013	1410	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/06/2013	1510	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/06/2013	1605	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-13

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Don Juan Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/02/2008	1255	GWJ	AA	Fair	23.0	15.0	478	3.03	2.55	8.8	1.0	8.80	0.29
11/04/2008	1425	GWJ	AA	Fair	12.0	13.0	476	3.11	3.09	8.5	1.1	8.99	0.34
12/02/2008	1315	GWJ	AA	Fair	17.0	12.0	465	3.19	4.94	8.5	1.2	9.94	0.50
01/06/2009	1245	GWJ	AA	Good	13.0	10.5	467	3.35	9.56	22.9	0.8	17.56	0.54
01/27/2009	1355	GWJ	AA	Good	15.0	9.0	398	3.70	34.52	30.4	0.9	28.42	1.21
02/04/2009	1145	GWJ	AA	Good	15.5	9.0	415	3.52	22.39	28.2	0.8	23.19	0.97
02/20/2009	0900	GWJ	AA	Good	5.5	7.0	220	5.54	328.59	69.3	1.8	127.20	2.58
03/03/2009	1315	GWJ	AA	Fair	14.0	9.5	165	7.26	1125.73	65.0	5.2	334.95	3.36
03/10/2009	1045	GWJ	AA	Good	13.5	9.0	203	5.57	354.31	70.1	1.9	133.74	2.65
03/18/2009	1225	GWJ	AA	Good	21.0	11.0	238	4.68	170.80	39.0	1.6	61.00	2.80
04/03/2009	1445	GWJ	AA	Good	15.5	13.5	285	4.13	89.96	34.3	1.3	44.27	2.03
04/27/2009	1045	GWJ	AA	Good	12.5	12.0	302	3.82	51.17	31.2	1.0	32.46	1.58
05/29/2009	1110	GWJ	AA	Good	18.0	15.0	334	3.50	25.96	25.7	0.9	22.37	1.16
06/18/2009	1420	GWJ	AA	Fair	28.0	17.5	332	3.42	19.35	25.3	0.8	20.99	0.92
07/07/2009	1240	GWJ	AA	Good	21.5	15.5	375	3.24	11.57	16.1	1.0	15.94	0.73
07/20/2009	1245	GWJ	AA	Fair	21.0	16.5	373	3.61	11.51	16.1	1.0	15.57	0.74
07/21/2009	1055	GWJ	AA	Fair	18.0	16.0	371	3.25	11.53	16.0	1.0	15.69	0.74
08/05/2009	1115	GWJ	AA	Good	17.0	16.5	395	3.17	7.92	15.9	0.9	13.94	0.57
09/03/2009	1325	GWJ	AA	Fair	28.5	17.0	406	3.05	4.65	14.2	0.8	11.43	0.41
10/02/2009	1320	GWJ	AA	Fair	21.5	14.5	406	3.08	4.97	14.0	0.8	11.88	0.42
10/19/2009	1300	GWJ	AA	Good	18.0	14.5	250	4.03	76.66	33.9	1.3	42.69	1.80
11/03/2009	1310	GWJ	AA	Good	24.0	14.0	302	3.55	29.36	27.9	1.0	27.11	1.08
12/03/2009	0940	GWJ	AA	Good	8.0	9.0	331	3.44	20.65	26.1	0.9	24.64	0.84
12/14/2009	1415	GWJ	AA	Good	15.5	10.0	225	4.86	185.66	40.5	1.8	74.84	2.48
01/04/2010	0950	GWJ	AA	Good	12.0	9.0	289	3.76	45.36	30.0	1.1	32.25	1.41

Table C-13 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Don Juan Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/20/2010	1450	GWJ	AA	Fair	11.0	9.5	144	10.75	3429.70	79.0	8.9	702.30	4.88
01/28/2010	1105	GWJ	AA	Good	16.0	10.0	193	5.79	457.36	70.1	2.1	149.84	3.05
02/04/2010	1200	GWJ	AA	Good	15.0	9.5	226	4.81	228.39	40.5	2.0	80.23	2.85
02/18/2010	0920	GWJ	AA	Good	9.5	10.0	240	4.75	219.17	68.0	1.5	105.23	2.08
03/04/2010	1210	GWJ	AA	Fair	20.5	10.5	203	6.48	805.48	62.5	3.9	246.63	3.27
03/12/2010	1025	GWJ	AA	Good	14.0	9.0	226	5.42	337.44	68.7	1.9	127.92	2.64
03/22/2010	1220	GWJ	AA	Good	19.0	11.0	245	4.71	214.23	48.0	1.9	90.15	2.38
04/27/2010	0925	GWJ	AA	Good	14.0	12.0	243	4.97	256.57	53.0	1.9	100.15	2.56
05/11/2010	1005	GWJ	AA	Good	16.0	11.5	257	4.44	168.10	44.0	1.7	74.90	2.24
05/25/2010	1010	GWJ	AA	Good	16.0	12.0	270	4.04	105.63	33.3	1.4	46.43	2.28
06/24/2010	1050	GWJ	AA	Good	16.0	14.5	307	3.51	52.54	25.9	1.1	28.90	1.82
07/15/2010	0835	GWJ	AA	Good	17.5	16.0	320	3.24	32.66	33.2	1.1	35.25	0.93
07/30/2010	0850	GWJ	AA	Good	13.5	14.0	330	3.08	22.12	31.1	1.0	29.89	0.74
09/02/2010	0945	GWJ	AA	Good	24.0	15.0	351	2.80	10.50	27.2	0.8	22.42	0.47
10/05/2010	1035	GWJ	AA	Good	16.5	13.5	348	2.93	15.01	28.0	0.9	26.14	0.57
11/02/2010	1020	GWJ	AA	Good	16.5	12.0	360	2.92	13.99	27.4	0.9	25.35	0.55
12/03/2010	0745	GWJ	AA	Good	5.0	9.5	383	3.02	18.42	27.8	1.0	27.97	0.66
12/21/2010	0830	GWJ	AA	Good	4.5	9.0	233	5.09	271.66	68.8	1.7	116.10	2.34
01/03/2011	1340	GWJ	AA	Fair	14.0	9.0	151	6.49	806.55	64.0	4.1	260.40	3.10
01/10/2011	1150	GWJ	AA	Good	12.0	7.0	223	4.45	160.37	68.2	1.4	92.53	1.73
02/02/2011	1230	GWJ	AA	Good	15.0	9.0	276	3.69	69.22	38.8	1.3	49.49	1.40
02/15/2011	1240	GWJ	AA	Good	16.5	11.0	280	3.56	57.70	37.8	1.2	45.75	1.26
02/19/2011	1540	GWJ	AA	Good	9.5	8.0	173	6.80	959.54	65.0	4.5	293.75	3.27
03/03/2011	1200	GWJ	AA	Fair	19.0	10.0	194	5.63	403.50	69.4	2.0	137.81	2.93
03/14/2011	1400	GWJ	AA	Good	17.0	12.0	222	4.66	205.11	45.5	1.9	85.48	2.40

Table C-13 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Don Juan Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
03/24/2011	1410	GWJ	AA	Fair	15.0	9.0	152	7.66	1423.97	66.0	5.5	365.50	3.90
03/25/2011	1145	GWJ	AA	Fair	14.0	9.0	120	9.42	2725.97	73.0	7.2	522.10	5.22
04/13/2011	1205	GWJ	AA	Good	14.0	10.5	235	4.70	248.38	62.5	1.5	94.19	2.64
04/27/2011	1230	GWJ	AA	Good	19.0	12.0	260	4.07	157.72	43.1	1.5	64.69	2.44
05/24/2011	0915	GWJ	AA	Good	14.0	12.0	295	3.60	94.49	42.7	1.2	49.47	1.91
06/24/2011	1125	GWJ	AA	Fair	16.0	15.0	288	3.28	60.23	37.5	1.0	37.08	1.62
07/13/2011	1505	GWJ	AA	Good	16.5	16.5	304	2.98	36.99	29.2	1.7	48.88	0.76
08/10/2011	0715	GWJ	AA	Good	10.0	14.5	328	2.68	20.31	28.2	1.4	39.45	0.51
09/13/2011	0945	GWJ	AA	Good	17.0	15.0	335	2.51	13.58	12.1	1.0	11.80	1.15
10/17/2011	0950	GWJ	AA	Good	16.5	14.0	322	2.67	17.39	12.3	1.1	12.92	1.35
11/02/2011	1110	GWJ	AA	Good	17.0	12.0	332	2.67	17.86	12.3	1.1	13.06	1.37
12/02/2011	1045	GWJ	AA	Good	15.0	9.0	335	2.67	17.85	20.0	0.9	18.93	0.94
01/03/2012	1005	GWJ	AA	Good	14.0	8.5	383	2.70	19.01	20.0	1.0	19.51	0.97
01/26/2012	1345	GWJ	AA	Good	18.0	10.5	275	3.55	76.96	28.9	1.8	51.35	1.50
02/28/2012	1230	GWJ	AA	Good	13.0	10.0	357	2.82	23.66	20.0	1.1	21.16	1.12
03/18/2012	1530	GWJ	AA	Good	10.5	10.0	270	4.00	133.22	29.9	2.1	62.19	2.14
04/14/2012	1040	GWJ	AA	Fair	10.0	10.0	236	4.43	195.32	34.5	2.2	76.01	2.57
05/03/2012	1315	GWJ	AA	Good	17.0	12.5	280	3.20	48.27	28.5	1.4	40.65	1.19
06/04/2012	1050	GWJ	AA	Good	15.0	14.0	321	2.65	17.28	19.8	0.9	18.76	0.92
06/11/2012	1125	GWJ	AA	Good	23.0	15.0	330	2.54	13.71	19.4	0.8	16.34	0.84
07/03/2012	1025	GWJ	AA	Good	18.5	15.0	346	2.37	8.77	11.4	0.9	9.84	0.89
08/02/2012	1110	GWJ	AA	Good	20.0	14.5	355	2.22	5.52	16.6	0.7	10.96	0.50
09/05/2012	1335	GWJ	AA	Fair	19.0	14.5	370	2.14	4.32	15.9	0.7	10.36	0.42
09/19/2012	0945	GWJ	AA	Fair	14.0	13.0	385	2.12	3.82	14.9	0.6	9.32	0.41
10/02/2012	1045	GWJ	AA	Fair	22.5	14.5	387	2.11	3.69	10.6	0.7	7.44	0.50

Table C-13 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Don Juan Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
11/02/2012	0940	GWJ	AA	Fair	12.0	12.5	400	2.05	2.81	15.1	0.6	8.99	0.31
11/08/2012	1345	GWJ	AA	Fair	15.0	13.5	391	2.02	2.75	15.2	0.6	9.12	0.30
12/04/2012	0945	GWJ	AA	Good	10.0	11.0	210	4.81	270.56	69.4	1.7	120.58	2.24
12/29/2012	1320	GWJ	AA	Good	12.0	9.0	180	5.04	302.47	69.6	1.8	126.41	2.39
01/17/2013	1245	GWJ	AA	Good	20.0	7.0	230	3.75	102.18	27.3	1.6	42.84	2.39
02/14/2013	0940	GWJ	AA	Good	11.0	7.5	272	3.20	49.68	25.0	1.3	32.48	1.53
04/02/2013	1300	GWJ	AA	Good	17.0	13.5	315	2.93	31.59	24.9	1.1	28.53	1.11
04/22/2013	1230	GWJ	AA	Good	23.0	14.0	328	2.66	18.57	23.9	1.0	23.33	0.80
06/13/2013	1350	GWJ	AA	Fair	20.0	15.0	365	2.21	5.22	15.3	0.7	10.97	0.48
07/02/2013	1245	GWJ	AA	Fair	23.0	16.0	375	2.20	4.62	15.1	0.7	10.24	0.45
08/02/2013	1305	GWJ	AA	Fair	17.5	15.0	392	2.00	2.04	7.4	0.7	4.85	0.42
09/13/2013	1010	GWJ	AA	Fair	17.0	15.0	415	2.04	1.78	8.0	0.6	5.11	0.35

DISCHARGE MEASUREMENT SUMMARY

SITE: Robinson Canyon Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/20/2008	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/20/2008	1500	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/08/2008	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2009	1340	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/27/2009	1325	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/10/2009	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/16/2009	1255	GWJ	AA	Fair	7.0	8.0	172	3.05	24.89	12.8	1.1	14.62	1.70
02/20/2009	1325	GWJ	Pygmy	Fair	20.5	7.5	314	2.35	1.84	4.7	0.7	3.18	0.58
03/06/2009	1500	GWJ	AA	Fair	16.0	10.5	210	2.56	6.01	7.2	0.8	5.61	1.07
03/18/2009	1350	GWJ	Pygmy	Poor	22.5	12.0	385	2.23	0.58	2.3	0.4	0.93	0.62
05/13/2009	1240	GWJ	Pygmy	Poor	22.0	15.0	772	1.90	0.02	0.5	0.1	0.04	0.51
06/15/2009	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/27/2009	1120	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/21/2009	1000	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/06/2009	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/19/2009	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/08/2009	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2010	1350	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/23/2010	1300	GWJ	AA	Fair	14.0	8.5	185	2.58	9.82	7.2	0.8	5.45	1.80
01/27/2010	1140	GWJ	Pygmy	Fair	14.0	9.5	269	2.36	2.97	6.7	0.4	2.81	1.06
02/18/2010	0815	GWJ	Pygmy	Fair	7.5	8.5	350	2.22	0.81	3.9	0.3	1.26	0.64
03/01/2010	1330	GWJ	AA	Fair	13.5	10.0	231	2.47	5.92	7.3	0.7	4.86	1.22
03/02/2010	1415	GWJ	AA	Fair	12.5	10.5	122	3.34	46.74	13.2	1.2	15.94	2.93
03/19/2010	1515	GWJ	Pygmy	Fair	21.0	11.0	320	2.29	1.30	5.8	0.4	2.60	0.50
04/05/2010	1445	GWJ	AA	Fair	16.0	10.0	170	2.85	18.04	7.9	1.1	9.07	1.99

Table C-14 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Robinson Canyon Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
04/22/2010	1120	GWJ	AA	Fair	16.0	10.0	263	2.43	4.34	7.1	0.7	4.69	0.93
06/04/2010	1225	GWJ	Pygmy	Poor	22.5	16.0	570	2.11	0.11	1.6	0.2	0.26	0.41
06/30/2010	1320	GWJ	Flume	Good	19.0	15.5	680	1.92	0.04	--	--	--	--
08/06/2010	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/07/2010	1420	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/08/2010	1140	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/08/2010	1210	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/17/2010	1315	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/20/2010	1055	GWJ	Pygmy	Poor	12.5	9.0	580	2.02	0.09	1.1	0.2	0.23	0.37
01/06/2011	1115	GWJ	Pygmy	Fair	10.0	6.0	365	2.21	0.76	3.7	0.4	1.57	0.48
02/11/2011	1200	GWJ	Pygmy	Poor	19.0	6.0	628	1.96	0.02	0.4	0.1	0.06	0.40
02/18/2011	0950	GWJ	AA	Fair	8.0	8.0	167	3.03	25.73	12.6	1.1	13.53	1.90
03/04/2011	1345	GWJ	Pygmy	Fair	17.0	9.5	281	2.33	1.85	6.0	0.6	3.61	0.51
03/30/2011	1300	GWJ	AA	Fair	24.0	10.5	242	2.48	5.74	7.1	0.7	4.93	1.16
06/02/2011	1015	GWJ	Pygmy	Poor	14.0	9.5	540	2.08	0.14	1.5	0.3	0.42	0.33
06/17/2011	1045	GWJ	Pygmy	Poor	18.0	11.5	575	2.08	0.10	1.4	0.3	0.37	0.27
07/29/2011	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2011	1545	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/12/2011	1410	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/12/2012	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/19/2012	1140	GWJ	Pygmy	Poor	12.0	7.0	428	2.08	0.40	2.0	0.4	0.72	0.56
04/11/2012	1430	GWJ	Pygmy	Poor	16.0	11.0	543	2.03	0.14	1.9	0.3	0.50	0.29
04/13/2012	1200	GWJ	AA	Fair	12.0	9.0	180	2.50	5.86	7.1	0.7	5.20	1.13
04/27/2012	1325	GWJ	Pygmy	Poor	18.5	13.0	588	1.95	0.06	0.9	0.2	0.22	0.25
06/25/2012	1345	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

Table C-14 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Robinson Canyon Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
07/20/2012	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/09/2012	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/28/2012	1310	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/22/2012	1100	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/21/2012	1500	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/05/2012	1605	GWJ	Pygmy	Poor	17.0	12.0	500	2.08	0.18	2.3	0.3	0.76	0.24
12/28/2012	1340	GWJ	Pygmy	Fair	11.0	7.5	280	2.31	1.66	6.0	0.5	2.94	0.56
03/01/2013	1030	GWJ	Pygmy	Poor	19.0	7.5	560	2.00	0.08	0.7	0.3	0.20	0.42
06/21/2013	1500	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/30/2013	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-15

DISCHARGE MEASUREMENT SUMMARY

SITE: Potrero Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/20/2008	1410	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/20/2008	1505	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/08/2008	1215	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2009	1350	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/10/2009	1415	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/17/2009	1535	GWJ	AA	Good	10.0	8.0	140	1.75	23.07	11.4	0.9	9.92	2.33
02/20/2009	1420	GWJ	Pygmy	Fair	15.5	8.0	348	0.92	1.46	4.0	0.4	1.48	0.99
03/06/2009	1550	GWJ	AA	Fair	10.0	11.0	255	1.10	5.68	7.2	0.5	3.68	1.55
03/18/2009	1515	GWJ	Pygmy	Poor	20.0	14.0	575	0.76	0.18	1.7	0.2	0.33	0.53
03/26/2009	1040	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
04/02/2009	1440	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
05/27/2009	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/15/2009	1320	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/27/2009	1110	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/21/2009	0915	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/19/2009	1410	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/08/2009	1210	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2010	1320	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/22/2010	0830	GWJ	AA	Fair	10.0	8.5	124	1.67	29.64	11.9	1.0	12.44	2.38
01/27/2010	1235	GWJ	Pygmy	Fair	14.5	10.0	302	0.90	1.85	4.0	0.5	2.04	0.91
02/18/2010	1045	GWJ	Pygmy	Fair	11.0	9.5	491	0.74	0.40	2.6	0.3	0.69	0.58
03/01/2010	1225	GWJ	AA	Fair	14.5	10.0	255	1.04	4.31	5.6	0.6	3.25	1.33
03/19/2010	1430	GWJ	Pygmy	Fair	22.5	12.0	515	0.87	1.46	3.4	0.5	1.56	0.94
04/05/2010	1550	GWJ	AA	Fair	15.5	10.5	160	1.61	27.61	11.2	0.9	10.37	2.66
04/19/2010	1250	GWJ	Pygmy	Fair	16.0	12.0	408	0.96	2.60	5.7	0.6	3.37	0.77

Table C-15 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Potrero Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
06/04/2010	1145	GWJ	Pygmy	Poor	22.0	15.0	746	0.66	0.03	0.7	0.1	0.06	0.48
06/14/2010	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/04/2010	1230	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/07/2010	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/08/2010	1130	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/08/2010	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/17/2010	1325	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/06/2011	1025	GWJ	Pygmy	Fair	9.5	5.5	412	0.76	0.39	2.7	0.2	0.57	0.68
02/11/2011	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/17/2011	1605	GWJ	AA	Poor	11.0	8.5	190	1.84	39.65	10.7	1.3	13.82	2.87
02/18/2011	1110	GWJ	AA	Fair	9.0	8.0	140	1.63	29.25	11.8	1.1	12.66	2.31
02/23/2011	1255	GWJ	AA	Fair	10.0	9.0	317	0.98	2.90	6.1	0.6	3.81	0.76
03/03/2011	1430	GWJ	Pygmy	Fair	19.5	11.0	357	0.92	2.10	6.1	0.8	4.58	0.46
03/30/2011	1415	GWJ	AA	Fair	19.5	12.0	354	1.27	8.05	7.1	0.7	4.65	1.73
05/03/2011	1630	GWJ	Pygmy	Poor	12.5	15.0	707	0.78	0.30	2.2	0.3	0.58	0.53
06/17/2011	1140	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/29/2011	1250	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/13/2011	0915	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/01/2011	1500	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/30/2011	1245	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/22/2011	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/12/2012	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
03/18/2012	1150	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
04/13/2012	1250	GWJ	AA	Fair	10.0	9.0	188	1.33	7.82	8.6	0.6	5.10	1.53
04/20/2012	1130	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

Table C-15 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Potrero Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
06/25/2012	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/20/2012	1210	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/10/2012	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/28/2012	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/22/2012	1050	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/21/2012	1420	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/01/2012	1210	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/28/2012	1300	GWJ	Pygmy	Fair	8.5	7.0	265	0.88	0.77	3.0	0.3	0.80	0.96
03/08/2013	1345	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
06/21/2013	1540	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/20/2013	1200	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/30/2013	1205	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-16

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/29/2008	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/21/2008	0945	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
12/16/2008	1245	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
01/08/2009	1200	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
02/19/2009	1150	GWJ	AA	Fair	15.0	7.5	215	4.41	429.79	53.0	2.4	128.86	3.34
03/03/2009	1100	GWJ	AA	Fair	11.5	9.5	160	6.88	1230.51	72.0	4.3	312.00	3.94
03/04/2009	1050	GWJ	AA	Good	12.0	10.5	152	10.09	2353.76	82.0	7.2	588.50	4.00
03/10/2009	1500	GWJ	AA	Good	13.0	11.0	214	3.85	366.97	50.5	2.3	115.71	3.17
03/16/2009	1035	GWJ	AA	Good	18.0	12.0	252	3.14	200.13	39.9	2.0	78.01	2.57
04/03/2009	1315	GWJ	AA	Good	17.5	13.5	301	2.44	83.25	32.8	1.3	42.63	1.95
04/27/2009	1220	GWJ	AA	Good	13.5	13.5	338	2.09	44.45	32.2	1.0	32.68	1.36
05/12/2009	1325	GWJ	AA	Good	16.0	17.5	358	1.90	31.05	29.3	0.9	26.83	1.16
05/19/2009	1150	GWJ	AA	Good	17.0	16.0	365	1.79	23.83	27.9	0.8	23.59	1.01
05/29/2009	1255	GWJ	AA	Good	20.0	16.5	388	1.66	16.41	27.9	0.7	20.25	0.81
06/09/2009	1500	GWJ	AA	Fair	22.0	20.5	365	1.73	14.86	27.5	0.7	19.66	0.76
06/15/2009	1155	GWJ	AA	Fair	20.0	17.5	395	1.69	12.43	26.4	0.7	18.27	0.68
06/22/2009	1135	GWJ	AA	Fair	21.0	17.0	425	1.55	7.03	10.1	0.5	5.04	1.39
06/29/2009	1410	GWJ	Pygmy	Fair	22.0	20.0	475	1.24	2.76	7.2	0.4	2.82	0.98
07/07/2009	1415	GWJ	Pygmy	Fair	21.0	19.0	581	1.07	0.66	2.3	0.3	0.76	0.87
07/09/2009	1115	GWJ	Pygmy	Fair	17.0	16.5	545	1.05	0.66	2.7	0.3	0.83	0.80
07/16/2009	1120	GWJ	Pygmy	Poor	16.5	17.0	570	0.99	0.35	2.1	0.3	0.59	0.60
07/20/2009	1115	GWJ	Pygmy	Poor	18.0	16.0	558	0.96	0.21	1.7	0.2	0.37	0.56
07/27/2009	1100	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/29/2009	0950	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/28/2009	1145	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

Table C-16 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
09/25/2009	1400	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/19/2009	1455	GWJ	AA	Good	20.0	15.5	280	1.99	35.41	30.6	1.0	31.17	1.14
10/26/2009	1120	GWJ	AA	Good	17.5	13.5	305	1.85	15.77	19.0	0.9	17.26	0.91
10/28/2009	1200	GWJ	AA	Good	16.0	12.0	308	1.97	14.07	18.9	0.9	16.88	0.83
10/30/2009	1305	GWJ	AA	Fair	16.0	11.5	315	2.01	12.15	19.0	0.8	15.81	0.77
11/04/2009	0800	GWJ	AA	Fair	15.0	12.5	332	2.14	10.38	18.9	0.8	15.14	0.69
11/09/2009	1520	GWJ	AA	Fair	17.0	12.0	340	1.61	11.91	25.0	0.7	18.60	0.64
11/19/2009	1250	GWJ	AA	Fair	17.0	9.5	350	1.63	11.56	19.0	0.8	16.06	0.72
12/03/2009	0815	GWJ	AA	Fair	3.5	8.5	385	2.68	11.02	19.0	0.9	17.61	0.63
12/08/2009	1125	GWJ	AA	Fair	12.5	7.0	367	1.73	16.85	25.5	0.9	21.95	0.77
12/14/2009	0820	GWJ	AA	Fair	7.5	9.5	250	3.20	189.64	48.0	1.8	84.24	2.25
12/29/2009	1155	GWJ	AA	Good	14.0	9.0	314	2.09	41.50	39.7	0.9	36.32	1.14
01/04/2010	0815	GWJ	AA	Good	9.5	9.0	323	2.05	39.23	30.5	1.1	34.03	1.15
01/21/2010	1245	GWJ	AA	Fair	14.5	9.0	160	7.56	1597.45	73.0	5.3	387.35	4.12
01/28/2010	1315	GWJ	AA	Good	15.0	10.0	193	3.96	467.81	58.0	2.4	141.29	3.31
02/04/2010	1405	GWJ	AA	Good	14.5	10.0	240	3.01	241.36	41.0	2.0	79.96	3.02
02/18/2010	1130	GWJ	AA	Good	13.0	11.0	250	2.92	226.70	40.2	1.9	75.44	3.00
03/04/2010	1440	GWJ	AA	Good	18.0	10.5	181	4.96	813.99	66.5	3.1	204.03	3.99
03/12/2010	0830	GWJ	AA	Good	8.0	9.0	255	3.46	372.78	44.0	2.3	102.66	3.63
03/22/2010	1415	GWJ	AA	Good	15.0	12.0	274	2.82	218.49	40.1	1.9	75.31	2.90
04/27/2010	1145	GWJ	AA	Good	15.0	13.0	254	3.01	263.20	58.5	1.6	91.88	2.86
05/11/2010	0825	GWJ	AA	Good	10.0	11.5	288	2.54	166.63	37.4	1.7	62.28	2.68
05/25/2010	0820	GWJ	AA	Good	11.0	12.0	320	2.17	101.07	36.7	1.3	48.29	2.09
06/08/2010	0900	GWJ	AA	Good	14.5	16.0	335	1.94	66.27	42.1	0.8	35.65	1.86
06/24/2010	0915	GWJ	AA	Good	12.5	15.0	355	1.76	45.54	26.4	1.0	26.86	1.70

Table C-16 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
07/15/2010	1020	GWJ	AA	Good	20.0	17.0	384	1.52	22.03	22.7	0.8	19.27	1.14
07/28/2010	0745	GWJ	AA	Good	13.0	16.0	449	1.38	11.61	14.1	1.0	14.79	0.78
08/10/2010	1110	GWJ	AA	Fair	15.5	16.0	480	1.22	6.14	12.8	1.0	12.57	0.49
08/13/2010	1310	GWJ	AA	Fair	17.0	16.5	482	1.12	5.63	12.7	0.9	11.83	0.48
08/24/2010	0815	GWJ	Pygmy	Fair	17.0	16.0	560	0.96	1.19	4.4	0.5	2.09	0.57
08/30/2010	1405	GWJ	Pygmy	Poor	21.5	20.0	632	0.84	0.32	1.8	0.3	0.51	0.63
09/02/2010	1115	GWJ	Pygmy	Poor	22.5	19.0	636	0.82	0.22	1.4	0.3	0.36	0.62
09/13/2010	1030	GWJ	Pygmy	Poor	14.0	14.5	636	0.76	0.09	1.2	0.2	0.22	0.39
09/23/2010	0810	GWJ	Pygmy	Poor	13.0	12.0	627	0.71	0.02	0.4	0.1	0.05	0.39
09/27/2010	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/08/2010	1120	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/21/2010	1245	GWJ	Pygmy	Fair	19.0	14.5	602	0.88	0.90	3.9	0.5	2.03	0.44
10/29/2010	1105	GWJ	AA	Fair	18.0	12.0	485	1.05	3.94	7.0	0.7	5.12	0.77
11/17/2010	1200	GWJ	AA	Fair	18.0	11.0	482	1.24	6.58	9.1	1.0	9.25	0.71
11/22/2010	1215	GWJ	AA	Fair	12.5	10.5	417	1.60	11.69	23.2	0.9	21.58	0.54
11/29/2010	1425	GWJ	AA	Fair	13.0	9.0	435	1.29	12.74	23.1	1.0	21.98	0.58
12/09/2010	1350	GWJ	AA	Fair	17.0	12.5	424	2.10	18.00	23.1	1.1	26.56	0.68
12/17/2010	1420	GWJ	AA	Fair	16.0	11.5	427	1.38	17.99	15.7	1.3	20.23	0.89
12/21/2010	1040	GWJ	AA	Good	11.0	9.5	236	3.08	257.34	48.5	2.0	97.55	2.64
01/03/2011	1135	GWJ	AA	Fair	--	--	--	5.21	838.05	66.0	3.4	223.15	3.76
01/10/2011	0840	GWJ	AA	Good	2.5	7.0	250	2.70	181.60	46.0	1.6	73.03	2.49
01/17/2011	1010	GWJ	AA	Good	18.0	10.0	284	2.20	107.08	37.4	1.4	54.07	1.98
02/02/2011	1045	GWJ	AA	Good	13.0	8.0	307	1.78	65.05	36.2	1.1	40.67	1.60
02/15/2011	1445	GWJ	AA	Good	18.0	13.0	330	1.50	50.37	34.5	1.0	33.90	1.49
02/19/2011	1335	GWJ	AA	Good	--	--	--	5.67	1000.02	71.0	3.8	271.95	3.68

Table C-16 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
03/02/2011	1325	GWJ	AA	Good	20.0	11.0	202	3.67	415.82	49.9	2.4	119.87	3.47
03/14/2011	1010	GWJ	AA	Good	14.5	11.5	245	2.79	204.00	46.9	1.6	77.21	2.64
03/25/2011	0850	GWJ	AA	Fair	13.0	9.0	124	11.64	3667.43	93.0	8.5	789.50	4.65
03/31/2011	1415	GWJ	AA	Good	25.5	13.5	188	4.12	850.47	61.0	3.3	201.00	4.23
04/08/2011	1255	GWJ	AA	Good	11.5	10.5	240	2.72	395.72	51.0	2.2	113.58	3.48
04/27/2011	0800	GWJ	AA	Good	8.0	11.0	296	1.60	148.28	32.7	1.8	58.09	2.55
05/13/2011	0940	GWJ	AA	Good	13.5	12.5	317	1.20	91.79	31.0	1.5	45.38	2.02
05/24/2011	1100	GWJ	AA	Good	13.5	13.0	325	1.15	84.28	30.9	1.4	43.49	1.94
06/24/2011	1405	GWJ	AA	Good	15.5	16.0	330	0.90	54.24	30.4	1.2	35.58	1.52
07/13/2011	1230	GWJ	AA	Good	16.5	16.5	382	0.61	30.79	27.3	1.1	30.79	1.00
08/05/2011	0950	GWJ	AA	Good	16.0	16.0	429	0.19	15.42	29.2	0.7	19.24	0.80
08/18/2011	1340	GWJ	AA	Fair	17.0	16.5	505	-0.14	5.97	9.5	0.9	8.99	0.66
09/13/2011	0815	GWJ	AA	Fair	14.5	15.0	492	-0.22	4.33	8.3	0.8	7.04	0.62
09/29/2011	1125	GWJ	Pygmy	Fair	20.0	15.5	505	0.32	3.43	7.3	0.7	4.80	0.72
10/17/2011	1125	GWJ	AA	Fair	22.0	14.5	443	1.59	10.89	14.8	1.0	14.85	0.73
11/02/2011	1250	GWJ	AA	Fair	19.0	12.0	427	1.54	9.87	14.7	1.0	14.48	0.68
11/18/2011	1125	GWJ	AA	Good	14.0	11.5	406	2.39	13.61	16.0	1.1	18.35	0.74
11/30/2011	1040	GWJ	AA	Good	14.0	10.0	405	0.72	14.13	14.7	0.9	12.88	1.10
12/20/2011	1400	GWJ	AA	Good	14.0	9.5	446	2.89	14.62	17.6	1.0	17.75	0.82
01/03/2012	1150	GWJ	AA	Good	15.5	9.0	458	2.69	11.28	17.6	0.9	16.17	0.70
01/20/2012	1120	GWJ	AA	Good	14.0	10.0	440	0.57	12.80	14.8	0.9	12.71	1.01
01/23/2012	1250	GWJ	AA	Good	14.0	11.0	362	0.52	37.56	17.0	1.1	18.62	2.02
01/26/2012	1105	GWJ	AA	Good	18.0	10.0	300	0.82	62.98	30.4	1.2	35.05	1.80
02/22/2012	1420	GWJ	AA	Good	18.0	13.5	415	0.24	18.40	15.1	0.9	14.20	1.30
03/14/2012	1200	GWJ	AA	Good	17.5	13.5	428	1.19	13.42	14.5	0.9	13.03	1.03

Table C-16 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
03/19/2012	1300	GWJ	AA	Good	10.0	10.0	285	1.05	87.73	38.7	1.5	58.44	1.50
03/29/2012	0945	GWJ	AA	Good	13.0	11.0	250	1.41	134.04	40.3	1.8	71.03	1.89
04/14/2012	1235	GWJ	AA	Good	13.0	11.0	240	1.79	185.36	43.2	2.0	85.05	2.18
04/23/2012	0915	GWJ	AA	Good	14.5	14.5	--	0.96	76.32	37.4	1.5	54.70	1.40
05/03/2012	1135	GWJ	AA	Good	16.0	13.5	318	0.67	46.58	37.0	1.2	44.28	1.05
05/18/2012	1200	GWJ	AA	Good	14.5	15.5	382	0.33	21.50	35.7	0.9	32.56	0.66
06/04/2012	1220	GWJ	AA	Fair	13.0	15.0	441	0.93	13.32	13.3	0.9	11.97	1.11
06/11/2012	1315	GWJ	AA	Good	16.0	18.0	478	0.85	5.63	12.2	0.8	9.69	0.58
06/25/2012	1130	GWJ	Pygmy	Fair	19.0	16.0	573	-0.23	1.36	5.1	0.5	2.70	0.50
07/03/2012	1140	GWJ	Pygmy	Fair	16.5	16.0	614	-0.46	1.00	3.5	0.3	0.99	1.00
07/11/2012	1135	GWJ	Pygmy	Fair	16.5	15.5	604	-0.45	0.85	4.2	0.5	1.91	0.44
07/20/2012	1045	GWJ	Pygmy	Fair	20.0	17.0	608	-0.50	0.56	3.2	0.3	0.91	0.62
08/02/2012	1230	GWJ	Pygmy	Fair	15.0	16.0	610	-0.52	0.26	2.6	0.3	0.70	0.37
08/13/2012	1025	GWJ	Pygmy	Fair	14.0	15.5	596	-0.52	0.28	2.5	0.3	0.71	0.40
08/22/2012	1220	GWJ	Pygmy	Poor	16.0	16.0	613	-0.61	0.14	1.3	0.2	0.27	0.53
09/05/2012	1245	GWJ	Pygmy	Poor	19.0	15.0	665	-0.68	0.06	1.2	0.1	0.17	0.34
09/11/2012	1300	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/18/2012	1220	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/28/2012	1225	GWJ	Pygmy	Poor	18.0	14.5	675	-0.57	0.24	1.9	0.2	0.43	0.57
10/05/2012	1040	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
10/15/2012	1415	GWJ	Pygmy	Poor	18.5	16.0	740	-0.55	0.32	1.9	0.3	0.49	0.66
10/24/2012	1125	GWJ	Pygmy	Fair	16.5	13.5	656	-0.64	0.27	1.9	0.2	0.40	0.68
11/08/2012	1245	GWJ	Pygmy	Poor	18.0	13.0	580	-0.70	0.03	0.8	0.1	0.08	0.40
11/29/2012	1110	GWJ	Pygmy	Poor	17.0	12.5	530	-0.63	0.32	2.1	0.2	0.45	0.71
12/04/2012	1200	GWJ	AA	Good	14.0	11.5	202	1.95	229.76	46.5	2.1	96.08	2.39

Table C-16 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Carmel River at Highway 1 Bridge

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
12/17/2012	1200	GWJ	AA	Good	18.0	11.5	306	0.51	34.52	35.2	1.1	39.33	0.88
12/29/2012	1135	GWJ	AA	Good	11.5	8.5	184	2.40	304.27	48.0	2.2	107.46	2.83
01/17/2013	1440	GWJ	AA	Good	16.5	8.0	262	1.20	100.32	31.8	1.5	46.40	2.16
02/14/2013	1440	GWJ	AA	Good	16.0	11.0	318	0.68	44.33	30.5	1.0	30.11	1.47
03/14/2013	1335	GWJ	AA	Good	14.0	13.5	360	0.50	27.69	30.0	0.9	27.31	1.01
04/09/2013	1115	GWJ	AA	Good	18.0	13.0	378	0.29	17.08	20.5	0.9	18.38	0.93
04/15/2013	1330	GWJ	AA	Good	13.0	14.5	400	0.11	11.58	20.3	0.7	15.02	0.77
04/22/2013	1100	GWJ	AA	Fair	17.5	15.0	406	0.21	7.70	18.2	0.7	12.19	0.63
05/10/2013	1410	GWJ	Pygmy	Fair	16.0	18.0	530	-0.36	1.39	5.2	0.4	1.98	0.70
06/03/2013	1545	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
07/26/2013	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
08/19/2013	0930	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
09/20/2013	1330	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

DISCHARGE MEASUREMENT SUMMARY

SITE: San Jose Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/29/2008	1445	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--
11/21/2008	1100	GWJ	Flume	Fair	16.5	11.0	478	2.13	0.04	--	--	--	--
12/16/2008	1330	GWJ	Pygmy	Fair	9.0	7.0	368	2.30	0.79	4.3	0.5	2.10	0.37
01/22/2009	1145	GWJ	Pygmy	Fair	12.5	8.0	296	2.48	2.86	6.4	0.8	5.11	0.56
02/18/2009	1405	GWJ	AA	Fair	13.0	8.0	221	3.43	33.35	22.1	0.7	16.32	2.04
03/04/2009	1255	GWJ	AA	Fair	--	--	--	4.29	119.20	28.0	1.4	38.97	3.06
03/11/2009	1340	GWJ	AA	Fair	16.0	9.0	233	3.05	17.43	10.6	1.0	10.97	1.59
03/31/2009	1245	GWJ	AA	Fair	16.5	9.0	270	2.59	4.48	8.1	0.7	5.52	0.81
05/12/2009	1210	GWJ	Pygmy	Fair	19.0	11.5	296	2.37	1.70	5.5	0.5	2.66	0.64
06/29/2009	1215	GWJ	Pygmy	Fair	16.5	13.5	331	2.24	0.52	2.9	0.4	1.06	0.49
07/30/2009	1245	GWJ	Pygmy	Fair	23.0	14.0	353	2.21	0.31	2.7	0.3	0.92	0.34
08/28/2009	1305	GWJ	Flume	Good	23.0	16.0	371	2.08	0.04	--	--	--	--
10/09/2009	1405	GWJ	Flume	Good	15.0	13.0	370	1.98	0.01	--	--	--	--
10/30/2009	1205	GWJ	Pygmy	Fair	18.0	11.0	373	2.24	0.42	4.1	0.3	1.28	0.33
11/20/2009	0915	GWJ	Pygmy	Fair	13.5	8.0	358	2.24	0.37	2.9	0.4	1.17	0.32
12/29/2009	1045	GWJ	Pygmy	Fair	11.0	8.0	320	2.33	0.72	3.0	0.5	1.44	0.50
01/21/2010	1510	GWJ	AA	Fair	12.0	9.5	205	3.31	31.54	15.5	1.1	16.49	1.91
01/29/2010	0815	GWJ	AA	Fair	8.5	8.5	254	2.90	11.74	10.2	0.8	8.33	1.41
02/25/2010	1155	GWJ	AA	Fair	15.0	10.5	235	2.91	12.73	10.3	0.8	8.52	1.49
03/03/2010	1250	GWJ	AA	Fair	12.0	10.5	160	3.81	68.23	17.6	1.5	26.01	2.62
04/14/2010	1245	GWJ	AA	Fair	18.0	10.5	190	3.39	38.37	11.4	1.2	13.25	2.90
05/07/2010	1355	GWJ	AA	Fair	16.0	10.0	230	2.86	10.73	10.2	0.8	7.67	1.40
06/30/2010	1135	GWJ	Pygmy	Fair	16.0	12.0	274	2.43	2.26	4.3	0.5	2.13	1.06
07/30/2010	1255	GWJ	Pygmy	Fair	18.0	13.0	290	2.37	1.39	4.3	0.4	1.87	0.74
08/17/2010	1200	GWJ	Pygmy	Fair	17.0	12.0	300	2.32	1.11	4.4	0.4	1.82	0.61

Table C-17 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: San Jose Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
09/24/2010	1140	GWJ	Pygmy	Fair	27.0	13.0	314	2.26	0.56	3.3	0.4	1.30	0.43
10/25/2010	1150	GWJ	Pygmy	Fair	17.5	13.0	295	2.36	1.23	3.6	0.5	1.75	0.70
11/29/2010	1220	GWJ	Pygmy	Fair	15.5	7.0	291	2.34	0.91	3.6	0.5	1.62	0.56
01/06/2011	0905	GWJ	AA	Fair	8.0	7.0	257	2.72	7.16	9.8	0.7	6.70	1.07
02/11/2011	1310	GWJ	Pygmy	Fair	19.0	7.0	285	2.39	1.69	3.7	0.5	1.90	0.89
02/18/2011	1245	GWJ	AA	Fair	8.5	8.5	164	3.65	54.30	25.7	1.0	25.10	2.16
03/17/2011	1400	GWJ	AA	Fair	15.5	9.5	236	2.75	7.63	9.4	0.7	6.88	1.11
04/06/2011	1335	GWJ	AA	Fair	15.0	10.0	217	3.11	22.00	11.1	1.0	11.63	1.89
05/27/2011	1140	GWJ	AA	Fair	18.5	10.5	252	2.56	4.09	8.9	0.8	6.72	0.61
06/22/2011	1405	GWJ	AA	Fair	14.0	13.0	268	2.47	3.02	6.9	0.8	5.55	0.54
07/29/2011	1200	GWJ	Pygmy	Fair	16.0	13.5	280	2.35	1.69	6.9	0.7	4.78	0.35
08/31/2011	1530	GWJ	Pygmy	Fair	16.0	13.5	299	2.29	1.16	5.2	0.5	2.37	0.49
09/29/2011	1020	GWJ	Pygmy	Fair	17.5	12.5	300	2.21	0.63	5.1	0.4	1.95	0.32
10/17/2011	1310	GWJ	Pygmy	Fair	23.0	13.5	294	2.26	0.94	5.1	0.4	2.20	0.43
11/30/2011	1200	GWJ	Pygmy	Fair	17.0	9.0	272	2.30	1.03	5.1	0.4	2.28	0.45
12/22/2011	1015	GWJ	Pygmy	Fair	13.0	5.5	293	2.32	0.93	5.1	0.5	2.31	0.40
01/31/2012	1420	GWJ	Pygmy	Fair	12.0	9.0	288	2.31	1.37	5.1	0.5	2.56	0.53
02/27/2012	1340	GWJ	Pygmy	Fair	9.0	8.0	282	2.29	1.20	5.0	0.5	2.40	0.50
04/04/2012	1420	GWJ	Pygmy	Good	13.0	9.5	259	2.61	5.32	6.4	0.8	4.82	1.10
04/13/2012	1400	GWJ	AA	Fair	11.5	9.5	171	3.13	21.98	18.0	0.9	16.45	1.34
05/16/2012	1345	GWJ	Pygmy	Fair	14.0	11.5	274	2.41	2.25	5.8	0.5	3.05	0.74
06/28/2012	1220	GWJ	Pygmy	Fair	17.0	12.0	296	2.24	0.76	4.7	0.4	1.86	0.41
07/20/2012	1130	GWJ	Pygmy	Fair	15.5	13.5	308	2.22	0.55	3.7	0.4	1.41	0.39
08/27/2012	1245	GWJ	Pygmy	Fair	19.0	13.0	330	2.11	0.24	2.4	0.3	0.77	0.31
09/26/2012	1425	GWJ	Pygmy	Poor	14.0	12.5	340	2.07	0.15	1.1	0.3	0.33	0.46

Table C-17 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: San Jose Creek

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/31/2012	1210	GWJ	Pygmy	Poor	15.0	12.0	353	2.07	0.18	1.1	0.3	0.33	0.55
11/29/2012	1150	GWJ	Pygmy	Fair	17.0	11.0	305	2.26	0.75	3.1	0.4	1.38	0.54
12/05/2012	1500	GWJ	AA	Fair	18.0	12.0	286	2.59	5.30	7.2	0.8	5.57	0.95
12/14/2012	1220	GWJ	Pygmy	Fair	16.5	7.0	286	2.38	2.03	7.1	0.5	3.76	0.54
01/28/2013	1530	GWJ	AA	Fair	12.5	9.0	255	2.58	4.91	7.2	0.7	5.34	0.92
03/29/2013	1325	GWJ	Pygmy	Fair	15.0	10.5	285	2.33	1.63	5.2	0.5	2.79	0.59
04/30/2013	1115	GWJ	Pygmy	Fair	15.0	11.0	298	2.24	0.92	4.7	0.5	2.12	0.43
05/30/2013	1110	GWJ	Pygmy	Fair	15.5	11.5	308	2.19	0.63	4.1	0.4	1.76	0.36
06/27/2013	1410	GWJ	Pygmy	Poor	18.0	15.5	320	2.12	0.25	1.5	0.2	0.28	0.89
07/31/2013	1310	GWJ	Pygmy	Poor	16.5	13.0	340	2.00	0.06	0.9	0.1	0.12	0.49
08/27/2013	1430	GWJ	Flume	Good	19.0	13.5	337	1.94	0.01	--	--	--	--
09/24/2013	1430	GWJ	na	na	--	--	--	--	No Flow	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Table C-18

DISCHARGE MEASUREMENT SUMMARY

SITE: Arroyo Del Rey at Del Rey Oaks

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/17/2008	1220	GWJ	Flume	Good	22.5	9.5	1520	3.02	0.04	--	--	--	--
11/26/2008	1305	GWJ	AA	Fair	1.0	12.5	306	4.13	8.23	8.2	1.2	9.55	0.86
12/04/2008	1235	GWJ	Pygmy	Fair	11.0	8.5	983	3.02	0.26	1.9	0.3	0.54	0.47
12/15/2008	1040	GWJ	Pygmy	Fair	9.0	7.0	560	3.22	0.91	4.5	0.6	2.56	0.36
01/22/2009	0940	GWJ	AA	Fair	14.5	9.5	388	3.74	5.55	8.4	0.8	6.32	0.88
03/02/2009	1350	GWJ	AA	Fair	16.5	13.5	420	3.93	11.52	8.7	1.0	8.30	1.39
03/26/2009	1200	GWJ	Pygmy	Poor	14.5	13.5	1276	2.96	0.23	1.7	0.3	0.45	0.52
05/15/2009	1425	GWJ	Pygmy	Poor	15.0	16.0	1305	2.96	0.10	1.4	0.2	0.26	0.38
07/09/2009	1215	GWJ	Pygmy	Poor	22.0	15.5	1350	3.00	0.07	0.9	0.3	0.24	0.29
08/19/2009	1130	GWJ	Flume	Good	21.5	16.0	1314	3.02	0.06	--	--	--	--
10/12/2009	1325	GWJ	Flume	Good	20.0	13.0	1355	3.00	0.06	--	--	--	--
10/13/2009	1545	GWJ	AA	Fair	18.0	16.0	185	4.67	21.24	8.5	1.2	10.56	2.01
10/22/2009	1510	GWJ	Pygmy	Poor	18.0	15.0	1310	2.92	0.08	1.1	0.3	0.28	0.27
11/25/2009	1350	GWJ	Flume	Good	17.0	8.5	1280	2.94	0.08	--	--	--	--
01/13/2010	1345	GWJ	Pygmy	Fair	17.0	13.0	735	3.09	0.53	2.4	0.4	0.91	0.58
01/20/2010	0825	GWJ	AA	Fair	9.0	9.0	290	4.63	25.38	9.7	1.4	14.05	1.81
01/27/2010	1420	GWJ	Pygmy	Fair	13.5	11.0	630	3.52	3.20	5.8	0.7	4.20	0.76
02/24/2010	1015	GWJ	AA	Fair	17.5	11.5	490	4.58	32.53	10.5	1.4	14.51	2.24
03/12/2010	1235	GWJ	Pygmy	Fair	15.0	10.0	800	3.17	1.58	4.0	0.5	2.14	0.74
04/20/2010	1035	GWJ	AA	Fair	13.5	13.0	477	3.78	8.46	7.2	0.9	6.22	1.36
06/18/2010	1310	GWJ	Pygmy	Poor	15.5	14.0	1296	3.00	0.06	1.0	0.2	0.16	0.41
08/04/2010	1115	GWJ	Flume	Good	15.0	14.0	1300	3.01	0.04	--	--	--	--
09/30/2010	1305	GWJ	Flume	Good	18.0	14.0	1355	3.11	0.08	--	--	--	--
10/28/2010	1410	GWJ	Pygmy	Good	23.0	11.0	1112	3.10	0.08	--	--	--	--
12/17/2010	1055	GWJ	Pygmy	Poor	13.5	10.5	1203	2.99	0.22	1.4	0.3	0.41	0.54

Table C-18 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Arroyo Del Rey at Del Rey Oaks

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
01/17/2011	1210	GWJ	Pygmy	Poor	15.0	11.0	1301	2.98	0.18	0.8	0.3	0.25	0.72
01/31/2011	1110	GWJ	AA	Fair	14.0	8.0	812	3.30	3.02	6.9	0.6	4.40	0.69
02/14/2011	1300	GWJ	Pygmy	Poor	17.5	12.0	1280	2.98	0.16	1.0	0.3	0.29	0.56
02/18/2011	1410	GWJ	AA	Fair	11.5	9.5	350	4.22	24.70	8.3	1.3	10.71	2.31
03/20/2011	1150	GWJ	AA	Fair	15.0	10.5	367	4.95	54.94	9.9	1.7	17.11	3.21
04/06/2011	1505	GWJ	Pygmy	Fair	13.0	15.5	1102	3.02	0.54	2.3	0.4	0.89	0.60
04/29/2011	1415	GWJ	Pygmy	Poor	15.0	14.0	1250	2.97	0.10	1.1	0.2	0.26	0.38
05/31/2011	1445	GWJ	Pygmy	Poor	20.0	16.5	1152	2.96	0.10	0.8	0.3	0.24	0.41
07/25/2011	1305	GWJ	Pygmy	Poor	19.0	17.0	1180	3.04	0.15	1.3	0.4	0.53	0.29
08/30/2011	1350	GWJ	Pygmy	Poor	17.0	15.0	1420	3.10	0.06	0.9	0.2	0.21	0.26
09/29/2011	1355	GWJ	Flume	Good	20.0	15.5	1270	3.12	0.08	--	--	--	--
10/06/2011	1410	GWJ	AA	Fair	16.5	14.5	391	3.65	4.99	6.8	0.8	5.75	0.87
10/11/2011	1430	GWJ	Pygmy	Poor	18.0	17.5	841	2.96	0.11	1.2	0.2	0.28	0.37
11/22/2011	1235	GWJ	Pygmy	Poor	16.0	9.5	842	2.98	0.19	1.8	0.2	0.44	0.43
12/22/2011	1130	GWJ	Pygmy	Poor	13.5	5.0	1265	2.96	0.09	1.2	0.2	0.24	0.40
01/20/2012	1305	GWJ	Pygmy	Fair	15.0	10.0	1260	3.09	0.41	1.9	0.4	0.79	0.52
01/25/2012	1020	GWJ	Pygmy	Poor	14.0	8.0	1057	3.03	0.21	1.4	0.3	0.44	0.48
03/08/2012	1410	GWJ	Pygmy	Poor	18.0	10.0	1260	3.01	0.12	1.2	0.3	0.31	0.39
03/20/2012	1425	GWJ	Pygmy	Poor	15.5	12.0	1015	3.13	0.33	1.9	0.2	0.45	0.73
04/09/2012	1330	GWJ	Pygmy	Poor	19.5	12.5	1190	3.07	0.17	1.8	0.2	0.31	0.55
04/13/2012	1525	GWJ	AA	Fair	11.5	13.0	443	4.24	10.67	8.0	1.5	11.73	0.91
06/22/2012	1115	GWJ	Pygmy	Poor	19.5	14.5	1330	3.13	0.07	1.0	0.3	0.28	0.25
07/19/2012	1035	GWJ	Flume	Good	22.0	14.0	1287	3.10	0.06	--	--	--	--
08/30/2012	1350	GWJ	Flume	Good	20.5	14.0	1280	3.10	0.08	--	--	--	--
09/27/2012	1305	GWJ	Flume	Good	19.0	14.0	1280	3.12	0.07	--	--	--	--

Table C-18 (continued)

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DISCHARGE MEASUREMENT SUMMARY

SITE: Arroyo Del Rey at Del Rey Oaks

Water Years: 2009-2013

DATE	TIME	MADE BY	INSTRUMENT	RATING	AIR TEMP. (deg C)	WATER TEMP. (deg C)	SPECIFIC CONDUCTANCE (uS)	GAGE HEIGHT (feet)	DISCHARGE (CFS)	SECTION WIDTH (feet)	MEAN DEPTH (feet)	AREA (sqft)	MEAN VELOCITY (ft/sec)
10/31/2012	1050	GWJ	Pygmy	Poor	16.5	13.5	1270	2.97	0.08	1.2	0.2	0.20	0.40
11/28/2012	1135	GWJ	Pygmy	Fair	20.5	13.0	340	3.27	1.61	6.3	0.6	3.51	0.46
12/05/2012	1105	GWJ	AA	Fair	17.0	13.5	312	3.64	6.40	6.9	0.9	6.22	1.03
01/07/2013	1220	GWJ	Pygmy	Fair	13.0	7.0	715	3.25	1.95	6.6	0.5	3.60	0.54
01/11/2013	1030	GWJ	Pygmy	Fair	9.0	6.5	803	3.13	0.97	3.0	0.5	1.44	0.67
02/06/2013	1130	GWJ	Pygmy	Poor	12.5	8.5	1334	2.96	0.17	1.4	0.2	0.29	0.58
02/22/2013	1415	GWJ	Pygmy	Poor	11.0	11.5	1082	2.99	0.24	1.4	0.3	0.35	0.70
03/12/2013	1250	GWJ	Pygmy	Poor	13.5	12.0	1245	2.97	0.16	1.4	0.2	0.30	0.55
04/25/2013	1435	GWJ	Pygmy	Poor	15.0	16.0	1273	2.99	0.12	1.2	0.3	0.32	0.37
05/31/2013	1110	GWJ	Pygmy	Poor	20.5	14.0	1320	3.00	0.07	1.2	0.3	0.30	0.24
06/28/2013	1400	GWJ	Flume	Good	17.5	16.0	1346	3.00	0.05	--	--	--	--
07/31/2013	1130	GWJ	Flume	Good	20.0	15.0	1330	3.00	0.06	--	--	--	--
08/30/2013	1210	GWJ	Flume	Good	18.5	15.0	1340	3.00	0.06	--	--	--	--
09/30/2013	1115	GWJ	Flume	Good	19.0	13.0	1310	3.01	0.06	--	--	--	--

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX D

STREAMFLOW DATA

Monterey Peninsula Water Management District

Figure D-1

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— BL

Carmel River below Los Padres Reservoir

Daily Mean Discharge (CFS)



Summary Report

Site: BL Carmel River below Los Padres Reservoir
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.7	5.3	6.4	18	142	66	39	24	12	11	8.9
2	5.5	5.6	5.4	6.4	18	587	64	52	24	12	11	8.9
3	5.6	5.6	5.5	6.4	17	964	62	40	24	12	11	8.9
4	5.8	5.7	5.6	6.4	15	1140	60	38	23	12	9.8	9.0
5	5.7	5.7	5.7	6.4	22	753	58	37	24	12	9.7	9.0
6	5.5	5.7	5.6	6.5	35	561	56	36	24	12	9.3	9.0
7	5.3	5.7	5.4	6.6	45	413	65	34	23	13	9.0	9.0
8	5.2	5.6	5.6	6.6	39	336	72	33	22	13	9.0	8.8
9	5.2	5.5	5.9	6.5	49	279	62	32	22	13	9.0	8.6
10	5.3	5.4	6.0	6.4	43	241	59	31	22	14	8.9	8.6
11	5.3	5.3	6.2	6.3	43	212	56	31	21	14	8.9	8.7
12	5.4	5.3	6.2	6.3	45	187	54	30	21	14	8.9	8.8
13	5.3	5.3	6.2	6.4	65	167	53	30	21	14	8.9	8.7
14	5.3	5.3	6.2	6.3	69	152	51	29	20	14	9.2	8.8
15	5.3	5.3	6.2	6.3	259	140	50	29	20	14	9.3	8.7
16	5.3	5.3	6.2	6.3	659	129	49	28	20	13	9.3	8.6
17	5.3	5.2	6.4	6.3	682	120	48	28	19	13	9.1	8.6
18	5.4	5.2	6.6	6.3	463	112	46	27	18	13	9.1	8.6
19	5.5	5.2	6.4	6.3	292	106	45	27	17	13	9.1	8.6
20	5.5	5.2	6.1	6.3	213	100	43	26	17	13	9.1	8.3
21	5.4	5.2	6.0	6.3	171	96	42	26	17	13	9.0	8.2
22	5.3	5.2	6.0	6.3	174	118	41	26	17	13	8.9	8.6
23	5.3	5.2	6.1	6.3	498	97	40	26	16	13	8.8	8.6
24	5.3	5.2	6.1	8.6	413	90	40	26	16	12	8.8	8.6
25	5.3	5.2	6.5	25	288	85	39	26	15	12	8.8	8.6
26	5.4	5.3	6.4	30	225	82	39	25	15	12	8.8	8.7
27	5.5	5.4	6.2	26	182	78	38	24	14	12	9.0	8.8
28	5.4	5.3	6.3	24	156	75	38	24	13	12	8.9	8.8
29	5.3	5.3	6.4	24	-----	73	38	24	13	11	8.8	8.8
30	5.5	5.4	6.5	21	-----	70	36	24	13	11	8.9	8.7
31	5.8	-----	6.4	19	-----	67	-----	24	-----	11	9.0	-----
Total	167.7	161.5	187.6	324.2	5198	7772	1510	932	575	392	286.3	261.5
Mean	5.41	5.38	6.05	10.5	186	251	50.3	30.1	19.2	12.6	9.24	8.72
Max	5.8	5.7	6.6	30	682	1140	72	52	24	14	11	9.0
Min	5.2	5.2	5.3	6.3	15	67	36	24	13	11	8.8	8.2
Acre-Ft	333	320	372	643	10310	15420	3000	1850	1140	778	568	519
Wtr Year 2009	Total	17767.8	Mean	48.7	Max	1140	Min	5.2	Inst Max	1140	Acre-Ft	35240
Cal Year 2008	Total	16761.2	Mean	45.8	Max	972	Min	2.9	Inst Max	972	Acre-Ft	33250

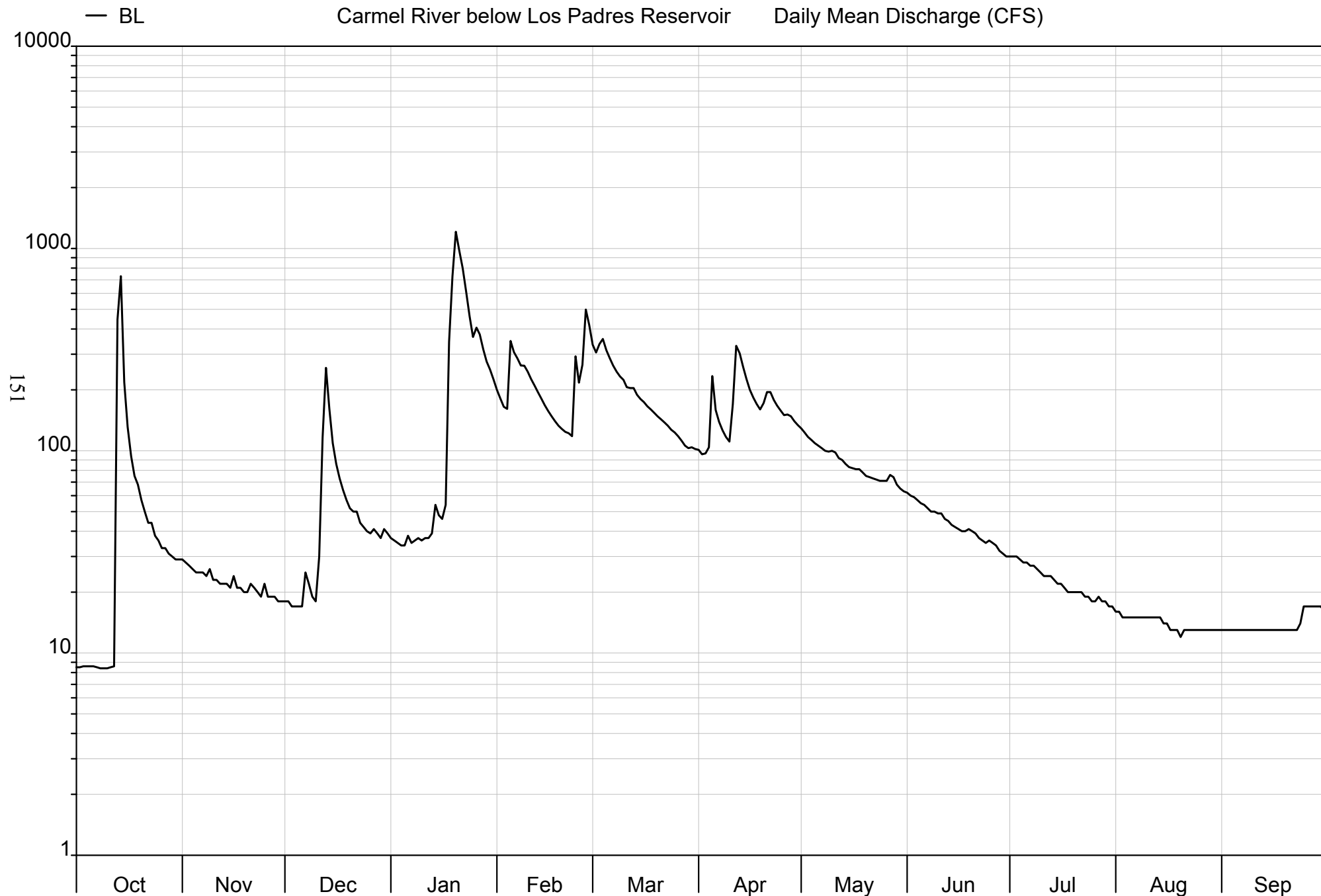
Monterey Peninsula Water Management District

Figure D-2

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010



Summary Report

Site: BL Carmel River below Los Padres Reservoir
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	29	18	37	200	334	101	129	62	30	16	13
2	8.5	28	18	36	181	306	96	123	60	30	16	13
3	8.6	27	17	35	165	337	97	117	59	30	15	13
4	8.6	26	17	34	161	357	104	113	57	29	15	13
5	8.6	25	17	34	349	314	234	109	55	28	15	13
6	8.6	25	17	38	307	287	159	106	54	28	15	13
7	8.5	25	25	35	286	264	139	103	52	27	15	13
8	8.4	24	22	36	264	246	126	100	50	27	15	13
9	8.4	26	19	37	263	233	117	99	50	26	15	13
10	8.4	23	18	36	246	224	111	100	49	25	15	13
11	8.5	23	30	37	226	206	170	98	49	24	15	13
12	8.6	22	116	37	210	204	330	92	46	24	15	13
13	445	22	257	39	195	204	303	90	45	24	15	13
14	729	22	161	54	181	189	260	86	43	23	15	13
15	218	21	109	48	168	180	226	83	42	22	14	13
16	131	24	86	46	157	174	200	82	41	22	14	13
17	94	21	73	54	148	166	183	81	40	21	13	13
18	75	21	64	345	140	160	170	81	40	20	13	13
19	68	20	57	728	133	154	160	78	41	20	13	13
20	57	20	52	1210	128	148	172	75	40	20	12	13
21	50	22	50	972	124	143	195	74	39	20	13	13
22	44	21	50	797	122	138	195	73	37	20	13	13
23	44	20	44	613	118	133	178	72	36	19	13	13
24	38	19	42	462	293	127	167	71	35	19	13	14
25	36	22	40	365	217	123	158	71	36	18	13	17
26	33	19	39	406	266	118	150	71	35	18	13	17
27	33	19	41	376	499	112	151	76	34	19	13	17
28	31	19	39	317	419	106	148	74	32	18	13	17
29	30	18	37	276	-----	103	140	68	31	18	13	17
30	29	18	41	252	-----	104	134	65	30	17	13	17
31	29	-----	39	225	-----	102	-----	63	-----	17	13	-----
Total	2316.2	671	1655	8017	6166	5996	5074	2723	1320	703	434	415
Mean	74.7	22.4	53.4	259	220	193	169	87.8	44.0	22.7	14.0	13.8
Max	729	29	257	1210	499	357	330	129	62	30	16	17
Min	8.4	18	17	34	118	102	96	63	30	17	12	13
Acre-Ft	4590	1330	3280	15900	12230	11890	10060	5400	2620	1390	861	823
Wtr Year 2010	Total	35490.2	Mean	97.2	Max	1210	Min	8.4	Inst Max	1210	Acre-Ft	70390
Cal Year 2009	Total	21893.2	Mean	60.0	Max	1140	Min	6.3	Inst Max	1140	Acre-Ft	43420

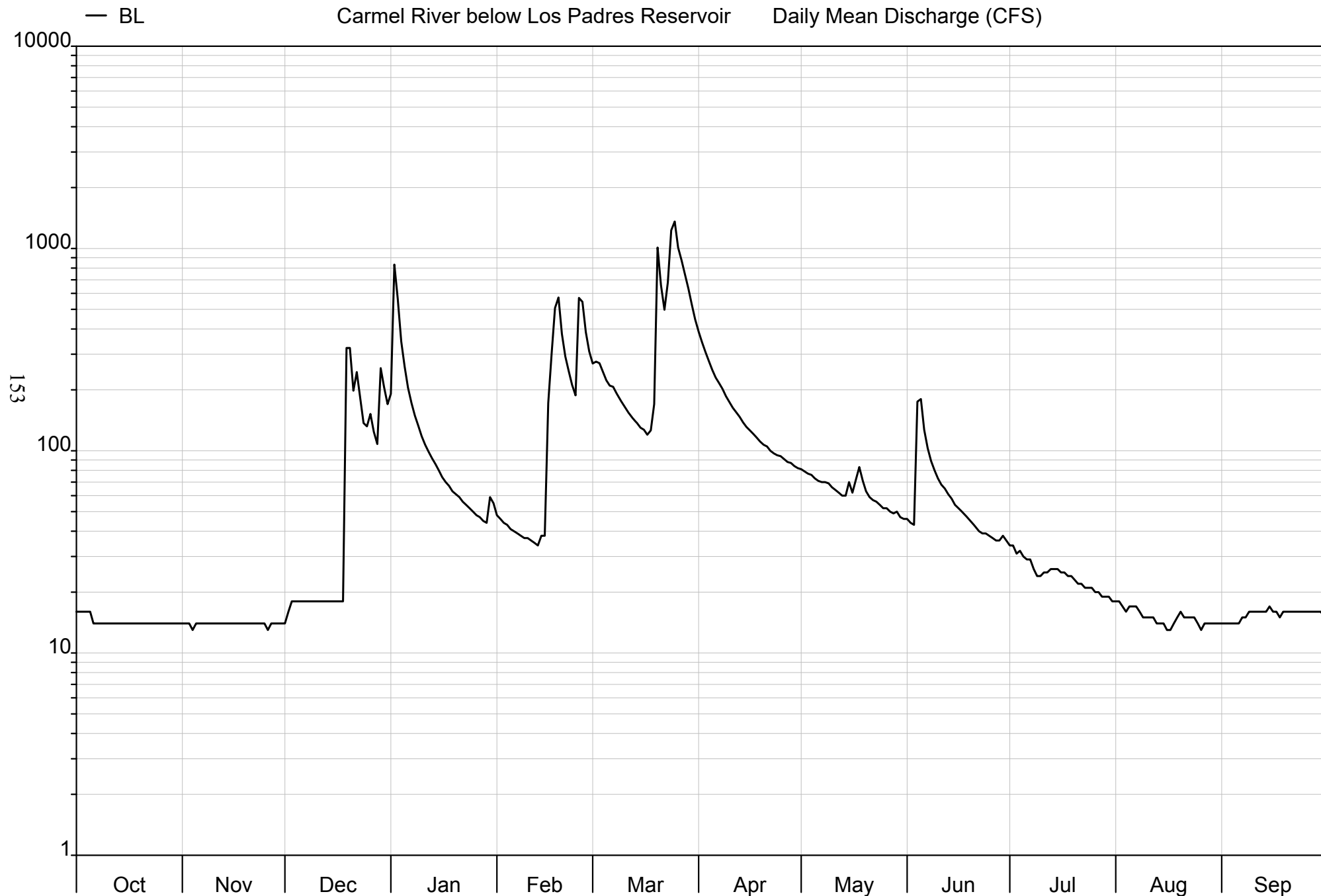
Monterey Peninsula Water Management District

Figure D-3

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011



Summary Report

Site: BL Carmel River below Los Padres Reservoir
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	14	191	48	270	388	81	46	34	18	14
2	16	14	16	833	46	276	344	79	44	34	18	14
3	16	14	18	564	44	271	307	77	43	31	17	14
4	16	13	18	347	43	246	277	76	175	32	16	14
5	16	14	18	261	41	223	251	73	180	30	17	14
6	14	14	18	205	40	210	230	71	127	29	17	14
7	14	14	18	172	39	207	216	70	103	29	17	15
8	14	14	18	149	38	192	202	70	89	26	16	15
9	14	14	18	133	37	180	186	69	80	24	15	16
10	14	14	18	118	37	168	174	66	73	24	15	16
11	14	14	18	107	36	159	163	64	68	25	15	16
12	14	14	18	99	35	150	155	62	65	25	15	16
13	14	14	18	92	34	143	147	60	61	26	14	16
14	14	14	18	86	38	137	138	60	58	26	14	16
15	14	14	18	80	38	130	131	70	54	26	14	17
16	14	14	18	74	172	127	126	62	52	25	13	16
17	14	14	18	70	302	120	121	72	50	25	13	16
18	14	14	18	67	508	126	116	83	48	24	14	15
19	14	14	322	63	572	170	111	71	46	24	15	16
20	14	14	322	61	378	1010	107	63	44	23	16	16
21	14	14	198	59	293	659	105	59	42	22	15	16
22	14	14	245	56	248	498	100	57	40	22	15	16
23	14	14	183	54	212	680	97	56	39	21	15	16
24	14	14	137	52	188	1230	95	54	39	21	15	16
25	14	14	132	50	570	1360	94	52	38	21	14	16
26	14	13	152	48	545	1010	91	52	37	20	13	16
27	14	14	124	47	386	872	88	50	36	20	14	16
28	14	14	108	45	310	743	87	49	36	19	14	16
29	14	14	256	44	-----	634	84	50	38	19	14	16
30	14	14	206	59	-----	529	82	47	36	19	14	16
31	14	-----	170	55	-----	446	-----	46	-----	18	14	-----
Total	444	418	2873	4341	5278	13176	4813	1971	1887	764	466	466
Mean	14.3	13.9	92.7	140	189	425	160	63.6	62.9	24.6	15.0	15.5
Max	16	14	322	833	572	1360	388	83	180	34	18	17
Min	14	13	14	44	34	120	82	46	36	18	13	14
Acre-Ft	881	829	5700	8610	10470	26130	9550	3910	3740	1520	924	924
Wtr Year 2011	Total	36897	Mean	101	Max	1360	Min	13	Inst Max	1360	Acre-Ft	73180
Cal Year 2010	Total	34583	Mean	94.7	Max	1210	Min	12	Inst Max	1210	Acre-Ft	68590

Monterey Peninsula Water Management District

Figure D-4

Period 1 Year Plot Start 00:00_10/01/2011

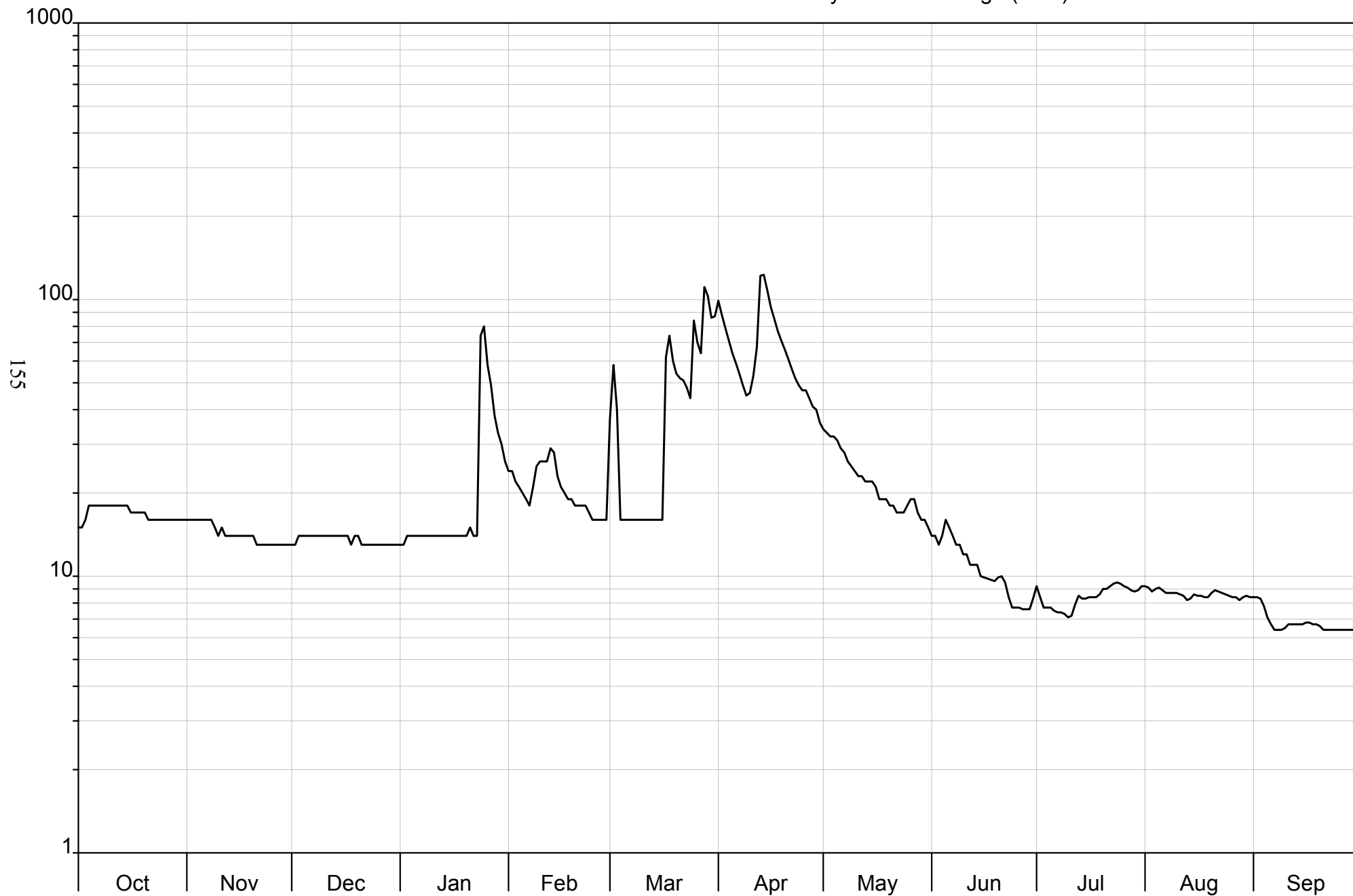
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— BL

Carmel River below Los Padres Reservoir

Daily Mean Discharge (CFS)



Summary Report

Site: BL Carmel River below Los Padres Reservoir
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	13	13	24	37	99	34	14	9.2	9.2	8.4
2	15	16	13	13	24	58	88	33	14	8.4	9.1	8.4
3	16	16	14	14	22	40	79	32	13	7.7	8.8	8.3
4	18	16	14	14	21	16	71	32	14	7.7	9.0	7.8
5	18	16	14	14	20	16	64	31	16	7.7	9.1	7.1
6	18	16	14	14	19	16	59	29	15	7.5	8.9	6.7
7	18	16	14	14	18	16	54	28	14	7.4	8.7	6.4
8	18	16	14	14	21	16	49	26	13	7.4	8.7	6.4
9	18	15	14	14	25	16	45	25	13	7.3	8.7	6.4
10	18	14	14	14	26	16	46	24	12	7.1	8.7	6.5
11	18	15	14	14	26	16	53	23	12	7.2	8.6	6.7
12	18	14	14	14	26	16	67	23	11	7.9	8.5	6.7
13	18	14	14	14	29	16	122	22	11	8.5	8.2	6.7
14	18	14	14	14	28	16	123	22	11	8.3	8.3	6.7
15	18	14	14	14	23	16	108	22	10	8.3	8.6	6.7
16	17	14	14	14	21	16	94	21	9.9	8.4	8.5	6.8
17	17	14	14	14	20	62	85	19	9.8	8.4	8.5	6.8
18	17	14	13	14	19	74	77	19	9.7	8.4	8.4	6.7
19	17	14	14	14	19	60	71	19	9.6	8.6	8.4	6.7
20	17	14	14	14	18	54	66	18	9.9	9.0	8.7	6.6
21	16	13	13	15	18	52	61	18	10	9.0	8.9	6.4
22	16	13	13	14	18	51	56	17	9.5	9.2	8.8	6.4
23	16	13	13	14	18	48	52	17	8.4	9.4	8.7	6.4
24	16	13	13	74	17	44	49	17	7.7	9.5	8.6	6.4
25	16	13	13	80	16	84	47	18	7.7	9.4	8.5	6.4
26	16	13	13	58	16	70	47	19	7.7	9.2	8.4	6.4
27	16	13	13	49	16	64	44	19	7.6	9.1	8.4	6.4
28	16	13	13	38	16	111	41	17	7.6	8.9	8.2	6.4
29	16	13	13	33	16	103	40	16	7.6	8.8	8.4	6.4
30	16	13	13	30	-----	86	36	16	8.3	8.9	8.5	6.4
31	16	-----	13	26	-----	87	-----	15	-----	9.2	8.4	-----
Total	523	428	420	709	600	1393	1993	691	324.0	261.0	267.4	203.5
Mean	16.9	14.3	13.5	22.9	20.7	44.9	66.4	22.3	10.8	8.42	8.63	6.78
Max	18	16	14	80	29	111	123	34	16	9.5	9.2	8.4
Min	15	13	13	13	16	16	36	15	7.6	7.1	8.2	6.4
Acre-Ft	1040	849	833	1410	1190	2760	3950	1370	643	518	530	404
Wtr Year 2012	Total	7812.9	Mean	21.3	Max	123	Min	6.4	Inst Max	123	Acre-Ft	15500
Cal Year 2011	Total	34533	Mean	94.6	Max	1360	Min	13	Inst Max	1360	Acre-Ft	68500

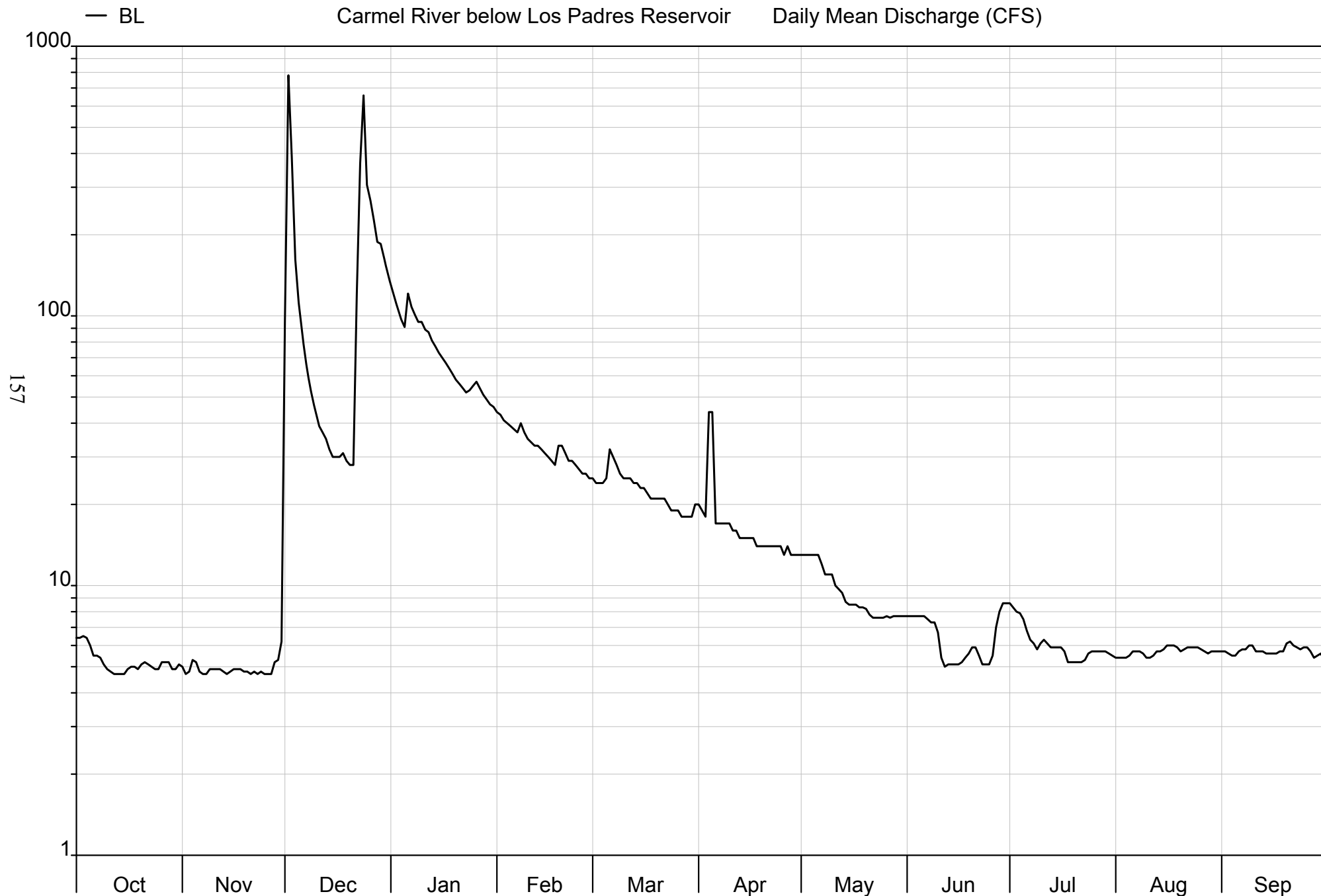
Monterey Peninsula Water Management District

Figure D-5

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013



Summary Report

Site: BL Carmel River below Los Padres Reservoir
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	5.0	96	130	44	25	20	13	7.7	8.6	5.4	5.7
2	6.4	4.7	780	117	43	24	19	13	7.7	8.3	5.4	5.7
3	6.5	4.8	387	107	41	24	18	13	7.7	8.0	5.4	5.6
4	6.4	5.3	162	97	40	24	44	13	7.7	7.9	5.4	5.5
5	6.0	5.2	112	91	39	25	44	13	7.7	7.5	5.5	5.5
6	5.5	4.8	88	121	38	32	17	13	7.7	6.8	5.7	5.7
7	5.5	4.7	69	108	37	30	17	12	7.5	6.3	5.7	5.8
8	5.4	4.7	58	101	40	28	17	11	7.3	6.1	5.7	5.8
9	5.1	4.9	50	95	37	26	17	11	7.3	5.8	5.6	6.0
10	4.9	4.9	44	95	35	25	17	11	6.7	6.1	5.4	6.0
11	4.8	4.9	39	89	34	25	16	10	5.4	6.3	5.4	5.7
12	4.7	4.9	37	87	33	25	16	9.7	5.0	6.1	5.5	5.7
13	4.7	4.8	35	81	33	24	15	9.4	5.1	5.9	5.7	5.7
14	4.7	4.7	32	77	32	24	15	8.7	5.1	5.9	5.7	5.6
15	4.7	4.8	30	73	31	23	15	8.5	5.1	5.9	5.8	5.6
16	4.9	4.9	30	70	30	23	15	8.5	5.1	5.9	6.0	5.6
17	5.0	4.9	30	67	29	22	15	8.5	5.2	5.7	6.0	5.6
18	5.0	4.9	31	64	28	21	14	8.3	5.4	5.2	6.0	5.7
19	4.9	4.8	29	61	33	21	14	8.3	5.6	5.2	5.9	5.7
20	5.1	4.8	28	58	33	21	14	8.2	5.9	5.2	5.7	6.1
21	5.2	4.7	28	56	31	21	14	7.8	5.9	5.2	5.8	6.2
22	5.1	4.8	120	54	29	21	14	7.6	5.5	5.2	5.9	6.0
23	5.0	4.7	367	52	29	20	14	7.6	5.1	5.3	5.9	5.9
24	4.9	4.8	657	53	28	19	14	7.6	5.1	5.6	5.9	5.8
25	4.9	4.7	306	55	27	19	14	7.6	5.1	5.7	5.9	5.9
26	5.2	4.7	268	57	26	19	13	7.7	5.5	5.7	5.8	5.9
27	5.2	4.7	227	54	26	18	14	7.6	7.0	5.7	5.7	5.7
28	5.2	5.2	188	51	25	18	13	7.7	8.0	5.7	5.6	5.4
29	4.9	5.3	185	49	-----	18	13	7.7	8.6	5.7	5.7	5.5
30	4.9	6.2	164	47	-----	18	13	7.7	8.6	5.6	5.7	5.6
31	5.1	-----	145	46	-----	20	-----	7.7	-----	5.5	5.7	-----
Total	162.2	147.2	4822	2363	931	703	515	295.4	192.3	189.6	176.5	172.2
Mean	5.23	4.91	156	76.2	33.3	22.7	17.2	9.53	6.41	6.12	5.69	5.74
Max	6.5	6.2	780	130	44	32	44	13	8.6	8.6	6.0	6.2
Min	4.7	4.7	28	46	25	18	13	7.6	5.0	5.2	5.4	5.4
Acre-Ft	322	292	9560	4690	1850	1390	1020	586	381	376	350	342
Wtr Year 2013	Total	10669.4	Mean	29.2	Max	780	Min	4.7	Inst Max	780	Acre-Ft	21160
Cal Year 2012	Total	11573.3	Mean	31.6	Max	780	Min	4.7	Inst Max	780	Acre-Ft	22960

Monterey Peninsula Water Management District

Figure D-6

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— FI

Finch Creek

Daily Mean Discharge (CFS)



Summary Report

Site: FI Finch Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	1.0	5.2	10	4.5	7.1	3.4	1.7	.56	.14
2	0	0	0	1.0	4.8	10	4.3	6.6	3.3	1.7	.49	.07
3	0	0	0	.95	4.6	19	4.3	6.2	3.1	1.6	.43	.03
4	0	0	0	.90	5.0	17	5.1	6.1	3.0	1.5	.40	.02
5	0	0	0	.86	19	13	10	6.0	2.9	1.4	.42	.02
6	0	0	0	.84	16	11	6.3	6.0	2.8	1.4	.43	.01
7	0	0	.15	.80	19	10	5.4	5.9	2.8	1.4	.42	.01
8	0	0	.09	.78	13	10	4.9	5.9	2.8	1.4	.43	.14
9	0	0	.13	.79	12	11	4.7	6.0	2.9	1.3	.49	.32
10	0	0	.24	.81	9.4	9.4	4.5	6.0	3.0	1.2	.42	.33
11	0	0	.87	.78	8.2	8.5	14	5.9	2.9	1.2	.44	.22
12	0	0	1.9	.81	7.2	8.8	18	5.4	2.7	1.2	.45	.16
13	8.8	0	4.8	1.1	6.6	8.9	13	5.2	2.5	1.2	.37	.19
14	5.5	0	2.6	1.1	6.2	7.8	10	5.0	2.4	1.1	.38	.17
15	.38	0	1.9	1.0	5.8	7.1	8.8	4.8	2.6	1.0	.38	.12
16	0	0	1.5	.94	5.4	6.6	7.7	4.7	2.6	.93	.32	.10
17	0	0	1.3	1.1	5.1	6.3	7.1	4.9	2.4	.85	.23	.11
18	0	0	1.2	12	4.9	6.0	6.6	4.7	2.5	.78	.21	.16
19	0	0	1.1	46	4.7	5.7	6.2	4.5	2.5	.78	.19	.21
20	0	0	1.1	95	4.5	5.5	9.7	4.4	2.4	.89	.15	.23
21	0	0	1.1	58	4.4	5.4	27	4.5	2.3	.95	.18	.33
22	0	0	1.5	30	5.0	5.2	20	4.5	2.1	.90	.21	.42
23	0	0	1.3	18	4.5	5.1	14	4.5	2.0	.78	.14	.39
24	0	0	1.3	12	11	5.0	12	4.3	2.0	.67	.09	.21
25	0	0	1.2	9.5	6.4	4.9	10	4.4	2.1	.66	.04	.10
26	0	0	1.1	12	15	4.7	9.3	4.1	2.1	.77	.03	.05
27	0	0	1.1	9.8	24	4.6	8.7	4.4	1.8	.84	.04	.02
28	0	0	1.1	7.9	14	4.4	8.4	4.1	1.7	.84	.13	0
29	0	0	1.1	6.8	-----	4.3	8.0	3.8	1.7	.75	.24	0
30	0	0	1.1	6.2	-----	4.4	7.5	3.5	1.7	.62	.26	0
31	0	-----	1.0	5.7	-----	4.5	-----	3.4	-----	.56	.25	-----
Total	14.68	0	31.78	344.46	250.9	244.1	280.0	156.8	75.0	32.87	9.22	4.28
Mean	.47	0	1.03	11.1	8.96	7.87	9.33	5.06	2.50	1.06	.30	.14
Max	8.8	0	4.8	95	24	19	27	7.1	3.4	1.7	.56	.42
Min	0	0	0	.78	4.4	4.3	4.3	3.4	1.7	.56	.03	0
Acre-Ft	29	0	63	683	498	484	555	311	149	65	18	8.5
Wtr Year 2010	Total	1444.09	Mean	3.96	Max	95	Min	0	Inst Max	95	Acre-Ft	2860

Monterey Peninsula Water Management District

Figure D-7

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— FI

Finch Creek

Daily Mean Discharge (CFS)



Summary Report

Site: FI Finch Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.29	.76	4.4	1.7	7.1	17	5.9	3.8	3.1	1.2	.43
2	0	.22	.70	59	1.7	7.1	16	5.7	3.7	2.8	1.2	.37
3	0	.16	.67	14	1.6	6.8	15	5.6	3.7	2.6	1.2	.33
4	.03	.12	.63	8.7	1.6	6.1	14	5.4	8.0	2.4	1.2	.34
5	.18	.10	.90	6.5	1.5	5.7	13	5.2	5.7	2.4	1.2	.31
6	.31	.12	1.3	5.1	1.4	5.6	12	5.1	4.6	2.2	1.0	.29
7	.36	.35	1.1	4.2	1.4	6.9	12	5.2	4.1	2.1	1.0	.25
8	.29	.49	.95	3.9	1.5	6.1	12	5.3	3.9	2.1	.96	.25
9	.24	.50	.80	3.5	1.5	5.5	11	5.2	3.7	2.0	.90	.24
10	.14	.47	.75	3.3	1.5	5.1	11	4.9	3.6	2.0	.87	.19
11	.09	.50	.75	3.0	1.4	4.9	10	4.7	3.7	2.1	.88	.23
12	.05	.41	.75	2.9	1.4	4.6	9.6	4.6	3.5	2.3	.84	.30
13	.02	.36	.75	2.8	1.4	4.3	9.4	4.5	3.3	2.2	.75	.27
14	.01	.31	.76	2.7	1.4	4.2	9.1	4.6	3.3	2.2	.72	.26
15	0	.28	.81	2.5	1.4	4.0	8.7	5.2	3.3	2.2	.73	.32
16	0	.27	.86	2.4	3.2	4.1	8.4	4.8	3.5	1.9	.72	.40
17	.04	.28	.97	2.2	11	4.0	8.0	5.1	3.5	1.8	.63	.42
18	.21	.30	1.4	2.2	30	4.5	7.7	5.6	3.8	1.9	.59	.31
19	.24	.35	5.5	2.2	28	18	7.5	4.8	4.3	1.9	.61	.23
20	.18	.85	6.4	2.1	14	123	7.5	4.5	4.2	1.7	.71	.19
21	.20	1.6	4.2	2.0	9.6	37	7.4	4.3	3.8	1.7	.72	.17
22	.33	1.1	5.2	2.0	7.5	23	7.3	4.3	3.6	1.6	.64	.16
23	.45	1.0	3.7	1.9	6.4	40	7.1	4.4	3.5	1.6	.52	.14
24	.45	1.0	2.9	1.9	5.7	80	6.8	4.2	3.3	1.6	.45	.19
25	.43	.98	3.1	1.8	18	67	6.7	4.1	3.3	1.5	.45	.31
26	.44	.91	3.7	1.8	13	42	6.6	4.1	3.3	1.4	.45	.39
27	.40	.92	2.9	1.7	9.7	33	6.5	3.9	2.8	1.4	.41	.32
28	.29	.94	2.4	1.8	8.0	26	6.3	4.0	2.8	1.3	.39	.21
29	.20	.90	5.7	1.7	-----	23	6.3	4.3	3.6	1.2	.40	.18
30	.27	.83	4.6	2.0	-----	20	6.1	4.0	3.4	1.2	.45	.28
31	.33	-----	3.6	1.9	-----	19	-----	3.8	-----	1.3	.47	-----
Total	6.18	16.91	69.51	158.1	186.5	647.6	286.0	147.3	114.6	59.7	23.26	8.28
Mean	.20	.56	2.24	5.10	6.66	20.9	9.53	4.75	3.82	1.93	.75	.28
Max	.45	1.6	6.4	59	30	123	17	5.9	8.0	3.1	1.2	.43
Min	0	.10	.63	1.7	1.4	4.0	6.1	3.8	2.8	1.2	.39	.14
Acre-Ft	12	34	138	314	370	1280	567	292	227	118	46	16
Wtr Year 2011	Total	1723.94	Mean	4.72	Max	123	Min	0	Inst Max	123	Acre-Ft	3420
Cal Year 2010	Total	1490.23	Mean	4.08	Max	95	Min	0	Inst Max	95	Acre-Ft	2960

Monterey Peninsula Water Management District

Figure D-8

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— FI

Finch Creek

Daily Mean Discharge (CFS)



Summary Report

Site: FI Finch Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.64	.95	.86	.81	1.0	2.1	1.2	.32	0	0	0
2	.43	.68	1.0	.77	.88	.97	1.9	1.2	.30	0	0	0
3	.55	.77	1.1	.79	.88	.89	1.6	1.3	.29	0	0	0
4	.78	1.1	1.2	.72	.84	.77	1.6	1.2	.44	0	0	0
5	1.3	1.1	1.1	.71	.81	.71	1.7	1.2	.51	0	0	0
6	1.3	1.3	1.1	.79	.75	.86	1.6	1.1	.47	0	0	0
7	1.2	1.2	1.1	.81	.76	.94	1.4	1.0	.37	0	0	0
8	.92	1.2	1.1	.80	.85	.85	1.3	.95	.30	0	0	0
9	.84	1.0	1.1	.76	.83	.78	1.3	.87	.30	0	0	0
10	.82	.72	1.0	.77	.83	.79	1.4	.89	.24	0	0	0
11	.79	1.2	1.0	.76	.91	.72	1.6	.87	.17	0	0	0
12	.78	1.1	1.0	.78	.94	.76	2.1	.81	.13	0	0	0
13	.68	.96	1.1	.72	1.5	.68	5.9	.82	.13	0	0	0
14	.62	.91	1.1	.73	1.6	.64	4.9	.88	.14	0	0	0
15	.65	.92	1.0	.72	1.3	.62	3.7	.86	.12	0	0	0
16	.70	.88	1.1	.82	1.3	.70	3.1	.76	.08E	0	0	0
17	.68	.85	1.1	.96	1.2	2.9	2.7	.65	.05	0	0	0
18	.66	.78	1.0	.96	1.0	3.8	2.4	.69	.05	0	0	0
19	.74	.89	.93	.93	1.0	2.7	2.2	.65	.04	0	0	0
20	.82	1.7	1.0	.75	1.0	2.1	2.0	.58	.02	0	0	0
21	.82	1.4	1.0	2.1	1.0	1.8	1.8	.54	.01	0	0	0
22	.76	1.2	1.1	1.4	.91	1.5	1.7	.53	.01	0	0	0
23	.69	1.1	1.2	3.1	.88	1.6	1.6	.54	.02	0	0	0
24	.58	1.0	1.2	1.7	.88	1.5	1.6	.59	.05	0	0	0
25	.63	1.0	1.1	1.2	.91	2.6	1.6	.73	.05	0	0	0
26	.76	.99	1.1	1.0	.99	2.1	1.7	.84	.03	0	0	0
27	.75	.96	1.2	.93	1.0	1.8	1.7	.70	.01	0	0	0
28	.71	.90	1.1	.99	.98	1.8	1.5	.61	.01	0	0	0
29	.69	.88	.87	.93	1.1	1.6	1.3	.60	0	0	0	0
30	.66	.94	.91	.86	-----	1.5	1.2	.53	0	0	0	0
31	.62	-----	.89	.79	-----	1.6	-----	.41	-----	0	0	-----
Total	23.33	30.27	32.75	30.91	28.64	43.58	62.2	25.10	4.66	0	0	0
Mean	.75	1.01	1.06	1.0	.99	1.41	2.07	.81	.16	0	0	0
Max	1.3	1.7	1.2	3.1	1.6	3.8	5.9	1.3	.51	0	0	0
Min	.40	.64	.87	.71	.75	.62	1.2	.41	0	0	0	0
Acre-Ft	46	60	65	61	57	86	123	50	9.2	0	0	0
Wtr Year 2012	Total	281.44	Mean	.77	Max	5.9	Min	0	Inst Max	5.9	Acre-Ft	558
Cal Year 2011	Total	1717.69	Mean	4.71	Max	123	Min	.14	Inst Max	123	Acre-Ft	3410

Monterey Peninsula Water Management District

Figure D-9

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— FI

Finch Creek

Daily Mean Discharge (CFS)



Summary Report

Site: FI Finch Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	2.3	1.0	.63	.53	.06	0	0	0	0
2	0	0	1.7	2.0	.90	.63	.53	.03	0	0	0	0
3	0	0	1.2	1.8	.93	.60	.46	.02	0	0	0	0
4	0	0	.39	1.6	.94	.65	.43	.01	0	0	0	0
5	0	0	.23	1.6	.92	.67	.42	.01	0	0	0	0
6	0	0	.25	2.7	.91	.94	.44	.03	0	0	0	0
7	0	0	.24	2.2	.91	.88	.42	.04	0	0	0	0
8	0	0	.25	2.0	1.1	.87	.48	.04	0	0	0	0
9	0	0	.21	1.9	.95	.74	.51	.03	0	0	0	0
10	0	0	.20	2.2	.93	.75	.44	.01	0	0	0	0
11	0	0	.22	2.0	.87	.72	.42	0	0	0	0	0
12	0	0	.26	2.2	.83	.65	.42	0	0	0	0	0
13	0	0	.29	2.0	.82	.53	.38	0	0	0	0	0
14	0	0	.28	1.9	.78	.51	.38	0	0	0	0	0
15	0	0	.29	1.8	.72	.51	.43	0	0	0	0	0
16	0	0	.32	1.7	.70	.52	.48	0	0	0	0	0
17	0	0	.31	1.7	.73	.53	.49	0	0	0	0	0
18	0	0	.38	1.6	.77	.54	.44	0	0	0	0	0
19	0	0	.39	1.5	1.0	.49	.37	0	0	0	0	0
20	0	0	.42	1.4	1.1	.52	.32	0	0	0	0	0
21	0	0	.40	1.4	.90	.57	.26	0	0	0	0	0
22	0	0	1.3	1.3	.87	.58	.19	0	0	0	0	0
23	0	0	2.6	1.2	.85	.57	.17	0	0	0	0	0
24	0	0	3.4	1.3	.84	.53	.21	0	0	0	0	0
25	0	0	1.6	1.2	.82	.52	.19	0	0	0	0	0
26	0	0	5.2	1.2	.79	.51	.17	0	0	0	0	0
27	0	0	4.5	1.2	.70	.52	.12	0	0	0	0	0
28	0	0	2.6	1.2	.63	.52	.11	0	0	0	0	0
29	0	0	5.4	1.1	-----	.53	.09	0	0	0	0	0
30	0	0	3.4	1.1	-----	.51	.07	0	0	0	0	0
31	0	-----	2.7	1.1	-----	.58	-----	0	-----	0	0	-----
Total	0	0	40.93	51.4	24.21	18.82	10.37	0.28	0	0	0	0
Mean	0	0	1.32	1.66	.86	.61	.35	.009	0	0	0	0
Max	0	0	5.4	2.7	1.1	.94	.53	.06	0	0	0	0
Min	0	0	0	1.1	.63	.49	.07	0	0	0	0	0
Acre-Ft	0	0	81	102	48	37	21	.56	0	0	0	0
Wtr Year 2013	Total	146.01	Mean	.40	Max	5.4	Min	0	Inst Max	5.4	Acre-Ft	290
Cal Year 2012	Total	236.02	Mean	.64	Max	5.9	Min	0	Inst Max	5.9	Acre-Ft	468

Monterey Peninsula Water Management District

Figure D-10

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— CA

Cachagua Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CA Cachagua Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	3.1	2.2	1.3	0E	0	0	0
2	0	0	0	0	0	18	2.1	1.6	0E	0	0	0
3	0	0	0	0	0	42	2.0	1.3	0E	0	0	0
4	0	0	0	0	0	80	1.9	1.2	0E	0	0	0
5	0	0	0	0	0	36	1.8	.99	0E	0	0	0
6	0	0	0	0	0	25	1.8	.95	0	0	0	0
7	0	0	0	0	0	18	1.8	.84	0	0	0	0
8	0	0	0	0	0	15	2.2	.80	0	0	0	0
9	0	0	0	0	0	12	1.9	.72	0	0	0	0
10	0	0	0	0	0	10	1.9	.62	0	0	0	0
11	0	0	0	0	0	9.0	1.6	.54	0	0	0	0
12	0	0	0	0	0	7.6	1.7	.49	0	0	0	0
13	0	0	0	0	0	6.8	1.7	.46	0	0	0	0
14	0	0	0	0	0	6.2	1.6	.41	0	0	0	0
15	0	0	0	0	0	5.7	1.5	.39	0	0	0	0
16	0	0	0	0	12	5.3	1.5	.28	0	0	0	0
17	0	0	0	0	32	4.7	1.5	.15	0	0	0	0
18	0	0	0	0	14	4.3	1.5	.07	0	0	0	0
19	0	0	0	0	7.2	4.0	1.4	.07	0	0	0	0
20	0	0	0	0	4.7	3.8	1.2	.05	0	0	0	0
21	0	0	0	0	3.4	3.5	1.1	.04	0	0	0	0
22	0	0	0	0	3.4	4.8	1.1	.02	0	0	0	0
23	0E	0	0	0	6.4	3.7	1.1	.02	0	0	0	0
24	0E	0	0	0	6.7	3.3	1.1	.03	0	0	0	0
25	0E	0	0	0	4.8	3.1	1.1	.05	0	0	0	0
26	0	0	0	0	4.0	3.0	1.2	.02	0	0	0	0
27	0	0	0	0	3.6	2.7	1.3	0	0	0	0	0
28	0	0	0	0	3.2	2.6	1.2	0E	0	0	0	0
29	0	0	0	0	-----	2.4	1.2	0E	0	0	0	0
30	0	0	0	0	-----	2.3	1.2	0E	0	0	0	0
31	0	-----	0	0	-----	2.2	-----	0E	-----	0	0	-----
Total	0	0	0	0	105.4	350.1	46.4	13.41	0	0	0	0
Mean	0	0	0	0	3.76	11.3	1.55	.43	0	0	0	0
Max	0	0	0	0	32	80	2.2	1.6	0	0	0	0
Min	0	0	0	0	0	2.2	1.1	0	0	0	0	0
Acre-Ft	0	0	0	0	209	694	92	27	0	0	0	0
Wtr Year 2009	Total	515.31	Mean	1.41	Max	80	Min	0 Inst Max	80	Acre-Ft	1020	
Cal Year 2008	Total	1108.88	Mean	3.03	Max	127	Min	0 Inst Max	127	Acre-Ft	2200	

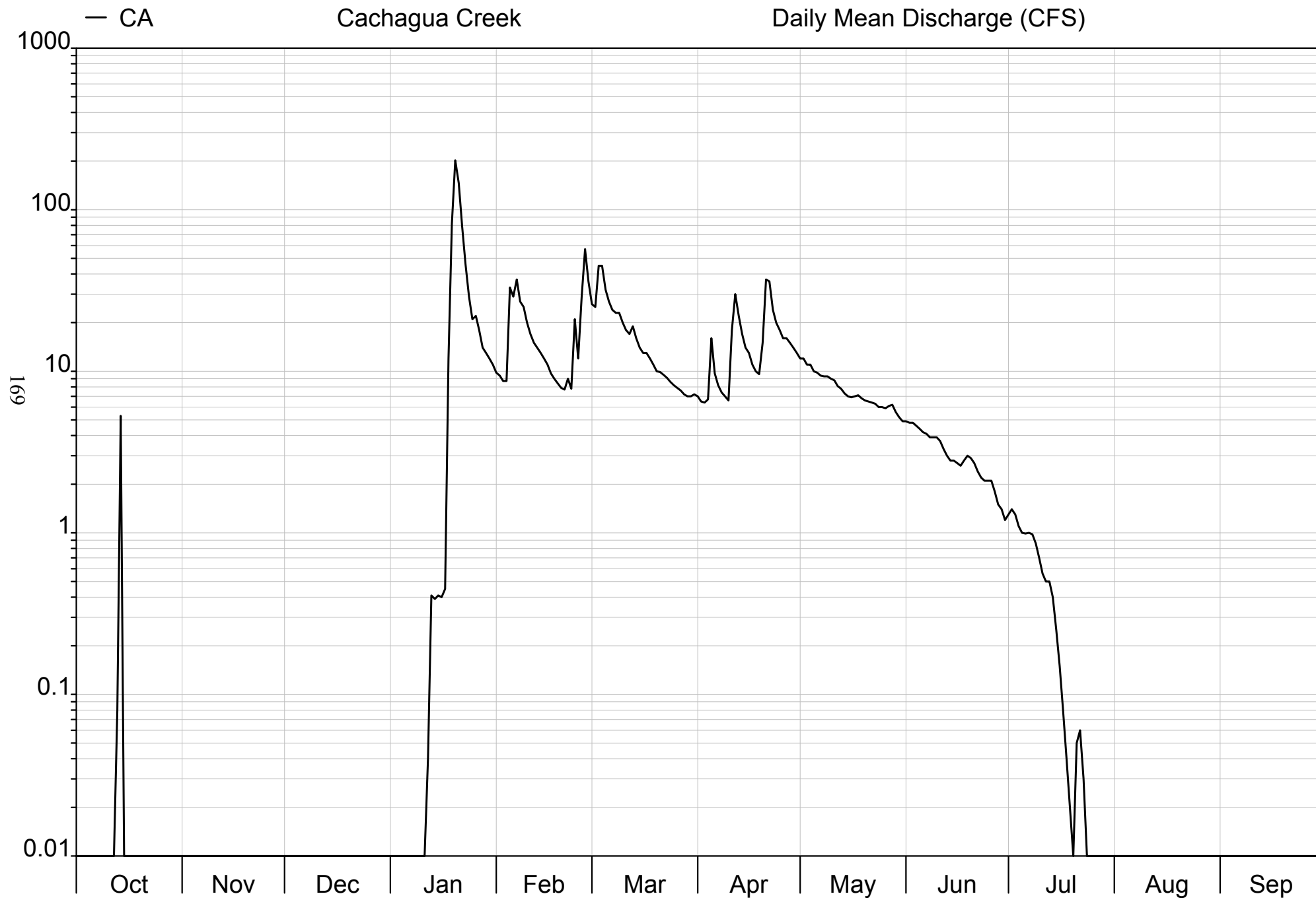
Monterey Peninsula Water Management District

Figure D-11

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010



Summary Report

Site: CA Cachagua Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	9.8	26	7.0	12	4.9	1.3	0	0
2	0	0	0	0	9.4	25	6.5	12	4.8	1.4	0	0
3	0	0	0	0	8.7	45	6.4	11	4.8	1.3	0	0
4	0	0	0	0	8.7	45	6.7	11	4.6	1.1	0	0
5	0	0	0	0	33	32	16	10	4.4	1.0	0	0
6	0	0	0	0	29	27	9.7	9.8	4.2	.99	0	0
7	0	0	0	0	37	24	8.2	9.4	4.1	1.0	0	0
8	0	0	0	0	27	23	7.4	9.3	3.9	.98	0	0
9	0	0	0	0	25	23	7.0	9.3	3.9	.86	0	0
10	0	0	0	0	20	20	6.6	9.0	3.9	.70	0	0
11	0	0	0	0	17	18	18	8.8	3.7	.56	0	0
12	0	0	0	.04	15	17	30	8.1	3.3	.50	0	0
13	.08	0	0	.41	14	19	22	7.8	3.0	.50	0	0
14	5.3	0	0	.39	13	16	17	7.3	2.8	.40	0	0
15	0	0	0	.41	12	14	14	7.0	2.8	.25	0	0
16	0	0	0	.40	11	13	13	6.9	2.7	.15	0	0
17	0	0	0	.45	9.7	13	11	7.0	2.6	.08	0	0
18	0	0	0	12	9.0	12	10	7.1	2.8	.04	0	0
19	0	0	0	82	8.4	11	9.6	6.8	3.0	.02	0	0
20	0	0	0	202	7.9	10	15	6.6	2.9	.01	0	0
21	0	0	0	146	7.7	9.9	37	6.5	2.7	.05	0	0
22	0	0	0	79	9.0	9.5	36	6.4	2.4	.06	0	0
23	0	0	0	46	7.8	9.1	24	6.3	2.2	.03	0	0
24	0	0	0	29	21	8.6	20	6.0	2.1	0	0	0
25	0	0	0	21	12	8.2	18	6.0	2.1	0	0	0
26	0	0	0	22	29	7.9	16	5.9	2.1	0	0	0
27	0	0	0	18	57	7.6	16	6.1	1.8	0	0	0
28	0	0	0	14	36	7.2	15	6.2	1.5	0	0	0
29	0	0	0	13	-----	7.0	14	5.6	1.4	0	0	0
30	0	0	0	12	-----	7.0	13	5.2	1.2	0	0	0
31	0	-----	0	11	-----	7.2	-----	4.9	-----	0	0	-----
Total	5.38	0	0	709.10	504.1	522.2	450.1	241.3	92.6	13.28	0	0
Mean	.17	0	0	22.9	18.0	16.8	15.0	7.78	3.09	.43	0	0
Max	5.3	0	0	202	57	45	37	12	4.9	1.4	0	0
Min	0	0	0	0	7.7	7.0	6.4	4.9	1.2	0	0	0
Acre-Ft	11	0	0	1410	1000	1040	893	479	184	26	0	0
Wtr Year 2010	Total	2538.06	Mean	6.95	Max	202	Min	0	Inst Max	202	Acre-Ft	5030
Cal Year 2009	Total	520.69	Mean	1.43	Max	80	Min	0	Inst Max	80	Acre-Ft	1030

Monterey Peninsula Water Management District

Figure D-12

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— CA

Cachagua Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CA Cachagua Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	4.7	3.6	13	27	7.6	4.5	2.2	.38	0
2	0	0	0	92	3.5	12	26	7.2	4.4	1.9	.33	0
3	0	0	0	27	3.4	12	23	7.0	4.3	1.7	.28	0
4	0	0	0	16	3.3	11	20	6.6	11	1.6	.27	0
5	0	0	0	12	3.1	10	18	6.2	9.6	1.5	.28	0
6	0	0	.10	9.0	2.9	9.8	18	6.2	6.9	1.4	.22	0
7	0	0	.23	7.6	2.8	13	17	6.3	6.0	1.3	.20	0
8	0	0	.20	6.6	2.8	11	17	6.6	5.5	1.3	.15	0
9	0	0	.15	5.9	2.8	10	16	6.5	5.2	1.4	.07	0
10	0	0	.14	5.5	2.7	10	15	6.2	4.9	1.4	.03	0
11	0	0	.16	4.9	2.6	10	14	5.8	4.8	1.4	.01	0
12	0	0	.20	4.9	2.4	10	13	5.5	4.4	1.5	.02	0
13	0	0	.23	5.1	2.3	9.6	13	5.3	4.2	1.6	0	0
14	0	0	.20	5.0	2.1	8.9	13	5.4	3.9	1.8	0	0
15	0	0	.30	4.8	2.2	8.6	12	6.7	3.6	1.7	0	0
16	0	0	.33	4.4	5.2	8.7	11	5.9	3.6	1.6	0	0
17	0	0	.31	4.2	18	8.8	10	6.3	3.6	1.5	0	0
18	0	0	.63	4.1	52	9.4	11	7.5	3.4	1.5	0	0
19	0	0	4.3	4.0	60	16	11	6.4	3.2	1.3	0	0
20	0	0	6.5	3.9	33	261	9.9	5.6	2.9	1.1	0	0
21	0	0	3.2	3.8	20	79	9.9	5.3	2.7	.93	0	0
22	0	0	3.9	3.6	15	43	9.5	5.2	2.5	.86	0	0
23	0	0	3.1	3.4	11	71	9.0	5.3	2.5	.85	0	0
24	0	0	2.3	3.4	9.4	150	9.5	5.1	2.6	.82	0	0
25	0	0	2.4	3.3	29	141	9.4	5.0	2.6	.76	0	0
26	0	0	4.0	3.3	26	84	8.8	5.0	2.5	.65	0	0
27	0	0	2.6	3.3	19	65	8.5	4.7	2.3	.58	0	0
28	0	0	2.1	3.3	15	50	8.2	4.6	2.3	.44	0	0
29	0	0	8.6	3.2	-----	41	8.2	5.3	2.8	.37	0	0
30	0	0	7.6	3.9	-----	33	8.0	4.7	2.7	.35	0	0
31	0	-----	4.9	4.0	-----	30	-----	4.6	-----	.40	0	-----
Total	0	0	58.68	270.1	355.1	1249.8	403.9	181.6	125.4	37.71	2.24	0
Mean	0	0	1.89	8.71	12.7	40.3	13.5	5.86	4.18	1.22	.072	0
Max	0	0	8.6	92	60	261	27	7.6	11	2.2	.38	0
Min	0	0	0	3.2	2.1	8.6	8.0	4.6	2.3	.35	0	0
Acre-Ft	0	0	116	536	704	2480	801	360	249	75	4.4	0
Wtr Year 2011	Total	2684.53	Mean	7.35	Max	261	Min	0	Inst Max	261	Acre-Ft	5320
Cal Year 2010	Total	2591.36	Mean	7.10	Max	202	Min	0	Inst Max	202	Acre-Ft	5140

Monterey Peninsula Water Management District

Figure D-13

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— CA

Cachagua Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CA Cachagua Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.96	.86	1.8	1.6	3.9	1.5	.01	0	0	0
2	0	0	1.1	.79	1.8	1.4	3.5	1.6	0	0	0	0
3	0	0	1.2	.77	1.7	1.3	2.9	1.6	0	0	0	0
4	0	0	1.2	.75	1.6	1.1	2.8	1.6	0	0	0	0
5	0	0	1.3	.72	1.5	1.0	2.7	1.6	.03	0	0	0
6	0	0	1.2	.80	1.4	1.1	2.5	1.3	.04	0	0	0
7	0	0	1.3	.94	1.3	1.2	2.3	1.1	0	0	0	0
8	0	.04	1.2	.95	1.4	1.2	2.1	.95	0	0	0	0
9	0	.16	1.2	.94	1.4	1.1	1.9	.82	0	0	0	0
10	0	.18	1.1	.93	1.3	1.0	2.0	.77	0	0	0	0
11	0	.41	.87	.96	1.3	.92	3.0	.69	0	0	0	0
12	0	.99	.97	.95	1.5	.97	3.5	.61	0	0	0	0
13	0	.75	1.1	.93	1.9	.90	9.8	.58	0	0	0	0
14	0	.65	1.1	.88	3.2	.94	9.5	.64	0	0	0	0
15	0	.67	1.1	.83	2.4	.86	7.2	.61	0	0	0	0
16	0	.61	1.2	.94	2.2	.89	5.5	.49	0	0	0	0
17	0	.57	1.2	1.1	1.9	5.3	4.5	.37	0	0	0	0
18	0	.52	1.0	1.1	1.6	8.0	3.9	.35	0	0	0	0
19	0	.63	.87	1.0	1.6	5.5	3.4	.32	0	0	0	0
20	0	1.8	.97	1.0	1.5	3.6	2.8	.23	0	0	0	0
21	0	1.8	1.0	5.6	1.4	2.9	2.4	.17	0	0	0	0
22	0	1.5	1.0	3.5	1.3	2.6	2.2	.13	0	0	0	0
23	0	1.2	1.0	7.9	1.2	2.6	2.3	.12	0	0	0	0
24	0	1.1	1.0	5.8	1.2	2.3	2.1	.14	0	0	0	0
25	0	1.1	.96	3.7	1.2	5.1	2.1	.21	0	0	0	0
26	0	1.1	.94	2.8	1.2	3.9	2.4	.47	0	0	0	0
27	0	.96	.95	2.3	1.2	3.2	2.4	.43	0	0	0	0
28	0	.86	.92	2.3	1.3	3.2	2.0	.24	0	0	0	0
29	0	.85	.85	2.1	1.3	3.0	1.7	.17	0	0	0	0
30	0	.92	.83	1.9	-----	2.6	1.6	.14	0	0	0	0
31	0	-----	.85	1.8	-----	2.9	-----	.05	-----	0	0	-----
Total	0	19.37	32.44	57.84	45.6	74.18	100.9	20.00	0.08	0	0	0
Mean	0	.65	1.05	1.87	1.57	2.39	3.36	.65	.003	0	0	0
Max	0	1.8	1.3	7.9	3.2	8.0	9.8	1.6	.04	0	0	0
Min	0	0	.83	.72	1.2	.86	1.6	.05	0	0	0	0
Acre-Ft	0	38	64	115	90	147	200	40	.16	0	0	0
Wtr Year 2012	Total	350.41	Mean	.96	Max	9.8	Min	0	Inst Max	9.8	Acre-Ft	695
Cal Year 2011	Total	2677.66	Mean	7.34	Max	261	Min	0	Inst Max	261	Acre-Ft	5310

Monterey Peninsula Water Management District

Figure D-14

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— CA

Cachagua Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CA Cachagua Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	2.1	1.2	.69	.51	0	0	0	0	0
2	0	0	0	1.8	1.1	.72	.50	0	0	0	0	0
3	0	0	0	1.5	1.1	.68	.44	0	0	0	0	0
4	0	0	0	1.3	1.1	.69	.39	0	0	0	0	0
5	0	0	0	1.3	1.0	.69	.37	0	0	0	0	0
6	0	0	0	3.4	.99	.81	.35	0	0	0	0	0
7	0	0	0	2.9	.97	.90	.35	0	0	0	0	0
8	0	0	0	2.3	1.3	.83	.37	0	0	0	0	0
9	0	0	0	2.0	1.1	.66	.32	0	0	0	0	0
10	0	0	0	2.3	.98	.62	.31	0	0	0	0	0
11	0	0	0	2.1	.90	.63	.30	0	0	0	0	0
12	0	0	0	2.3	.81	.61	.31	0	0	0	0	0
13	0	0	0	2.1	.84	.54	.25	0	0	0	0	0
14	0	0	0	1.9	.92	.47	.26	0	0	0	0	0
15	0	0	0	1.8	.84	.44	.32	0	0	0	0	0
16	0	0	0	1.8	.81	.42	.34	0	0	0	0	0
17	0	0	0	1.8	.81	.39	.27	0	0	0	0	0
18	0	0	0	1.7	.81	.43	.23	0	0	0	0	0
19	0	0	0	1.6	1.2	.42	.17	0	0	0	0	0
20	0	0	0	1.5	1.5	.44	.13	0	0	0	0	0
21	0	0	0	1.5	1.0	.55	.07	0	0	0	0	0
22	0	0	0	1.4	.89	.53	.03	0	0	0	0	0
23	0	0	0	1.3	.89	.47	.01	0	0	0	0	0
24	0	0	0	1.4	.87	.45	0	0	0	0	0	0
25	0	0	0	1.4	.81	.41	0	0	0	0	0	0
26	0	0	0	1.4	.79	.37	0	0	0	0	0	0
27	0	0	1.9	1.4	.72	.39	0	0	0	0	0	0
28	0	0	1.3	1.3	.68	.37	0	0	0	0	0	0
29	0	0	5.2	1.2	-----	.37	0	0	0	0	0	0
30	0	0	4.0	1.2	-----	.37	0	0	0	0	0	0
31	0	-----	2.5	1.2	-----	.48	-----	0	-----	0	0	-----
Total	0	0	14.9	54.2	26.93	16.84	6.60	0	0	0	0	0
Mean	0	0	.48	1.75	.96	.54	.22	0	0	0	0	0
Max	0	0	5.2	3.4	1.5	.90	.51	0	0	0	0	0
Min	0	0	0	1.2	.68	.37	0	0	0	0	0	0
Acre-Ft	0	0	30	108	53	33	13	0	0	0	0	0
Wtr Year 2013	Total	119.47	Mean	.33	Max	5.2	Min	0	Inst Max	5.2	Acre-Ft	237
Cal Year 2012	Total	313.50	Mean	.86	Max	9.8	Min	0	Inst Max	9.8	Acre-Ft	622

Monterey Peninsula Water Management District

Figure D-15

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— PI

Pine Creek

Daily Mean Discharge (CFS)



Summary Report

Site: PI Pine Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.11	.84	1.3	10	7.0	4.1	1.8	.55	.06	0
2	0	0	.12	.80	1.3	43	6.7	4.9	1.8	.53	.05	0
3	0	0	.13	.88	1.2	83	6.5	4.0	1.9	.50	.06	0
4	0	0	.14	.82	1.2	107	6.2	3.8	1.9	.49	.05	0
5	0	0	.14	.79	1.6	66	5.9	3.7	1.9	.51	.04	0
6	0	0	.15	.79	2.2	49	5.7	3.6	1.9	.50	.05	0
7	0	0	.16	.78	3.0	37	6.6	3.5	1.8	.47	.04	0
8	0	0	.15	.79	2.5	30	7.5	3.3	1.8	.43	.04	0
9	0	.01	.16	.77	3.7	28	6.6	3.2	1.7	.42	.03	0
10	0	.01	.17	.74	3.5	24	6.2	3.0	1.7	.37	.02	0
11	0	.01	.28	.71	3.6	21	5.9	2.9	1.7	.33	.01	0
12	0	.01	.60	.73	4.0	18	5.7	2.8	1.6	.29	.01	0
13	0	.01	.66	.74	7.4	16	5.5	2.7	1.6	.26	0	0
14	0	.01	.61	.70	8.5	15	5.4	2.7	1.5	.22	.01	0
15	0	.01	.72	.67	17	14	5.3	2.8	1.6	.20	.01	0
16	0	.01	.92	.64	46	13	5.1	2.6	1.6	.18	.01	0
17	0	.01	.78	.64	64	12	5.0	2.5	1.5	.17	0	0
18	0	.01	.66	.64	35	11	4.9	2.4	1.4	.14	.01	0
19	0	.01	.61	.64	22	11	4.6	2.4	1.3	.12	.01	0
20	0	.01	.64	.64	16	11	4.4	2.3	1.3	.11	0	0
21	0	.02	.65	.65	13	10	4.2	2.2	1.4	.11	0	0
22	0	.02	1.5	1.2	11	13	4.0	2.2	1.3	.10	.01	0
23	0	.02	1.3	1.3	18	11	4.0	2.2	1.2	.10	.01	0
24	0	.03	1.0	1.9	17	10	3.9	2.3	1.1	.11	.01	0
25	0	.03	2.3	1.9	15	9.8	3.9	2.2	1.1	.11	0	0
26	0	.11	2.4	2.0	13	9.4	4.0	2.1	1.0	.10	.01	0
27	0	.11	1.6	1.7	12	8.9	4.0	2.0	.96	.07	0	0
28	0	.09	1.3	1.6	11	8.2	3.9	2.0	.81	.07	0	0
29	0	.09	1.1	1.5	-----	7.9	3.9	1.9	.68	.07	0	0
30	0	.10	1.0	1.4	-----	7.5	3.7	1.9	.60	.07	0	0
31	0	-----	.90	1.3	-----	7.2	-----	1.9	-----	.06	0	-----
Total	0	0.74	22.96	31.20	355.0	721.9	156.2	86.1	43.45	7.76	0.55	0
Mean	0	.025	.74	1.01	12.7	23.3	5.21	2.78	1.45	.25	.018	0
Max	0	.11	2.4	2.0	64	107	7.5	4.9	1.9	.55	.06	0
Min	0	0	.11	.64	1.2	7.2	3.7	1.9	.60	.06	0	0
Acre-Ft	0	1.5	46	62	704	1430	310	171	86	15	1.1	0
Wtr Year 2009	Total	1425.86	Mean	3.91	Max	107	Min	0	Inst Max	107	Acre-Ft	2830
Cal Year 2008	Total	1938.92	Mean	5.30	Max	124	Min	0	Inst Max	124	Acre-Ft	3850

Monterey Peninsula Water Management District

Figure D-16

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— PI

Pine Creek

Daily Mean Discharge (CFS)



Summary Report

Site: PI Pine Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.4	1.0	2.4	14	34	11	18	6.9	2.7	.95	.13
2	0	1.3	.96	2.3	13	33	11	17	6.5	2.7	.94	.11
3	0	1.2	.96	2.2	12	38	11	16	6.4	2.6	.92	.11
4	0	1.2	.99	2.1	12	43	12	15	6.2	2.5	.88	.11
5	0	1.2	.96	2.0	20	39	27	15	6.0	2.4	.87	.11
6	0	1.2	.93	1.9	16	36	18	14	5.8	2.4	.87	.11
7	0	1.2	1.5	1.9	16	32	16	14	5.7	2.4	.86	.11
8	0	1.2	1.3	1.8	16	30	15	13	5.4	2.3	.85	.13
9	0	1.2	1.1	1.8	18	29	14	13	5.5	2.2	.80	.13
10	0	1.1	1.1	1.8	17	28	14	13	5.4	2.0	.80	.11
11	0	1.1	1.6	1.8	17	25	19	13	5.1	2.0	.74	.12
12	0	1.1	5.4	2.3	16	25	34	12	4.9	2.0	.73	.12
13	39	1.1	8.7	5.4	16	26	34	11	4.7	2.0	.68	.12
14	31	1.1	6.7	4.3	15	23	29	11	4.5	1.8	.68	.12
15	7.7	1.1	5.1	3.7	14	21	27	10	4.4	1.7	.66	.11
16	4.7	1.1	4.4	3.5	14	20	25	10	4.4	1.6	.62	.11
17	3.4	1.0	4.0	4.3	13	19	23	10	4.2	1.5	.57	.11
18	2.8	1.0	3.7	19	12	18	22	9.7	4.2	1.4	.52	.11
19	2.6	1.1	3.4	44	12	17	21	9.4	4.1	1.3	.47	.11
20	2.5	1.1	3.2	78	11	16	22	9.0	4.0	1.3	.40	.10
21	2.1	1.3	3.0	56	11	15	27	8.8	3.9	1.4	.35	.10
22	1.8	1.2	3.5	50	11	15	26	8.7	3.7	1.3	.32	.10
23	1.7	1.2	2.9	39	11	14	24	8.5	3.6	1.2	.28	.10
24	1.6	1.0	2.8	31	31	14	22	8.3	3.5	1.1	.22	.09
25	1.5	.94	2.6	25	23	13	21	8.0	3.5	1.1	.19	.08
26	1.5	.92	2.5	25	27	13	20	8.0	3.4	1.1	.18	.08
27	1.5	.94	2.6	22	41	12	21	8.8	3.2	1.2	.16	.07
28	1.6	1.1	2.5	19	38	12	20	8.3	3.0	1.2	.16	.06
29	1.6	1.0	2.5	18	-----	11	19	7.7	2.9	1.1	.16	.06
30	1.5	.99	2.8	16	-----	12	18	7.4	2.8	1.0	.15	.06
31	1.5	-----	2.6	15	-----	11	-----	7.1	-----	.97	.14	-----
Total	111.6	33.59	87.30	502.5	487	694	623	342.7	137.8	53.47	17.12	3.09
Mean	3.60	1.12	2.82	16.2	17.4	22.4	20.8	11.1	4.59	1.72	.55	.10
Max	39	1.4	8.7	78	41	43	34	18	6.9	2.7	.95	.13
Min	0	.92	.93	1.8	11	11	11	7.1	2.8	.97	.14	.06
Acre-Ft	221	67	173	997	966	1380	1240	680	273	106	34	6.1
Wtr Year 2010	Total	3093.17	Mean	8.47	Max	78	Min	0	Inst Max	78	Acre-Ft	6140
Cal Year 2009	Total	1634.65	Mean	4.48	Max	107	Min	0	Inst Max	107	Acre-Ft	3240

Monterey Peninsula Water Management District

Figure D-17

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— PI

Pine Creek

Daily Mean Discharge (CFS)



Summary Report

Site: PI Pine Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.24	1.4	13	4.3	31	46	8.9	5.1	3.7	1.4	.31
2	.06	.29	1.2	32	4.1	29	41	8.6	5.0	3.4	1.4	.29
3	.08	.31	1.2	26	3.9	26	36	8.3	4.9	3.2	1.3	.28
4	.10	.33	1.1	19	3.8	22	33	8.0	15	2.9	1.3	.26
5	.11	.31	1.6	16	3.8	20	30	7.6	13	2.8	1.3	.25
6	.12	.32	2.6	14	3.6	19	27	7.3	11	2.7	1.2	.22
7	.13	.34	2.1	12	3.4	19	26	7.2	9.6	2.6	1.1	.20
8	.12	.37	1.8	11	3.3	18	25	7.2	8.7	2.5	1.1	.20
9	.10	.38	1.7	9.6	3.3	17	23	7.1	7.9	2.4	.95	.19
10	.09	.42	1.7	8.9	3.2	16	22	6.9	7.3	2.4	.84	.17
11	.08	.45	1.6	8.3	3.2	15	21	6.6	6.9	2.5	.86	.20
12	.08	.49	1.7	7.7	3.1	14	20	6.5	6.6	2.5	.81	.19
13	.07	.49	1.6	7.3	3.1	14	19	6.4	6.2	2.6	.72	.17
14	.06	.49	1.6	7.0	3.4	13	17	6.3	5.9	2.6	.65	.17
15	.07	.49	1.6	6.6	3.3	13	17	7.3	5.6	2.7	.65	.18
16	.06	.45	1.5	6.3	13	12	16	6.6	5.4	2.5	.63	.17
17	.08	.41	1.6	6.0	26	12	15	7.9	5.2	2.5	.63	.16
18	.09	.41	5.7	5.6	37	12	14	11	5.0	2.4	.66	.15
19	.09	.42	21	5.4	38	15	14	9.0	4.8	2.3	.62	.14
20	.09	.63	17	5.2	31	108	13	7.6	4.6	2.2	.65	.12
21	.09	2.4	11	5.1	26	61	13	6.9	4.3	2.1	.71	.11
22	.10	1.8	12	4.9	22	46	12	6.6	4.1	2.0	.71	.11
23	.12	1.9	9.2	4.8	19	59	12	6.4	4.0	2.0	.70	.10
24	.14	2.3	7.4	4.6	17	142	11	6.1	3.9	1.9	.68	.12
25	.14	1.7	8.4	4.4	61	170	11	6.0	3.9	1.9	.66	.14
26	.13	1.5	11	4.3	52	136	11	5.8	3.8	1.8	.62	.13
27	.12	1.6	8.6	4.2	41	112	10	5.6	3.7	1.7	.56	.11
28	.12	2.2	7.7	4.1	35	87	9.9	5.4	3.7	1.5	.52	.10
29	.12	1.7	26	4.0	-----	68	9.6	5.6	4.0	1.5	.36	.09
30	.15	1.5	18	5.0	-----	59	9.3	5.3	3.8	1.5	.30	.11
31	.20	-----	14	4.6	-----	51	-----	5.2	-----	1.5	.31	-----
Total	3.17	26.64	204.6	276.9	470.8	1436	583.8	217.2	182.9	72.8	24.90	5.14
Mean	.10	.89	6.60	8.93	16.8	46.3	19.5	7.01	6.10	2.35	.80	.17
Max	.20	2.4	26	32	61	170	46	11	15	3.7	1.4	.31
Min	.06	.24	1.1	4.0	3.1	12	9.3	5.2	3.7	1.5	.30	.09
Acre-Ft	6.3	53	406	549	934	2850	1160	431	363	144	49	10
Wtr Year 2011	Total	3504.85	Mean	9.60	Max	170	Min	.06	Inst Max	170	Acre-Ft	6950
Cal Year 2010	Total	3095.09	Mean	8.48	Max	78	Min	.06	Inst Max	78	Acre-Ft	6140

Monterey Peninsula Water Management District

Figure D-18

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— PI

Pine Creek

Daily Mean Discharge (CFS)



Summary Report

Site: PI Pine Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.49	.97	.88	1.7	3.1	10	3.8	1.3	.46	.01	0
2	.10	.47	.98	.82	1.7	2.4	9.2	3.6	1.2	.54	.01	0
3	.11	.46	.98	.79	1.6	2.1	8.3	3.6	1.1	.54	.01	0
4	.16	.51	.94	.79	1.5	2.0	7.5	3.6	1.3	.44	.02	0
5	.54	.66	.91	.78	1.5	1.9	6.9	3.4	1.6	.38	.03	0
6	.66	1.3	.90	.75	1.4	1.8	6.3	3.1	1.5	.36	.02	0
7	1.2	1.0	.90	.74	1.4	1.7	5.8	2.9	1.3	.31	.01	0
8	.86	.87	.90	.73	1.4	1.7	5.3	2.8	1.2	.30	.01	0
9	.71	.83	.90	.70	1.4	1.6	4.9	2.7	1.1	.30	.01	0
10	.66	.75	.90	.69	1.4	1.5	5.3	2.5	1.0	.24	.01	0
11	.65	1.1	.88	.69	1.4	1.5	5.7	2.4	.93	.18	.01	0
12	.67	1.4	.98	.69	1.4	1.5	7.1	2.3	.83	.17	.01	0
13	.59	1.1	1.0	.68	2.0	1.6	12	2.2	.78	.17	.01	0
14	.55	1.0	1.0	.65	3.0	1.7	12	2.3	.77	.17	.01	0
15	.52	.99	.93	.64	2.3	1.7	11	2.3	.77	.16	.01	0
16	.51	.94	.96	.66	2.1	1.9	9.7	2.1	.68	.18	.01	0
17	.52	.94	.96	.69	2.0	9.7	9.2	2.0	.58	.18	0	0
18	.55	.96	.94	.70	1.9	9.1	8.6	1.9	.53	.16	0	0
19	.55	1.0	.90	.72	1.9	7.1	7.8	1.9	.50	.13	0	0
20	.57	2.2	.90	.89	1.9	6.1	7.2	1.8	.50	.09	0	0
21	.59	1.9	.90	.16	1.9	5.8	6.6	1.7	.44	.05	0	0
22	.59	1.5	.90	4.9	1.8	5.5	6.0	1.7	.44	.04	0	0
23	.52	1.3	.90	.15	1.8	5.0	5.7	1.7	.49	.03	0	0
24	.47	1.2	.85	7.9	1.8	4.7	5.4	1.7	.55	.03	0	0
25	.47	1.2	.85	4.9	1.7	8.4	5.2	1.8	.61	.02	0	0
26	.51	1.2	.85	3.9	1.7	7.0	5.2	2.0	.60	.02	0	0
27	.53	1.1	.85	3.1	1.7	6.3	4.9	1.9	.57	.02	0	0
28	.53	1.0	.85	2.5	1.8	10	4.6	1.7	.48	.02	0	0
29	.51	.95	.85	2.2	3.2	9.4	4.3	1.6	.47	.03	0	0
30	.51	.93	.88	2.0	-----	8.4	4.0	1.6	.46	.02	0	0
31	.49	-----	.90	1.8	-----	8.7	-----	1.4	-----	.02	0	-----
Total	16.51	31.25	28.31	78.88	52.3	140.9	211.7	72.0	24.58	5.76	0.20	0
Mean	.53	1.04	.91	2.54	1.80	4.55	7.06	2.32	.82	.19	.006	0
Max	1.2	2.2	1.0	.16	3.2	10	12	3.8	1.6	.54	.03	0
Min	.10	.46	.85	.64	1.4	1.5	4.0	1.4	.44	.02	0	0
Acre-Ft	33	62	56	156	104	279	420	143	49	11	.40	0
Wtr Year 2012	Total	662.39	Mean	1.81	Max	16	Min	0	Inst Max	16	Acre-Ft	1310
Cal Year 2011	Total	3346.51	Mean	9.17	Max	170	Min	.09	Inst Max	170	Acre-Ft	6640

Monterey Peninsula Water Management District

Figure D-19

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— PI

Pine Creek

Daily Mean Discharge (CFS)



Summary Report

Site: PI Pine Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	7.7	14	5.0	3.3	2.4	.73	.42	0	0	0
2	0	0	56	13	4.9	3.2	2.1	.71	.45	0	0	0
3	0	0	21	12	4.8	3.1	2.0	.64	.44	0	0	0
4	0	0	11	11	4.6	3.1	2.0	.59	.43	0	0	0
5	0	0	8.6	10	4.5	3.0	2.0	.60	.39	0	0	0
6	0	0	7.7	14	4.4	4.4	1.9	.78	.39	0	0	0
7	0	0	6.5	12	4.4	3.8	1.9	.83	.37	0	0	0
8	0	0	5.6	11	4.7	3.6	1.9	.81	.32	0	0	0
9	0	0	4.9	10	4.4	3.4	1.8	.81	.31	0	0	0
10	0	0	4.4	10	4.3	3.3	1.7	.75	.28	0	0	0
11	0	0	4.1	9.8	4.1	3.2	1.7	.67	.29	0	0	0
12	0	0	3.7	9.4	4.0	3.1	1.6	.57	.26	0	0	0
13	0	0	3.4	9.0	4.0	2.9	1.6	.53	.24	0	0	0
14	0	0	3.1	8.7	4.0	2.9	1.7	.54	.21	0	0	0
15	0	0	3.0	8.5	3.9	2.8	1.7	.57	.25	0	0	0
16	0	0	3.0	8.3	3.8	2.7	1.6	.64	.25	0	0	0
17	0	0	3.0	8.0	3.7	2.6	1.6	.63	.23	0	0	0
18	0	0	3.1	7.7	3.6	2.5	1.6	.60	.22	0	0	0
19	0	0	2.8	7.3	4.3	2.4	1.5	.57	.25	0	0	0
20	0	0	2.7	7.1	4.3	2.5	1.4	.52	.23	0	0	0
21	0	0	2.5	6.8	4.1	2.4	1.4	.49	.19	0	0	0
22	0	.01	7.5	6.6	4.0	2.4	1.3	.50	.09	0	0	0
23	0	.01	25	6.4	3.8	2.3	1.3	.54	.08	0	0	0
24	0	.01	41	6.4	3.7	2.2	1.3	.64	.11	0	0	0
25	0	.02	23	6.4	3.6	2.2	1.2	.63	.09	0	0	0
26	0	.02	22	6.2	3.5	2.1	1.1	.58	.07	0	0	0
27	0	.02	22	6.1	3.4	2.1	.95	.57	.05	0	0	0
28	0	.11	19	5.8	3.4	2.1	.90	.60	.04	0	0	0
29	0	.09	21	5.6	-----	2.1	.83	.61	.03	0	0	0
30	0	.18	18	5.5	-----	2.0	.78	.57	.01	0	0	0
31	0	-----	16	5.3	-----	2.3	-----	.49	-----	0	0	-----
Total	0	18.29	382.3	267.9	115.2	86.0	46.76	19.31	6.99	0	0	0
Mean	0	.61	12.3	8.64	4.11	2.77	1.56	.62	.23	0	0	0
Max	0	.18	56	14	5.0	4.4	2.4	.83	.45	0	0	0
Min	0	0	2.5	5.3	3.4	2.0	.78	.49	.01	0	0	0
Acre-Ft	0	36	758	531	228	171	93	38	14	0	0	0
Wtr Year 2013	Total	942.75	Mean	2.58	Max	56	Min	0	Inst Max	56	Acre-Ft	1870
Cal Year 2012	Total	986.91	Mean	2.70	Max	56	Min	0	Inst Max	56	Acre-Ft	1960

Monterey Peninsula Water Management District

Figure D-20

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— CL

San Clemente Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CL San Clemente Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.15	.94	1.3	15	8.9	5.0	2.1	.82	.13	.05
2	0	.19	.15	.87	1.8	79	8.7	6.3	2.1	.78	.17	.04
3	.01	.48	.15	1.6	1.3	128	7.8	5.2	2.1	.71	.17	.03
4	.02	.51	.15	1.3	1.2	181	6.2	5.4	2.1	.66	.16	.03
5	.04	.50	.15	1.1	2.0	103	5.8	4.6	2.1	.62	.16	.04
6	.03	.50	.14	.86	3.1	72	5.1	4.5	2.3	.63	.17	.05
7	.02	.53	.14	.74	4.8	56	6.0	4.3	2.4	.61	.14	.04
8	.01	.59	.14	.74	3.6	45	11	4.1	1.9	.54	.13	.03
9	.01	.63	.14	.82	5.9	38	9.2	4.4	1.9	.52	.09	.03
10	.01	.71	.16	.88	5.7	34	8.4	4.4	2.0	.49	.07	.03
11	.03	.58	.16	.88	5.4	30	9.3	3.5	2.7	.45	.08	.02
12	.04	.21	.18	1.4	6.3	27	8.1	3.3	2.0	.40	.07	.02
13	.03	.17	.26	1.3	12	24	7.5	3.4	2.2	.36	.06	.03
14	.03	.16	.34	.84	13	22	7.2	3.6	2.0	.32	.07	.03
15	.02	.15	.62	.98	39	20	4.4	3.4	2.0	.30	.04	.04
16	.02	.14	.63	.73	101	19	2.0	3.2	1.9	.29	.03	.03
17	.01	.14	.53	.72	123	18	4.8	3.1	1.7	.27	.03	.02
18	.02	.14	.44	.84	58	16	6.4	3.4	1.7	.25	.04	.02
19	.03	.15	.39	.81	34	15	6.8	2.8	1.5	.23	.06	.01
20	.03	.15	.40	.79	24	14	5.9	2.7	1.4	.22	.07	.01
21	.03	.15	.39	.80	19	14	5.5	2.6	1.5	.20	.12	.01
22	.02	.14	.83	1.8	16	19	5.2	2.6	1.7	.24	.12	.01
23	.01	.14	.66	2.6	32	15	5.6	2.6	1.4	.23	.16	.01
24	.01	.14	.61	2.5	29	14	5.1	2.7	1.2	.21	.14	0
25	.01	.13	1.2	2.3	23	13	6.0	3.1	1.3	.19	.11	0
26	.01	.21	1.7	2.5	20	12	5.3	2.7	1.2	.18	.11	0
27	.02	.21	1.9	2.3	17	11	5.5	2.3	1.1	.16	.08	0
28	.05	.17	1.8	2.0	16	11	5.2	2.4	.93	.15	.06	0
29	.04	.15	2.3	2.3	-----	11	5.0	2.2	.87	.16	.04	.01
30	.03	.15	1.3	2.1	-----	10	5.2	2.2	.83	.13	.03	.02
31	.03	-----	1.1	1.5	-----	9.3	-----	2.2	-----	.12	.05	-----
Total	0.68	8.25	19.21	41.84	618.4	1095.3	193.1	108.2	52.13	11.44	2.96	0.66
Mean	.022	.28	.62	1.35	22.1	35.3	6.44	3.49	1.74	.37	.095	.022
Max	.05	.71	2.3	2.6	123	181	11	6.3	2.7	.82	.17	.05
Min	0	.03	.14	.72	1.2	9.3	2.0	2.2	.83	.12	.03	0
Acre-Ft	1.3	16	38	83	1230	2170	383	215	103	23	5.9	1.3
Wtr Year 2009	Total	2152.17	Mean	5.90	Max	181	Min	0	Inst Max	181	Acre-Ft	4270
Cal Year 2008	Total	2783.62	Mean	7.61	Max	152	Min	0	Inst Max	152	Acre-Ft	5520

Monterey Peninsula Water Management District

Figure D-21

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— CL

San Clemente Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CL San Clemente Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	1.0	1.0	2.4	20	49	18	30	10	3.8	1.8	.25
2	.01	1.0	1.1	2.7	18	53	17	28	10	3.7	1.5	.23
3	0	.97	1.0	2.3	17	72	18	27	9.3	3.6	1.4	.26
4	.01	.98	1.0	2.1	16	85	19	17	9.1	3.8	1.2	.28
5	.02	.98	.92	1.9	32	67	60	25	8.8	3.3	1.2	.25
6	.02	1.4	.97	1.8	26	59	36	24	8.7	3.2	.98	.24
7	.03	1.2	1.5	1.7	27	55	27	23	8.9	3.3	1.1	.22
8	.04	1.1	1.6	1.7	26	53	18	22	8.4	3.3	1.1	.22
9	.57	1.1	1.3	1.7	30	50	21	21	8.2	3.2	1.0	.28
10	1.6	1.0	1.2	1.8	30	47	22	22	8.4	3.2	1.2	.25
11	1.1	.93	1.5	1.5	29	43	39	20	8.2	2.7	1.0	.16
12	.61	.94	5.0	1.6	27	43	70	19	7.5	2.7	.95	.16
13	.62	.95	9.7	5.3	25	45	64	18	7.0	2.7	.91	.19
14	.48	1.1	6.3	4.0	23	40	54	18	6.6	2.6	.77	.20
15	8.6	1.0	4.9	4.2	21	36	48	17	6.4	1.8	.73	.20
16	4.2	.92	4.1	3.0	19	33	45	16	6.5	1.5	.74	.24
17	2.5	.89	3.7	3.3	18	30	41	16	6.4	1.7	.66	.27
18	1.9	.89	3.3	28	18	28	37	16	6.6	1.6	.65	.31
19	1.8	.88	3.2	89	16	26	35	16	6.7	1.5	.54	.32
20	2.2	.91	3.2	154	15	26	40	15	6.5	1.6	.48	.23
21	1.8	1.1	2.5	102	16	24	57	14	6.2	1.7	.49	.22
22	1.6	1.0	3.8	97	18	23	50	15	5.7	1.7	.45	.22
23	1.4	.99	3.5	70	17	22	45	14	5.3	1.7	.41	.20
24	1.3	1.0	3.4	50	45	21	41	14	5.0	1.6	.31	.20
25	1.5	.97	2.8	37	32	21	38	13	4.9	1.4	.23	.17
26	1.3	.95	2.6	37	41	20	35	13	5.1	1.5	.29	.17
27	1.2	.96	2.5	34	67	19	35	14	4.5	1.7	.31	.51
28	1.3	1.7	2.4	30	57	18	36	15	4.4	1.8	.32	.88
29	1.2	1.6	2.4	26	-----	17	34	13	4.1	1.9	.31	.62
30	1.1	1.2	2.3	24	-----	17	32	11	3.8	2.0	.30	.44
31	1.1	-----	2.3	23	-----	17	-----	10	-----	2.0	.28	-----
Total	150.03	31.61	86.99	844.0	746	1159	1132	556	207.2	73.8	23.61	8.39
Mean	4.84	1.05	2.81	27.2	26.6	37.4	37.7	17.9	6.91	2.38	.76	.28
Max	62	1.7	9.7	154	67	85	70	30	10	3.8	1.8	.88
Min	0	.88	.92	1.5	15	17	17	10	3.8	1.4	.23	.16
Acre-Ft	298	63	173	1670	1480	2300	2250	1100	411	146	47	17
Wtr Year 2010	Total	5018.63	Mean	13.7	Max	154	Min	0	Inst Max	154	Acre-Ft	9950
Cal Year 2009	Total	2392.66	Mean	6.56	Max	181	Min	0	Inst Max	181	Acre-Ft	4750

Monterey Peninsula Water Management District

Figure D-22

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— CL

San Clemente Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CL San Clemente Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	1.8	1.4	16	5.7	46	90	18	9.8	5.6	1.9	.49
2	.30	.66	1.4	66	5.6	40	84	8.9	9.4	5.0	1.8	.50
3	.29	.62	1.3	40	5.4	37	76	15	8.8	4.7	1.8	.46
4	.31	.39	1.2	29	5.1	34	70	15	23	4.5	1.7	.43
5	.31	.28	1.6	24	4.8	29	62	14	21	4.3	1.7	.43
6	.33	.32	4.1	19	4.6	27	58	14	17	4.0	1.7	.39
7	.34	.38	3.0	17	4.5	31	55	14	14	3.8	1.6	.36
8	.31	.49	2.5	14	4.5	27	52	14	14	3.6	1.5	.33
9	.27	.51	2.3	12	4.6	26	48	14	13	3.5	1.3	.34
10	.22	.50	2.0	11	4.4	23	44	13	12	3.3	1.2	.34
11	.21	.53	2.0	10	4.4	22	38	13	12	3.0	1.1	.35
12	.21	.45	1.9	9.7	4.3	21	36	13	11	3.3	1.1	.35
13	.20	.45	1.9	9.3	4.0	20	37	12	11	3.5	1.1	.32
14	.17	.48	1.8	8.6	4.1	19	35	12	10	4.1	1.0	.32
15	.18	.53	2.7	8.0	4.1	18	33	15	9.4	3.8	.85	.33
16	.20	.52	2.1	7.3	28	18	30	13	9.3	3.7	.88	.31
17	.24	.51	2.1	7.0	68	17	28	14	9.1	3.5	.83	.30
18	.28	.51	7.8	6.8	87	19	27	22	8.7	3.4	.73	.28
19	.25	.49	29	6.9	97	27	25	17	8.2	3.2	.70	.25
20	.23	1.0	26	6.9	72	267	25	14	7.6	2.9	.81	.25
21	.23	3.7	16	6.5	52	145	26	13	7.2	2.6	.89	.20
22	.26	2.1	21	5.9	40	108	25	12	7.0	2.6	.90	.22
23	.27	2.1	14	6.0	33	148	24	12	6.7	2.7	.80	.22
24	.23	3.0	9.7	5.9	30	322	24	12	6.5	2.6	.67	.21
25	.24	2.1	14	5.5	122	332	23	11	6.5	2.6	.63	.23
26	.21	1.8	19	5.3	93	250	22	11	6.2	2.4	.62	.37
27	.18	1.9	13	5.1	68	212	21	10	5.8	2.0	.61	.48
28	1.1	3.1	9.8	5.0	55	173	20	9.5	5.8	2.0	.54	.50
29	2.3	2.4	53	4.8	-----	145	20	10	6.5	2.0	.51	.65
30	2.5	1.9	28	6.4	-----	122	19	9.8	6.2	1.9	.51	1.3
31	2.3	-----	19	6.6	-----	104	-----	9.7	-----	1.9	.50	-----
Total	15.03	35.52	314.6	391.5	915.1	2829	1177	404.9	302.7	102.0	32.48	11.51
Mean	.48	1.18	10.1	12.6	32.7	91.3	39.2	13.1	10.1	3.29	1.05	.38
Max	2.5	3.7	53	66	122	332	90	22	23	5.6	1.9	1.3
Min	.17	.28	1.2	4.8	4.0	17	19	8.9	5.8	1.9	.50	.20
Acre-Ft	30	70	624	777	1820	5610	2330	803	600	202	64	23
Wtr Year 2011	Total	6531.34	Mean	17.9	Max	332	Min	.17	Inst Max	332	Acre-Ft	12950
Cal Year 2010	Total	5115.15	Mean	14.0	Max	154	Min	.16	Inst Max	154	Acre-Ft	10150

Monterey Peninsula Water Management District

Figure D-23

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— CL

San Clemente Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CL San Clemente Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	2.3	1.1	1.1	3.2	4.5	16	5.9	1.4	.38	.07	.03
2	.63	2.2	1.4	1.1	2.7	3.6	11	5.4	1.3	.39	.06	.02
3	.52	2.2	1.9	1.1	2.3	3.1	9.0	3.2	1.1	.39	.06	.01
4	.53	1.9	1.6	1.1	2.2	2.7	11	1.5	1.2	.37	.07	.01
5	2.6	1.3	1.4	1.1	2.0	2.4	11	1.7	1.5	.32	.12	.01
6	1.8	2.0	1.4	1.1	2.3	2.4	10	3.1	1.5	.30	.07	.01
7	2.0	1.9	1.3	1.1	2.3	2.6	9.0	4.2	1.3	.28	.04	.02
8	1.2	1.4	1.4	1.1	2.2	2.4	8.0	3.9	1.2	.28	.03	.02
9	.93	1.3	1.3	1.1	2.3	2.2	7.2	3.8	1.1	.26	.02	.01
10	.86	1.2	1.3	1.1	2.3	2.0	7.3	3.6	1.0	.23	.01	.01
11	.89	1.4	1.6	1.0	2.4	1.9	9.3	3.4	.84	.20	.01	.01
12	.89	1.8	1.6	1.1	2.4	1.9	11	3.1	.78	.19	.01	.02
13	.78	1.5	1.6	1.1	3.3	1.9	26	2.9	.75	.18	0	.02
14	.73	1.4	1.6	1.0	5.5	2.0	23	3.0	.76	.19	0	.01
15	.71	1.4	1.4	.99	4.1	2.1	20	3.1	.73	.19	0	.02
16	.74	1.3	1.4	.99	3.7	2.2	17	2.9	.66	.18	.01	.01
17	.74	1.3	1.4	1.0	3.3	16	14	2.5	.60	.17	.01	.01
18	.75	1.3	1.3	1.1	3.0	16	13	2.5	.53	.17	0	.02
19	.77	1.3	1.5	1.1	2.8	12	12	2.5	.50	.16	0	.02
20	.81	3.9	2.0	1.1	2.7	9.8	11	2.3	.48	.14	.01	.02
21	.83	3.7	1.5	26	2.6	9.2	10	2.2	.45	.12	.01	.02
22	.77	2.3	1.4	7.2	2.4	7.8	9.2	2.0	.45	.10	.01	.02
23	.73	1.9	1.4	22	2.1	7.1	8.5	2.0	.46	.10	.01	.01
24	.71	1.7	1.3	11	2.1	6.4	7.9	2.1	.49	.09	.02	.01
25	.74	1.7	1.3	6.7	2.1	16	7.6	2.2	.46	.08	.02	.02
26	.81	1.7	1.2	5.1	2.0	12	8.9	2.6	.44	.06	.02	.02
27	.85	1.6	1.3	4.3	1.9	10	7.5	2.5	.44	.07	.02	.02
28	.83	1.8	1.2	3.7	2.2	16	6.7	2.1	.46	.09	.01	.02
29	.81	1.5	1.2	3.2	3.6	14	6.4	1.8	.41	.08	.01	.02
30	1.5	1.3	1.1	2.8	-----	12	6.3	1.8	.41	.08	0	.01
31	2.4	-----	1.1	2.5	-----	13	-----	1.7	-----	.07	.02	-----
Total	30.70	53.5	43.5	115.98	78.0	217.2	334.8	87.5	23.70	5.91	0.75	0.48
Mean	.99	1.78	1.40	3.74	2.69	7.01	11.2	2.82	.79	.19	.024	.016
Max	2.6	3.9	2.0	26	5.5	16	26	5.9	1.5	.39	.12	.03
Min	.52	1.2	1.1	.99	1.9	1.9	6.3	1.5	.41	.06	0	.01
Acre-Ft	61	106	86	230	155	431	664	174	47	12	1.5	.95
Wtr Year 2012	Total	992.02	Mean	2.71	Max	26	Min	0	Inst Max	26	Acre-Ft	1970
Cal Year 2011	Total	6293.89	Mean	17.2	Max	332	Min	.20	Inst Max	332	Acre-Ft	12480

Monterey Peninsula Water Management District

Figure D-24

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— CL

San Clemente Creek

Daily Mean Discharge (CFS)



Summary Report

Site: CL San Clemente Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	13	19	6.1	4.0	3.0	.79	.36	.04	.01	0
2	0	.04	77	18	5.9	3.7	2.2	.75	.34	.03	.01	0
3	0	.04	31	16	5.8	3.6	2.2	.68	.36	.03	.01	0
4	0	.03	14	14	5.6	3.5	2.2	.66	.35	.02	.01	0
5	.01	.03	10	13	5.5	3.5	2.0	.71	.35	.02	.01	0
6	.01	.72	9.5	23	5.5	5.9	1.9	.81	.34	.03	.01	0
7	.01	2.1	7.8	18	5.4	5.7	1.8	.83	.30	.02	.01	0
8	.01	1.6	6.6	16	6.8	4.6	1.7	.81	.26	.02	.01	0
9	.01	.98	5.6	15	6.0	4.3	1.1	.81	.25	.01	.01	0
10	.03	.34	4.9	17	5.6	4.3	.99	.79	.29	0	.01	0
11	.06	.19	4.4	15	5.4	4.0	.81	.73	.28	.01	.01	0
12	.07	.16	4.2	14	5.2	3.7	.72	.64	.24	0	.01	0
13	.05	.14	4.0	13	5.1	3.5	.75	.62	.21	0	.01	0
14	.04	.12	3.5	13	4.8	3.3	.74	.58	.17	0	0	0
15	.03	.12	3.4	12	4.8	3.3	.70	.59	.17	0	0	0
16	.02	.15	3.5	11	4.5	3.2	.76	.62	.19	0	.01	0
17	.01	.21	3.6	11	4.4	3.1	.84	.69	.17	0	.01	0
18	.01	.20	3.8	10	4.4	3.1	.86	.64	.17	0	0	0
19	.01	.17	3.3	9.4	5.9	3.0	.85	.50	.18	0	.01	0
20	.01	.15	3.2	8.9	6.7	3.0	1.6	.41	.17	0	0	0
21	.02	.15	3.0	8.9	5.4	3.0	1.5	.37	.15	.01	.01	0
22	.03	.15	11	8.5	5.1	2.9	1.4	.40	.16	0	.01	0
23	.05	.14	44	7.6	4.9	2.9	1.3	.44	.16	0	.01	0
24	.04	.14	74	7.6	4.8	2.7	1.3	.50	.20	0	0	0
25	.03	.13	34	7.4	4.6	2.6	1.3	.52	.19	0	0	0
26	.03	.14	35	6.8	4.4	2.5	1.3	.46	.18	0	0	0
27	.03	.14	32	7.8	4.3	2.5	1.2	.40	.13	0	0	0
28	.02	.23	25	7.2	4.1	2.5	1.0	.47	.11	0	0	0
29	.02	.21	31	6.9	-----	2.5	.92	.46	.09	.01	0	0
30	.02	.46	26	6.6	-----	2.5	.86	.43	.05	.01	0	0
31	.02	-----	22	6.2	-----	3.1	-----	.40	-----	.01	0	-----
Total	0.70	54.95	553.3	367.8	147.0	106.0	39.80	18.51	6.57	0.27	0.19	0
Mean	.023	1.83	17.8	11.9	5.25	3.42	1.33	.60	.22	.009	.006	0
Max	.07	.46	77	23	6.8	5.9	3.0	.83	.36	.04	.01	0
Min	0	.03	3.0	6.2	4.1	2.5	.70	.37	.05	0	0	0
Acre-Ft	1.4	109	1100	730	292	210	79	37	13	.54	.38	0
Wtr Year 2013	Total	1295.09	Mean	3.55	Max	77	Min	0	Inst Max	77	Acre-Ft	2570
Cal Year 2012	Total	1473.27	Mean	4.03	Max	77	Min	0	Inst Max	77	Acre-Ft	2920

Monterey Peninsula Water Management District

Figure D-25

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— SHW

Carmel River at Sleepy Hollow Weir

Daily Mean Discharge (CFS)



Summary Report

Site: SHW Carmel River at Sleepy Hollow Weir
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.5	5.9	9.8	23	181	93	52	28	14	11	8.1
2	5.3	6.5	5.9	9.6	22	676	90	71	29	14	11	7.7
3	5.4	6.0	6.3	10	22	1290	87	56	31	13	11	7.8
4	5.5	6.0	6.4	10	21	1770	83	53	30	13	9.6	8.0
5	5.7	5.7	6.6	9.7	22	1050	80	50	29	13	9.1	8.5
6	5.5	5.7	6.8	9.6	34	732	77	48	30	13	8.7	8.6
7	5.2	5.7	6.7	9.5	50	553	83	46	30	13	8.3	8.5
8	4.9	5.8	6.2	9.6	51	444	103	44	30	14	8.2	8.5
9	4.9	6.2	6.2	9.5	54	367	90	43	29	14	8.0	8.3
10	5.0	6.4	6.4	9.4	58	313	84	42	28	15	7.8	7.9
11	5.3	6.2	6.5	9.4	54	276	82	40	28	15	7.8	7.7
12	5.3	5.9	6.7	9.6	56	245	78	39	28	15	7.7	8.0
13	5.3	5.7	7.0	9.9	66	221	75	38	27	15	7.6	8.4
14	5.2	5.5	7.1	9.6	79	202	73	38	26	14	7.6	8.5
15	5.1	5.5	8.2	9.6	255	187	69	38	26	14	8.1	8.4
16	5.1	5.5	8.9	9.3	838	174	65	36	26	14	8.4	8.3
17	5.1	5.6	8.8	9.0	941	163	65	34	24	13	8.3	8.2
18	5.3	5.8	8.3	9.1	626	153	66	33	24	13	8.2	8.1
19	5.5	5.9	8.2	9.2	378	144	64	33	22	13	7.8	8.1
20	5.6	5.8	8.0	9.1	275	136	60	32	21	13	8.0	8.2
21	5.5	5.7	7.9	9.2	221	130	58	32	21	13	8.1	7.5
22	5.3	5.6	8.6	12	211	160	56	31	21	13	8.2	7.7
23	5.2	5.6	10	13	514	135	55	31	20	13	8.4	7.9
24	5.1	5.6	9.5	13	500	125	54	31	19	13	8.4	7.9
25	5.2	5.8	11	23	350	119	55	31	18	12	8.3	7.8
26	5.2	6.2	13	35	277	114	54	30	18	12	7.9	7.5
27	5.4	6.4	12	35	231	110	53	29	17	12	8.1	7.7
28	5.4	5.9	11	31	199	106	53	28	16	12	8.2	8.3
29	5.4	5.9	11	30	-----	103	52	27	15	11	7.9	8.6
30	5.3	5.9	11	29	-----	99	51	27	14	10	8.1	8.5
31	5.2	-----	10	25	-----	96	-----	27	-----	10	8.2	-----
Total	163.5	175.5	256.1	445.7	6428	10574	2108	1190	725	406	262.0	243.2
Mean	5.27	5.85	8.26	14.4	230	341	70.3	38.4	24.2	13.1	8.45	8.11
Max	5.7	6.5	13	35	941	1770	103	71	31	15	11	8.6
Min	4.9	5.5	5.9	9.0	21	96	51	27	14	10	7.6	7.5
Acre-Ft	324	348	508	884	12750	20970	4180	2360	1440	805	520	482
Wtr Year 2009	Total	22977.0	Mean	63.0	Max	1770	Min	4.9	Inst Max	1770	Acre-Ft	45570
Cal Year 2008	Total	24355.0	Mean	66.5	Max	1580	Min	4.6	Inst Max	1580	Acre-Ft	48310

Monterey Peninsula Water Management District

Figure D-26

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— SHW

Carmel River at Sleepy Hollow Weir

Daily Mean Discharge (CFS)



Summary Report

Site: SHW Carmel River at Sleepy Hollow Weir
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	31	20	43	271	523	145	199	78	38	19	12
2	7.7	30	20	43	248	489	138	188	76	38	19	12
3	7.8	29	20	41	229	555	142	179	74	38	18	12
4	8.0	28	20	40	216	630	140	164	73	37	18	12
5	8.1	27	20	39	461	534	349	166	70	36	18	12
6	8.2	27	21	42	413	484	235	162	68	35	17	12
7	8.3	27	28	41	408	448	201	156	67	35	17	12
8	8.3	26	28	40	370	410	177	151	65	34	17	13
9	8.7	27	22	41	373	389	171	147	66	33	17	13
10	8.7	25	22	40	347	368	164	146	67	32	17	12
11	9.2	24	30	40	320	336	233	143	66	31	17	12
12	9.8	24	89	42	296	325	497	136	64	32	17	12
13	283	23	275	49	277	337	469	132	61	33	17	12
14	1030	23	187	59	258	303	385	127	59	33	16	12
15	238	23	131	58	241	283	337	122	59	31	16	12
16	140	25	105	53	226	265	302	118	57	29	16	12
17	101	22	90	56	215	250	276	116	56	28	15	12
18	77	21	78	349	204	236	256	115	56	27	15	12
19	70	22	71	964	193	222	240	112	57	25	14	12
20	60	21	65	1670	184	210	263	108	56	25	14	12
21	53	24	60	1350	180	201	326	105	54	25	13	12
22	47	23	62	1090	183	193	337	103	52	25	13	12
23	45	22	55	814	173	185	289	100	50	25	13	12
24	39	21	52	634	422	177	264	97	48	24	12	12
25	38	23	49	502	329	171	246	97	47	23	12	15
26	36	21	47	524	371	165	233	97	47	22	12	16
27	34	21	49	505	745	159	232	99	45	23	12	16
28	33	23	46	426	641	152	231	103	43	23	13	17
29	33	22	45	370	-----	147	219	92	40	22	13	16
30	32	20	47	337	-----	148	208	84	39	22	13	16
31	31	-----	46	299	-----	147	-----	80	-----	20	12	-----
Total	2520.8	725	1900	10601	8794	9442	7705	3944	1760	904	472	386
Mean	81.3	24.2	61.3	342	314	305	257	127	58.7	29.2	15.2	12.9
Max	1030	31	275	1670	745	630	497	199	78	38	19	17
Min	7.7	20	20	39	173	147	138	80	39	20	12	12
Acre-Ft	5000	1440	3770	21030	17440	18730	15280	7820	3490	1790	936	766
Wtr Year 2010	Total	49153.8	Mean	135	Max	1670	Min	7.7	Inst Max	1670	Acre-Ft	97500
Cal Year 2009	Total	27527.7	Mean	75.4	Max	1770	Min	7.5	Inst Max	1770	Acre-Ft	54600

Monterey Peninsula Water Management District

Figure D-27

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— SHW

Carmel River at Sleepy Hollow Weir

Daily Mean Discharge (CFS)



Summary Report

Site: SHW Carmel River at Sleepy Hollow Weir
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	17	199	64	387	587	118	69	49	25	14
2	16	15	17	1040	60	375	521	108	68	48	24	14
3	16	15	22	724	58	367	463	109	67	46	24	14
4	16	14	22	450	56	330	416	108	194	44	23	14
5	16	14	24	323	54	299	376	104	234	43	23	14
6	15	14	28	255	53	280	345	101	164	40	24	14
7	14	15	26	214	51	281	327	100	136	40	23	14
8	14	15	25	185	50	258	310	100	120	38	23	14
9	13	15	25	163	49	241	284	100	110	35	22	15
10	13	15	24	146	48	225	262	97	102	34	21	16
11	13	15	24	133	47	212	242	94	96	35	19	16
12	13	15	24	124	46	200	230	91	92	36	19	16
13	13	15	24	116	45	190	220	89	86	36	18	16
14	14	15	24	111	47	182	208	87	81	38	17	16
15	14	15	25	103	50	173	200	101	76	37	16	17
16	14	15	25	98	192	167	191	92	73	36	16	16
17	15	15	25	93	361	159	184	103	71	35	16	16
18	15	15	30	88	695	163	177	121	69	35	15	16
19	14	15	248	82	803	203	171	109	67	34	16	16
20	15	17	412	80	566	1700	164	96	64	33	17	15
21	14	23	242	76	424	975	163	89	62	30	17	16
22	15	20	273	73	341	741	157	85	59	30	17	16
23	15	19	215	70	290	937	151	83	57	32	17	16
24	15	21	160	67	257	1720	146	81	55	33	16	16
25	15	19	146	65	777	2190	142	78	55	31	16	16
26	15	18	188	63	778	1540	137	78	53	30	15	16
27	14	18	148	61	572	1290	132	75	51	29	14	16
28	14	20	128	59	460	1030	128	73	51	28	14	16
29	16	19	333	57	-----	869	126	76	54	27	14	16
30	17	18	272	72	-----	757	122	72	53	26	14	17
31	16	-----	215	74	-----	663	-----	70	-----	26	14	-----
Total	455	495	3411	5464	7294	19104	7282	2888	2589	1094	569	464
Mean	14.7	16.5	110	176	261	616	243	93.2	86.3	35.3	18.4	15.5
Max	17	23	412	1040	803	2190	587	121	234	49	25	17
Min	13	14	17	57	45	159	122	70	51	26	14	14
Acre-Ft	902	982	6770	10840	14470	37890	14440	5730	5140	2170	1130	920
Wtr Year 2011	Total	51109	Mean	140	Max	2190	Min	13	Inst Max	2190	Acre-Ft	101400
Cal Year 2010	Total	48369	Mean	133	Max	1670	Min	12	Inst Max	1670	Acre-Ft	95940

Monterey Peninsula Water Management District

Figure D-28

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— SHW

Carmel River at Sleepy Hollow Weir

Daily Mean Discharge (CFS)



Summary Report

Site: SHW Carmel River at Sleepy Hollow Weir
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	19	17	18	37	35	132	49	18	10	7.9	7.5
2	16	19	17	18	36	57	116	47	17	11	7.9	7.4
3	16	19	18	18	34	54	106	44	17	10	7.8	7.2
4	18	20	19	18	32	25	100	41	17	9.1	7.7	6.7
5	21	19	19	18	31	24	92	40	19	9.8	8.1	6.6
6	21	21	18	18	29	24	83	40	19	8.7	7.9	6.5
7	21	21	18	18	28	24	76	39	17	8.9	7.3	6.3
8	19	20	18	18	29	24	70	36	17	7.7	7.1	6.1
9	19	20	18	18	29	23	64	35	16	8.0	7.0	6.0
10	19	19	18	18	28	23	62	34	15	7.6	6.9	5.9
11	19	20	18	19	27	23	76	33	14	7.4	6.8	5.8
12	19	21	19	18	28	23	87	31	13	7.1	6.7	5.8
13	19	20	19	18	27	23	157	31	13	7.8	6.7	5.9
14	19	19	18	18	30	23	168	31	12	7.4	6.5	6.0
15	19	18	18	18	34	23	148	31	12	7.4	7.0	6.1
16	19	18	18	18	30	24	130	29	11	7.4	7.2	6.1
17	19	18	18	18	30	79	117	28	11	7.4	7.1	6.2
18	19	18	18	18	28	115	107	27	10	7.5	7.1	6.4
19	20	18	18	19	27	93	99	26	9.9	7.1	7.3	6.3
20	20	24	19	19	27	78	92	24	9.4	7.5	7.3	6.3
21	19	24	19	50	27	73	83	23	10	7.5	7.6	6.1
22	18	20	17	41	26	69	76	23	11	7.5	7.8	5.9
23	18	19	17	48	25	65	71	22	11	7.6	7.8	5.9
24	18	18	17	59	24	61	67	22	13	8.0	7.7	5.9
25	18	18	17	83	24	111	64	23	12	8.0	7.7	5.9
26	18	18	17	79	23	101	66	25	12	8.0	7.6	5.8
27	18	18	17	71	23	91	63	25	12	7.9	7.5	5.8
28	18	18	18	60	23	135	58	23	11	7.9	7.2	5.8
29	17	18	18	50	25	136	56	22	11	7.8	7.0	5.8
30	18	18	18	43	-----	117	51	21	9.7	7.7	7.3	5.7
31	19	-----	18	39	-----	114	-----	20	-----	7.8	7.5	-----
Total	578	580	556	986	821	1890	2737	945	400.0	250.5	228.0	185.7
Mean	18.6	19.3	17.9	31.8	28.3	61.0	91.2	30.5	13.3	8.08	7.35	6.19
Max	21	24	19	83	37	136	168	49	19	11	8.1	7.5
Min	16	18	17	18	23	23	51	20	9.4	7.1	6.5	5.7
Acre-Ft	1150	1150	1100	1960	1630	3750	5430	1870	793	497	452	368
Wtr Year 2012	Total	10157.2	Mean	27.8	Max	168	Min	5.7	Inst Max	168	Acre-Ft	20150
Cal Year 2011	Total	48462	Mean	133	Max	2190	Min	14	Inst Max	2190	Acre-Ft	96120

Monterey Peninsula Water Management District

Figure D-29

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— SHW

Carmel River at Sleepy Hollow Weir

Daily Mean Discharge (CFS)



Summary Report

Site: SHW Carmel River at Sleepy Hollow Weir
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.2	92	173	59	38	31	16	7.5	7.1	3.7	3.8
2	5.8	5.4	926	157	57	37	31	15	7.5	7.2	3.7	3.9
3	5.7	5.2	529	141	55	36	28	15	7.6	6.9	3.6	4.0
4	5.9	5.0	212	128	54	36	42	15	7.5	6.6	3.6	3.8
5	6.1	5.7	142	119	53	36	63	15	7.6	6.4	3.6	3.8
6	5.5	5.5	114	162	51	47	28	15	7.6	6.4	3.7	3.5
7	5.2	4.8	91	147	50	47	27	15	7.4	5.8	4.0	3.3
8	5.4	5.7	74	134	56	43	27	14	6.9	4.9	4.1	3.5
9	5.4	6.4	64	126	54	40	25	14	6.8	4.6	4.2	3.6
10	5.5	6.3	55	127	51	38	24	13	7.2	4.3	4.0	3.8
11	5.3	5.9	50	118	49	37	23	13	7.2	4.7	3.6	4.1
12	5.3	5.9	47	115	48	36	23	11	7.4	5.2	3.5	4.0
13	4.9	5.7	43	107	47	36	22	11	8.0	5.0	3.4	3.9
14	4.6	5.4	40	102	46	35	22	10	7.7	4.7	3.7	3.8
15	4.4	5.2	38	97	45	34	22	9.8	7.8	4.8	3.8	3.7
16	4.4	5.6	37	94	44	33	22	9.8	7.3	4.9	3.8	3.7
17	4.6	6.9	36	90	43	33	21	9.5	6.9	4.9	3.9	3.7
18	4.6	6.9	38	85	42	33	20	9.5	7.2	4.4	4.4	3.9
19	4.4	6.1	36	80	47	32	19	9.4	6.9	3.7	4.3	3.9
20	4.3	6.0	35	76	54	32	20	8.9	6.5	3.6	4.0	3.6
21	4.7	6.2	34	74	46	32	19	8.5	6.7	3.6	3.6	4.2
22	5.1	6.0	114	72	43	32	19	8.0	6.8	3.4	3.6	4.8
23	5.4	5.9	349	69	42	31	19	8.0	6.4	3.3	4.0	4.5
24	5.0	5.9	881	69	42	31	18	8.1	6.1	3.4	4.1	4.3
25	4.7	5.8	397	70	41	30	18	8.2	6.3	3.7	4.0	4.4
26	4.7	5.7	349	73	40	29	18	8.1	6.3	3.9	4.1	4.6
27	4.8	5.8	300	70	39	29	18	8.3	7.0	4.0	3.9	4.5
28	4.8	6.5	248	66	38	29	17	8.5	7.0	4.1	3.6	4.1
29	4.8	7.3	253	64	-----	28	16	8.3	7.6	4.0	3.7	4.3
30	4.6	32	224	62	-----	28	16	8.1	7.6	3.9	3.8	4.0
31	4.7	-----	194	61	-----	31	-----	7.8	-----	3.8	3.6	-----
Total	156.3	201.9	6042	3128	1336	1069	718	338.8	214.3	147.2	118.6	119.0
Mean	5.04	6.73	195	101	47.7	34.5	23.9	10.9	7.14	4.75	3.83	3.97
Max	6.1	32	926	173	59	47	63	16	8.0	7.2	4.4	4.8
Min	4.3	4.8	34	61	38	28	16	7.8	6.1	3.3	3.4	3.3
Acre-Ft	310	400	11980	6200	2650	2120	1420	672	425	292	235	236
Wtr Year 2013	Total	13589.1	Mean	37.2	Max	926	Min	3.3	Inst Max	926	Acre-Ft	26950
Cal Year 2012	Total	14843.4	Mean	40.6	Max	926	Min	4.3	Inst Max	926	Acre-Ft	29440

Monterey Peninsula Water Management District

Figure D-30

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— TU

Tularcitos Creek

Daily Mean Discharge (CFS)



Summary Report

Site: TU Tularcitos Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.21	.42	.68	.72	1.2	1.0	.73	.43	.07	0	0
2	.01	.32	.48	.75	.72	2.0	.98	.81	.39	.07	0	0
3	.02	.30	.52	.81	.67	2.3	.98	.71	.40	.06	0	0
4	.04	.29	.53	.90	.72	8.7	.95	.69	.41	.06	0	0
5	.08	.26	.63	.89	.95	2.8	.96	.63	.40	.05	0	0
6	.08	.23	.65	.84	.99	2.2	.94	.61	.38	.05	0	0
7	.07	.25	.61	.77	1.1	1.9	.96	.60	.35	.04	0	0
8	.04	.28	.56	.72	.89	1.9	.97	.56	.33	.04	0	0
9	.03	.36	.57	.71	.92	1.6	.91	.56	.35	.04	0	0
10	.07	.41	.61	.67	.84	1.6	.91	.55	.32	.04	0	0
11	.11	.36	.61	.67	.85	1.5	.91	.52	.32	.05	0	0
12	.13	.34	.65	.63	.95	1.4	.91	.50	.32	.04	0	0
13	.14	.31	.76	.62	1.4	1.4	.84	.48	.33	.03	0	0
14	.13	.31	.81	.61	1.4	1.4	.84	.48	.34	.02	0	0
15	.10	.32	.90	.61	2.0	1.4	.84	.48	.33	.02	0	0
16	.08	.32	1.0	.66	3.3	1.2	.84	.47	.33	.01	0	0
17	.08	.31	.80	.63	6.0	1.2	.84	.42	.30	.01	0	0
18	.08	.32	.72	.61	2.9	1.2	.79	.39	.25	.01	0	0
19	.13	.33	.78	.61	1.9	1.3	.73	.42	.23	.01	0	0
20	.14	.33	.76	.62	1.6	1.4	.71	.43	.24	.01	0	0
21	.13	.37	.79	.61	1.6	1.2	.67	.44	.25	.01	0	0
22	.09	.38	.84	.93	1.6	1.6	.67	.45	.23	.01	0	0
23	.07	.39	.86	.88	1.5	1.4	.71	.45	.21	.01	0	0
24	.06	.37	.80	.82	1.5	1.3	.74	.51	.24	.01	0	0
25	.07	.41	.97	.81	1.4	1.2	.70	.52	.22	.01	0	0
26	.10	.53	.95	.95	1.3	1.1	.69	.50	.21	0	0	0
27	.15	.60	.84	.82	1.2	1.1	.72	.44	.18	0	0	0
28	.16	.51	.79	.76	1.2	1.1	.72	.44	.11	0	0	0
29	.15	.49	.78	.72	-----	1.1	.72	.43	.09	0	0	0
30	.16	.45	.75	.75	-----	1.1	.75	.42	.07	0	0	0
31	.18	-----	.67	.72	-----	1.1	-----	.43	-----	0	0	-----
Total	2.90	10.66	22.41	22.78	42.12	52.9	24.90	16.07	8.56	0.78	0	0
Mean	.094	.36	.72	.73	1.50	1.71	.83	.52	.29	.025	0	0
Max	.18	.60	1.0	.95	6.0	8.7	1.0	.81	.43	.07	0	0
Min	.01	.21	.42	.61	.67	1.1	.67	.39	.07	0	0	0
Acre-Ft	5.8	21	44	45	84	105	49	32	17	1.5	0	0
Wtr Year 2009	Total	204.08	Mean	.56	Max	8.7	Min	0	Inst Max	8.7	Acre-Ft	405
Cal Year 2008	Total	467.56	Mean	1.28	Max	23	Min	0	Inst Max	23	Acre-Ft	927

Monterey Peninsula Water Management District

Figure D-31

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— TU

Tularcitos Creek

Daily Mean Discharge (CFS)



Summary Report

Site: TU Tularcitos Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.19	.36	.52	1.4	7.4	2.2	3.0	1.1	.44	.16	.09
2	0	.18	.36	.48	1.4	6.8	2.2	2.6	1.1	.44	.14	.07
3	0	.18	.36	.44	1.4	21	2.2	2.4	1.0	.46	.14	.06
4	0	.18	.35	.44	1.4	26	2.2	2.3	1.0	.37	.14	.06
5	0	.19	.36	.44	1.7	15	5.2	2.3	.97	.35	.16	.07
6	0	.20	.36	.44	1.5	10	3.4	2.3	.88	.39	.15	.07
7	0	.21	.51	.44	3.2	7.7	3.1	2.2	.85	.40	.19	.05
8	0	.20	.52	.44	2.4	7.2	2.8	2.1	.97	.40	.20	.09
9	0	.24	.45	.44	2.5	9.6	2.5	2.0	.98	.38	.19	.11
10	0	.24	.40	.44	2.1	7.6	2.3	1.9	1.0	.43	.19	.09
11	0	.24	.44	.43	2.1	6.6	3.0	1.9	.97	.43	.17	.07
12	0	.25	.54	.46	1.7	6.1	5.5	1.9	.83	.42	.16	.08
13	.99	.25	.66	.58	1.6	8.6	4.4	1.9	.71	.36	.16	.11
14	.46	.27	.49	.52	1.5	5.8	3.7	1.8	.67	.28	.17	.11
15	.12	.27	.48	.48	1.5	4.9	3.2	1.7	.67	.24	.17	.12
16	.08	.27	.48	.44	1.3	4.2	2.9	1.7	.66	.18	.15	.11
17	.07	.27	.48	.45	1.3	3.7	2.7	1.6	.58	.20	.16	.10
18	.08	.30	.48	1.5	1.3	3.6	2.4	1.7	.51	.20	.17	.11
19	.10	.30	.44	5.7	1.3	3.4	2.4	1.7	.55	.18	.16	.11
20	.13	.30	.44	11	1.4	3.3	4.1	1.6	.56	.21	.17	.12
21	.13	.30	.47	8.0	1.4	3.0	8.9	1.5	.56	.23	.18	.10
22	.13	.30	.61	5.3	2.1	3.0	8.8	1.5	.56	.24	.16	.09
23	.15	.30	.60	3.4	1.7	3.0	5.7	1.4	.56	.21	.13	.07
24	.15	.30	.56	2.4	4.8	2.7	4.7	1.4	.52	.17	.10	.04
25	.15	.30	.56	2.0	3.4	2.5	4.2	1.4	.52	.16	.09	.02
26	.14	.33	.56	2.3	5.7	2.5	3.8	1.5	.52	.15	.09	.01
27	.16	.38	.52	2.0	20	2.4	3.9	1.5	.52	.14	.10	.01
28	.18	.40	.52	1.8	14	2.3	3.7	1.6	.50	.15	.10	0
29	.17	.38	.53	1.8	-----	2.2	3.5	1.5	.44	.14	.10	0
30	.17	.36	.54	1.7	-----	2.2	3.3	1.3	.44	.14	.12	0
31	.17	-----	.52	1.5	-----	2.2	-----	1.1	-----	.15	.12	-----
Total	3.73	8.08	14.95	58.28	87.1	196.5	112.9	56.3	21.70	8.64	4.59	2.14
Mean	.12	.27	.48	1.88	3.11	6.34	3.76	1.82	.72	.28	.15	.071
Max	.99	.40	.66	11	20	26	8.9	3.0	1.1	.46	.20	.12
Min	0	.18	.35	.43	1.3	2.2	2.2	1.1	.44	.14	.09	0
Acre-Ft	7.4	16	30	116	173	390	224	112	43	17	9.1	4.2
Wtr Year 2010	Total	574.91	Mean	1.58	Max	26	Min	0	Inst Max	26	Acre-Ft	1140
Cal Year 2009	Total	194.87	Mean	.53	Max	8.7	Min	0	Inst Max	8.7	Acre-Ft	387

Monterey Peninsula Water Management District

Figure D-32

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— TU

Tularcitos Creek

Daily Mean Discharge (CFS)



Summary Report

Site: TU Tularcitos Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.25	.51	1.2	.98	2.8	7.3	2.2	1.2	.54	.25	.12
2	.01	.25	.48	3.6	1.0	2.8	6.4	2.1	1.2	.56	.24	.13
3	.01	.25	.48	2.3	1.1	2.5	6.2	2.1	1.2	.53	.24	.11
4	.03	.25	.44	1.4	1.1	2.3	5.5	2.0	2.2	.50	.24	.10
5	.04	.25	.51	1.2	1.1	2.2	5.2	1.8	1.8	.52	.26	.11
6	.05	.22	.59	1.1	1.1	2.3	4.9	1.6	1.5	.42	.29	.09
7	.06	.28	.56	1.1	1.1	3.0	5.4	1.6	1.2	.39	.28	.06
8	.07	.34	.58	1.2	1.1	2.9	5.4	1.7	1.1	.40	.28	.04
9	.08	.33	.61	1.2	1.1	2.3	4.9	1.8	1.1	.41	.26	.07
10	.06	.33	.66	1.1	1.1	2.1	4.6	1.9	1.1	.41	.24	.07
11	.06	.33	.81	1.1	1.1	2.1	4.2	1.8	1.1	.41	.24	.06
12	.05	.33	.87	1.1	1.1	1.9	4.2	1.7	1.1	.40	.24	.07
13	.03	.36	.96	1.1	1.1	1.8	3.9	1.6	1.1	.41	.24	.07
14	.04	.36	.98	1.0	1.1	1.8	3.7	1.5	.99	.41	.20	.08
15	.05	.36	.98	.98	1.1	1.9	3.4	1.8	.90	.36	.17	.10
16	.05	.36	.98	.94	1.8	1.9	3.1	1.6	.87	.37	.17	.09
17	.10	.36	1.1	.91	3.3	1.9	2.9	1.7	.85	.36	.18	.08
18	.14	.39	1.1	.91	4.0	2.2	2.8	2.3	.87	.34	.17	.07
19	.15	.40	1.5	.97	5.5	3.2	2.8	2.2	.83	.36	.18	.05
20	.16	.66	1.3	.99	5.4	38	2.8	1.8	.75	.34	.18	.03
21	.18	1.0	1.0	.98	3.7	26	2.8	1.7	.67	.31	.18	.02
22	.19	.75	.96	.98	3.0	19	3.0	1.7	.63	.33	.19	.03
23	.22	.61	.92	.98	2.6	25	3.0	1.6	.60	.35	.16	.03
24	.25	.61	.90	.98	2.1	49	2.9	1.6	.62	.32	.13	.03
25	.27	.58	1.0	.98	3.3	57	2.6	1.6	.71	.31	.12	.04
26	.27	.56	1.2	.98	4.4	32	2.5	1.4	.68	.30	.13	.04
27	.28	.56	1.0	.98	3.4	22	2.5	1.3	.62	.29	.13	.02
28	.29	.56	1.0	.92	2.9	17	2.5	1.3	.62	.28	.13	.02
29	.25	.52	2.3	.91	-----	13	2.3	1.5	.65	.25	.13	.02
30	.27	.52	1.2	.99	-----	10	2.2	1.4	.58	.28	.14	.03
31	.25	-----	1.2	.99	-----	8.7	-----	1.3	-----	.27	.13	-----
Total	3.96	12.93	28.68	36.07	61.68	360.6	115.9	53.2	29.34	11.73	6.12	1.88
Mean	.13	.43	.93	1.16	2.20	11.6	3.86	1.72	.98	.38	.20	.063
Max	.29	1.0	2.3	3.6	5.5	57	7.3	2.3	2.2	.56	.29	.13
Min	0	.22	.44	.91	.98	1.8	2.2	1.3	.58	.25	.12	.02
Acre-Ft	7.9	26	57	72	122	715	230	106	58	23	12	3.7
Wtr Year 2011	Total	722.09	Mean	1.98	Max	57	Min	0	Inst Max	57	Acre-Ft	1430
Cal Year 2010	Total	593.72	Mean	1.63	Max	26	Min	0	Inst Max	26	Acre-Ft	1180

Monterey Peninsula Water Management District

Figure D-33

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— TU

Tularcitos Creek

Daily Mean Discharge (CFS)



Summary Report

Site: TU Tularcitos Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.31	.60	1.1	1.1	1.1	1.3	.88	.52	.08	0	0
2	.04	.31	.56	1.1	1.1	1.0	1.2	.84	.50	.09	0	0
3	.06	.35	.56	1.1	1.1	.98	1.2	.80	.43	.08	0	0
4	.16	.39	.61	1.1	.99	.93	1.2	.84	.41	.08	0	0
5	.37	.42	.61	1.1	.98	.91	1.2	.78	.46	.08	.01	0
6	.54	.58	.61	1.1	.98	.99	1.2	.82	.48	.08	.01	0
7	.42	.53	.64	1.1	.98	.98	1.1	.78	.44	.07	0	0
8	.37	.47	.68	1.1	.98	.98	1.1	.78	.43	.06	0	0
9	.37	.44	.78	1.1	.98	.95	1.1	.74	.39	.06	0	0
10	.36	.46	.78	1.0	.98	.91	1.2	.72	.33	.05	0	0
11	.33	.58	.84	1.1	1.0	.91	1.4	.77	.29	.04	0	0
12	.31	.64	.84	1.1	1.0	.91	1.5	.72	.27	.03	0	0
13	.29	.53	.88	1.0	1.2	.89	2.4	.71	.25	.03	0	0
14	.28	.51	.91	1.1	1.3	.86	2.1	.67	.23	.03	0	0
15	.28	.48	.91	1.1	1.2	.91	1.6	.63	.21	.03	0	0
16	.26	.48	.93	1.1	1.1	.88	1.4	.61	.19	.03	0	0
17	.26	.48	.98	1.1	1.1	2.1	1.4	.61	.15	.03	0	0
18	.26	.48	.98	1.1	1.1	2.5	1.3	.56	.16	.03	0	0
19	.30	.48	.98	1.1	1.1	1.6	1.2	.56	.16	.03	0	0
20	.34	.67	.98	1.1	1.0	1.5	1.1	.61	.14	.02	0	0
21	.35	.60	.98	4.0	.98	1.4	.99	.60	.13	.02	0	0
22	.32	.57	.98	1.4	.98	1.4	.98	.56	.14	.01	0	0
23	.30	.56	.98	2.4	.98	1.2	.98	.56	.14	.01	0	0
24	.29	.56	1.0	1.6	.98	1.3	.98	.56	.15	.01	0	0
25	.31	.56	1.1	1.5	.98	2.7	.94	.56	.14	.01	0	0
26	.32	.56	1.1	1.3	.98	1.6	.91	.56	.13	0	0	0
27	.35	.56	1.1	1.3	.98	1.6	.97	.61	.11	0	0	0
28	.35	.56	1.1	1.2	.98	1.5	.97	.61	.09	0	0	0
29	.33	.59	1.1	1.2	1.1	1.4	.91	.57	.09	0	0	0
30	.30	.61	1.1	1.1	-----	1.3	.91	.55	.08	0	0	0
31	.31	-----	1.1	1.1	-----	1.3	-----	.52	-----	0	0	-----
Total	9.16	15.32	27.30	39.9	30.21	39.49	36.74	20.69	7.64	1.09	0.02	0
Mean	.30	.51	.88	1.29	1.04	1.27	1.22	.67	.25	.035	.001	0
Max	.54	.67	1.1	4.0	1.3	2.7	2.4	.88	.52	.09	.01	0
Min	.03	.31	.56	1.0	.98	.86	.91	.52	.08	0	0	0
Acre-Ft	18	30	54	79	60	78	73	41	15	2.2	.04	0
Wtr Year 2012	Total	227.56	Mean	.62	Max	4.0	Min	0	Inst Max	4.0	Acre-Ft	451
Cal Year 2011	Total	728.30	Mean	2.00	Max	57	Min	.02	Inst Max	57	Acre-Ft	1440

Monterey Peninsula Water Management District

Figure D-34

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— TU

Tularcitos Creek

Daily Mean Discharge (CFS)



Summary Report

Site: TU Tularcitos Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.19	1.1	1.2	.98	.98	.78	.31	.07	0	0	0
2	0	.20	2.4	1.1	1.0	.98	.78	.28	.05	0	0	0
3	0	.18	1.1	1.1	1.1	.98	.78	.25	.07	0	0	0
4	0	.16	.72	1.1	1.1	.92	.81	.25	.07	0	0	0
5	0	.15	.78	.99	1.1	.91	.84	.23	.06	0	0	0
6	0	.14	.84	1.9	1.1	.97	.79	.24	.05	0	0	0
7	0	.14	.84	1.4	1.1	.93	.73	.25	.04	0	0	0
8	0	.17	.77	1.4	1.3	.97	.72	.24	.03	0	0	0
9	0	.24	.71	1.3	1.2	.91	.72	.23	.03	0	0	0
10	.01	.27	.65	1.7	1.1	.91	.72	.23	.02	0	0	0
11	0	.25	.61	1.4	.99	.94	.72	.21	.02	0	0	0
12	0	.28	.61	1.4	1.0	.91	.68	.19	.02	0	0	0
13	0	.31	.60	1.3	1.0	.88	.61	.18	.01	0	0	0
14	.01	.33	.59	1.2	1.0	.85	.61	.18	.01	0	0	0
15	.04	.30	.63	1.2	.99	.91	.63	.18	.01	0	0	0
16	.05	.32	.62	1.1	.95	.91	.61	.17	0	0	0	0
17	.05	.36	.62	1.1	.94	.88	.57	.17	0	0	0	0
18	.04	.36	.66	1.1	.95	.84	.54	.17	0	0	0	0
19	.03	.35	.66	1.1	1.1	.84	.52	.17	0	0	0	0
20	.06	.33	.65	1.1	1.3	.84	.52	.15	0	0	0	0
21	.09	.33	.67	1.1	1.1	.84	.52	.11	0	0	0	0
22	.11	.34	.94	1.1	1.1	.85	.48	.12	0	0	0	0
23	.16	.35	1.2	1.1	1.0	.84	.40	.12	0	0	0	0
24	.16	.34	1.3	1.1	.98	.84	.43	.13	0	0	0	0
25	.16	.34	.95	1.1	1.0	.84	.44	.13	0	0	0	0
26	.17	.37	1.8	1.1	1.0	.84	.41	.13	0	0	0	0
27	.14	.39	1.9	1.1	.98	.84	.38	.12	0	0	0	0
28	.14	.63	1.4	1.1	.98	.82	.38	.13	0	0	0	0
29	.15	.70	2.3	1.1	-----	.78	.35	.11	0	0	0	0
30	.16	4.9	1.6	1.0	-----	.79	.30	.10	0	0	0	0
31	.16	-----	1.2	.98	-----	.80	-----	.09	-----	0	0	-----
Total	1.89	13.72	31.42	37.07	29.44	27.34	17.77	5.57	0.56	0	0	0
Mean	.061	.46	1.01	1.20	1.05	.88	.59	.18	.019	0	0	0
Max	.17	4.9	2.4	1.9	1.3	.98	.84	.31	.07	0	0	0
Min	0	.14	.59	.98	.94	.78	.30	.09	0	0	0	0
Acre-Ft	3.7	27	62	74	58	54	35	11	1.1	0	0	0
Wtr Year 2013	Total	164.78	Mean	.45	Max	4.9	Min	0	Inst Max	4.9	Acre-Ft	327
Cal Year 2012	Total	222.81	Mean	.61	Max	4.9	Min	0	Inst Max	4.9	Acre-Ft	442

Monterey Peninsula Water Management District

Figure D-35

Period 1 Year Plot Start 00:00_10/01/2008

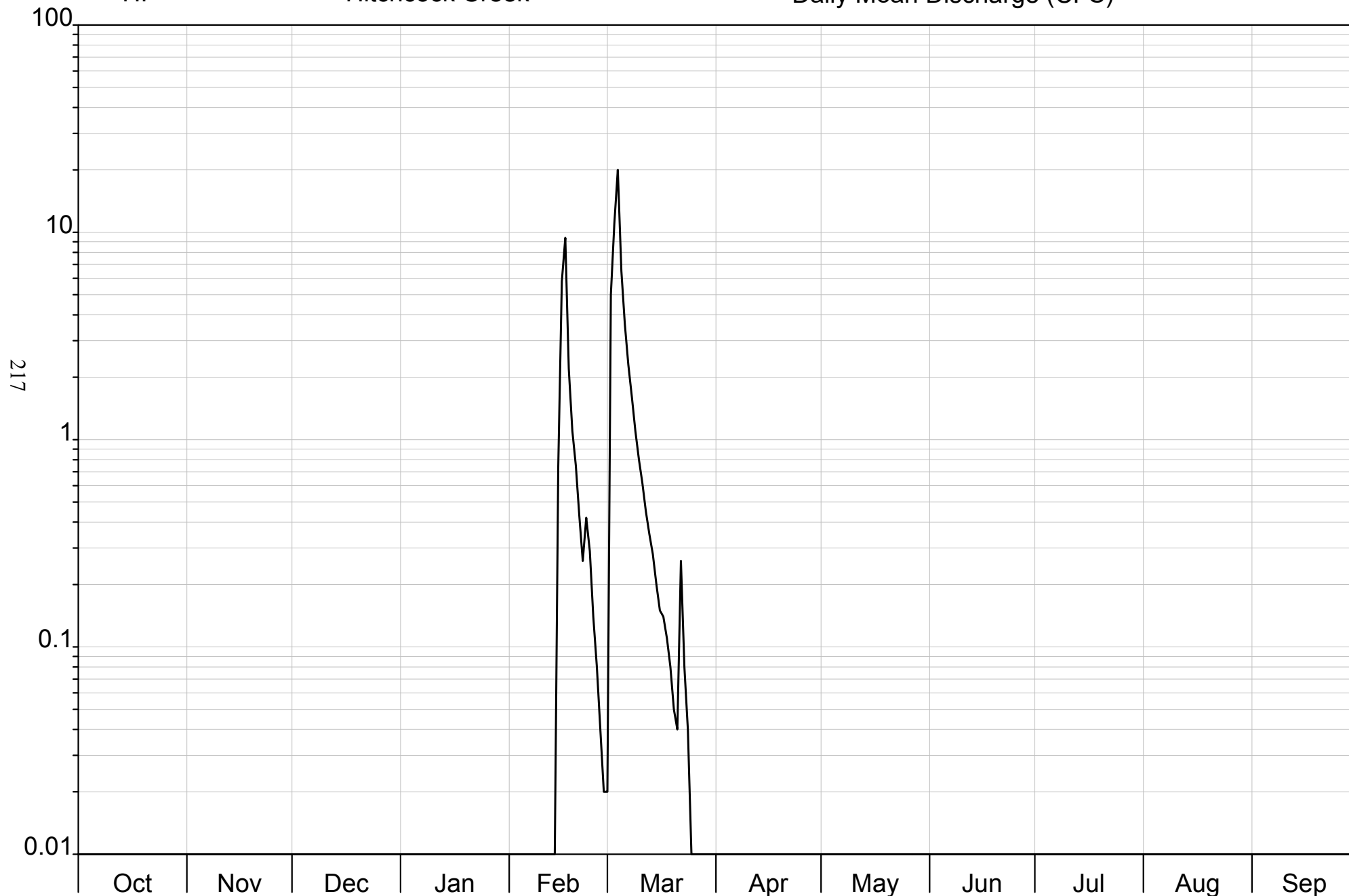
WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— HI

Hitchcock Creek

Daily Mean Discharge (CFS)



Summary Report

Site: HI Hitchcock Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	.02	0	0	0	0	0	0
2	0	0	0	0	0	5.0	0	0	0	0	0	0
3	0	0	0	0	0	11	0	0	0	0	0	0
4	0	0	0	0	0	20	0	0	0	0	0	0
5	0	0	0	0	0	6.5	0	0	0	0	0	0
6	0	0	0	0	0	3.6	0	0	0	0	0	0
7	0	0	0	0	0	2.3	0	0	0	0	0	0
8	0	0	0	0	0	1.6	0	0	0	0	0	0
9	0	0	0	0	0	1.1	0	0	0	0	0	0
10	0	0	0	0	0	.80	0	0	0	0	0	0
11	0	0	0	0	0	.62	0	0	0	0	0	0
12	0	0	0	0	0	.45	0	0	0	0	0	0
13	0	0	0	0	0	.35	0	0	0	0	0	0
14	0	0	0	0	0	.28	0	0	0	0	0	0
15	0	0	0	0	.74	.20	0	0	0	0	0	0
16	0	0	0	0	5.8	.15	0	0	0	0	0	0
17	0	0	0	0	9.4	.14	0	0	0	0	0	0
18	0	0	0	0	2.2	.11E	0	0	0	0	0	0
19	0	0	0	0	1.1	.08E	0	0	0	0	0	0
20	0	0	0	0	.75	.05E	0	0	0	0	0	0
21	0	0	0	0	.43	.04E	0	0	0	0	0	0
22	0	0	0	0	.26	.26	0	0	0	0	0	0
23	0	0	0	0	.42	.08	0	0	0	0	0	0
24	0	0	0	0	.29	.04	0	0	0	0	0	0
25	0	0	0	0	.14	.01	0	0	0	0	0	0
26	0	0	0	0	.08	0	0	0	0	0	0	0
27	0	0	0	0	.04	0	0	0	0	0	0	0
28	0	0	0	0	.02	0	0	0	0	0	0	0
29	0	0	0	0	-----	0	0	0	0	0	0	0
30	0	0	0	0	-----	0	0	0	0	0	0	0
31	0	-----	0	0	-----	0	-----	0	-----	0	0	-----
Total	0	0	0	0	21.67	54.78	0	0	0	0	0	0
Mean	0	0	0	0	.77	1.77	0	0	0	0	0	0
Max	0	0	0	0	9.4	20	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	0	0	0	43	109	0	0	0	0	0	0
Wtr Year 2009	Total	76.45	Mean	.21	Max	20	Min	0	Inst Max	20	Acre-Ft	152
Cal Year 2008	Total	193.32	Mean	.53	Max	30	Min	0	Inst Max	30	Acre-Ft	383

Monterey Peninsula Water Management District

Figure D-36

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— HI

Hitchcock Creek

Daily Mean Discharge (CFS)



Summary Report

Site: HI Hitchcock Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.55	5.2	.20	.74	0	0	0	0
2	0	0	0	0	.42	7.2	.15	.61	0	0	0	0
3	0	0	0	0	.33	11	.14	.55	0	0	0	0
4	0	0	0	0	.38	13	.21	.58	0	0	0	0
5	0	0	0	0	2.3	7.7	2.4	.53	0	0	0	0
6	0	0	0	0	1.2	5.4	.71	.44	0	0	0	0
7	0	0	0	0	1.9	4.2	.47	.33	0	0	0	0
8	0	0	0	0	1.5	3.9	.36	.25	0	0	0	0
9	0	0	0	0	2.1	3.9	.31	.22	0	0	0	0
10	0	0	0	0	1.7	3.2	.25	.23	0	0	0	0
11	0	0	0	0	1.4	2.6	1.9	.20	0	0	0	0
12	0	0	.01	0	1.1	2.6	3.8	.14	0	0	0	0
13	.08E	0	.01	0	.96	2.9	2.6	.11	0	0	0	0
14	0	0	0	0	.80	2.3	1.8	.08	0	0	0	0
15	0	0	0	0	.67	1.8	1.4	.06	0	0	0	0
16	0	0	0	0	.55	1.6	1.1	.05	0	0	0	0
17	0	0	0	0	.46	1.4	.94	.05	0	0	0	0
18	0	0	0	.43	.39	1.2	.80	.04E	0	0	0	0
19	0	0	0	6.1E	.32	1.1	.69	.03E	0	0	0	0
20	0	0	0	35	.27	.90	1.4	.02E	0	0	0	0
21	0	0	0	11	.31	.79	3.9	.01E	0	0	0	0
22	0	0	0	12	.57	.69	2.8	0E	0	0	0	0
23	0	0	0	6.0	.53	.58	2.1	0	0	0	0	0
24	0	0	0	3.9	6.2	.49	1.7	0	0	0	0	0
25	0	0	0	2.6	2.7	.42	1.4	0	0	0	0	0
26	0	0	0	2.4	8.3	.35	1.2	0	0	0	0	0
27	0	0	0	1.9	14	.30	1.1	.04	0	0	0	0
28	0	0	0	1.4	8.4	.24	1.1	.02	0	0	0	0
29	0	0	0	1.1	-----	.21	.94	0	0	0	0	0
30	0	0	0	.87	-----	.18	.82	0	0	0	0	0
31	0	-----	0	.70	-----	.19	-----	0	-----	0	0	-----
Total	0.08	0	0.02	85.40	60.31	87.54	38.69	5.33	0	0	0	0
Mean	.003	0	.001	2.75	2.15	2.82	1.29	.17	0	0	0	0
Max	.08	0	.01	35	14	13	3.9	.74	0	0	0	0
Min	0	0	0	0	.27	.18	.14	0	0	0	0	0
Acre-Ft	.16	0	.04	169	120	174	77	11	0	0	0	0
Wtr Year 2010	Total	277.37	Mean	.76	Max	35	Min	0 Inst Max	35	Acre-Ft	550	
Cal Year 2009	Total	76.55	Mean	.21	Max	20	Min	0 Inst Max	20	Acre-Ft	152	

Monterey Peninsula Water Management District

Figure D-37

Period 1 Year Plot Start 00:00_10/01/2010

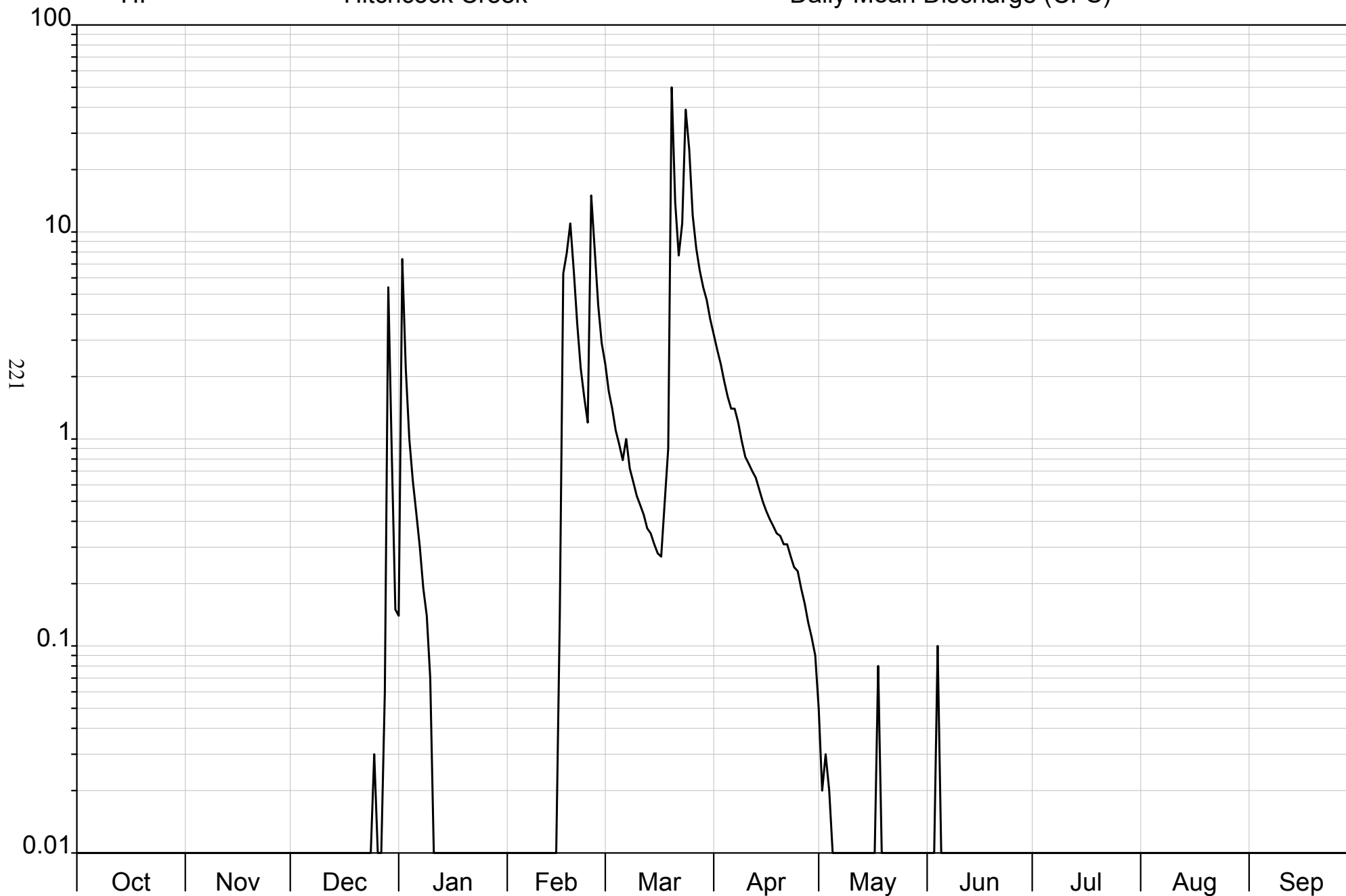
WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— HI

Hitchcock Creek

Daily Mean Discharge (CFS)



Summary Report

Site: HI Hitchcock Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.14	0	2.3	3.2	.05	0	0	0	0
2	0	0	0	7.4	0	1.7	2.7	.02	0	0	0	0
3	0	0	0	2.2	0	1.4	2.3	.03	0	0	0	0
4	0	0	0	1.0	0	1.1	1.9	.02	.10	0	0	0
5	0	0	0	.63	0	.94	1.6	.01	0	0	0	0
6	0	0	0	.44	0	.79	1.4	0	0	0	0	0
7	0	0	0	.30	0	1.0	1.4	0	0	0	0	0
8	0	0	0	.19	0	.72	1.2	0	0	0	0	0
9	0	0	0	.14	0	.62	.98	0	0	0	0	0
10	0	0	0	.07	0	.53	.82	0	0	0	0	0
11	0	0	0	.01	0	.48	.76	0	0	0	0	0
12	0	0	0	0	0	.43	.70	0	0	0	0	0
13	0	0	0	0	0	.37	.65	0	0	0	0	0
14	0	0	0	0	0	.35	.57	0	0	0	0	0
15	0	0	0	0	0	.31	.50	.01	0	0	0	0
16	0	0	0	0	.14	.28	.45	0	0	0	0	0
17	0	0	0	0	6.3	.27	.41	0	0	0	0	0
18	0	0	0	0	7.9	.50	.38	.08	0	0	0	0
19	0	0	0	0	11	.90	.35	0	0	0	0	0
20	0	.01	0	0	6.5	50	.34	0	0	0	0	0
21	0	0	0	0	3.6	14	.31	0	0	0	0	0
22	0	0	0	0	2.2	7.7	.31	0	0	0	0	0
23	0	0	0	0	1.6	11	.27	0	0	0	0	0
24	0	0	0	0	1.2	39	.24	0	0	0	0	0
25	0	0	.03	0	15	25	.23	0	0	0	0	0
26	0	0	0	0	8.1	12	.19	0	0	0	0	0
27	0	0	0	0	4.4	8.3	.16	0	0	0	0	0
28	0	0	.06	0	2.9	6.5	.13	0	0	0	0	0
29	0	0	5.4	0	-----	5.4	.11	0	0	0	0	0
30	0	0	.85	0	-----	4.7	.09	0	0	0	0	0
31	0	-----	.15	0	-----	3.8	-----	0	-----	0	0	-----
Total	0	0.01	6.49	12.52	70.84	202.39	24.65	0.22	0.10	0	0	0
Mean	0	0	.21	.40	2.53	6.53	.82	.007	.003	0	0	0
Max	0	.01	5.4	7.4	15	50	3.2	.08	.10	0	0	0
Min	0	0	0	0	0	.27	.09	0	0	0	0	0
Acre-Ft	0	.02	13	25	141	401	49	.44	.20	0	0	0
Wtr Year 2011	Total	317.22	Mean	.87	Max	50	Min	0	Inst Max	50	Acre-Ft	629
Cal Year 2010	Total	283.77	Mean	.78	Max	35	Min	0	Inst Max	35	Acre-Ft	563

Monterey Peninsula Water Management District

Figure D-38

Period 1 Year Plot Start 00:00_10/01/2011

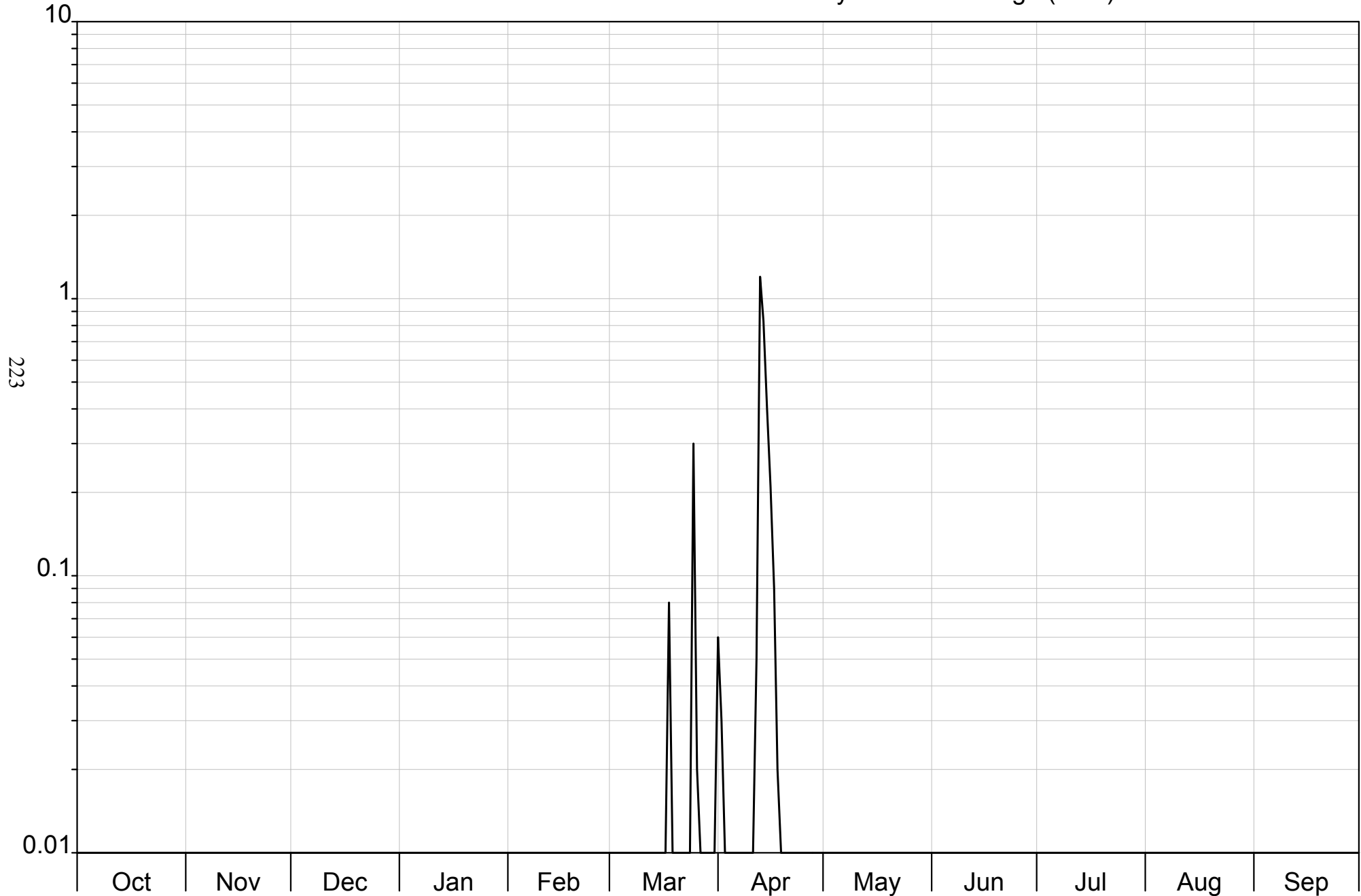
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— HI

Hitchcock Creek

Daily Mean Discharge (CFS)



Summary Report

Site: HI Hitchcock Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	.06	0	0	0	0	0
2	0	0	0	0	0	0	.03	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	.05	0	0	0	0	0
13	0	0	0	0	0	0	1.2	0	0	0	0	0
14	0	0	0	0	0	0	.83	0	0	0	0	0
15	0	0	0	0	0	0	.40	0	0	0	0	0
16	0	0	0	0	0	0	.21	0	0	0	0	0
17	0	0	0	0	0	.01	.09	0	0	0	0	0
18	0	0	0	0	0	.08	.02	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	.01	0	0	0	0	0	0
25	0	0	0	0	0	.30	0	0	0	0	0	0
26	0	0	0	0	0	.02	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	-----	0	0	0	0	0	0	0
31	0	-----	0	0	-----	0	-----	0	-----	0	0	-----
Total	0	0	0	0	0	0.42	2.89	0	0	0	0	0
Mean	0	0	0	0	0	.014	.096	0	0	0	0	0
Max	0	0	0	0	0	.30	1.2	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	0	0	0	0	.83	5.7	0	0	0	0	0
Wtr Year 2012	Total	3.31	Mean	.009	Max	1.2	Min	0	Inst Max	1.2	Acre-Ft	6.6
Cal Year 2011	Total	310.72	Mean	.85	Max	50	Min	0	Inst Max	50	Acre-Ft	616

Monterey Peninsula Water Management District

Figure D-39

Period 1 Year Plot Start 00:00_10/01/2012

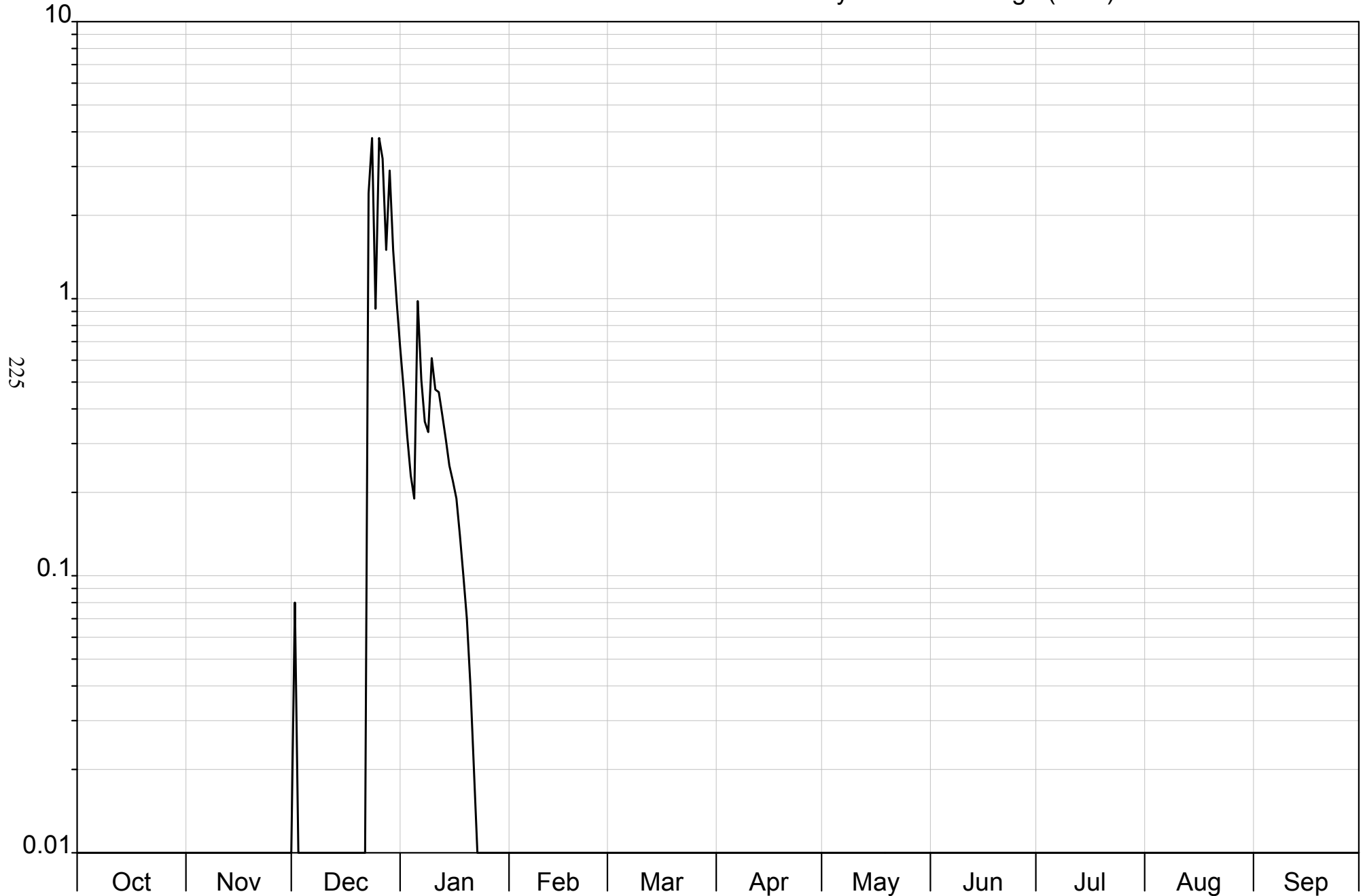
WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— HI

Hitchcock Creek

Daily Mean Discharge (CFS)



Summary Report

Site: HI Hitchcock Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.67	0	0	0	0	0	0	0	0
2	0	0	.08	.47	0	0	0	0	0	0	0	0
3	0	0	0	.32	0	0	0	0	0	0	0	0
4	0	0	0	.23	0	0	0	0	0	0	0	0
5	0	0	0	.19	0	0	0	0	0	0	0	0
6	0	0	0	.98	0	0	0	0	0	0	0	0
7	0	0	0	.51	0	0	0	0	0	0	0	0
8	0	0	0	.36	0	0	0	0	0	0	0	0
9	0	0	0	.33	0	0	0	0	0	0	0	0
10	0	0	0	.61	0	0	0	0	0	0	0	0
11	0	0	0	.47	0	0	0	0	0	0	0	0
12	0	0	0	.46	0	0	0	0	0	0	0	0
13	0	0	0	.38	0	0	0	0	0	0	0	0
14	0	0	0	.31	0	0	0	0	0	0	0	0
15	0	0	0	.25	0	0	0	0	0	0	0	0
16	0	0	0	.22	0	0	0	0	0	0	0	0
17	0	0	0	.19	0	0	0	0	0	0	0	0
18	0	0	0	.14	0	0	0	0	0	0	0	0
19	0	0	0	.10	.01	0	0	0	0	0	0	0
20	0	0	0	.07	0	0	0	0	0	0	0	0
21	0	0	0	.04	0	0	0	0	0	0	0	0
22	0	0	0	.02	0	0	0	0	0	0	0	0
23	0	0	2.4	0	0	0	0	0	0	0	0	0
24	0	0	3.8	.01	0	0	0	0	0	0	0	0
25	0	0	.92	0	0	0	0	0	0	0	0	0
26	0	0	3.8	0	0	0	0	0	0	0	0	0
27	0	0	3.2	.01	0	0	0	0	0	0	0	0
28	0	0	1.5	0	0	0	0	0	0	0	0	0
29	0	0	2.9	0	-----	0	0	0	0	0	0	0
30	0	0	1.5	0	-----	0	0	0	0	0	0	0
31	0	-----	.97	0	-----	0	-----	0	-----	0	0	-----
Total	0	0	21.07	7.34	0.01	0	0	0	0	0	0	0
Mean	0	0	.68	.24	0	0	0	0	0	0	0	0
Max	0	0	3.8	.98	.01	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	0	42	15	.02	0	0	0	0	0	0	0
Wtr Year 2013	Total	28.42	Mean	.078	Max	3.8	Min	0	Inst Max	3.8	Acre-Ft	56
Cal Year 2012	Total	24.38	Mean	.067	Max	3.8	Min	0	Inst Max	3.8	Acre-Ft	48

Monterey Peninsula Water Management District

Figure D-40

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— GC

Garzas Creek near Lower Garzas Canyon

Daily Mean Discharge (CFS)



Summary Report

Site: GC Garzas Creek near Lower Garzas Canyon
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.06	.45	8.5	3.8	1.5	.58	.11	0	0
2	0	0	0	.06	.42	M	3.8	2.0	.43	.05	0	0
3	0	0	0	.06	.42	M	3.7	1.6	.37	.04	0	0
4	0	0	0	.05	.37	M	3.5	1.5	.32	.04	0	0
5	0	0	0	.05	.54	M	3.3	1.4	.29	.03	0	0
6	0	0	0	.05	.58	48	3.2	1.3	.27	.03	0	0
7	0	0	0	.05	.68	33	3.6	1.2	.25	.03	0	0
8	0	0	0	.05	.50	26	6.0	1.1	.25	.03	0	0
9	0	0	0	.04	.93	20	4.4	1.0	.23	.02	0	0
10	0	0	0	.03	.90	17	3.8	.95	.23	.02	0	0
11	0	0	0	.03	.86	15	3.4	.89	.30	.02	0	0
12	0	0	0	.03	1.4	13	3.2	1.1	.28	.02	0	0
13	0	0	0	.02	6.4	12	3.0	.97	.36	.01	0	0
14	0	0	0	.02	6.7	11	2.8	1.3	.46	.01	0	0
15	0	0	0	.02	M	10	2.6	1.7	.40	.01	0	0
16	0	0	0	.02	M	9.2	2.6	1.6	.33	.01	0	0
17	0	0	0	.01	M	8.5	2.3	1.2	.26	.01	0	0
18	0	0	0	.01	M	7.9	2.1	1.7	.29	.01	0	0
19	0	0	0	.01	30	7.2	2.0	1.9	.26	.01	0	0
20	0	0	.14	.01	20	6.6	1.8	1.8	.21	.01	0	0
21	0	0	.47	.02	15	6.5	1.6	1.7	.31	.01	0	0
22	0	0	.62	.32	13	13	1.5	1.5	.18	.01	0	0
23	0	0	.64	.31	21	8.1	1.3	1.4	.26	.01	0	0
24	0	0	.56	.36	16	6.7	1.3	1.0	.37	.01	0	0
25	0	0	1.4	.39	13	6.1	1.3	.97	.31	0	0	0
26	0	0	.97	.28	11	5.6	1.3	.89	.28	0	0	0
27	0	0	.48	.32	10	5.1	1.4	.84	.19	0	0	0
28	0	0	.21	.54	8.8	4.8	1.4	.62	.12	0	0	0
29	0	0	.13	.53	-----	4.4	1.4	.51	.11	0	0	0
30	0	0	.09	.50	-----	4.2	1.3	.75	.12	0	0	0
31	0	-----	.07	.48	-----	3.9	-----	.73	-----	0	0	-----
Total	0	0	5.78	4.73	178.95	321.3	78.7	38.62	8.62	0.56	0	0
Mean	0	0	.19	.15	7.46	11.9	2.62	1.25	.29	.018	0	0
Max	0	0	1.4	.54	30	48	6.0	2.0	.58	.11	0	0
Min	0	0	0	.01	.37	3.9	1.3	.51	.11	0	0	0
Acre-Ft	0	0	11	9.4	355	637	156	77	17	1.1	0	0

Wtr Year 2009 Total: Incomplete record
 Cal Year 2008 Total: Incomplete record
 M Data missing/inadequate gaging information

Monterey Peninsula Water Management District

Figure D-41

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— GC

Garzas Creek near Lower Garzas Canyon

Daily Mean Discharge (CFS)



Summary Report

Site: GC Garzas Creek near Lower Garzas Canyon
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.85	.12	.55	10	M	8.8	14	4.7	1.6	.27	.03
2	0	.34	.11	.54	9.4	M	7.8	13	4.5	1.2	.26	.03
3	0	.17	.15	.53	8.5	M	8.3	12	4.3	1.1	.25	.03
4	0	.07	.16	.48	8.3	M	8.9	11	4.5	.87	.26	.03
5	0	.04	.18	.48	22	M	M	11	4.8	.65	.25	.03
6	0	.03	.42	.48	14	M	20	10	4.3	.49	.22	.02
7	0	.04	.99	1.9	16	M	16	9.6	3.7	.77	.22	.02
8	0	.05	.54	2.2	15	33	15	9.0	4.3	.87	.21	.02
9	0	.05	.49	1.8	22	31	15	9.1	5.2	.85	.21	.02
10	0	.04	.50	1.8	18	29	14	9.3	5.3	.82	.21	.02
11	0	.04	.54	1.7	16	24	M	9.3	5.4	.81	.20	.02
12	0	.15	.81	1.9	15	25	M	8.4	5.0	.81	.20	.02
13	M	.43	1.4	2.4	14	30	40	8.0	3.7	.85	.17	.02
14	7.2	.29	.96	2.0	13	21	29	7.8	2.4	.83	.19	.02
15	1.1	.08	.79	1.9	12	19	24	7.5	2.4	.79	.20	.01
16	1.4	.05	.71	1.8	11	18	21	7.2	2.3	.74	.17	.01
17	1.2	.04	.68	2.1	11	17	19	7.2	2.2	.67	.15	.01
18	.98	.05	.66	M	10	16	18	7.4	2.2	.49	.16	.01
19	.96	.07	.62	M	10	14	17	7.1	2.0	.75	.14	.01
20	1.3	.09	.59	M	9.7	13	24	6.6	1.9	.94	.10	.01
21	1.4	.12	.62	M	10	12	46	6.3	1.8	.90	.07	.01
22	1.3	.13	.80	M	16	11	32	6.2	1.8	.76	.07	.01
23	1.3	.14	.64	M	14	11	23	6.1	2.5	.46	.05	.01
24	1.3	.35	.61	31	M	9.9	20	5.7	2.6	.38	.04	.01
25	1.3	.37	.55	21	28	9.3	18	5.6	2.4	.37	.03	.01
26	1.2	.13	.53	23	M	8.8	17	5.7	2.0	.38	.03	.01
27	1.1	.12	.54	19	M	8.3	17	6.3	1.9	.37	.04	.01
28	.93	.15	.54	15	M	7.7	17	6.8	1.8	.35	.03	0
29	.87	.37	.56	14	-----	7.4	16	5.7	1.8	.34	.04	.01
30	.89	.34	.56	14	-----	8.1	15	5.3	1.7	.29	.04	.01
31	.90	-----	.55	12	-----	8.2	-----	4.8	-----	.27	.04	-----
Total	26.63	5.19	17.92	173.56	332.9	391.7	526.8	249.0	95.4	21.77	4.52	0.48
Mean	.89	.17	.58	6.94	13.9	16.3	19.5	8.03	3.18	.70	.15	.016
Max	7.2	.85	1.4	31	28	33	46	14	5.4	1.6	.27	.03
Min	0	.03	.11	.48	8.3	7.4	7.8	4.8	1.7	.27	.03	0
Acre-Ft	53	10	36	344	660	777	1040	494	189	43	9.0	.95

Wtr Year 2010 Total: Incomplete record
 Cal Year 2009 Total: Incomplete record
 M Data missing/inadequate gaging information

Monterey Peninsula Water Management District

Figure D-42

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— GC

Garzas Creek near Lower Garzas Canyon

Daily Mean Discharge (CFS)



Summary Report

Site: GC Garzas Creek near Lower Garzas Canyon
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	0	.96	15	3.2	31	39	6.7	3.7	2.9	1.1	.40
2	.01	0	.98	M	2.9	27	35	6.4	3.5	2.8	1.1	.37
3	0	0	.93	28	2.5	22	32	6.1	3.4	2.8	1.1	.33
4	0	0	.93	17	2.4	19	28	5.9	13	2.8	1.1	.23
5	0	0	1.1	12	2.3	18	25	5.6	9.7	2.9	1.1	.15
6	0	0	1.2	11	2.2	17	22	5.4	6.8	3.4	1.1	.17
7	0	0	1.3	9.6	2.1	20	23	5.3	5.9	3.7	1.1	.30
8	0	0	1.3	8.2	2.1	17	22	5.6	5.3	3.3	1.0	.31
9	0	0	1.3	7.3	2.0	15	19	5.5	4.9	2.4	1.0	.32
10	0	.01	1.3	6.5	1.9	14	17	5.3	4.7	2.2	.97	.32
11	0	.03	.81	5.9	1.9	13	16	5.2	4.6	1.9	.83	.36
12	0	.04	.68	5.5	1.8	12	16	5.0	4.6	1.4	.83	.37
13	0	.04	.67	5.1	1.7	12	15	4.8	4.2	1.3	.72	.32
14	0	.04	.67	4.9	1.8	11	14	4.6	3.9	1.0	.67	.28
15	0	.04	.70	4.6	1.8	10	13	5.8	3.6	.96	.63	.30
16	0	.04	.64	4.2	1.6	11	12	5.3	3.2	.94	.63	.26
17	0	.04	.65	4.0	M	10	12	5.8	3.2	.90	.60	.08
18	0	.05	.82	3.8	M	12	11	9.5	3.1	1.6	.54	.04
19	0	.04	1.6	3.5	M	M	11	7.5	3.0	1.3	.53	.03
20	0	.25	5.0	3.4	M	M	10	5.9	2.7	1.2	.55	.02
21	0	.74	7.4	3.2	41	M	10	5.4	2.4	1.2	.55	.01
22	0	.37	11	3.1	28	60	9.6	5.1	2.3	1.1	.56	.01
23	0	.92	7.8	2.9	22	M	9.0	4.8	2.2	.76	.46	0
24	0	1.0	5.8	2.8	19	M	8.7	4.4	2.2	1.6	.39	0
25	0	1.0	14	2.8	M	M	8.6	4.3	2.6	1.7	.41	0
26	0	1.0	16	2.7	M	M	8.1	4.4	2.8	1.4	.41	.01
27	0	1.1	9.1	2.6	50	M	7.8	4.0	2.0	1.3	.39	0
28	0	1.0	6.9	2.5	37	M	7.4	3.9	2.1	1.2	.37	0
29	0	.95	M	2.4	-----	M	7.2	4.1	2.8	1.2	.38	0
30	0	.94	25	3.8	-----	M	6.9	3.8	3.0	1.2	.41	.01
31	0	-----	17	4.3	-----	M	-----	3.7	-----	1.1	.41	-----
Total	0.02	9.64	143.54	192.6	245.6	351	475.3	165.1	121.4	55.46	21.94	5.00
Mean	.001	.32	4.78	6.42	11.2	18.5	15.8	5.33	4.05	1.79	.71	.17
Max	.01	1.1	25	28	50	60	39	9.5	13	3.7	1.1	.40
Min	0	0	.64	2.4	1.7	10	6.9	3.7	2.0	.76	.37	0
Acre-Ft	.04	19	285	382	487	696	943	327	241	110	44	9.9

Wtr Year 2011 Total: Incomplete record
 Cal Year 2010 Total: Incomplete record
 M Data missing/inadequate gaging information

Monterey Peninsula Water Management District

Figure D-43

Period 1 Year Plot Start 00:00_10/01/2011

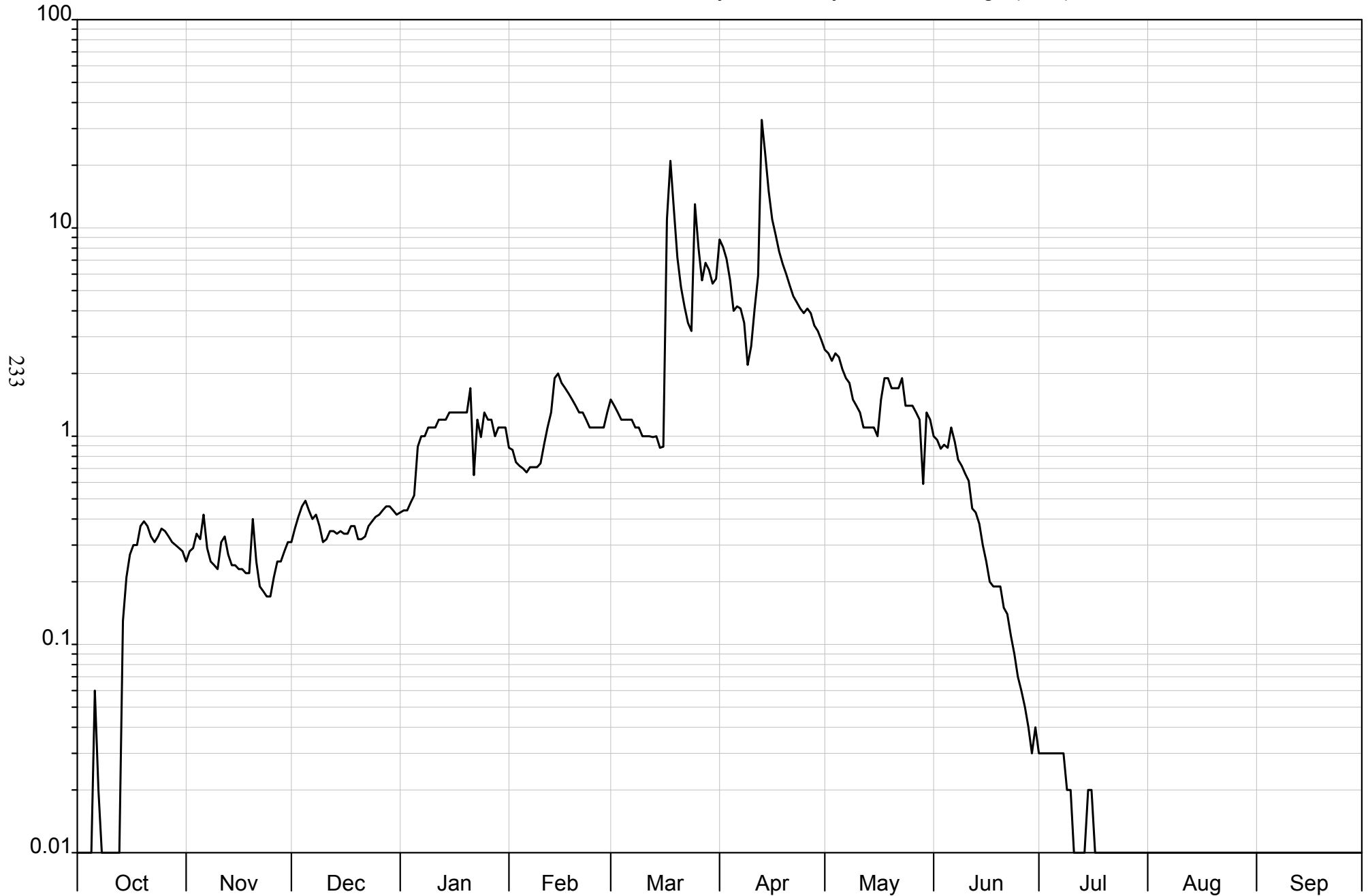
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— GC

Garzas Creek near Lower Garzas Canyon

Daily Mean Discharge (CFS)



Summary Report

Site: GC Garzas Creek near Lower Garzas Canyon
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.25	.31	.43	.88	1.5	8.8	2.6	1.0	.03	0	0
2	0	.28	.36	.44	.86	1.4	8.1	2.5	.96	.03	0	0
3	0	.29	.41	.44	.75	1.3	7.1	2.3	.87	.03	0	0
4	0	.34	.46	.48	.72	1.2	5.6	2.5	.91	.03	0	0
5	.01	.32	.49	.52	.70	1.2	4.0	2.4	.88	.03	0	0
6	.06	.42	.44	.89	.67	1.2	4.2	2.1	1.1	.03	0	0
7	.02	.29	.40	1.0	.71	1.2	4.1	1.9	.94	.03	0	0
8	0	.25	.42	1.0	.71	1.1	3.5	1.8	.77	.03	0	0
9	0	.24	.37	1.1	.71	1.1	2.2	1.5	.72	.02	0	0
10	0	.23	.31	1.1	.74	1.0	2.7	1.4	.66	.02	0	0
11	0	.31	.32	1.1	.91	1.0	4.1	1.3	.61	.01	0	0
12	0	.33	.35	1.2	1.1	1.0	5.9	1.1	.45	.01	0	0
13	0	.27	.35	1.2	1.3	.99	33E	1.1	.43	.01	0	0
14	.13	.24	.34	1.2	1.9	1.0	23	1.1	.38	.01	0	0
15	.21	.24	.35	1.3	2.0	.88	15	1.1	.30	.02	0	0
16	.27	.23	.34	1.3	1.8	.89	11	1.0	.25	.02	0	0
17	.30	.23	.34	1.3	1.7	11	9.2	1.5	.20	.01	0	0
18	.30	.22	.37	1.3	1.6	21	7.7	1.9	.19	.01	0	0
19	.37	.22	.37	1.3	1.5	12	6.7	1.9	.19	.01	0	0
20	.39	.40	.32	1.3	1.4	7.2	6.0	1.7	.19	.01	0	0
21	.37	.25	.32	1.7	1.3	5.2	5.3	1.7	.15	.01	0	0
22	.33	.19	.33	.65	1.3	4.2	4.7	1.7	.14	0	0	0
23	.31	.18	.37	1.2	1.2	3.5	4.4	1.9	.11	0	0	0
24	.33	.17	.39	.99	1.1	3.2	4.1	1.4	.09	0	0	0
25	.36	.17	.41	1.3	1.1	13	3.9	1.4	.07	0	0	0
26	.35	.21	.42	1.2	1.1	8.0	4.1	1.4	.06	0	0	0
27	.33	.25	.44	1.2	1.1	5.6	3.9	1.3	.05	0	0	0
28	.31	.25	.46	1.0	1.1	6.8	3.4	1.2	.04	0	0	0
29	.30	.28	.46	1.1	1.3	6.3	3.2	.59	.03	0	0	0
30	.29	.31	.44	1.1	-----	5.4	2.9	1.3	.04	0	0	0
31	.28	-----	.42	1.1	-----	5.7	-----	1.2	-----	0	0	-----
Total	5.63	7.86	11.88	32.44	33.26	136.06	211.8	49.79	12.78	0.41	0	0
Mean	.18	.26	.38	1.05	1.15	4.39	7.06	1.61	.43	.013	0	0
Max	.39	.42	.49	1.7	2.0	21	33	2.6	1.1	.03	0	0
Min	0	.17	.31	.43	.67	.88	2.2	.59	.03	0	0	0
Acre-Ft	11	16	24	64	66	270	420	99	25	.81	0	0
Wtr Year 2012	Total	501.91	Mean	1.37	Max	33	Min	0	Inst Max	33	Acre-Ft	996
Cal Year 2011	Total:	Incomplete	record									

Monterey Peninsula Water Management District

Figure D-44

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— GC

Garzas Creek near Lower Garzas Canyon

Daily Mean Discharge (CFS)



Summary Report

Site: GC Garzas Creek near Lower Garzas Canyon
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	3.1	12	3.6	2.5	1.5	.29	.07	0	0	0
2	0	0	M	10	3.4	2.5	1.4	.23	.07	0	0	0
3	0	0	23	9.6	3.3	2.4	1.3	.21	.09	0	0	0
4	0	0	11	9.8	3.3	2.3	1.2	.22	.10	0	0	0
5	0	0	8.8	10	3.2	2.2	1.2	.25	.09	0	0	0
6	0	0	8.2	18	3.1	3.0	1.2	.25	.09	0	0	0
7	0	0	6.1	16	3.0	3.0	1.3	.27	.07	0	0	0
8	0	0	4.2	13	4.5	2.7	1.3	.28	.05	0	0	0
9	0	0	3.3	12	3.9	2.5	1.3	.29	.05	0	0	0
10	0	0	2.8	17	3.3	2.3	1.2	.26	.07	0	0	0
11	0	0	2.5	15	3.1	2.2	1.1	.24	.07	0	0	0
12	0	0	2.3	14	2.9	2.1	1.1	.20	.07	0	0	0
13	0	0	2.2	13	2.8	2.1	1.0	.20	.05	0	0	0
14	0	0	2.1	11	2.8	1.9	.99	.20	.04	0	0	0
15	0	0	2.2	9.5	2.7	1.9	1.1	.21	.03	0	0	0
16	0	0	2.0	5.8	2.6	1.8	1.0	.22	.03	0	0	0
17	0	0	1.9	5.4	2.5	1.7	.97	.21	.03	0	0	0
18	0	0	1.8	4.9	2.5	1.7	.83	.19	.03	0	0	0
19	0	0	1.8	4.9	3.5	1.6	.79	.17	.03	0	0	0
20	0	0	1.7	5.7	5.5	1.6	.77	.15	.04	0	0	0
21	0	0	1.7	5.3	3.7	1.6	.71	.15	.03	0	0	0
22	0	0	4.7	5.0	3.3	1.6	.66	.15	.02	0	0	0
23	0	0	M	4.7	3.1	1.5	.61	.15	.02	0	0	0
24	0	0	M	5.0	3.5	1.4	.57	.17	.03	0	0	0
25	0	0	20	5.0	2.9	1.4	.51	.16	.02	0	0	0
26	0	0	M	4.5	2.8	1.4	.51	.14	.01	0	0	0
27	0	0	M	4.4	2.7	1.3	.48	.13	.01	0	0	0
28	0	0	19	4.1	2.6	1.3	.44	.15	0	0	0	0
29	0	0	30	4.0	-----	1.3	.40	.14	0	0	0	0
30	0	8.1	19	3.9	-----	1.3	.34	.12	0	0	0	0
31	0	-----	14	3.7	-----	1.4	-----	.10	-----	0	0	-----
Total	0	8.1	199.4	266.2	90.1	59.5	27.78	6.10	1.31	0	0	0
Mean	0	.27	7.67	8.59	3.22	1.92	.93	.20	.044	0	0	0
Max	0	8.1	30	18	5.5	3.0	1.5	.29	.10	0	0	0
Min	0	0	1.7	3.7	2.5	1.3	.34	.10	0	0	0	0
Acre-Ft	0	16	396	528	179	118	55	12	2.6	0	0	0

Wtr Year 2013 Total: Incomplete record
 Cal Year 2012 Total: Incomplete record
 M Data missing/inadequate gaging information

Monterey Peninsula Water Management District

Figure D-45

Period 1 Year Plot Start 00:00_10/01/2008

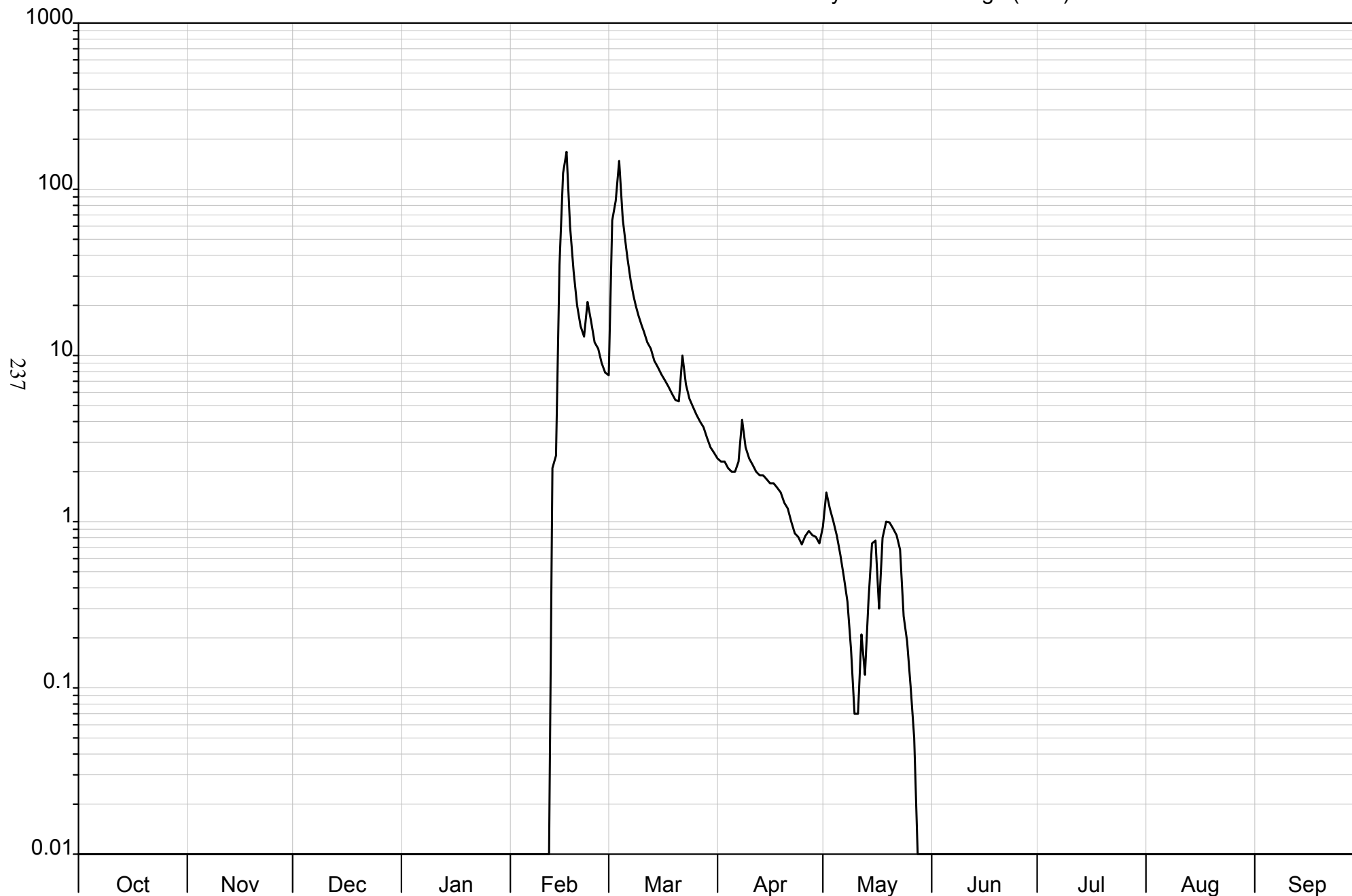
WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— GA

Garzas Creek at Garzas Road

Daily Mean Discharge (CFS)



Summary Report

Site: GA Garzas Creek at Garzas Road
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	7.6	2.4	.93	0	0	0	0
2	0	0	0	0	0	65	2.3	1.5	0	0	0	0
3	0	0	0	0	0	85	2.3	1.2	0	0	0	0
4	0	0	0	0	0	148	2.1	1.0	0	0	0	0
5	0	0	0	0	0	66	2.0	.82	0	0	0	0
6	0	0	0	0	0	44	2.0	.63	0	0	0	0
7	0	0	0	0	0	31	2.3	.46	0	0	0	0
8	0	0	0	0	0	23	4.1	.33	0	0	0	0
9	0	0	0	0	0	19	2.8	.17	0	0	0	0
10	0	0	0	0	0	16	2.4	.07	0	0	0	0
11	0	0	0	0	0	14	2.2	.07	0	0	0	0
12	0	0	0	0	0	12	2.0	.21	0	0	0	0
13	0	0	0	0	2.1	11	1.9	.12	0	0	0	0
14	0	0	0	0	2.5	9.3	1.9	.34	0	0	0	0
15	0	0	0	0	35	8.5	1.8	.74	0	0	0	0
16	0	0	0	0	125	7.7	1.7	.77	0	0	0	0
17	0	0	0	0	168	7.1	1.7	.30	0	0	0	0
18	0	0	0	0	60	6.5	1.6	.80	0	0	0	0
19	0	0	0	0	32	5.9	1.5	1.0	0	0	0	0
20	0	0	0	0	20	5.4	1.3	.99	0	0	0	0
21	0	0	0	0	15	5.3	1.2	.91	0	0	0	0
22	0	0	0	0	13	10	1.0	.83	0	0	0	0
23	0	0	0	0	21	6.7	.85	.68	0	0	0	0
24	0	0	0	0	16	5.5	.81	.27	0	0	0	0
25	0	0	0	0	12	4.9	.73	.19	0	0	0	0
26	0	0	0	0	11	4.4	.82	.10	0	0	0	0
27	0	0	0	0	9.0	4.0	.88	.05	0	0	0	0
28	0	0	0	0	7.9	3.7	.83	.01	0	0	0	0
29	0	0	0	0	-----	3.2	.81	0	0	0	0	0
30	0	0	0	0	-----	2.8	.74	.01	0	0	0	0
31	0	-----	0	0	-----	2.6	-----	0	-----	0	0	-----
Total	0	0	0	0	549.5	645.1	50.97	15.50	0	0	0	0
Mean	0	0	0	0	19.6	20.8	1.70	.50	0	0	0	0
Max	0	0	0	0	168	148	4.1	1.5	0	0	0	0
Min	0	0	0	0	0	2.6	.73	0	0	0	0	0
Acre-Ft	0	0	0	0	1090	1280	101	31	0	0	0	0
Wtr Year 2009	Total	1261.07	Mean	3.45	Max	168	Min	0	Inst Max	168	Acre-Ft	2500
Cal Year 2008	Total	1516.49	Mean	4.14	Max	149	Min	0	Inst Max	149	Acre-Ft	3010

Monterey Peninsula Water Management District

Figure D-46

Period 1 Year Plot Start 00:00_10/01/2009

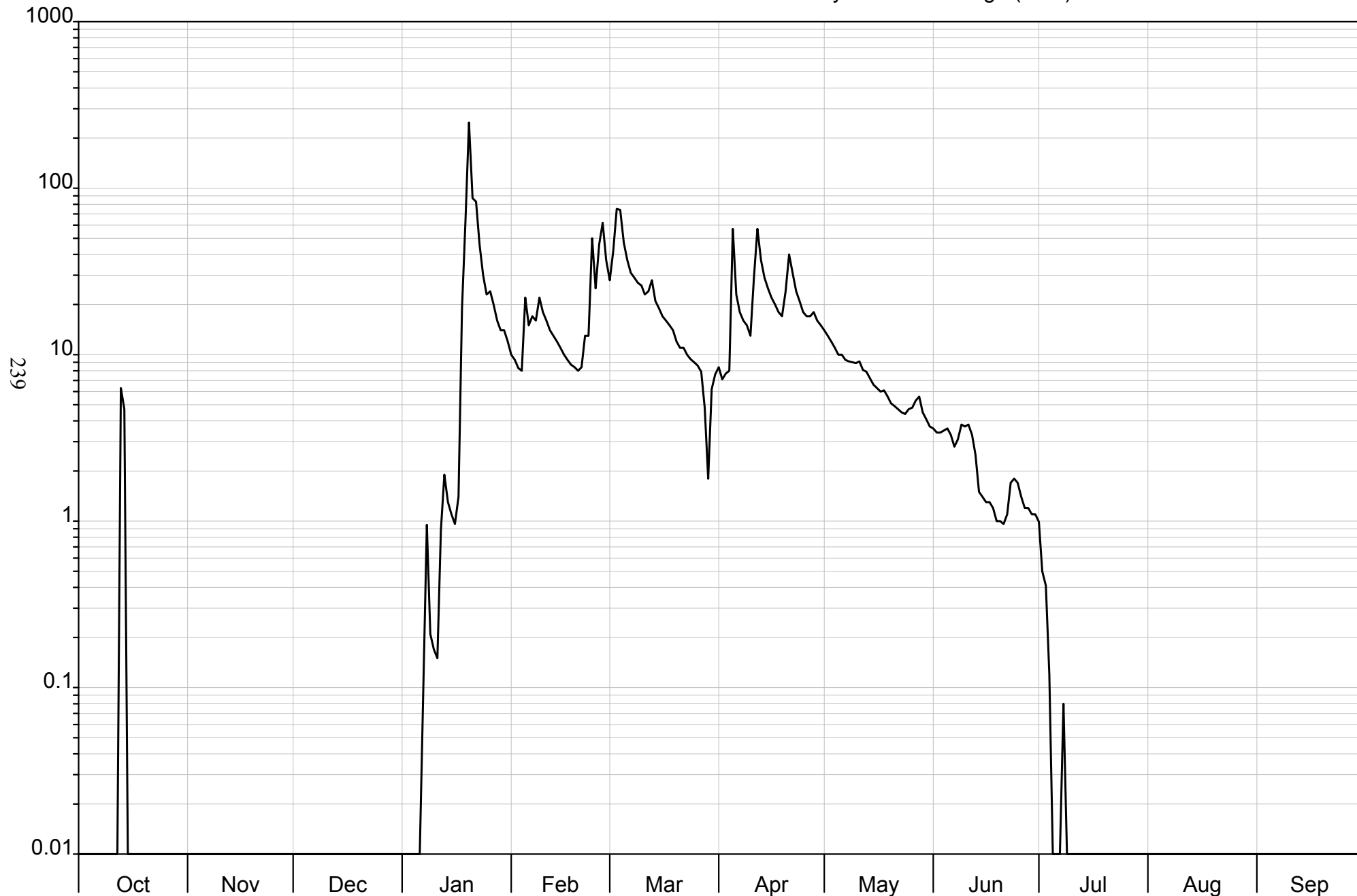
WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— GA

Garzas Creek at Garzas Road

Daily Mean Discharge (CFS)



Summary Report

Site: GA Garzas Creek at Garzas Road
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	10	28	8.4	14	3.6	.99	0	0
2	0	0	0	0	9.3	42	7.1	13	3.4	.50	0	0
3	0	0	0	0	8.3	75	7.7	12	3.4	.41	0	0
4	0	0	0	0	8.0	74	8.0	11	3.5	.12	0	0
5	0	0	0	0	22	47	57	10	3.6	.01	0	0
6	0	0	0	0	15	37	23	10	3.3	.01	0	0
7	0	0	0	.10	17	31	18	9.3	2.8	.01	0	0
8	0	0	0	.95	16	29	16	9.1	3.1	.08	0	0
9	0	0	0	.21	22	27	15	9.0	3.8	0	0	0
10	0	0	0	.17	18	26	13	8.9	3.7	0	0	0
11	0	0	0	.15	16	23	29	9.1	3.8	0	0	0
12	0	0	0	.88	14	24	57	8.1	3.3	0	0	0
13	6.3	0	0	1.9	13	28	37	7.9	2.5	0	0	0
14	4.7	0	0	1.3	12	21	29	7.2	1.5	0	0	0
15	0	0	0	1.1	11	19	25	6.6	1.4	0	0	0
16	0	0	0	.96	10	17	22	6.3	1.3	0	0	0
17	0	0	0	1.4	9.3	16	20	6.0	1.3	0	0	0
18	0	0	0	19	8.7	15	18	6.1	1.2	0	0	0
19	0	0	0	64	8.4	14	17	5.6	1.0	0	0	0
20	0	0	0	248	8.0	12	24	5.1	1.0	.01	0	0
21	0	0	0	87	8.4	11	40	4.9	.96	0	0	0
22	0	0	0	83	13	11	31	4.7	1.1	0	0	0
23	0	0	0	46	13	10	24	4.5	1.7	0	0	0
24	0	0	0	30	50	9.4	21	4.4	1.8	0	0	0
25	0	0	0	23	25	9.0	18	4.7	1.7	0	0	0
26	0	0	0	24	46	8.6	17	4.8	1.4	0	0	0
27	0	0	0	20	62	7.9	17	5.3	1.2	0	0	0
28	0	0	0	16	37	4.8	18	5.6	1.2	0	0	0
29	0	0	0	14	-----	1.8	16	4.5	1.1	0	0	0
30	0	0	0	14	-----	6.2	15	4.1	1.1	0	0	0
31	0	-----	0	12	-----	7.6	-----	3.7	-----	0	0	-----
Total	11.0	0	0	709.12	510.4	692.3	668.2	225.5	65.76	2.14	0	0
Mean	.35	0	0	22.9	18.2	22.3	22.3	7.27	2.19	.069	0	0
Max	6.3	0	0	248	62	75	57	14	3.8	.99	0	0
Min	0	0	0	0	8.0	1.8	7.1	3.7	.96	0	0	0
Acre-Ft	22	0	0	1410	1010	1370	1330	447	130	4.2	0	0
Wtr Year 2010	Total	2884.42	Mean	7.90	Max	248	Min	0	Inst Max	248	Acre-Ft	5720
Cal Year 2009	Total	1272.07	Mean	3.49	Max	168	Min	0	Inst Max	168	Acre-Ft	2520

Monterey Peninsula Water Management District

Figure D-47

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— GA

Garzas Creek at Garzas Road

Daily Mean Discharge (CFS)



Summary Report

Site: GA Garzas Creek at Garzas Road
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	12	1.9	30	39	6.3	3.0	1.8	.61	.01
2	0	0	0	62	1.6	27	35	5.9	2.8	1.8	.62	.01
3	0	0	0	32	1.5	24	31	5.6	2.8	1.9	.62	0
4	0	0	0	21	1.4	21	27	5.4	11	2.0	.64	0
5	0	0	0	14	1.2	19	25	5.0	8.9	2.1	.62	0
6	0	0	0	13	1.1	18	23	4.9	6.4	2.9	.65	0
7	0	0	0	11	1.0	21	23	4.6	5.2	3.2	.67	0
8	0	0	0	9.1	1.0	18	22	4.8	4.5	3.0	.62	0
9	0	0	0	7.8	.92	17	20	4.8	4.1	2.1	.60	0
10	0	0	0	7.0	.86	15	18	4.5	3.9	2.0	.57	0
11	0	0	0	6.1	.77	15	17	4.4	3.9	1.6	.33	0
12	0	0	0	5.5	.76	13	16	4.3	3.9	.84	.35	0
13	0	0	0	5.0	.73	13	15	4.0	3.5	.62	.22	0
14	0	0	0	4.7	.74	12	14	3.9	3.0	.26	.16	0
15	0	0	0	4.3	.83	12	14	5.2	2.7	.19	.11	0
16	0	0	0	3.8	13	13	13	4.7	2.3	.12	.09	0
17	0	0	0	3.4	72	11	12	5.5	2.2	.07	.10	0
18	0	0	0	3.2	90	14	11	9.1	2.2	.96	.07	0
19	0	0	.10	2.9	113	22	11	7.1	2.1	.61	.07	0
20	0	0	2.5	2.6	62	326	11	5.5	1.8	.51	.09	0
21	0	0	5.1	2.2	39	94	10	4.8	1.5	.50	.08	0
22	0	0	8.0	2.0	30	60	10	4.4	1.4	.50	.07	0
23	0	0	5.7	1.8	24	99	9.6	4.2	1.3	.06	.02	0
24	0	0	4.0	1.6	20	297	9.3	4.0	1.2	2.7	0	0
25	0	0	12	1.4	135	204	8.9	3.9	1.6	3.2	0	0
26	0	0	20	1.4	70	135	8.4	3.8	1.8	1.9	0	0
27	0	0	8.7	1.3	45	101	8.0	3.4	1.1	.86	0	0
28	0	0	5.0	1.2	35	76	7.6	3.3	1.1	.78	0	0
29	0	0	54	1.3	-----	61	7.1	3.6	1.7	.70	.01	0
30	0	0	27	2.2	-----	51	6.6	3.3	2.0	.62	.01	0
31	0	-----	17	2.7	-----	44	-----	3.0	-----	.63	.01	-----
Total	0	0	169.10	249.5	764.31	1883	482.5	147.2	94.9	41.03	8.01	0.02
Mean	0	0	5.45	8.05	27.3	60.7	16.1	4.75	3.16	1.32	.26	.001
Max	0	0	54	62	135	326	39	9.1	11	3.2	.67	.01
Min	0	0	0	1.2	.73	11	6.6	3.0	1.1	.06	0	0
Acre-Ft	0	0	335	495	1520	3730	957	292	188	81	16	.04
Wtr Year 2011	Total	3839.57	Mean	10.5	Max	326	Min	0	Inst Max	326	Acre-Ft	7620
Cal Year 2010	Total	3042.52	Mean	8.34	Max	248	Min	0	Inst Max	248	Acre-Ft	6030

Monterey Peninsula Water Management District

Figure D-48

Period 1 Year Plot Start 00:00_10/01/2011

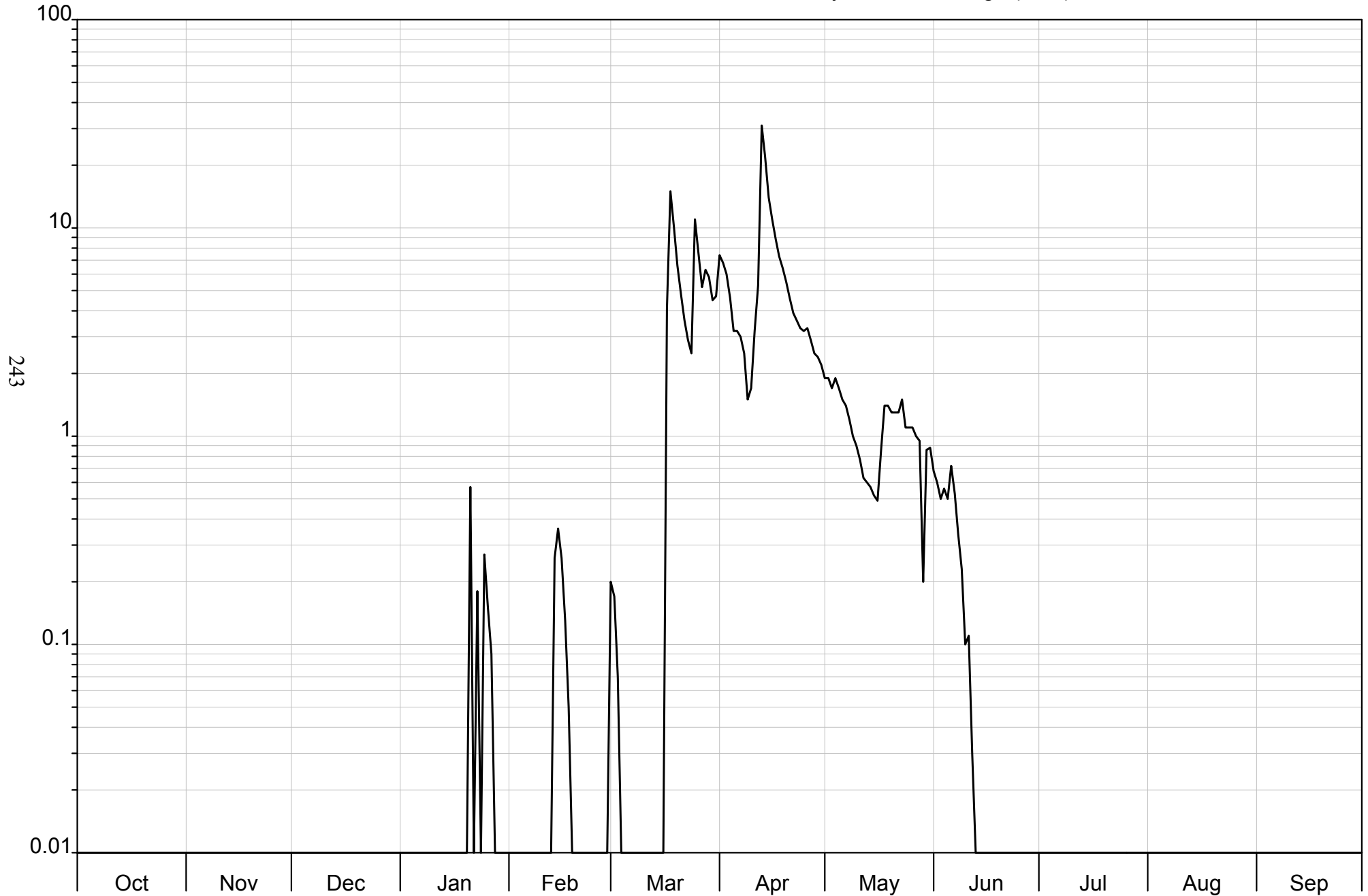
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— GA

Garzas Creek at Garzas Road

Daily Mean Discharge (CFS)



Summary Report

Site: GA Garzas Creek at Garzas Road
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	.20	7.4	1.9	.68	0	0	0
2	0	0	0	0	0	.17	6.8	1.9	.60	0	0	0
3	0	0	0	0	0	.07	6.0	1.7	.50	0	0	0
4	0	0	0	0	0	.01	4.6	1.9	.56	0	0	0
5	0	0	0	0	0	0	3.2	1.7	.50	0	0	0
6	0	0	0	0	0	0	3.2	1.5	.72	0	0	0
7	0	0	0	0	0	0	3.0	1.4	.53	0	0	0
8	0	0	0	0	0	0	2.5	1.2	.34	0	0	0
9	0	0	0	0	0	0	1.5	1.0	.23	0	0	0
10	0	0	0	0	0	0	1.7	.90	.10	0	0	0
11	0	0	0	0	0	0	3.2	.77	.11	0	0	0
12	0	0	0	0	0	0	5.3	.63	.03	0	0	0
13	0	0	0	0	.01	0	31	.60	.01	0	0	0
14	0	0	0	0	.26	0	22	.57	0	0	0	0
15	0	0	0	0	.36	0	14	.52	0	0	0	0
16	0	0	0	0	.26	0	11	.49	0	0	0	0
17	0	0	0	0	.13	4.1	8.8	.85	0	0	0	0
18	0	0	0	0	.05	15	7.3	1.4	0	0	0	0
19	0	0	0	0	.01	10	6.4	1.4	0	0	0	0
20	0	0	0	0	0	6.6	5.5	1.3	0	0	0	0
21	0	0	0	.57E	0	4.8	4.6	1.3	0	0	0	0
22	0	0	0	0E	0	3.6	3.9	1.3	0	0	0	0
23	0	0	0	.18E	0	2.9	3.6	1.5	0	0	0	0
24	0	0	0	0E	0	2.5	3.3	1.1	0	0	0	0
25	0	0	0	.27	0	11	3.2	1.1	0	0	0	0
26	0	0	0	.15	0	7.5	3.3	1.1	0	0	0	0
27	0	0	0	.09	0	5.2	2.9	1.0	0	0	0	0
28	0	0	0	0	0	6.3	2.5	.95	0	0	0	0
29	0	0	0	0	0	5.8	2.4	.20	0	0	0	0
30	0	0	0	0	-----	4.5	2.2	.86	0	0	0	0
31	0	-----	0	0	-----	4.7	-----	.88	-----	0	0	-----
Total	0	0	0	1.26	1.08	94.95	186.3	34.92	4.91	0	0	0
Mean	0	0	0	.041	.037	3.06	6.21	1.13	.16	0	0	0
Max	0	0	0	.57	.36	15	31	1.9	.72	0	0	0
Min	0	0	0	0	0	0	1.5	.20	0	0	0	0
Acre-Ft	0	0	0	2.5	2.1	188	370	69	9.7	0	0	0
Wtr Year 2012	Total	323.42	Mean	.88	Max	31	Min	0 Inst Max	31	Acre-Ft	641	
Cal Year 2011	Total	3670.47	Mean	10.1	Max	326	Min	0 Inst Max	326	Acre-Ft	7280	

Monterey Peninsula Water Management District

Figure D-49

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— GA

Garzas Creek at Garzas Road

Daily Mean Discharge (CFS)



Summary Report

Site: GA Garzas Creek at Garzas Road
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.43	11	2.6	1.3	.66	0	0	0	0	0
2	0	0	34	9.9	2.4	1.3	.58	0	0	0	0	0
3	0	0	20	9.1	2.3	1.2	.45	0	0	0	0	0
4	0	0	11	9.2	2.2	1.1	.37	0	0	0	0	0
5	0	0	9.3	9.7	2.2	1.1	.37	0	0	0	0	0
6	0	0	8.6	16	2.1	2.1	.28	0	0	0	0	0
7	0	0	6.1	14	1.9	2.2	.24	0	0	0	0	0
8	0	0	4.0E	12	3.7	1.8	.31	0	0	0	0	0
9	0	0	2.8E	12	3.0	1.5	.32	0	0	0	0	0
10	0	0	2.2E	15	2.4	1.3	.17	0	0	0	0	0
11	0	0	1.8E	13	2.1	1.2	.09E	0	0	0	0	0
12	0	0	1.6	12	1.9	1.1	.08E	0	0	0	0	0
13	0	0	1.4	11	1.7	1.0	.0E	0	0	0	0	0
14	0	0	1.3	9.5	1.6	.98	.0E	0	0	0	0	0
15	0	0	1.3	7.8	1.6	.91	.08E	0	0	0	0	0
16	0	0	1.1	4.4	1.5	.85	.18E	0	0	0	0	0
17	0	0	.90	4.0	1.4	.80	.08	0	0	0	0	0
18	0	0	.79	3.6	1.4	.74	.01	0	0	0	0	0
19	0	0	.73	3.6	2.1	.65	0	0	0	0	0	0
20	0	0	.70	4.3	4.4	.66	0	0	0	0	0	0
21	0	0	.72	4.0	2.7	.74	0	0	0	0	0	0
22	0	0	4.5	3.8	2.2	.75	0	0	0	0	0	0
23	0	0	23	3.6	2.1	.66	0	0	0	0	0	0
24	0	0	41	3.8	2.5	.58	0	0	0	0	0	0
25	0	0	20	3.9	1.9	.55	0	0	0	0	0	0
26	0	0	37	3.5	1.7	.46	0	0	0	0	0	0
27	0	0	29	3.5	1.5	.43	0	0	0	0	0	0
28	0	0	18	3.2	1.4	.39	0	0	0	0	0	0
29	0	0	25	3.0	-----	.35	0	0	0	0	0	0
30	0	5.2	17	2.9	-----	.34	0	0	0	0	0	0
31	0	-----	13	2.7	-----	.64	-----	0	-----	0	0	-----
Total	0	5.2	338.27	229.0	60.5	29.68	4.27	0	0	0	0	0
Mean	0	.17	10.9	7.39	2.16	.96	.14	0	0	0	0	0
Max	0	5.2	41	16	4.4	2.2	.66	0	0	0	0	0
Min	0	0	.43	2.7	1.4	.34	0	0	0	0	0	0
Acre-Ft	0	10	671	454	120	59	8.5	0	0	0	0	0
Wtr Year 2013	Total	666.92	Mean	1.83	Max	41	Min	0	Inst Max	41	Acre-Ft	1320
Cal Year 2012	Total	666.89	Mean	1.82	Max	41	Min	0	Inst Max	41	Acre-Ft	1320

Monterey Peninsula Water Management District

Figure D-50

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— DJ

Carmel River at Don Juan Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: DJ Carmel River at Don Juan Bridge
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.4	5.1	9.7	25	178	95	51	27	13	8.8	5.4
2	2.7	3.2	5.1	9.2	25	612	94	68	26	13	8.5	5.0
3	2.7	3.1	5.1	10	24	1330	91	59	27	12	8.5	4.8
4	2.9	3.4	5.4	11	23	2240	87	54	27	12	8.4	4.9
5	2.9	3.1	5.6	10	22	1160	83	51	26	12	7.9	5.4
6	2.7	2.9	5.5	9.9	30	767	79	49	26	12	7.3	5.6
7	2.6	2.9	5.5	9.7	48	575	80	47	27	12	7.0	5.7
8	2.5	2.9	5.5	10	55	472	104	44	26	12	6.7	5.9
9	2.7	3.2	5.7	11	58	403	91	43	25	12	6.1	6.0
10	2.5	3.6	5.3	11	63	347	84	42	24	13	5.9	5.6
11	2.5	3.8	5.2	9.8	60	307	82	41	24	13	5.9	4.9
12	2.5	3.8	5.2	8.9	62	274	78	39	24	13	5.8	4.8
13	2.4	3.9	5.8	8.9	71	245	74	38	24	13	5.5	5.3
14	2.4	3.7	6.5	8.8	87	223	72	38	23	12	5.3	5.7
15	2.4	3.7	7.3	8.6	198	208	69	36	23	12	5.5	5.7
16	2.4	3.6	8.9	8.7	914	195	64	35	22	12	5.8	5.5
17	2.3	3.7	9.0	8.2	1150	184	63	33	21	12	6.0	5.3
18	2.5	4.0	8.9	8.5	696	171	62	33	20	11	6.0	5.2
19	2.7	4.4	8.5	8.4	436	159	60	33	20	12	6.0	5.4
20	2.9	4.5	7.8	8.3	328	151	56	32	19	11	5.9	5.7
21	2.7	4.6	7.4	8.1	256	145	52	32	18	11	5.7	5.7
22	2.3	4.7	7.8	11	227	185	52	31	18	11	5.9	5.3
23	2.4	4.7	8.5	12	446	157	52	31	17	11	6.2	5.3
24	2.5	4.5	8.7	12	505	141	52	31	16	11	6.3	5.4
25	2.6	4.4	10	14	378	133	52	31	16	11	6.1	5.4
26	2.7	4.7	12	29	304	122	51	29	16	11	5.9	5.1
27	2.8	5.3	11	35	249	117	52	28	15	10	5.5	4.9
28	2.7	5.2	10	33	206	112	52	26	15	10	5.2	5.7
29	2.5	5.1	9.9	30	-----	108	51	26	14	10	4.8	6.4
30	2.6	5.1	10	30	-----	105	51	25	13	9.6	5.0	5.9
31	2.7	-----	10	27	-----	99	-----	25	-----	9.1	5.4	-----
Total	80.4	118.1	232.2	429.7	6946	11625	2085	1181	639	358.7	194.8	162.9
Mean	2.59	3.94	7.49	13.9	248	375	69.5	38.1	21.3	11.6	6.28	5.43
Max	2.9	5.3	12	35	1150	2240	104	68	27	13	8.8	6.4
Min	2.3	2.4	5.1	8.1	22	99	51	25	13	9.1	4.8	4.8
Acre-Ft	159	234	461	852	13780	23060	4140	2340	1270	711	386	323
Wtr Year 2009	Total	24052.8	Mean	65.9	Max	2240	Min	2.3	Inst Max	2240	Acre-Ft	47710
Cal Year 2008	Total	26745.2	Mean	73.1	Max	2000	Min	2.3	Inst Max	2000	Acre-Ft	53050

Monterey Peninsula Water Management District

Figure D-51

Period 1 Year Plot Start 00:00_10/01/2009

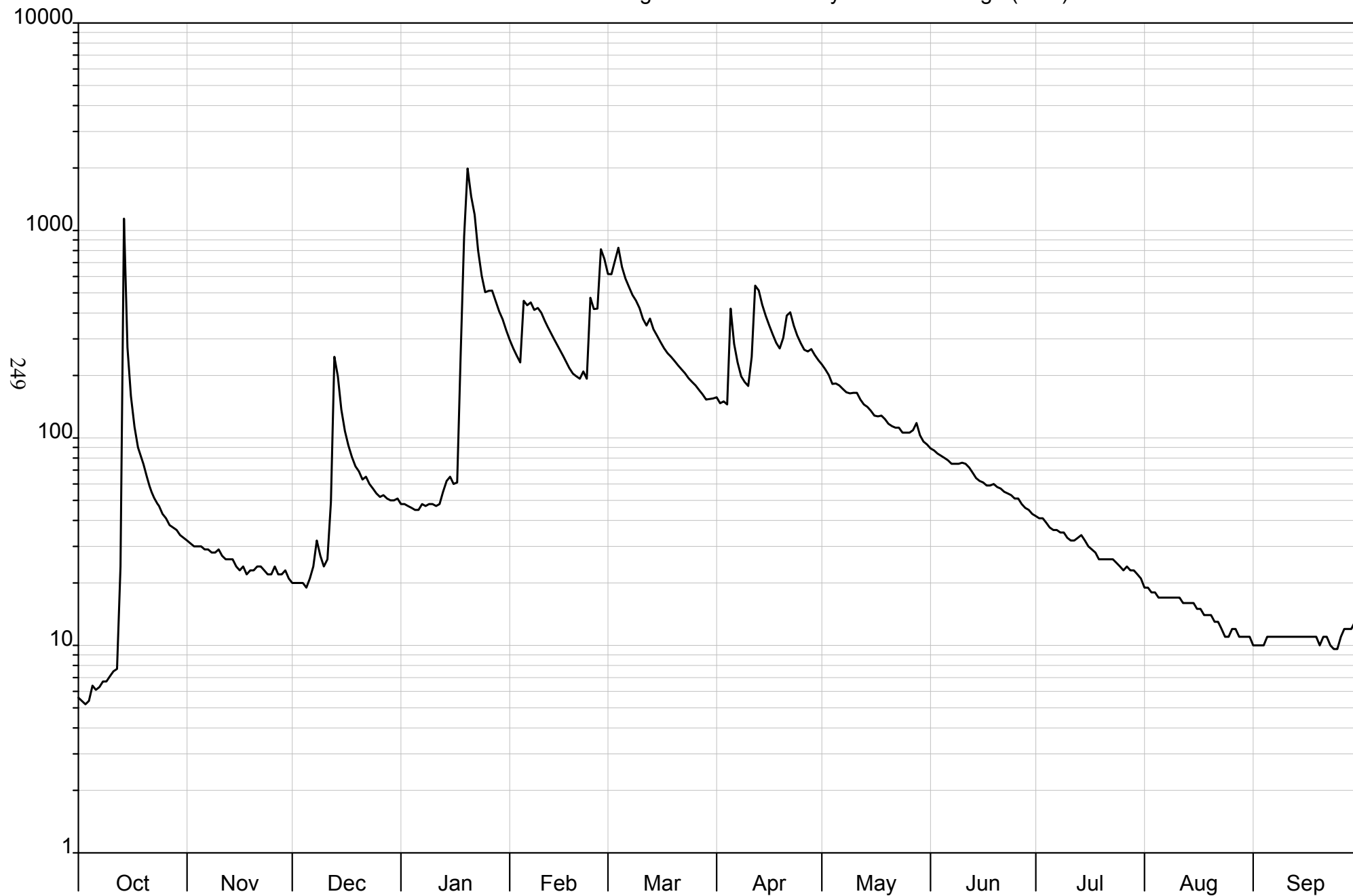
WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— DJ

Carmel River at Don Juan Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: DJ Carmel River at Don Juan Bridge
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	32	20	48	297	617	157	226	89	42	19	10
2	5.4	31	20	48	270	615	147	214	87	41	19	10
3	5.2	30	20	47	249	713	150	201	84	41	18	10
4	5.4	30	20	46	231	826	145	182	82	39	18	10
5	6.4	30	19	45	458	667	420	183	80	37	17	11
6	6.1	29	21	45	436	586	284	179	78	36	17	11
7	6.3	29	24	48	450	535	231	172	75	36	17	11
8	6.7	28	32	47	414	488	198	166	75	35	17	11
9	6.7	28	27	48	423	459	186	164	75	35	17	11
10	7.1	29	24	48	401	422	178	165	76	33	17	11
11	7.5	27	26	47	367	375	246	165	75	32	17	11
12	7.7	26	49	48	338	348	542	153	72	32	16	11
13	24	26	246	55	315	376	514	145	68	33	16	11
14	1140	26	198	62	292	334	438	141	64	34	16	11
15	273	24	137	65	271	311	388	135	62	32	16	11
16	159	23	108	60	252	290	349	128	61	30	15	11
17	113	24	92	61	235	271	315	127	59	29	15	11
18	90	22	81	250	217	256	287	128	59	28	14	11
19	80	23	73	933	204	246	270	123	60	26	14	11
20	70	23	69	1990	198	235	304	117	58	26	14	10
21	61	24	63	1460	193	224	389	114	57	26	13	11
22	54	24	65	1190	209	214	403	112	55	26	13	11
23	50	23	60	799	193	205	347	112	54	26	12	10
24	47	22	57	605	474	194	312	106	53	25	11	9.6
25	43	22	54	504	418	186	286	106	51	24	11	9.6
26	41	24	52	512	420	179	266	106	51	23	12	11
27	38	22	53	513	812	170	261	109	48	24	12	12
28	37	22	51	456	729	162	268	118	46	23	11	12
29	36	23	50	407	-----	153	251	103	45	23	11	12
30	34	21	50	373	-----	154	237	96	43	22	11	13
31	33	-----	51	330	-----	155	-----	93	-----	21	11	-----
Total	2499.1	767	1912	11190	9766	10966	8769	4389	1942	940	457	326.2
Mean	80.6	25.6	61.7	361	349	354	292	142	64.7	30.3	14.7	10.9
Max	1140	32	246	1990	812	826	542	226	89	42	19	13
Min	5.2	21	19	45	193	153	145	93	43	21	11	9.6
Acre-Ft	4960	1520	3790	22200	19370	21750	17390	8710	3850	1860	906	647
Wtr Year 2010	Total	53923.3	Mean	148	Max	1990	Min	5.2	Inst Max	1990	Acre-Ft	107000
Cal Year 2009	Total	28800.2	Mean	78.9	Max	2240	Min	4.8	Inst Max	2240	Acre-Ft	57120

Monterey Peninsula Water Management District

Figure D-52

Period 1 Year Plot Start 00:00_10/01/2010

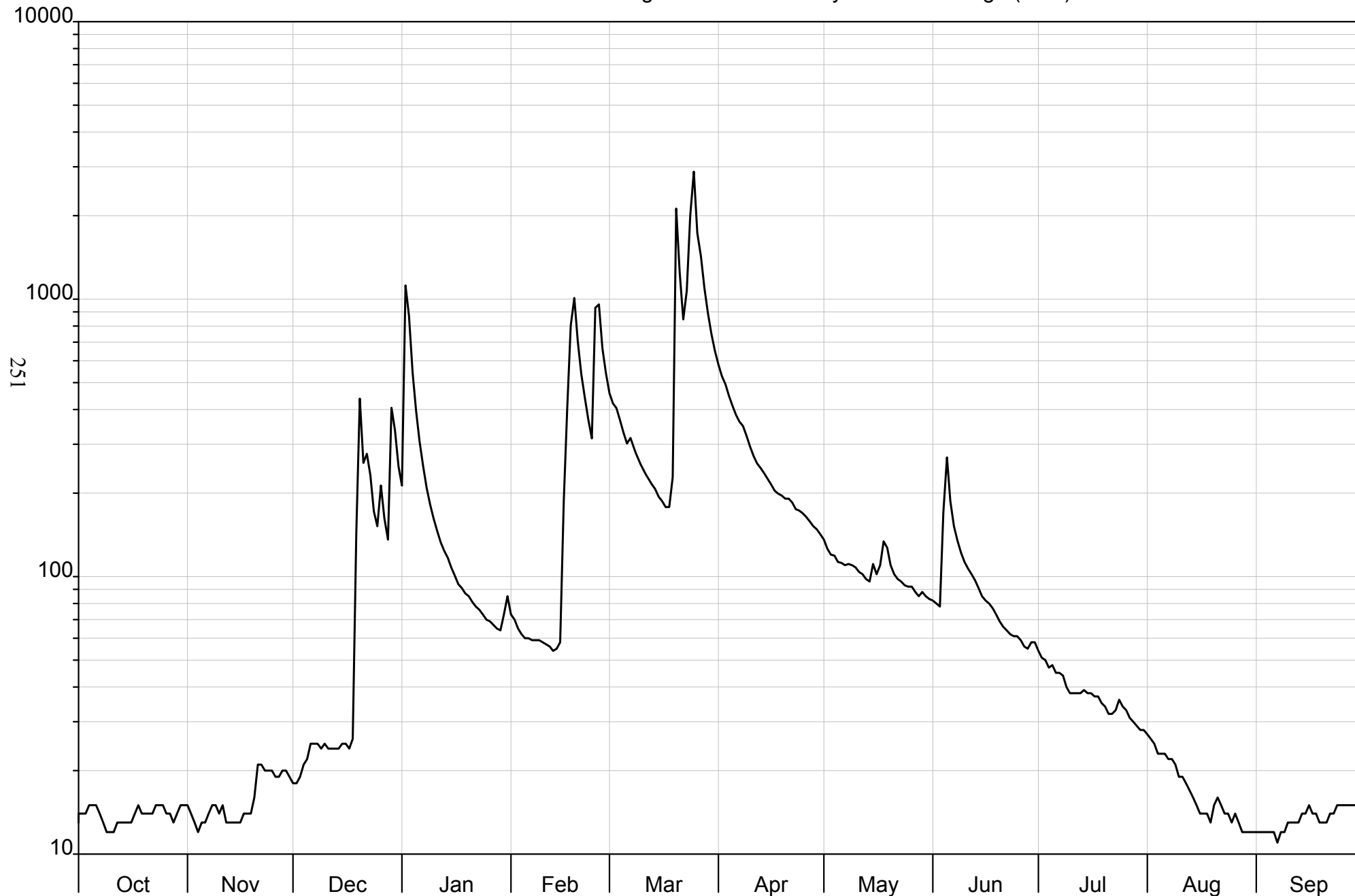
WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— DJ

Carmel River at Don Juan Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: DJ Carmel River at Don Juan Bridge
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	18	213	73	458	581	136	82	54	27	12
2	14	14	18	1120	70	421	528	126	80	51	26	12
3	14	13	19	869	65	405	493	120	78	50	25	12
4	15	12	21	545	62	367	448	119	171	47	23	12
5	15	13	22	396	60	330	413	113	269	48	23	12
6	15	13	25	307	60	302	383	112	187	45	23	12
7	14	14	25	250	59	316	362	110	152	45	22	11
8	13	15	25	209	59	290	349	111	135	44	22	12
9	12	15	24	182	59	269	322	110	122	40	21	12
10	12	14	25	162	58	252	294	108	113	38	19	13
11	12	15	24	146	57	238	272	104	107	38	19	13
12	13	13	24	133	56	226	256	102	102	38	18	13
13	13	13	24	124	54	216	246	98	97	38	17	13
14	13	13	24	117	55	207	236	96	91	39	16	14
15	13	13	25	108	58	194	225	111	85	38	15	14
16	13	13	25	101	187	187	215	102	82	38	14	15
17	14	14	24	94	406	178	204	110	80	37	14	14
18	15	14	26	91	802	178	199	134	77	37	14	14
19	14	14	145	87	1010	228	196	127	73	35	13	13
20	14	16	438	85	703	2120	191	110	69	34	15	13
21	14	21	257	81	537	1250	191	102	66	32	16	13
22	14	21	277	78	443	845	185	98	64	32	15	14
23	15	20	232	76	369	1070	175	96	62	33	14	14
24	15	20	172	73	315	2000	173	93	61	36	14	15
25	15	20	152	70	931	2880	169	92	61	34	13	15
26	14	19	213	69	958	1730	164	92	59	33	14	15
27	14	19	162	67	666	1430	158	88	56	31	13	15
28	13	20	136	65	542	1100	152	85	55	30	12	15
29	14	20	406	64	-----	893	148	88	58	29	12	15
30	15	19	337	73	-----	752	142	85	58	28	12	15
31	15	-----	249	85	-----	653	-----	83	-----	28	12	-----
Total	430	475	3594	6140	8774	21985	8070	3261	2852	1180	533	402
Mean	13.9	15.8	116	198	313	709	269	105	95.1	38.1	17.2	13.4
Max	15	21	438	1120	1010	2880	581	136	269	54	27	15
Min	12	12	18	64	54	178	142	83	55	28	12	11
Acre-Ft	853	942	7130	12180	17400	43610	16010	6470	5660	2340	1060	797
Wtr Year 2011	Total	57696	Mean	158	Max	2880	Min	11	Inst Max	2880	Acre-Ft	114400
Cal Year 2010	Total	53244.2	Mean	146	Max	1990	Min	9.6	Inst Max	1990	Acre-Ft	105600

Monterey Peninsula Water Management District

Figure D-53

Period 1 Year Plot Start 00:00_10/01/2011

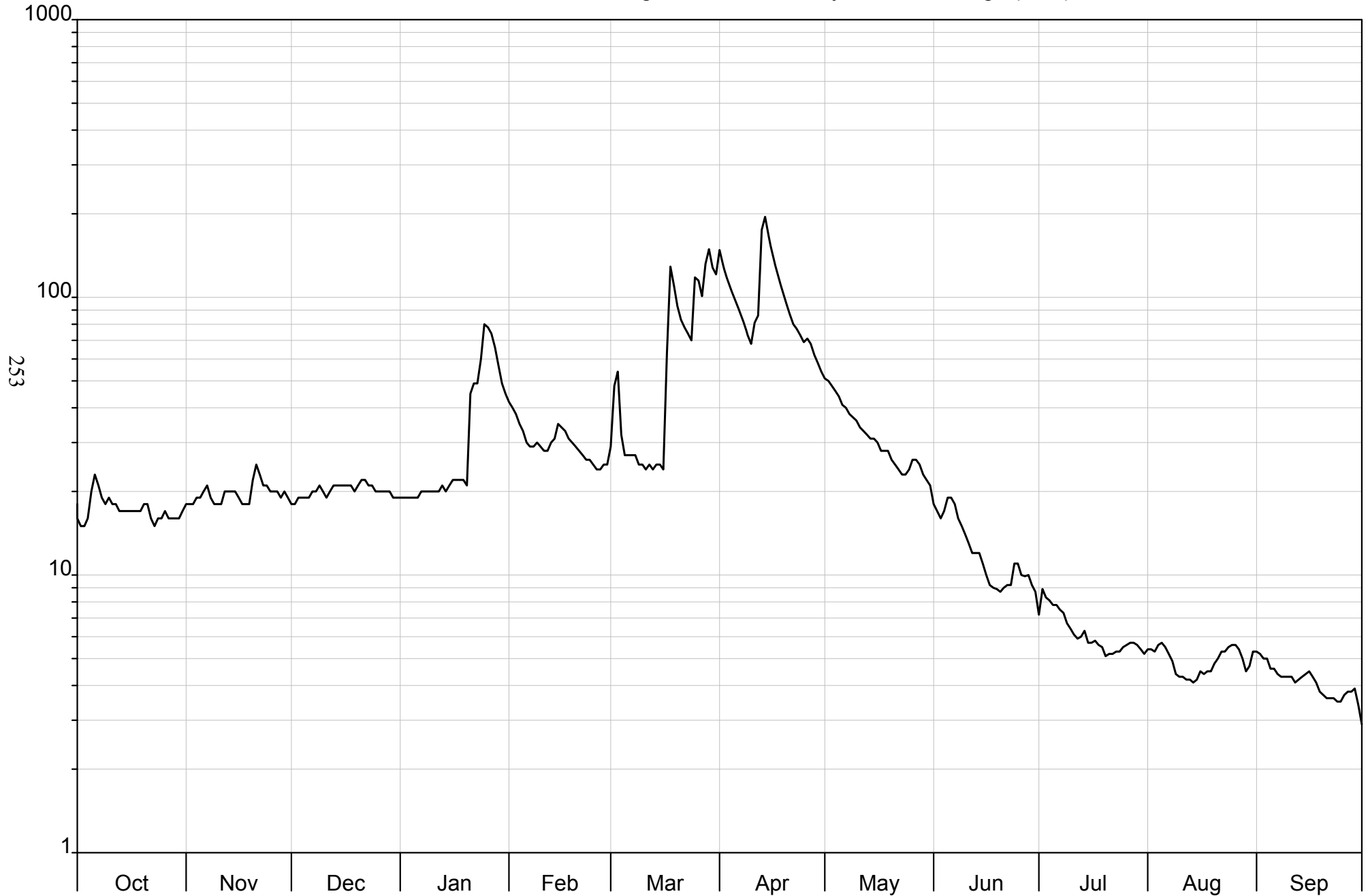
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— DJ

Carmel River at Don Juan Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: DJ Carmel River at Don Juan Bridge
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	18	19	42	29	148	51	18	7.2	5.4	5.3
2	15	18	18	19	40	48	131	50	17	8.9	5.4	5.2
3	15	18	19	19	38	54	118	48	16	8.3	5.3	5.0
4	16	19	19	19	35	32	109	46	17	8.1	5.6	5.0
5	20	19	19	19	33	27	101	44	19	7.8	5.7	4.6
6	23	20	19	19	30	27	94	41	19	7.8	5.5	4.6
7	21	21	20	20	29	27	87	40	18	7.5	5.2	4.4
8	19	19	20	20	29	27	80	38	16	7.3	4.9	4.3
9	18	18	21	20	30	25	73	37	15	6.7	4.4	4.3
10	19	18	20	20	29	25	68	36	14	6.4	4.3	4.3
11	18	18	19	20	28	24	81	34	13	6.1	4.3	4.3
12	18	20	20	20	28	25	86	33	12	5.9	4.2	4.1
13	17	20	21	21	30	24	175	32	12	6.0	4.2	4.2
14	17	20	21	20	31	25	195	31	12	6.3	4.1	4.3
15	17	20	21	21	35	25	166	31	11	5.7	4.2	4.4
16	17	19	21	22	34	24	145	30	10	5.7	4.5	4.5
17	17	18	21	22	33	63	128	28	9.2	5.8	4.4	4.3
18	17	18	21	22	31	129	116	28	9.0	5.6	4.5	4.1
19	17	18	20	22	30	110	105	28	8.9	5.5	4.5	3.8
20	18	22	21	21	29	93	95	26	8.7	5.1	4.8	3.7
21	18	25	22	45	28	83	87	25	9.0	5.2	5.0	3.6
22	16	23	22	49	27	78	80	24	9.2	5.2	5.3	3.6
23	15	21	21	49	26	74	77	23	9.2	5.3	5.3	3.6
24	16	21	21	60	26	70	73	23	11	5.3	5.5	3.5
25	16	20	20	80	25	118	69	24	11	5.5	5.6	3.5
26	17	20	20	78	24	115	71	26	10	5.6	5.6	3.7
27	16	20	20	74	24	101	68	26	9.9	5.7	5.4	3.8
28	16	19	20	66	25	132	62	25	10	5.7	5.0	3.8
29	16	20	20	57	25	149	58	23	9.2	5.6	4.5	3.9
30	16	19	19	49	-----	128	54	22	8.7	5.4	4.7	3.4
31	17	-----	19	45	-----	121	-----	21	-----	5.2	5.3	-----
Total	534	589	623	1057	874	2032	3000	994	372.0	193.4	152.6	125.1
Mean	17.2	19.6	20.1	34.1	30.1	65.5	100	32.1	12.4	6.24	4.92	4.17
Max	23	25	22	80	42	149	195	51	19	8.9	5.7	5.3
Min	15	18	18	19	24	24	54	21	8.7	5.1	4.1	3.4
Acre-Ft	1060	1170	1240	2100	1730	4030	5950	1970	738	384	303	248
Wtr Year 2012	Total	10546.1	Mean	28.8	Max	195	Min	3.4	Inst Max	195	Acre-Ft	20920
Cal Year 2011	Total	54943	Mean	151	Max	2880	Min	11	Inst Max	2880	Acre-Ft	109000

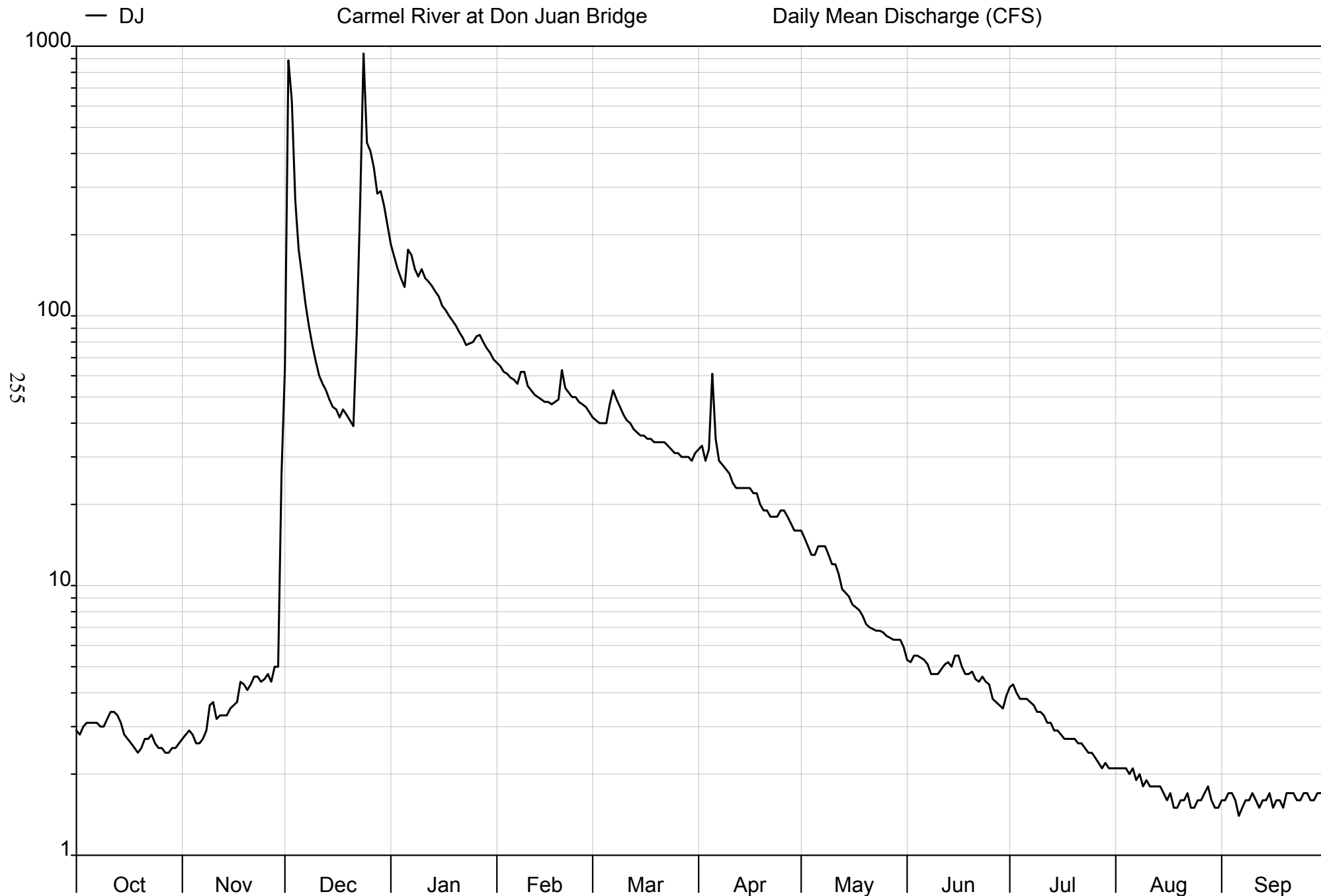
Monterey Peninsula Water Management District

Figure D-54

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013



Summary Report

Site: DJ Carmel River at Don Juan Bridge
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.7	64	184	67	42	32	16	5.3	4.2	2.1	1.6
2	2.8	2.8	886	165	65	41	33	15	5.2	4.3	2.1	1.6
3	3.0	2.9	631	149	62	40	29	14	5.5	4.0	2.1	1.7
4	3.1	2.8	268	137	61	40	32	13	5.5	3.8	2.1	1.7
5	3.1	2.6	176	128	59	40	61	13	5.4	3.8	2.0	1.6
6	3.1	2.6	141	176	58	47	35	14	5.3	3.8	2.1	1.4
7	3.1	2.7	111	168	56	53	29	14	5.1	3.7	1.9	1.5
8	3.0	2.9	92	149	62	49	28	14	4.7	3.6	2.0	1.6
9	3.0	3.6	78	140	62	46	27	13	4.7	3.4	1.8	1.6
10	3.2	3.7	68	149	55	43	26	12	4.7	3.4	1.9	1.7
11	3.4	3.2	60	138	53	41	24	12	4.9	3.3	1.8	1.6
12	3.4	3.3	56	134	51	40	23	11	5.1	3.1	1.8	1.5
13	3.3	3.3	53	129	50	38	23	9.7	5.2	3.1	1.8	1.6
14	3.1	3.3	49	123	49	37	23	9.4	5.0	2.9	1.8	1.6
15	2.8	3.5	46	118	48	36	23	9.1	5.5	2.9	1.7	1.7
16	2.7	3.6	45	109	48	36	23	8.5	5.5	2.8	1.6	1.5
17	2.6	3.7	42	105	47	35	22	8.3	5.0	2.7	1.7	1.6
18	2.5	4.4	45	100	48	35	22	8.1	4.7	2.7	1.5	1.6
19	2.4	4.3	43	96	49	34	20	7.7	4.7	2.7	1.5	1.5
20	2.5	4.1	41	92	63	34	19	7.2	4.8	2.7	1.6	1.7
21	2.7	4.3	39	87	54	34	19	7.0	4.5	2.6	1.6	1.7
22	2.7	4.6	88	83	52	34	18	6.9	4.4	2.6	1.7	1.7
23	2.8	4.6	261	78	50	33	18	6.8	4.6	2.5	1.5	1.6
24	2.6	4.4	940	79	50	32	18	6.8	4.4	2.4	1.5	1.6
25	2.5	4.5	439	80	48	31	19	6.7	4.3	2.4	1.6	1.7
26	2.5	4.7	408	84	47	31	19	6.5	3.8	2.3	1.6	1.7
27	2.4	4.4	355	85	46	30	18	6.4	3.7	2.2	1.7	1.6
28	2.4	5.0	284	80	44	30	17	6.3	3.6	2.1	1.8	1.6
29	2.5	5.0	290	76	-----	30	16	6.3	3.5	2.2	1.6	1.7
30	2.5	26	256	73	-----	29	16	6.3	3.9	2.1	1.5	1.7
31	2.6	-----	216	69	-----	31	-----	5.9	-----	2.1	1.5	-----
Total	87.2	133.5	6571	3563	1504	1152	732	300.9	142.5	92.4	54.5	48.5
Mean	2.81	4.45	212	115	53.7	37.2	24.4	9.71	4.75	2.98	1.76	1.62
Max	3.4	26	940	184	67	53	61	16	5.5	4.3	2.1	1.7
Min	2.4	2.6	39	69	44	29	16	5.9	3.5	2.1	1.5	1.4
Acre-Ft	173	265	13030	7070	2980	2280	1450	597	283	183	108	96
Wtr Year 2013	Total	14381.5	Mean	39.4	Max	940	Min	1.4	Inst Max	940	Acre-Ft	28530
Cal Year 2012	Total	15591.8	Mean	42.6	Max	940	Min	2.4	Inst Max	940	Acre-Ft	30930

Monterey Peninsula Water Management District

Figure D-55

Period 1 Year Plot Start 00:00_10/01/2008

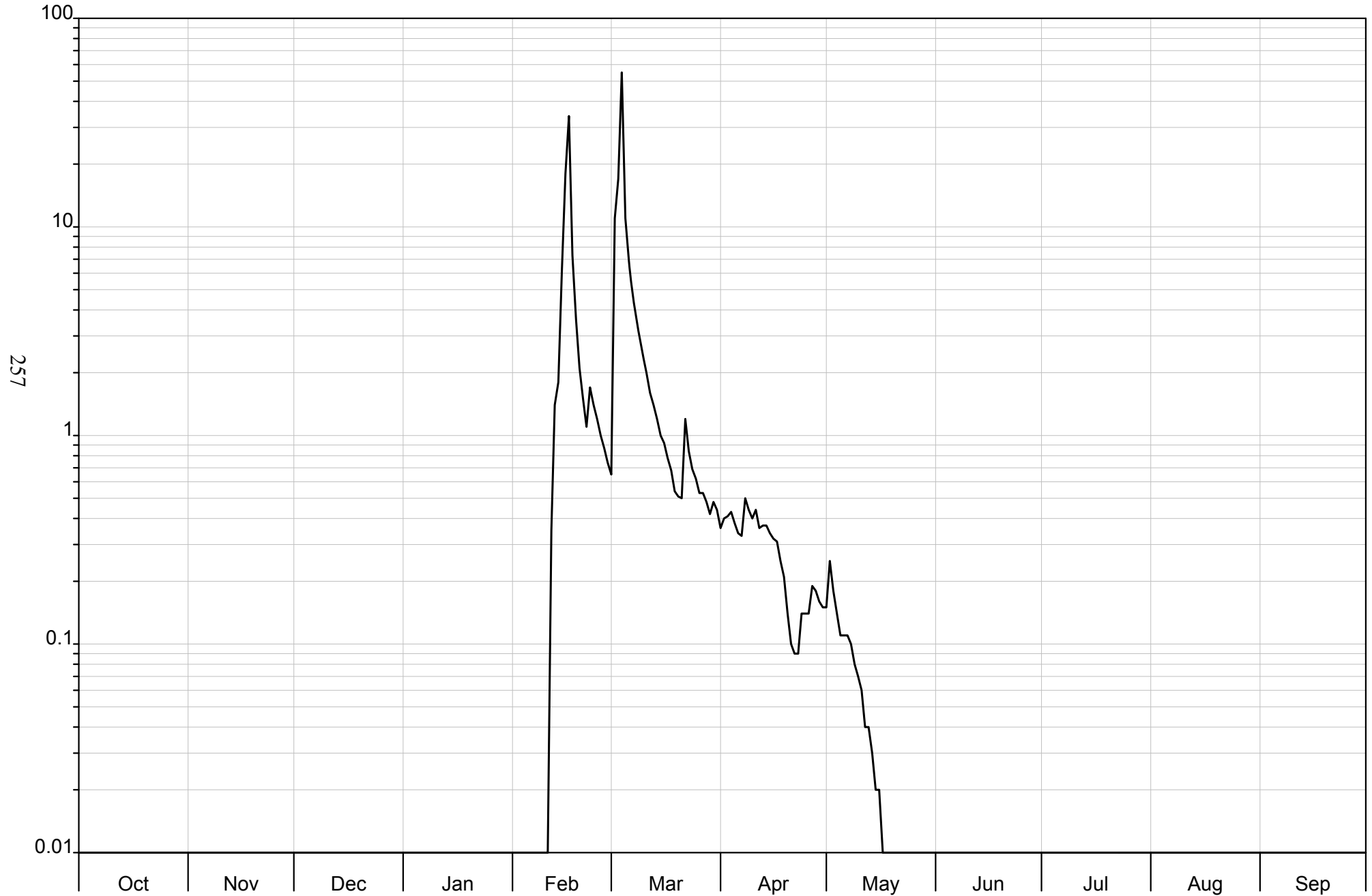
WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— RC

Robinson Canyon Creek

Daily Mean Discharge (CFS)



Summary Report

Site: RC Robinson Canyon Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	.65	.36	.15	0E	0	0	0
2	0	0	0	0	0	11	.40	.25	0E	0	0	0
3	0	0	0	0	0	17	.41	.18	0E	0	0	0
4	0	0	0	0	0	55	.43	.14	0E	0	0	0
5	0	0	0	0	0	11	.38	.11	0E	0	0	0
6	0	0	0	0	0	6.9	.34	.11	0	0	0	0
7	0	0	0	0	0	4.9	.33	.11	0	0	0	0
8	0	0	0	0	0	3.7	.50	.10	0	0	0	0
9	0	0	0	0	0	3.0	.44	.08	0	0	0	0
10	0	0	0	0	0	2.4	.40	.07	0	0	0	0
11	0	0	0	0	0	2.0	.44	.06	0	0	0	0
12	0	0	0	0	.35	1.6	.36	.04	0	0	0	0
13	0	0	0	0	1.4	1.4	.37	.04	0	0	0	0
14	0	0	0	0	1.8	1.2	.37	.03	0	0	0	0
15	0	0	0	0	6.1	1.0	.34	.02	0	0	0	0
16	0	0	0	0	18	.92	.32	.02	0	0	0	0
17	0	0	0	0	34	.78	.31	0	0	0	0	0
18	0	0	0	0	7.3	.68	.25	0	0	0	0	0
19	0	0	0	0	3.6	.54	.21	0	0	0	0	0
20	0	0	0	0	2.1	.51	.14	0	0	0	0	0
21	0	0	0	0	1.5	.50	.10	0	0	0	0	0
22	0	0	0	0	1.1	1.2	.09	0	0	0	0	0
23	0E	0	0	0	1.7	.84	.09	0	0	0	0	0
24	0E	0	0	0	1.4	.69	.14	.01	0	0	0	0
25	0E	0	0	0	1.2	.62	.14	.01	0	0	0	0
26	0	0	0	0	1.0	.53	.14	.01	0	0	0	0
27	0	0	0	0	.87	.53	.19	0E	0	0	0	0
28	0	0	0	0	.74	.48	.18	0E	0	0	0	0
29	0	0	0	0	-----	.42	.16	0E	0	0	0	0
30	0	0	0	0	-----	.48	.15	0E	0	0	0	0
31	0	-----	0	0	-----	.44	-----	0E	-----	0	0	-----
Total	0	0	0	0	84.16	132.91	8.48	1.54	0	0	0	0
Mean	0	0	0	0	3.01	4.29	.28	.050	0	0	0	0
Max	0	0	0	0	34	55	.50	.25	0	0	0	0
Min	0	0	0	0	0	.42	.09	0	0	0	0	0
Acre-Ft	0	0	0	0	167	264	17	3.1	0	0	0	0
Wtr Year 2009	Total	227.09	Mean	.62	Max	55	Min	0	Inst Max	55	Acre-Ft	450
Cal Year 2008	Total	230.63	Mean	.63	Max	40	Min	0	Inst Max	40	Acre-Ft	457

Monterey Peninsula Water Management District

Figure D-56

Period 1 Year Plot Start 00:00_10/01/2009

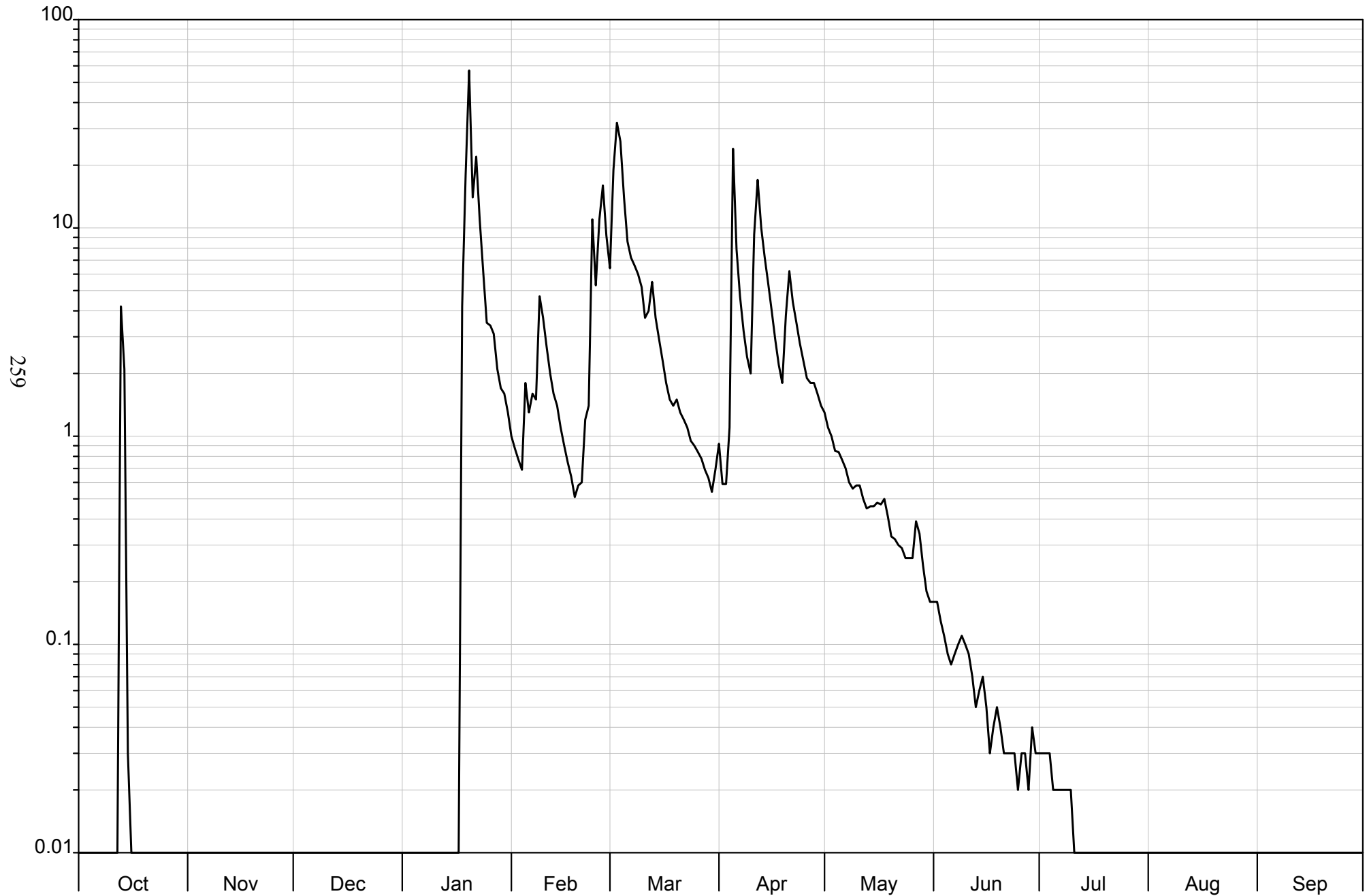
WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— RC

Robinson Canyon Creek

Daily Mean Discharge (CFS)



Summary Report

Site: RC Robinson Canyon Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	1.0	6.4	.92	1.3	.16	.03E	0	0
2	0	0	0	0	.87	19	.59	1.1	.16	.03E	0	0
3	0	0	0	0	.77	32	.59	1.0	.13	.03E	0	0
4	0	0	0	0	.69	26	1.1	.85	.11	.03	0	0
5	0	0	0	0	1.8	14	24	.84	.09	.02	0	0
6	0	0	0	0	1.3	8.6	7.9	.77	.08	.02	0	0
7	0	0	0	0	1.6	7.2	4.7	.70	.09	.02	0	0
8	0	0	0	0	1.5	6.6	3.2	.60	.10	.02	0	0
9	0	0	0	0	4.7	6.0	2.4	.56	.11	.02	0	0
10	0	0	0	0	3.7	5.2	2.0	.58	.10	.02	0	0
11	0	0	0	0	2.7	3.7	9.3	.58	.09	.01	0	0
12	0	0	0	0	2.0	4.0	17	.50	.07	.01	0	0
13	4.2	0	0	0	1.6	5.5	10	.45	.05	.01	0	0
14	2.1	0	0	0	1.4	3.7	7.2	.46	.06	0	0	0
15	.03	0	0	0	1.1	2.9	5.4	.46	.07	0	0	0
16	0	0	0	0	.90	2.3	4.0	.48	.05	0	0	0
17	0	0	0	0	.75	1.8	2.9	.47	.03	0	0	0
18	0	0	0	4.2	.64	1.5	2.2	.50	.04	0	0	0
19	0	0	0	18	.51	1.4	1.8	.41	.05	0	0	0
20	0	0	0	57	.58	1.5	3.8	.33	.04	0	0	0
21	0	0	0	14	.60	1.3	6.2	.32	.03	0	0	0
22	0	0	0	22	1.2	1.2	4.4	.30	.03	0	0	0
23	0	0	0	11	1.4	1.1	3.5	.29	.03	0	0	0
24	0	0	0	6.1	11	.95	2.8	.26	.03	0	0	0
25	0	0	0	3.5	5.3	.90	2.3	.26	.02	0	0	0
26	0	0	0	3.4	11	.84	1.9	.26	.03	0	0	0
27	0	0	0	3.1	16	.78	1.8	.39	.03	0	0	0
28	0	0	0	2.1	9.2	.69	1.8	.34	.02	0	0	0
29	0	0	0	1.7	-----	.63	1.6	.24	.04	0	0	0
30	0	0	0	1.6	-----	.54	1.4	.18	.03E	0	0	0
31	0	-----	0	1.3	-----	.69	-----	.16	-----	0	0	-----
Total	6.33	0	0	149.0	85.81	168.92	138.70	15.94	1.97	0.27	0	0
Mean	.20	0	0	4.81	3.06	5.45	4.62	.51	.066	.009	0	0
Max	4.2	0	0	57	16	32	24	1.3	.16	.03	0	0
Min	0	0	0	0	.51	.54	.59	.16	.02	0	0	0
Acre-Ft	13	0	0	296	170	335	275	32	3.9	.54	0	0
Wtr Year 2010	Total	566.94	Mean	1.55	Max	57	Min	0	Inst Max	57	Acre-Ft	1120
Cal Year 2009	Total	233.42	Mean	.64	Max	55	Min	0	Inst Max	55	Acre-Ft	463

Monterey Peninsula Water Management District

Figure D-57

Period 1 Year Plot Start 00:00_10/01/2010

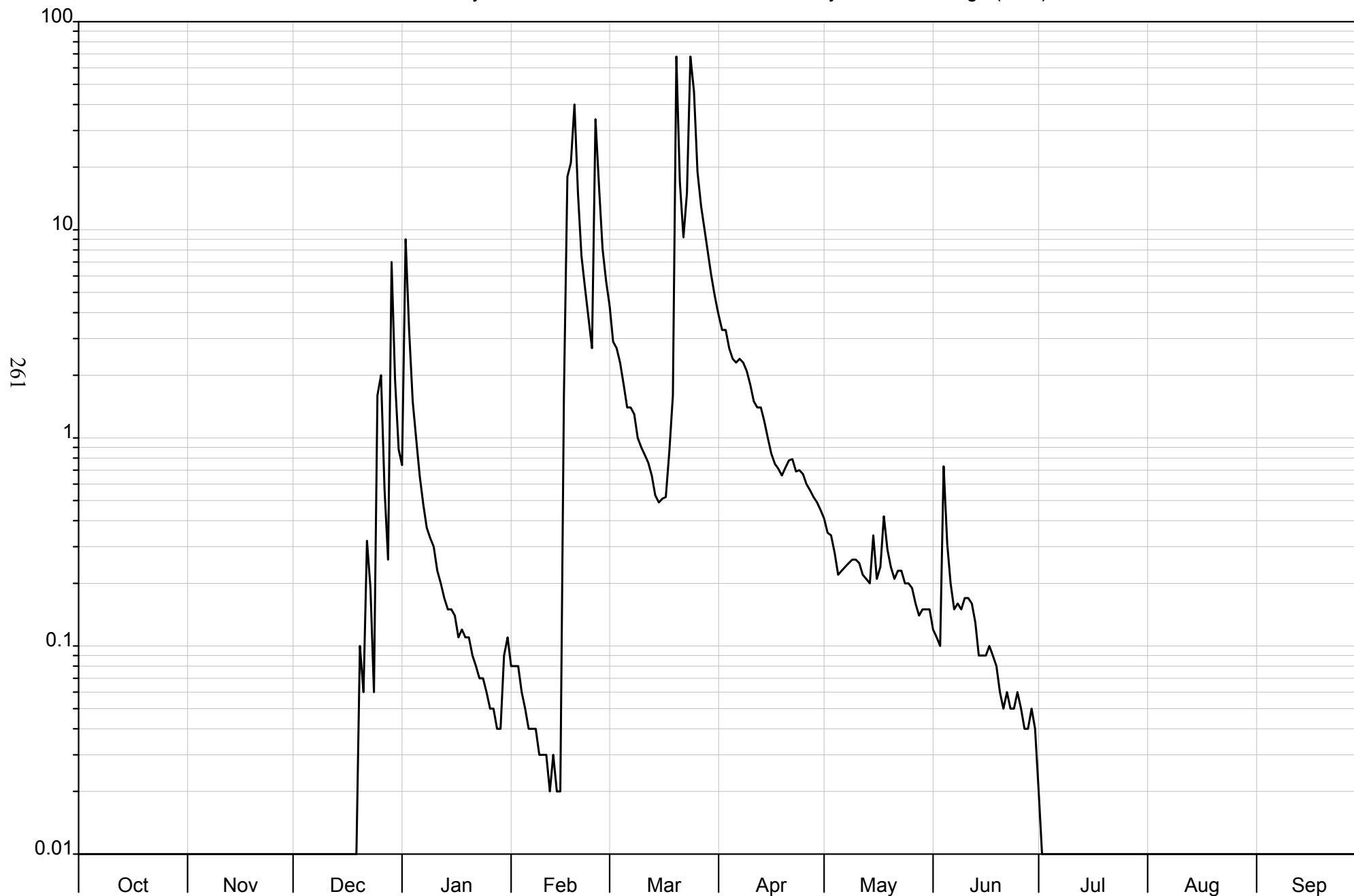
WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— RC

Robinson Canyon Creek

Daily Mean Discharge (CFS)



Summary Report

Site: RC Robinson Canyon Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.74	.08	4.3	3.9	.41	.12	.02	0	0
2	0	0	0	9.0	.08	2.9	3.3	.35	.11	.01	0	0
3	0	0	0	3.3	.08	2.7	3.3	.34	.10	.01	0	0
4	0	0	0	1.5	.06	2.3	2.7	.28	.73	.01	0	0
5	0	0	0	.99	.05	1.8	2.4	.22	.31	.01	0	0
6	0	0	0	.66	.04	1.4	2.3	.23	.20	.01	0	0
7	0	0	0	.48	.04	1.4	2.4	.24	.15	0	0	0
8	0	0	0	.37	.04	1.3	2.3	.25	.16	0	0	0
9	0	0	0	.33	.03	1.0	2.1	.26	.15	0	0	0
10	0	0	0	.30	.03	.90	1.8	.26	.17	0	0	0
11	0	0	0	.23	.03	.83	1.5	.25	.17	0	0	0
12	0	0	0	.20	.02	.76	1.4	.22	.16	0	0	0
13	0	0	0	.17	.03	.66	1.4	.21	.13	0	0	0
14	0	0	0	.15	.02	.53	1.2	.20	.09	0	0	0
15	0	0	0	.15	.02	.49	1.0	.34	.09	0	0	0
16	0	0	0	.14	1.6	.51	.84	.21	.09	0	0	0
17	0	0	0	.11	18	.52	.75	.24	.10	0	0	0
18	0	0	0	.12	21	.87	.71	.42	.09	0	0	0
19	0	0	.01	.11	40	1.6	.66	.29	.08	0	0	0
20	0	0	.10	.11	15	68	.72	.24	.06	0	0	0
21	0	0	.06	.09	7.5	17	.78	.21	.05	0	0	0
22	0	0	.32	.08	5.3	9.2	.79	.23	.06	0	0	0
23	0	0	.19	.07	3.8	15	.69	.23	.05	0	0	0
24	0	0	.06	.07	2.7	68	.70	.20	.05	0	0	0
25	0	0	1.6	.06	34	46	.67	.20	.06	0	0	0
26	0	0	2.0	.05	16	19	.60	.19	.05	0	0	0
27	0	0	.57	.05	8.1	13	.56	.16	.04	0	0	0
28	0	0	.26	.04	5.7	10	.52	.14	.04	0	0	0
29	0	0	7.0	.04	-----	7.6	.49	.15	.05	0	0	0
30	0	0	1.9	.09	-----	6.0	.45	.15	.04	0	0	0
31	0	-----	.88	.11	-----	4.7	-----	.15	-----	0	0	-----
Total	0	0	14.95	19.91	179.35	310.27	42.93	7.47	3.75	0.07	0	0
Mean	0	0	.48	.64	6.41	10.0	1.43	.24	.13	.002	0	0
Max	0	0	7.0	9.0	40	68	3.9	.42	.73	.02	0	0
Min	0	0	0	.04	.02	.49	.45	.14	.04	0	0	0
Acre-Ft	0	0	30	39	356	615	85	15	7.4	.14	0	0
Wtr Year 2011	Total	578.70	Mean	1.59	Max	68	Min	0	Inst Max	68	Acre-Ft	1150
Cal Year 2010	Total	575.56	Mean	1.58	Max	57	Min	0	Inst Max	57	Acre-Ft	1140

Monterey Peninsula Water Management District

Figure D-58

Period 1 Year Plot Start 00:00_10/01/2011

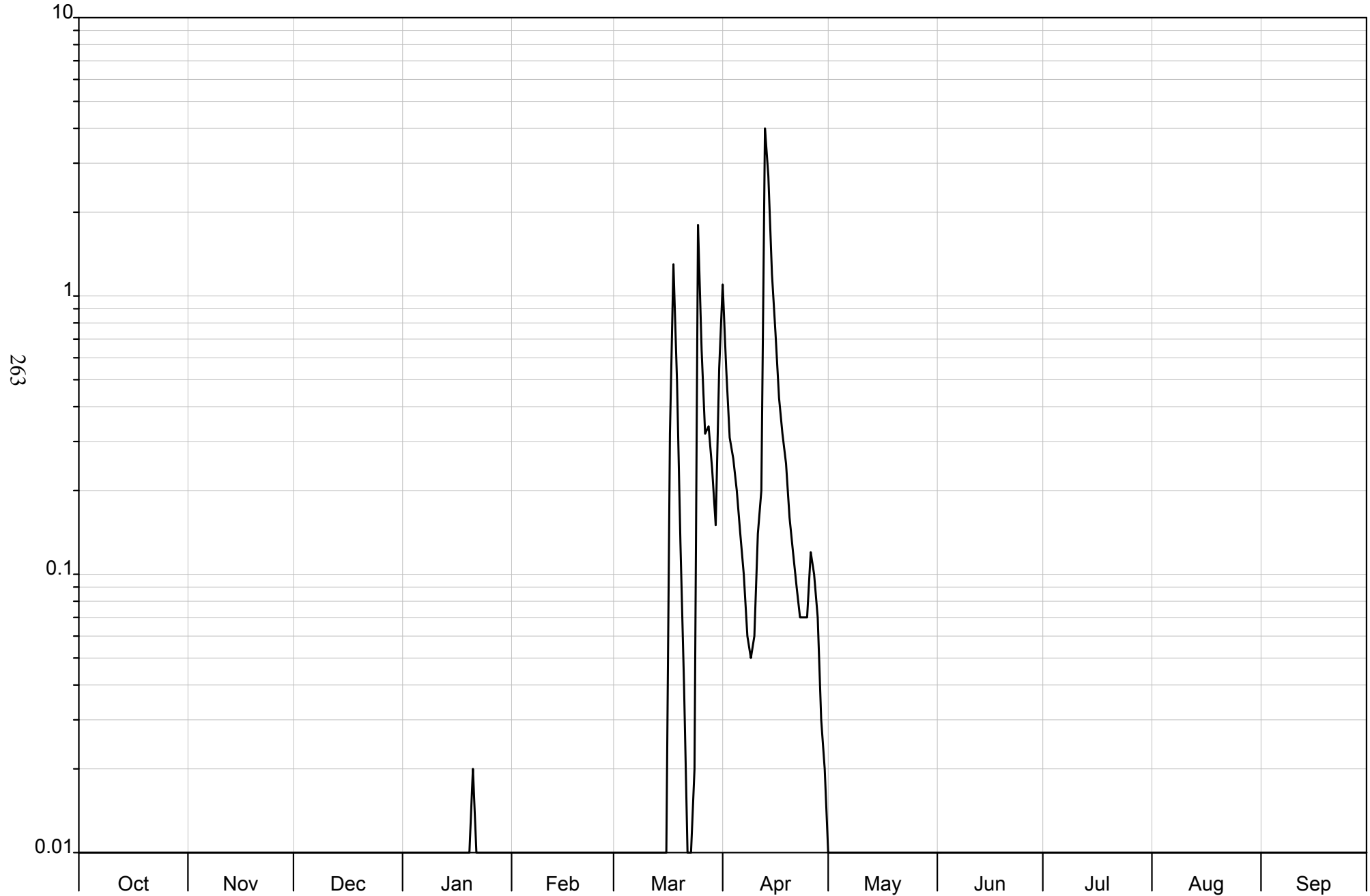
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— RC

Robinson Canyon Creek

Daily Mean Discharge (CFS)



Summary Report

Site: RC Robinson Canyon Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	1.1	.01	0	0	0	0
2	0	0	0	0	0	0	.55	.01	0	0	0	0
3	0	0	0	0	0	0	.31	0	0	0	0	0
4	0	0	0	0	0	0	.26	.01	0	0	0	0
5	0	0	0	0	0	0	.20	.01	0	0	0	0
6	0	0	0	0	0	0	.14	0	0	0	0	0
7	0	0	0	0	0	0	.10	0	0	0	0	0
8	0	0	0	0	0	0	.06	0	0	0	0	0
9	0	0	0	0	0	0	.05	0	0	0	0	0
10	0	0	0	0	0	0	.06	0	0	0	0	0
11	0	0	0	0	0	0	.14	0	0	0	0	0
12	0	0	0	0	0	0	.20	0	0	0	0	0
13	0	0	0	0	0	0	4.0	0	0	0	0	0
14	0	0	0	0	0	0	2.7	0	0	0	0	0
15	0	0	0	0	0	0	1.2	0	0	0	0	0
16	0	0	0	0	0	0	.74	0	0	0	0	0
17	0	0	0	0	0	.32	.43	0	0	0	0	0
18	0	0	0	0	0	1.3	.32	0	0	0	0	0
19	0	0	0	0	0	.49	.25	0	0	0	0	0
20	0	0	0	0	0	.13	.16	0	0	0	0	0
21	0	0	0	.02	0	.04	.12	0	0	0	0	0
22	0	0	0	0	0	.01	.09	0	0	0	0	0
23	0	0	0	.01	0	0	.07	0	0	0	0	0
24	0	0	0	0	0	.02	.07	0	0	0	0	0
25	0	0	0	0	0	1.8	.07	0	0	0	0	0
26	0	0	0	0	0	.64	.12	0	0	0	0	0
27	0	0	0	0	0	.32	.10	0	0	0	0	0
28	0	0	0	0	0	.34	.07	0	0	0	0	0
29	0	0	0	0	0	.24	.03	0	0	0	0	0
30	0	0	0	0	-----	.15	.02	0	0	0	0	0
31	0	-----	0	0	-----	.55	-----	0	-----	0	0	-----
Total	0	0	0	0.03	0	6.35	13.73	0.04	0	0	0	0
Mean	0	0	0	.001	0	.20	.46	.001	0	0	0	0
Max	0	0	0	.02	0	1.8	4.0	.01	0	0	0	0
Min	0	0	0	0	0	0	.02	0	0	0	0	0
Acre-Ft	0	0	0	.06	0	13	27	.08	0	0	0	0
Wtr Year 2012	Total	20.15	Mean	.055	Max	4.0	Min	0 Inst Max	4.0	Acre-Ft	40	
Cal Year 2011	Total	563.75	Mean	1.54	Max	68	Min	0 Inst Max	68	Acre-Ft	1120	

Monterey Peninsula Water Management District

Figure D-59

Period 1 Year Plot Start 00:00_10/01/2012

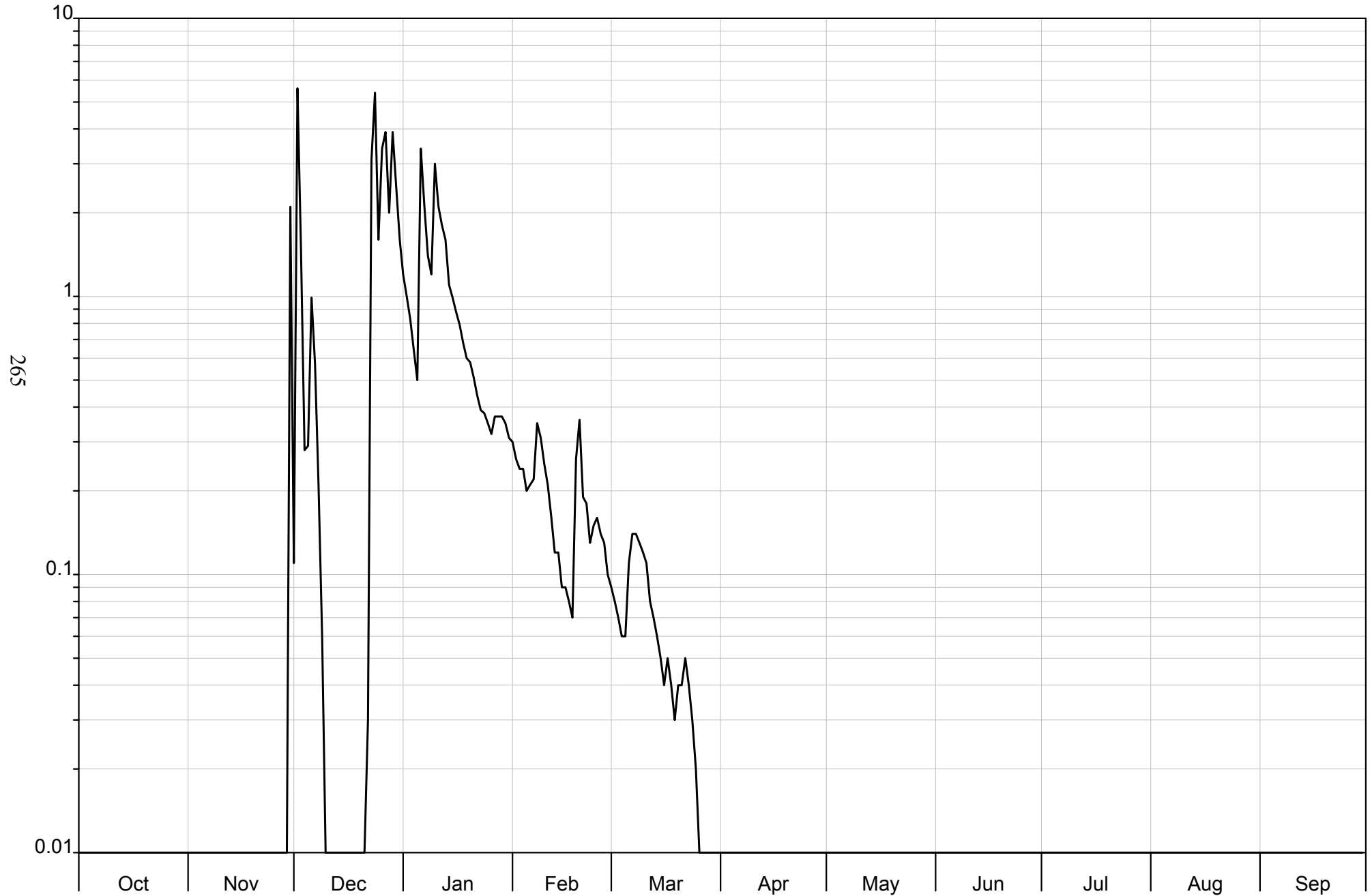
WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— RC

Robinson Canyon Creek

Daily Mean Discharge (CFS)



Summary Report

Site: RC Robinson Canyon Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.11	1.2	.30	.09	0	0	0	0	0	0
2	0	0	5.6	1.0	.26	.08	0	0	0	0	0	0
3	0	0	1.5	.83	.24	.07	0	0	0	0	0	0
4	0	0	.28	.64	.24	.06	0	0	0	0	0	0
5	0	0	.29	.50	.20	.06	0	0	0	0	0	0
6	0	0	.99	3.4	.21	.11	0	0	0	0	0	0
7	0	0	.57	2.1	.22	.14	0	0	0	0	0	0
8	0	0	.21	1.4	.35	.14	0	0	0	0	0	0
9	0	0	.06	1.2	.31	.13	0	0	0	0	0	0
10	0	0	.01	3.0	.25	.12	0	0	0	0	0	0
11	0	0	0	2.1	.21	.11	0	0	0	0	0	0
12	0	0	0	1.8	.16	.08	0	0	0	0	0	0
13	0	0	0	1.6	.12	.07	0	0	0	0	0	0
14	0	0	0	1.1	.12	.06	0	0	0	0	0	0
15	0	0	0	.99	.09	.05	0	0	0	0	0	0
16	0	0	0	.88	.09	.04	0	0	0	0	0	0
17	0	0	0	.79	.08	.05	0	0	0	0	0	0
18	0	0	0	.68	.07	.04	0	0	0	0	0	0
19	0	0	0	.60	.26	.03	0	0	0	0	0	0
20	0	0	0	.58	.36	.04	0	0	0	0	0	0
21	0	0	0	.51	.19	.04	0	0	0	0	0	0
22	0	0	.03	.44	.18	.05	0	0	0	0	0	0
23	0	0	3.1	.39	.13	.04	0	0	0	0	0	0
24	0	0	5.4	.38	.15	.03	0	0	0	0	0	0
25	0	0	1.6	.35	.16	.02	0	0	0	0	0	0
26	0	0	3.4	.32	.14	0	0	0	0	0	0	0
27	0	0	3.9	.37	.13	0	0	0	0	0	0	0
28	0	0	2.0	.37	.10	0	0	0	0	0	0	0
29	0	0	3.9	.37	-----	0	0	0	0	0	0	0
30	0	2.1	2.5	.35	-----	0	0	0	0	0	0	0
31	0	-----	1.6	.31	-----	.01	-----	0	-----	0	0	-----
Total	0	2.1	37.05	30.55	5.32	1.76	0	0	0	0	0	0
Mean	0	.070	1.20	.99	.19	.057	0	0	0	0	0	0
Max	0	2.1	5.6	3.4	.36	.14	0	0	0	0	0	0
Min	0	0	0	.31	.07	0	0	0	0	0	0	0
Acre-Ft	0	4.2	73	61	11	3.5	0	0	0	0	0	0
Wtr Year 2013	Total	76.78	Mean	.21	Max	5.6	Min	0	Inst Max	5.6	Acre-Ft	152
Cal Year 2012	Total	59.30	Mean	.16	Max	5.6	Min	0	Inst Max	5.6	Acre-Ft	118

Monterey Peninsula Water Management District

Figure D-60

Period 1 Year Plot Start 00:00_10/01/2008

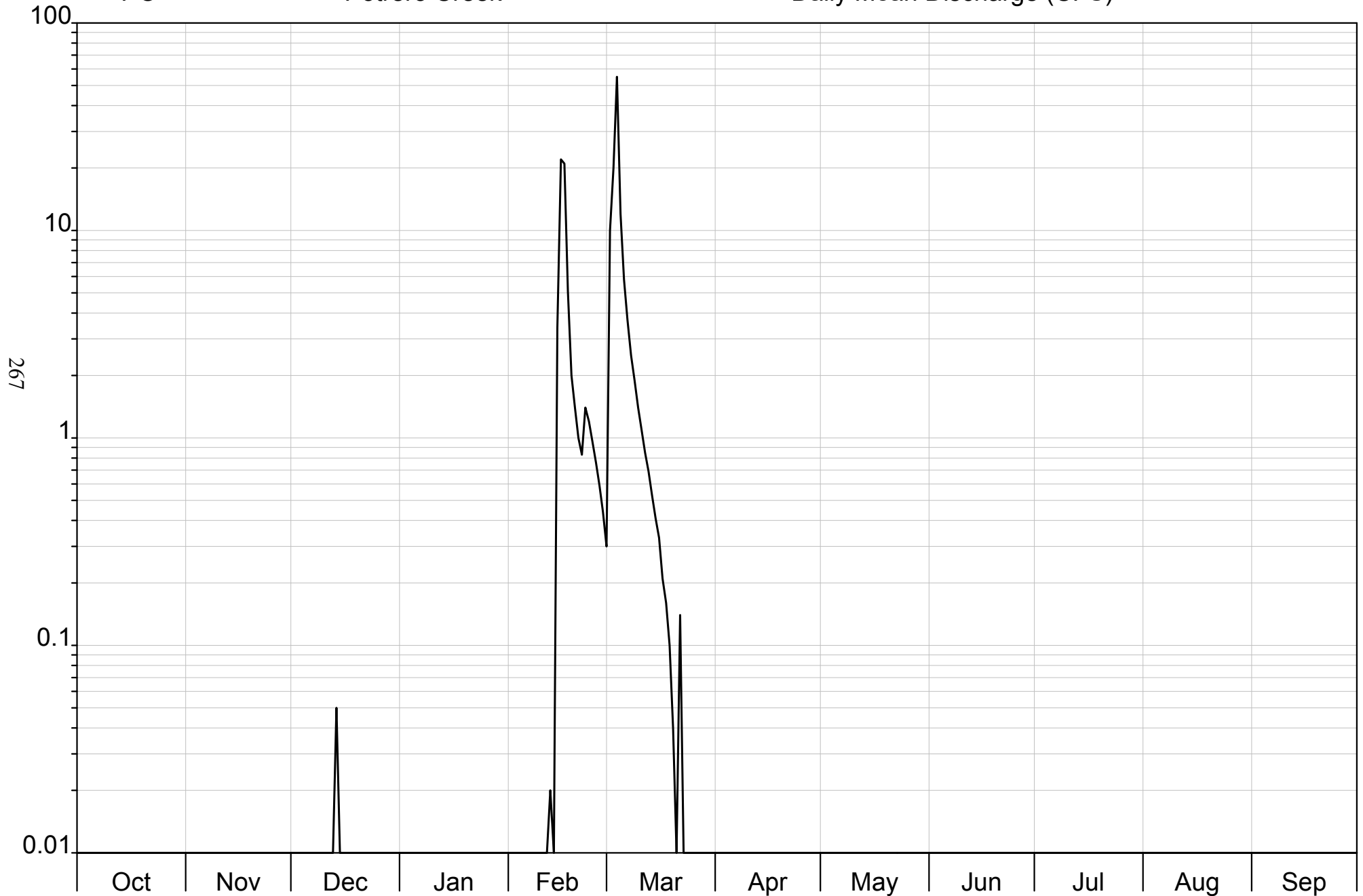
WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— PO

Potrero Creek

Daily Mean Discharge (CFS)



Summary Report

Site: P0 Potrero Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	.30	0	0	0	0	0	0
2	0	0	0	0	0	10	0	0	0	0	0	0
3	0	0	0	0	0	20	0	0	0	0	0	0
4	0	0	0	0	0	55	0	0	0	0	0	0
5	0	0	0	0	0	12	0	0	0	0	0	0
6	0	0	0	0	0	5.8	0	0	0	0	0	0
7	0	0	0	0	0	3.7	0	0	0	0	0	0
8	0	0	0	0	0	2.5	0	0	0	0	0	0
9	0	0	0	0	0	1.9	0	0	0	0	0	0
10	0	0	0	0	0	1.4	0	0	0	0	0	0
11	0	0	0	0	0	1.1	0	0	0	0	0	0
12	0	0	0	0	0	.85	0	0	0	0	0	0
13	0	0	0	0	.02	.69	0	0	0	0	0	0
14	0	0	.05	0	0	.53	0	0	0	0	0	0
15	0	0	0	0	3.4	.41	0	0	0	0	0	0
16	0	0	0	0	22	.33	0	0	0	0	0	0
17	0	0	0	0	21	.21	0	0	0	0	0	0
18	0	0	0	0	5.1	.16	0	0	0	0	0	0
19	0	0	0	0	2.0	.10	0	0	0	0	0	0
20	0	0	0	0	1.4	.04	0	0	0	0	0	0
21	0	0	0	0	1.0	0	0	0	0	0	0	0
22	0	0	0	0	.83	.14	0	0	0	0	0	0
23	0	0	0	0	1.4	.01	0	0	0	0	0	0
24	0	0	0	0	1.2	0	0	0	0	0	0	0
25	0	0	0	0	.96	0	0	0	0	0	0	0
26	0	0	0	0	.76	0	0	0	0	0	0	0
27	0	0	0	0	.59	0	0	0	0	0	0	0
28	0	0	0	0	.44	0	0	0	0	0	0	0
29	0	0	0	0	-----	0	0	0	0	0	0	0
30	0	0	0	0	-----	0	0	0	0	0	0	0
31	0	-----	0	0	-----	0	-----	0	-----	0	0	-----
Total	0	0	0.05	0	62.10	117.17	0	0	0	0	0	0
Mean	0	0	.002	0	2.22	3.78	0	0	0	0	0	0
Max	0	0	.05	0	22	55	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	0	.10	0	123	232	0	0	0	0	0	0
Wtr Year 2009	Total	179.32	Mean	.49	Max	55	Min	0	Inst Max	55	Acre-Ft	356
Cal Year 2008	Total	155.54	Mean	.42	Max	31	Min	0	Inst Max	31	Acre-Ft	309

Monterey Peninsula Water Management District

Figure D-61

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— PO

Potrero Creek

Daily Mean Discharge (CFS)



Summary Report

Site: P0 Potrero Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.32	4.3	.38	1.6	.04	0	0	0
2	0	0	0	0	.24	16	.26	1.4	.03E	0	0	0
3	0	0	0	0	.12	22	.24	1.2	.02E	0	0	0
4	0	0	0	0	.14	21	.72	1.1	.01E	0	0	0
5	0	0	0	0	.58	10	40	1.1	.01	0	0	0
6	0	0	0	0	.31	6.5	12	.93	.01	0	0	0
7	0	0	0	0	.34	4.7	7.0	.83	0	0	0	0
8	0	0	0	0	.36	3.6	5.1	.75	.01	0	0	0
9	0	0	0	0	3.7	2.8	4.2	.74	0	0	0	0
10	0	0	0	0	2.9	2.4	3.3	.71	0	0	0	0
11	0	0	0	0	2.0	1.9	11	.66	0	0	0	0
12	0	0	0	0	1.5	2.3	20	.60	0	0	0	0
13	.01	0	0	0	1.3	3.1	13	.57	0	0	0	0
14	.22	0	0	0	1.1	2.3	8.6	.50	0	0	0	0
15	0	0	0	0	.86	2.0	6.2	.42	0	0	0	0
16	0	0	0	0	.67	1.8	4.6	.41	0	0	0	0
17	0	0	0	0	.52	1.7	3.8	.35	0	0	0	0
18	0	0	0	.02	.38	1.6	3.0	.33	0	0	0	0
19	0	0	0	13	.26	1.4	2.5	.24	0	0	0	0
20	0	0	0	58	.15	1.1	4.0	.19	0	0	0	0
21	0	0	0	13	.14	.97	9.5	.15	0	0	0	0
22	0	0	0	19	.26	.96	6.1	.13	0	0	0	0
23	0	0	0	8.5	.46	.85	4.5	.11	0	0	0	0
24	0	0	0	4.2	5.0	.76	3.7	.11	0	0	0	0
25	0	0	0	2.5	3.0	.66	3.1	.11	0	0	0	0
26	0	0	0	2.5	4.1	.58	2.7	.10	0	0	0	0
27	0	0	0	1.9	9.6	.52	2.5	.21	0	0	0	0
28	0	0	0	1.2	6.9	.49	2.2	.12	0	0	0	0
29	0	0	0	.91	-----	.38	1.9	.08	0	0	0	0
30	0	0	0	.73	-----	.38	1.7	.06	0	0	0	0
31	0	-----	0	.48	-----	.40	-----	.05	-----	0	0	-----
Total	0.23	0	0	125.94	47.21	119.45	187.80	15.86	0.13	0	0	0
Mean	.007	0	0	4.06	1.69	3.85	6.26	.51	.004	0	0	0
Max	.22	0	0	58	9.6	22	40	1.6	.04	0	0	0
Min	0	0	0	0	.12	.38	.24	.05	0	0	0	0
Acre-Ft	.46	0	0	250	94	237	372	31	.26	0	0	0
Wtr Year 2010	Total	496.62	Mean	1.36	Max	58	Min	0	Inst Max	58	Acre-Ft	985
Cal Year 2009	Total	179.50	Mean	.49	Max	55	Min	0	Inst Max	55	Acre-Ft	356

Monterey Peninsula Water Management District

Figure D-62

Period 1 Year Plot Start 00:00_10/01/2010

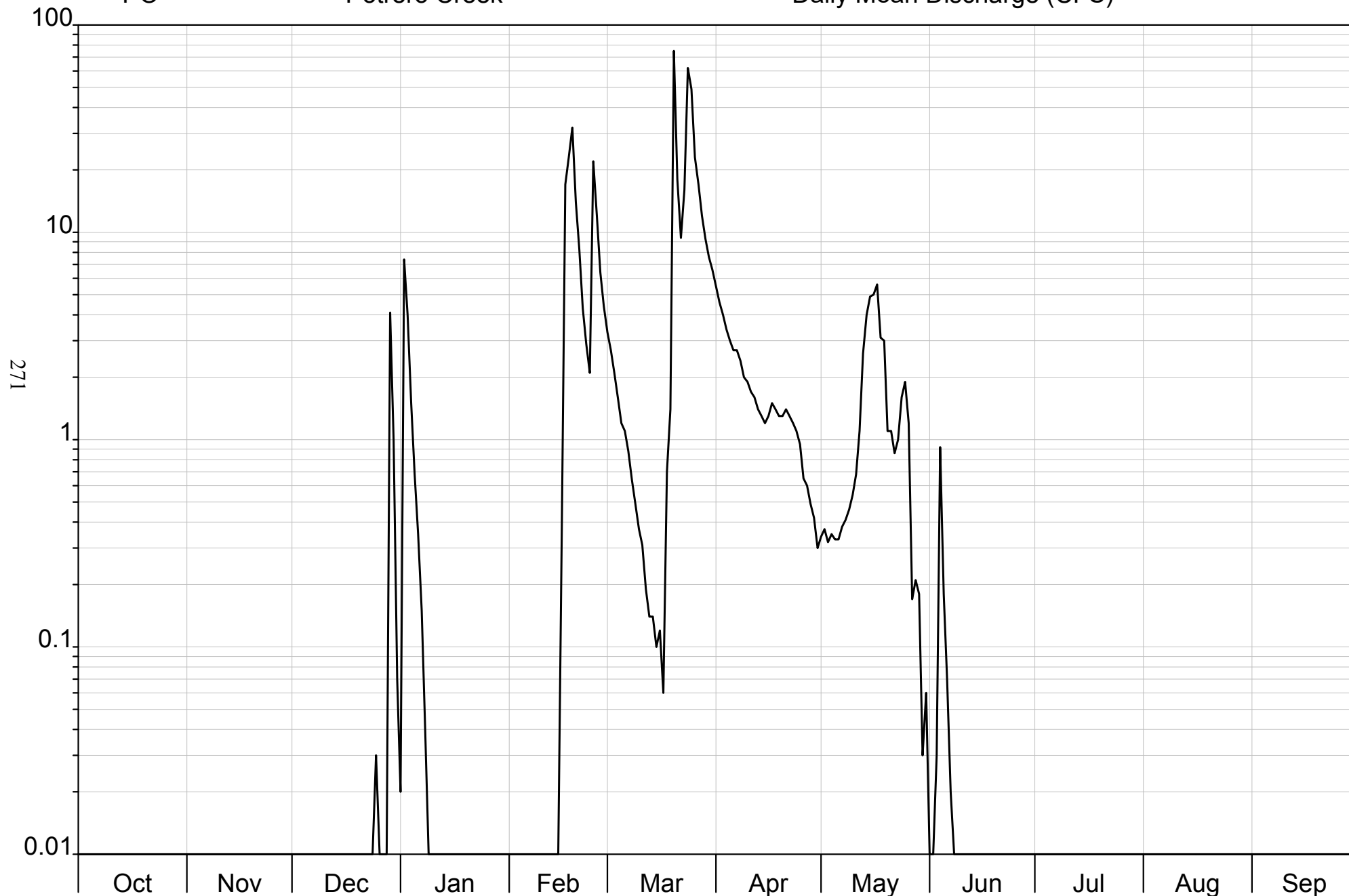
WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— PO

Potrero Creek

Daily Mean Discharge (CFS)



Summary Report

Site: P0 Potrero Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.02	0	3.3	5.5	.34	0	0	0	0
2	0	0	0	7.4	0	2.7	4.6	.37	0	0	0	0
3	0	0	0	4.0	0	2.1	4.0	.32	.03	0	0	0
4	0	0	0	1.5	0	1.6	3.4	.35	.92	0	0	0
5	0	0	0	.68	0	1.2	3.0	.33	.18	0	0	0
6	0	0	0	.35	0	1.1	2.7	.33	.07	0	0	0
7	0	0	0	.15	0	.88	2.7	.38	.02	0	0	0
8	0	0	0	.04	0	.64	2.4	.41	.01	0	0	0
9	0	0	0	0	0	.49	2.0	.46	0	0	0	0
10	0	0	0	0	0	.37	1.9	.54	.01	0	0	0
11	0	0	0	0	0	.31	1.7	.68	0	0	0	0
12	0	0	0	0	0	.19	1.6	1.1	0	0	0	0
13	0	0	0	0	0	.14	1.4	2.6	0	0	0	0
14	0	0	0	0	0	.14	1.3	4.0	0	0	0	0
15	0	0	0	0	0	.10	1.2	4.9	0	0	0	0
16	0	0	0	0	.38	.12	1.3	5.0	0	0	0	0
17	0	0	0	0	17	.06	1.5	5.6	0	0	0	0
18	0	0	0	0	23	.70	1.4	3.1	0	0	0	0
19	0	0	0	0	32	1.4	1.3	3.0	0	0	0	0
20	0	0	0	0	14	75	1.3	1.1	0	0	0	0
21	0	0	0	0	8.3	18	1.4	1.1	0	0	0	0
22	0	0	0	0	4.3	9.4	1.3	.86	0	0	0	0
23	0	0	0	0	2.9	16	1.2	1.0	0	0	0	0
24	0	0	0	0	2.1	62	1.1	1.6	0	0	0	0
25	0	0	.03	0	22	49	.95	1.9	0	0	0	0
26	0	0	0	0	12	23	.65	1.2	0	0	0	0
27	0	0	0	0	6.4	17	.60	.17	0	0	0	0
28	0	0	0	0	4.4	12	.49	.21	0	0	0	0
29	0	0	4.1	0	-----	9.3	.42	.18	0	0	0	0
30	0	0	1.0	0	-----	7.6	.30	.03	0	0	0	0
31	0	-----	.07	0	-----	6.6	-----	.06	-----	0	0	-----
Total	0	0	5.20	14.14	148.78	322.44	54.61	43.22	1.24	0	0	0
Mean	0	0	.17	.46	5.31	10.4	1.82	1.39	.041	0	0	0
Max	0	0	4.1	7.4	32	75	5.5	5.6	.92	0	0	0
Min	0	0	0	0	0	.06	.30	.03	0	0	0	0
Acre-Ft	0	0	10	28	295	640	108	86	2.5	0	0	0
Wtr Year 2011	Total	589.63	Mean	1.62	Max	75	Min	0 Inst Max	75	Acre-Ft	1170	
Cal Year 2010	Total	501.59	Mean	1.37	Max	58	Min	0 Inst Max	58	Acre-Ft	995	

Monterey Peninsula Water Management District

Figure D-63

Period 1 Year Plot Start 00:00_10/01/2011

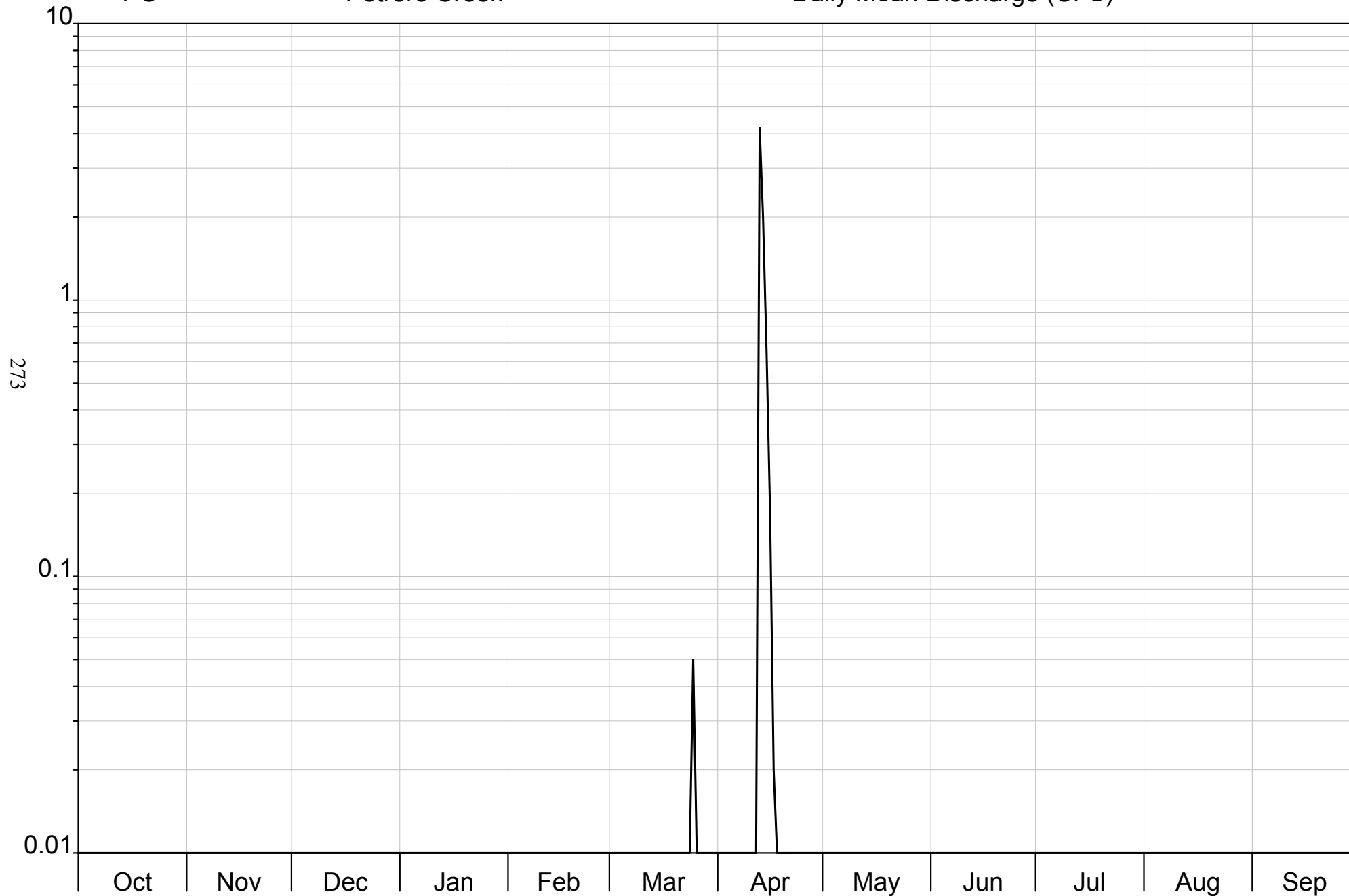
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— PO

Potrero Creek

Daily Mean Discharge (CFS)



Summary Report

Site: P0 Potrero Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	4.2	0	0	0	0	0
14	0	0	0	0	0	0	2.0	0	0	0	0	0
15	0	0	0	0	0	0	.64	0	0	0	0	0
16	0	0	0	0	0	0	.17	0	0	0	0	0
17	0	0	0	0	0	.01	.02	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	.05	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	-----	0	0	0	0	0	0	0
31	0	-----	0	0	-----	0	-----	0	-----	0	0	-----
Total	0	0	0	0	0	0.06	7.03	0	0	0	0	0
Mean	0	0	0	0	0	.002	.23	0	0	0	0	0
Max	0	0	0	0	0	.05	4.2	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	0	0	0	0	.12	14	0	0	0	0	0
Wtr Year 2012	Total	7.09	Mean	.019	Max	4.2	Min	0	Inst Max	4.2	Acre-Ft	14
Cal Year 2011	Total	584.43	Mean	1.60	Max	75	Min	0	Inst Max	75	Acre-Ft	1160

Monterey Peninsula Water Management District

Figure D-64

Period 1 Year Plot Start 00:00_10/01/2012

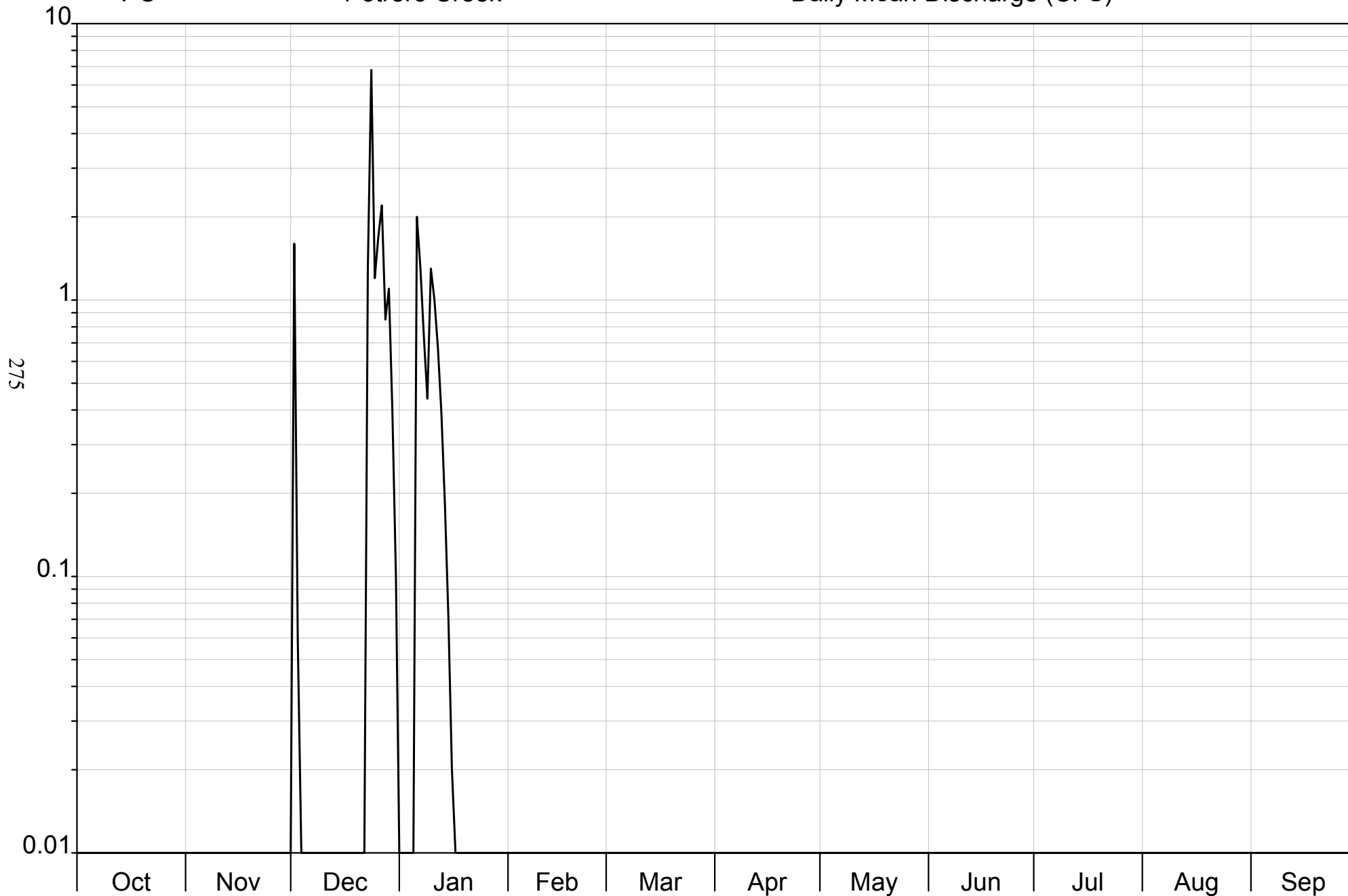
WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— PO

Potrero Creek

Daily Mean Discharge (CFS)



Summary Report

Site: P0 Potrero Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.01	0	0	0	0	0	0	0	0
2	0	0	1.6	0	0	0	0	0	0	0	0	0
3	0	0	.06	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	2.0	0	.01	0	0	0	0	0	0
7	0	0	0	1.3	0	0	0	0	0	0	0	0
8	0	0	0	.73	0	0	0	0	0	0	0	0
9	0	0	0	.44	0	0	0	0	0	0	0	0
10	0	0	0	1.3	0	0	0	0	0	0	0	0
11	0	0	0	1.0	0	0	0	0	0	0	0	0
12	0	0	0	.67	0	0	0	0	0	0	0	0
13	0	0	0	.39	0	0	0	0	0	0	0	0
14	0	0	0	.18	0	0	0	0	0	0	0	0
15	0	0	0	.07	0	0	0	0	0	0	0	0
16	0	0	0	.02	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	1.3	0	0	0	0	0	0	0	0	0
24	0	0	6.8	0	0	0	0	0	0	0	0	0
25	0	0	1.2	0	0	0	0	0	0	0	0	0
26	0	0	1.7	0	0	0	0	0	0	0	0	0
27	0	0	2.2	0	0	0	0	0	0	0	0	0
28	0	0	.85	0	0	0	0	0	0	0	0	0
29	0	0	1.1	0	-----	0	0	0	0	0	0	0
30	0	.01	.40	0	-----	0	0	0	0	0	0	0
31	0	-----	.10	0	-----	0	-----	0	-----	0	0	-----
Total	0	0.01	17.31	8.11	0	0.01	0	0	0	0	0	0
Mean	0	0	.56	.26	0	0	0	0	0	0	0	0
Max	0	.01	6.8	2.0	0	.01	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Acre-Ft	0	.02	34	16	0	.02	0	0	0	0	0	0
Wtr Year 2013	Total	25.44	Mean	.070	Max	6.8	Min	0	Inst Max	6.8	Acre-Ft	50
Cal Year 2012	Total	24.41	Mean	.067	Max	6.8	Min	0	Inst Max	6.8	Acre-Ft	48

Monterey Peninsula Water Management District

Figure D-65

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— H1

Carmel River at Highway 1 Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: H1 Carmel River at Highway 1 Bridge
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	203	91	43	15	1.9E	0	0
2	0	0	0	0	0	396	87	53	15	1.2E	0	0
3	0	0	0	0	0	1150	83	54	16	.94E	0	0
4	0	0	0	0	0	1970	80	51	17	.70E	0	0
5	0	0	0	0	0	1100	77	46	15	.70E	0	0
6	0	0	0	0	0	729	73	43	14	.70E	0	0
7	0	0	0	0	0	543	71	40E	15	.70E	0	0
8	0	0	0	0	0	457	96E	39E	15	.70E	0	0
9	0	0	0	0	0	404	97	37E	14	.70E	0	0
10	0	0	0	0	0	369	78	35	14	.59E	0	0
11	0	0	0	0	.01	328	73	33	13	.59E	0	0
12	0	0	0	0	0	293	71	30	12	.49E	0	0
13	0	0	0	0	.07	263	68	29	13	.40E	0	0
14	0	0	0	0	0	238	66	28	13	.40E	0	0
15	0	0	0	0	5.8	218	62	28	12	.40E	0	0
16	0	0	0	0	764E	200	58	27	12	.32E	0	0
17	0	0	0	0	1000	187	56	25	11	.32E	0	0
18	0	0	0	0	721	175	56	23	11	.25E	0	0
19	0	0	0	0	432	165	55	23	10	.25E	0	0
20	0	0	0	0	324	155	51	22	9.6	.19E	0	0
21	0	0	0	0	262	147	48	21	8.0	.14E	0	0
22	0	0	0	0	230	161	46	22	7.0	.09E	0	0
23	0	0	0	0	330	151	45	21	6.4	.06E	0	0
24	0	0	0	0	471	138	44	21	5.1	.03E	0	0
25	0	0	0	0	361	130	43	21	3.7	.01E	0	0
26	0	0	0	0	302	123	45	20	3.5	0E	0	0
27	0	0	0	0	260	117	44	19	3.5	0	0	0
28	0	0	0	0	226	111	43	18	2.8	0	0	0
29	0	0	0	0	-----	106	44	16	2.7	0	0	0
30	0	0	0	0	-----	100	43	15	1.9E	0	0	0
31	0	-----	0	0	-----	95	-----	15	-----	0	0	-----
Total	0	0	0	0	5688.88	10922	1894	918	311.2	12.77	0	0
Mean	0	0	0	0	203	352	63.1	29.6	10.4	.41	0	0
Max	0	0	0	0	1000	1970	97	54	17	1.9	0	0
Min	0	0	0	0	0	95	43	15	1.9	0	0	0
Acre-Ft	0	0	0	0	11280	21660	3760	1820	617	25	0	0
Wtr Year 2009	Total	19746.85	Mean	54.1	Max	1970	Min	0	Inst Max	1970	Acre-Ft	39170
Cal Year 2008	Total	21438.80	Mean	58.6	Max	1940	Min	0	Inst Max	1940	Acre-Ft	42520

Monterey Peninsula Water Management District

Figure D-66

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— H1

Carmel River at Highway 1 Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: H1 Carmel River at Highway 1 Bridge
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	11E	11E	40	299	581	168	229	85	34	9.5	.43
2	0	11E	11E	40	275	588	161	220	83	33	8.9	.31
3	0	11E	11E	40	257	665	160	209	80	32	8.1	.17
4	0	10E	11E	39	243	847	161	202	78	30	8.0	.26
5	0	10E	11E	36	402	644	405	190	74	29	7.8	.24
6	0	11E	11E	35	401	555	315	185	71	28	7.8	.18
7	0	11E	15E	38	421	510	249	178	68	27	8.0	.21
8	0	12	17E	36	393	468	218	171	66	27	7.9	.44
9	0	12	17E	36	401	454	203	168	65	26	8.3	.35
10	0	13	17E	35E	393	425	195	166	66	25	7.9	.25
11	0	12	17E	35E	359	395	226	165	66	24	7.1	.27
12	0	12	27E	39E	332	370	517	154	63	23	6.5	.24
13	1.7	12	163E	42E	308	396	531	150	60	22	5.8	.18
14	684	11	179	47	287	358	447	146	56	22	5.4	.20
15	189	11	136	54	269	328	399	140	55	21	4.8	.22
16	99	11	109	52	253	305	359	136	54	20	4.5	.27
17	66	12	93	53	241	287	326	132	53	18	3.9	.32
18	47	10E	82	112	228	273	302	131	51	18	3.5	.46
19	37	12E	73	838	221	256	281	127	51	16	2.9	.33
20	33	12E	67	2080	212	239	305	122	51	15	2.8	.55
21	27	11E	63	1900	206	227	374	117	50	15	2.6	.44
22	25	11E	61	1470	211	218	405	112	48	15	1.9	.48
23	21	11E	57	985	202	209	354	112	47	15	1.8	.15
24	19E	11E	52	731	394	200	317	108	46	14	1.3	0
25	17E	11E	48	583	398	194	293	104	45	13	.91	0
26	16E	11E	45	541	349	189	275	102	44	13	.71	0
27	15E	11E	43E	540	765	181	263	102	43	12	.49	0
28	14E	11E	43E	469	733	175	271	106	40	11	.42	0
29	13E	11E	41E	412	-----	171	255	97	38	9.6	.37	0
30	12E	11E	38E	372	-----	170	242	92	36	10	.29	0
31	12E	-----	41E	330	-----	171	-----	88	-----	10	.44	-----
Total	1347.7	337	1610	12060	9453	11049	8977	4461	1733	627.6	140.63	6.95
Mean	43.5	11.2	51.9	389	338	356	299	144	57.8	20.2	4.54	.23
Max	684	13	179	2080	765	847	531	229	85	34	9.5	.55
Min	0	10	11	35	202	170	160	88	36	9.6	.29	0
Acre-Ft	2670	668	3190	23920	18750	21920	17810	8850	3440	1240	279	14
Wtr Year 2010	Total	51802.88	Mean	142	Max	2080	Min	0	Inst Max	2080	Acre-Ft	102700
Cal Year 2009	Total	23041.55	Mean	63.1	Max	1970	Min	0	Inst Max	1970	Acre-Ft	45700

Monterey Peninsula Water Management District

Figure D-67

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— H1

Carmel River at Highway 1 Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: H1 Carmel River at Highway 1 Bridge
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	6.0	12E	247	72	454	762	132	73	50	17	3.8
2	0	6.5	12E	809	65	420	677	129	72	49	17	3.2
3	0	6.9	12E	851	61	411	602	123	68	48	17	3.2
4	0	6.0	14E	529	60	379	542	122	98	48	16	3.4
5	0	5.6	15E	393	60	349	496	121	202	46E	16	3.4
6	0	5.2	14E	318	60	326	455	117	152	44E	16	3.1
7	0	6.0	17E	268	58	318	426	113	131	42	16	2.9
8	0	8.0	17E	234	58	299	396	112	120	40	16	2.5
9	0	8.0	18E	206	58E	280	359	107	110	38	17	3.1
10	0	10	18E	182	56	263	333	103	102	36	15	3.9
11	0	8.7	18E	169	54	247	312	100	95	34	14	4.4
12	0	8.5	18E	158	52	229	296	97	93	30	12	4.0
13	0	8.8	18E	146	52E	214	280	96	90	30	11	4.0
14	0	10	18E	136	48E	202	263	94	88	29	11	4.8
15	0	10	18E	124	50	192	251	99	82	29	9.1	5.0
16	0	12	19E	115	119	184	242	95	76	32	7.9	5.3
17	.06	12	19E	107	285	181E	236	97	73	33	6.4	4.8
18	0	5.8E	19E	101E	716	179	226	109	71	32	5.7	4.3
19	.01	5.9E	35E	96E	976	202	218	114	70	32	5.5	4.0
20	.79	7.7E	350E	90	739	1780	209	101	67	32	6.8	3.7
21	.69	11E	258	86	549	1210	202	97	64	31	7.9	2.5
22	1.8	12E	247	81E	449	697	192	92	58	31	7.9	3.5E
23	2.7	13E	242	80	385	781	181	88	58	30	7.5	3.7E
24	4.3	14E	191	76	343	1360	174	87	54	32	6.5	3.9E
25	4.6	14E	172	73	679	3380	167	83	51	33	5.5	4.1E
26	4.3	14E	216	69	971	1830	161	83	52	31	5.4	4.1E
27	4.6	14E	185	68E	641	1550	153	81	51	28	5.0	3.8E
28	4.7	14E	168	66E	527	1170	149	79	50	22	4.5	3.9E
29	4.5	13E	326	64E	-----	999	143	80	51	21	4.0	3.4E
30	5.4	12E	341	66E	-----	900	137	78	52	20	3.7	4.3E
31	5.6	-----	277	79E	-----	844	-----	74	-----	19	3.8	-----
Total	44.05	288.6	3304	6087	8243	21830	9240	3103	2474	1052	314.1	114.0
Mean	1.42	9.62	107	196	294	704	308	100	82.5	33.9	10.1	3.80
Max	5.6	14	350	851	976	3380	762	132	202	50	17	5.3
Min	0	5.2	12	64	48	179	137	74	50	19	3.7	2.5
Acre-Ft	87	572	6550	12070	16350	43300	18330	6150	4910	2090	623	226
Wtr Year 2011	Total	56093.75	Mean	154	Max	3380	Min	0	Inst Max	3380	Acre-Ft	111300
Cal Year 2010	Total	52144.83	Mean	143	Max	2080	Min	0	Inst Max	2080	Acre-Ft	103400

Monterey Peninsula Water Management District

Figure D-68

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— H1

Carmel River at Highway 1 Bridge

Daily Mean Discharge (CFS)



Summary Report

Site: H1 Carmel River at Highway 1 Bridge
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5E	9.5E	13E	12E	35	17E	137E	57	11E	.94	.29	.11E
2	4.5E	9.9E	13E	12E	32	26E	127	52	9.9E	.84	.17	.04E
3	4.8E	10E	13E	11E	27E	37E	117	49	8.7E	.96	.21	.03E
4	6.3E	11E	12E	12E	25E	29E	109	48	8.5E	.97	.37	.03E
5	11E	11E	12E	13E	23E	20E	97	43	8.7E	.83	.48	.04E
6	16E	13E	12E	13E	22E	18E	89	42	9.5E	.72	.39	.07E
7	14E	14E	13E	14E	21E	17E	85	41	9.1E	.56	.19	.04E
8	13E	14E	13E	14E	19E	16E	80	39	7.8E	.74	.25	.03E
9	13E	14E	13E	14E	19E	15E	75	35	7.1E	.87	.37	.06E
10	13E	14E	13E	14E	18E	15E	74	33	6.3E	.76	.32	0E
11	14E	15E	14E	14E	19E	15E	81	31	5.6E	.77	.30	0E
12	13E	15E	14E	13E	18E	14E	84	30E	5.0E	.53	.35	0E
13	12E	15E	15E	12E	19E	14E	153	28E	4.6E	.51	.23	0E
14	11E	14E	14E	12E	19E	13E	190	27E	4.7E	.95	.32	0E
15	11E	14E	14E	11E	23E	13E	164	25E	4.8E	1.0	.45	0E
16	11E	14E	14E	11E	23E	14E	145	24	4.4E	.90	.46	0E
17	11E	13E	15E	11E	21E	26E	130	22	4.3E	.86	.38	0E
18	11E	14E	14E	11E	21E	87E	119	22	4.2E	.81	.41	0E
19	11E	14E	15E	12E	20E	92	108	19	4.0E	.51	.25	0E
20	11E	17E	15E	13E	19E	83	102	19	3.9E	.44	.14	0E
21	11E	18E	15E	26E	19E	78	93	21	3.6E	.23	.11	0E
22	10E	18E	15E	38E	18E	76	82	18	3.3E	.10	.16	0E
23	8.8E	17E	13E	39	18E	69	77	16	2.3E	.29	.17E	0E
24	8.4E	16E	13E	44	17E	69	77	13	1.8E	.42	.13E	.07E
25	8.4E	15E	14E	55	16E	96E	77	12	1.4E	.65	.11E	.12E
26	8.9E	14E	13E	63	16E	105	80	15E	1.1E	.64	.18E	.15E
27	9.1E	14E	13E	62	16E	96	70	17E	1.1E	.50	.23E	.11E
28	8.9E	14E	13E	55	15E	110	63	15E	1.1E	.64	.27E	.21E
29	9.0E	14E	13E	48	16E	138	62	14E	1.2	.54	.13E	.21E
30	8.6E	14E	12E	43	-----	128	60	13E	1.1	.40	.06E	.17E
31	8.7E	-----	12E	40	-----	127	-----	12E	-----	.33	.08E	-----
Total	315.9	419.4	417	762	594	1673	3007	852	150.1	20.21	7.96	1.49
Mean	10.2	14.0	13.5	24.6	20.5	54.0	100	27.5	5.00	.65	.26	.050
Max	16	18	15	63	35	138	190	57	11	1.0	.48	.21
Min	4.5	9.5	12	11	15	13	60	12	1.1	.10	.06	0
Acre-Ft	627	832	827	1510	1180	3320	5960	1690	298	40	16	3.0
Wtr Year 2012	Total	8220.06	Mean	22.5	Max	190	Min	0	Inst Max	190	Acre-Ft	16300
Cal Year 2011	Total	53609.4	Mean	147	Max	3380	Min	2.5	Inst Max	3380	Acre-Ft	106300

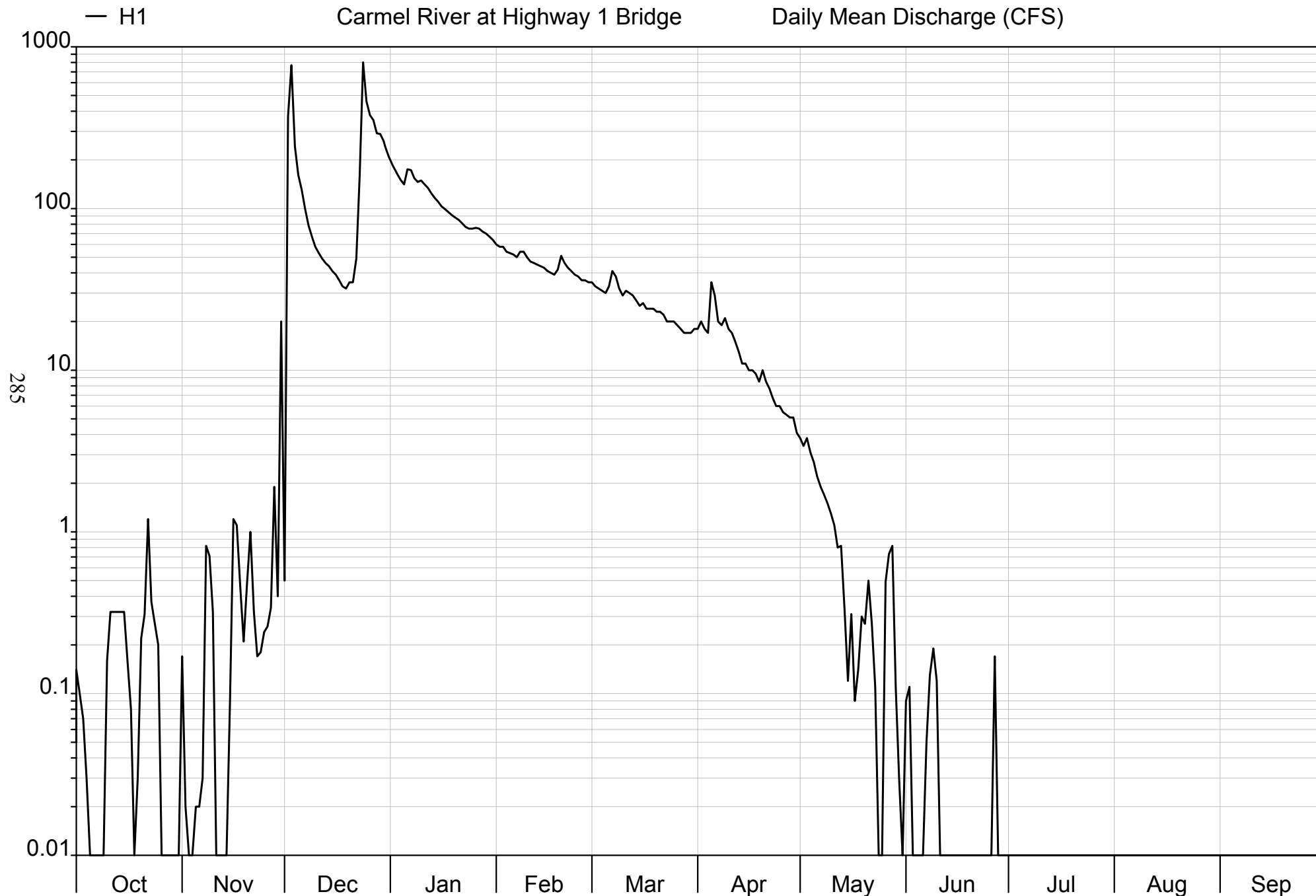
Monterey Peninsula Water Management District

Figure D-69

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013



Summary Report

Site: H1 Carmel River at Highway 1 Bridge
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14E	.17	.50E	198	60	35E	18E	3.8E	.09	0	0	0
2	.10E	.02	371E	179	58	33E	20E	3.4E	.11	0	0	0
3	.07E	0	770E	164	58	32E	18E	3.8	0	0	0	0
4	.03E	.01	242	150	54E	31E	17E	3.1	0	0	0	0
5	0E	.02	161	141	53E	30E	35E	2.7	0	0	0	0
6	0E	.02	131	175	52E	33E	29E	2.2	.01	0	0	0
7	0E	.03	100	173	50E	41E	20E	1.9	.05	0	0	0
8	0E	.82	79	154	54E	38E	19E	1.7	.13	0	0	0
9	0E	.71	67	146	54E	32	21	1.5	.19	0	0	0
10	.16E	.32	58	149	50E	29	18	1.3	.12	0	0	0
11	.32E	0	53	141	47E	31E	17	1.1	0	0	0	0
12	.32E	0	49	134	46E	30E	15	.80	0	0	0	0
13	.32E	0	46E	124	45E	29E	13	.82	0	0	0	0
14	.32E	0	44E	116	44E	27	11	.33	0	0	0	0
15	.32E	.09	41E	110	43E	25	11	.12	0	0	0	0
16	.16E	1.2	39E	103	41E	26	10	.31	0	0	0	0
17	.08E	1.1	36	99	40E	24	10	.09	0	0	0	0
18	0E	.47	33	95	39E	24E	9.5E	.14	0	0	0	0
19	.03	.21	32	91	42E	24E	8.5E	.30	0	0	0	0
20	.22	.48	35E	88	51E	23E	10E	.27	0	0	0	0
21	.31	1.0	35E	85	46E	23E	8.5E	.50	0	0	0	0
22	1.2	.32	49E	81	43E	22	7.7E	.27	0	0	0	0
23	.37	.17	161E	77	41E	20	6.7E	.11	0	0	0	0
24	.27	.18	801	75E	39E	20	6.0E	.01	0	0	0	0
25	.20	.24	460	75E	38E	20E	6.0E	.01	0	0	0	0
26	0	.26	378	76E	36E	19E	5.5E	.49	0	0	0	0
27	0	.34	353	75E	36E	18E	5.3E	.73	.17	0	0	0
28	0	1.9	292	72E	35E	17E	5.1E	.82	0	0	0	0
29	0	.40	289	70	-----	17E	5.1E	.11	0	0	0	0
30	0	20E	262	67	-----	17E	4.1E	.03	0	0	0	0
31	0	-----	224	64	-----	18E	-----	.01	-----	0	0	-----
Total	4.94	30.48	5691.50	3547	1295	808	390.0	32.77	0.87	0	0	0
Mean	.16	1.02	184	114	46.3	26.1	13.0	1.06	.029	0	0	0
Max	1.2	20	801	198	60	41	35	3.8	.19	0	0	0
Min	0	0	.50	64	35	17	4.1	.01	0	0	0	0
Acre-Ft	9.8	60	11290	7040	2570	1600	774	65	1.7	0	0	0
Wtr Year 2013	Total	11800.56	Mean	32.3	Max	801	Min	0	Inst Max	801	Acre-Ft	23410
Cal Year 2012	Total	12794.68	Mean	35.0	Max	801	Min	0	Inst Max	801	Acre-Ft	25380

Monterey Peninsula Water Management District

Figure D-70

Period 1 Year Plot Start 00:00_10/01/2008

WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— SJ

San Jose Creek

Daily Mean Discharge (CFS)



Summary Report

Site: SJ San Jose Creek
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.08	.58	.76	7.6	4.2	2.1	1.2	.58	.25	.02
2	0	0	.08	.60	.74	32	4.0	2.3	1.2	.58	.22	.03
3	0	0	.08	.79	.71	57	4.0	2.0	1.1	.57	.21	.03
4	0	0	.08	.71	.68	126	3.8	2.0	1.1	.56	.19	.03
5	0	0	.08	.68	1.1	65	3.6	2.0	1.0	.53	.17	.03
6	0	0	.07	.72	1.3	44	3.4	1.9	.96	.55	.15	.03
7	0	0	.07	.72	2.7	34	3.6	1.8	.95	.53	.15	.02
8	0	0	.07	.71	1.8	28	3.6	1.7	.96	.55	.15	.02
9	0	0	.07	.72	3.5	23	3.4	1.7	.96	.52	.13	.02
10	0	0	.07	.70	2.9	20	3.4	1.6	.94	.55	.10	.02
11	0	0	.07	.66	2.5	17	3.3	1.6	.94	.54	.08	.02
12	0	0	.07	.64	3.5	15	3.2	1.6	.91	.50	.09	.01
13	0	0	.08	.63	7.3	14	3.2	1.5	.94	.44	.08	.01
14	0	0	.17	.61	7.4	12	3.1	1.5	.96	.39	.05	.02
15	0	0	.38	.61	13	11	3.0	1.5	.88	.34	.05	.02
16	0	0	.68	.58	63	10	3.0	1.4	.93	.32	.04	.02
17	0	0	.60	.58	75	9.3	2.9	1.3	.91	.32	.05	.01
18	0	0	.45	.58	38	8.4	2.7	1.3	.89	.29	.07	.01
19	0	.01	.41	.57	21	7.7	2.5	1.3	.84	.26	.09	.01
20	0	.03	.41	.56	15	7.2	2.4	1.3	.83	.25	.08	.01
21	0	.04	.45	.56	11	6.8	2.2	1.2	.88	.28	.07	.01
22	0	.05	1.5	2.1	9.4	7.7	2.2	1.3	.81	.29	.08	.01
23	0	.05	.93	1.4	14	6.6	2.2	1.3	.74	.30	.08	.01
24	0	.05	.66	1.5	13	6.2	2.2	1.4	.71	.34	.08	.01
25	0	.05	.70	1.3	11	5.8	2.2	1.5	.71	.35	.08	.01
26	0	.13	.87	1.2	10	5.4	2.2	1.4	.73	.34	.07	.01
27	0	.17	.71	1.0	9.3	5.1	2.2	1.3	.71	.30	.05	.01
28	0	.11	.65	.97	8.4	4.9	2.1	1.2	.62	.27	.04	.01
29	0	.10	.61	.91	-----	4.7	2.1	1.2	.57	.26	.03	.01
30	0	.09	.58	.86	-----	4.5	2.0	1.2	.58	.26	.03	.01
31	0	-----	.56	.81	-----	4.3	-----	1.3	-----	.27	.03	-----
Total	0	0.88	12.29	25.56	347.99	610.2	87.9	47.7	26.46	12.43	3.04	0.49
Mean	0	.029	.40	.82	12.4	19.7	2.93	1.54	.88	.40	.098	.016
Max	0	.17	1.5	2.1	75	126	4.2	2.3	1.2	.58	.25	.03
Min	0	0	.07	.56	.68	4.3	2.0	1.2	.57	.25	.03	.01
Acre-Ft	0	1.7	24	51	690	1210	174	95	52	25	6.0	.97
Wtr Year 2009	Total	1174.94	Mean	3.22	Max	126	Min	0	Inst Max	126	Acre-Ft	2330
Cal Year 2008	Total	872.94	Mean	2.39	Max	77	Min	0	Inst Max	77	Acre-Ft	1730

Monterey Peninsula Water Management District

Figure D-71

Period 1 Year Plot Start 00:00_10/01/2009

WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— SJ

San Jose Creek

Daily Mean Discharge (CFS)



Summary Report

Site: SJ San Jose Creek
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.42	.39	.65	8.4	20	8.6	16	4.3	2.2	1.3	.82
2	.01	.40	.39	.64	7.5	48	7.3	15	4.1	2.2	1.3	.76
3	.01	.40	.41	.63	6.7	67	7.2	14	3.9	2.2	1.2	.75
4	.01	.39	.40	.62	6.2	75	8.1	13	3.7	2.1	1.3	.79
5	.01	.40	.41	.60	7.8	54	67	12	3.5	2.0	1.3	.75
6	.01	.39	.41	.58	6.7	43	36	12	3.4	1.9	1.3	.73
7	.01	.41	1.1	.56	6.5	34	29	11	3.4	1.9	1.3	.70
8	.01	.40	.92	.56	6.3	29	25	10	3.4	1.9	1.2	.76
9	.01	.39	.65	.56	15	26	23	10	3.4	2.0	1.2	.83
10	.01	.33	.57	.54	15	24	21	9.8	3.3	1.9	1.2	.79
11	.01	.34	.65	.54	14	20	33	9.4	3.2	1.8	1.2	.74
12	0	.34	.84	.77	12	20	53	8.9	3.0	1.8	1.2	.73
13	9.0	.34	1.0	.96	11	21	47	8.6	2.8	1.8	1.2	.77
14	9.5	.34	.99	.80	10	18	38	8.2	2.8	1.7	1.2	.76
15	1.7	.37	.81	.71	9.6	17	34	7.9	2.8	1.6	1.2	.75
16	.97	.35	.78	.67	8.8	16	31	7.6	2.7	1.5	1.1	.76
17	.77	.35	.75	.88	8.2	15	28	7.2	2.7	1.5	1.1	.75
18	.65	.36	.72	3.0	7.6	14	25	7.0	2.7	1.5	1.1	.76
19	.60	.36	.67	21	7.3	13	23	6.6	2.8	1.4	1.0	.75
20	.56	.39	.66	62	6.8	12	28	6.1	2.7	1.5	1.0	.74
21	.52	.44	.73	33	6.9	11	33	6.1	2.6	1.5	1.0	.70
22	.51	.42	.95	49	7.6	11	30	5.9	2.5	1.5	1.0	.67
23	.48	.41	.80	33	7.4	10	27	5.7	2.5	1.5	.92	.65
24	.47	.38	.75	23	15	9.6	25	5.4	2.4	1.4	.79	.62
25	.48	.38	.73	17	13	9.0	23	5.3	2.4	1.4	.75	.56
26	.44	.36	.71	17	14	8.6	21	5.2	2.5	1.4	.76	.53
27	.41	.36	.76	15	25	8.1	21	6.2	2.4	1.4	.79	.49
28	.39	.46	.72	13	24	7.6	20	5.7	2.2	1.3	.79	.45
29	.39	.44	.74	12	-----	7.4	18	5.0	2.2	1.3	.82	.43
30	.41	.39	.71	11	-----	8.2	17	4.6	2.2	1.3	.84	.45
31	.42	-----	.68	9.5	-----	7.9	-----	4.4	-----	1.3	.88	-----
Total	28.78	11.51	21.80	329.77	294.3	684.4	807.2	259.8	88.5	51.7	33.24	20.74
Mean	.93	.38	.70	10.6	10.5	22.1	26.9	8.38	2.95	1.67	1.07	.69
Max	9.5	.46	1.1	62	25	75	67	16	4.3	2.2	1.3	.83
Min	0	.33	.39	.54	6.2	7.4	7.2	4.4	2.2	1.3	.75	.43
Acre-Ft	57	23	43	654	584	1360	1600	515	176	103	66	41
Wtr Year 2010	Total	2631.74	Mean	7.21	Max	75	Min	0	Inst Max	75	Acre-Ft	5220
Cal Year 2009	Total	1223.86	Mean	3.35	Max	126	Min	0	Inst Max	126	Acre-Ft	2430

Monterey Peninsula Water Management District

Figure D-72

Period 1 Year Plot Start 00:00_10/01/2010

WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— SJ

San Jose Creek

Daily Mean Discharge (CFS)



Summary Report

Site: SJ San Jose Creek
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.75	.85	5.4	2.1	25	38	6.5	3.7	2.5	1.5	1.1
2	.51	.72	.82	15	2.2	22	33	6.0	3.6	2.4	1.5	1.1
3	.52	.67	.80	13	2.0	19	30	5.8	3.6	2.3	1.5	1.0
4	.56	.63	.82	9.9	1.9	17	27	5.6	7.7	2.2	1.6	.99
5	.58	.64	.90	8.2	1.8	15	24	5.3	5.5	2.2	1.6	1.0
6	.57	.68	1.0	7.1	1.7	14	22	5.2	4.7	2.1	1.6	.96
7	.60	.77	.93	6.3	1.6	14	21	5.1	4.3	2.0	1.6	.85
8	.57	.86	.90	5.6	1.7	12	20	5.1	4.2	2.0	1.6	.80
9	.55	.77	.90	5.0	1.6	11	18	5.0	4.2	2.0	1.5	.86
10	.56	.74	.92	4.6	1.6	10	17	4.9	4.2	2.0	1.4	.88
11	.53	.74	.92	4.1	1.6	9.8	16	4.8	4.2	2.0	1.4	.81
12	.47	.69	.92	3.8	1.5	9.2	15	4.7	4.2	2.0	1.4	.86
13	.47	.65	.94	3.5	1.5	8.6	14	4.6	4.0	2.1	1.4	.86
14	.45	.60	1.0	3.4	1.4	8.3	13	4.5	3.8	2.1	1.3	.89
15	.43	.57	1.1	3.2	1.3	7.8	13	5.8	3.6	2.1	1.3	.93
16	.44	.56	1.1	3.0	5.1	8.2	12	4.7	3.4	2.0	1.2	.95
17	.57	.57	1.2	2.8	22	7.4	12	5.1	3.4	2.0	1.2	.90
18	.68	.60	1.6	2.8	45	10	11	6.0	3.5	2.0	1.2	.84
19	.63	.66	2.8	2.7	79	14	11	5.1	3.4	1.9	1.2	.79
20	.61	1.4	3.9	2.6	51	120	10	4.7	3.2	1.8	1.3	.73
21	.57	1.8	2.7	2.5	34	80	10	4.5	3.0	1.8	1.3	.69
22	.60	1.2	4.8	2.4	26	57	9.7	4.4	2.9	1.8	1.3	.69
23	.69	1.3	3.0	2.3	21	75	9.2	4.4	2.8	1.8	1.2	.69
24	.71	1.3	2.4	2.2	18	125	8.8	4.3	2.8	1.7	1.1	.67
25	1.2	1.1	4.6	2.1	54	150	8.6	4.3	2.8	1.7	1.1	.74
26	.84	1.0	7.8	2.1	47	117	8.3	4.2	2.8	1.7	1.2	.70
27	.76	1.0	4.0	2.0	34	95	7.9	4.0	2.7	1.8	1.2	.67
28	.71	1.1	3.3	2.0	28	77	7.5	3.9	2.7	1.7	1.1	.63
29	.66	.96	18	2.0	-----	61	7.2	3.9	3.1	1.6	1.1	.61
30	.82	.89	9.6	2.4	-----	52	6.9	3.8	2.7	1.5	1.1	.63
31	.81	-----	6.7	2.3	-----	44	-----	3.7	-----	1.5	1.1	-----
Total	19.14	25.92	91.22	136.3	489.6	1295.3	461.1	149.9	110.7	60.3	41.1	24.82
Mean	.62	.86	2.94	4.40	17.5	41.8	15.4	4.84	3.69	1.95	1.33	.83
Max	1.2	1.8	18	15	79	150	38	6.5	7.7	2.5	1.6	1.1
Min	.43	.56	.80	2.0	1.3	7.4	6.9	3.7	2.7	1.5	1.1	.61
Acre-Ft	38	51	181	270	971	2570	915	297	220	120	82	49
Wtr Year 2011	Total	2905.40	Mean	7.96	Max	150	Min	.43	Inst Max	150	Acre-Ft	5760
Cal Year 2010	Total	2705.93	Mean	7.41	Max	75	Min	.43	Inst Max	75	Acre-Ft	5370

Monterey Peninsula Water Management District

Figure D-73

Period 1 Year Plot Start 00:00_10/01/2011

WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— SJ

San Jose Creek

Daily Mean Discharge (CFS)



Summary Report

Site: SJ San Jose Creek
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.83	1.1E	.88E	1.3	1.6	7.9	3.2	1.8	.90	.33	.20
2	.69	.79	1.1E	.82E	1.3	1.4	6.5	3.0	1.7	.98	.35	.21
3	.72	.82	1.1E	.79E	1.2	1.2	5.7	2.9	1.7	1.1	.39	.19
4	.99	1.1	1.0E	.79E	1.2	1.2	5.4	3.0	1.7	.85	.41	.16
5	2.5	1.1	1.0E	.78E	1.1	1.2	4.7	2.8	1.7	.82	.41	.16
6	1.9	1.4	.97E	.75E	1.1	1.2	4.1	2.6	1.6	.81	.34	.17
7	1.7	1.2	.97E	.74E	1.1	1.1	3.8	2.5	1.6	.81	.31	.15
8	1.2	1.1	.97E	.73E	1.1	1.0	3.4	2.4	1.6	.78	.30	.14
9	1.1	.90E	.97E	.70E	.99	.98	3.2	2.3	1.6	.84	.31	.13
10	1.0	.85E	.96E	.69E	1.0	1.0	3.4	2.3	1.4	.88	.30	.13
11	1.1	1.1E	.94E	.69E	1.2	1.1	3.8	2.2	1.3	.76	.28	.15
12	1.0	1.5E	1.0E	.69E	1.4	1.2	3.9	2.1	1.3	.73	.26	.16
13	.91	1.2E	1.1E	.68E	1.3	1.2	17	2.1	1.5	.68	.24	.17
14	.86	1.1E	1.1E	.65E	1.8	1.2	13	2.1	1.5	.80	.21	.18
15	.86	1.1E	.99E	.64E	1.5	1.3	10	2.1	1.3	.81	.20	.17
16	.88	1.1E	1.0E	.66E	1.4	1.5	8.4	2.2	1.3	.72	.19	.16
17	.91	1.0E	1.0E	.69E	1.4	7.9	7.5	2.2	1.3	.63	.18	.14
18	.94	1.1E	.98E	.70E	1.4	5.3	6.9	2.1	1.3	.73	.16	.13
19	.99	1.1E	.93E	.72E	1.3	3.7	6.3	1.9	1.3	.54	.15	.14
20	.96	2.3E	.93E	.87E	1.3	3.1	5.8	1.9	1.3	.56	.16	.15
21	.99	2.1E	.92E	12E	1.2	2.9	5.3	1.9	1.3	.62	.18	.15
22	.94	1.7E	.93E	3.7E	1.2	2.7	4.8	1.7	1.4	.65	.22	.14
23	.87	1.5E	.92E	11E	1.2	2.4	4.5	1.8	1.5	.64	.25	.14
24	.86	1.3E	.87E	6.0E	1.1	2.8	4.2	1.9	1.3	.57	.28	.12
25	.90	1.4E	.87E	3.7E	1.1	11	4.0	2.0	1.3	.46	.28	.12
26	.92	1.3E	.86E	2.5E	1.1	5.8	4.8	2.0	1.2	.43	.26	.14
27	.92	1.2E	.86E	2.3E	1.2	4.5	4.0	2.0	1.1	.42	.23	.17
28	.86	1.2E	.86E	2.0E	1.1	5.4	3.8	1.9	.83	.41	.21	.18
29	.81	1.1E	.85E	1.7E	1.4	4.4	3.6	1.7	.79	.41	.18	.16
30	.80	1.0E	.88E	1.5E	-----	3.9	3.3	1.7	.86	.47	.16	.14
31	.81	-----	.90E	1.4E	-----	6.4	-----	1.8	-----	.38	.17	-----
Total	31.58	36.49	29.83	62.46	35.99	91.58	173.0	68.3	41.38	21.19	7.90	4.65
Mean	1.02	1.22	.96	2.01	1.24	2.95	5.77	2.20	1.38	.68	.25	.16
Max	2.5	2.3	1.1	12	1.8	11	17	3.2	1.8	1.1	.41	.21
Min	.69	.79	.85	.64	.99	.98	3.2	1.7	.79	.38	.15	.12
Acre-Ft	63	72	59	124	71	182	343	135	82	42	16	9.2
Wtr Year 2012	Total	604.35	Mean	1.65	Max	17	Min	.12	Inst Max	17	Acre-Ft	1200
Cal Year 2011	Total	2867.02	Mean	7.85	Max	150	Min	.61	Inst Max	150	Acre-Ft	5690

Monterey Peninsula Water Management District

Figure D-74

Period 1 Year Plot Start 00:00_10/01/2012

WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— SJ

San Jose Creek

Daily Mean Discharge (CFS)



Summary Report

Site: SJ San Jose Creek
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.20	4.7	13	4.2	2.4	1.7	.87	.58	.13	.05	0
2	.05	.28	20	11	3.9	2.3	1.6	.81	.55	.11	.05	0
3	.04	.26	11	9.9	3.8	2.2	1.6	.75	.61	.10	.06	0
4	.03	.19	5.5	8.9	3.7	2.2	1.6	.77	.54	.09	.08	0
5	.04	.15	5.4	8.2	3.6	2.2	1.5	.77	.54	.08	.09	0
6	.04	.12	5.4	18	3.5	3.2	1.5	.81	.54	.11	.09	0
7	.05	.11	4.3	15	3.4	2.6	1.5	.81	.51	.15	.08	0
8	.05	.12	3.7	13	4.1	2.6	1.5	.84	.47	.14	.08	0
9	.05	.32	3.1	12	3.6	2.4	1.5	.86	.42	.13	.07	0
10	.06	.46	2.7	15	3.4	2.3	1.4	.91	.44	.12	.07	0
11	.09	.31	2.5	13	3.2	2.2	1.3	.89	.44	.11	.08	0
12	.13	.25	2.5	13	3.2	2.2	1.4	.79	.46	.13	.08	0
13	.14	.22	2.3	12	3.2	2.1	1.4	.74	.40	.13	.06	0
14	.14	.20	2.1	11	3.1	2.1	1.4	.74	.38	.11	.04	0
15	.13	.18	2.0	10	2.9	2.1	1.4	.77	.36	.09	.02	0
16	.13	.25	2.1	9.6	2.8	2.0	1.4	.77	.38	.10	.02	0
17	.11	.63	2.0	9.1	2.7	2.0	1.3	.76	.35	.11	.02	0
18	.09	1.1	2.1	8.5	2.7	2.0	1.2	.74	.35	.12	.02	0
19	.08	.60	1.9	7.9	3.8	1.9	1.2	.72	.36	.13	.02	0
20	.09	.42	1.9	7.3	3.9	1.9	1.1	.68	.34	.16	.02	0
21	.13	.40	1.8	6.8	3.1	1.9	1.1	.63	.34	.16	.02	0
22	.15	.47	2.6	6.3	3.0	1.9	1.1	.66	.32	.12	.02	0
23	.21	.41	10	6.0	2.8	1.8	1.0	.66	.29	.11	.01	0
24	.24	.39	26	5.9	2.8	1.8	1.0	.70	.34	.09	.01	0
25	.17	.36	15	5.9	2.7	1.7	1.0	.72	.33	.07	.01	0
26	.14	.33	14	5.5	2.7	1.7	1.0	.72	.28	.06	.01	0
27	.13	.33	14	5.2	2.5	1.7	1.0	.70	.25	.06	.01	0
28	.12	.45	12	4.9	2.4	1.6	.99	.72	.22	.06	.01	0
29	.13	.70	19	4.7	-----	1.6	.94	.67	.19	.05	.01	0
30	.15	.12	16	4.6	-----	1.6	.89	.64	.15	.05	.01	0
31	.16	-----	14	4.4	-----	1.8	-----	.63	-----	.05	.01	-----
Total	3.35	22.21	231.6	285.6	90.7	64.0	38.52	23.25	11.73	3.23	1.23	0
Mean	.11	.74	7.47	9.21	3.24	2.06	1.28	.75	.39	.10	.040	0
Max	.24	.12	26	18	4.2	3.2	1.7	.91	.61	.16	.09	0
Min	.03	.11	1.8	4.4	2.4	1.6	.89	.63	.15	.05	.01	0
Acre-Ft	6.6	44	459	566	180	127	76	46	23	6.4	2.4	0
Wtr Year 2013	Total	775.42	Mean	2.12	Max	26	Min	0	Inst Max	26	Acre-Ft	1540
Cal Year 2012	Total	763.61	Mean	2.09	Max	26	Min	.03	Inst Max	26	Acre-Ft	1510

Monterey Peninsula Water Management District

Figure D-75

Period 1 Year Plot Start 00:00_10/01/2008

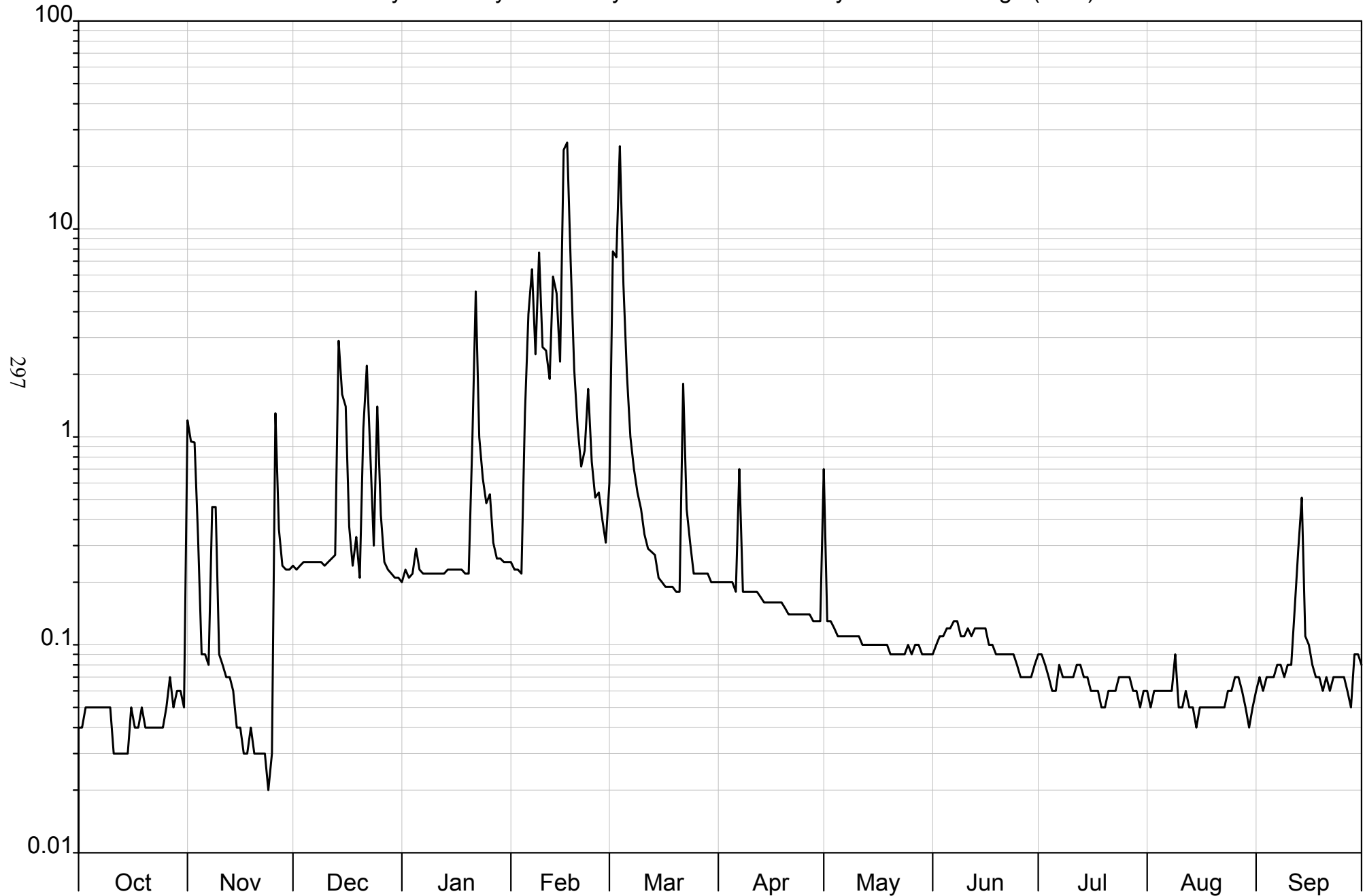
WY 2009

Interval 1 Day Plot End 00:00_10/01/2009

— AD

Arroyo Del Rey at Del Rey Oaks

Daily Mean Discharge (CFS)



Summary Report

Site: AD Arroyo Del Rey at Del Rey Oaks
 USGS #:
 Beginning Date: 10/01/2008
 Ending Date: 09/30/2009

Daily Mean Discharge in Cubic feet/second Water Year Oct 2008 to Sep 2009

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04E	1.2	.24	.20	.25	.60	.20E	.70E	.09	.09	.06	.06
2	.04E	.95	.23	.23	.23	7.8	.20E	.13E	.10	.09	.05	.07
3	.05E	.94	.24	.21	.23	7.3	.20E	.13E	.11	.08	.06	.06
4	.05E	.33	.25E	.22	.22	25	.20E	.12E	.11	.07	.06	.07
5	.05E	.09	.25E	.29	1.3	5.4	.20E	.11E	.12	.06	.06	.07
6	.05E	.09	.25E	.23	3.9	2.0	.18E	.11E	.12	.06	.06	.07
7	.05E	.08	.25E	.22	6.4	1.0	.70E	.11E	.13	.08	.06	.08
8	.05E	.46	.25E	.22	2.5	.70	.18E	.11E	.13	.07	.06	.08
9	.05E	.46	.25	.22	7.7	.54	.18E	.11E	.11	.07	.09	.07
10	.05E	.09	.24	.22	2.7	.45	.18E	.11E	.11	.07	.05	.08
11	.03E	.08	.25	.22	2.6	.34	.18E	.11E	.12	.07	.05	.08
12	.03E	.07	.26	.22	1.9	.29	.18E	.10E	.11	.08	.06	.15
13	.03E	.07	.27	.22	5.9	.28	.17E	.10E	.12	.08	.05	.29
14	.03E	.06	2.9	.23	4.9	.27	.16E	.10E	.12	.07	.05	.51
15	.03E	.04	1.6	.23	2.3	.21	.16E	.10E	.12	.07	.04	.11
16	.05E	.04	1.4	.23	24	.20	.16E	.10	.12	.06	.05	.10
17	.04E	.03	.37	.23	26	.19	.16E	.10	.10	.06	.05	.08
18	.04	.03	.24	.23	7.0	.19	.16E	.10	.10	.06	.05	.07
19	.05	.04	.33	.22	2.1	.19	.16E	.10	.09	.05	.05	.07
20	.04	.03	.21	.22	1.1	.18	.15E	.09	.09	.05	.05	.06
21	.04	.03	1.1	.93	.72	.18	.14E	.09	.09	.06	.05	.07
22	.04	.03	2.2	5.0	.86	1.8	.14E	.09	.09	.06	.05	.06
23	.04	.03	.83	1.0	1.7	.45	.14E	.09	.09	.06	.05	.07
24	.04	.02	.30	.63	.76	.31	.14E	.09	.09	.07	.06	.07
25	.04	.03	1.4	.48	.51	.22	.14E	.10	.08	.07	.06	.07
26	.05	1.3	.42	.53	.54	.22E	.14E	.09	.07	.07	.07	.07
27	.07	.36	.25	.31	.40	.22E	.14E	.10	.07	.07	.07	.06
28	.05	.24	.23	.26	.31	.22E	.13E	.10	.07	.06	.06	.05
29	.06	.23	.22	.26	-----	.22E	.13E	.09	.07	.06	.05	.09
30	.06	.23	.21	.25	-----	.20E	.13E	.09	.08	.05	.04	.09
31	.05	-----	.21	.25	-----	.20E	-----	.09	-----	.06	.05	-----
Total	1.39	7.68	17.65	14.41	109.03	57.37	5.43	3.76	3.02	2.08	1.72	2.93
Mean	.045	.26	.57	.46	3.89	1.85	.18	.12	.10	.067	.055	.098
Max	.07	1.3	2.9	5.0	26	25	.70	.70	.13	.09	.09	.51
Min	.03	.02	.21	.20	.22	.18	.13	.09	.07	.05	.04	.05
Acre-Ft	2.8	15	35	29	216	114	11	7.5	6.0	4.1	3.4	5.8
Wtr Year 2009	Total	226.47	Mean	.62	Max	26	Min	.02	Inst Max	26	Acre-Ft	449
Cal Year 2008	Total	303.22	Mean	.83	Max	23	Min	.02	Inst Max	23	Acre-Ft	601

Monterey Peninsula Water Management District

Figure D-76

Period 1 Year Plot Start 00:00_10/01/2009

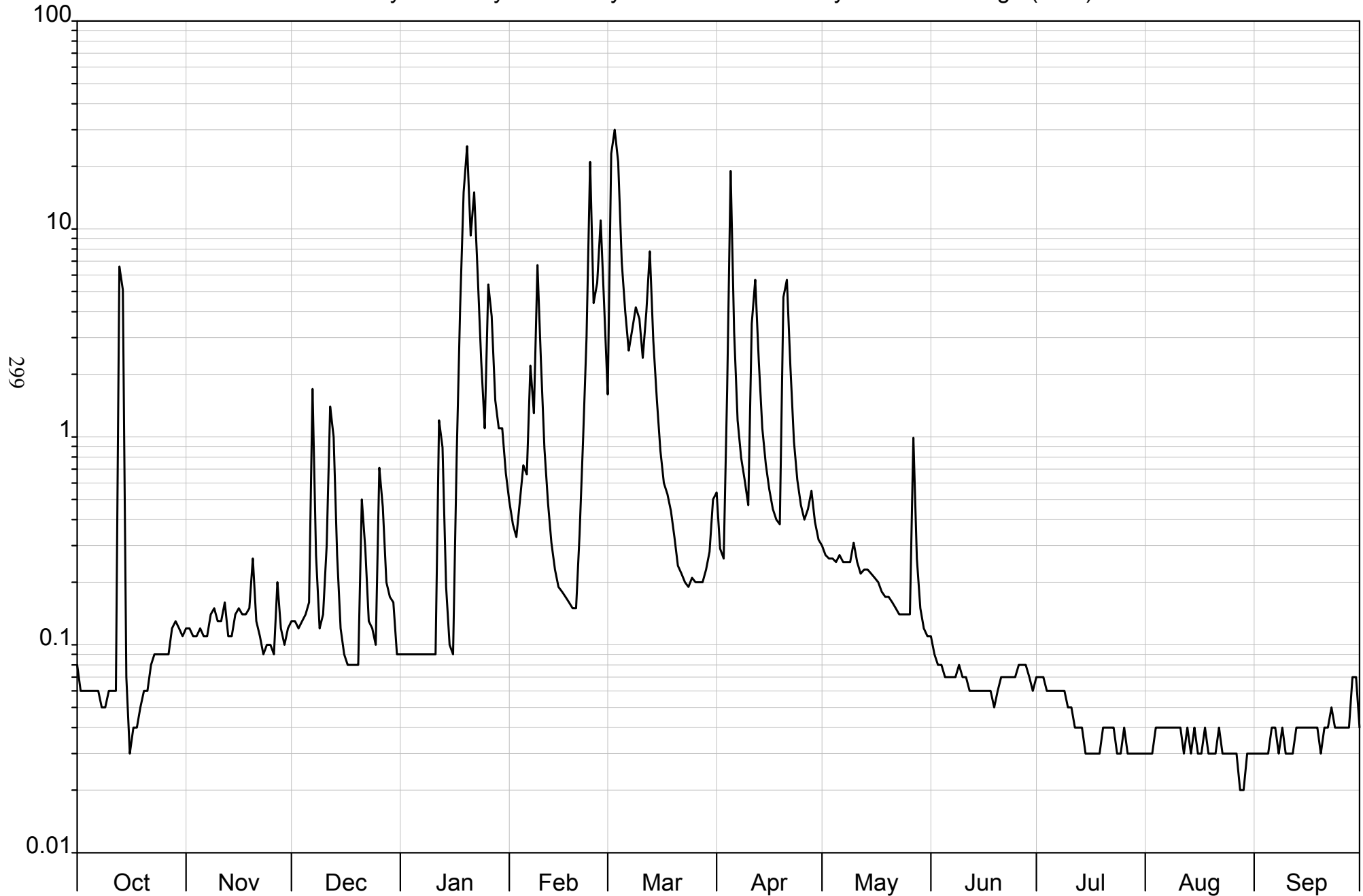
WY 2010

Interval 1 Day Plot End 00:00_10/01/2010

— AD

Arroyo Del Rey at Del Rey Oaks

Daily Mean Discharge (CFS)



Summary Report

Site: AD Arroyo Del Rey at Del Rey Oaks
 USGS #:
 Beginning Date: 10/01/2009
 Ending Date: 09/30/2010

Daily Mean Discharge in Cubic feet/second Water Year Oct 2009 to Sep 2010

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.12	.13	.09	.49	1.6	.54	.30	.11	.07	.03	.03
2	.06	.12	.13	.09	.38	23	.29	.27	.09	.07	.03	.03
3	.06	.11	.12	.09	.33	30	.26	.26	.08	.07	.03	.03
4	.06	.11	.13	.09	.49	21	1.7	.26	.08	.06	.04	.03
5	.06	.12	.14	.09	.73	6.9	19	.25	.07	.06	.04	.03
6	.06	.11	.16	.09	.66	4.0	3.2	.27	.07	.06	.04	.04
7	.06	.11	1.7	.09	2.2	2.6	1.2	.25	.07	.06	.04	.04
8	.05	.14	.27	.09	1.3	3.3	.79	.25	.07	.06	.04	.03
9	.05	.15	.12	.09	6.7	4.2	.62	.25	.08	.06	.04	.04
10	.06	.13	.14	.09	2.3	3.7	.47	.31	.07	.05	.04	.03
11	.06	.13	.30	.09	.88	2.4	3.5	.25	.07	.05	.04	.03
12	.06	.16	1.4	1.2	.48	4.0	5.7	.22	.06	.04	.03	.03
13	6.6	.11	1.0	.89	.31	7.8	2.3	.23	.06	.04	.04	.04
14	5.1	.11	.27	.19	.23	2.9	1.1	.23	.06	.04	.03	.04
15	.07	.14	.12	.10	.19	1.5	.74	.22	.06	.03	.04	.04
16	.03	.15	.09	.09	.18	.86	.56	.21	.06	.03	.03	.04
17	.04	.14	.08	.80	.17	.60	.45	.20	.06	.03	.03	.04
18	.04	.14	.08	4.2	.16	.53	.40	.18	.06	.03	.04	.04
19	.05	.15	.08	15	.15	.44	.38	.17	.05	.03	.03	.04
20	.06	.26	.08	25	.15	.33	4.7	.17	.06	.04	.03	.03
21	.06	.13	.50	9.3	.34	.24	5.7	.16	.07	.04	.03	.04
22	.08	.11	.29	15	.96	.22	2.2	.15	.07	.04	.04	.04
23	.09	.09	.13	6.1	3.0	.20	.95	.14	.07	.04	.03	.05
24	.09	.10	.12	2.3	.21	.19	.62	.14	.07	.03	.03	.04
25	.09	.10	.10	1.1	4.4	.21	.47	.14	.07	.03	.03	.04
26	.09	.09	.71	5.4	5.5	.20	.40	.14	.08	.04	.03	.04
27	.09	.20	.46	3.8	11	.20	.45	.99	.08	.03	.03	.04
28	.12	.12	.20	1.5	4.3	.20	.55	.26	.08	.03	.02	.04
29	.13	.10	.17	1.1	-----	.23	.39	.15	.07	.03	.02	.07
30	.12	.12	.16	1.1	-----	.28	.32	.12	.06	.03	.03	.07
31	.11	-----	.09	.67	-----	.50	-----	.11	-----	.03	.03	-----
Total	13.78	3.87	9.47	95.83	68.98	124.33	59.95	7.25	2.11	1.35	1.03	1.17
Mean	.44	.13	.31	3.09	2.46	4.01	2.00	.23	.070	.044	.033	.039
Max	6.6	.26	1.7	25	21	30	19	.99	.11	.07	.04	.07
Min	.03	.09	.08	.09	.15	.19	.26	.11	.05	.03	.02	.03
Acre-Ft	27	7.7	19	190	137	247	119	14	4.2	2.7	2.0	2.3
Wtr Year 2010	Total	389.12	Mean	1.07	Max	30	Min	.02	Inst Max	30	Acre-Ft	772
Cal Year 2009	Total	226.87	Mean	.62	Max	26	Min	.03	Inst Max	26	Acre-Ft	450

Monterey Peninsula Water Management District

Figure D-77

Period 1 Year Plot Start 00:00_10/01/2010

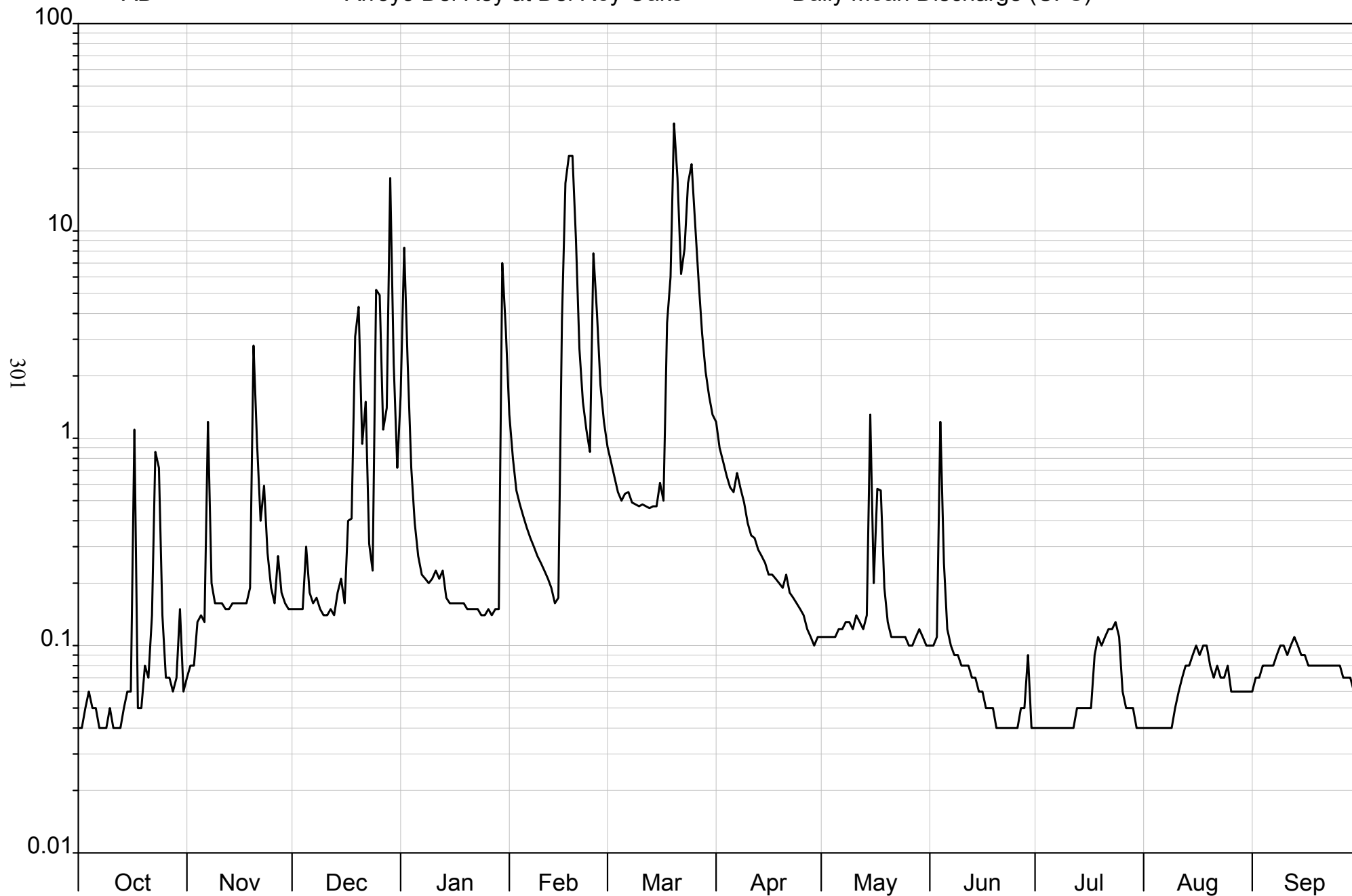
WY 2011

Interval 1 Day Plot End 00:00_10/01/2011

— AD

Arroyo Del Rey at Del Rey Oaks

Daily Mean Discharge (CFS)



Summary Report

Site: AD Arroyo Del Rey at Del Rey Oaks
 USGS #:
 Beginning Date: 10/01/2010
 Ending Date: 09/30/2011

Daily Mean Discharge in Cubic feet/second Water Year Oct 2010 to Sep 2011

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.07	.15	1.6	1.3	.91	1.2	.11	.10	.04	.04	.06
2	.04	.08	.15	8.3	.80	.77	.90	.11	.10	.04	.04	.07
3	.05	.08	.15	2.3	.56	.65	.77	.11	.11	.04	.04	.07
4	.06	.13	.15	.72	.48	.55	.66	.11	1.2	.04	.04	.08
5	.05	.14	.30	.39	.42	.50	.58	.11	.25	.04	.04	.08
6	.05	.13	.18	.27	.37	.54	.55	.12	.12	.04	.04	.08
7	.04	1.2	.16	.22	.33	.55	.68	.12	.10	.04	.04	.08
8	.04	.20	.17	.21	.30	.49	.57	.13	.09	.04	.04	.09
9	.04	.16	.15	.20	.27	.48	.49	.13	.09	.04	.04	.10
10	.05	.16	.14	.21	.25	.47	.39	.12	.08	.04	.05	.10
11	.04	.16	.14	.23	.23	.48	.34	.14	.08	.04	.06	.09
12	.04	.15	.15	.21	.21	.47	.33	.13	.08	.04	.07	.10
13	.04	.15	.14	.23	.19	.46	.29	.12	.07	.05	.08	.11
14	.05	.16	.18	.17	.16	.47	.27	.14	.07	.05	.08	.10
15	.06	.16	.21	.16	.17	.47	.25	1.3	.06	.05	.09	.09
16	.06	.16	.16	.16	3.7	.61	.22	.20	.06	.05	.10	.09
17	1.1	.16	.40	.16	17	.50	.22	.57	.05	.05	.09	.08
18	.05	.16	.41	.16	23	3.6	.21	.56	.05	.09	.10	.08
19	.05	.19	3.1	.16	23	6.0	.20	.19	.05	.11	.10	.08
20	.08	2.8	4.3	.15	9.1	33	.19	.13	.04	.10	.08	.08
21	.07	.96	.94	.15	2.7	18	.22	.11	.04	.11	.07	.08
22	.14	.40	1.5	.15	1.5	6.2	.18	.11	.04	.12	.08	.08
23	.86	.59	.31	.15	1.1	8.2	.17	.11	.04	.12	.07	.08
24	.72	.28	.23	.14	.86	17	.16	.11	.04	.13	.07	.08
25	.14	.19	5.2	.14	7.8	21	.15	.11	.04	.11	.08	.08
26	.07	.16	4.9	.15	4.0	11	.14	.10	.04	.06	.06	.08
27	.07	.27	1.1	.14	1.8	5.7	.12	.10	.05	.05	.06	.07
28	.06	.18	1.4	.15	1.2	3.2	.11	.11	.05	.05	.06	.07
29	.07	.16	.18	.15	-----	2.1	.10	.12	.09	.05	.06	.07
30	.15	.15	2.3	7.0	-----	1.6	.11	.11	.04	.04	.06	.06
31	.06	-----	.72	3.3	-----	1.3	-----	.10	-----	.04	.06	-----
Total	4.44	9.94	47.49	27.83	102.80	147.27	10.77	5.84	3.32	1.91	1.99	2.46
Mean	.14	.33	1.53	.90	3.67	4.75	.36	.19	.11	.062	.064	.082
Max	1.1	2.8	.18	8.3	.23	.33	1.2	1.3	1.2	.13	.10	.11
Min	.04	.07	.14	.14	.16	.46	.10	.10	.04	.04	.04	.06
Acre-Ft	8.8	20	94	55	204	292	21	12	6.6	3.8	3.9	4.9
Wtr Year 2011	Total	366.06	Mean	1.00	Max	33	Min	.04	Inst Max	33	Acre-Ft	726
Cal Year 2010	Total	423.87	Mean	1.16	Max	30	Min	.02	Inst Max	30	Acre-Ft	841

Monterey Peninsula Water Management District

Figure D-78

Period 1 Year Plot Start 00:00_10/01/2011

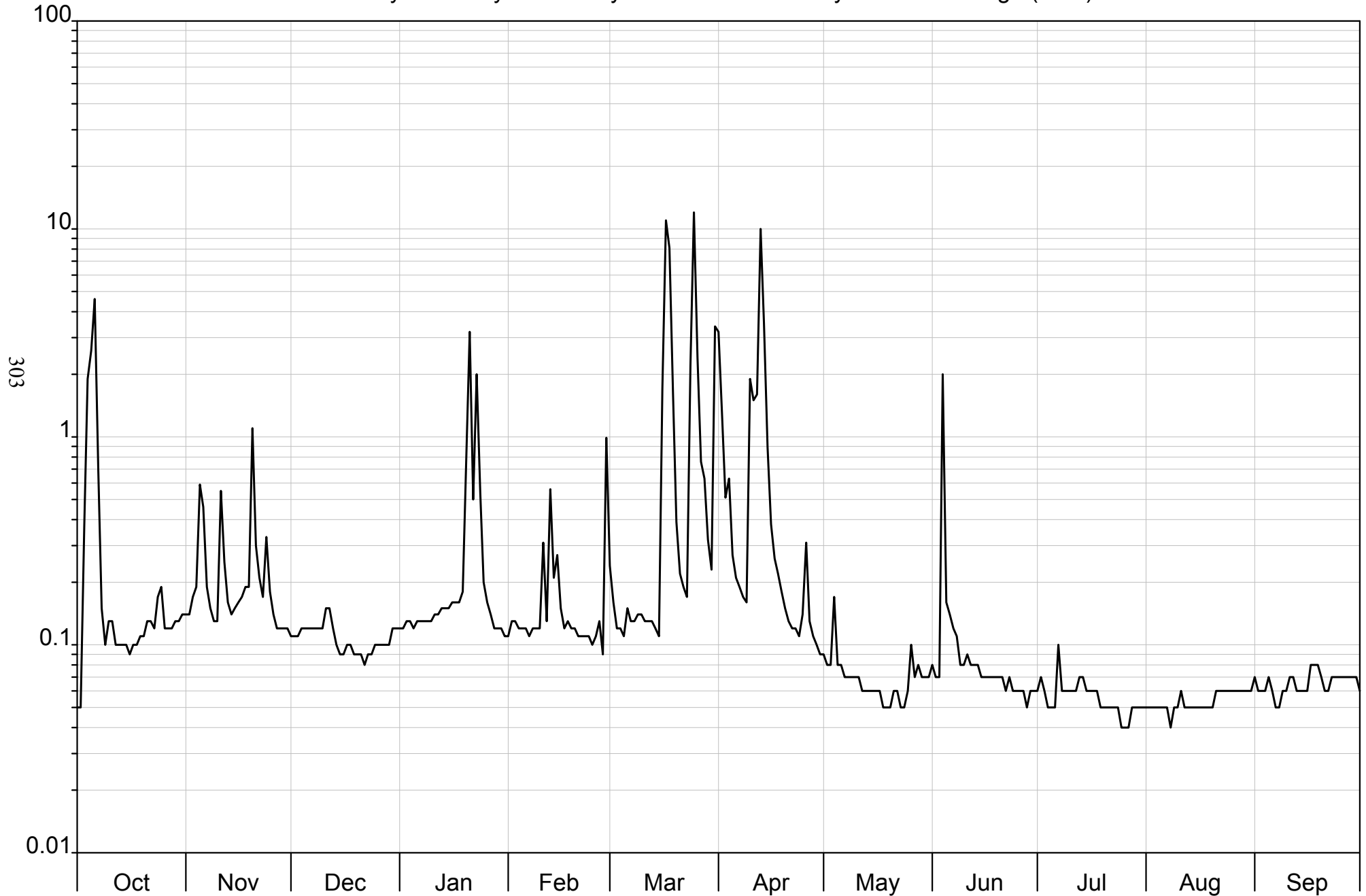
WY 2012

Interval 1 Day Plot End 00:00_10/01/2012

— AD

Arroyo Del Rey at Del Rey Oaks

Daily Mean Discharge (CFS)



Summary Report

Site: AD Arroyo Del Rey at Del Rey Oaks
 USGS #:
 Beginning Date: 10/01/2011
 Ending Date: 09/30/2012

Daily Mean Discharge in Cubic feet/second Water Year Oct 2011 to Sep 2012

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.14	.11	.12	.11	.24	3.2	.09	.08	.06	.05	.07
2	.05	.14	.11	.12	.13	.16	1.3	.08	.07	.07	.05	.06
3	.37	.17	.11	.13	.13	.12	.51	.08	.07	.06	.05	.06
4	1.9	.19	.12	.13	.12	.12	.63	.17	2.0	.05	.05	.06
5	2.6	.59	.12	.12	.12	.11	.27	.08	.16	.05	.05	.07
6	4.6	.46	.12	.13	.12	.15	.21	.08	.14	.05	.05	.06
7	.69	.19	.12	.13	.11	.13	.19	.07	.12	.10	.05	.05
8	.15	.15	.12	.13	.12	.13	.17	.07	.11	.06	.04	.05
9	.10	.13	.12	.13	.12	.14	.16	.07	.08	.06	.05	.06
10	.13	.13	.12	.13	.12	.14	1.9	.07	.08	.06	.05	.06
11	.13	.55	.15	.14	.31	.13	1.5	.07	.09	.06	.06	.07
12	.10	.25	.15	.14	.13	.13	1.6	.06	.08	.06	.05	.07
13	.10	.16	.12	.15	.56	.13	10	.06	.08	.07	.05	.06
14	.10	.14	.10	.15	.21	.12	3.5	.06	.08	.07	.05	.06
15	.10	.15	.09	.15	.27	.11	.89	.06	.07	.06	.05	.06
16	.09	.16	.09	.16	.15	1.7	.38	.06	.07	.06	.05	.06
17	.10	.17	.10	.16	.12	11	.26	.06	.07	.06	.05	.08
18	.10	.19	.10	.16	.13	8.1	.22	.05	.07	.06	.05	.08
19	.11	.19	.09	.18	.12	1.6	.18	.05	.07	.05	.05	.08
20	.11	1.1	.09	.77	.12	.39	.15	.05	.07	.05	.05	.07
21	.13	.30	.09	3.2	.11	.22	.13	.06	.07	.05	.06	.06
22	.13	.21	.08	.50	.11	.19	.12	.06	.06	.05	.06	.06
23	.12	.17	.09	2.0	.11	.17	.12	.05	.07	.05	.06	.07
24	.17	.33	.09	.54	.11	2.2	.11	.05	.06	.05	.06	.07
25	.19	.18	.10	.20	.10	12	.14	.06	.06	.04	.06	.07
26	.12	.14	.10	.16	.11	2.4	.31	.10	.06	.04	.06	.07
27	.12	.12	.10	.14	.13	.76	.13	.07	.06	.04	.06	.07
28	.12	.12	.10	.12	.09	.63	.11	.08	.05	.05	.06	.07
29	.13	.12	.10	.12	.99	.32	.10	.07	.06	.05	.06	.07
30	.13	.12	.12	.12	-----	.23	.09	.07	.06	.05	.06	.07
31	.14	-----	.12	.11	-----	3.4	-----	.07	-----	.05	.06	-----
Total	13.18	7.16	3.34	10.64	5.18	47.37	28.58	2.18	4.27	1.74	1.66	1.97
Mean	.43	.24	.11	.34	.18	1.53	.95	.070	.14	.056	.054	.066
Max	4.6	1.1	.15	3.2	.99	12	10	.17	2.0	.10	.06	.08
Min	.05	.12	.08	.11	.09	.11	.09	.05	.05	.04	.04	.05
Acre-Ft	26	14	6.6	21	10	94	57	4.3	8.5	3.5	3.3	3.9
Wtr Year 2012	Total	127.27	Mean	.35	Max	12	Min	.04	Inst Max	12	Acre-Ft	252
Cal Year 2011	Total	327.87	Mean	.90	Max	33	Min	.04	Inst Max	33	Acre-Ft	650

Monterey Peninsula Water Management District

Figure D-79

Period 1 Year Plot Start 00:00_10/01/2012

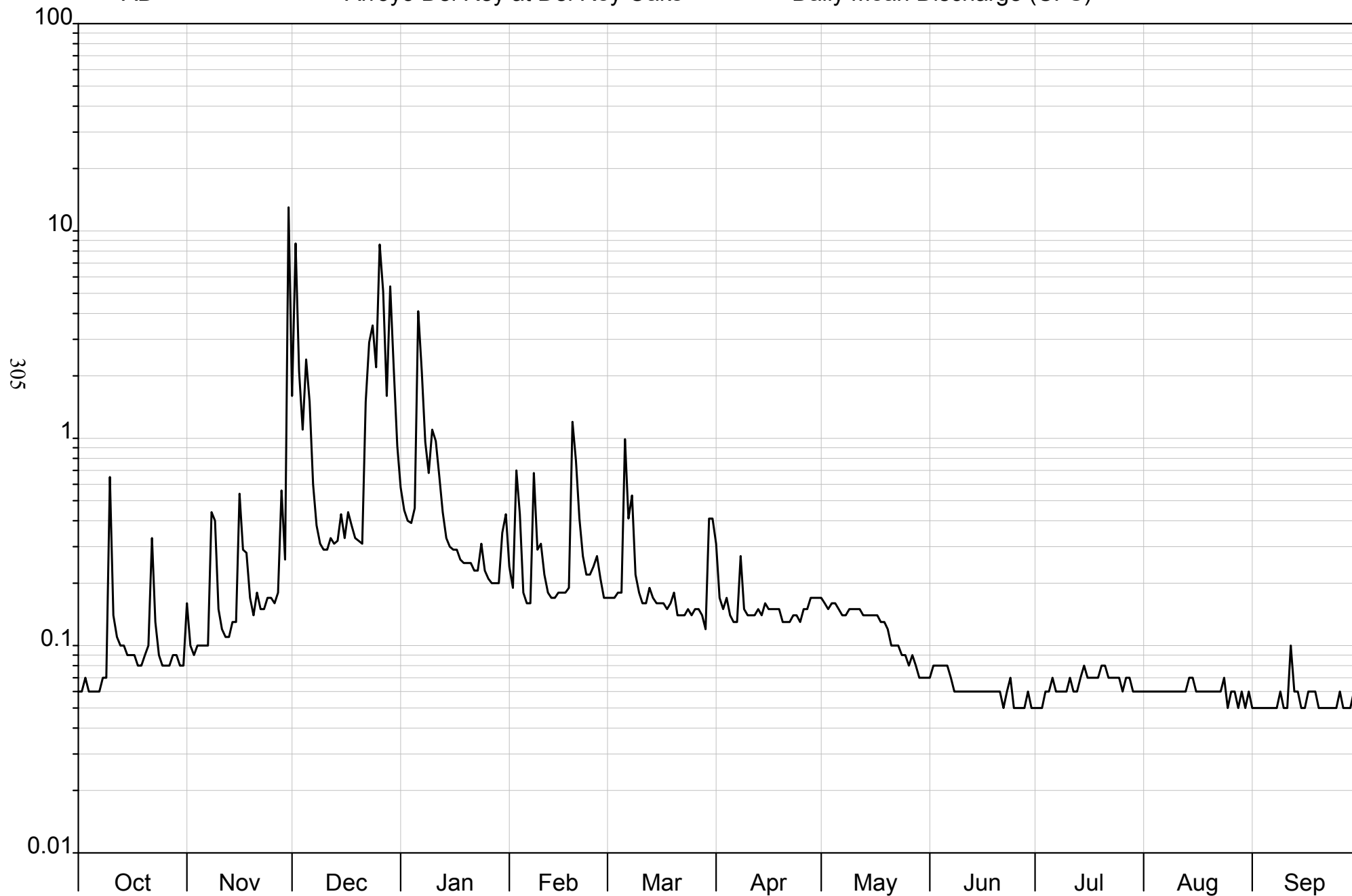
WY 2013

Interval 1 Day Plot End 00:00_10/01/2013

— AD

Arroyo Del Rey at Del Rey Oaks

Daily Mean Discharge (CFS)



Summary Report

Site: AD Arroyo Del Rey at Del Rey Oaks
 USGS #:
 Beginning Date: 10/01/2012
 Ending Date: 09/30/2013

Daily Mean Discharge in Cubic feet/second Water Year Oct 2012 to Sep 2013

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.16	1.6	.58	.24	.17	.31	.17	.07	.05	.06	.05
2	.06	.10	8.7	.45	.19	.17	.17	.16	.08	.05	.06	.05
3	.07	.09	2.1	.40	.70	.17	.15	.15	.08	.05	.06	.05
4	.06	.10	1.1	.39	.43	.18	.17	.16	.08	.06	.06	.05
5	.06	.10	2.4	.46	.18	.18	.14	.16	.08	.06	.06	.05
6	.06	.10	1.5	4.1	.16	.99	.13	.15	.08	.07	.06	.05
7	.06	.10	.60	2.1	.16	.41	.13	.14	.07	.06	.06	.05
8	.07	.44	.38	.96	.68	.53	.27	.14	.06	.06	.06	.05
9	.07	.40	.31	.68	.29	.22	.15	.15	.06	.06	.06	.06
10	.65	.15	.29	1.1	.31	.18	.14	.15	.06	.06	.06	.05
11	.14	.12	.29	.97	.22	.16	.14	.15	.06	.07	.06	.05
12	.11	.11	.33	.66	.18	.16	.14	.15	.06	.06	.06	.10
13	.10	.11	.31	.44	.17	.19	.15	.14	.06	.06	.06	.06
14	.10	.13	.32	.33	.17	.17	.14	.14	.06	.07	.07	.06
15	.09	.13	.43	.30	.18	.16	.16	.14	.06	.08	.07	.05
16	.09	.54	.33	.29	.18	.16	.15	.14	.06	.07	.06	.05
17	.09	.29	.44	.29	.18	.16	.15	.14	.06	.07	.06	.06
18	.08	.28	.38	.26	.19	.15	.15	.13	.06	.07	.06	.06
19	.08	.17	.33	.25	1.2	.16	.15	.13	.06	.07	.06	.06
20	.09	.14	.32	.25	.78	.18	.13	.12	.06	.08	.06	.05
21	.10	.18	.31	.25	.41	.14	.13	.10	.06	.08	.06	.05
22	.33	.15	1.5	.23	.27	.14	.13	.10	.05	.07	.06	.05
23	.13	.15	2.9	.23	.22	.14	.14	.10	.06	.07	.06	.05
24	.09	.17	3.5	.31	.22	.15	.14	.09	.07	.07	.07	.05
25	.08	.17	2.2	.23	.24	.14	.13	.09	.05	.07	.05	.05
26	.08	.16	8.6	.21	.27	.15	.15	.08	.05	.06	.06	.06
27	.08	.18	5.1	.20	.21	.15	.15	.09	.05	.07	.06	.05
28	.09	.56	1.6	.20	.17	.14	.17	.08	.05	.07	.05	.05
29	.09	.26	5.4	.20	-----	.12	.17	.07	.06	.06	.06	.05
30	.08	.13	2.2	.35	-----	.41	.17	.07	.05	.06	.05	.06
31	.08	-----	.92	.43	-----	.41	-----	.07	-----	.06	.06	-----
Total	3.42	18.74	56.69	18.10	8.80	6.94	4.70	3.85	1.87	2.02	1.86	1.63
Mean	.11	.62	1.83	.58	.31	.22	.16	.12	.062	.065	.060	.054
Max	.65	.13	8.7	4.1	1.2	.99	.31	.17	.08	.08	.07	.10
Min	.06	.09	.29	.20	.16	.12	.13	.07	.05	.05	.05	.05
Acre-Ft	6.8	37	112	36	17	14	9.3	7.6	3.7	4.0	3.7	3.2
Wtr Year 2013	Total	128.62	Mean	.35	Max	13	Min	.05	Inst Max	13	Acre-Ft	255
Cal Year 2012	Total	182.44	Mean	.50	Max	13	Min	.04	Inst Max	13	Acre-Ft	362

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX E

PEAK FLOW DATA

TABLE E-1

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN STREAMFLOW GAGING STATIONS
SUMMARY OF INSTANTANEOUS PEAK FLOWS

WATER YEAR 2009				
STATION	DATE	TIME	GHT (feet)	Q (cfs)
Cachagua Creek	March 4, 2009	0300	4.18	129
Pine Creek	March 4, 2009	0445	3.26	139
San Clemente Creek	March 4, 2009	0300	3.95	252
Tularcitos Creek	March 4, 2009	0715	3.96	23
Hitchcock Creek	March 4, 2009	0330	3.55	35
Garzas Creek at Garzas Road	February 17, 2009	0800	3.32	271
	March 4, 2009	0440	3.28	259
Robinson Canyon Creek	March 4, 2009	0415	4.37	143
Potrero Creek	March 4, 2009	0500	2.89	136
San Jose Creek	March 4, 2009	0530	4.74	189
Arroyo Del Rey at Del Rey Oaks	February 16, 2009	1330	4.89	49
	March 4, 2009	0630	4.92	50
Los Padres Dam Spillway	March 4, 2009	0400	1042.50	1,450
Carmel River at Robles del Rio (USGS)	March 4, 2009	0630	5.72	2,500
Carmel River at Don Juan Bridge	March 4, 2009	0515	9.53	2,930
Carmel River near Carmel (USGS)	March 4, 2009	0900	10.19	2,630
Carmel River at Highway 1 Bridge	March 4, 2009	1100	10.18	2,460

TABLE E-2

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN STREAMFLOW GAGING STATIONS
SUMMARY OF INSTANTANEOUS PEAK FLOWS

WATER YEAR 2010				
STATION	DATE	TIME	GHT (feet)	Q (cfs)
Finch Creek	January 20, 2010	1045	5.04	355
Cachagua Creek	January 20, 2010	1215	5.61	482
Pine Creek	October 13, 2009	2045	3.66	270
San Clemente Creek	October 13, 2009	2130	4.35	374
	January 20, 2010	1145	4.32	370
Tularcitos Creek	February 27, 2010	1700	4.37	48
	March 3, 2010	2335	4.34	45
Hitchcock Creek	January 20, 2010	1045	4.22	150
Garzas Creek at Garzas Road	January 20, 2010	1030	4.91	898
Robinson Canyon Creek	January 20, 2010	1030	5.03	233
Potrero Creek	January 20, 2010	1200	3.64	247
San Jose Creek	January 20, 2010	1015	4.56	164
Arroyo Del Rey at Del Rey Oaks	January 20, 2010	1445	5.17	50
	March 2, 2010	1730	4.93	50
Los Padres Dam Spillway	October 13, 2009	2130	1043.68	2,660
	January 20, 2010	1215	1042.97	1,890
Carmel River at Robles del Rio (USGS)	October 14, 2009	0030	7.34	3,910
	January 20, 2010	1500	6.97	3,340
Carmel River at Don Juan Bridge	October 14, 2009	0215	10.48	3,180
	January 20, 2010	1615	11.10	3,850
Carmel River near Carmel (USGS)	October 14, 2009	0700	9.54	1,970
	January 20, 2010	1900	11.57	3,480
Carmel River at Highway 1 Bridge	October 14, 2009	0730	9.01	1,920
	January 20, 2010	2015	11.85	3,860

TABLE E-3

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN STREAMFLOW GAGING STATIONS
SUMMARY OF INSTANTANEOUS PEAK FLOWS

WATER YEAR 2011				
STATION	DATE	TIME	GHT (feet)	Q (cfs)
Finch Creek	March 20, 2011	0015	4.42	213
Cachagua Creek	March 20, 2011	0200	5.28	387
Pine Creek	March 24, 2011	1800	3.92	328
San Clemente Creek	March 24, 2011	1745	5.39	726
Tularcitos Creek	March 24, 2011	2045	5.08	112
Hitchcock Creek	March 24, 2011	1645	4.03	117
Garzas Creek at Garzas Road	March 24, 2011	1740	4.78	841
Robinson Canyon Creek	March 24, 2011	1715	4.78	192
Potrero Creek	March 20, 2011	0800	3.79	261
San Jose Creek	March 24, 2011	2115	4.94	232
Arroyo Del Rey at Del Rey Oaks	March 20, 2011	1115	5.00	58
Los Padres Dam Spillway	March 24, 2011	2000	1043.67	2,650
Carmel River at Robles del Rio (USGS)	March 24, 2011	2200	7.60	4,560
Carmel River at Don Juan Bridge	March 24, 2011	2330	12.14	5,230
Carmel River near Carmel (USGS)	March 25, 2011	0245	13.61	5,940
Carmel River at Highway 1 Bridge	March 25, 2011	0330	12.72	5,000

TABLE E-4

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN STREAMFLOW GAGING STATIONS
SUMMARY OF INSTANTANEOUS PEAK FLOWS

WATER YEAR 2012				
STATION	DATE	TIME	GHT (feet)	Q (cfs)
Finch Creek	April 13, 2012	0500	2.85	20
Cachagua Creek	April 13, 2012	0900	3.34	18
Pine Creek	January 21, 2012	0400	2.53	37
San Clemente Creek	January 21, 2012	0500	2.96	64
Tularcitos Creek	January 21, 2012	0745	3.84	9.9
Hitchcock Creek	April 13, 2012	1115	2.63	2.3
Garzas Creek at Garzas Road	April 13, 2012	1020	2.28	55
Robinson Canyon Creek	April 13, 2012	0900	2.55	7.9
Potrero Creek	April 13, 2012	1030	1.40	10
San Jose Creek	April 13, 2012	0945	3.27	29
Arroyo Del Rey at Del Rey Oaks	October 6, 2011	1015	4.83	41
Los Padres Dam Spillway	April 13, 2012	1300	---	144
Carmel River at Robles del Rio (USGS)	April 13, 2012	1430	2.40	236
Carmel River at Don Juan Bridge	April 13, 2012	1600	4.59	224
Carmel River near Carmel (USGS)	April 13, 2012	2200	5.47	239
Carmel River at Highway 1 Bridge	April 13, 2012	2145	1.92	207

Note: WY 2012 peak discharge for Los Padres Dam Spillway obtained from CR below Los Padres Reservoir gage.

TABLE E-5

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN STREAMFLOW GAGING STATIONS
SUMMARY OF INSTANTANEOUS PEAK FLOWS

WATER YEAR 2013				
STATION	DATE	TIME	GHT (feet)	Q (cfs)
Finch Creek	December 29, 2012	0830	2.68	12
Cachagua Creek	December 29, 2012	1315	3.19	11
Pine Creek	December 2, 2012	1315	3.91	261
San Clemente Creek	December 2, 2012	1330	4.05	275
Tularcitos Creek	November 30, 2012	1315	4.03	18
Hitchcock Creek	December 24, 2012	0000	3.08	16
Garzas Creek at Garzas Road	December 2, 2012	1335	3.14	188
Robinson Canyon Creek	December 2, 2012	1330	3.05	31
Potrero Creek	December 23, 2012	2315	1.66	24
San Jose Creek	December 2, 2012	1445	3.81	69
Arroyo Del Rey at Del Rey Oaks	November 30, 2012	0845	4.65	36
Los Padres Dam Spillway	December 2, 2012	1445	1043.36	2,300
Carmel River at Robles del Rio (USGS)	December 2, 2012	1745	6.77	3,420
Carmel River at Don Juan Bridge	December 2, 2012	1915	9.91	2,980
Carmel River near Carmel (USGS)	December 2, 2012	2315	9.82	2,140
Carmel River at Highway 1 Bridge	December 3, 2012	0130	8.79	2,560

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CARMEL RIVER BASIN

**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX F

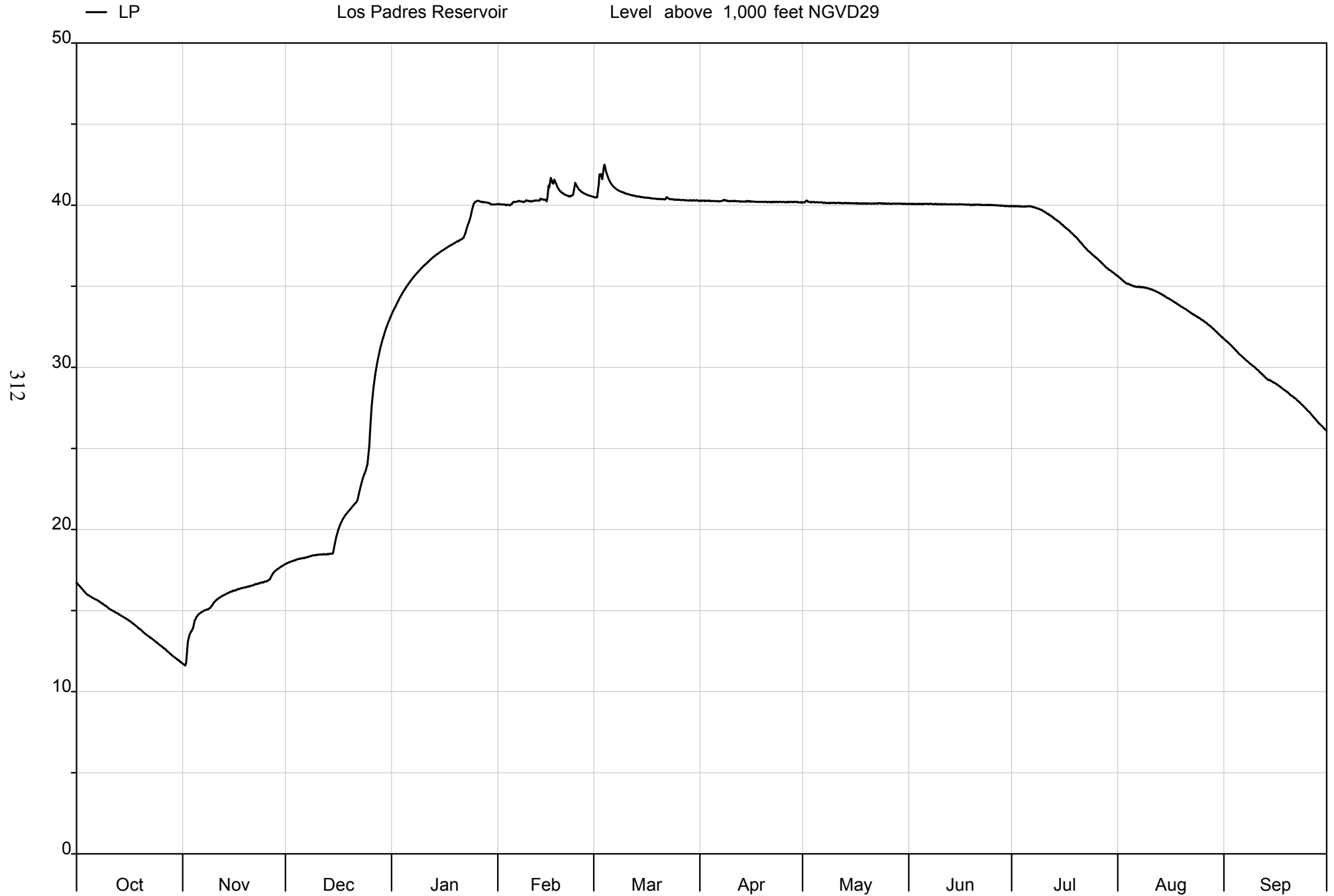
RESERVOIR LEVELS

Monterey Peninsula Water Management District

Figure F-1

Period 1 Year Plot Start 00:00_10/01/2008
Interval 12 Hour Plot End 00:00_10/01/2009

WY 2009

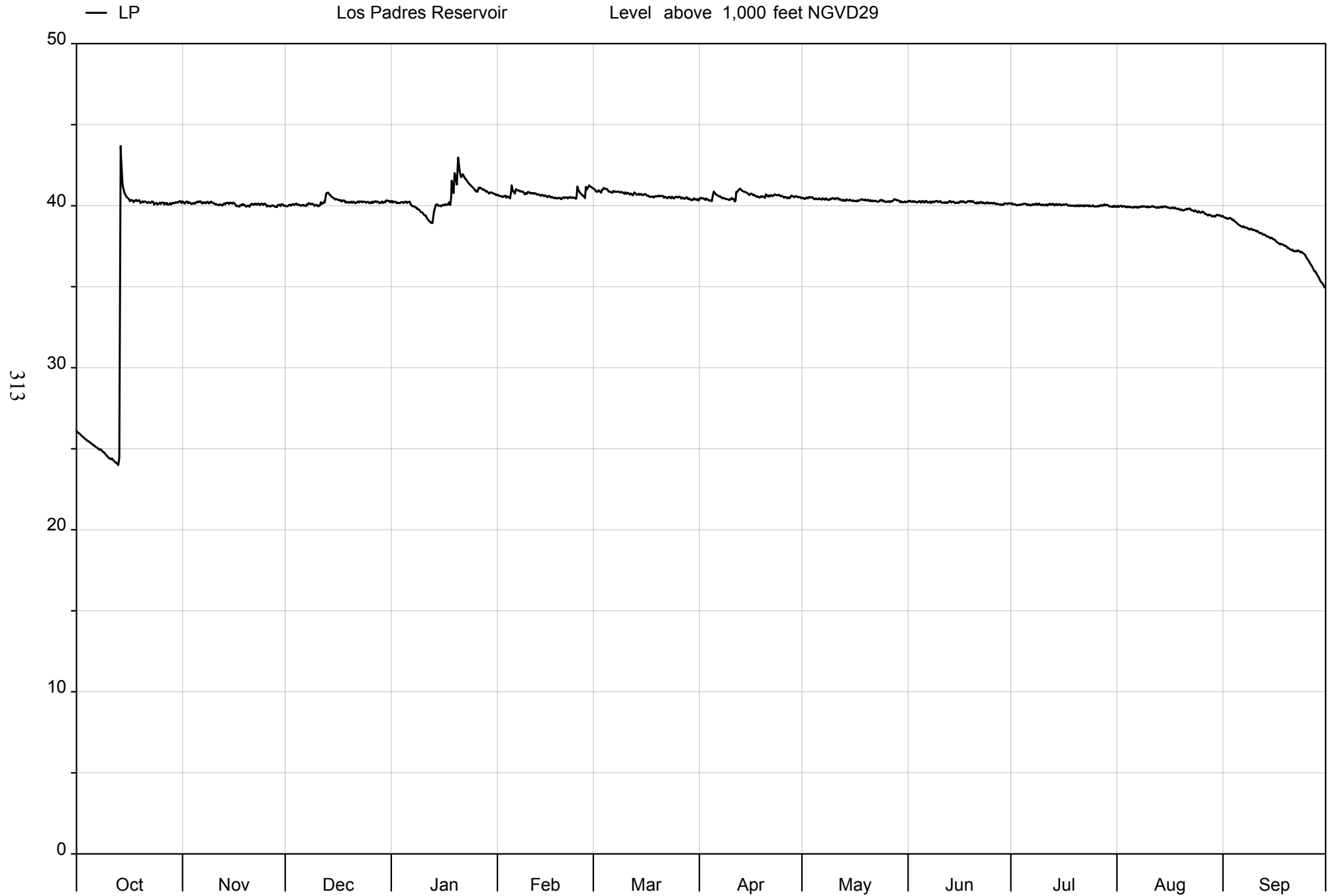


Monterey Peninsula Water Management District

Figure F-2

Period 1 Year Plot Start 00:00_10/01/2009
Interval 12 Hour Plot End 00:00_10/01/2010

WY 2010

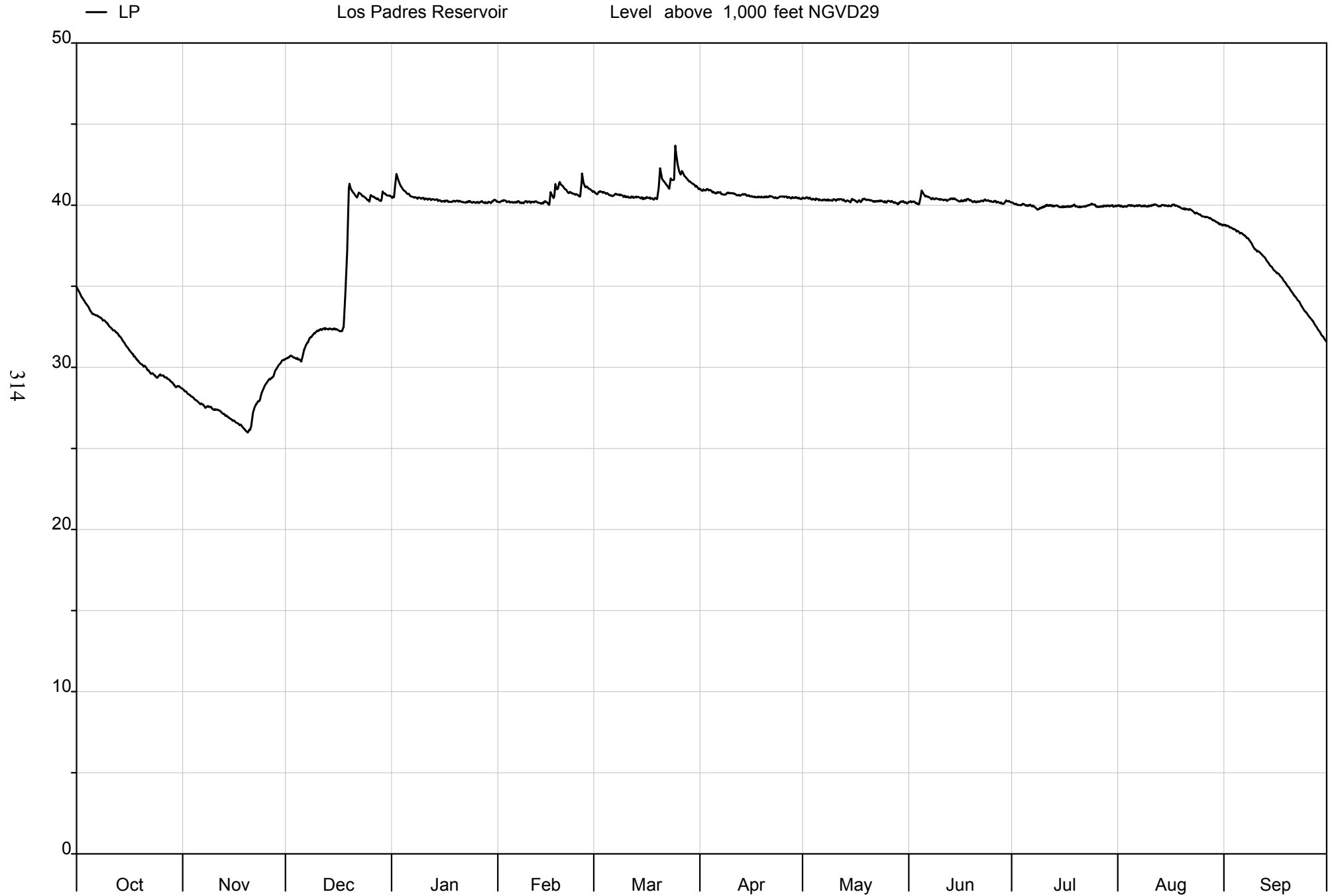


Monterey Peninsula Water Management District

Figure F-3

Period 1 Year Plot Start 00:00_10/01/2010
Interval 12 Hour Plot End 00:00_10/01/2011

WY 2011

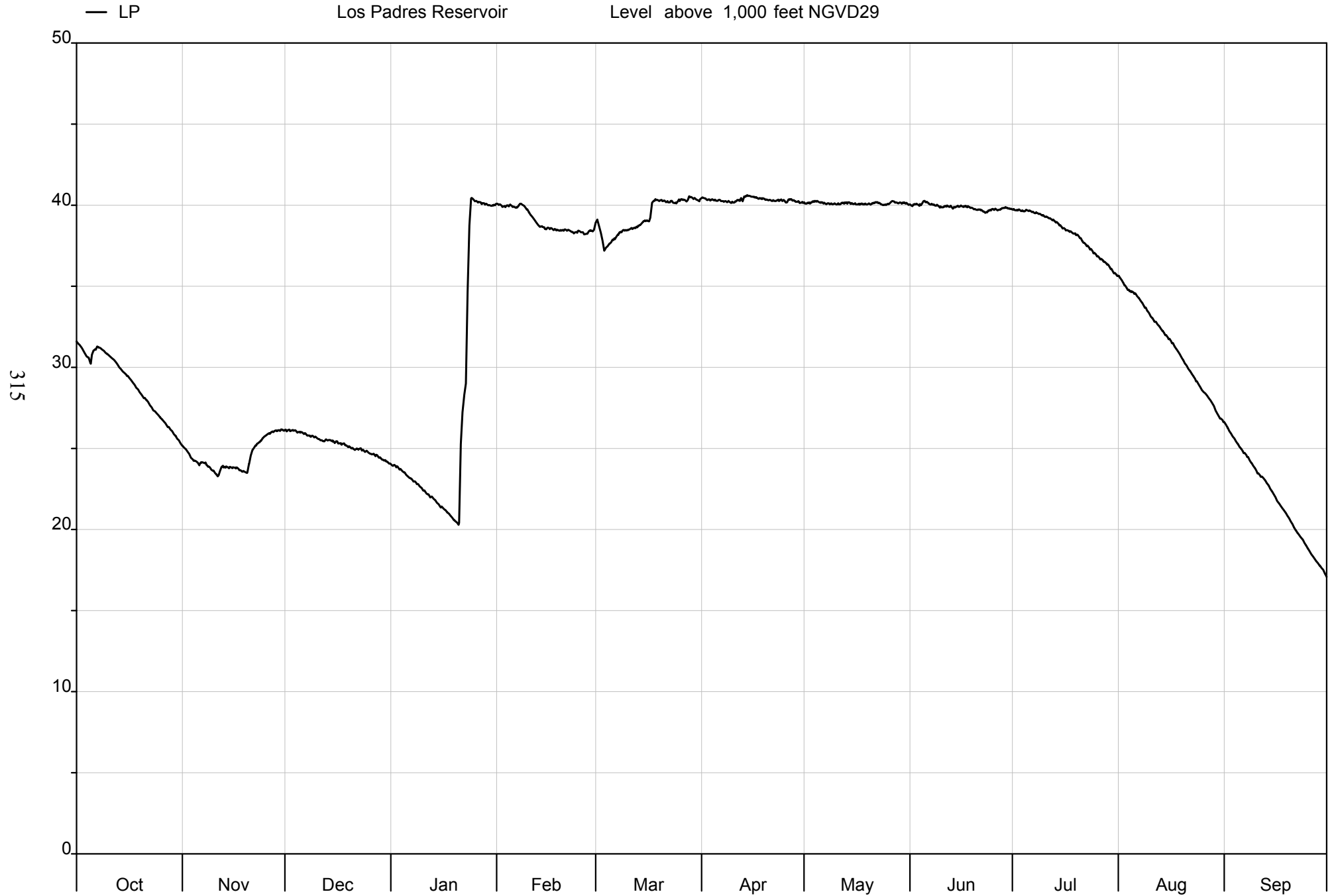


Monterey Peninsula Water Management District

Figure F-4

Period 1 Year Plot Start 00:00_10/01/2011
Interval 12 Hour Plot End 00:00_10/01/2012

WY 2012

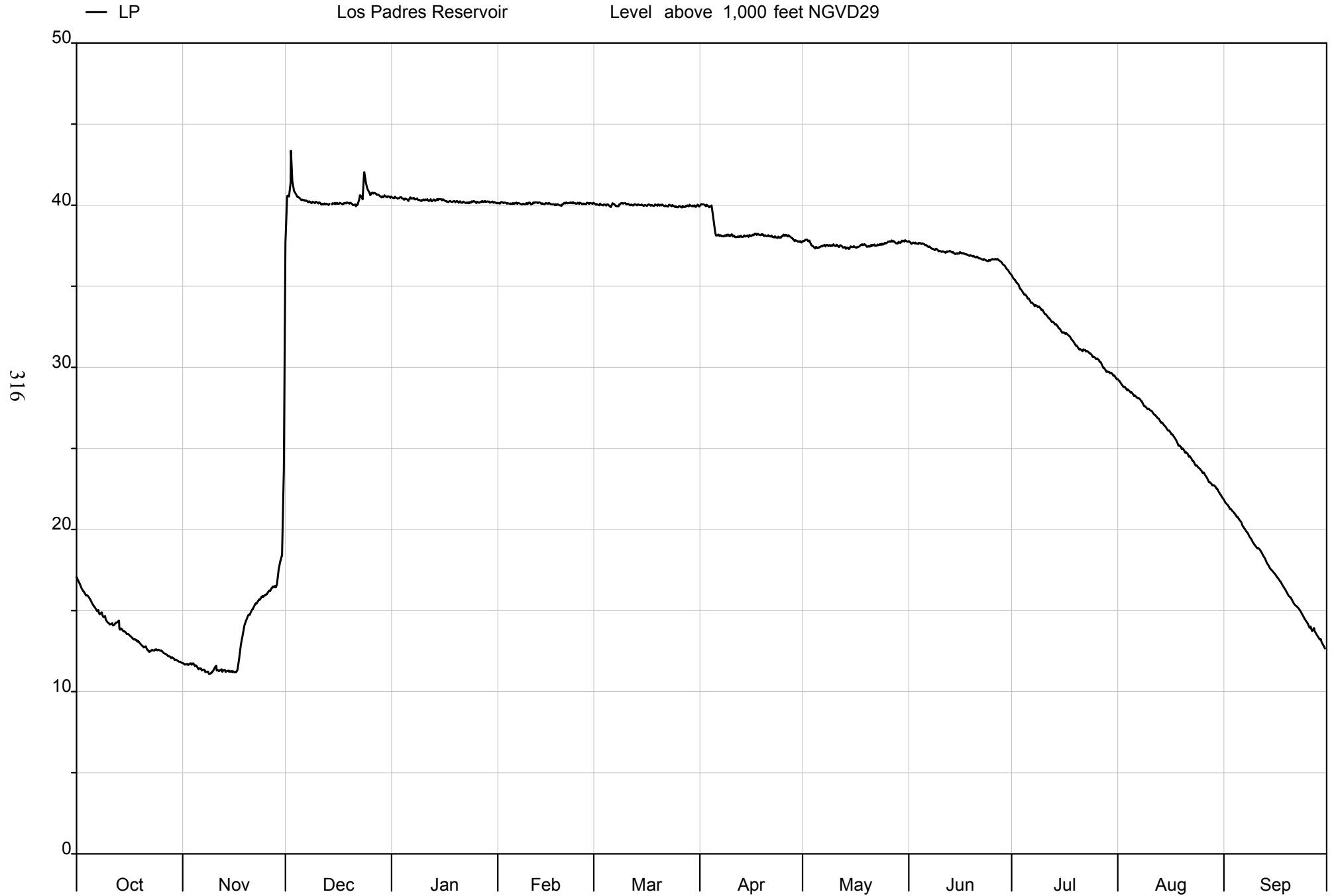


Monterey Peninsula Water Management District

Figure F-5

Period 1 Year Plot Start 00:00_10/01/2012
Interval 12 Hour Plot End 00:00_10/01/2013

WY 2013

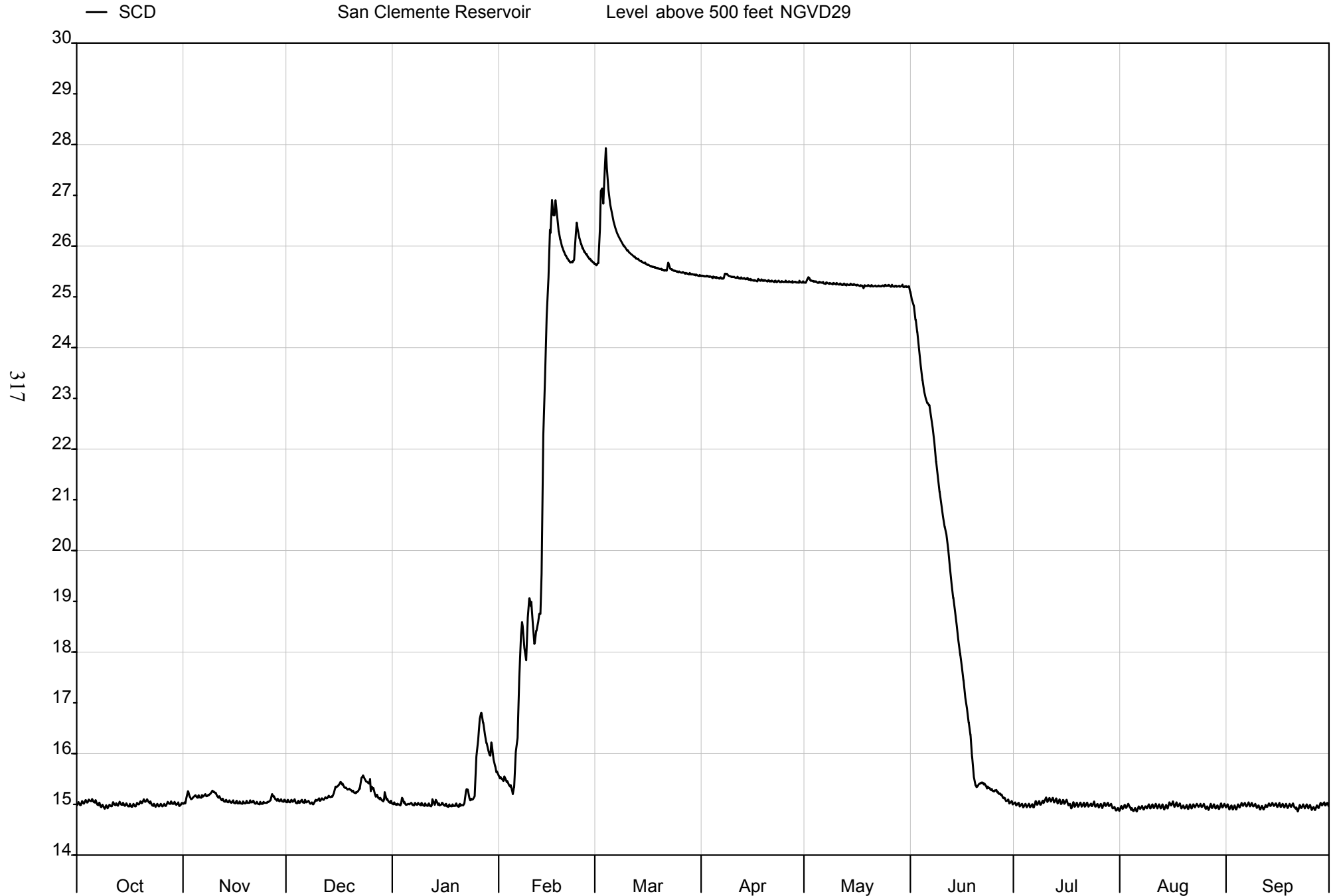


Monterey Peninsula Water Management District

Figure F-6

Period 1 Year Plot Start 00:00_10/01/2008
Interval 12 Hour Plot End 00:00_10/01/2009

WY 2009



Monterey Peninsula Water Management District

Figure F-7

Period 1 Year Plot Start 00:00_10/01/2009

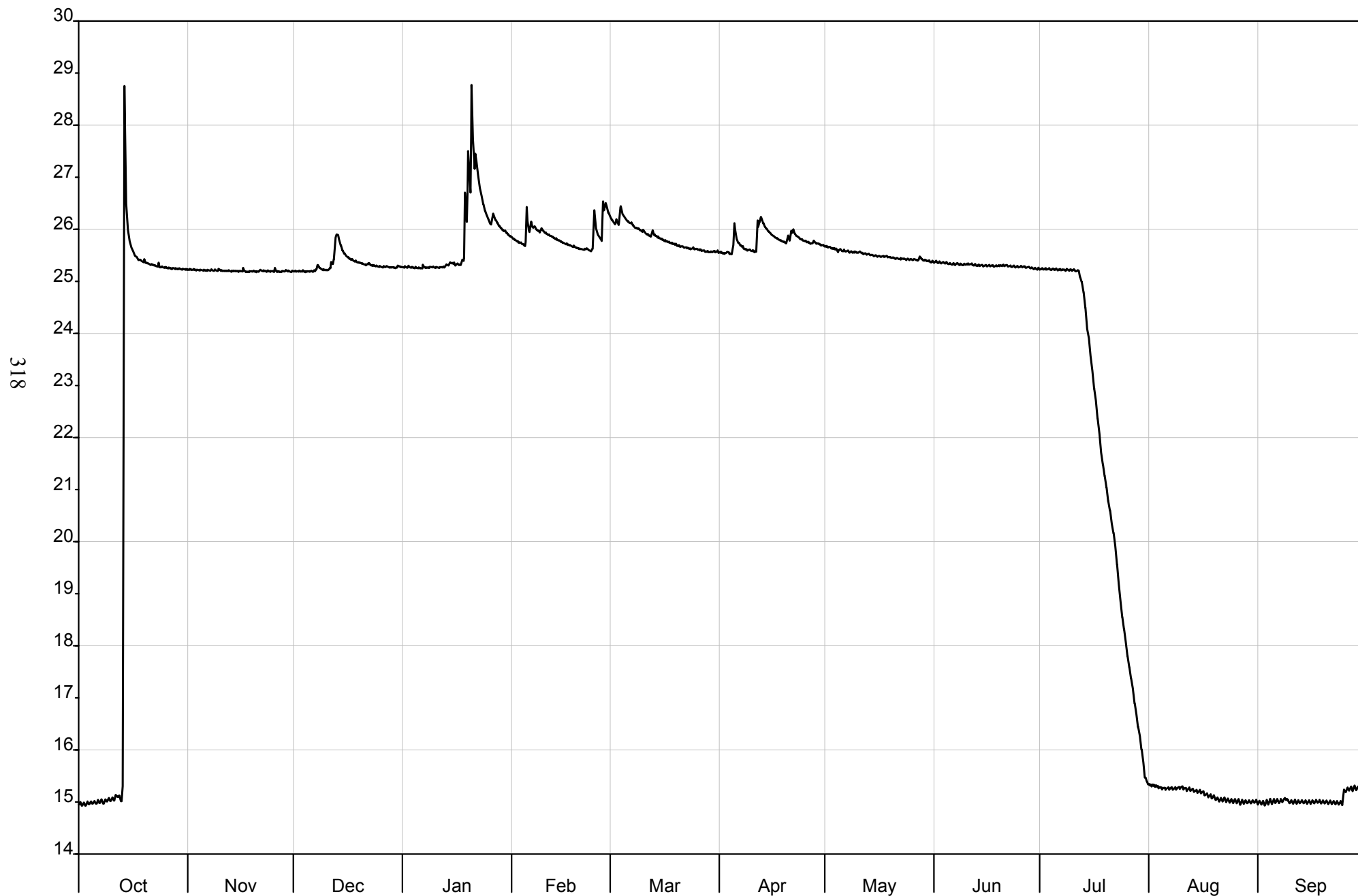
WY 2010

Interval 12 Hour Plot End 00:00_10/01/2010

— SCD

San Clemente Reservoir

Level above 500 feet NGVD29



Monterey Peninsula Water Management District

Figure F-8

Period 1 Year Plot Start 00:00_10/01/2010

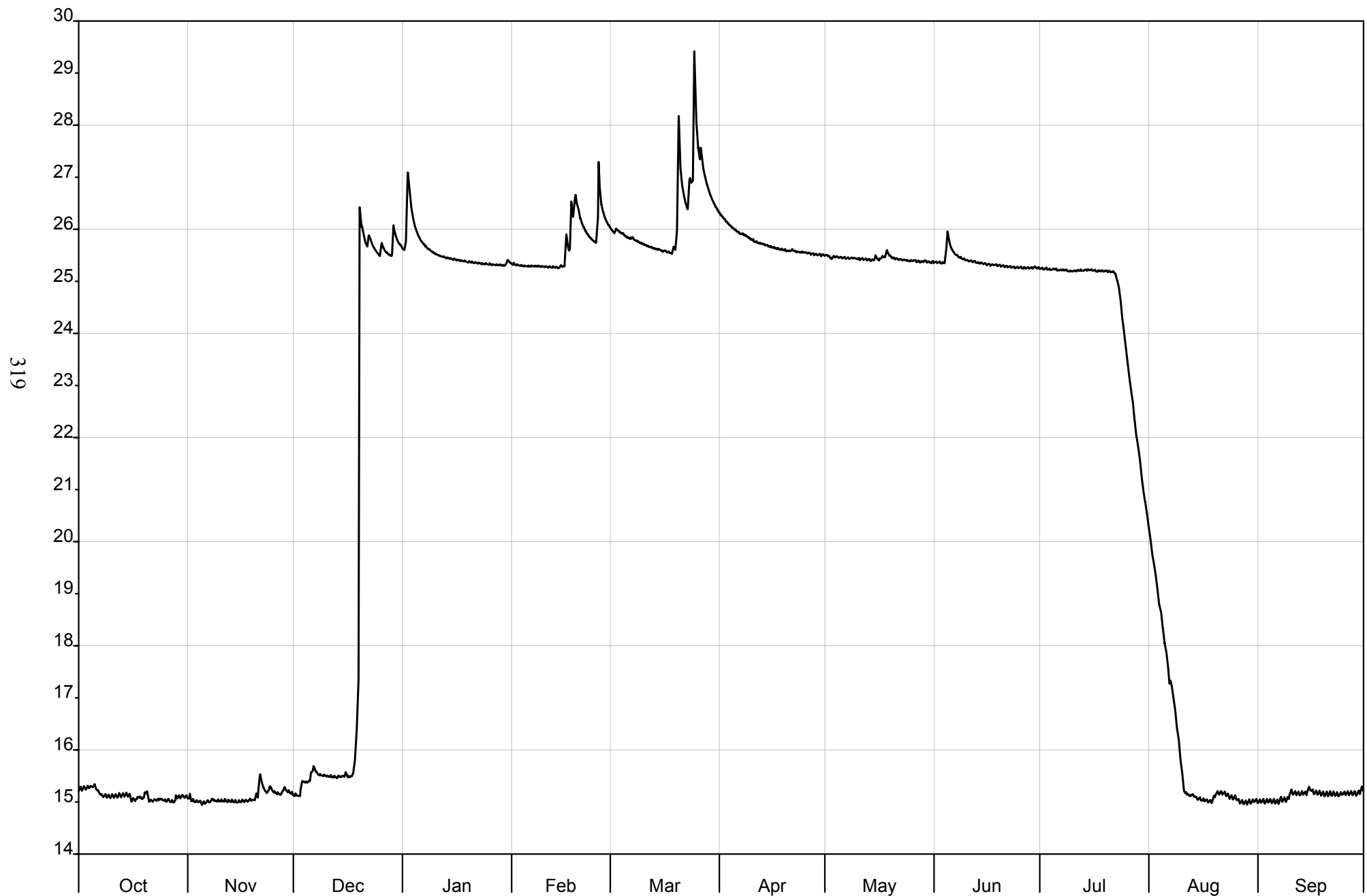
WY 2011

Interval 12 Hour Plot End 00:00_10/01/2011

— SCD

San Clemente Reservoir

Level above 500 feet NGVD29

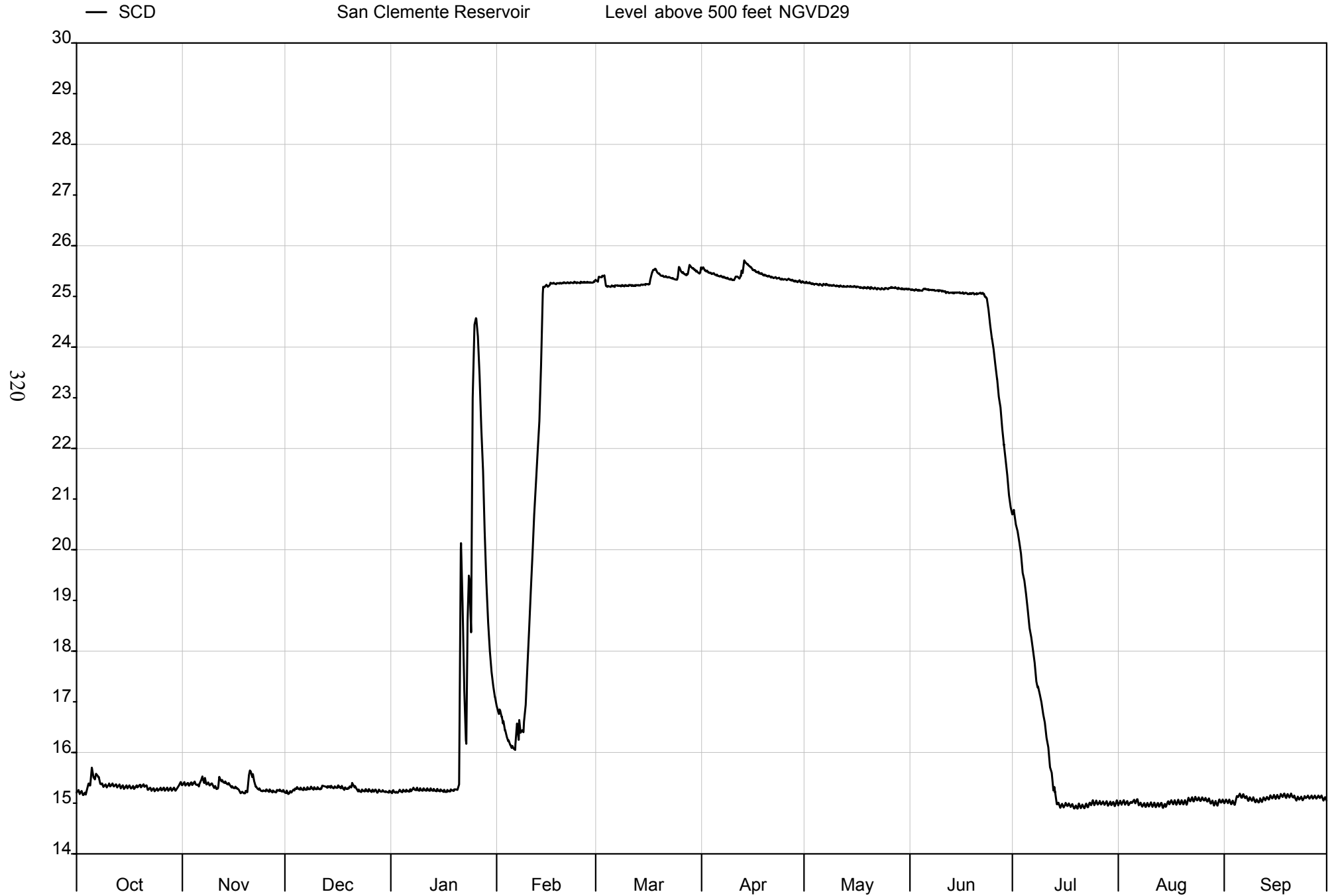


Monterey Peninsula Water Management District

Figure F-9

Period 1 Year Plot Start 00:00_10/01/2011
Interval 12 Hour Plot End 00:00_10/01/2012

WY 2012



Monterey Peninsula Water Management District

Figure F-10

Period 1 Year Plot Start 00:00_10/01/2012

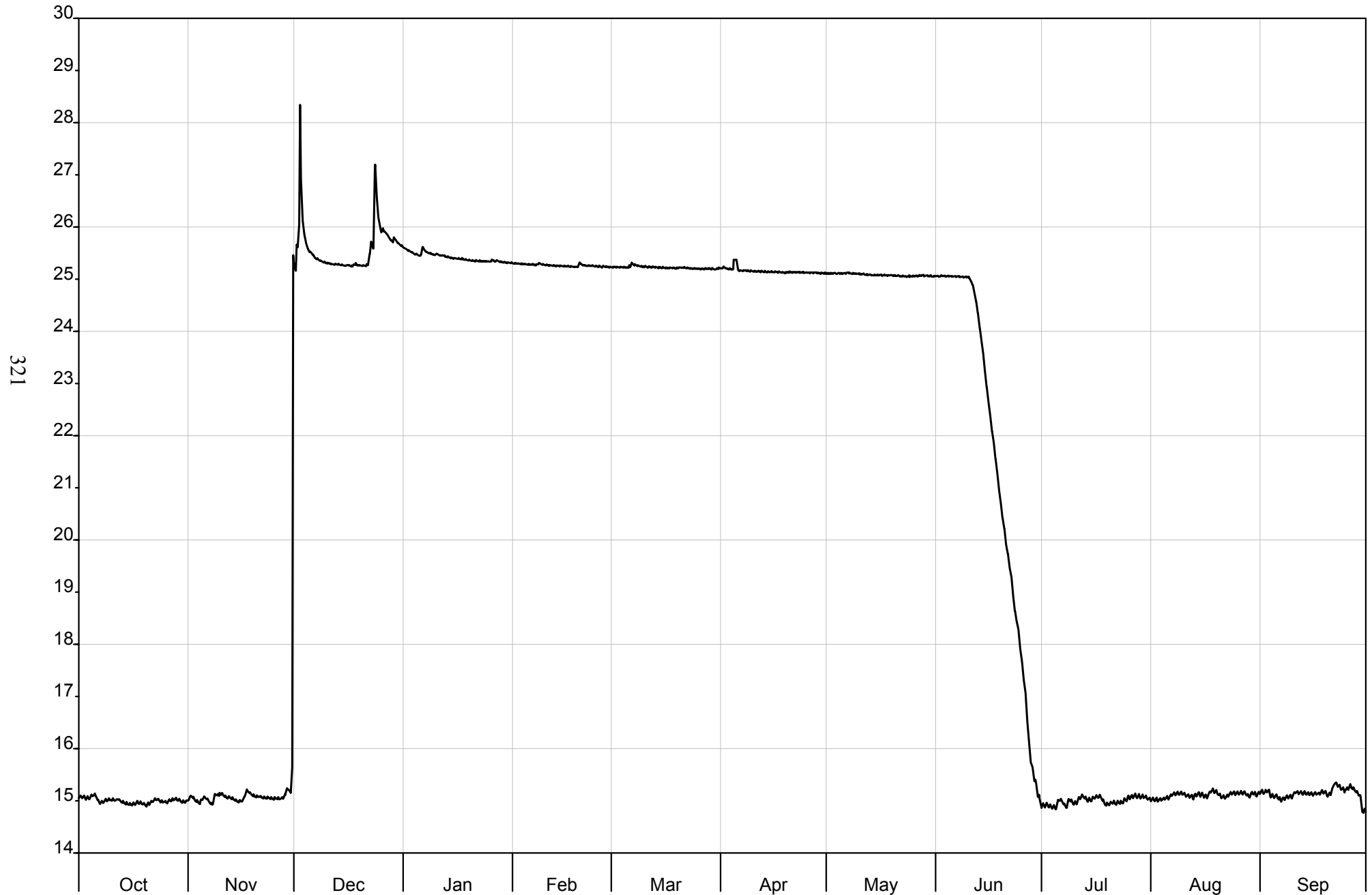
WY 2013

Interval 12 Hour Plot End 00:00_10/01/2013

— SCD

San Clemente Reservoir

Level above 500 feet NGVD29



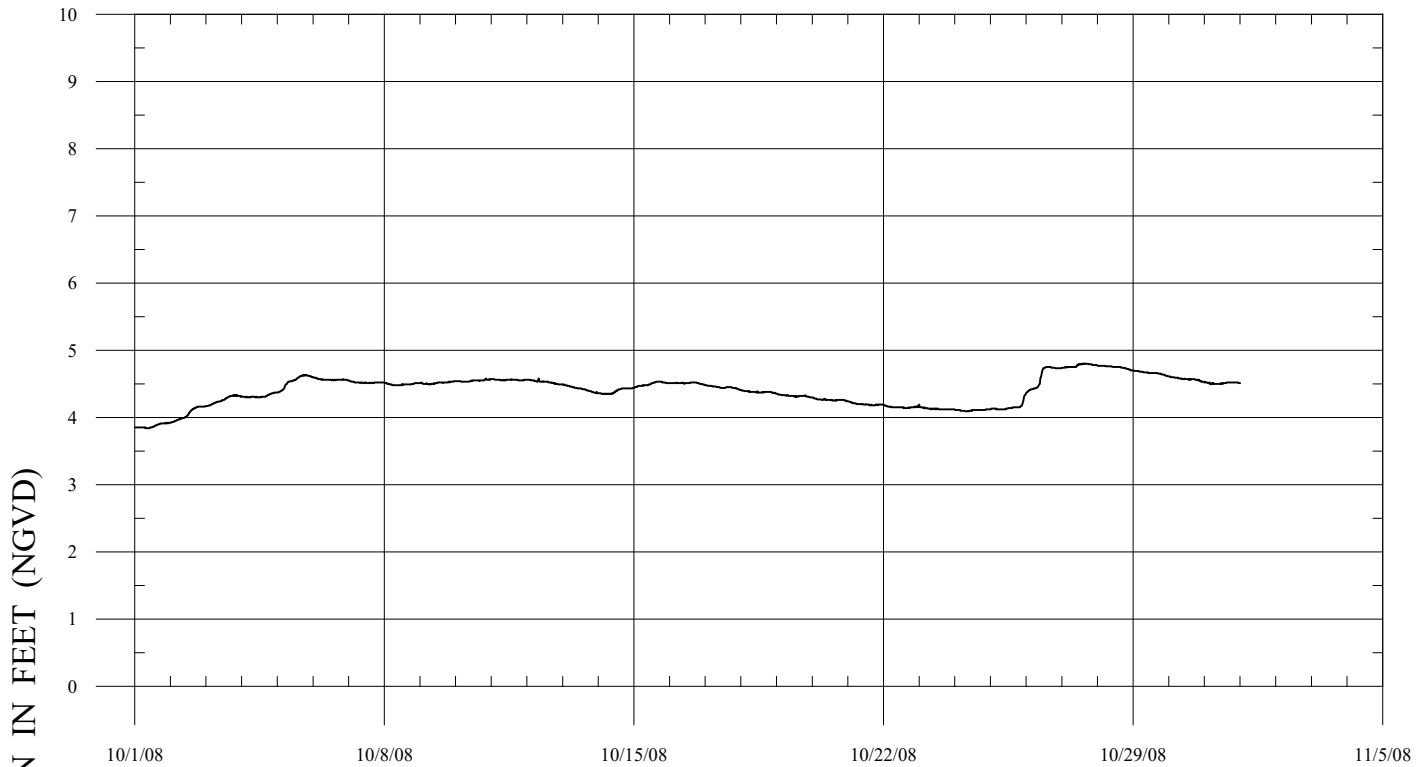
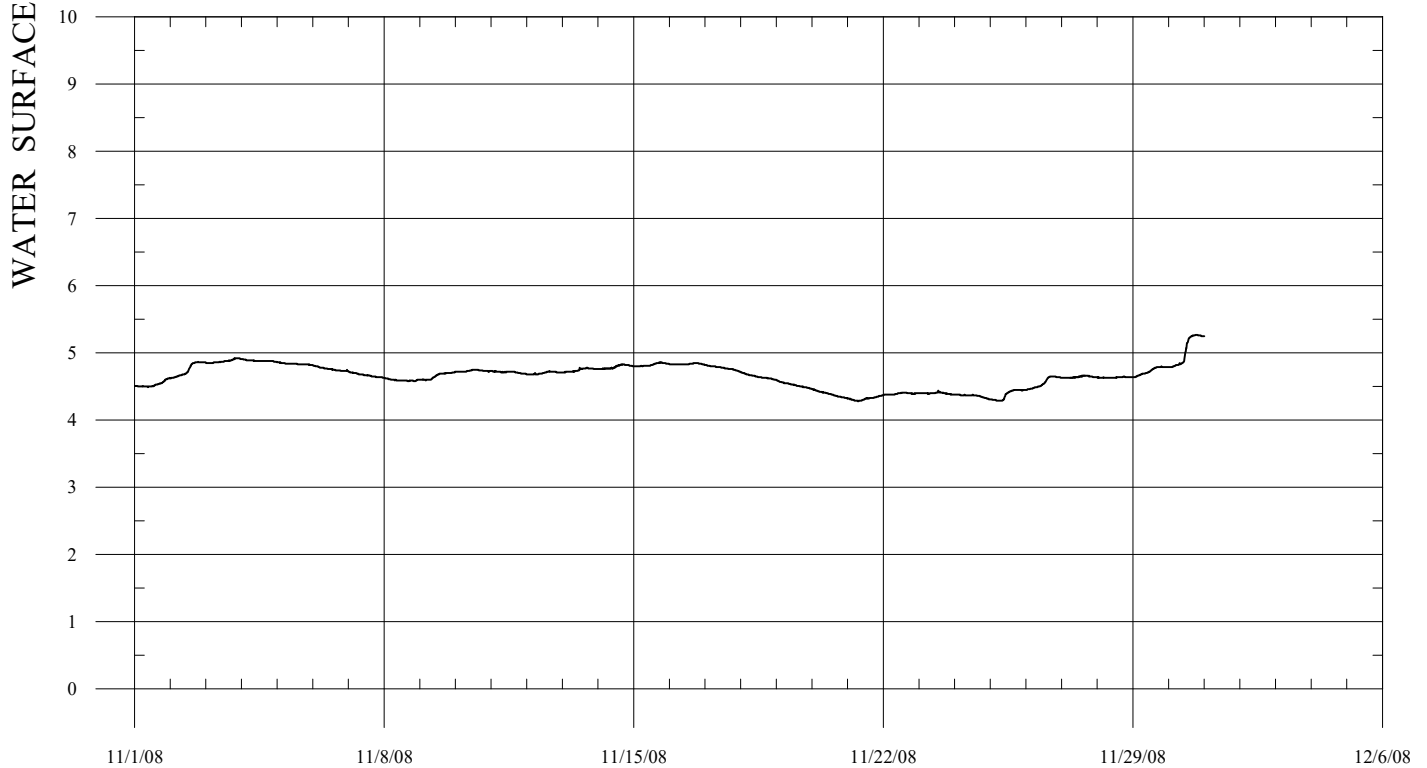
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

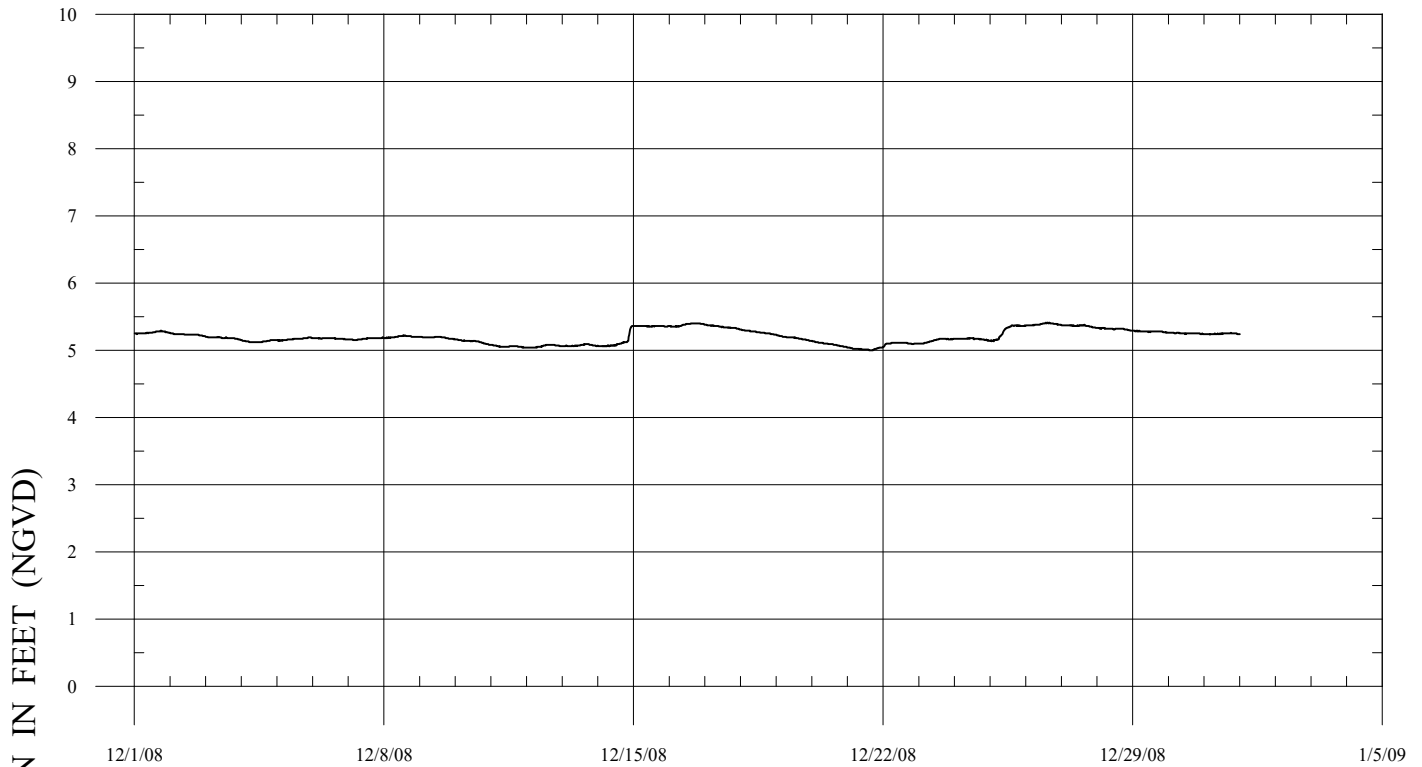
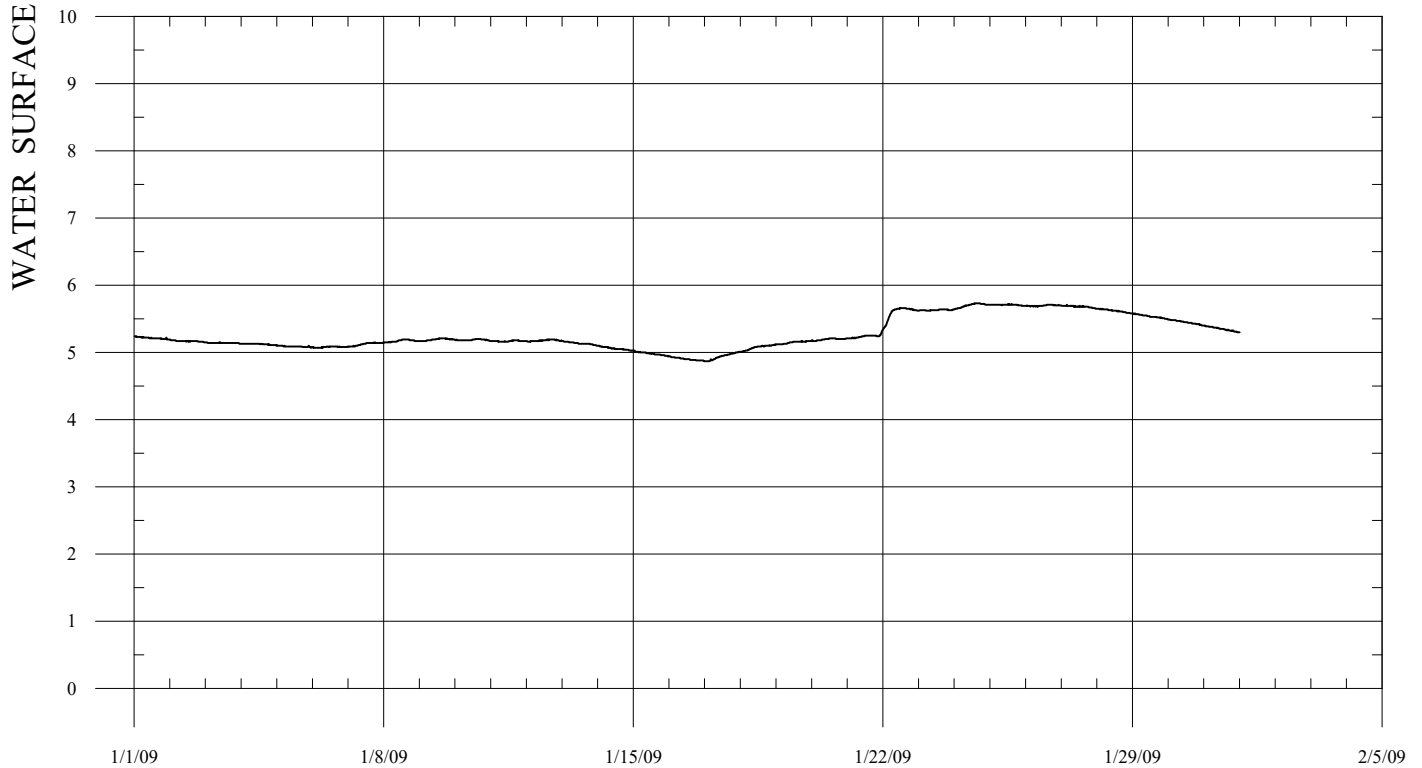
CARMEL RIVER BASIN

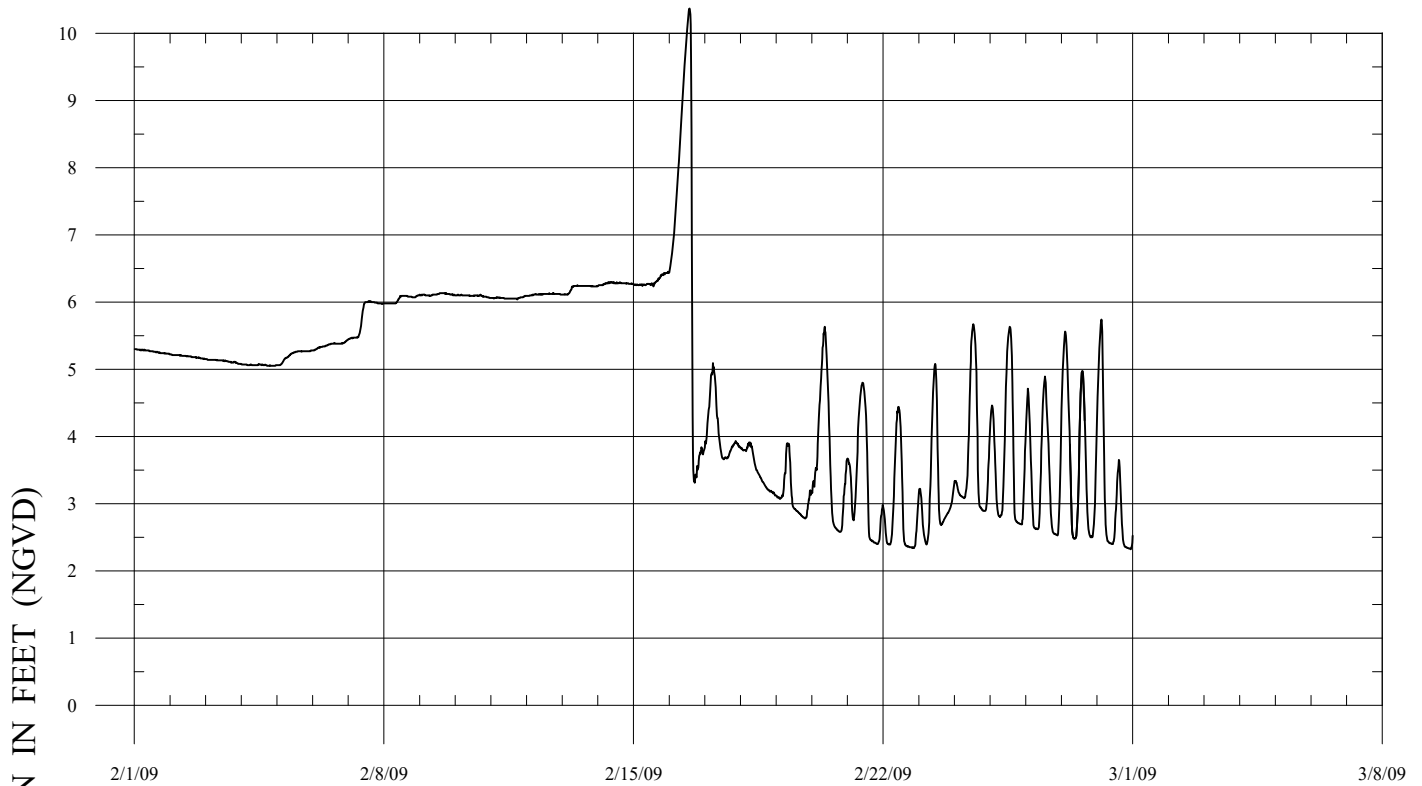
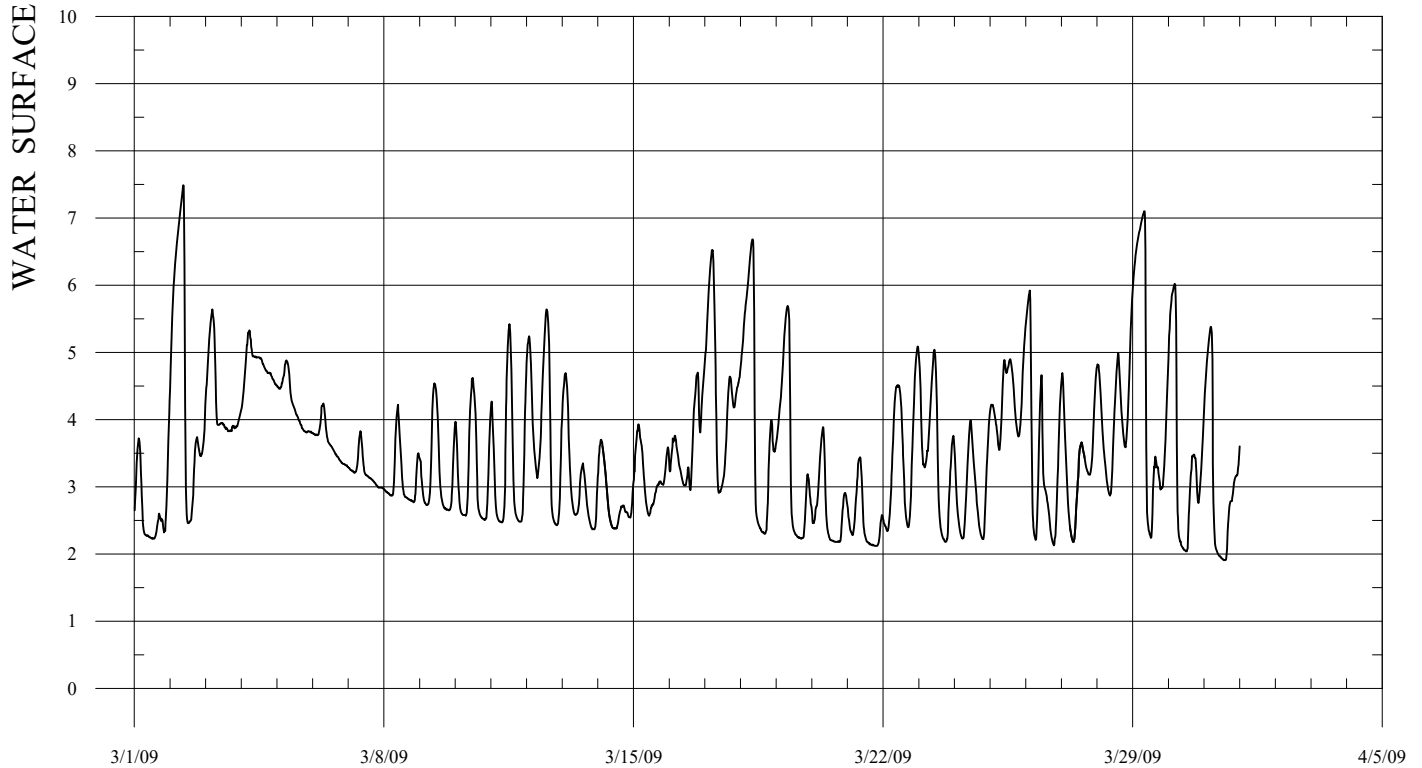
**SURFACE WATER RESOURCES DATA REPORT
WATER YEARS 2009 - 2013**

APPENDIX G

LAGOON WATER LEVEL AND CROSS SECTION DATA

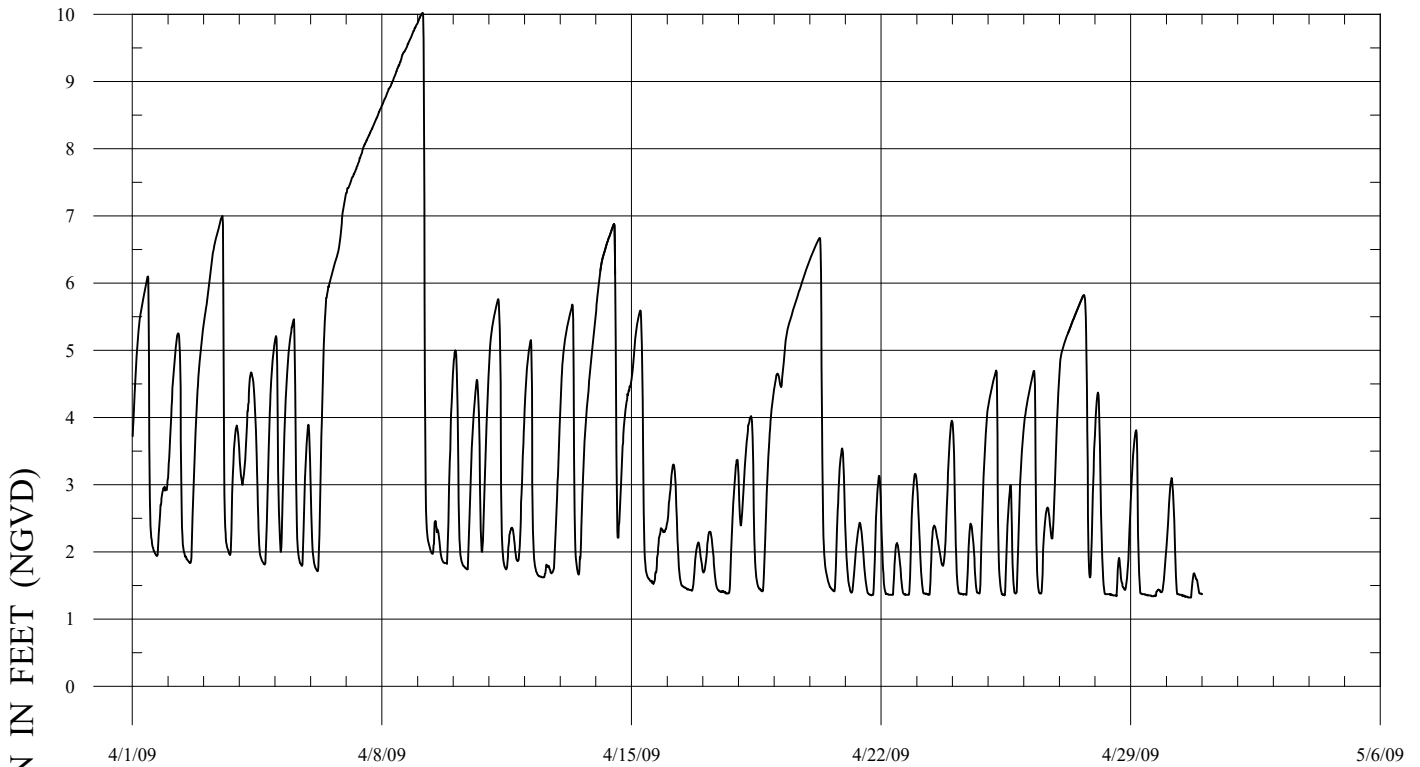
CARMEL RIVER LAGOON**OCTOBER 2008****NOVEMBER 2008**

CARMEL RIVER LAGOON**DECEMBER 2008****JANUARY 2009**

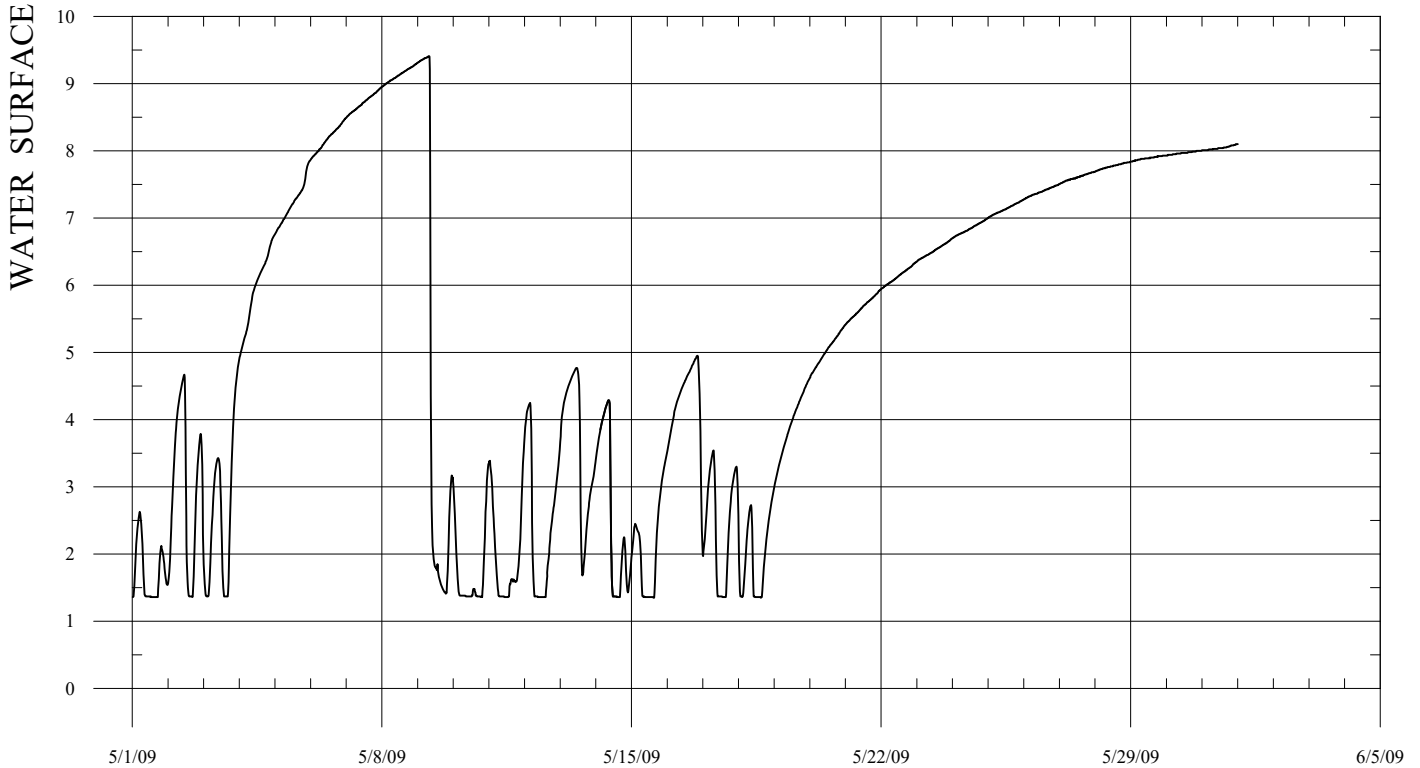
CARMEL RIVER LAGOON**FEBRUARY 2009****MARCH 2009**

CARMEL RIVER LAGOON

APRIL 2009

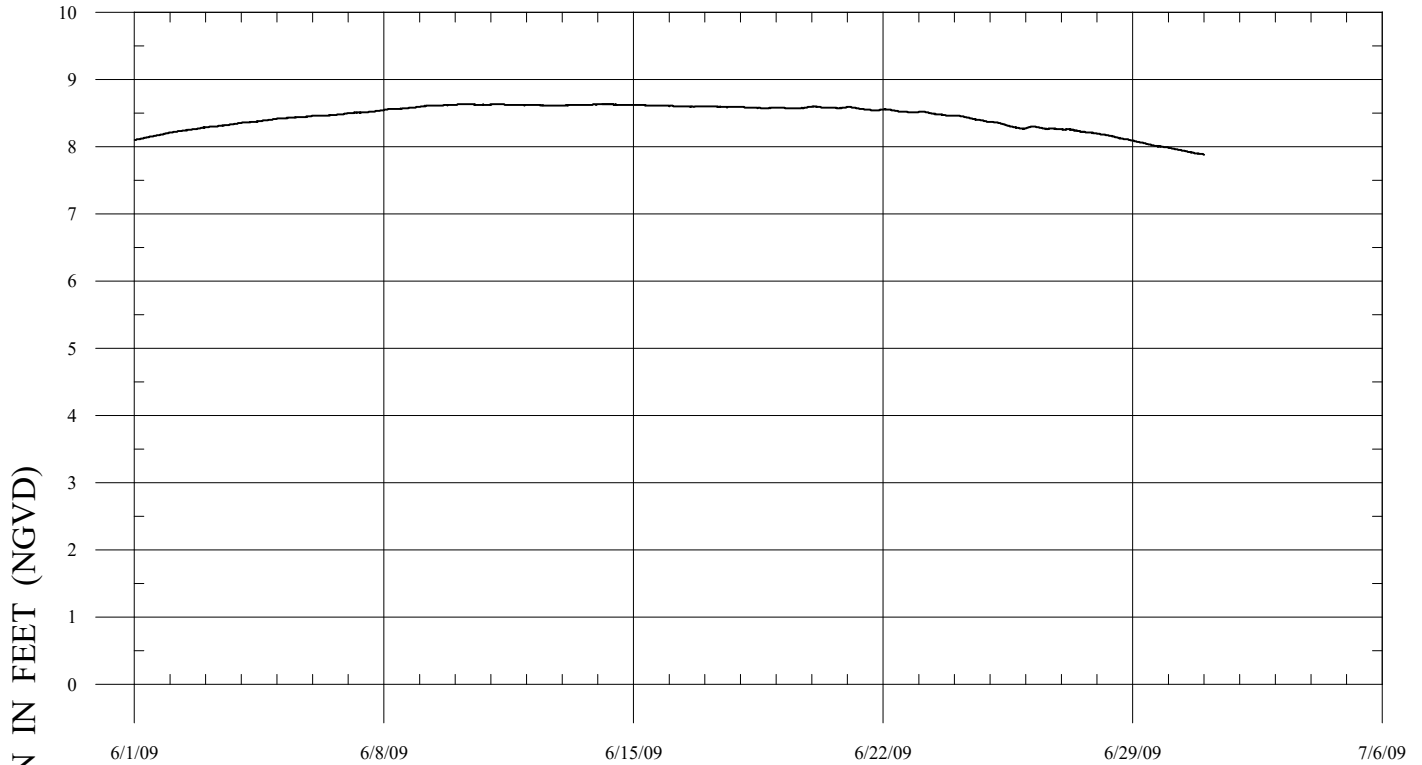


MAY 2009

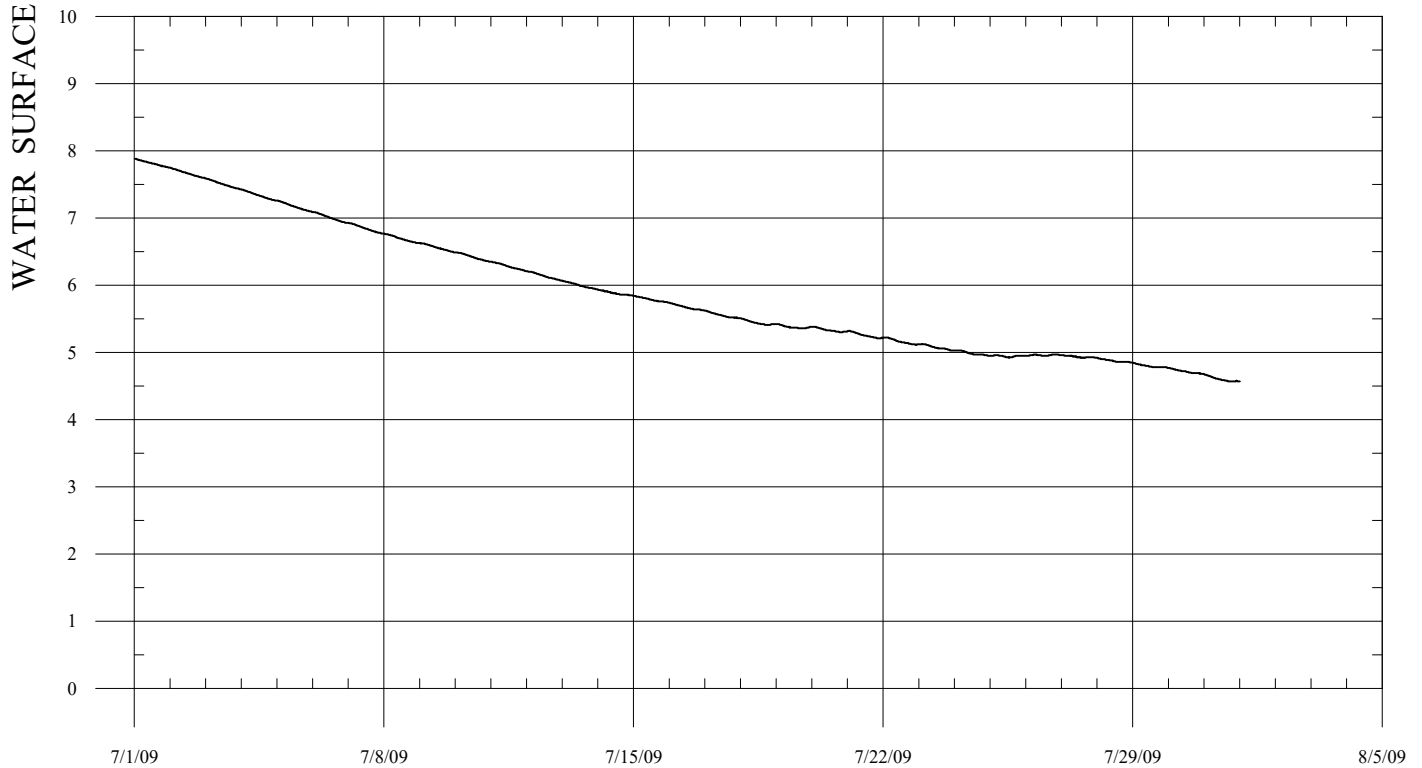


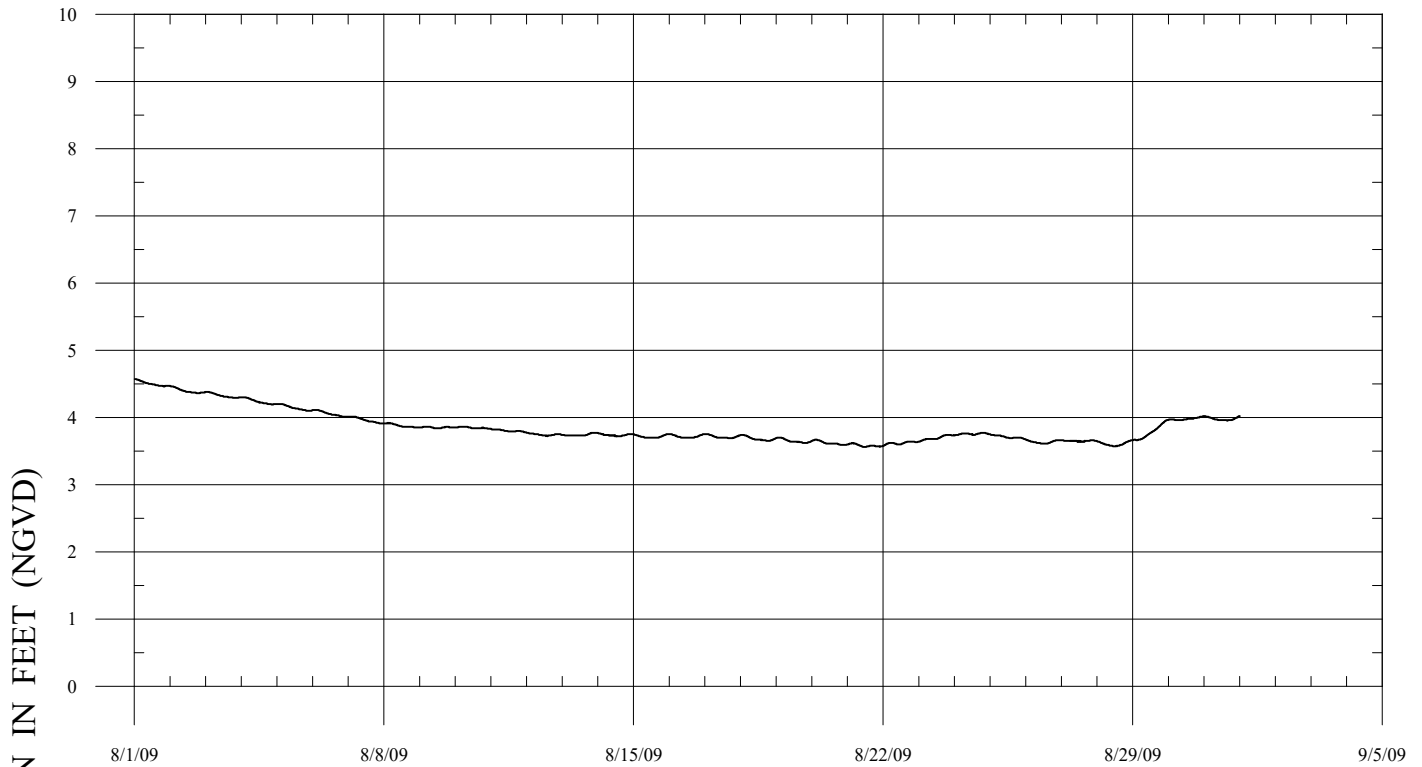
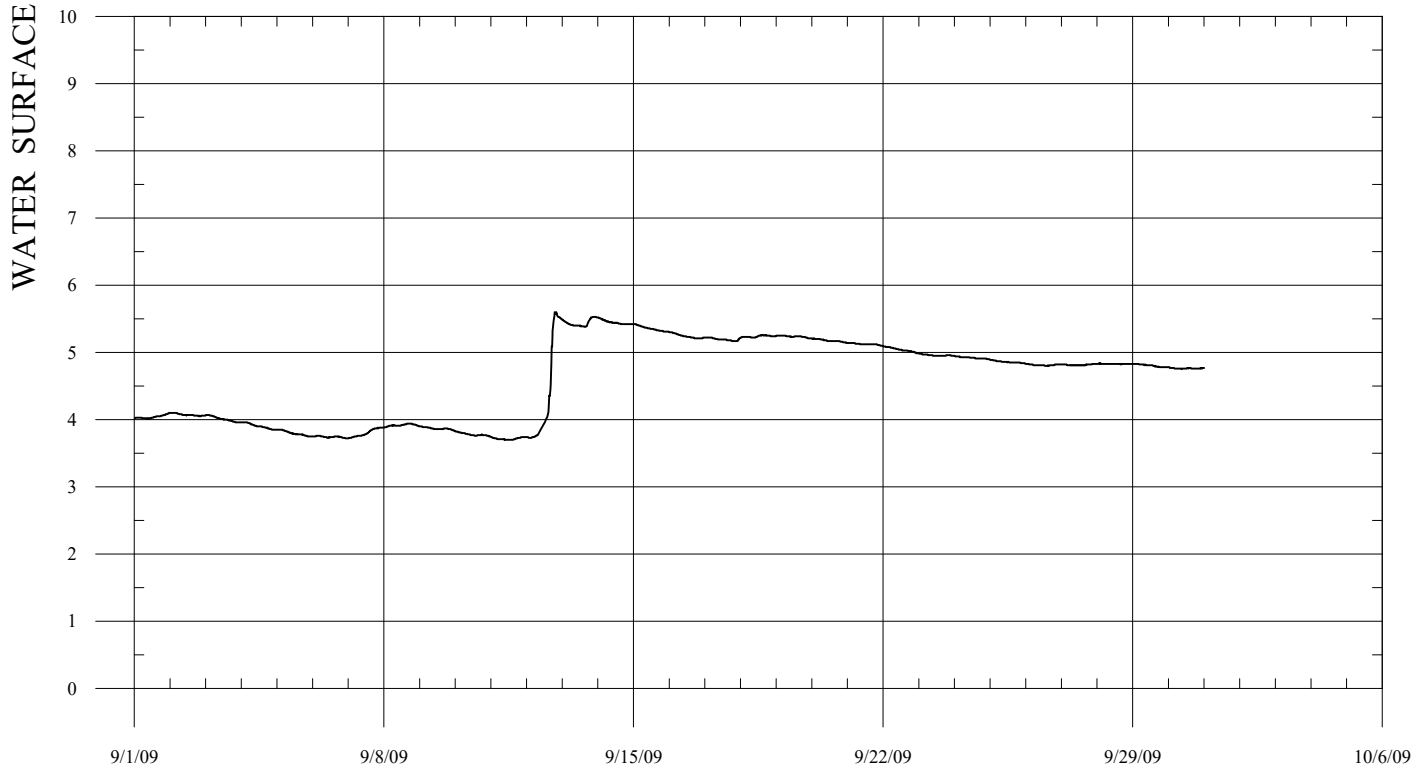
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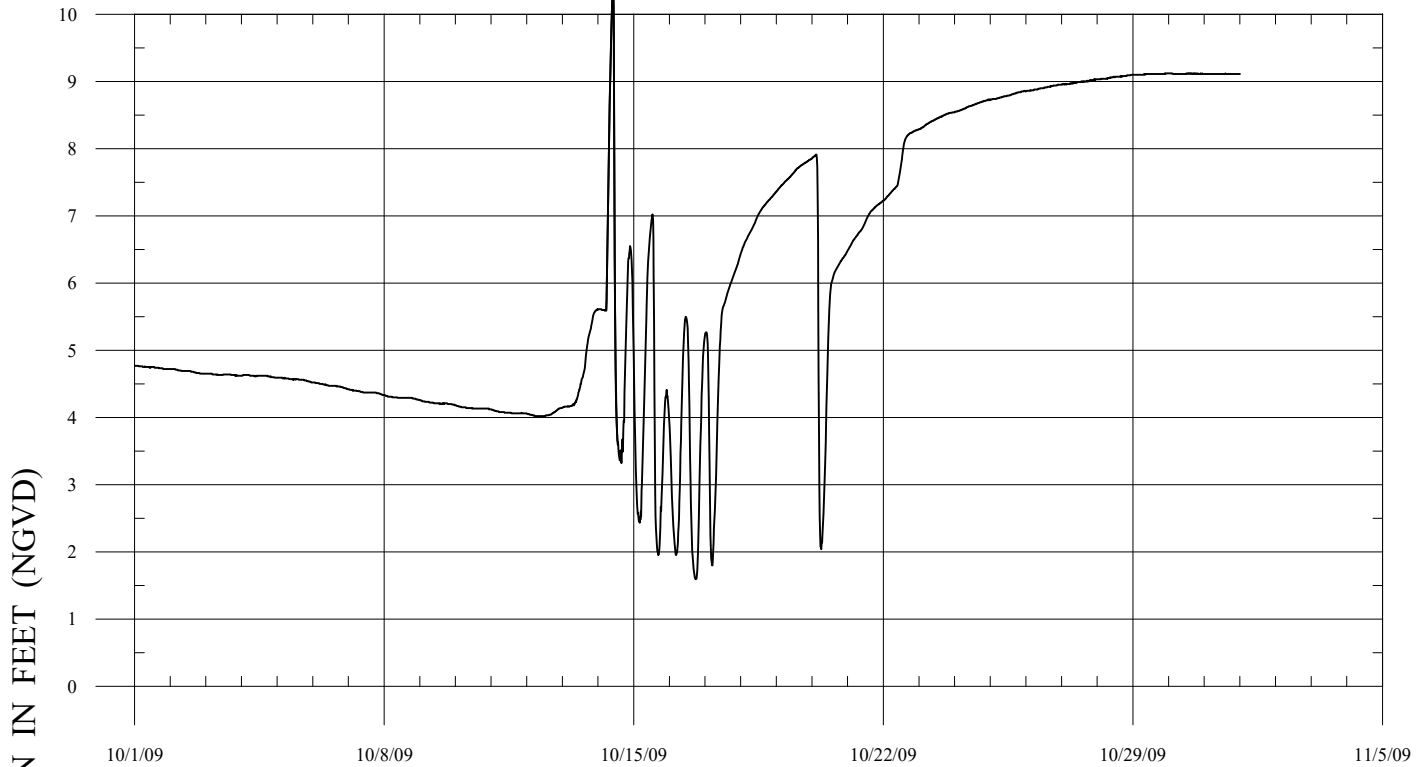
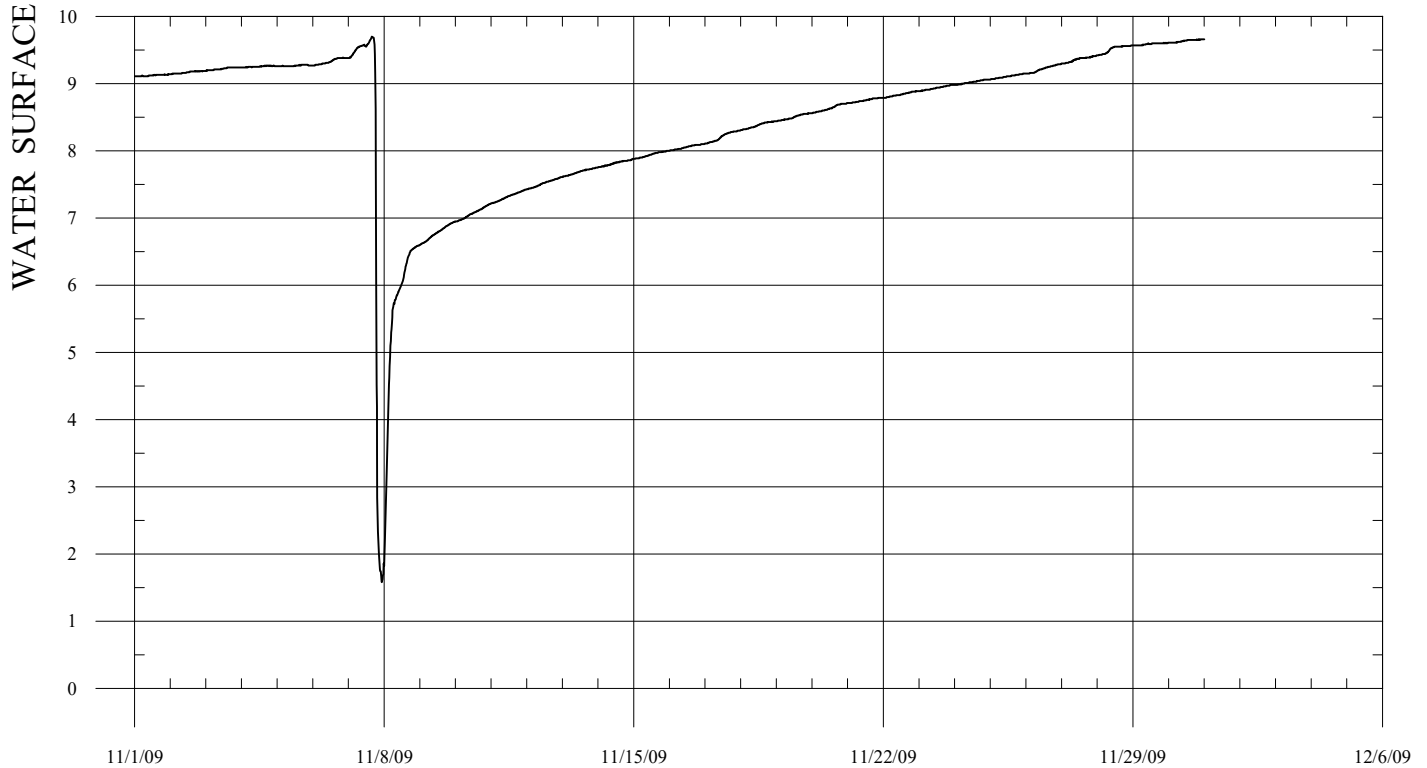
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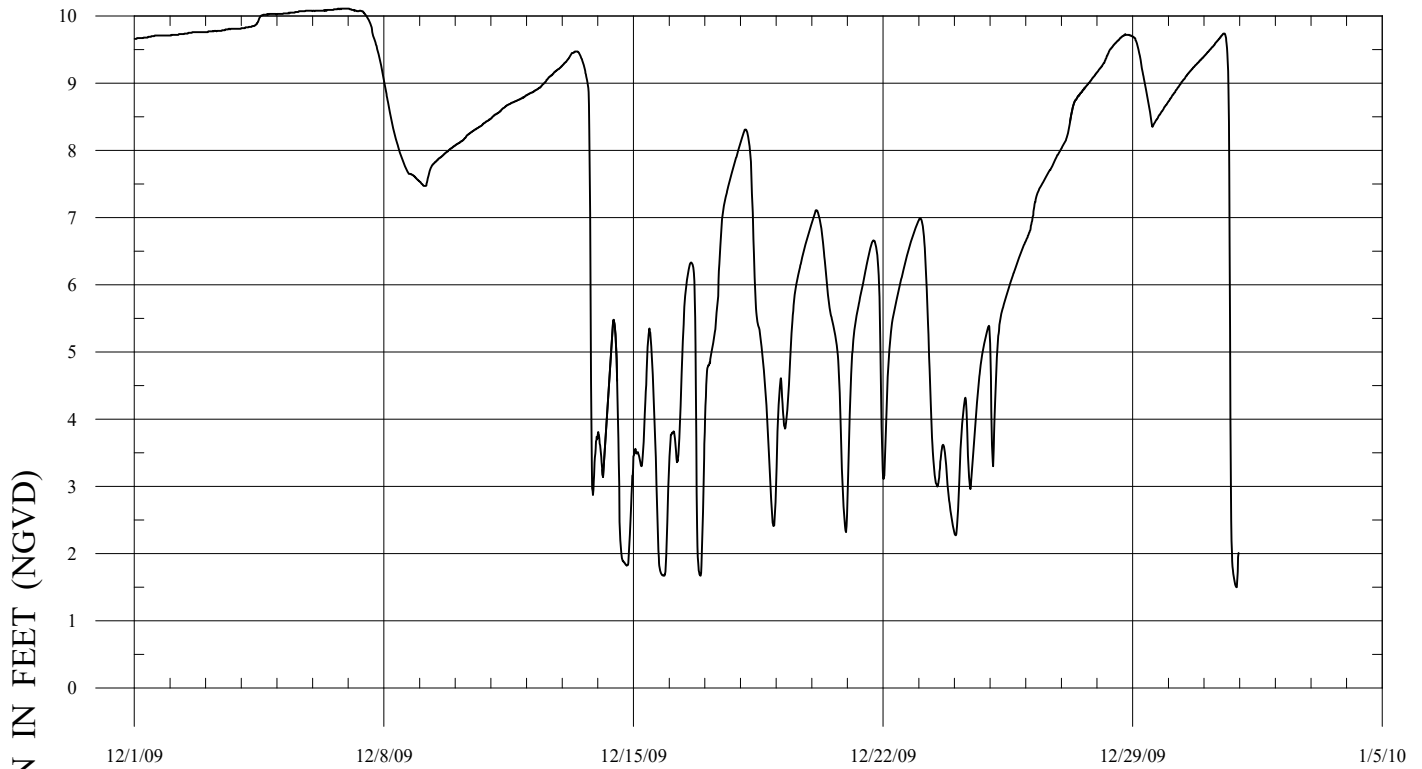
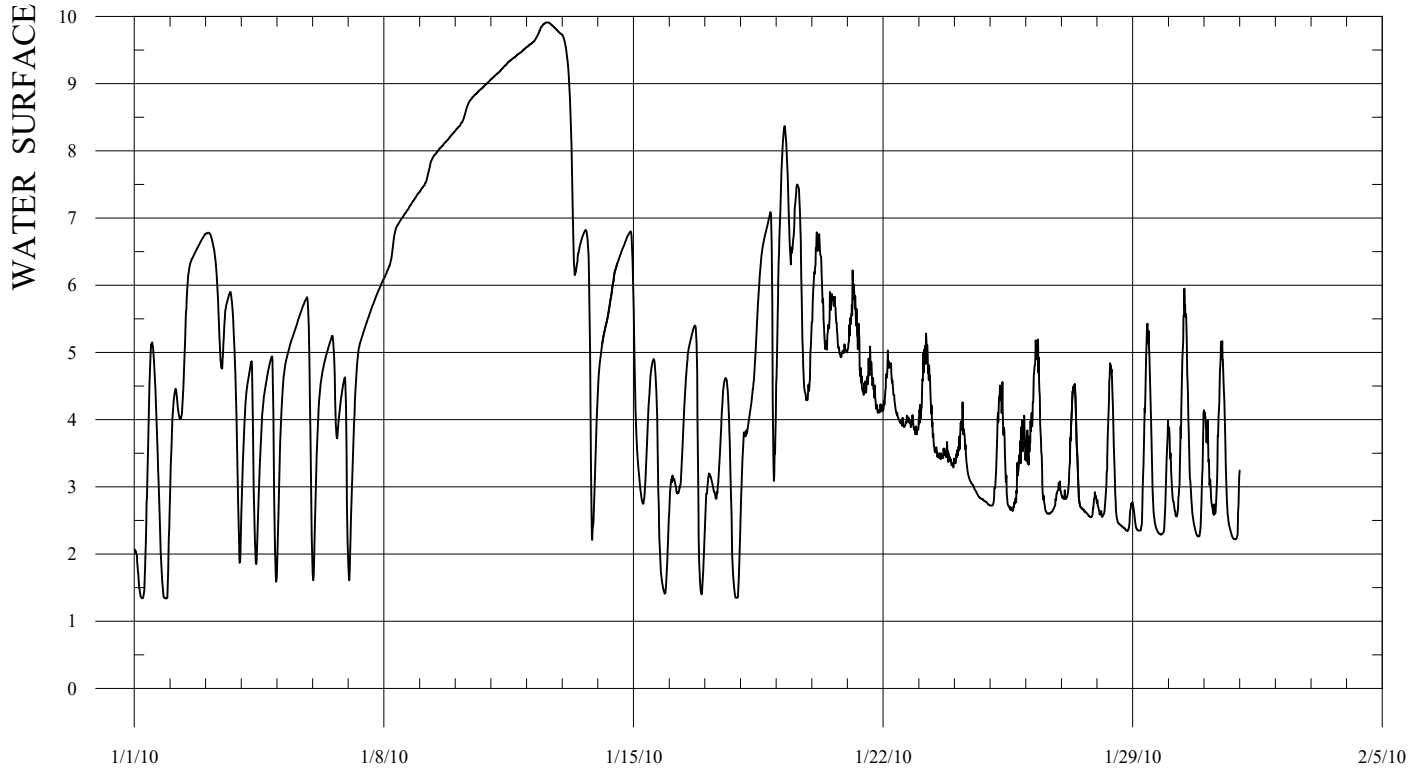


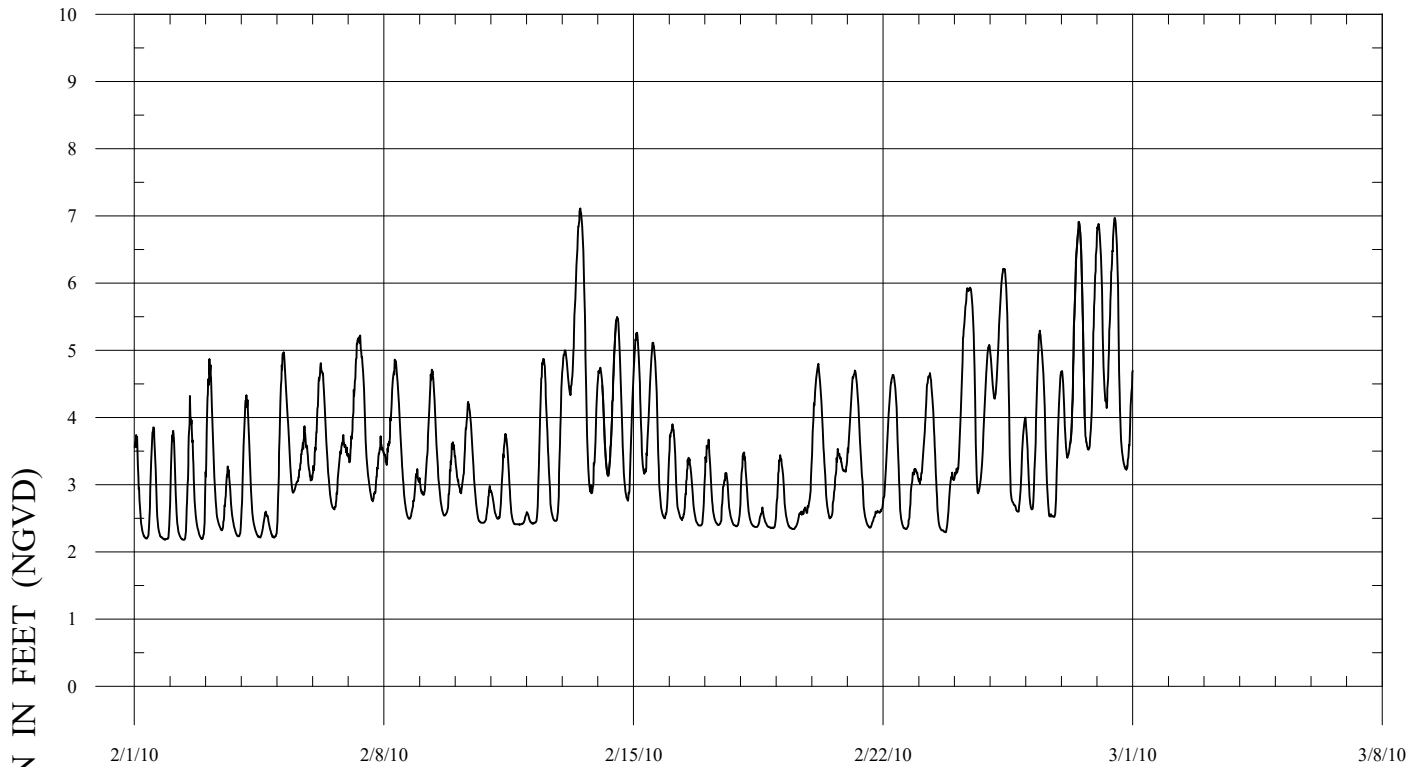
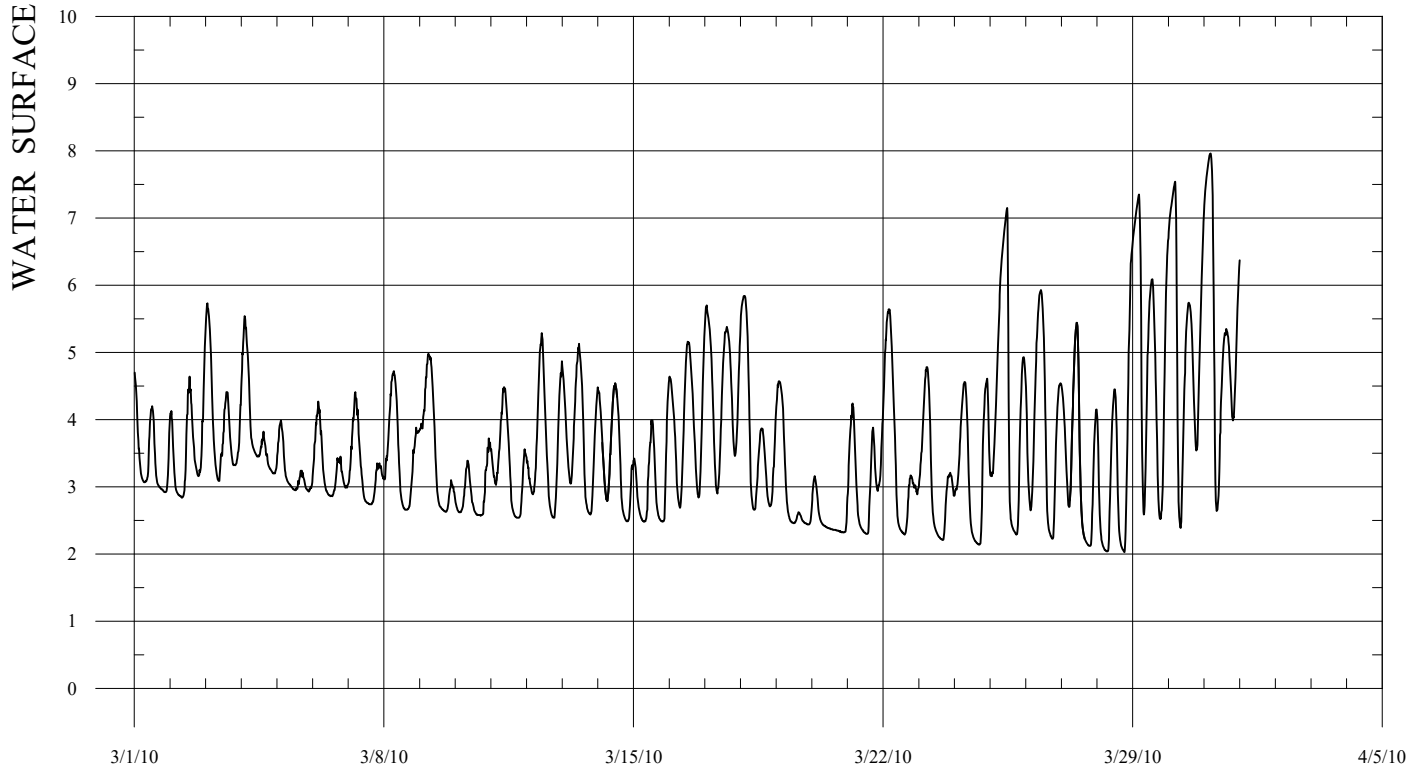
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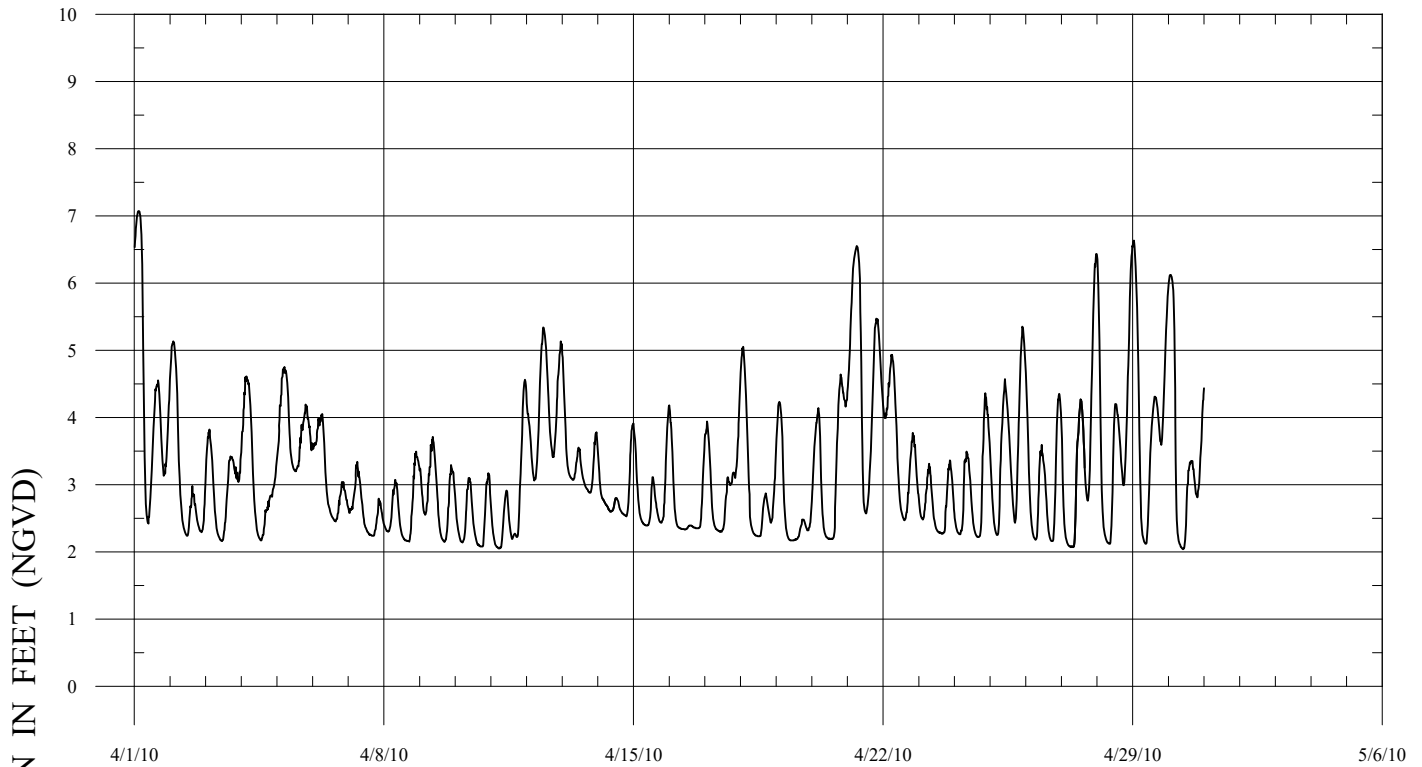
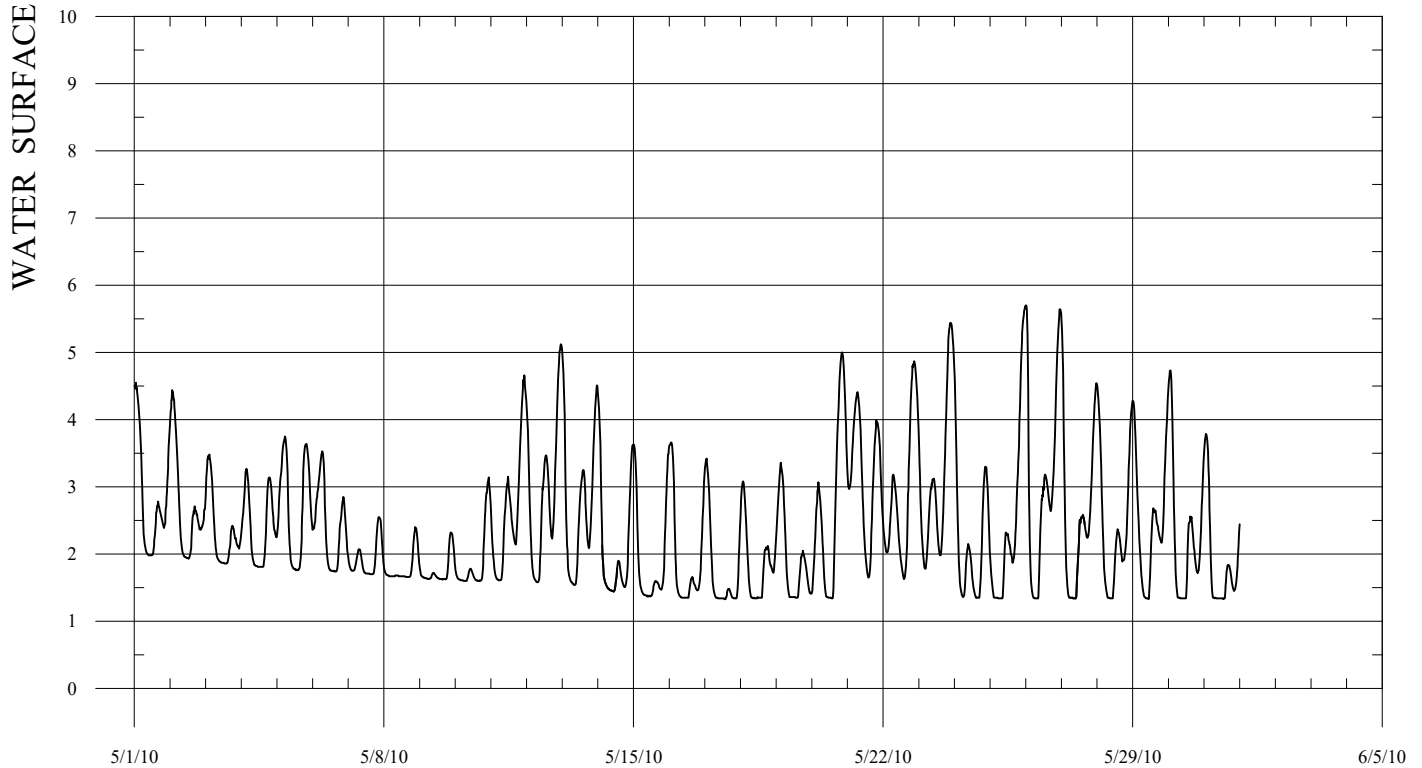


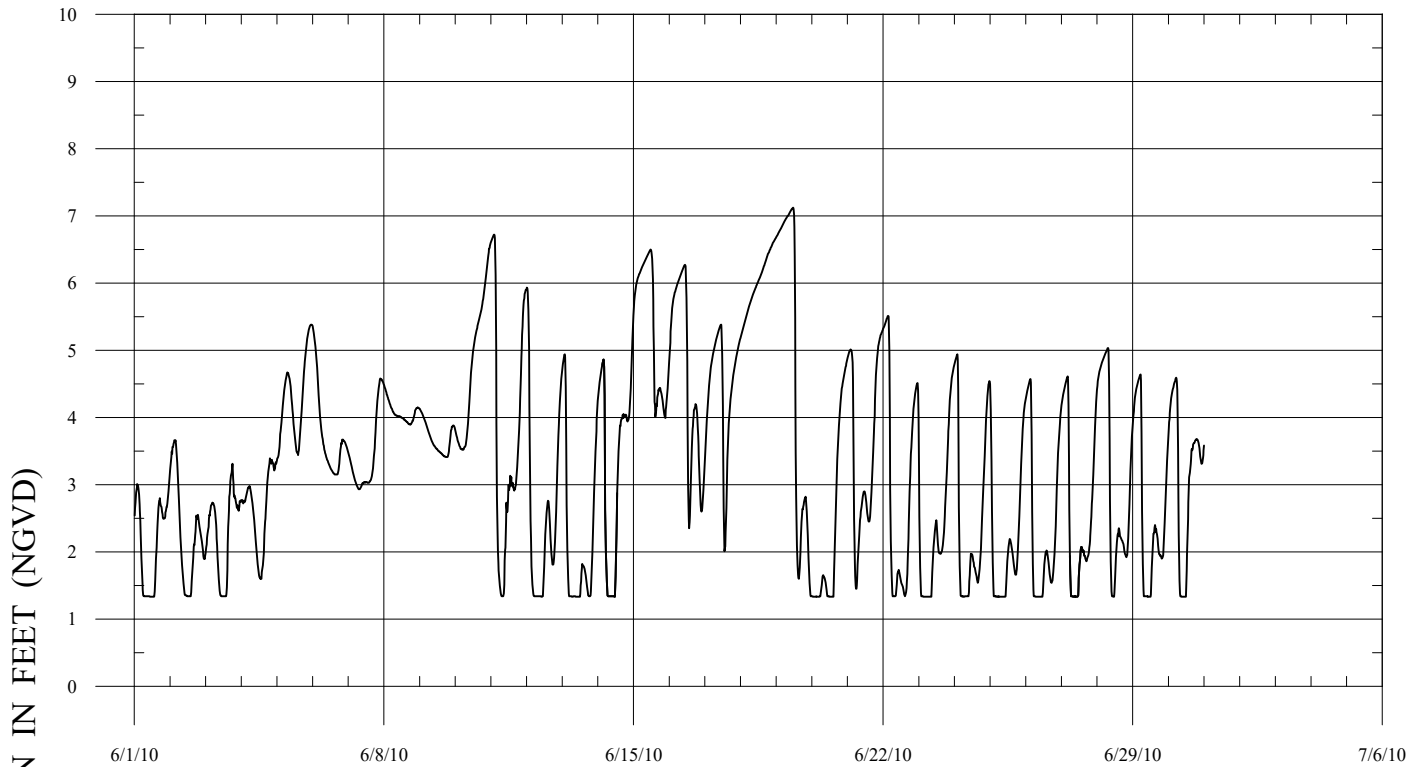
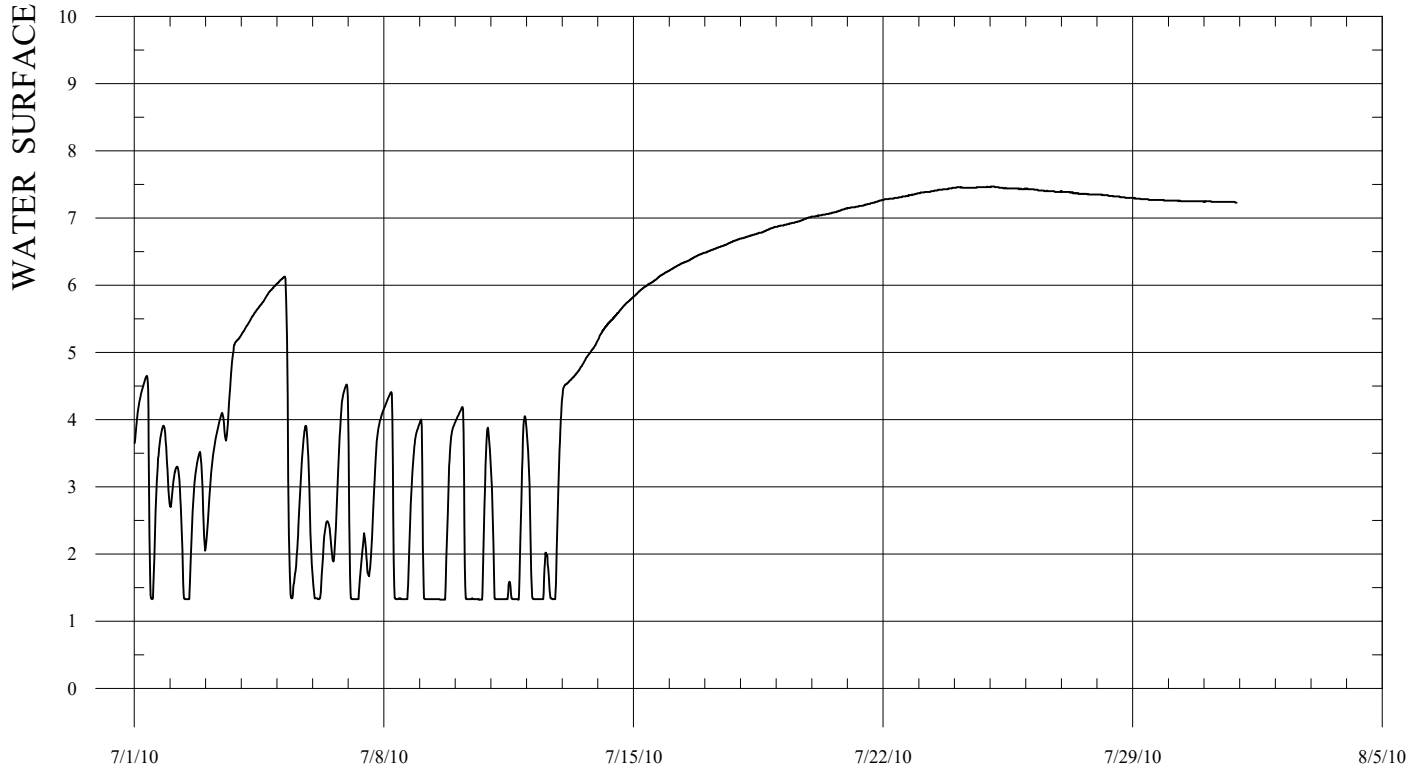
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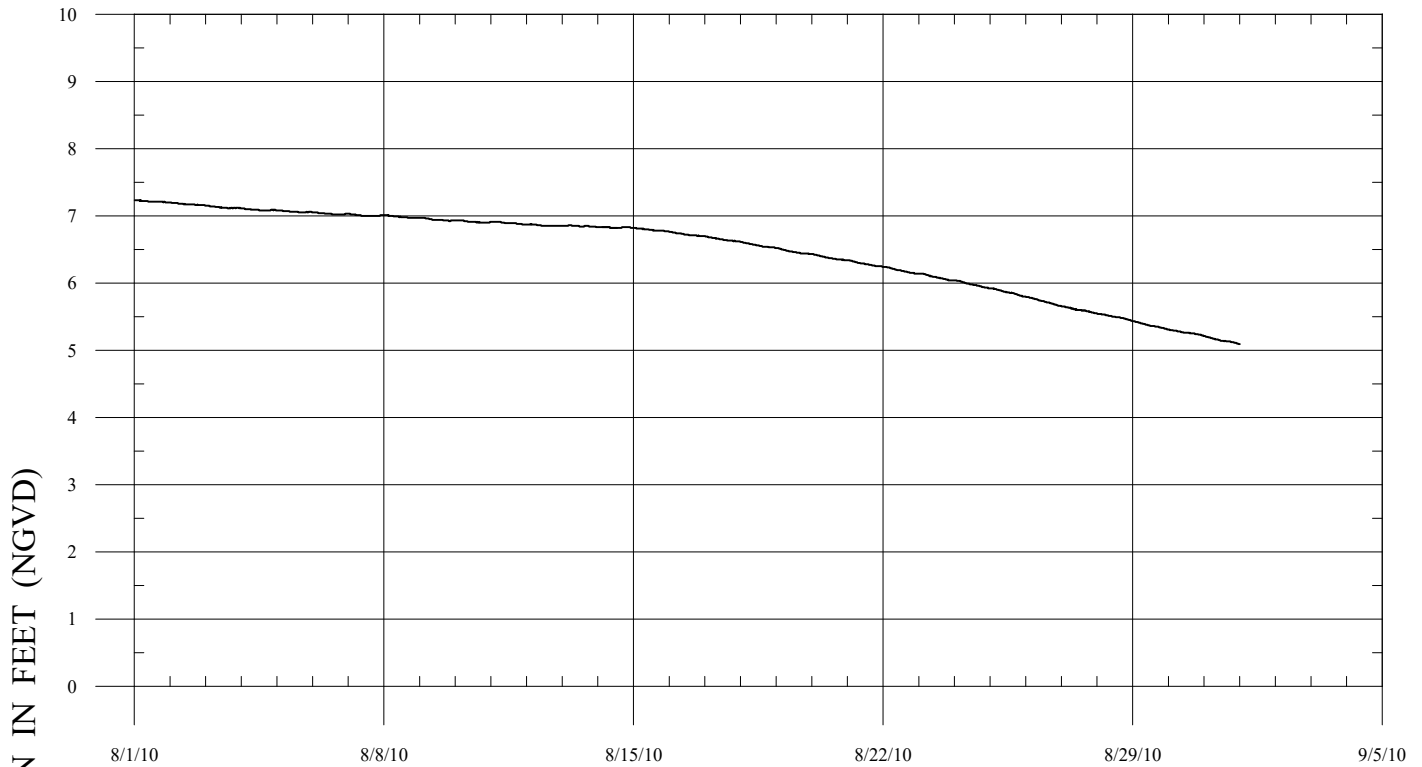
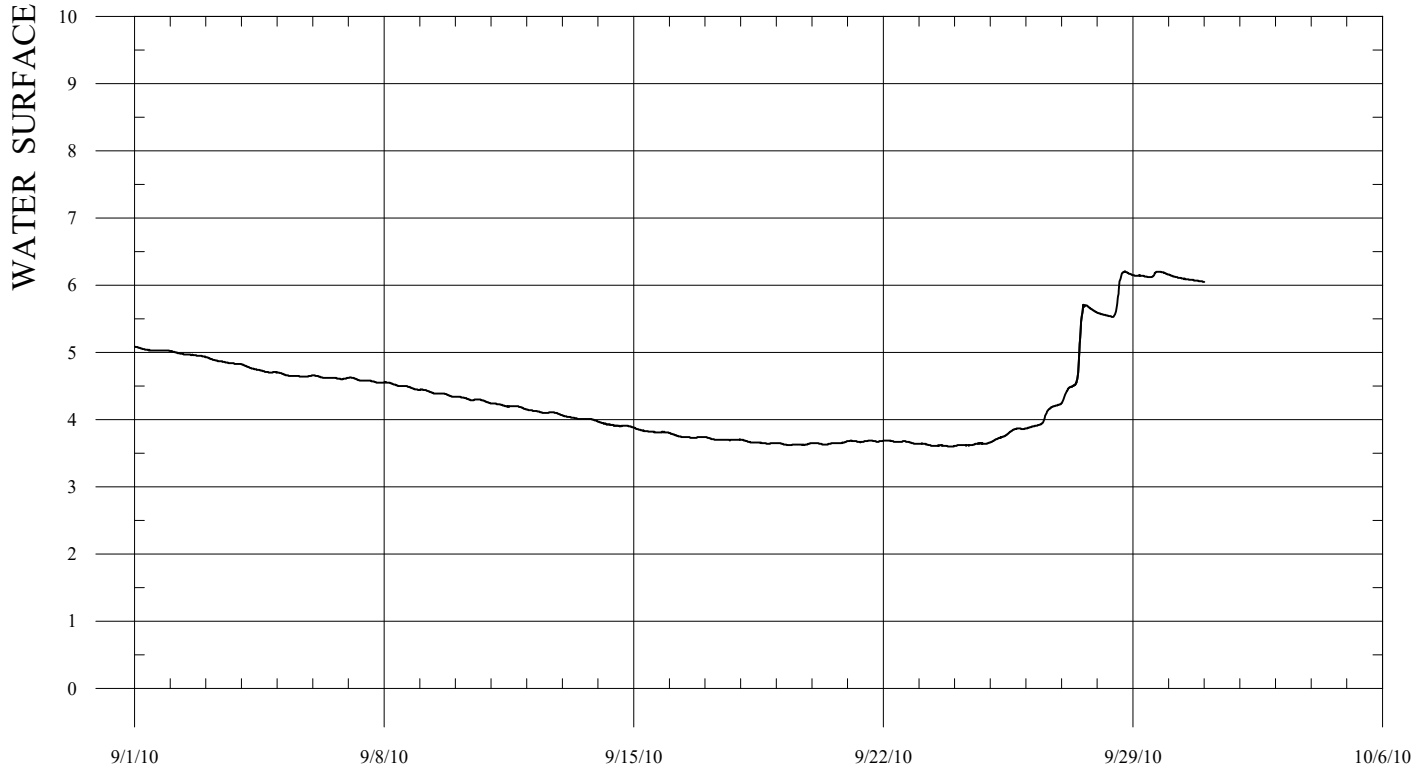
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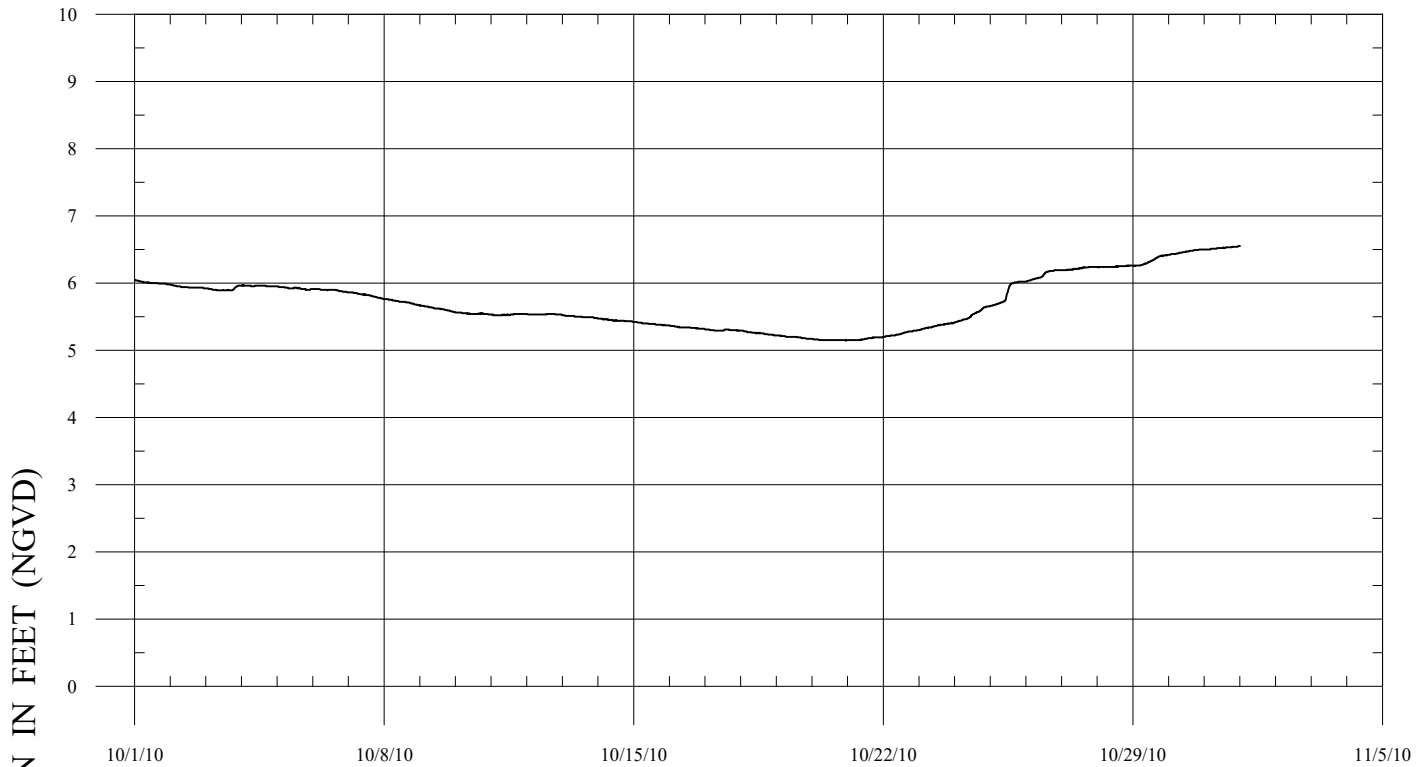
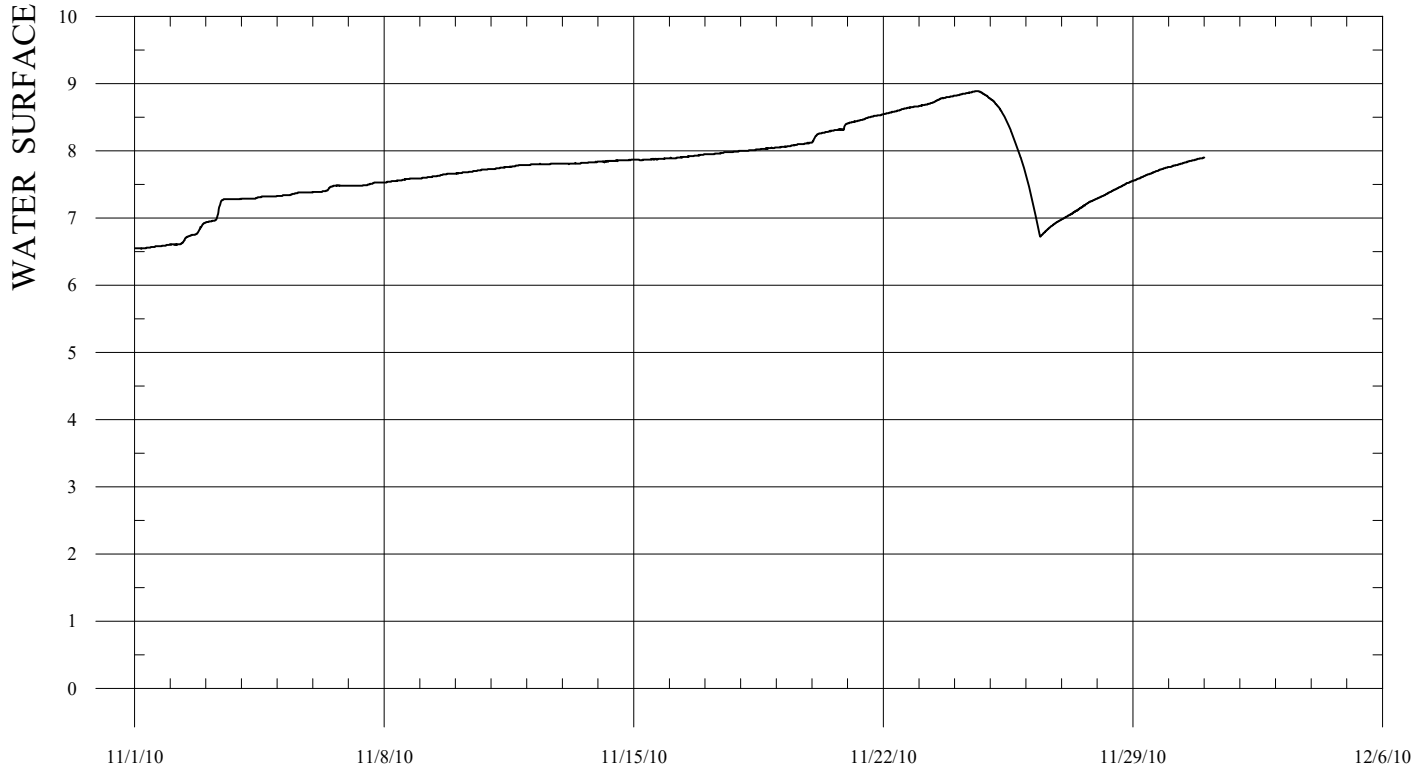
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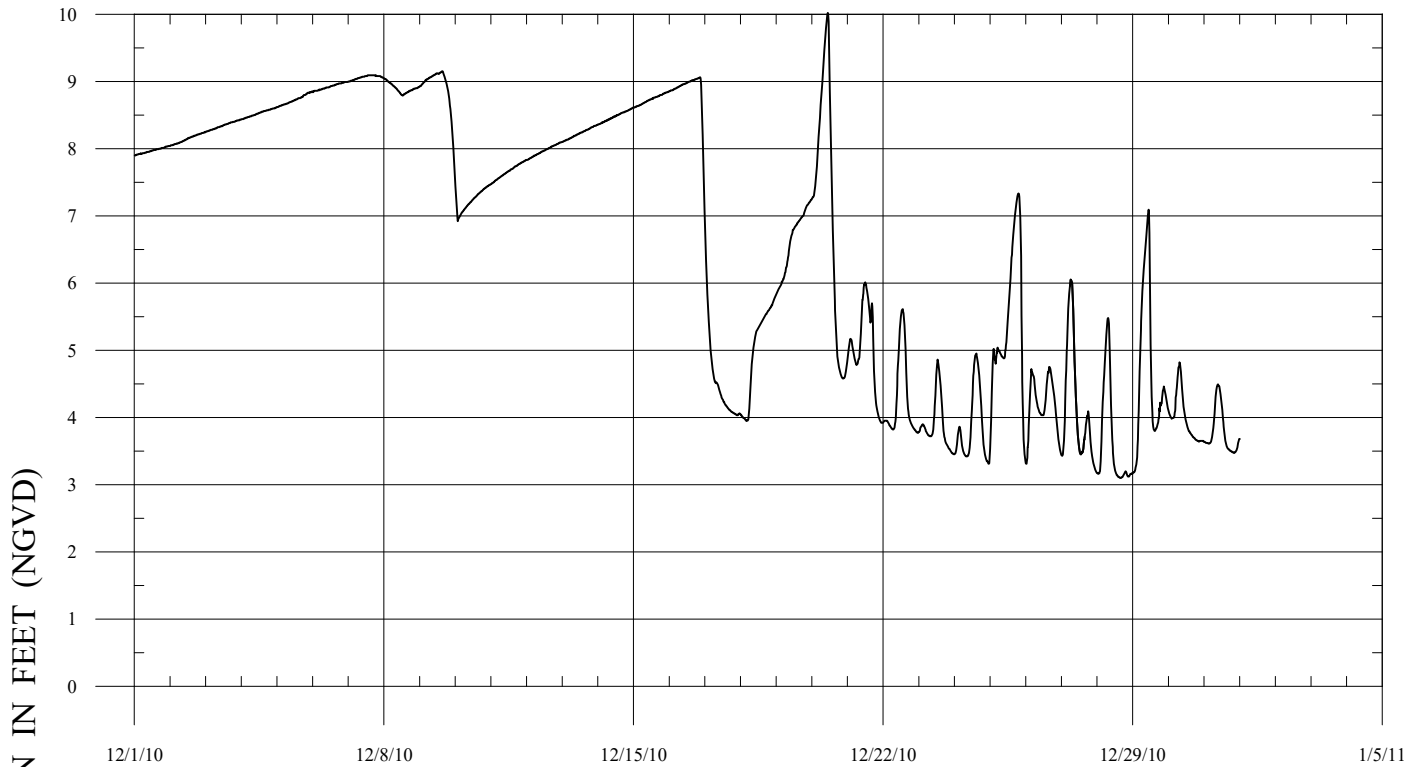
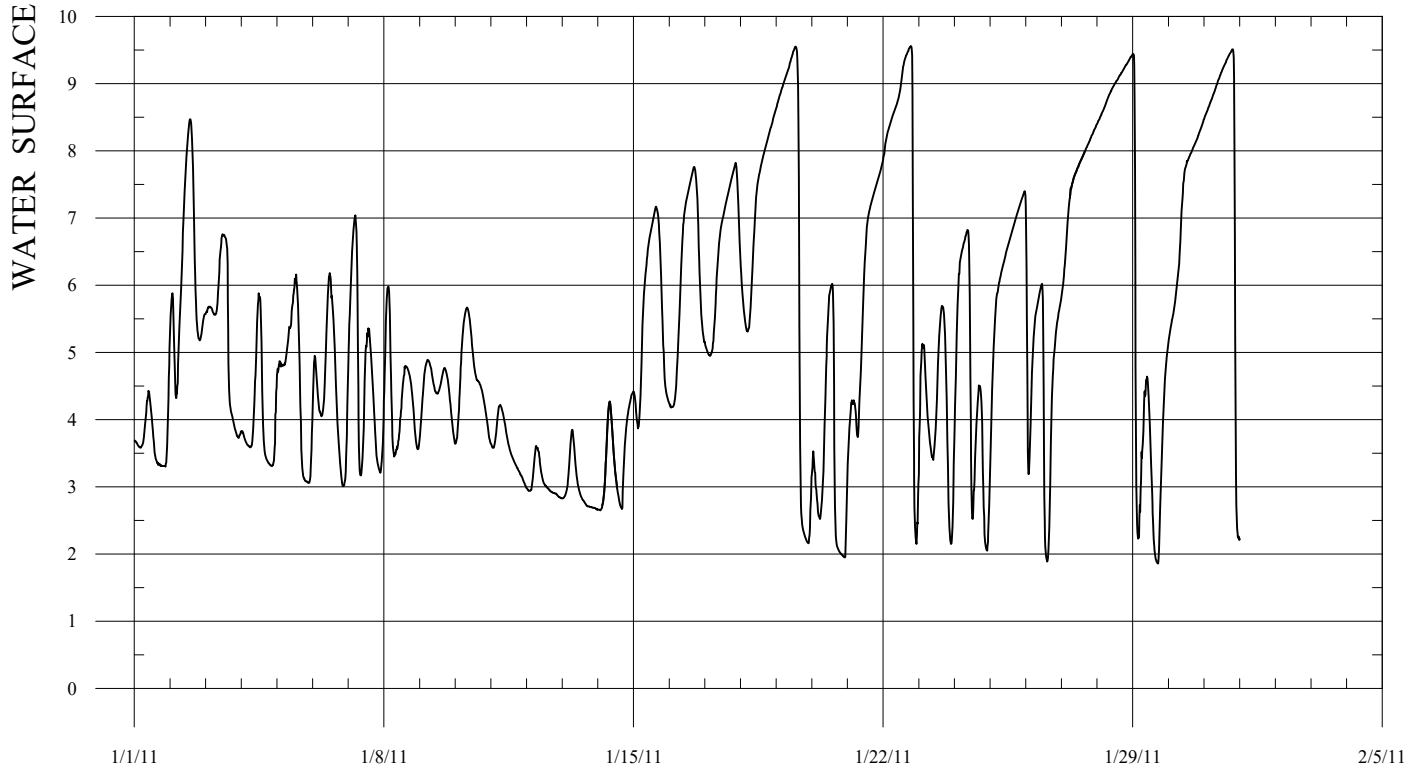
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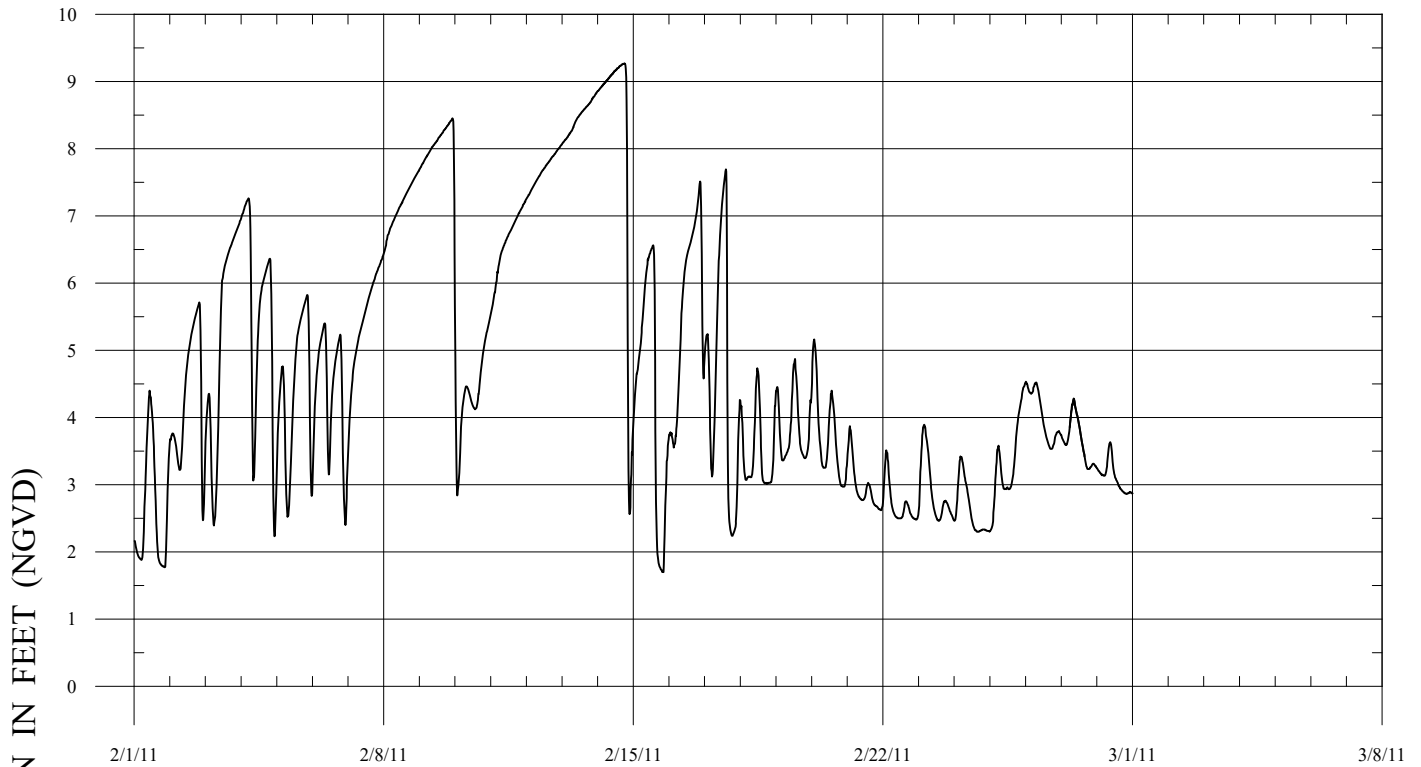
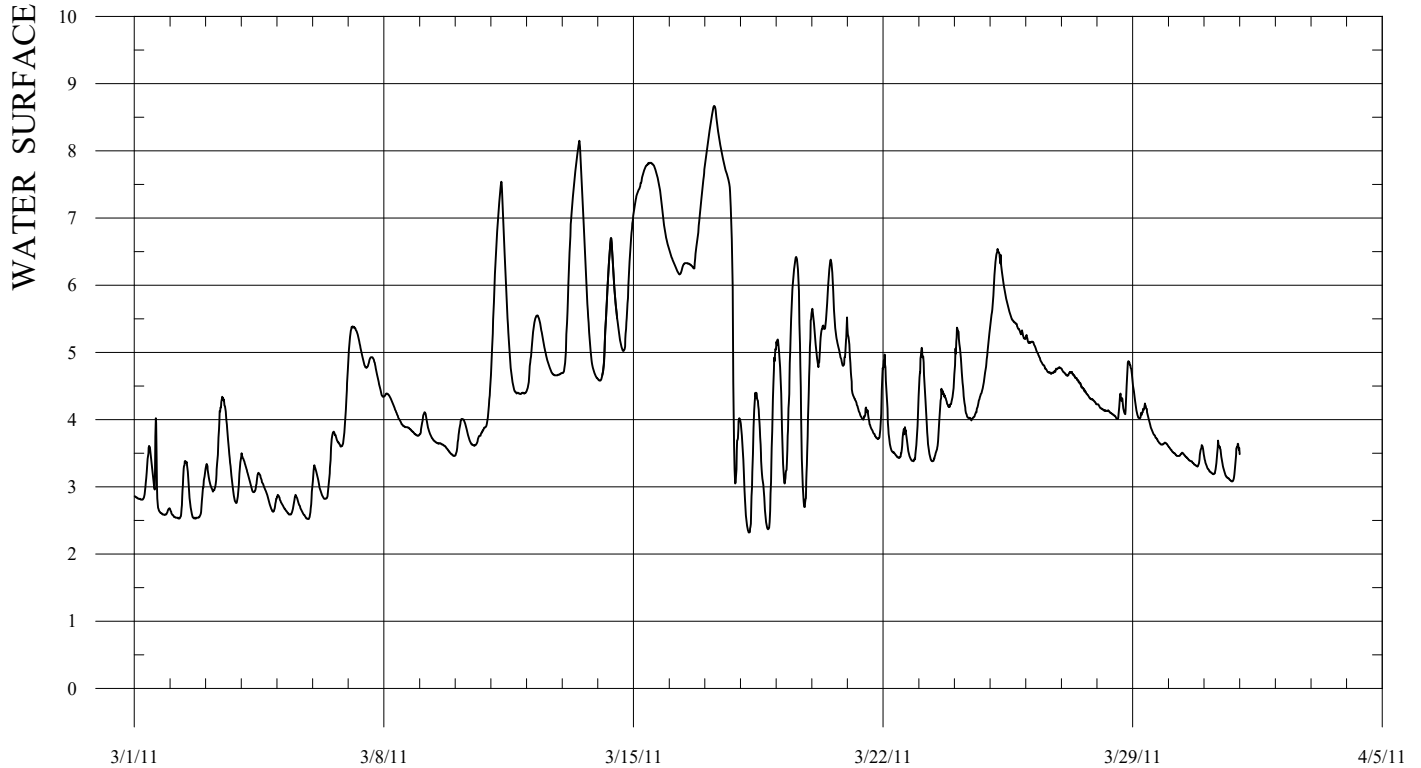
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CARMEL RIVER LAGOON**JUNE 2010****JULY 2010**

CARMEL RIVER LAGOON**AUGUST 2010****SEPTEMBER 2010**

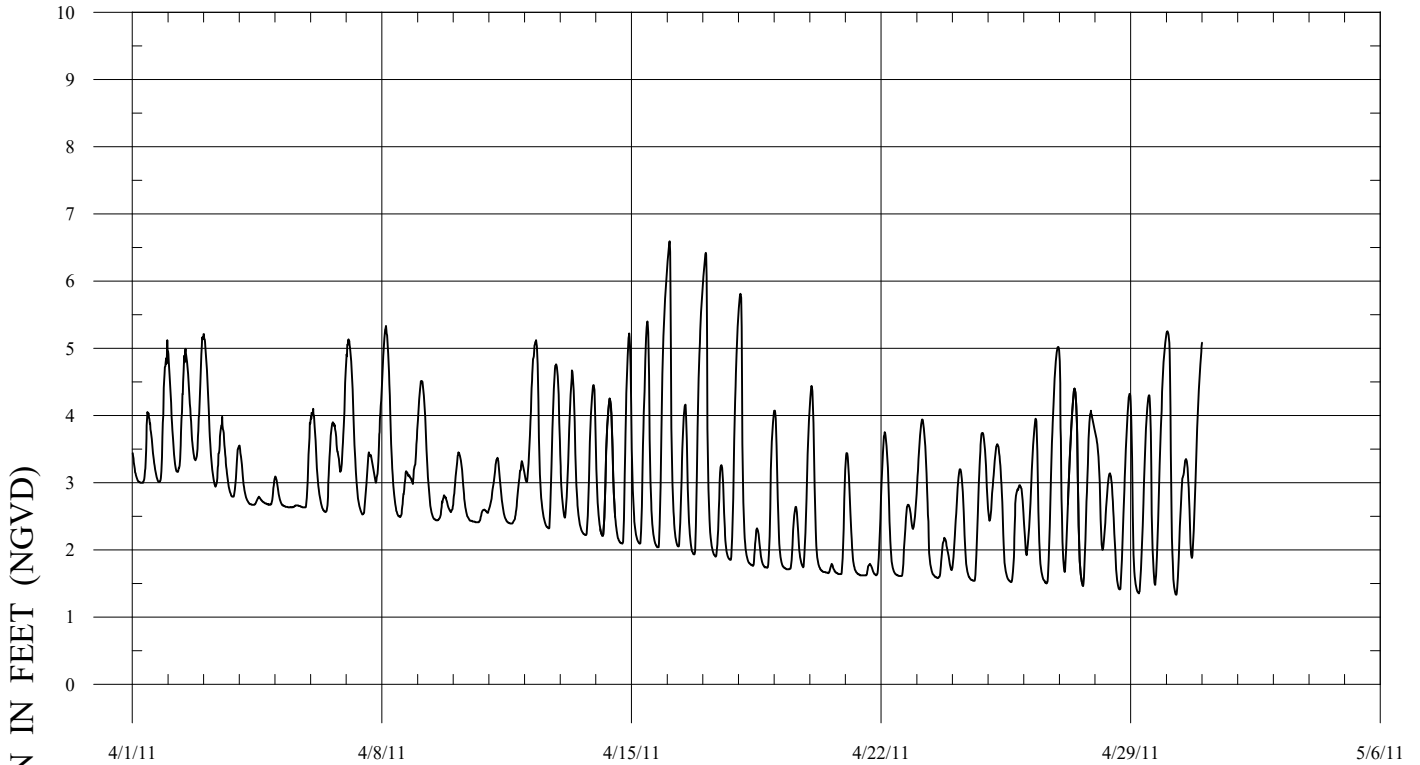
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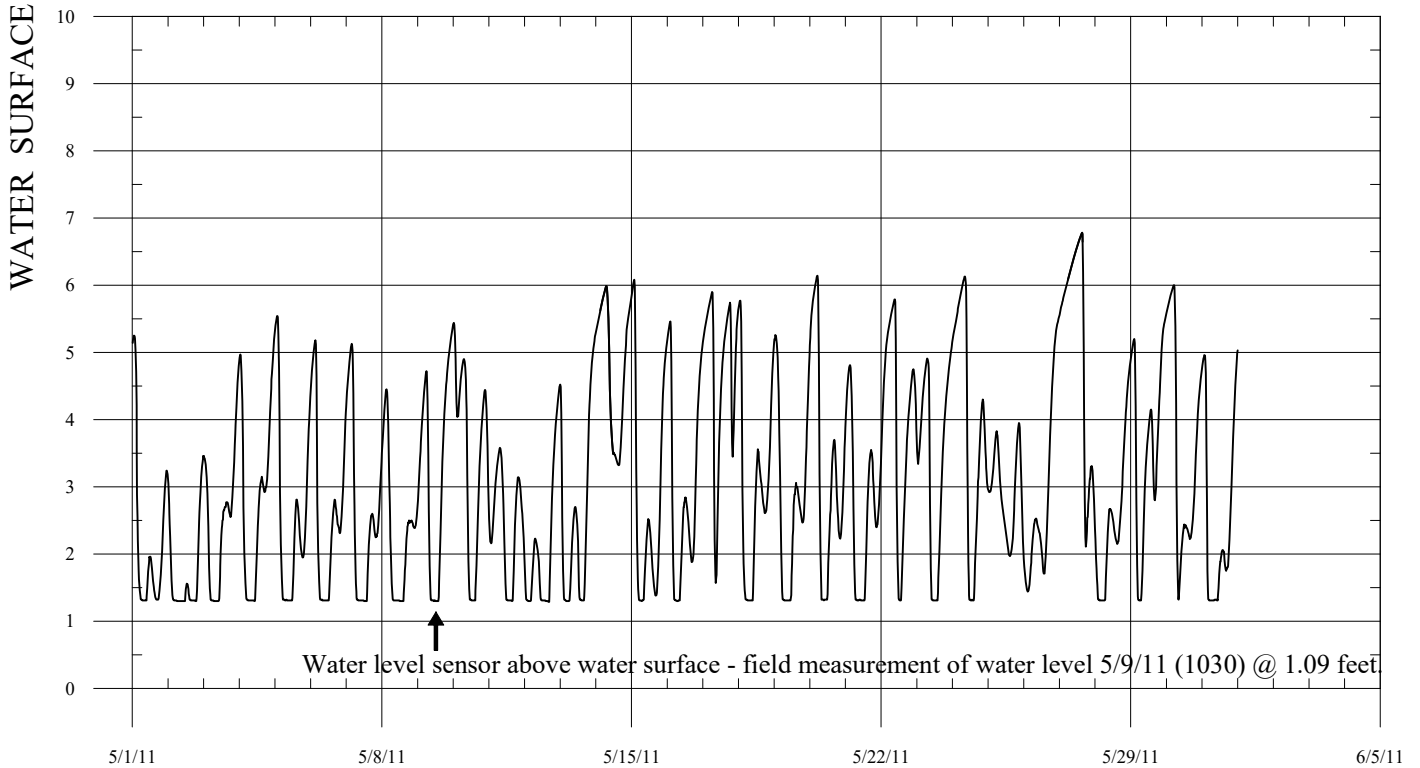
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CARMEL RIVER LAGOON

APRIL 2011

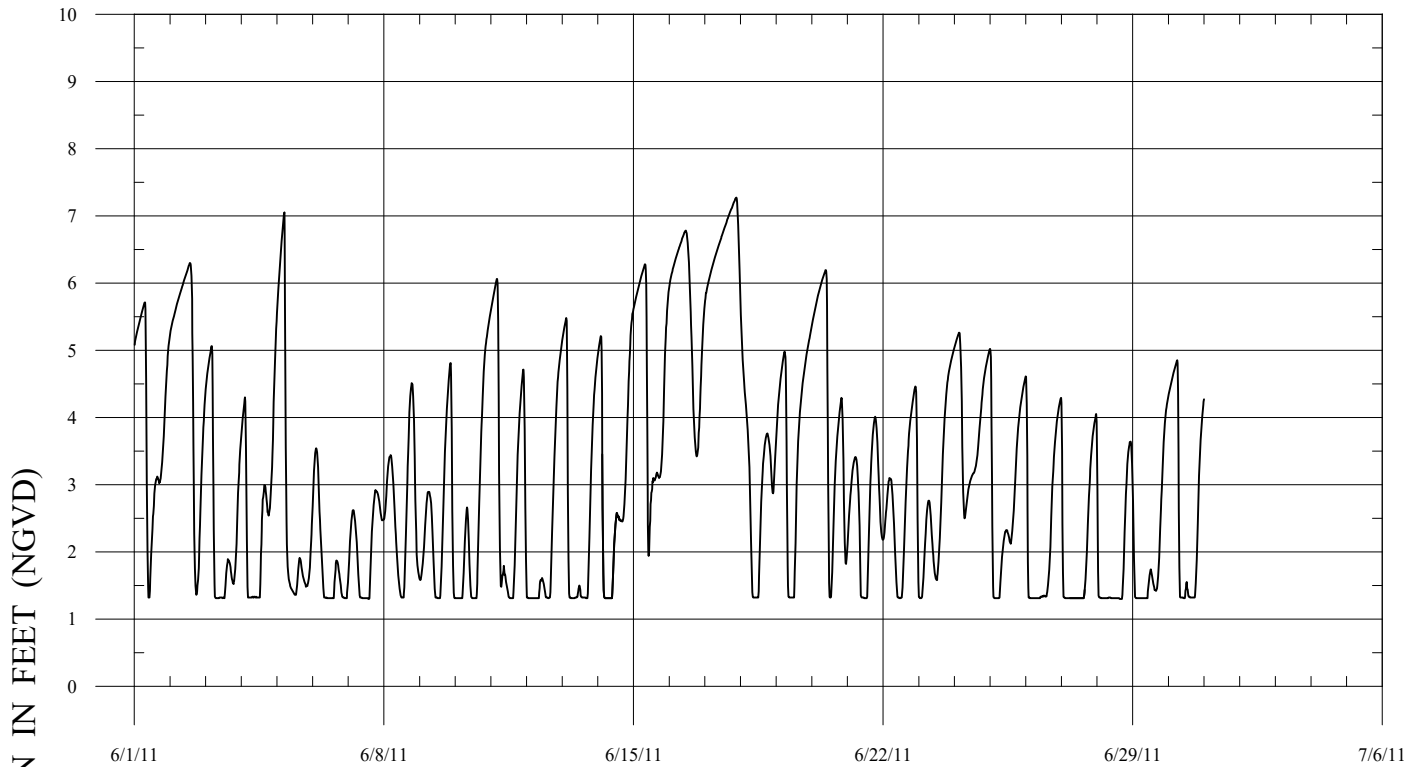


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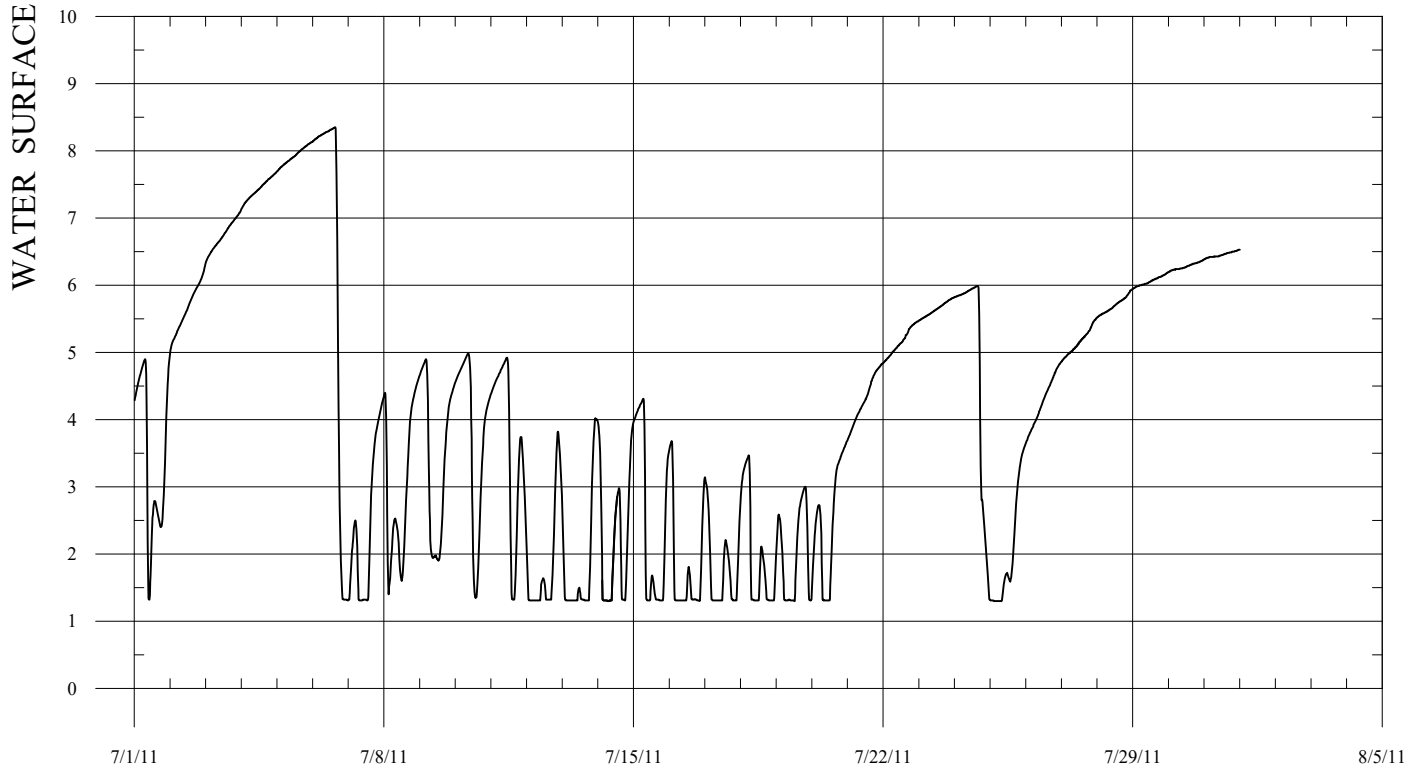


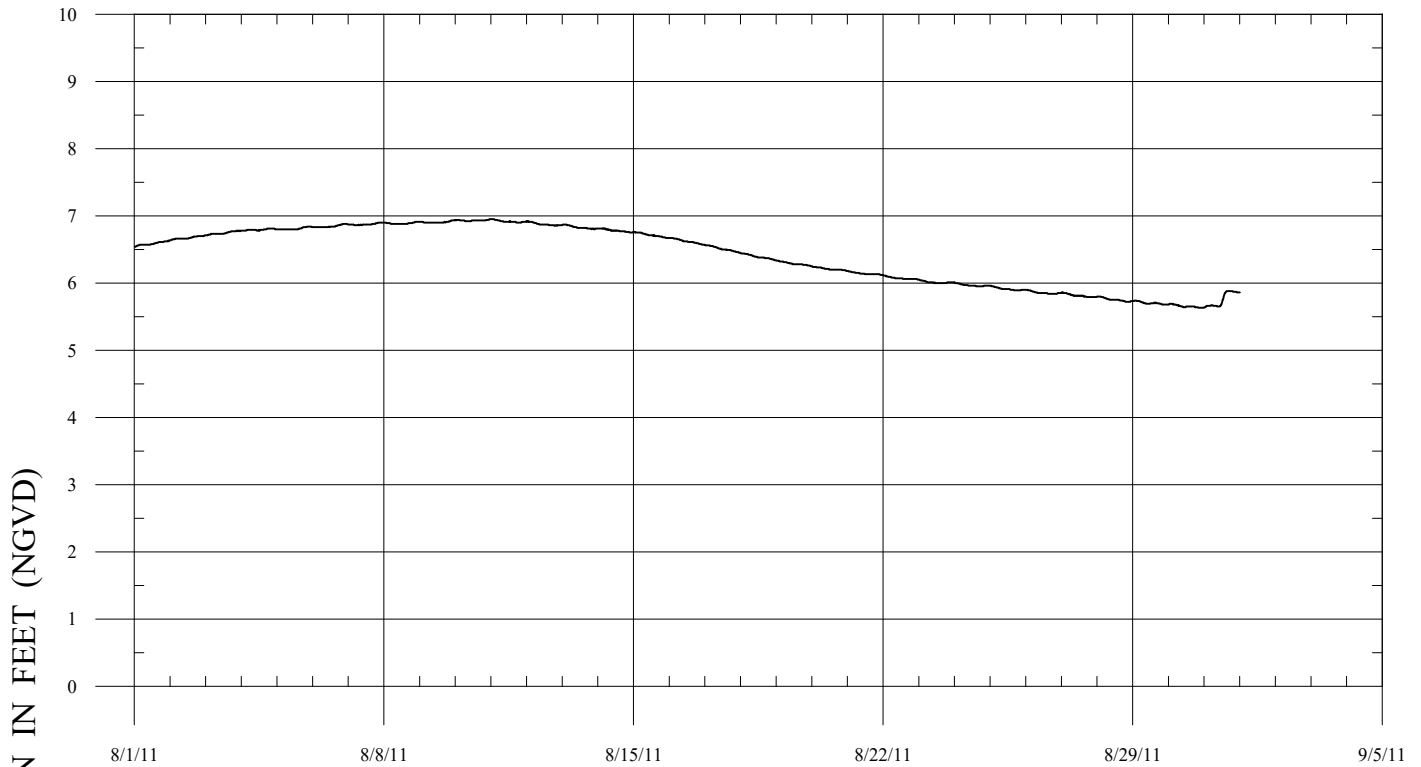
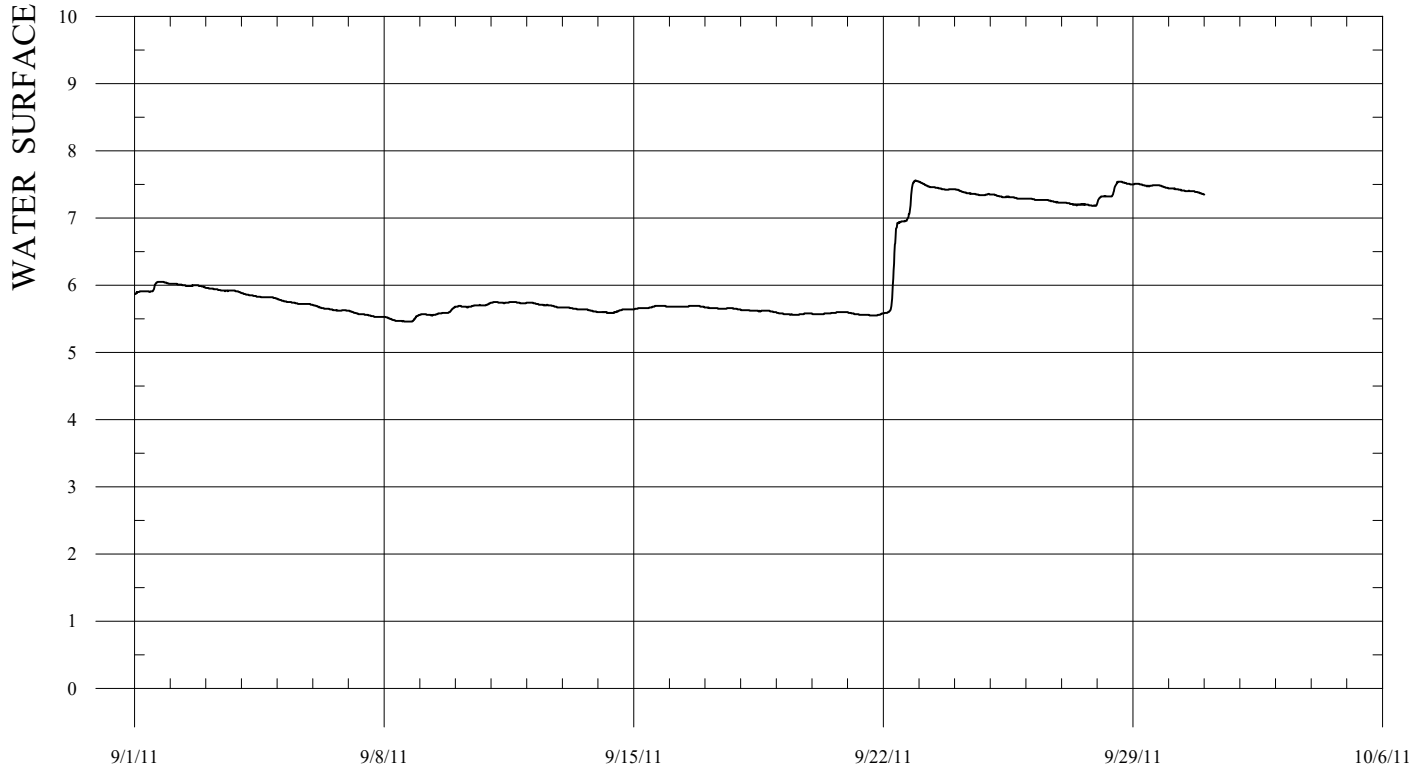
CARMEL RIVER LAGOON

JUNE 2011



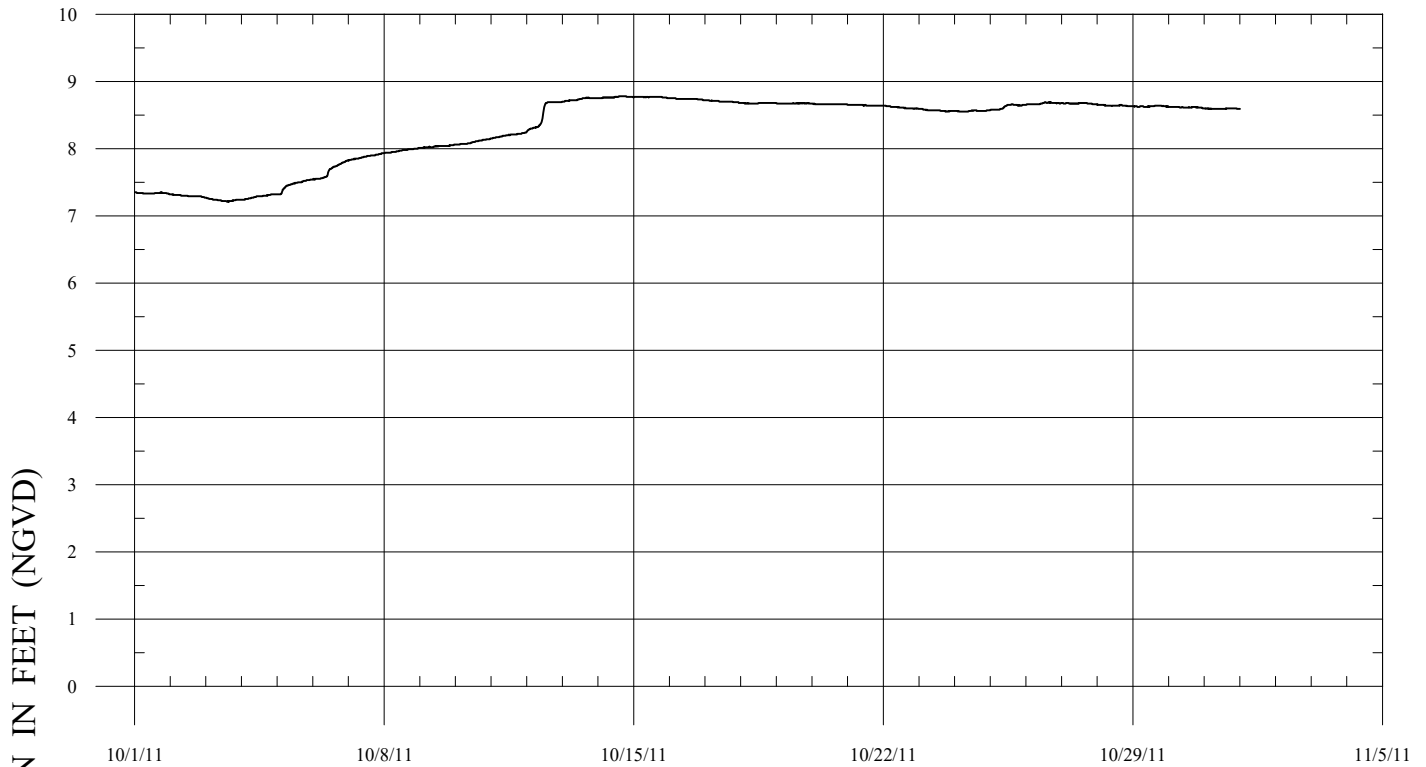
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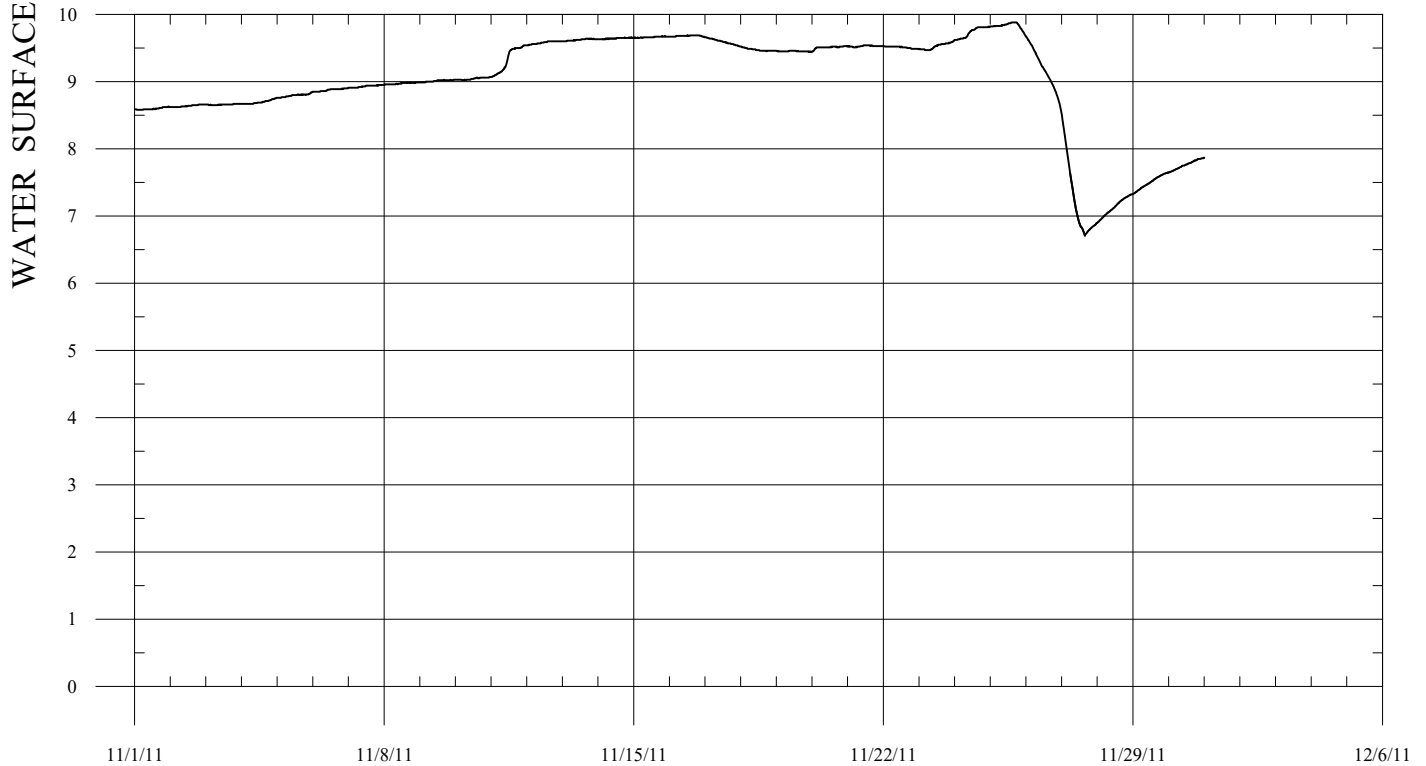
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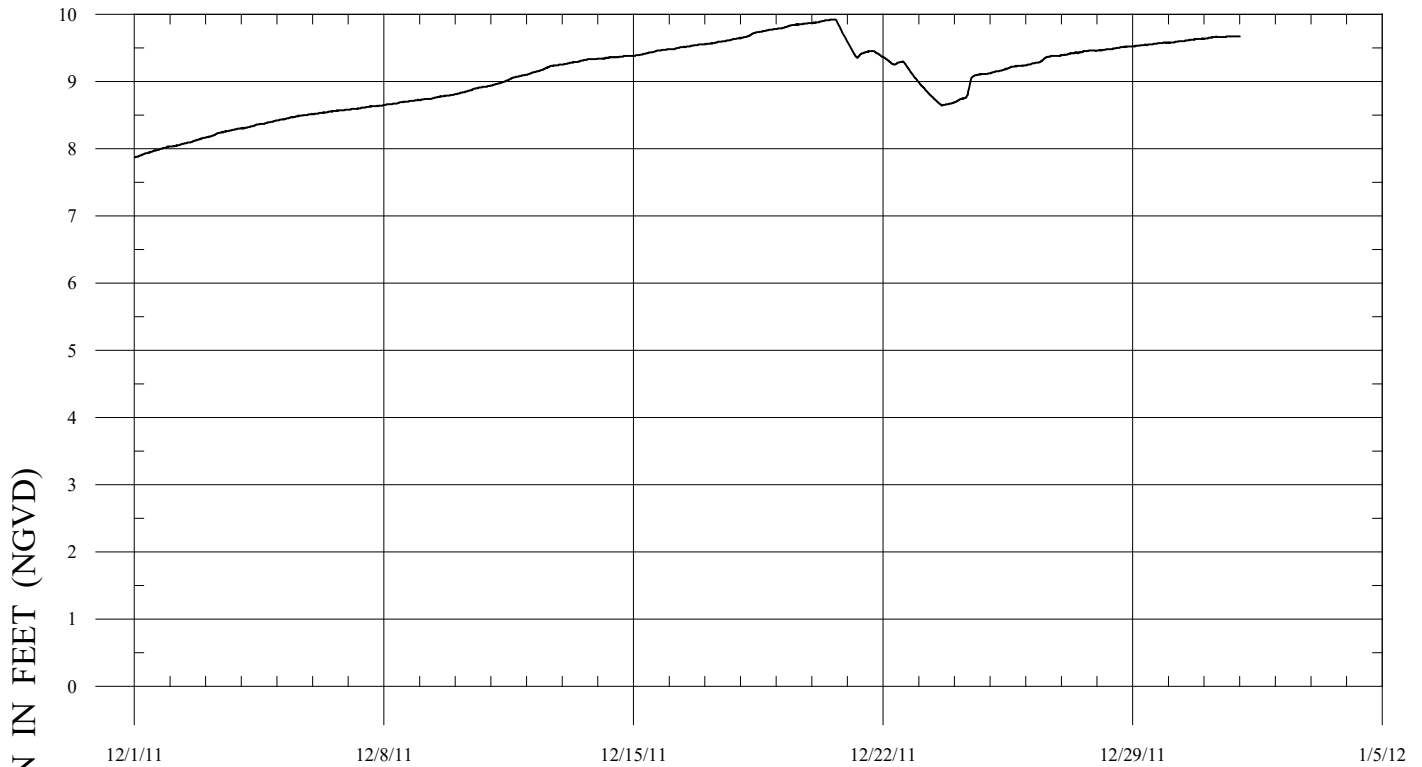
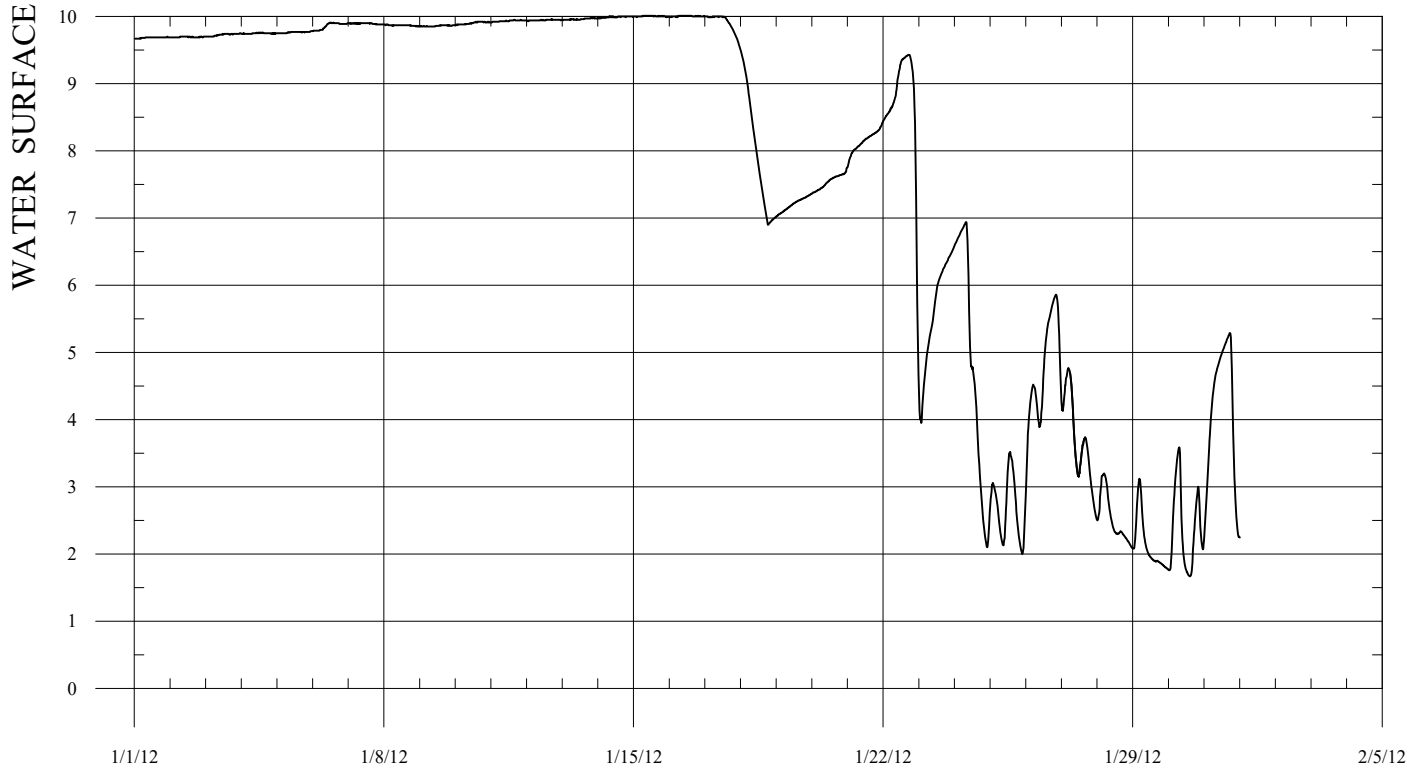
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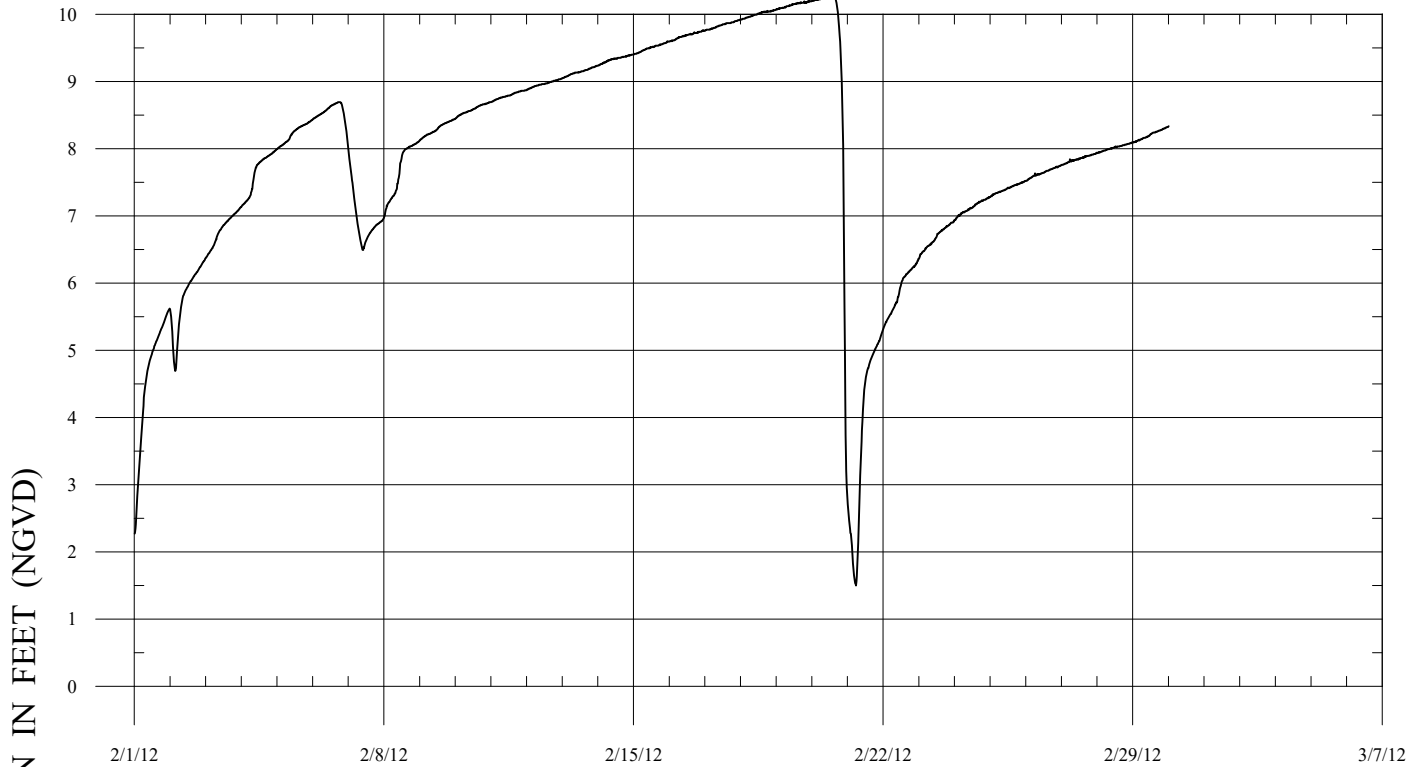
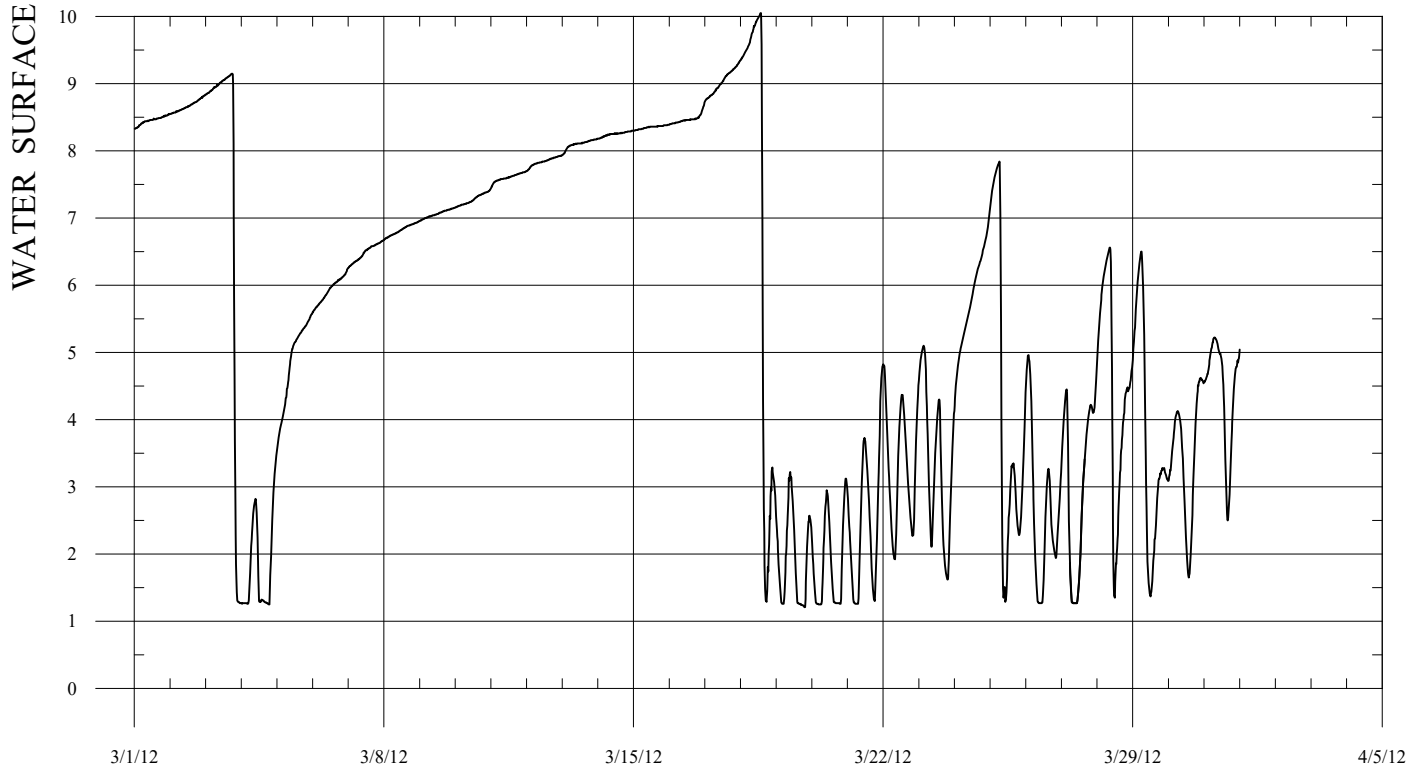
OCTOBER 2011



NOVEMBER 2011

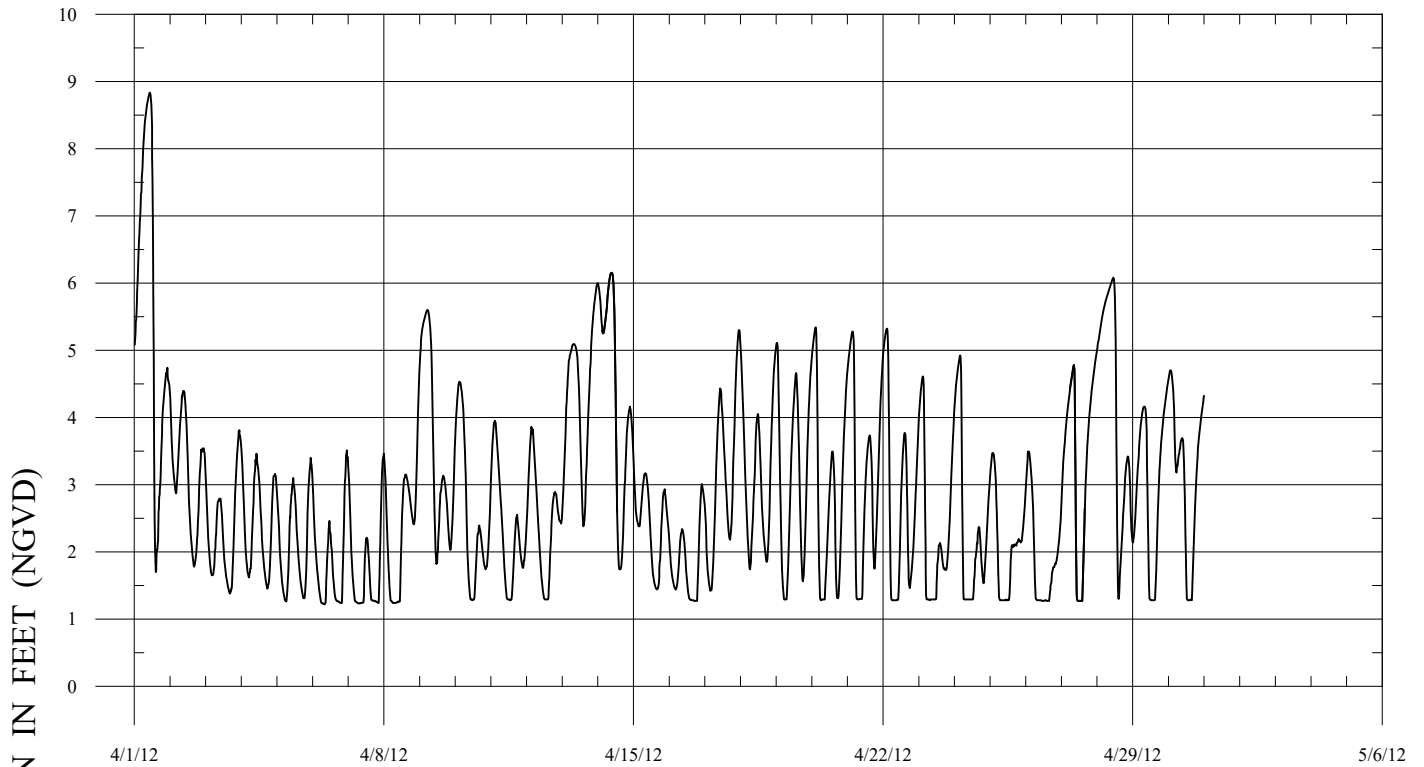


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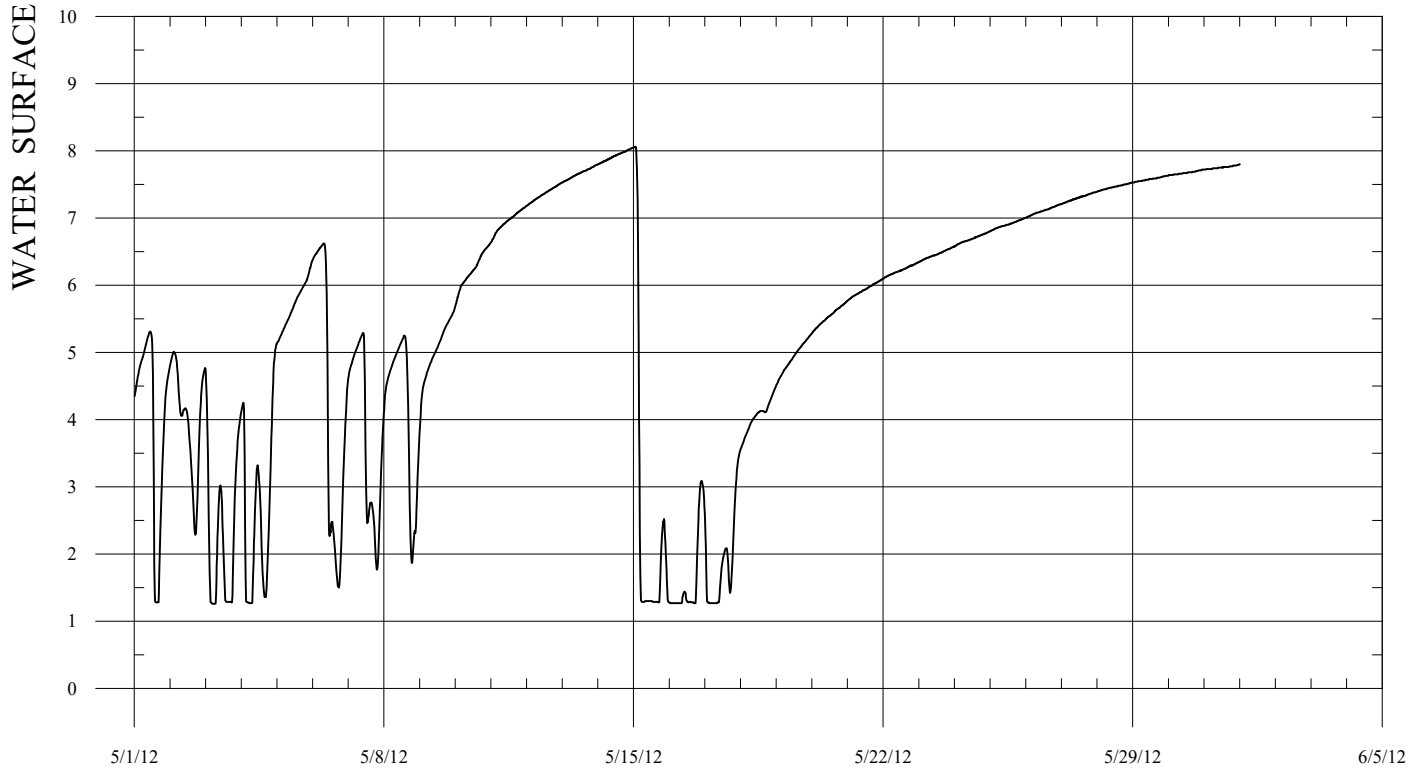
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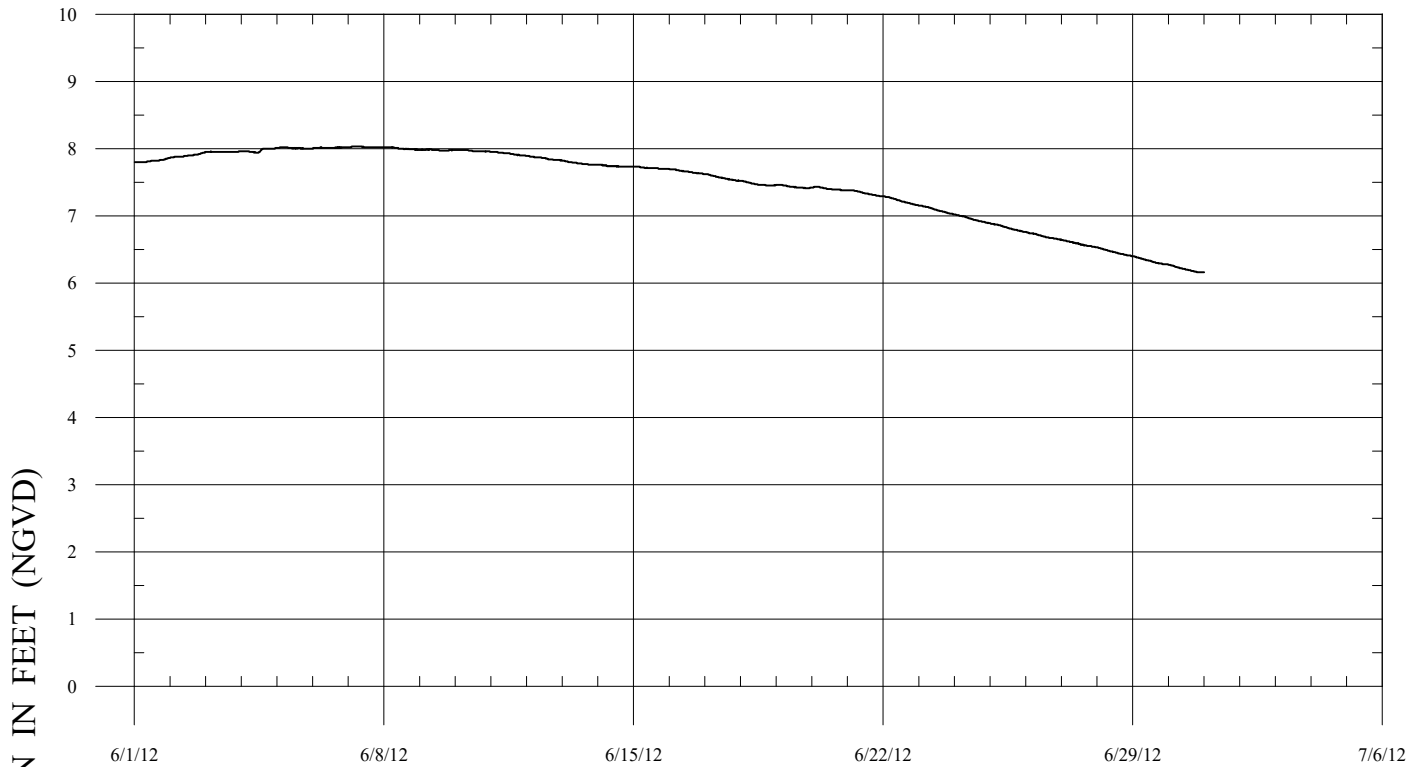
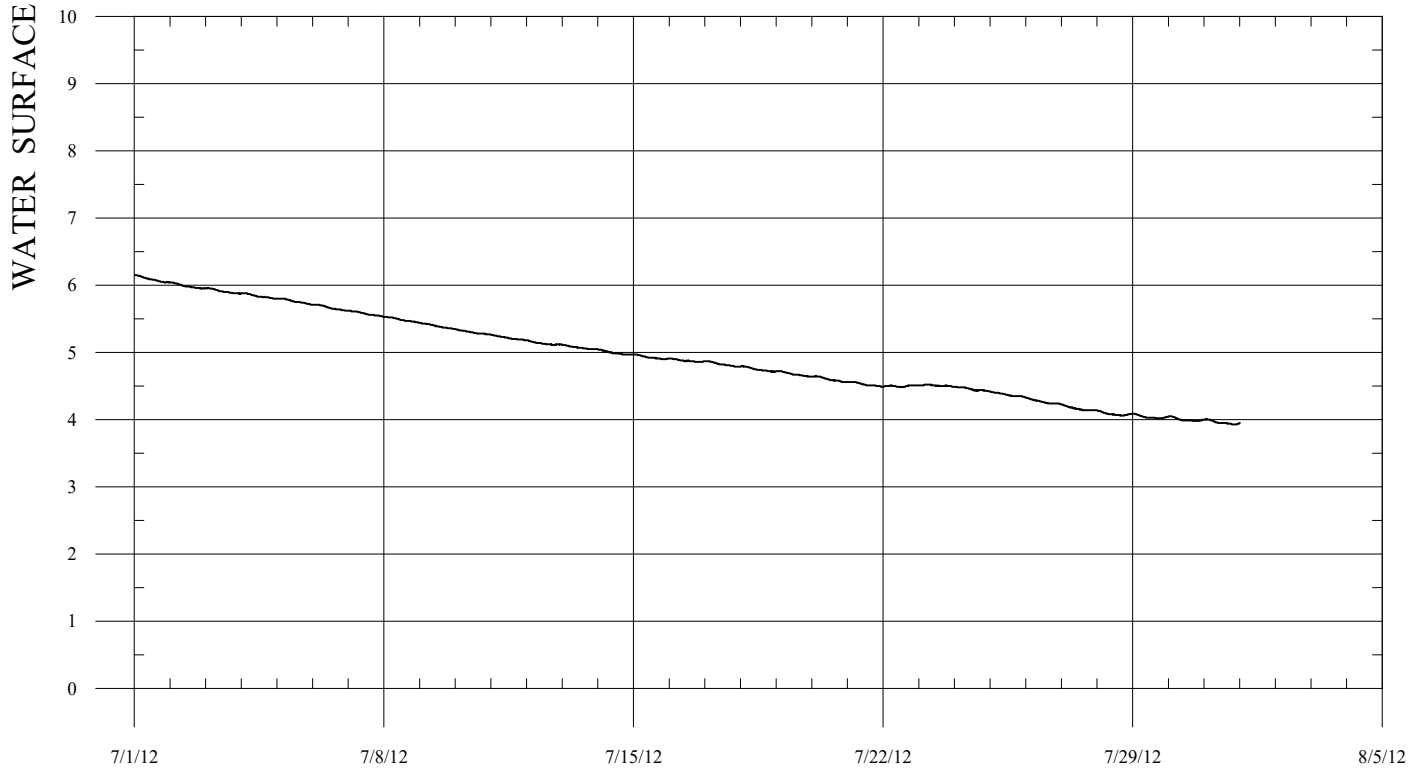
CARMEL RIVER LAGOON

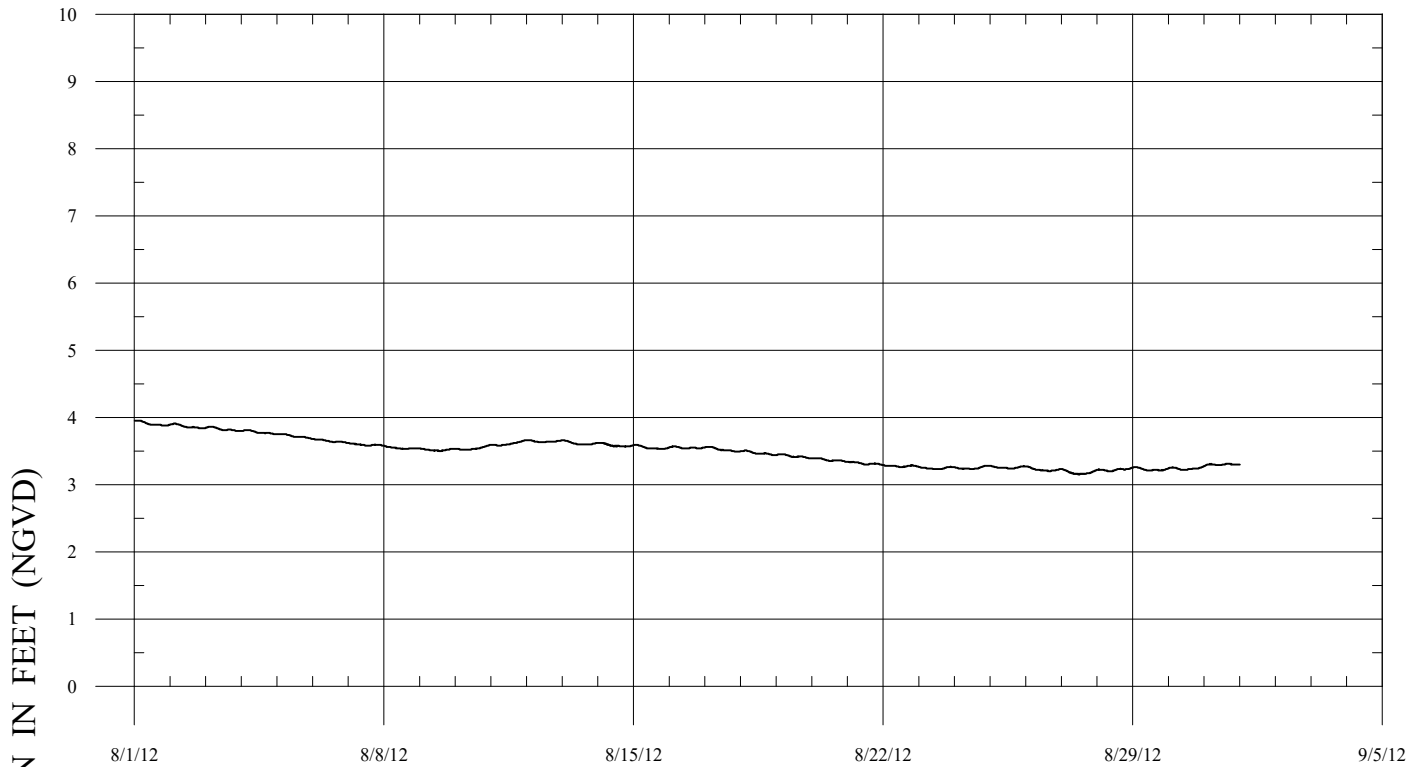
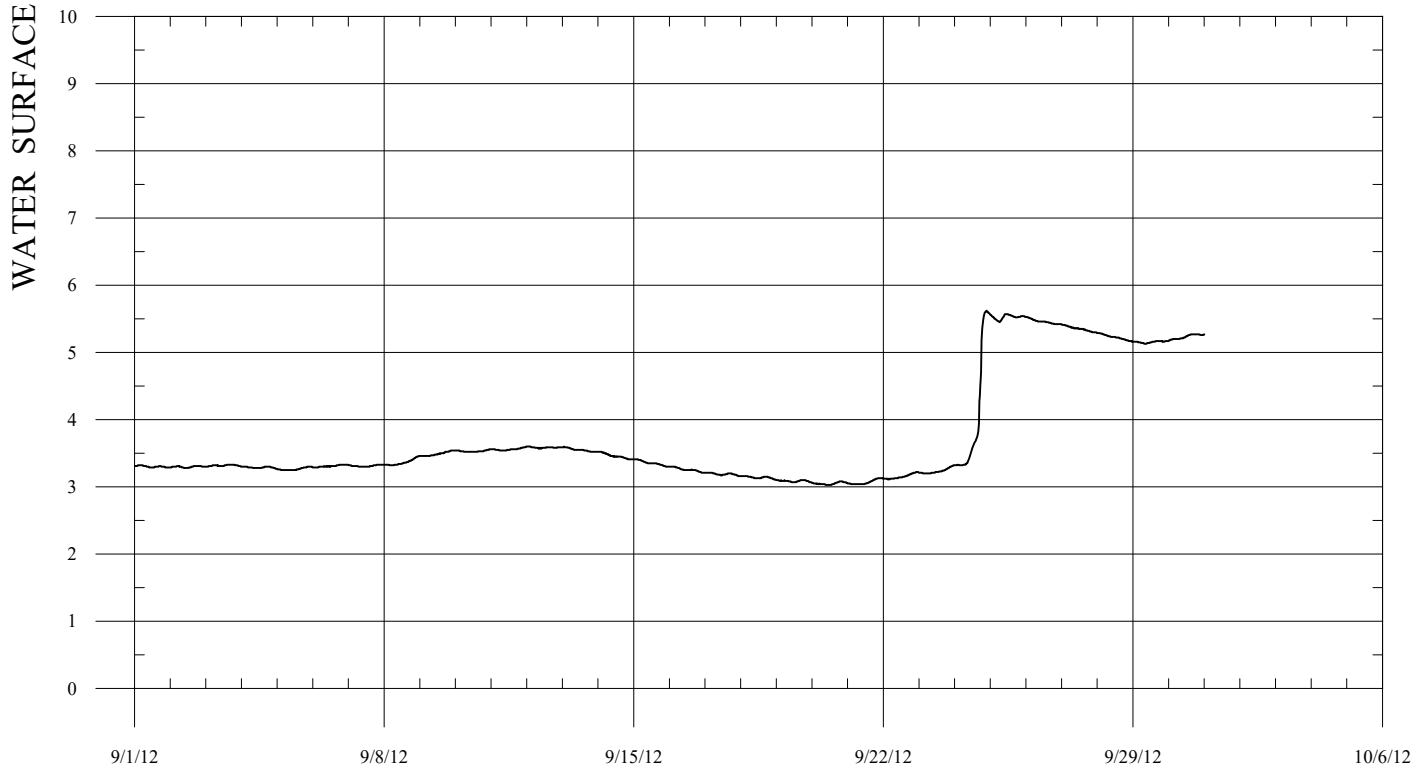
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MAY 2012

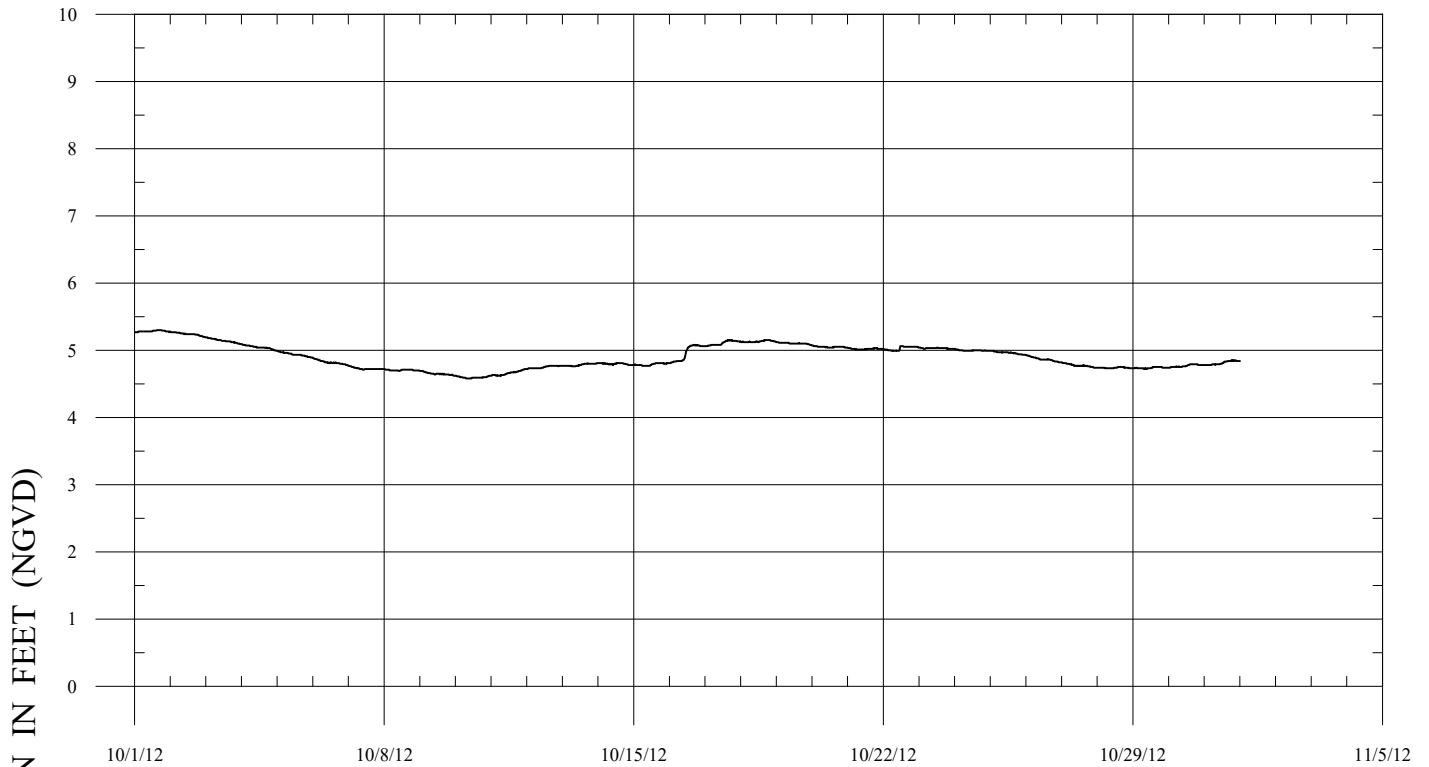


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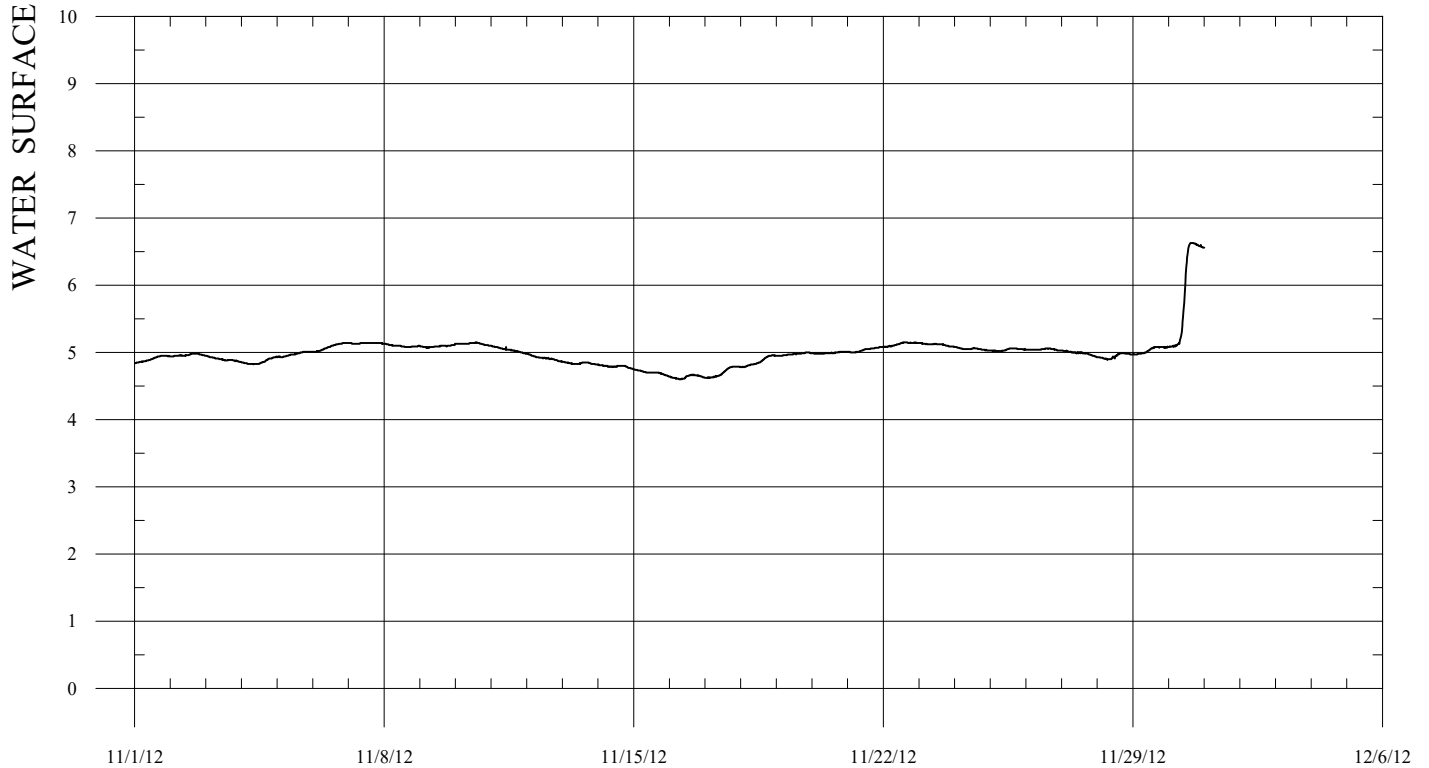
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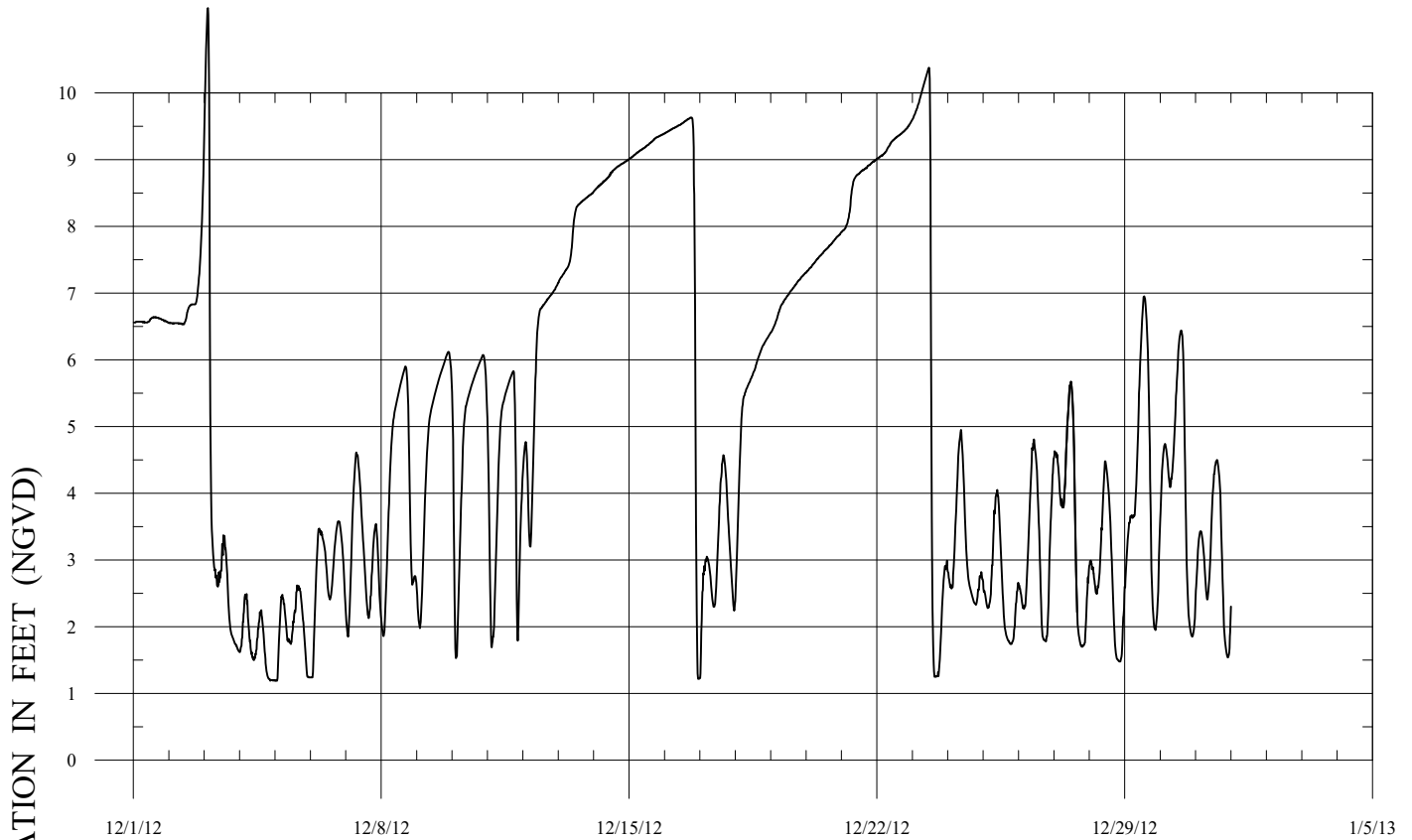
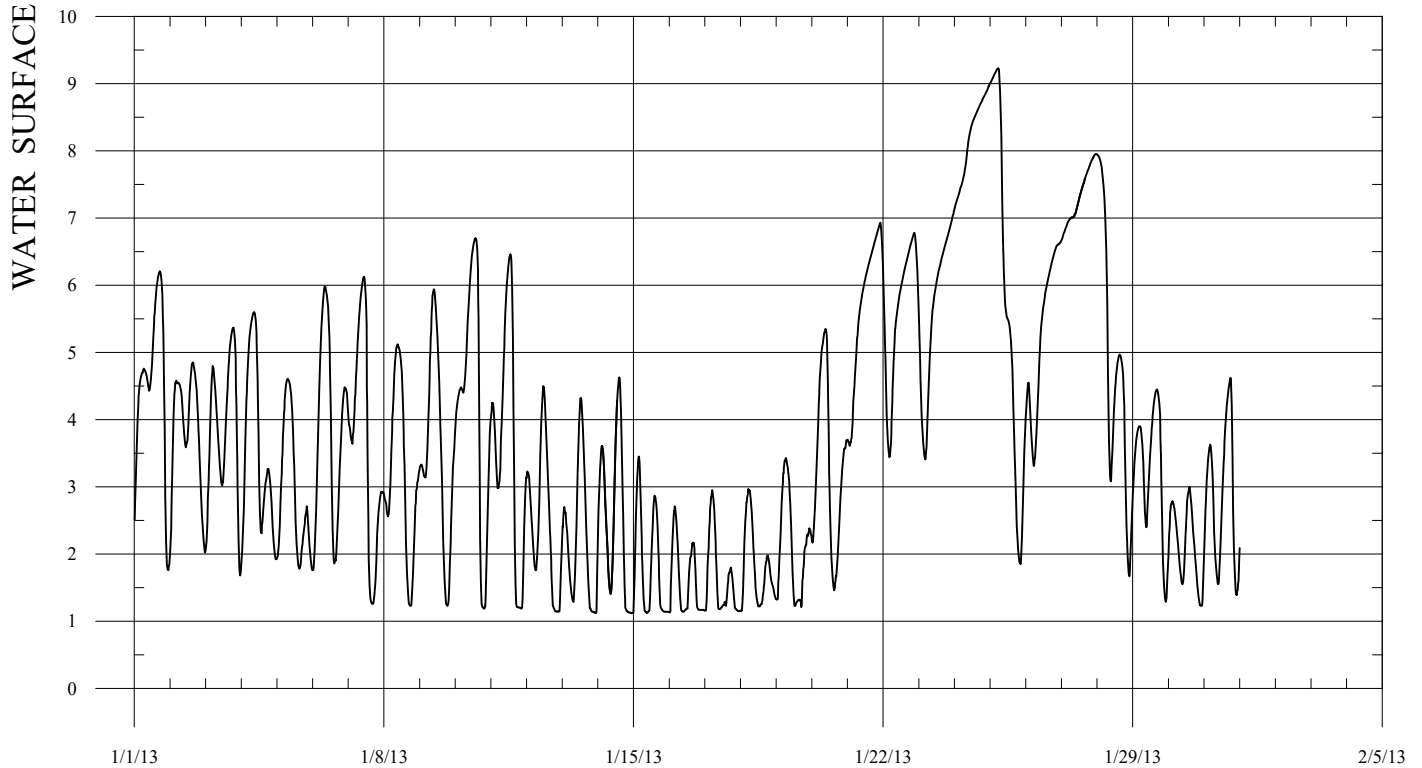
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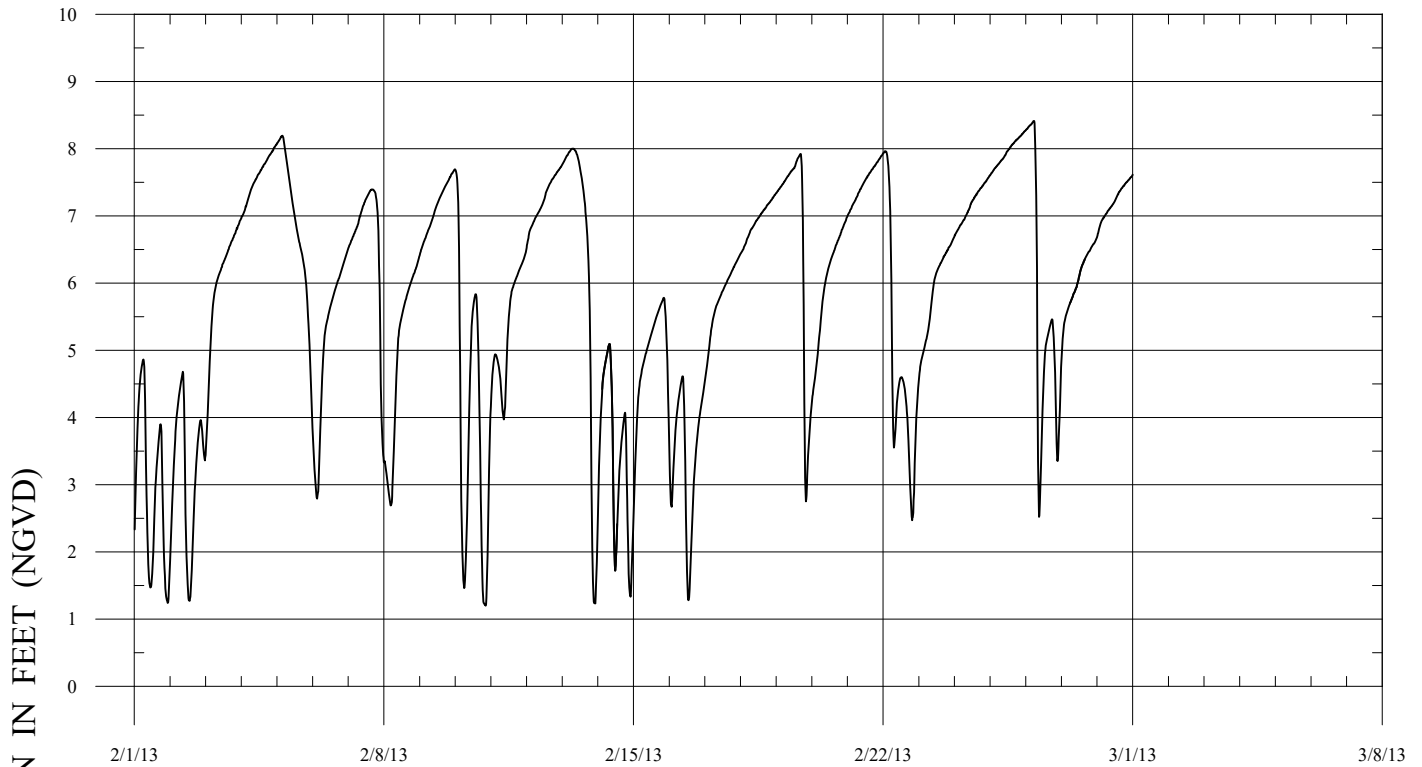
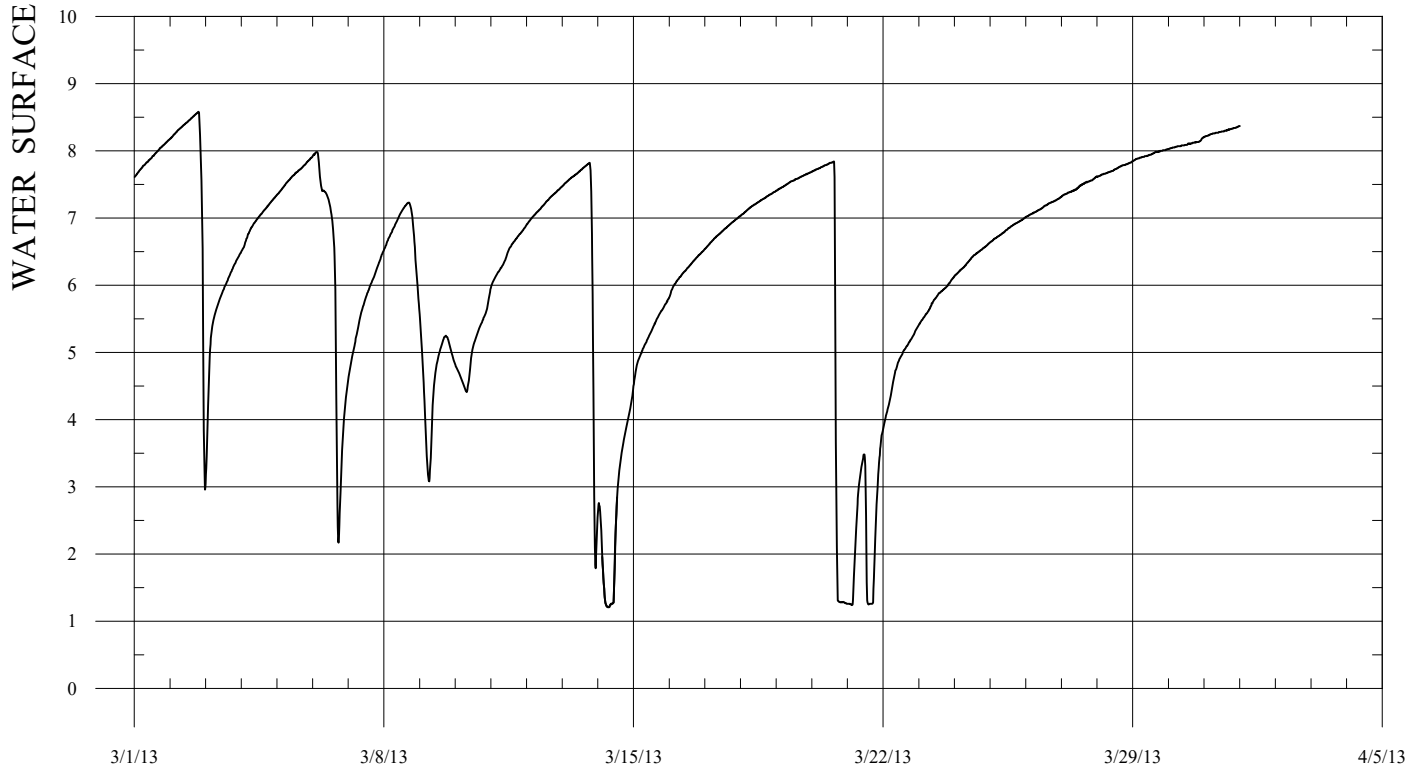
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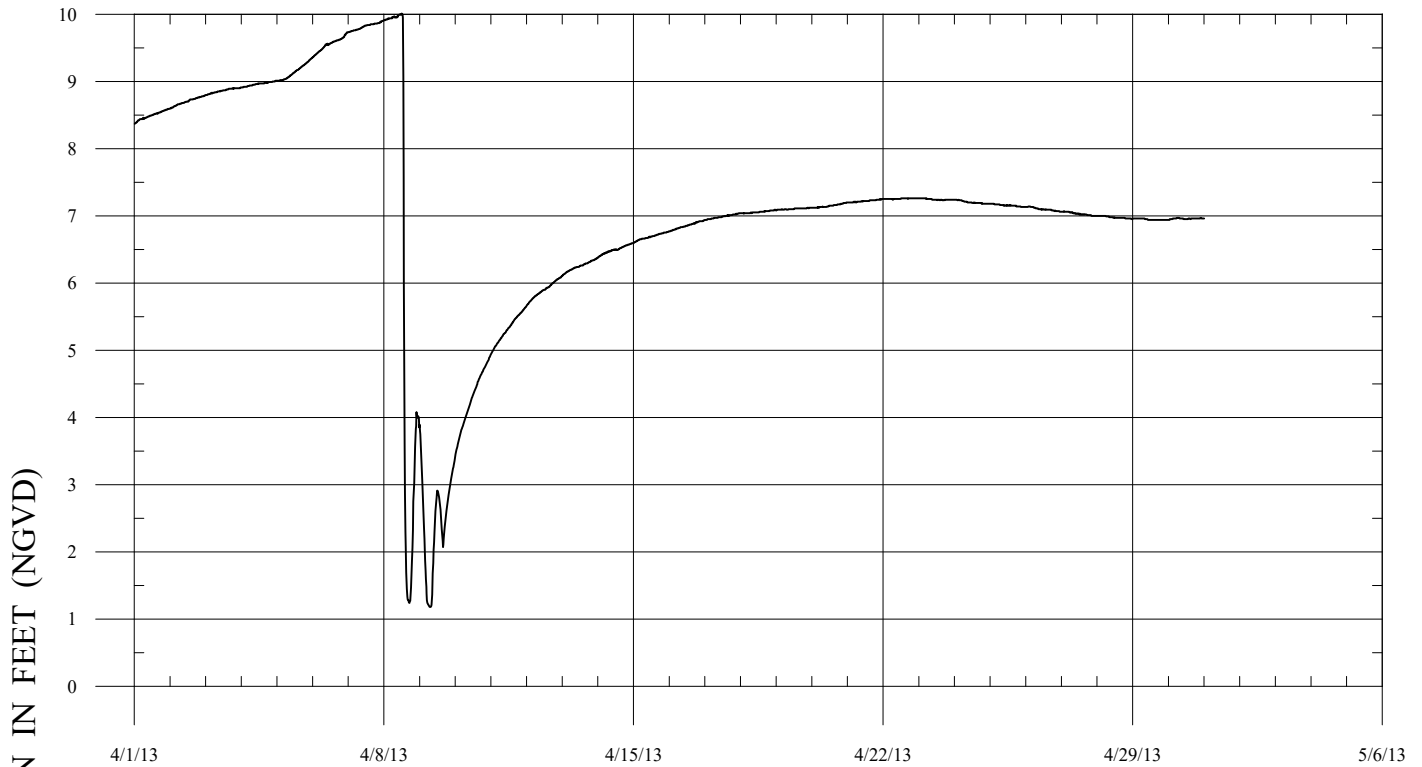
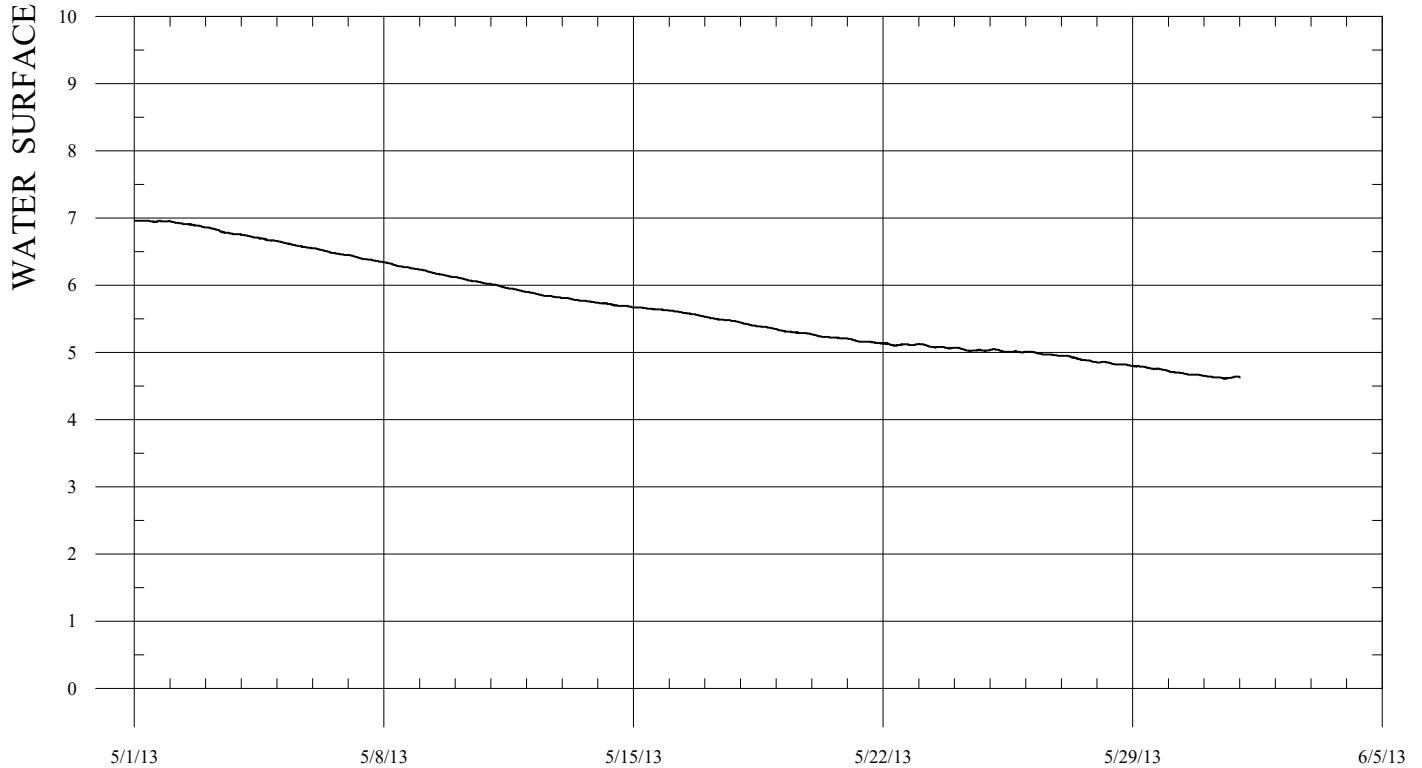


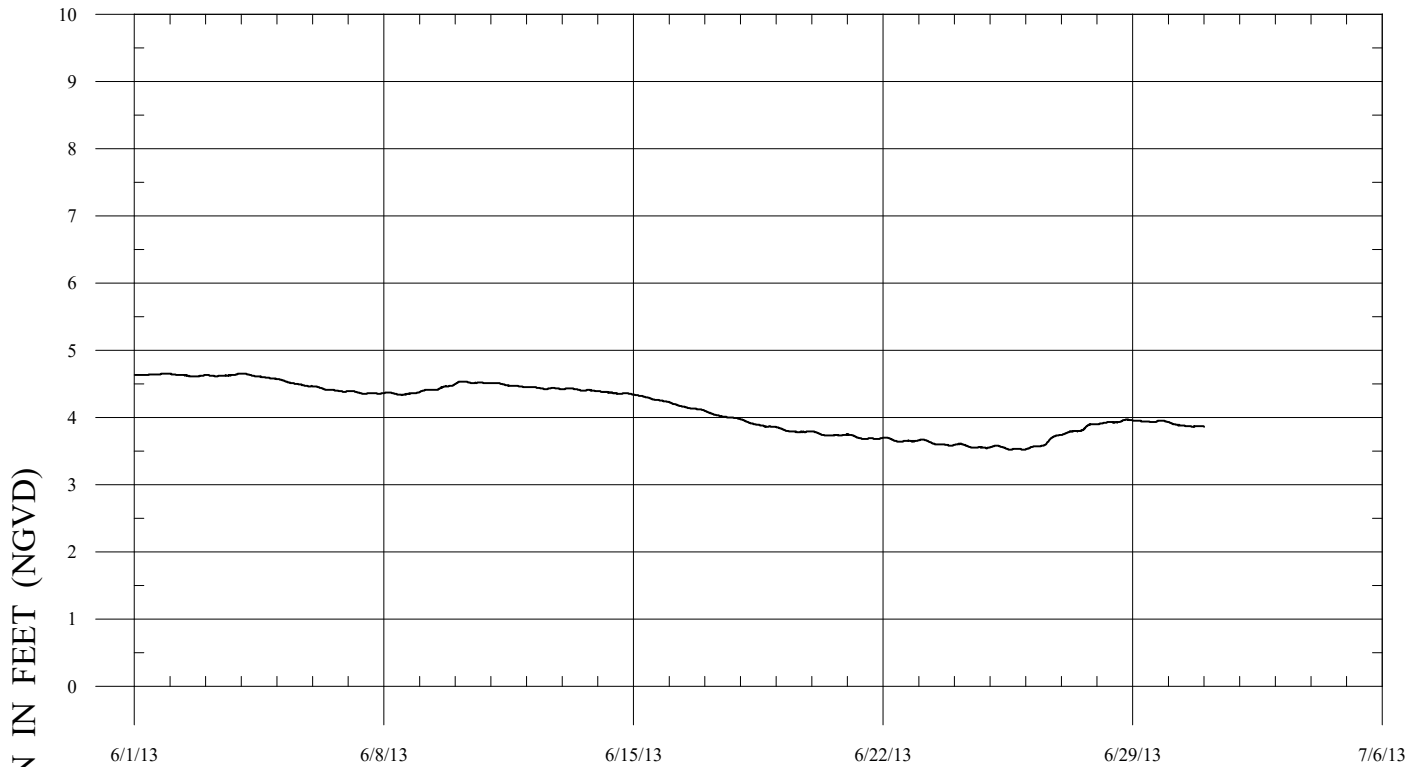
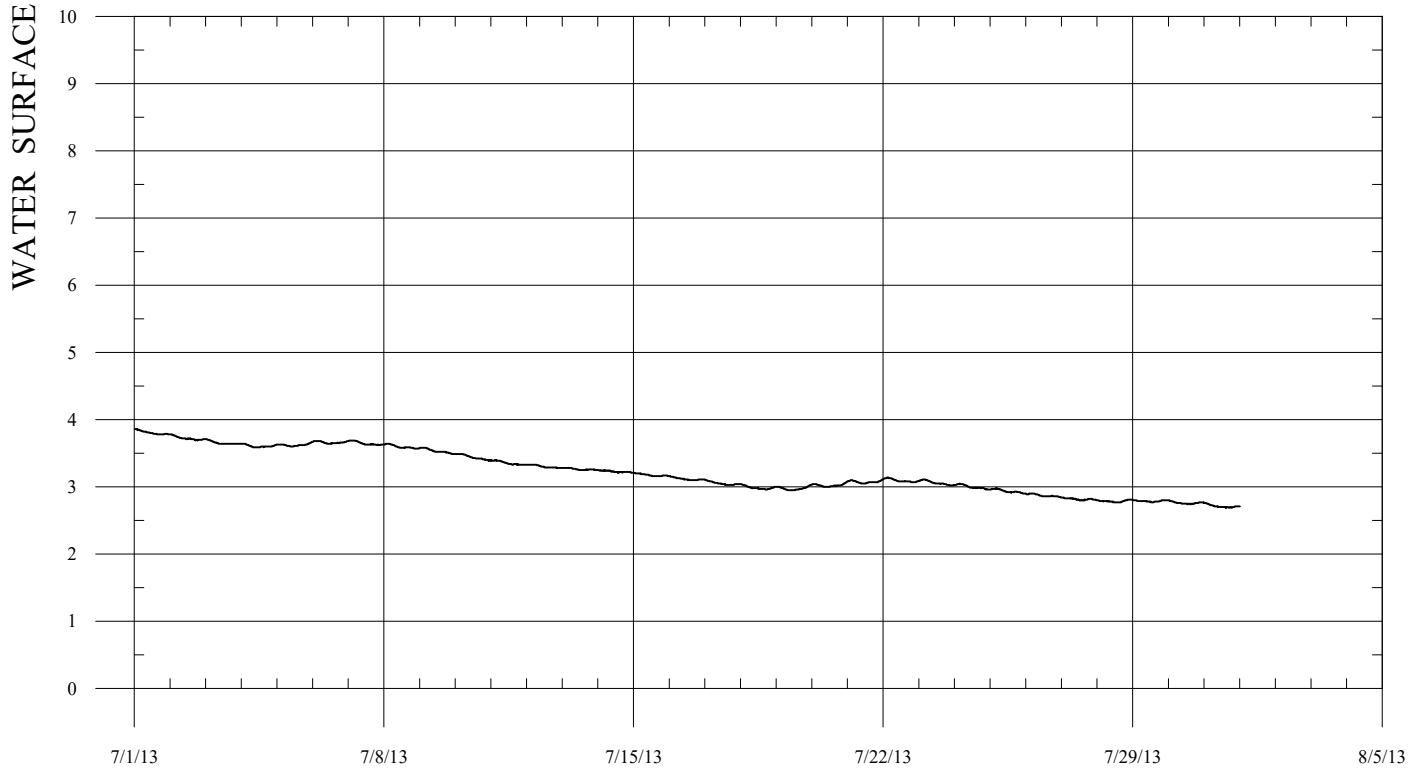
NOVEMBER 2012



CARMEL RIVER LAGOON**DECEMBER 2012****JANUARY 2013**

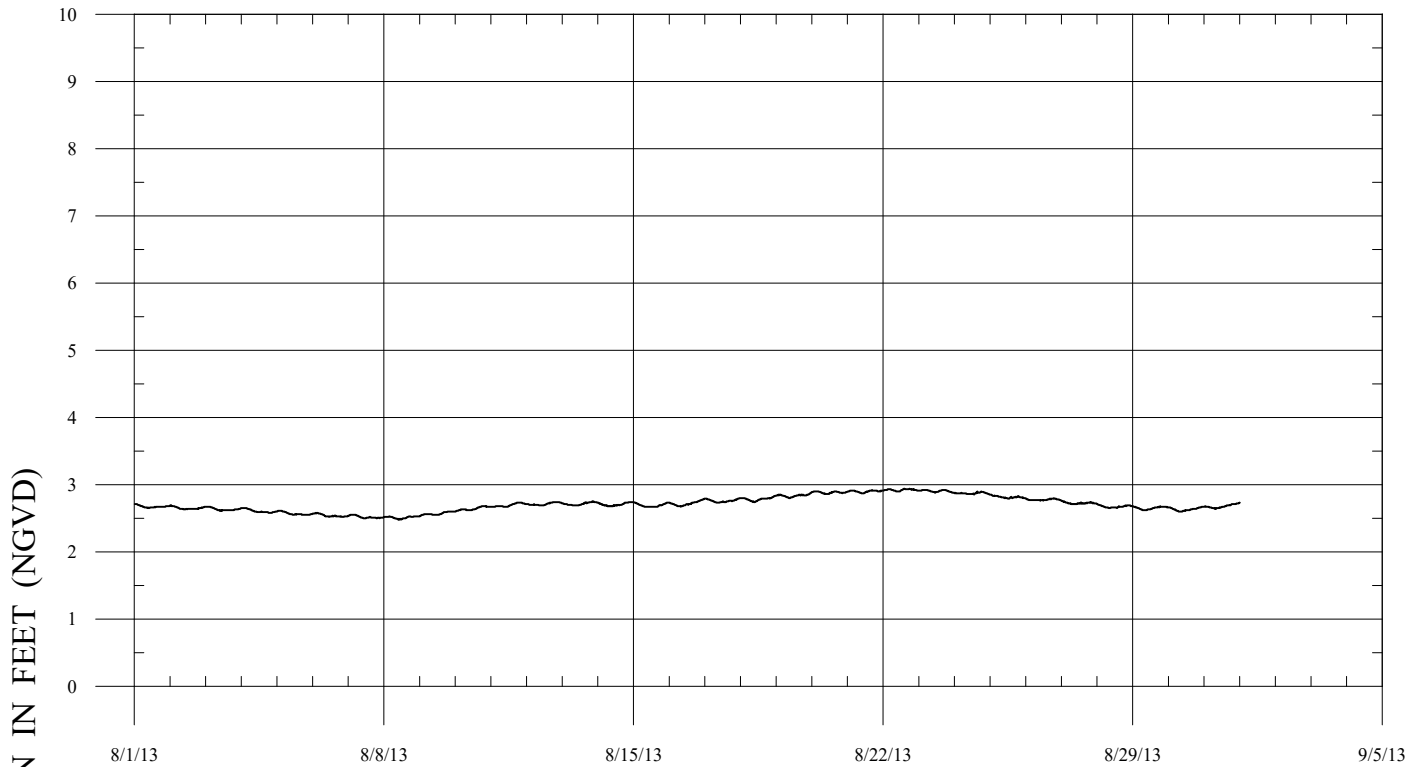
CARMEL RIVER LAGOON**FEBRUARY 2013****MARCH 2013**

CARMEL RIVER LAGOON**APRIL 2013****MAY 2013**

CARMEL RIVER LAGOON**JUNE 2013****JULY 2013**

CARMEL RIVER LAGOON

AUGUST 2013



SEPTEMBER 2013

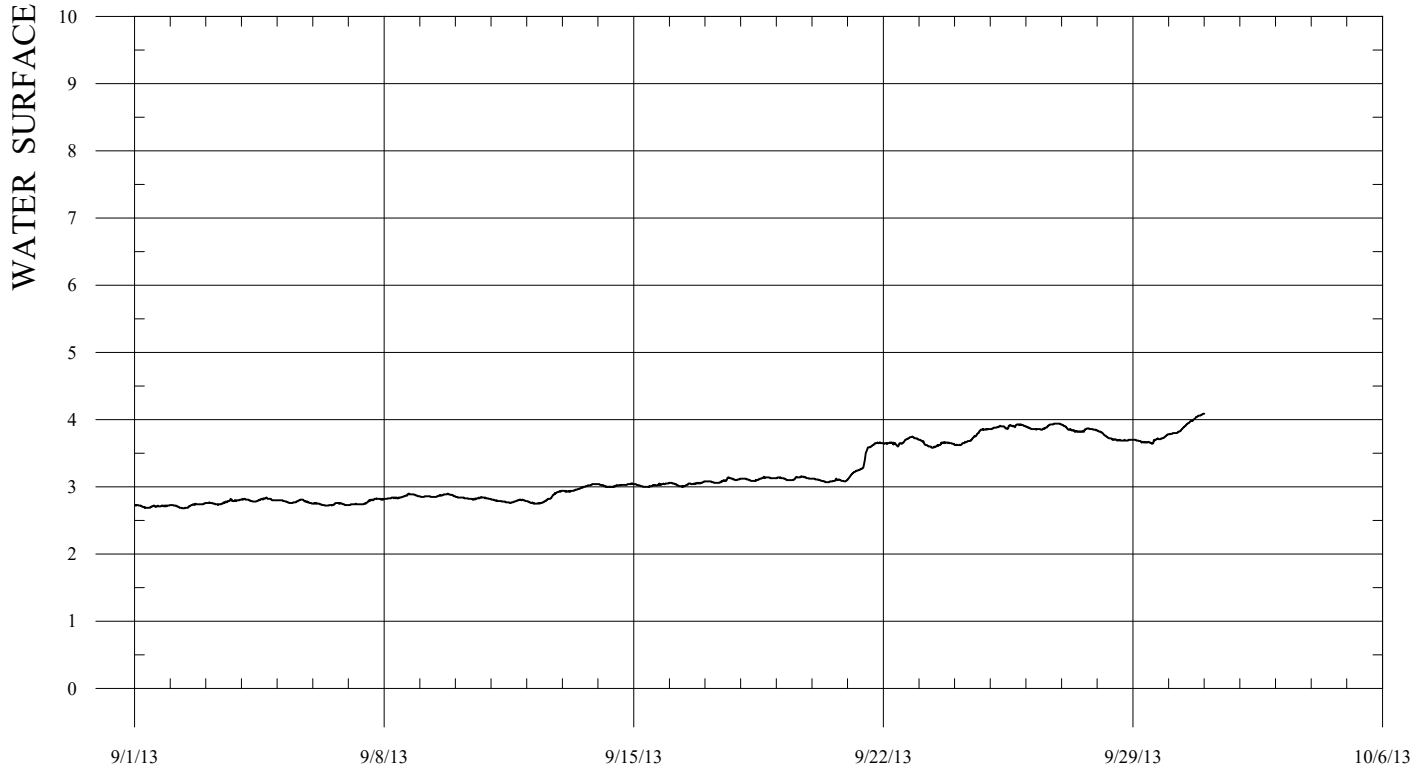


Figure G-31

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
2008 - 2013 ANNUAL SURVEYS

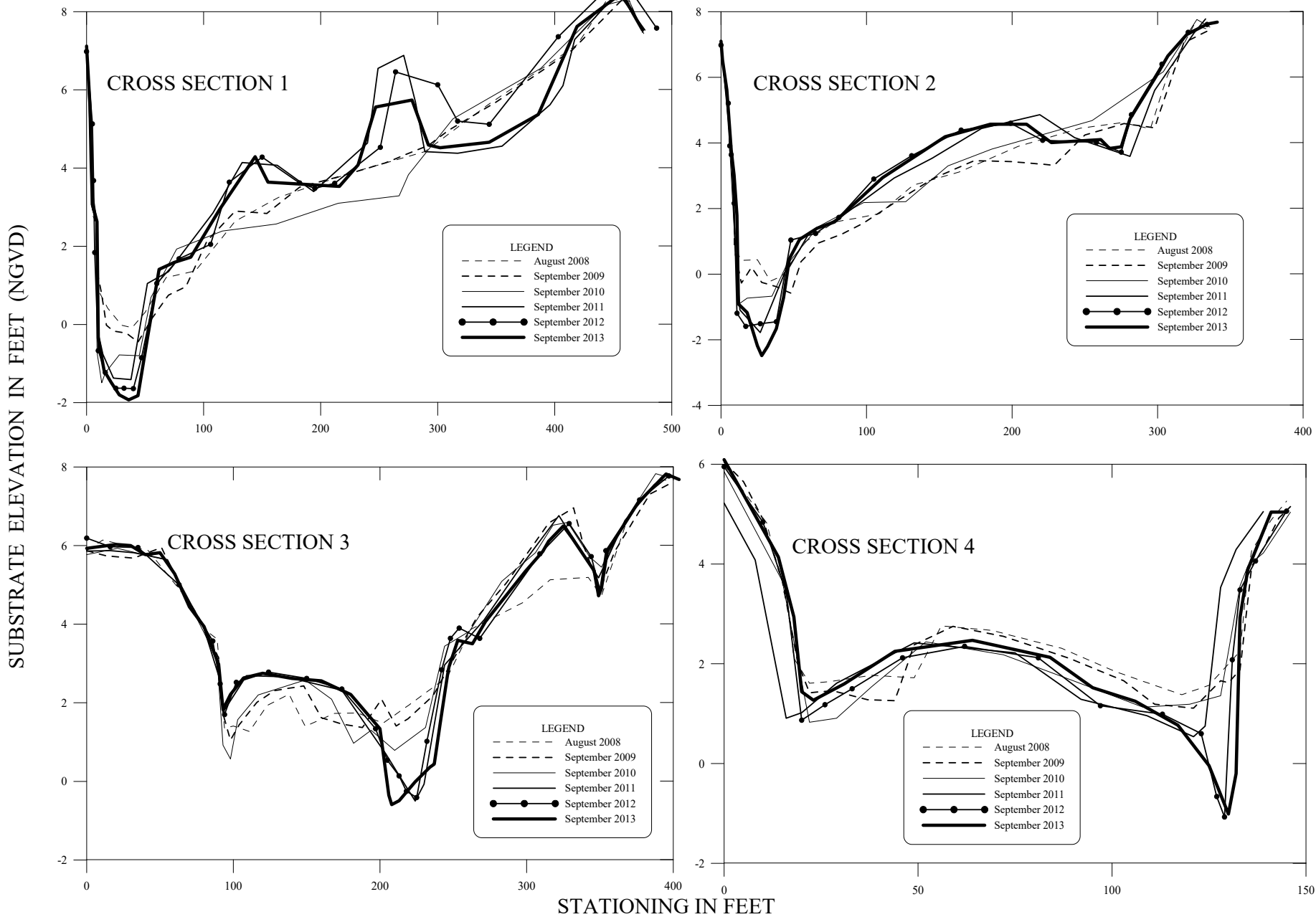


Figure G-32

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
 2008 - 2009 ANNUAL SURVEYS

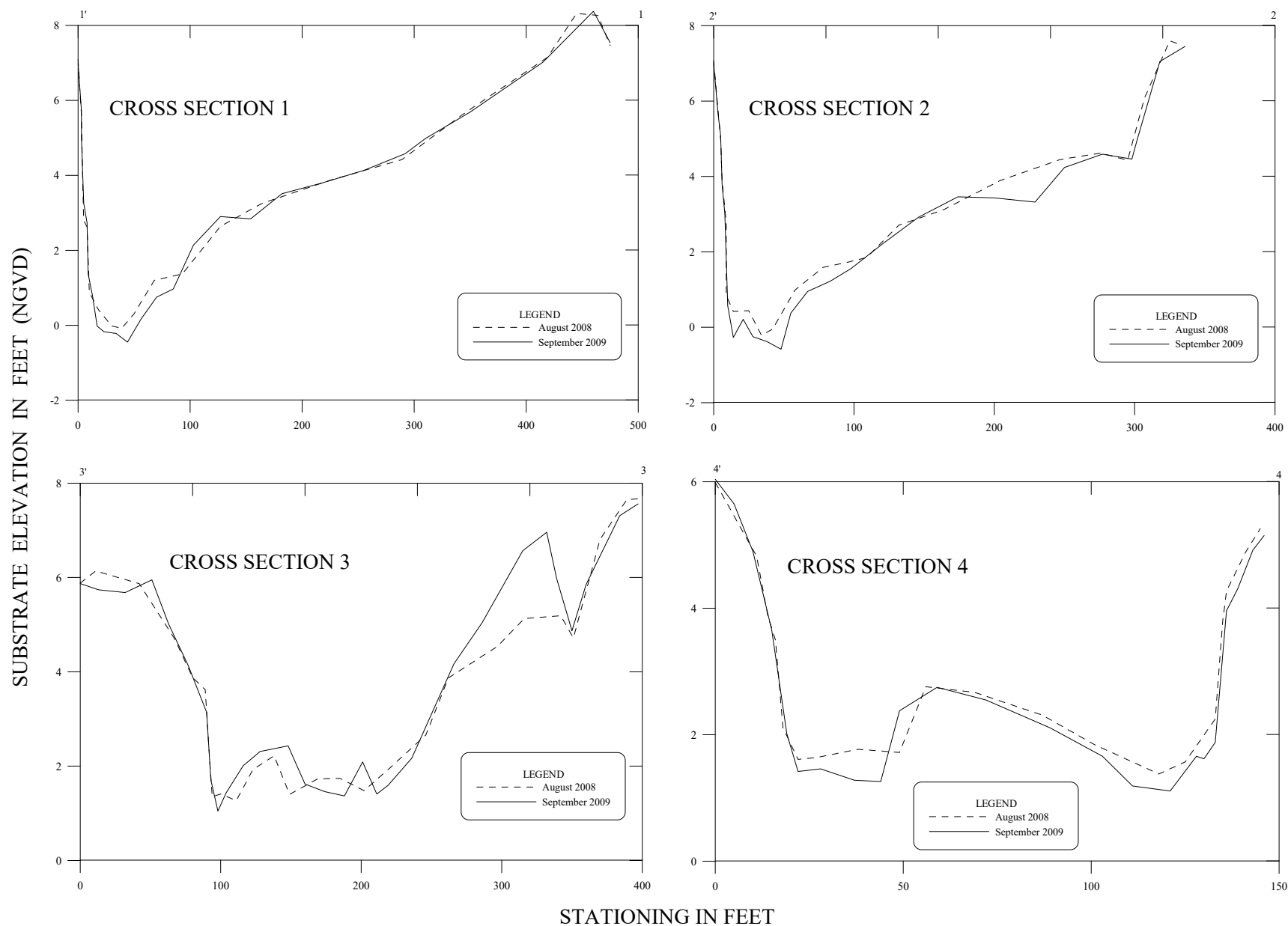


Figure G-33

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
 2009 - 2010 ANNUAL SURVEYS

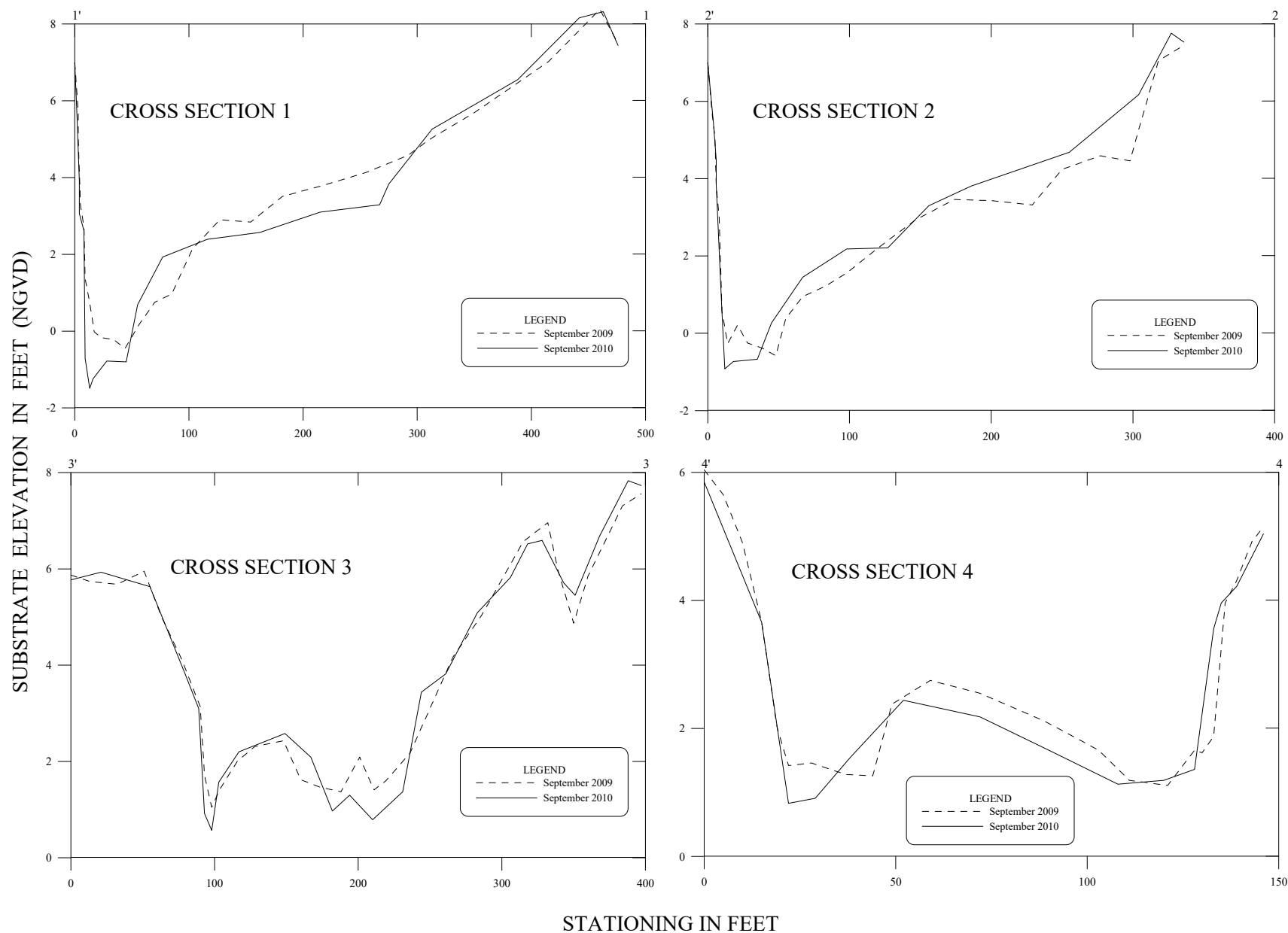


Figure G-34

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
 2010 - 2011 ANNUAL SURVEYS

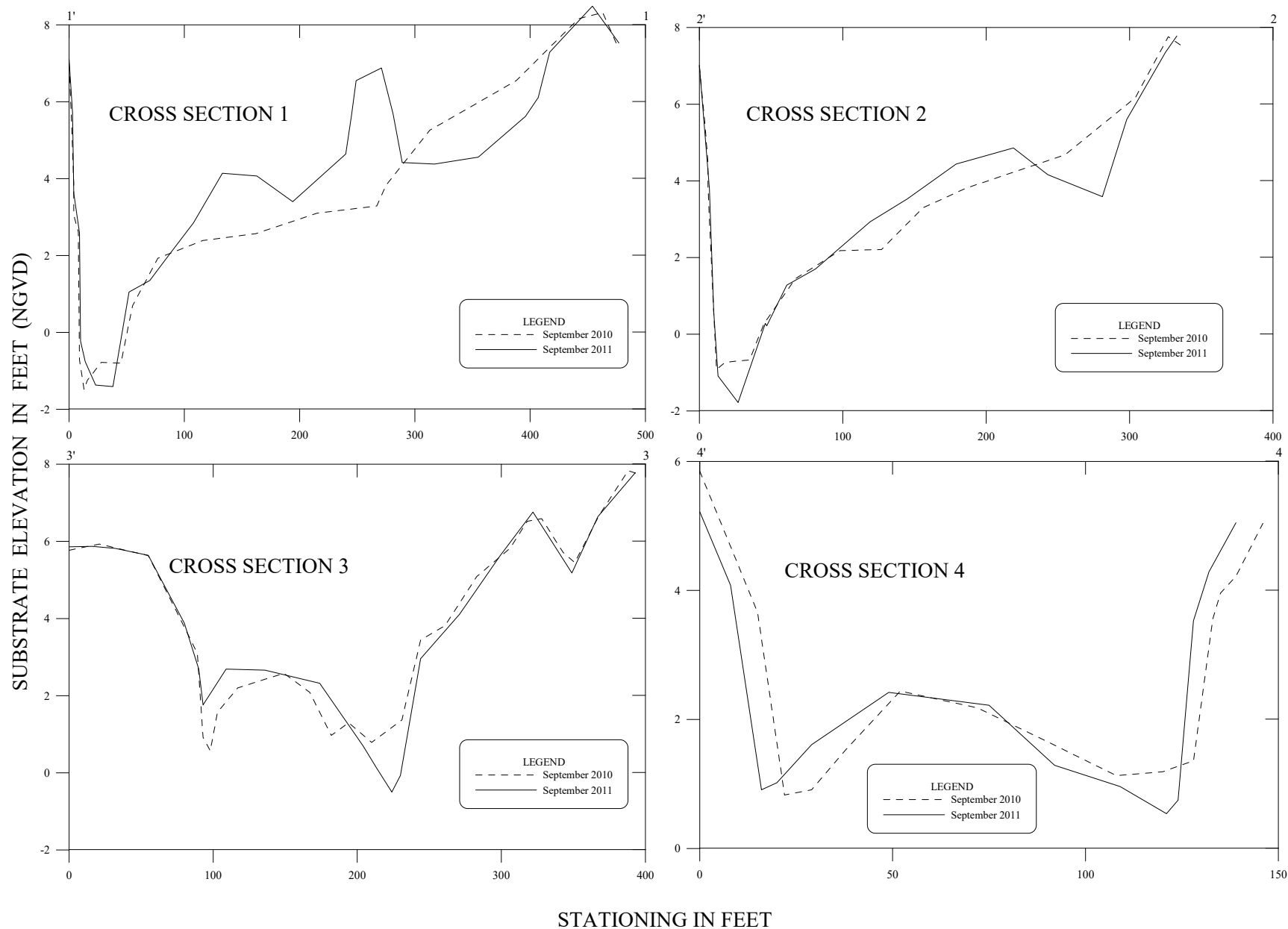


Figure G-35

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
 2011 - 2012 ANNUAL SURVEYS

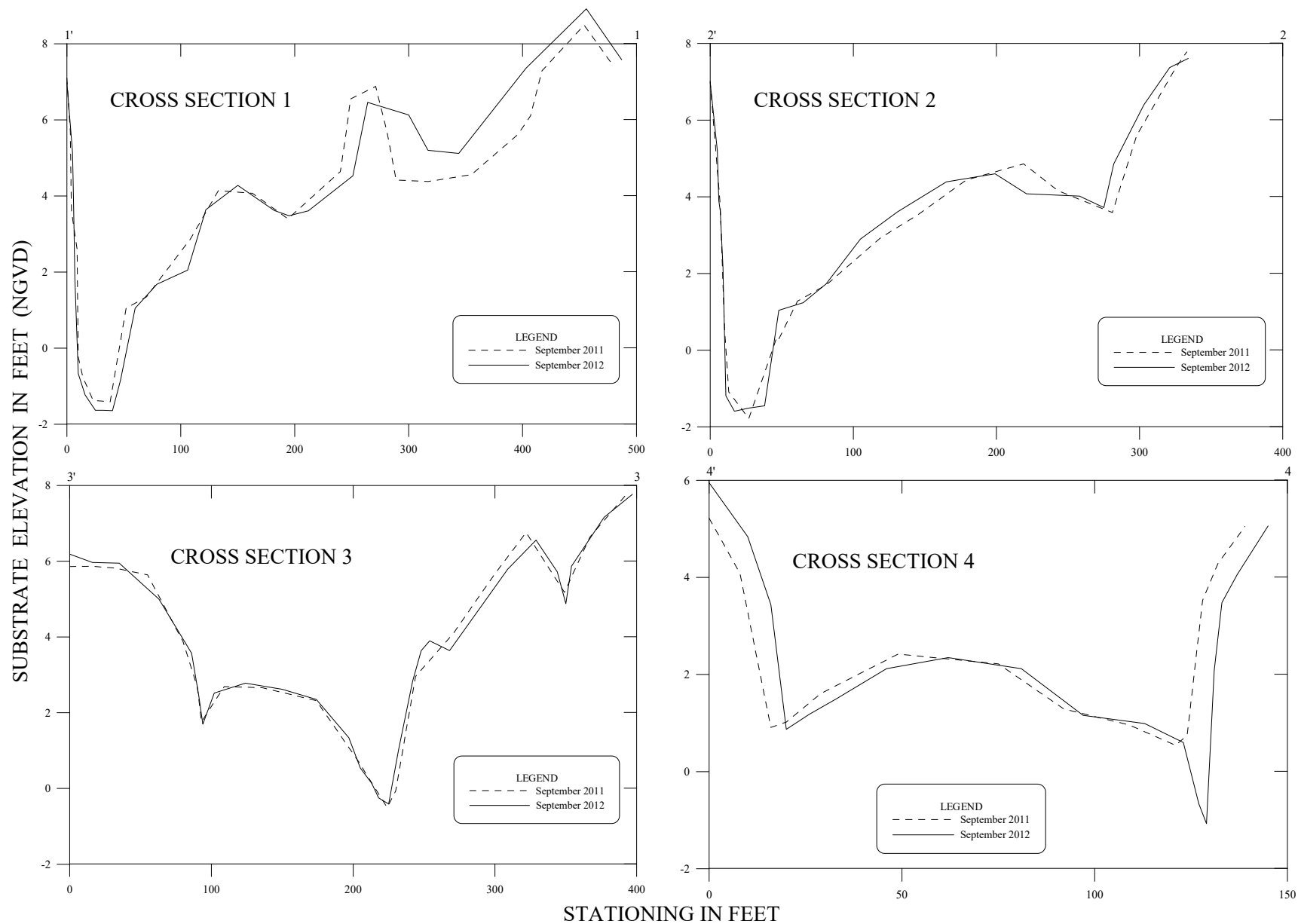


Figure G-36

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CARMEL RIVER LAGOON CROSS SECTIONS 1 - 4
 2012 - 2013 ANNUAL SURVEYS

