

Figure C.27a Geographic Distribution of Cumulative ET for Water Year 1986

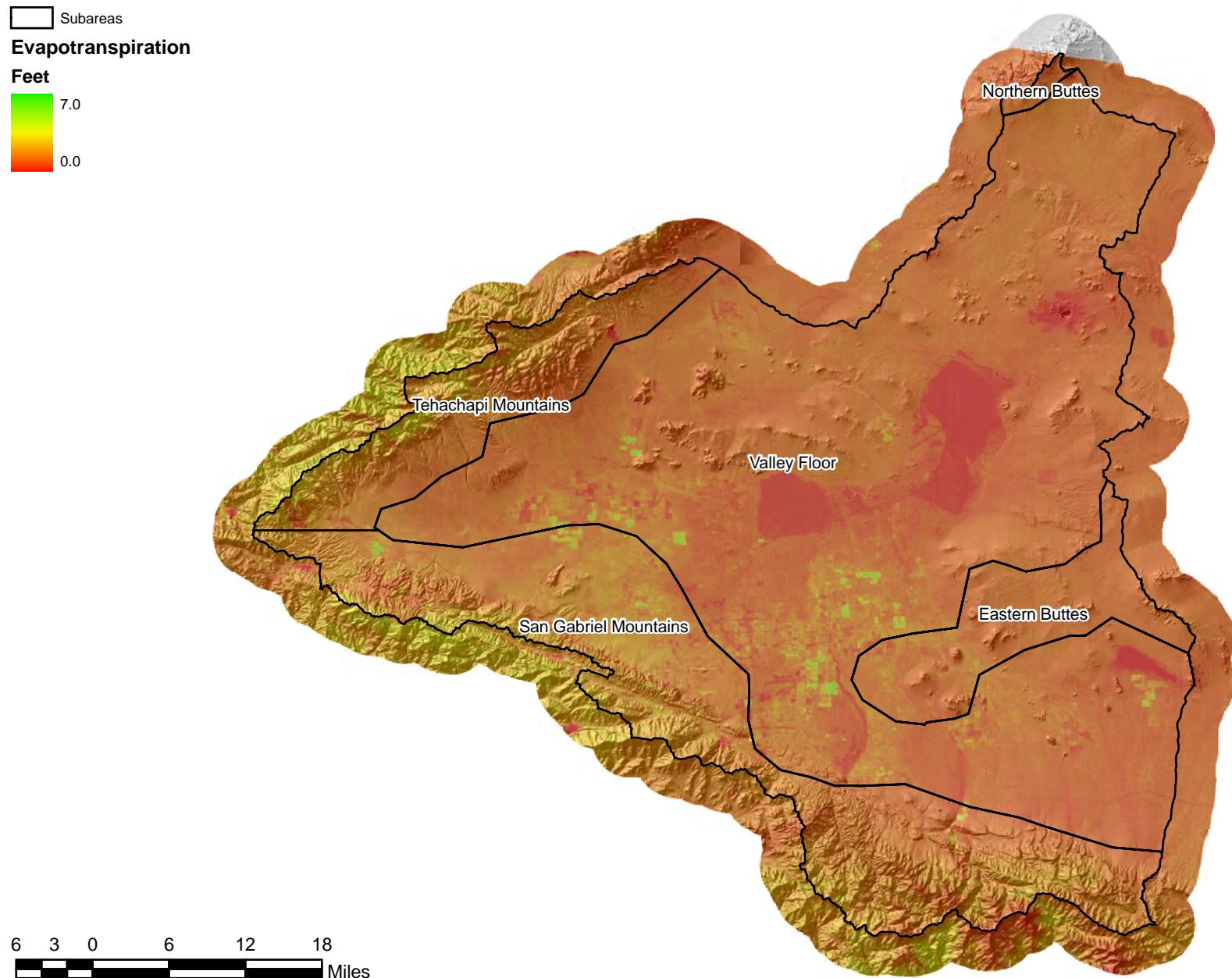


Figure C.27b Geographic Distribution of Cumulative ET for Water Year 2005

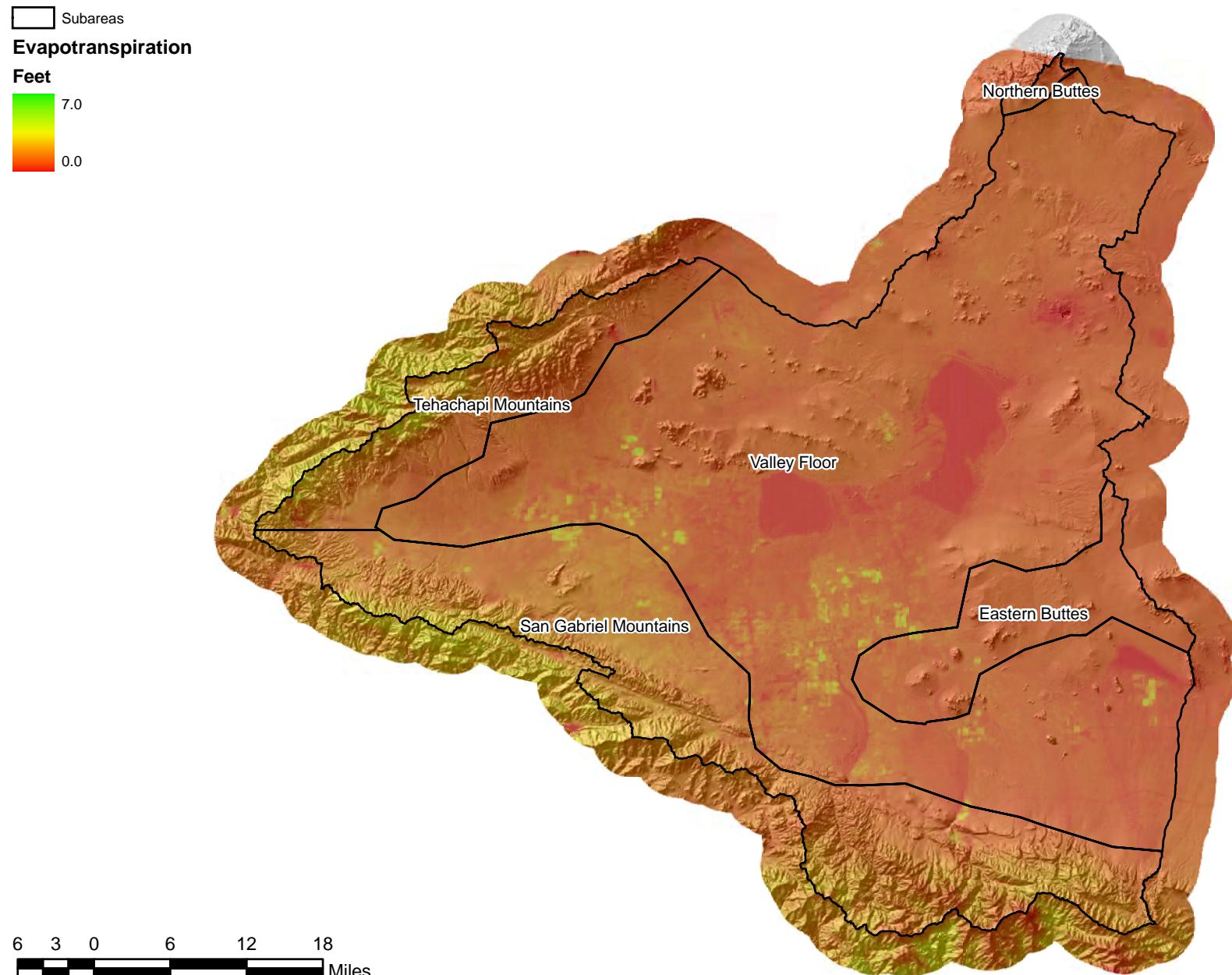


Figure C.28 Geographic Distribution of Average Annual Actual ET

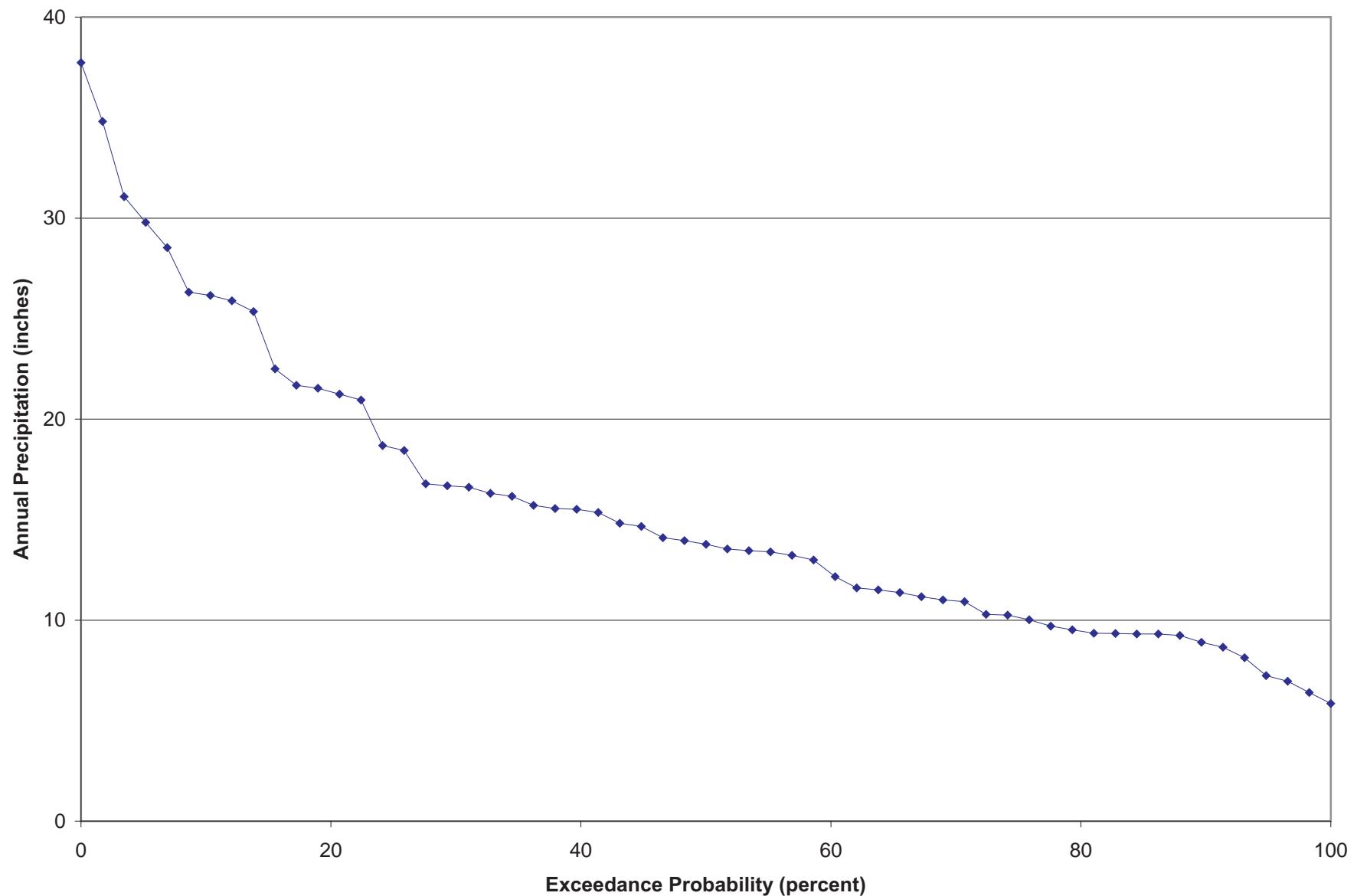


Figure C.29a Cumulative Distribution of Annual Precipitation for San Gabriel Mountains

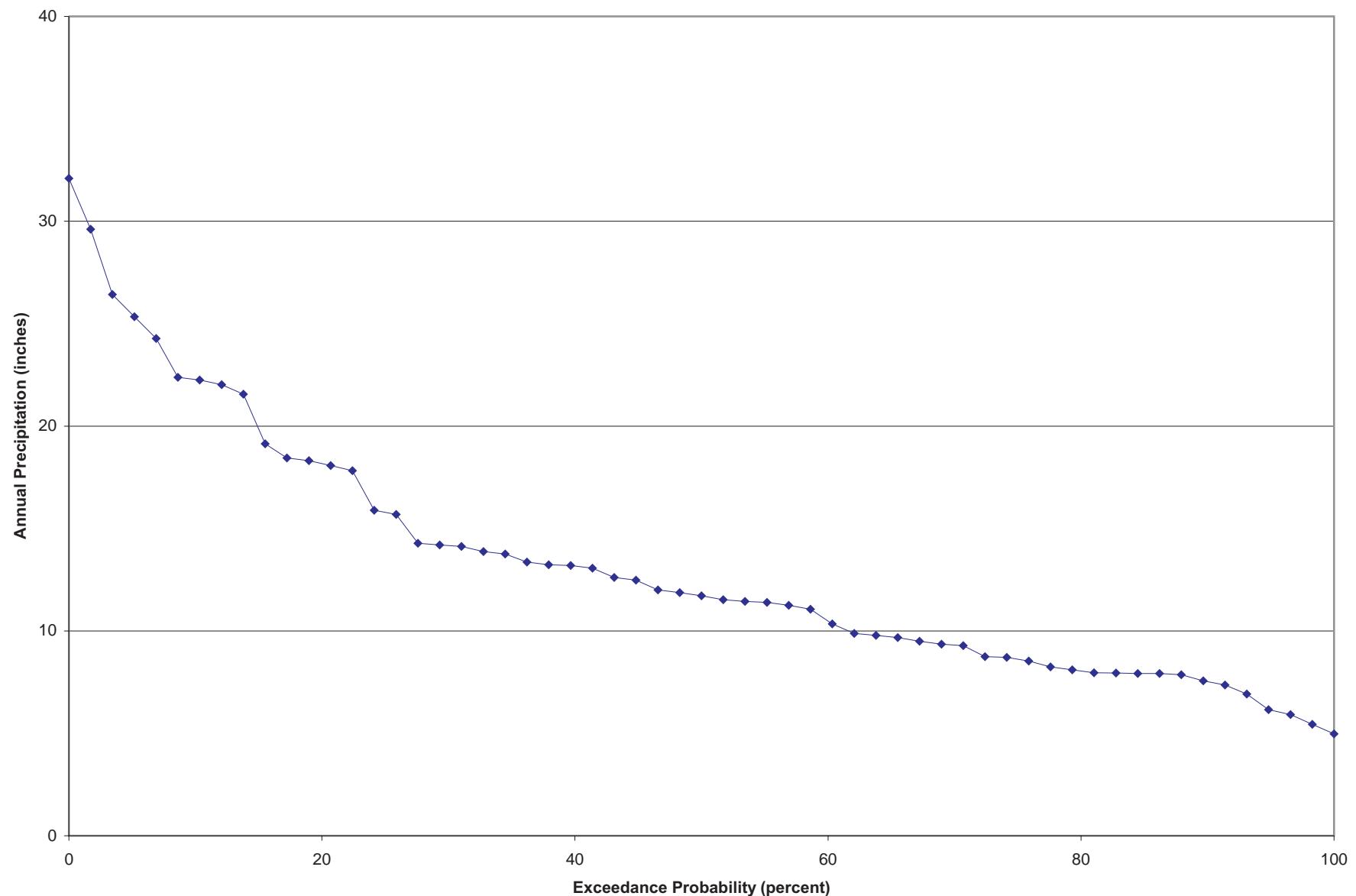


Figure C.29b Cumulative Distribution of Annual Precipitation for Tehachapi Mountains

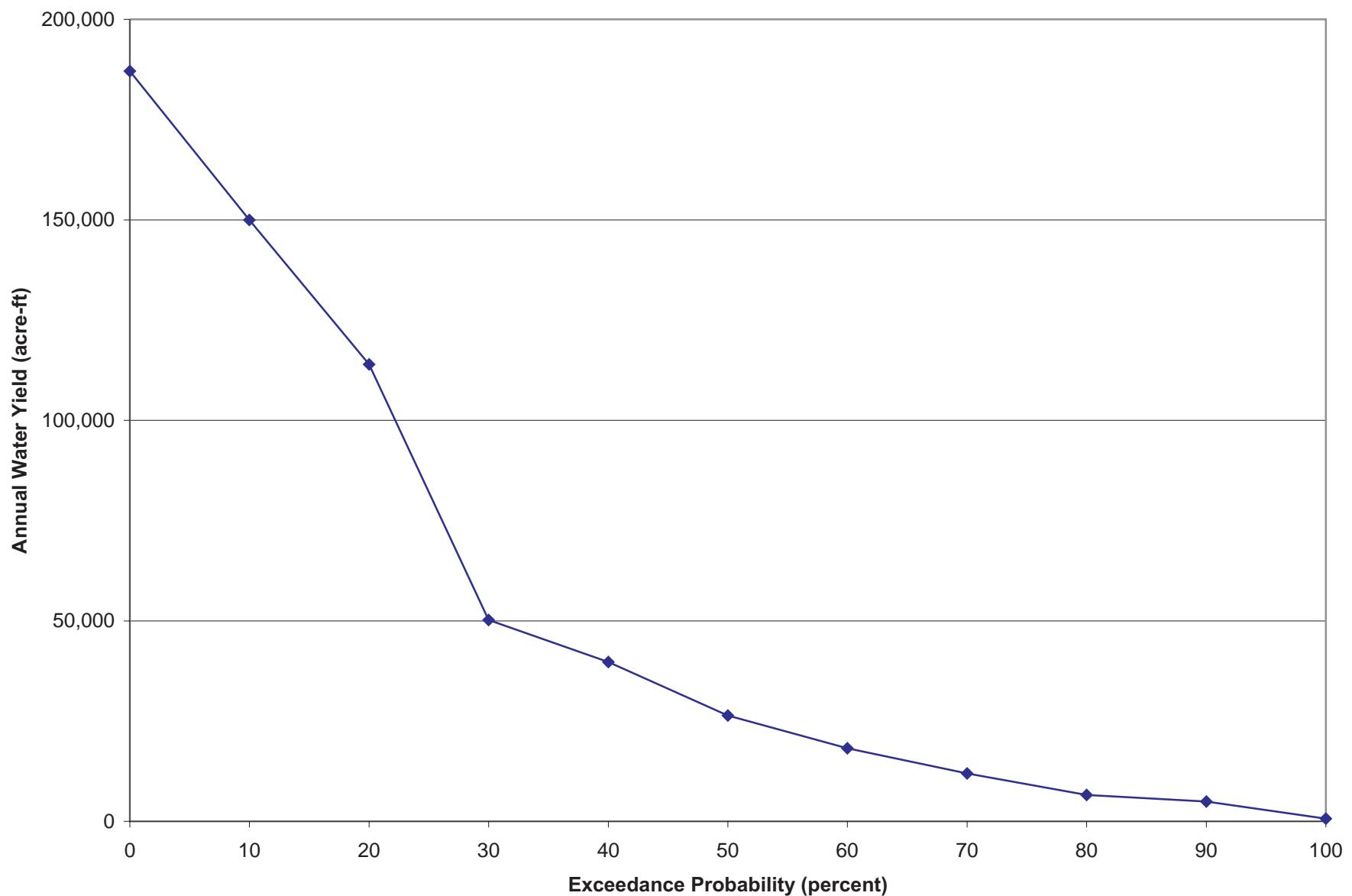


Figure C.30a Cumulative Distribution of Annual Water Yield for San Gabriel Mountains

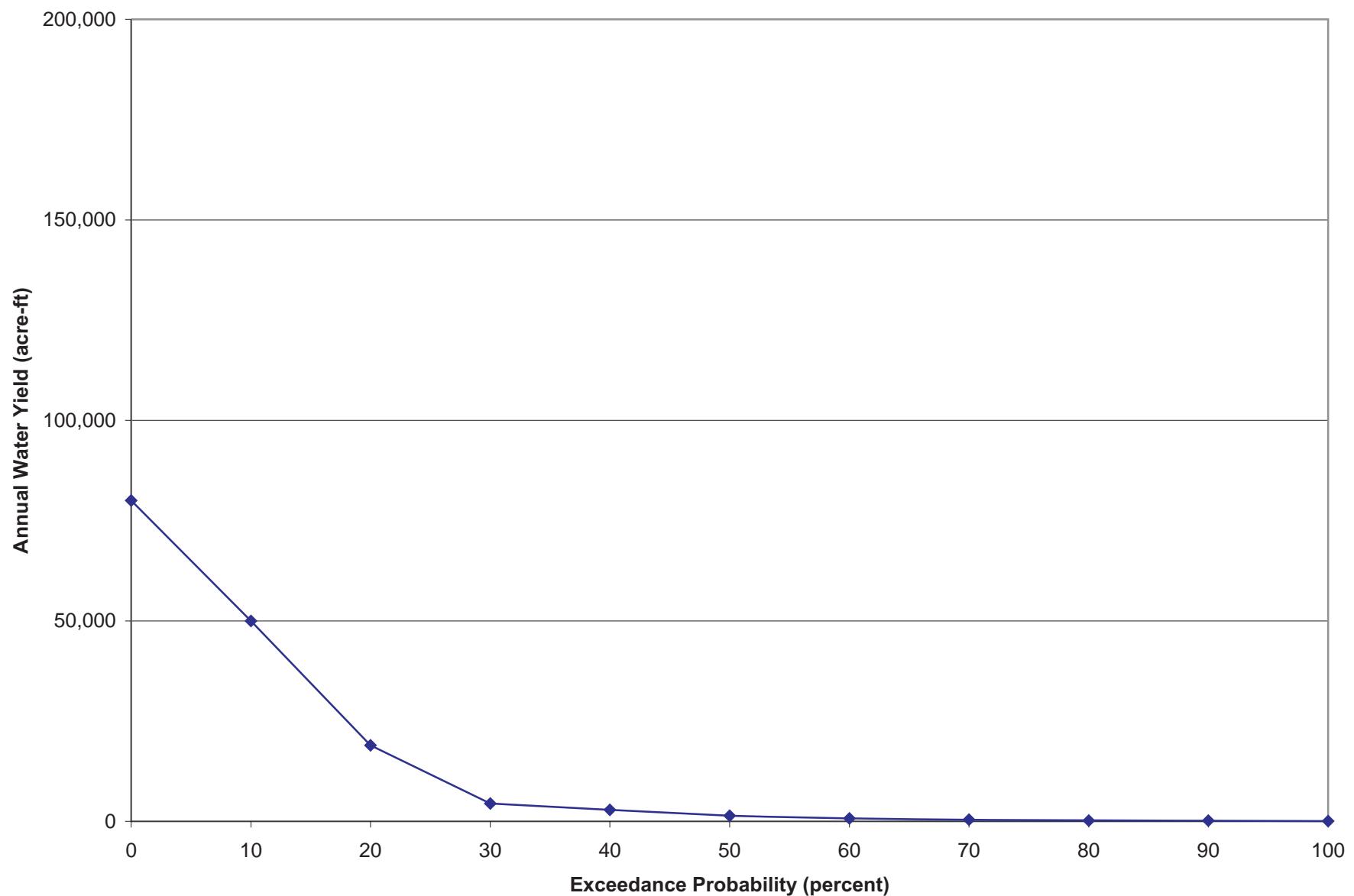


Figure C.30b Cumulative Distribution of Annual Water Yield for Tehachapi Mountains

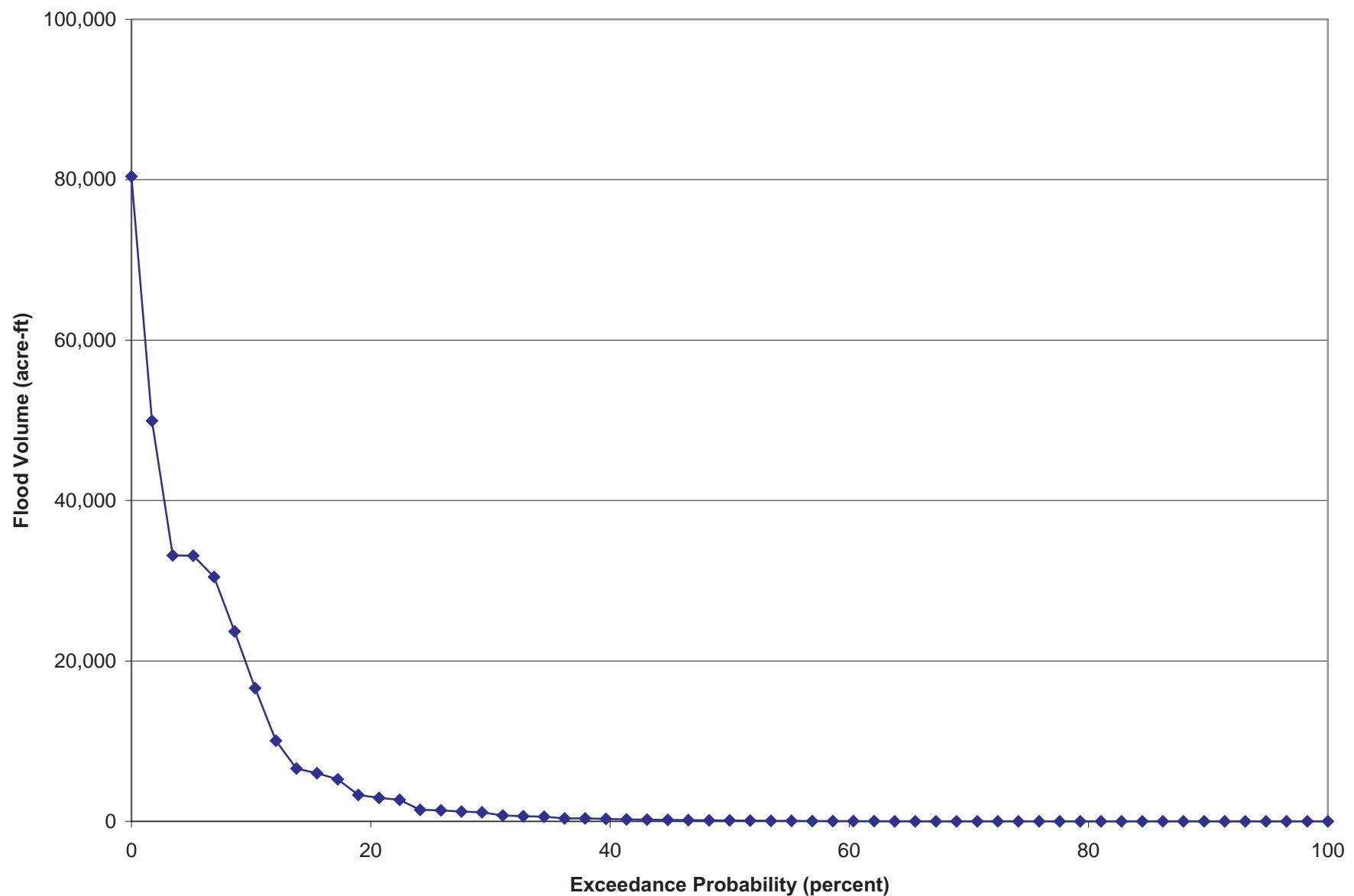


Figure C.31a Cumulative Distribution of Playa Flood Volume for San Gabriel Mountains

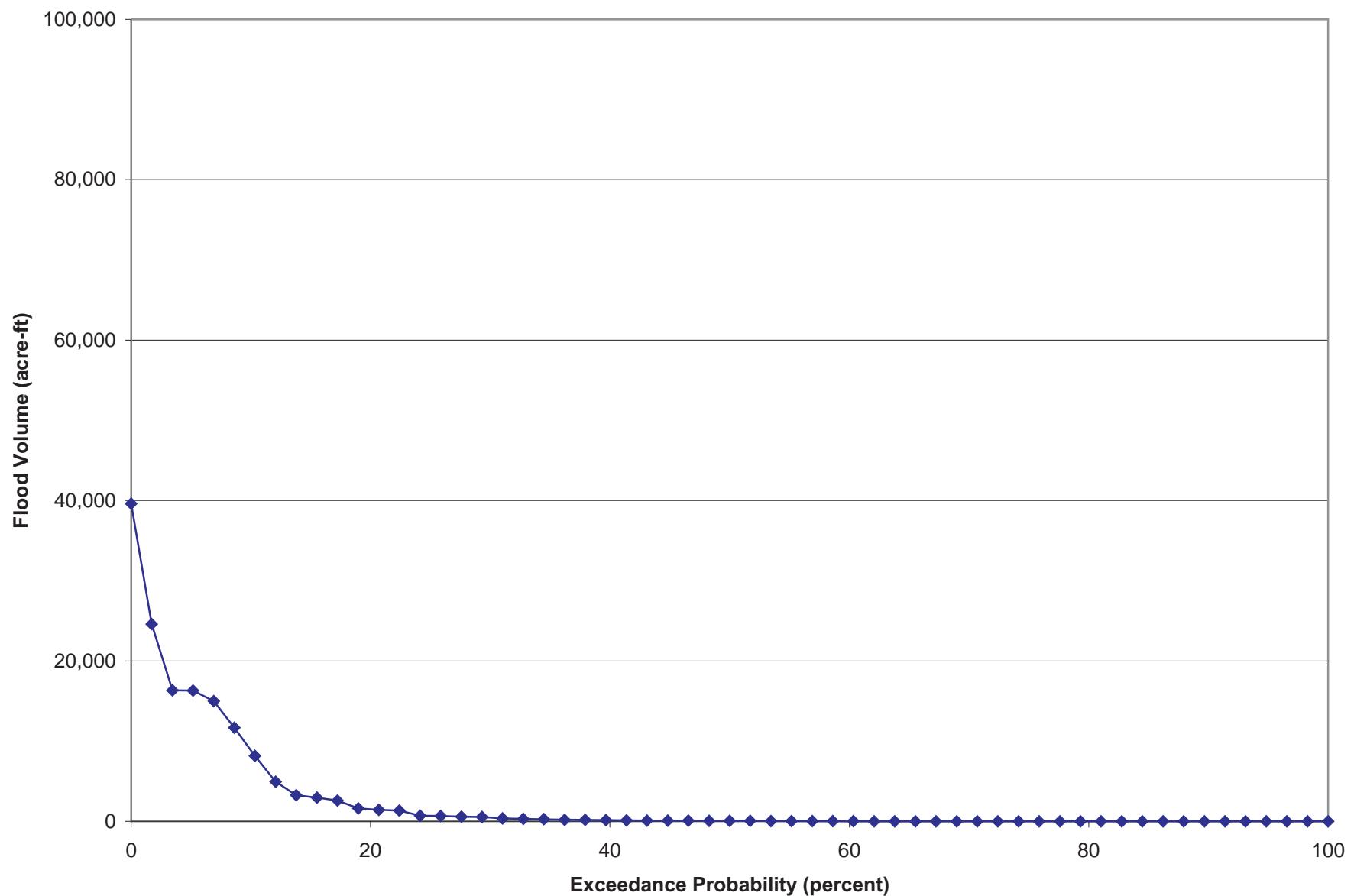


Figure C.31b Cumulative Distribution of Playa Flood Volume for Tehachapi Mountains

Streams
Watersheds

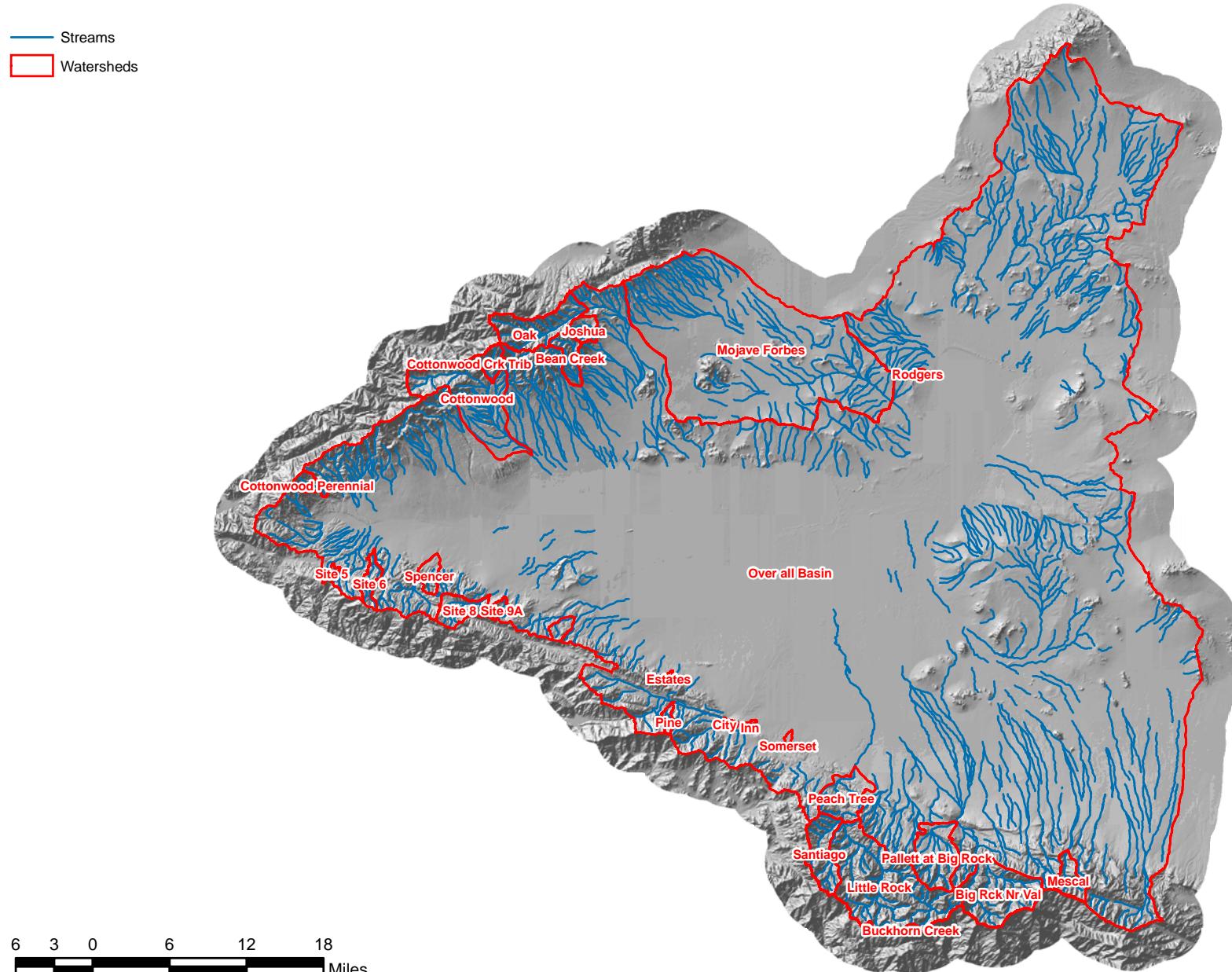


Figure C.32 Watersheds Used to Develop Water-Yield Model

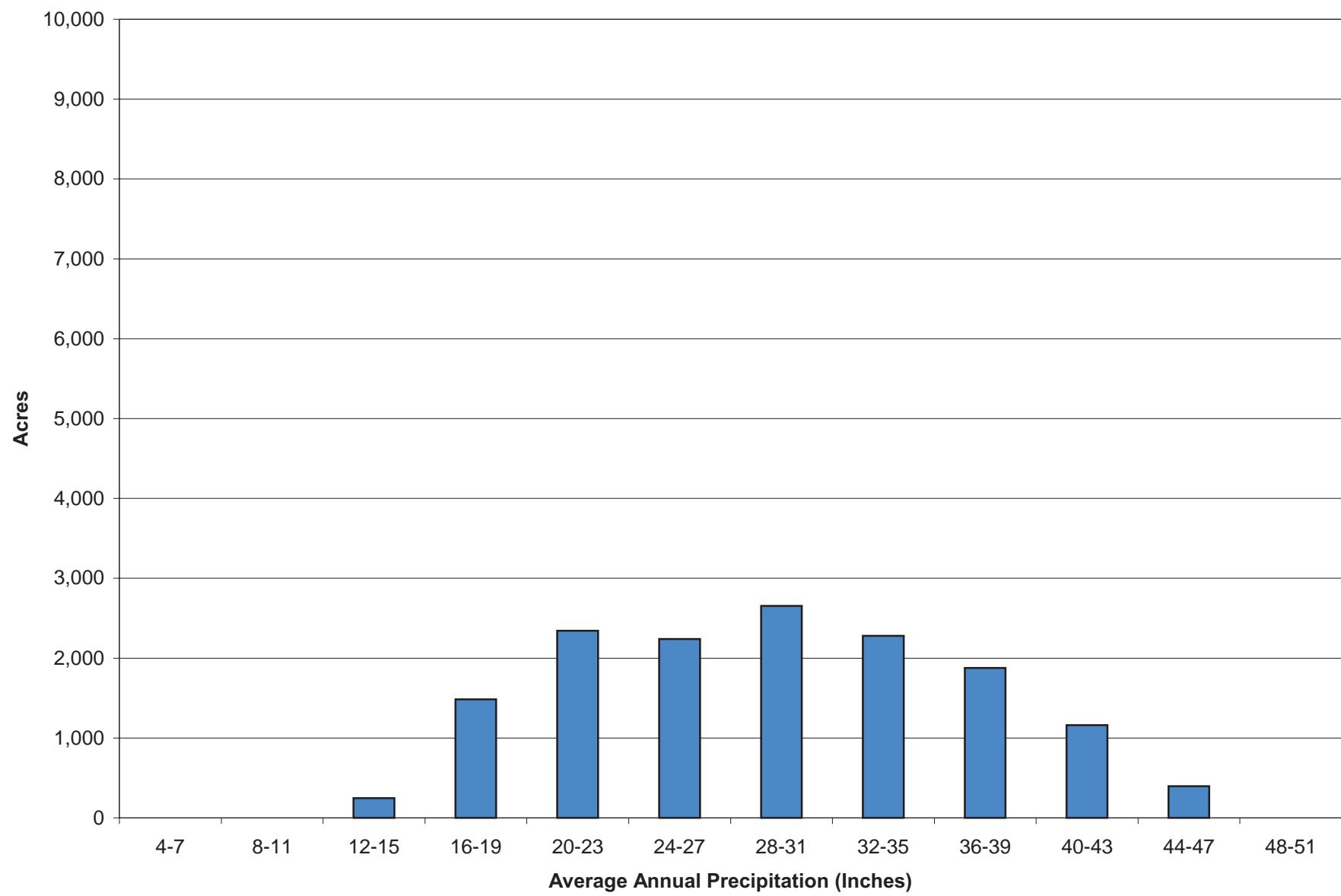


Figure C.33a Distribution of Precipitation for Big Rock

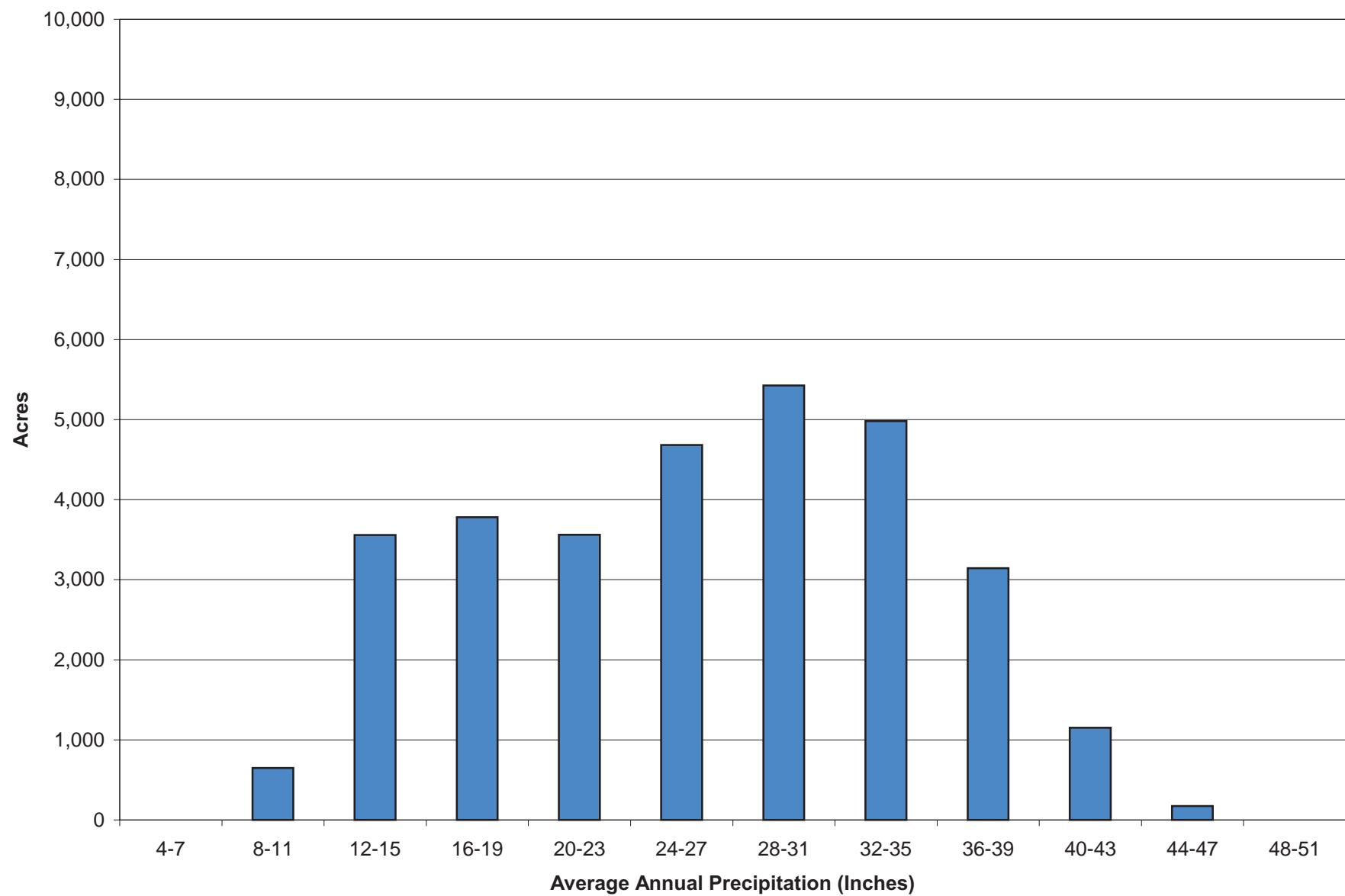


Figure C.33b Distribution of Precipitation for Little Rock

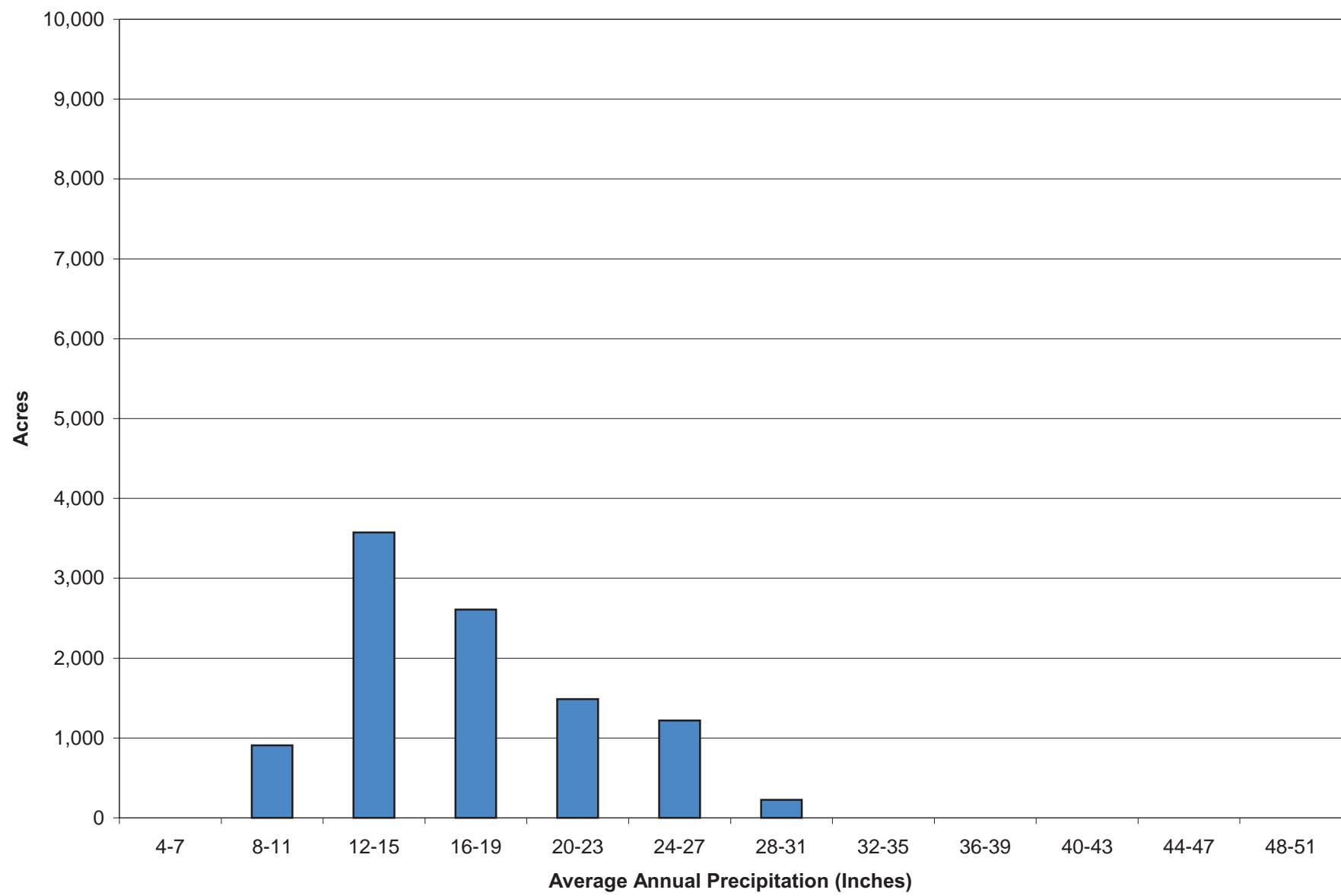


Figure C.33c Distribution of Precipitation for Oak

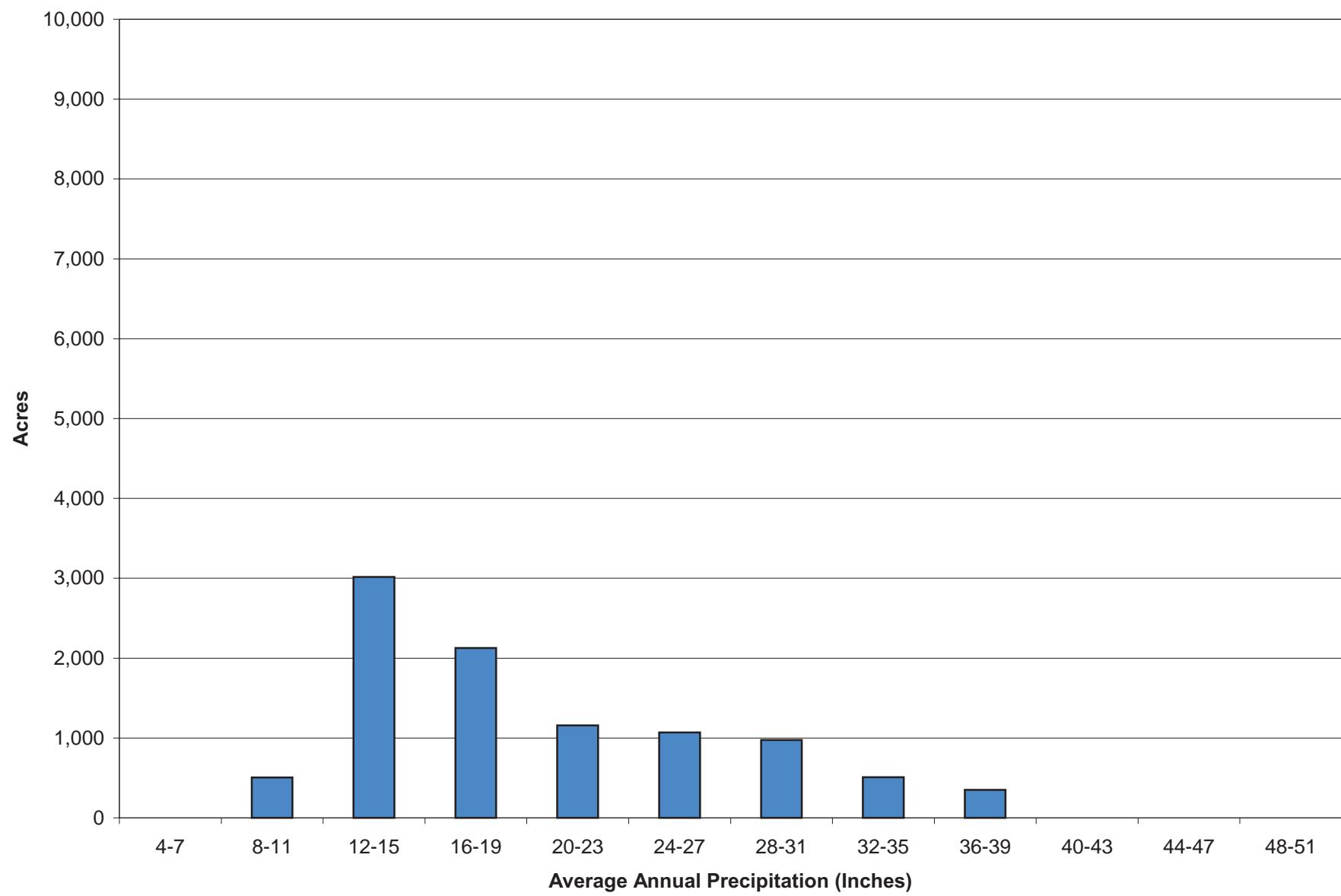


Figure C.33d Distribution of Precipitation for Pallett

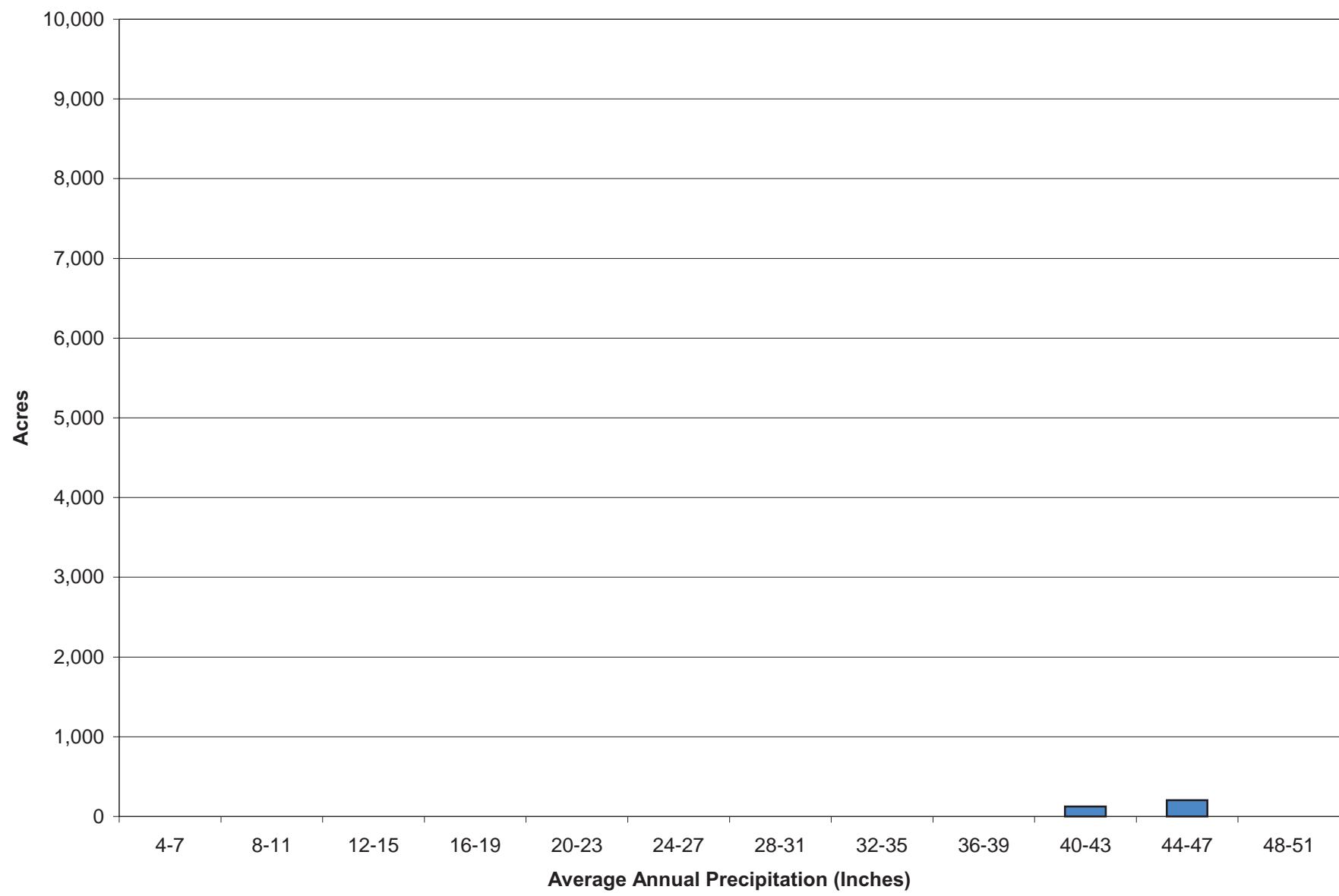


Figure C.33e Distribution of Precipitation for Buckhorn

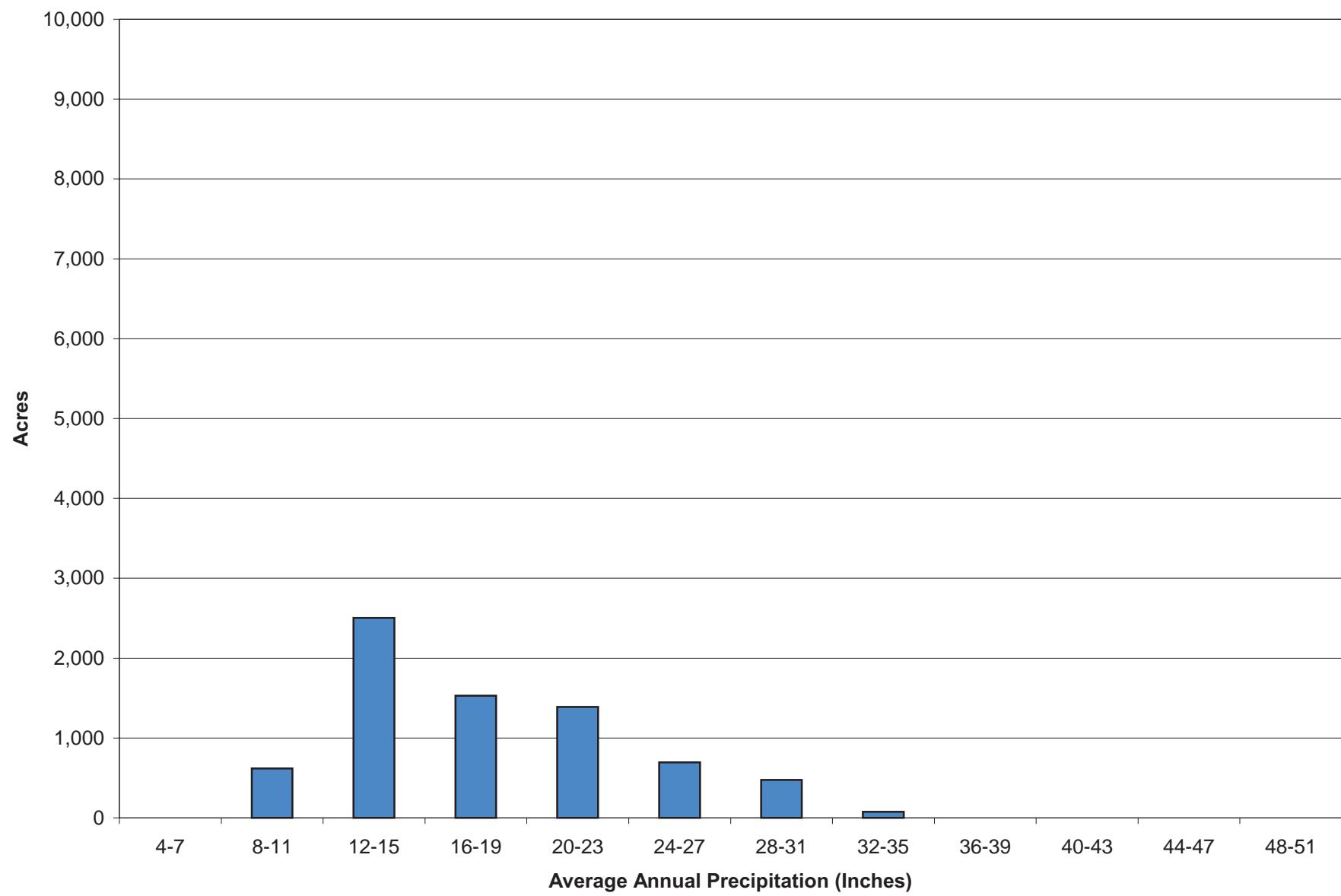


Figure C.33f Distribution of Precipitation for Santiago Canyon

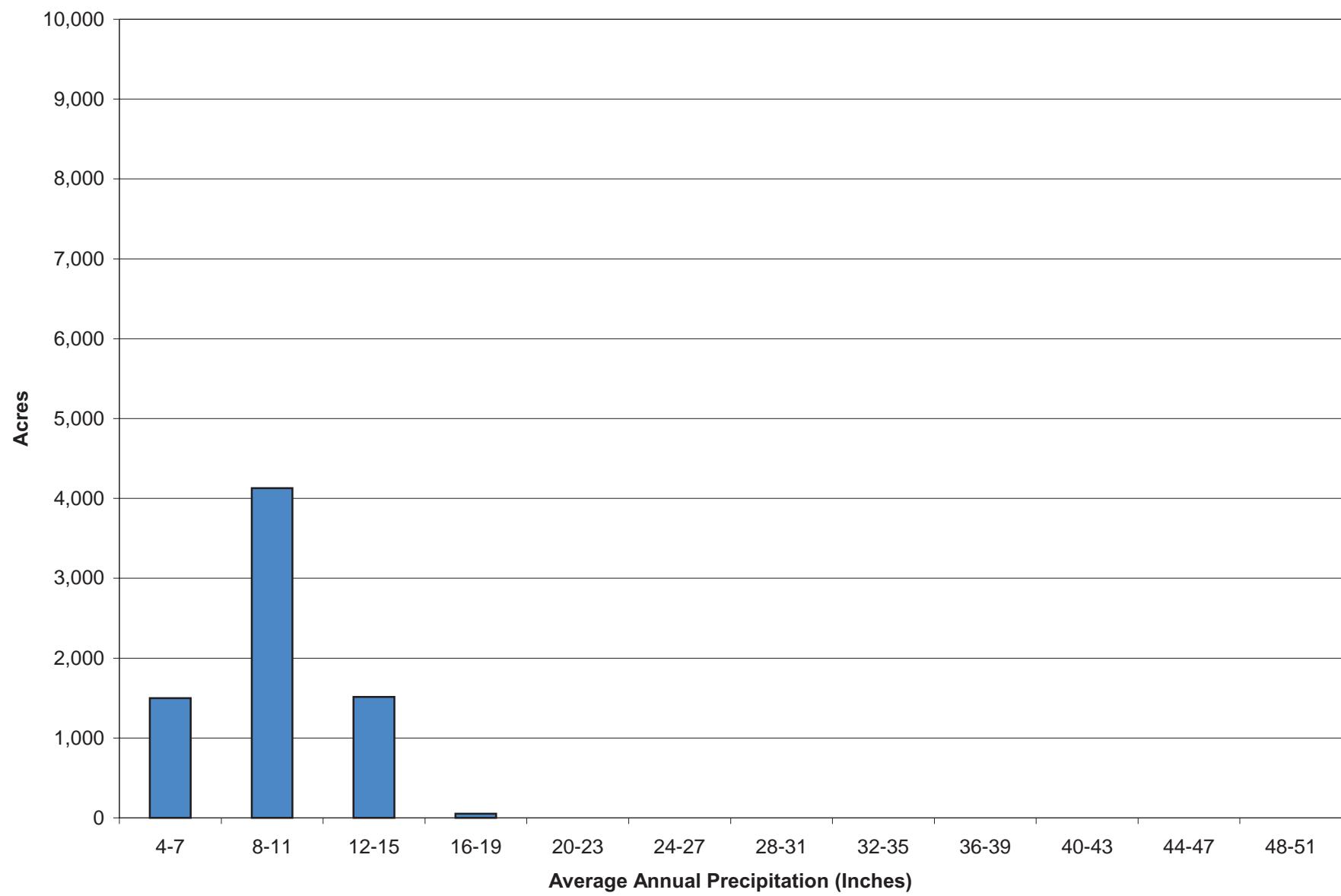


Figure C.33g Distribution of Precipitation for Peachtree

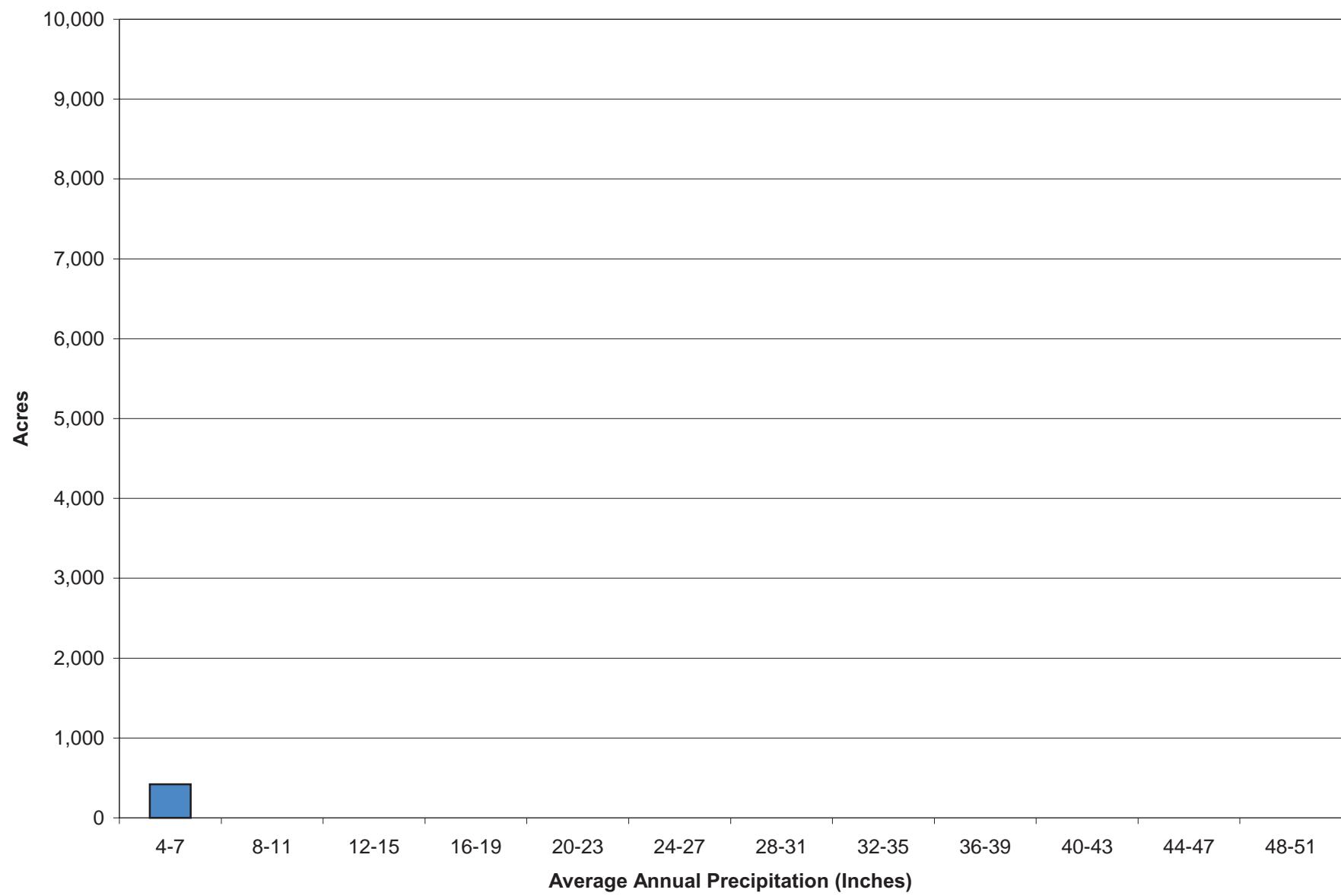


Figure C.33h Distribution of Precipitation for Somerset

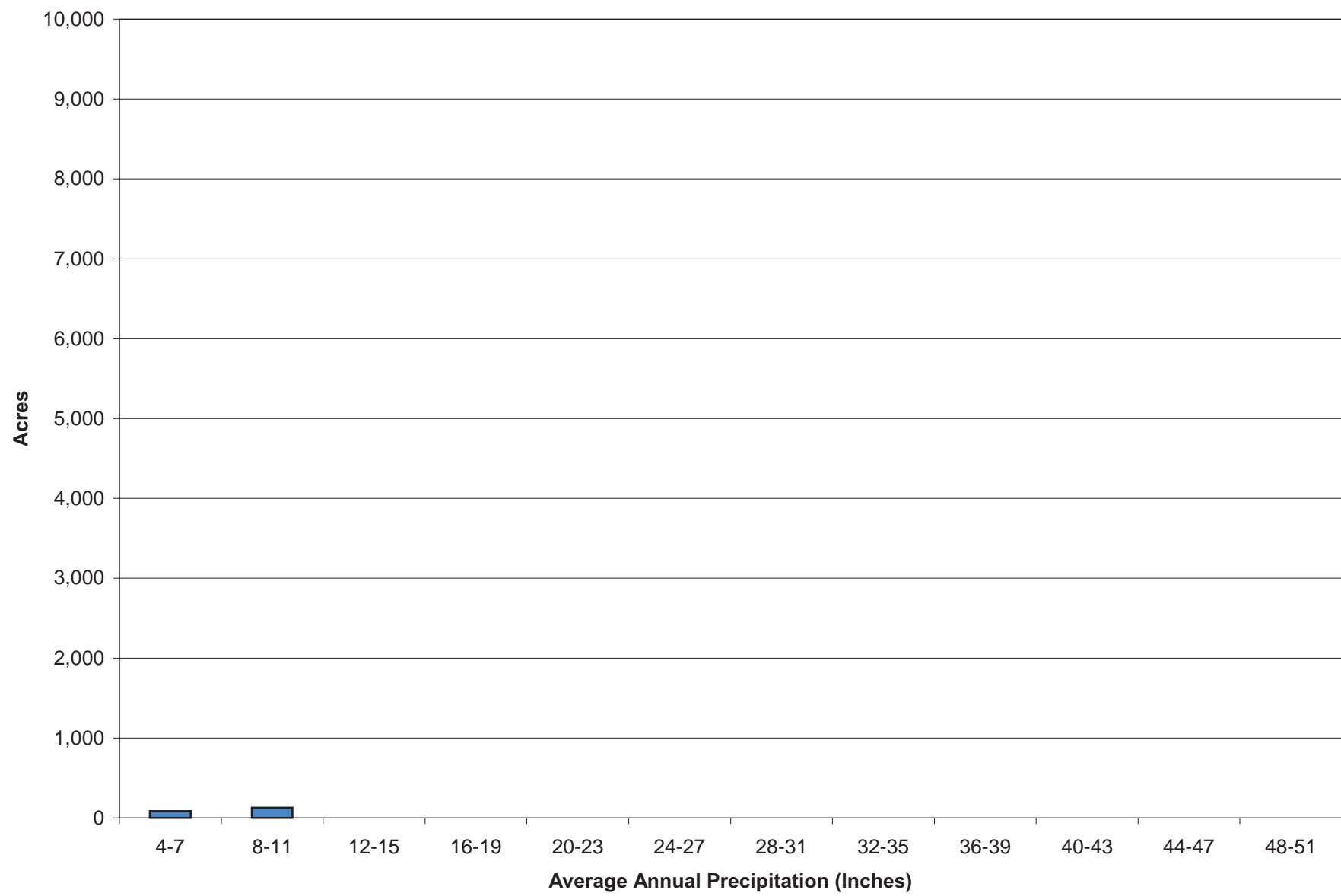


Figure C.33i Distribution of Precipitation for Inn

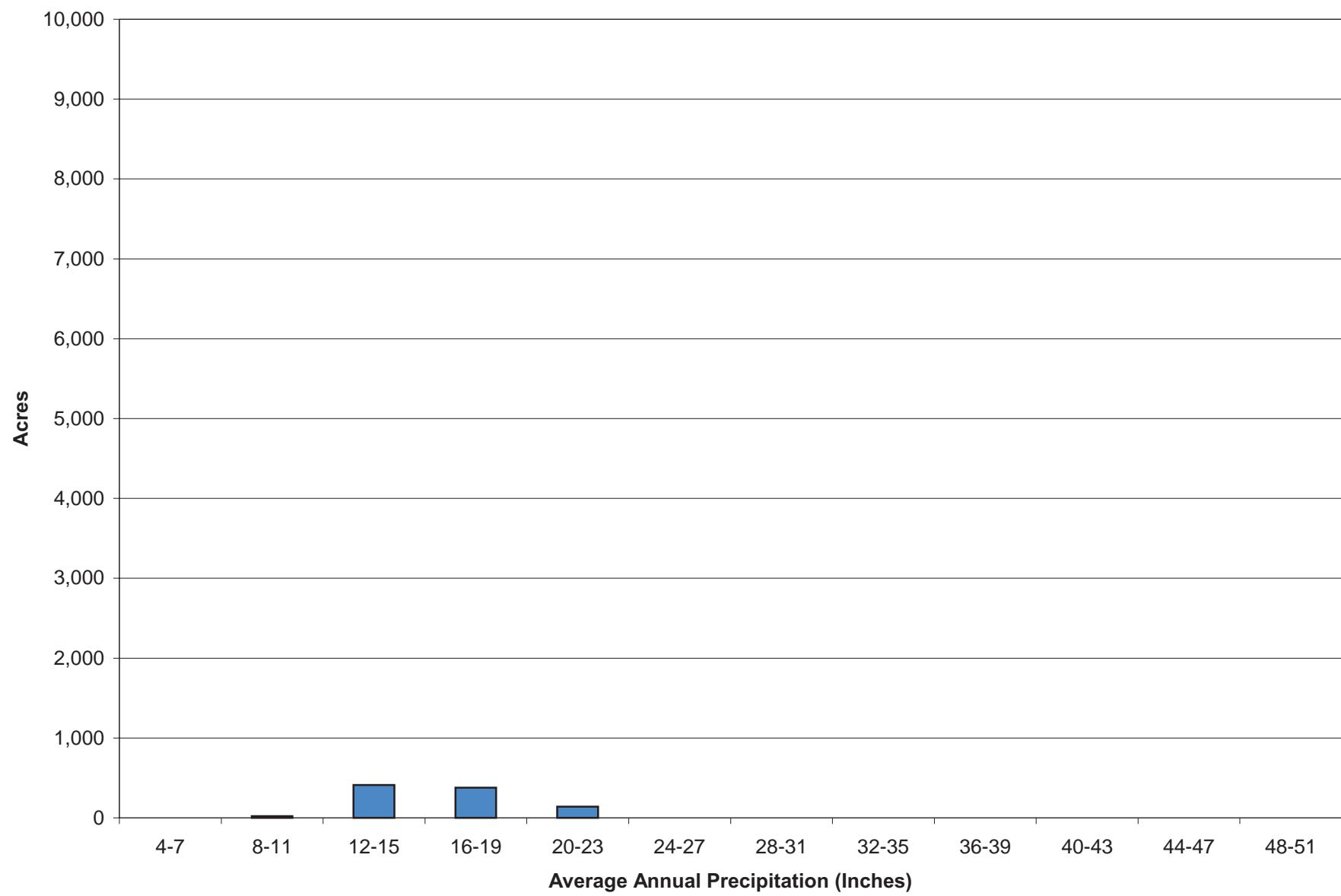


Figure C.33j Distribution of Precipitation for Pine

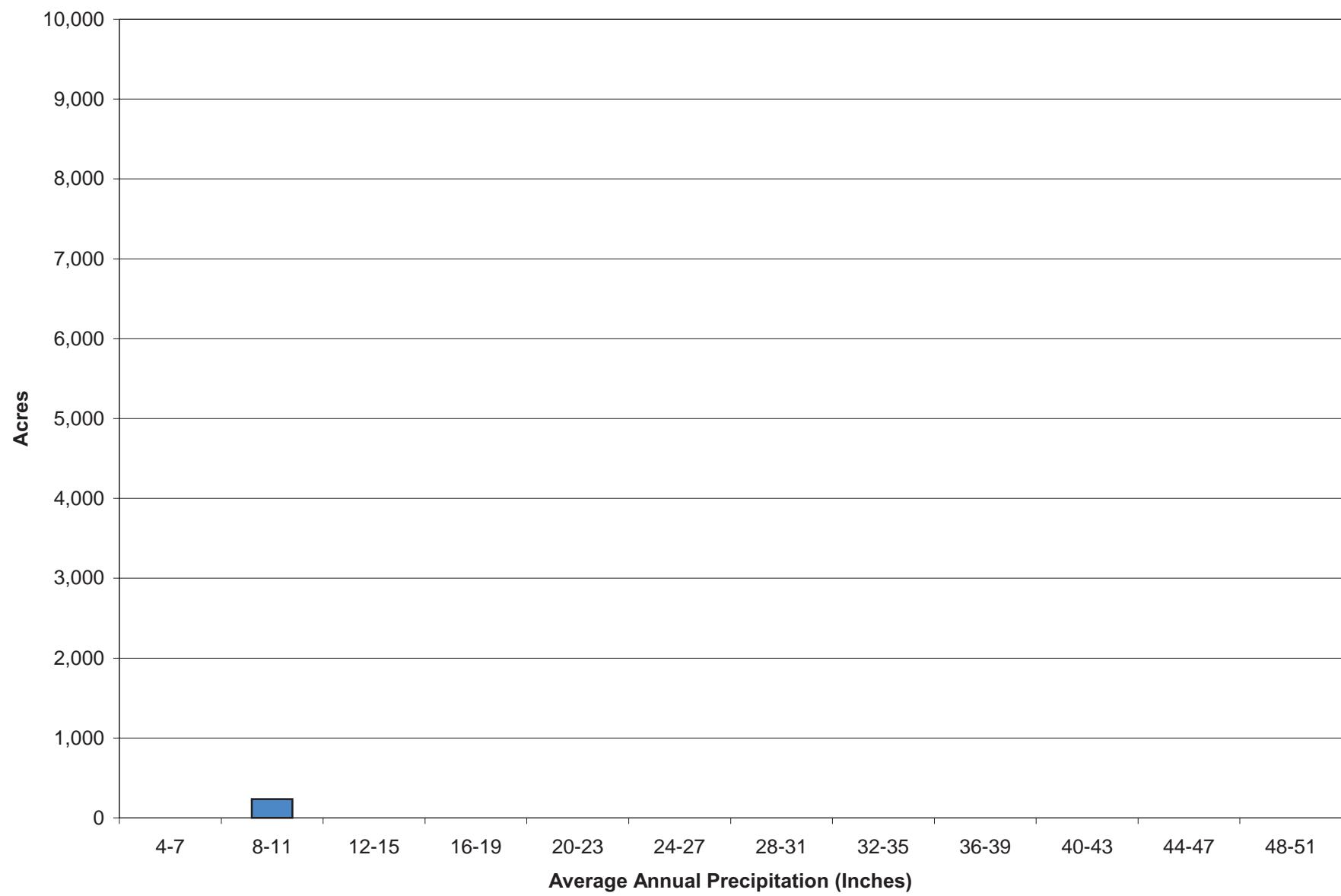


Figure C.33k Distribution of Precipitation for City Ranch

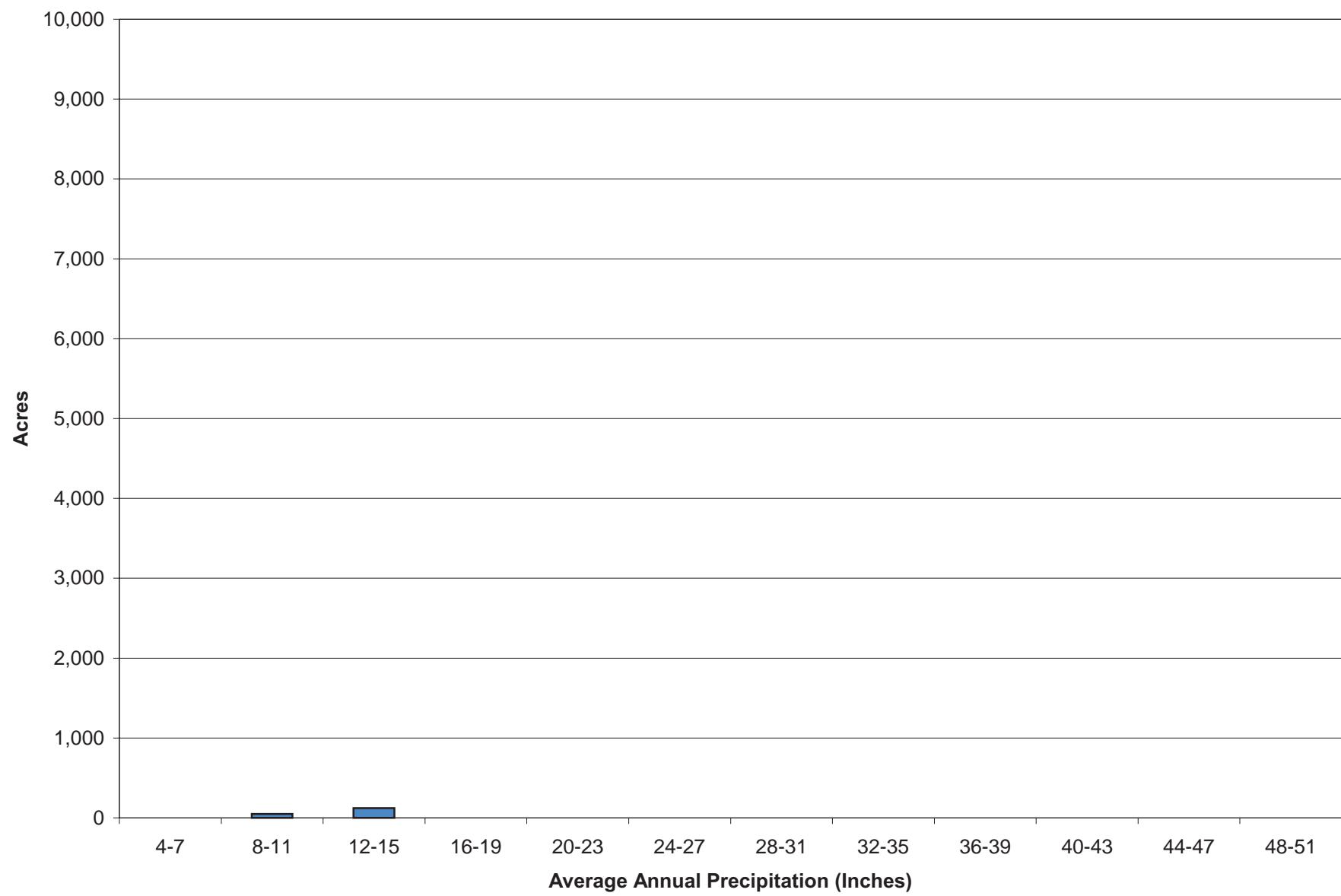


Figure C.33I Distribution of Precipitation for Estates

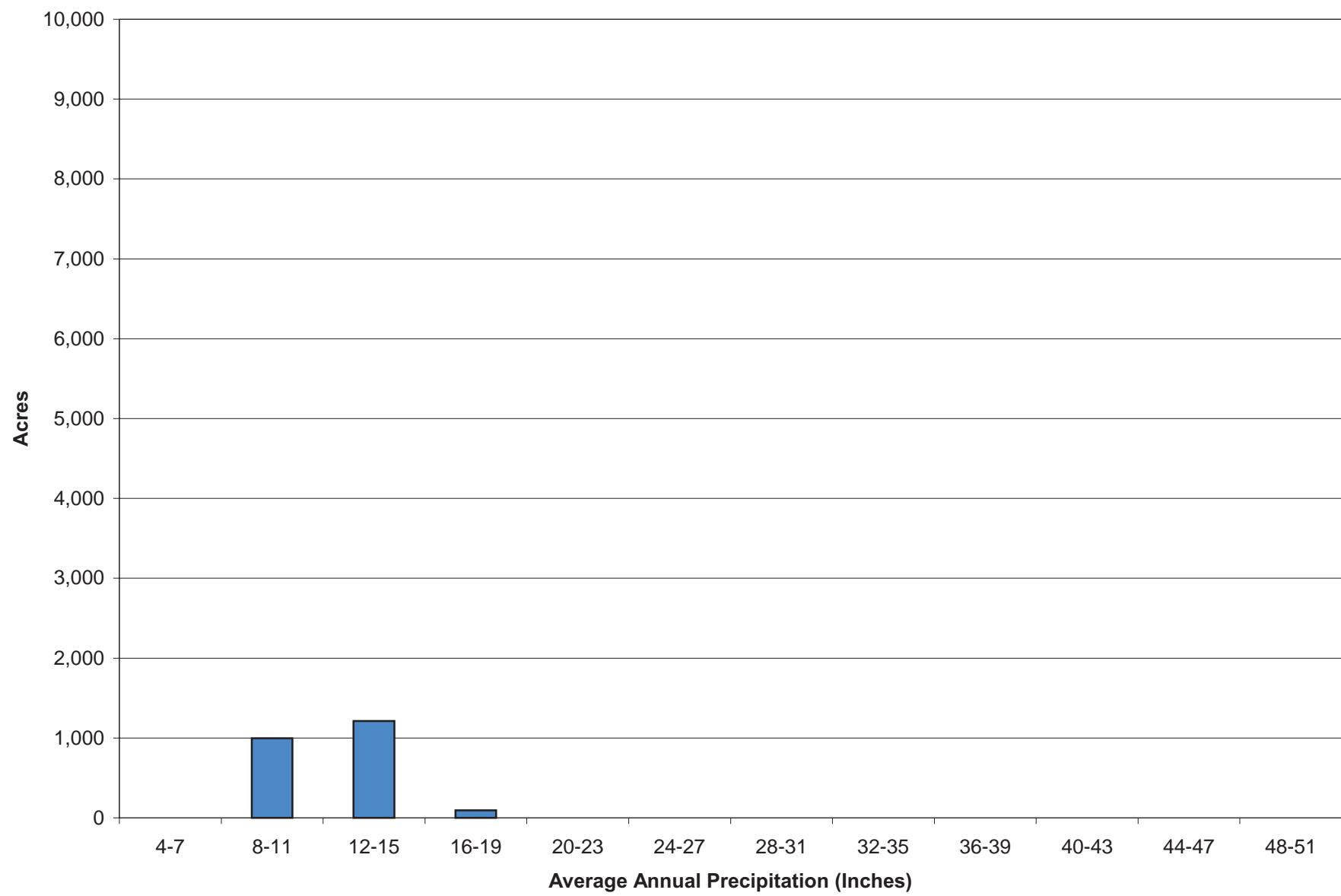


Figure C.33m Distribution of Precipitation for Spencer Canyon

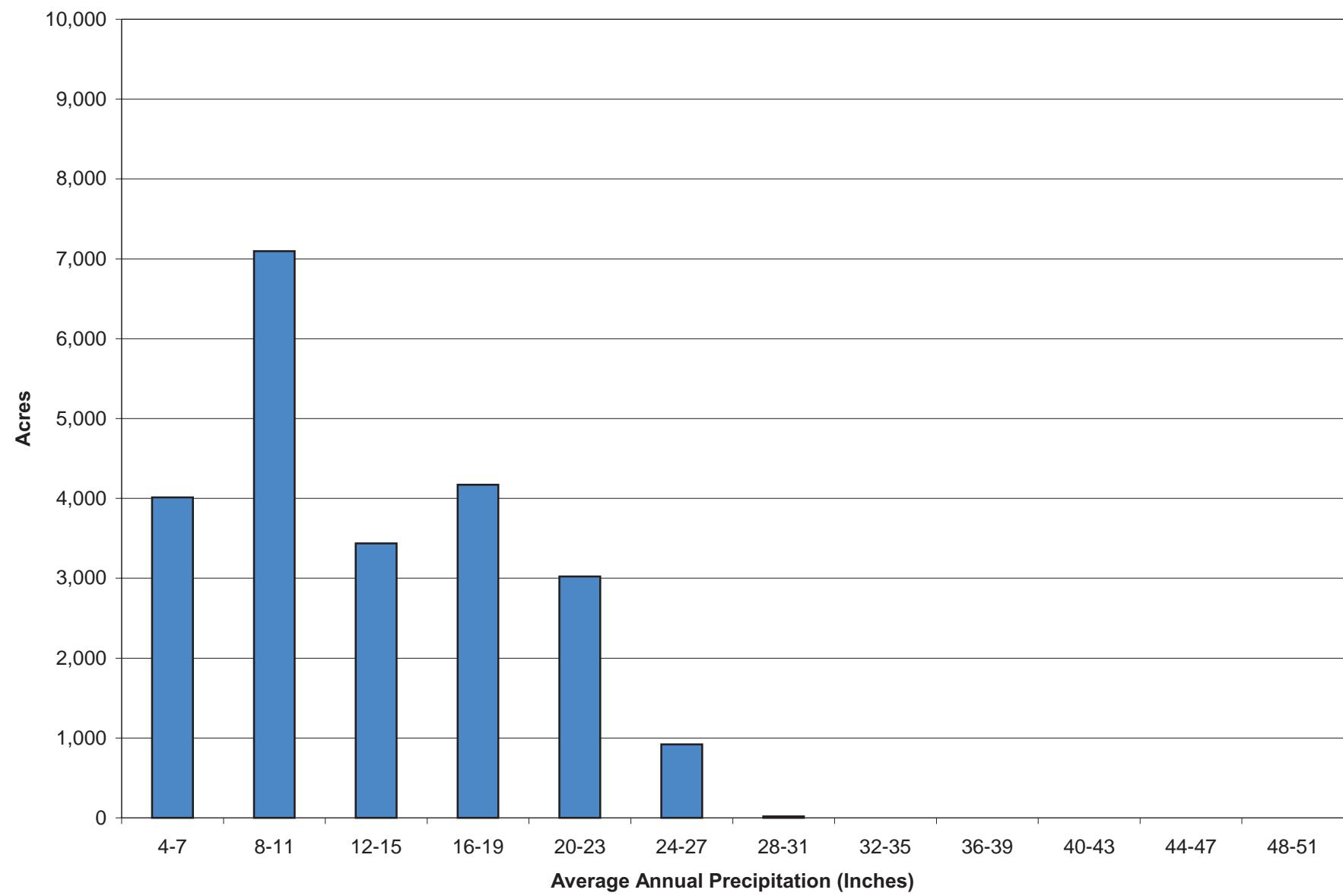


Figure C.33n Distribution of Precipitation for Cottonwood

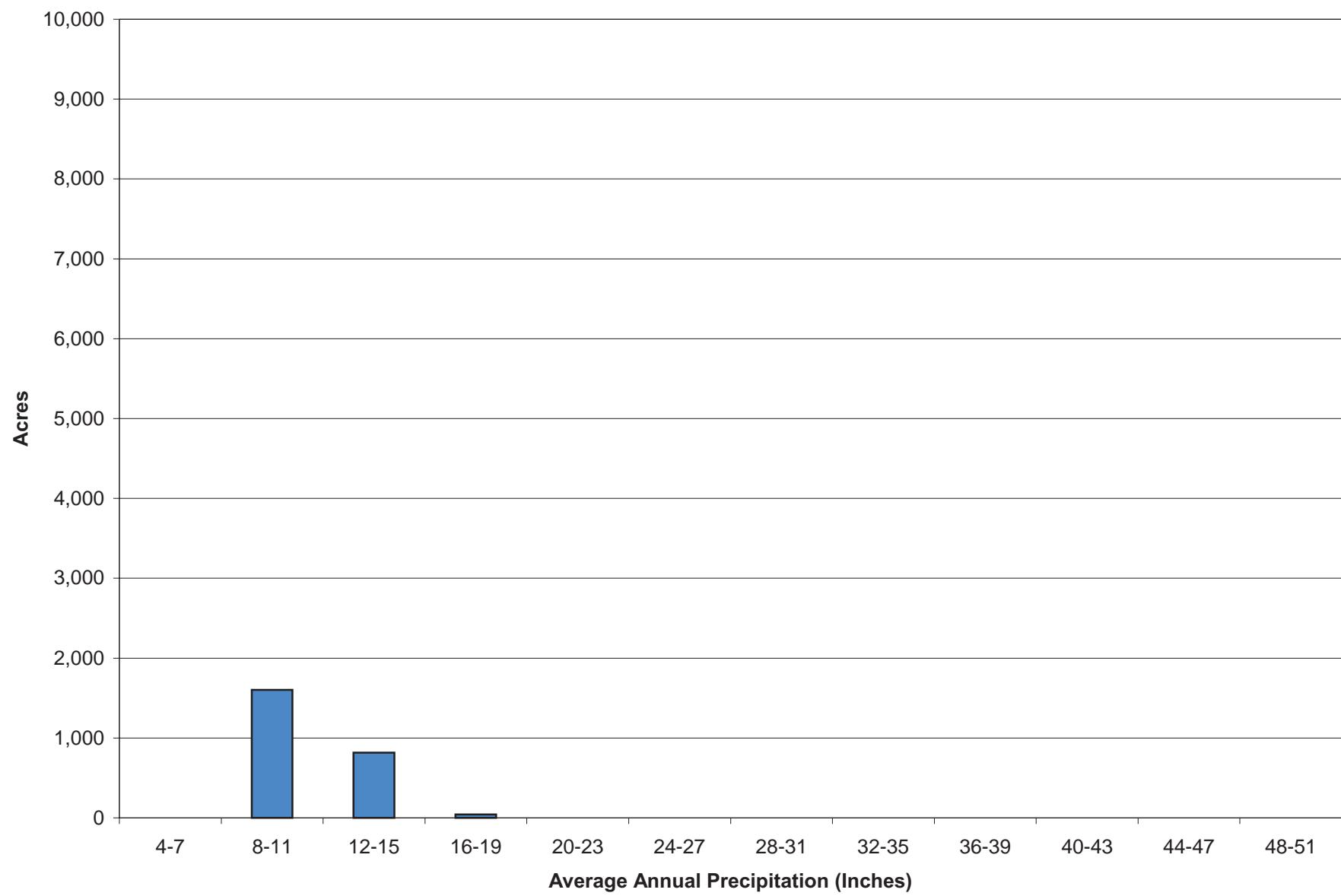


Figure C.33o Distribution of Precipitation for Joshua

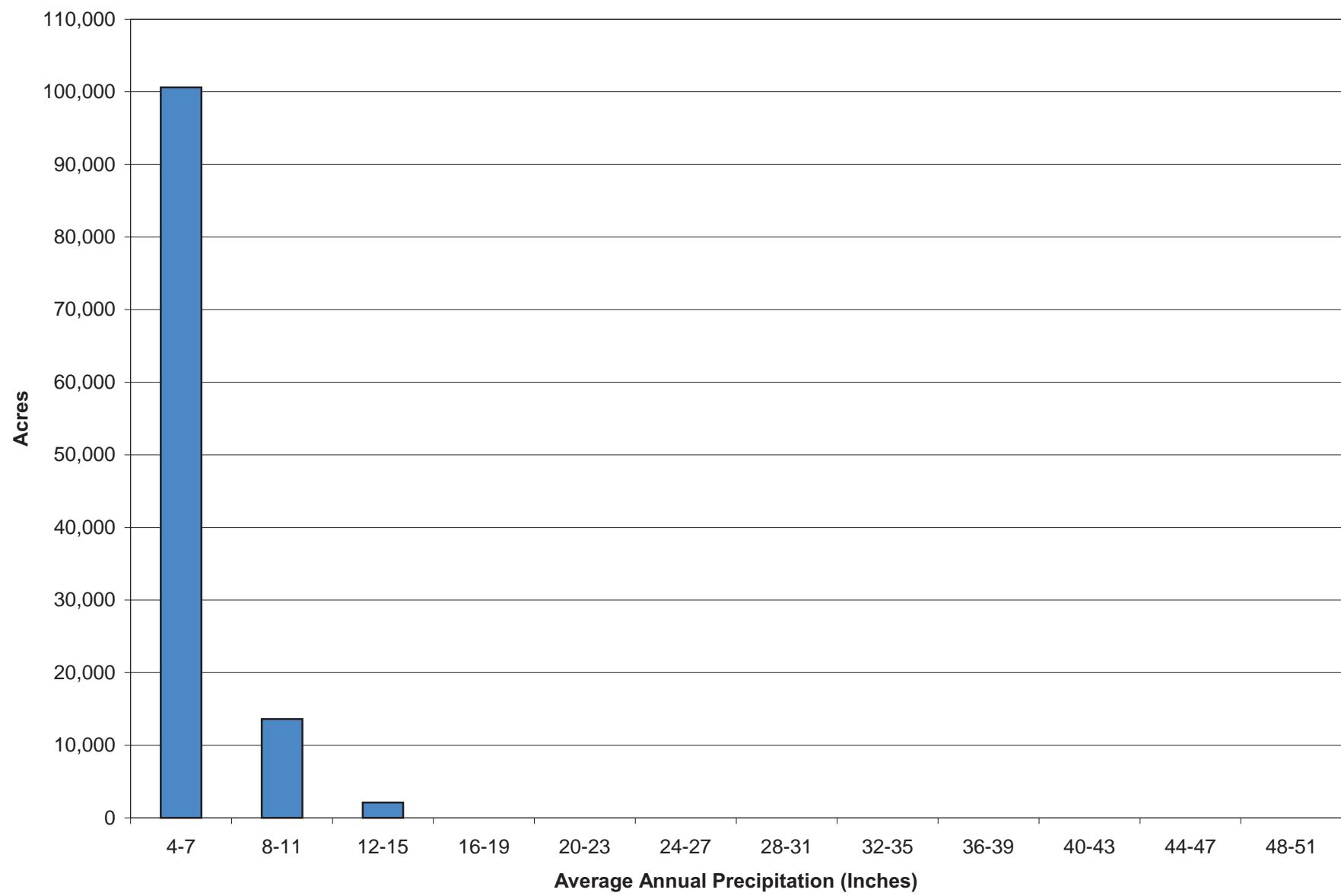


Figure C.33p Distribution of Precipitation for Mojave

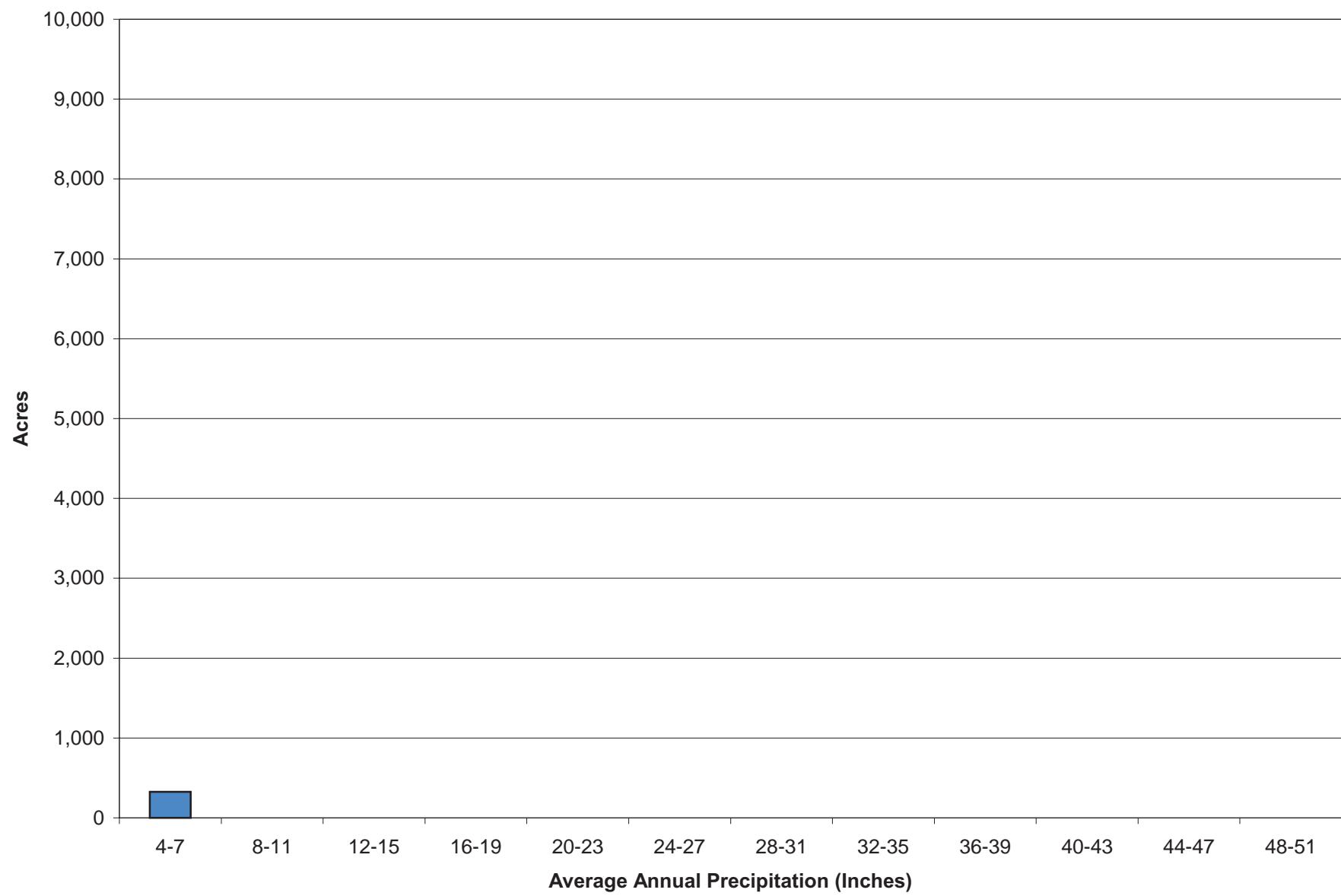


Figure C.33q Distribution of Precipitation for Rogers Lake

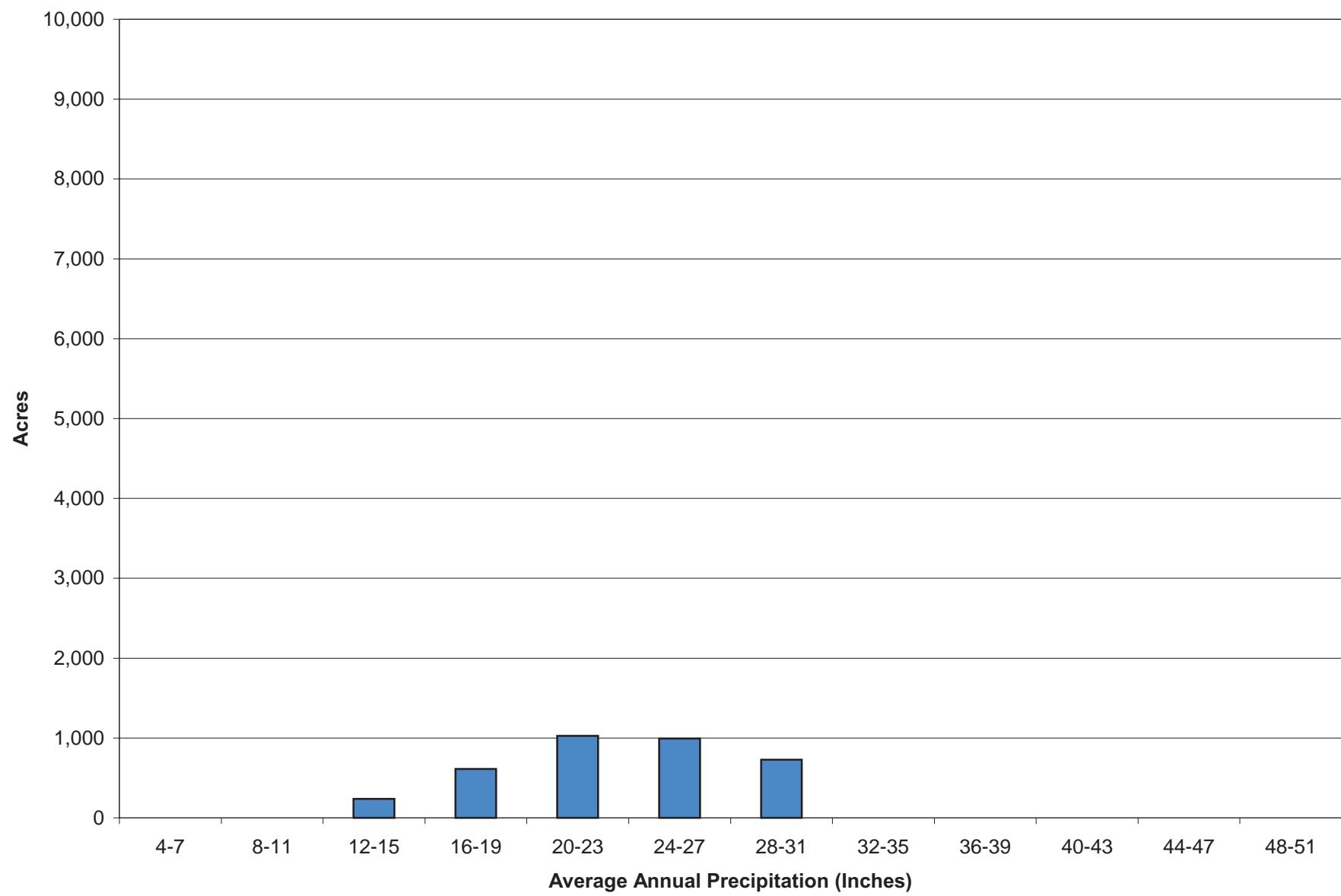


Figure C.33r Distribution of Precipitation for Mescal

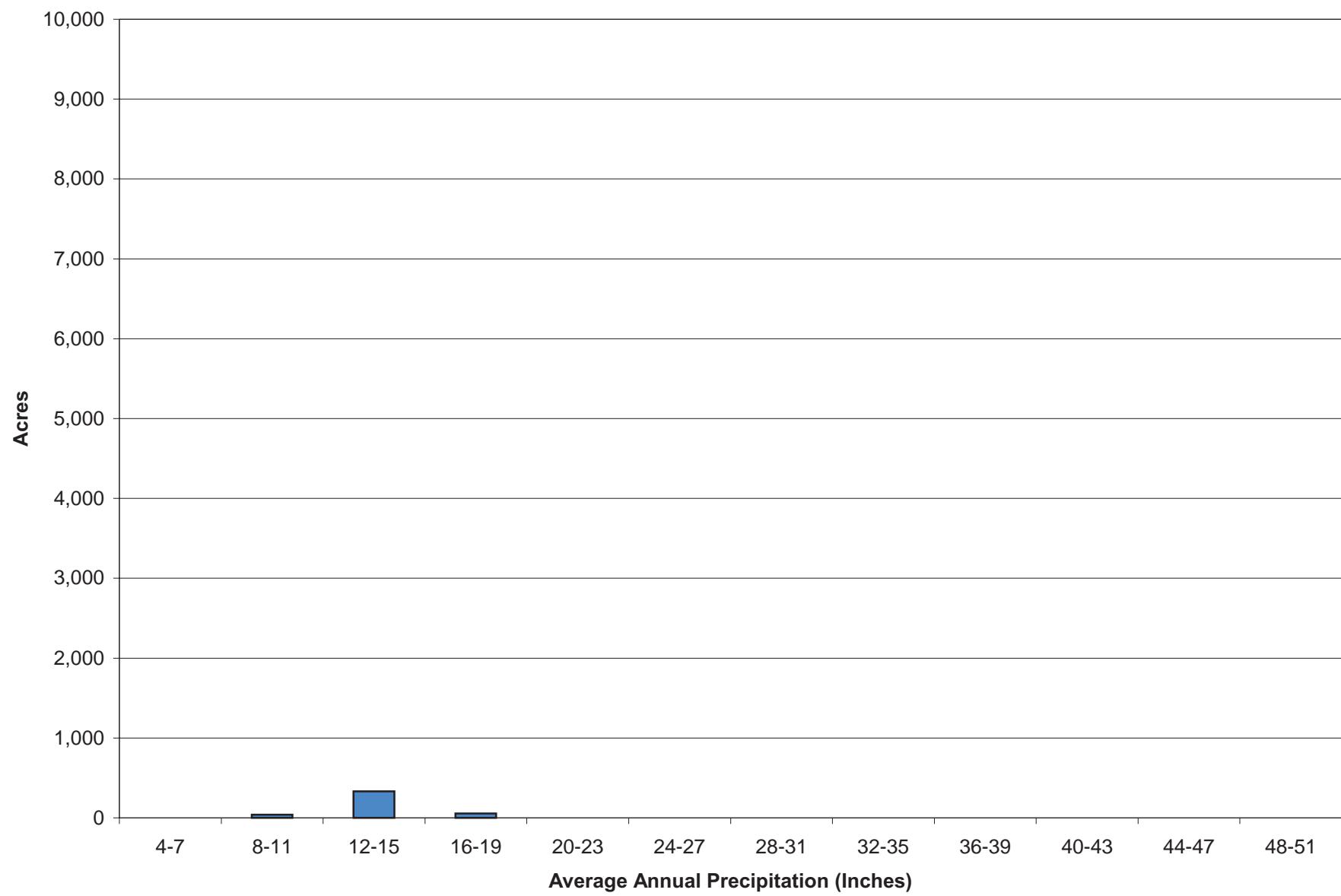


Figure C.33s Distribution of Precipitation for CG-5

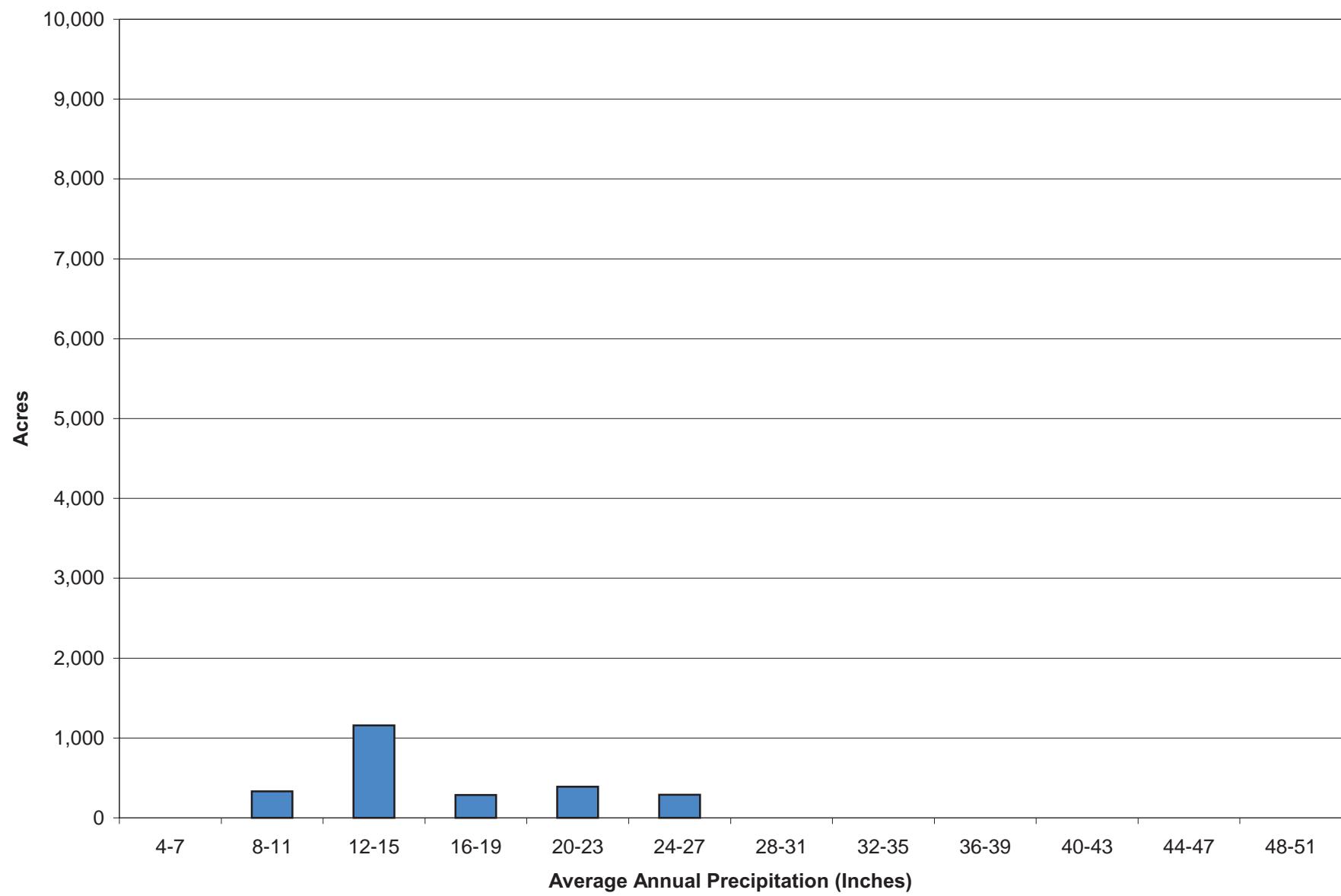


Figure C.33t Distribution of Precipitation for CG-6

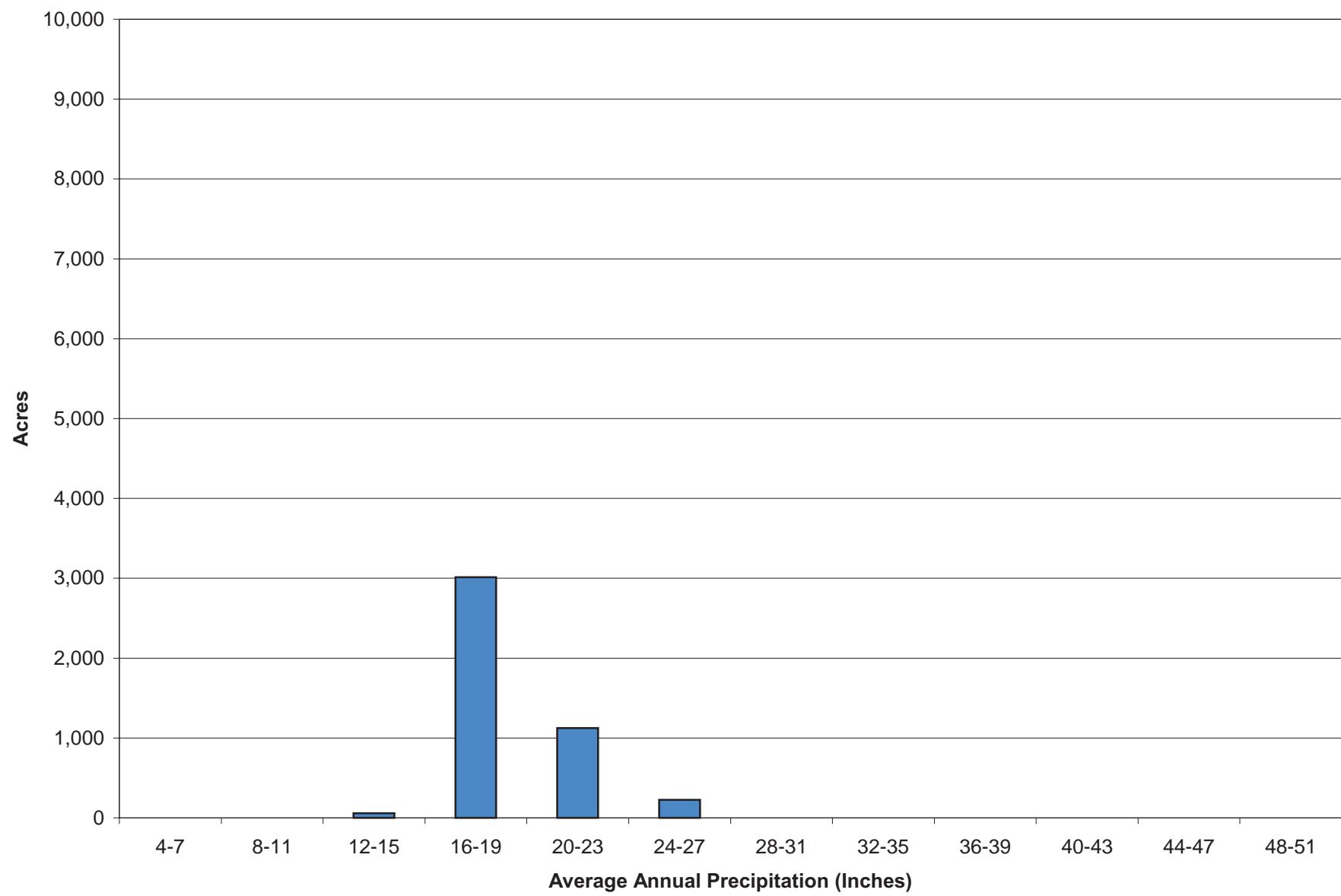


Figure C.33u Distribution of Precipitation for CG-8

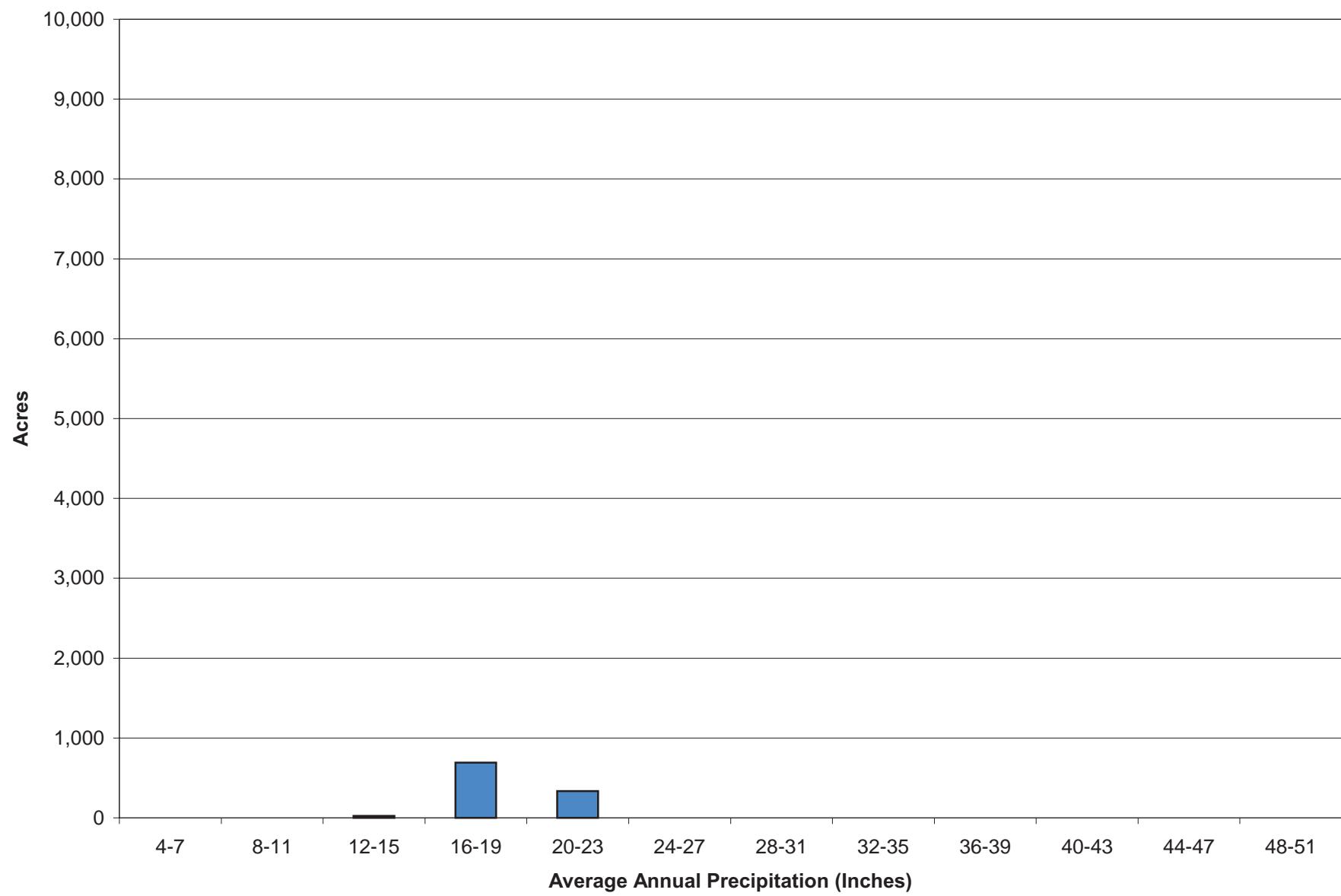


Figure C.33v Distribution of Precipitation for CG-9A

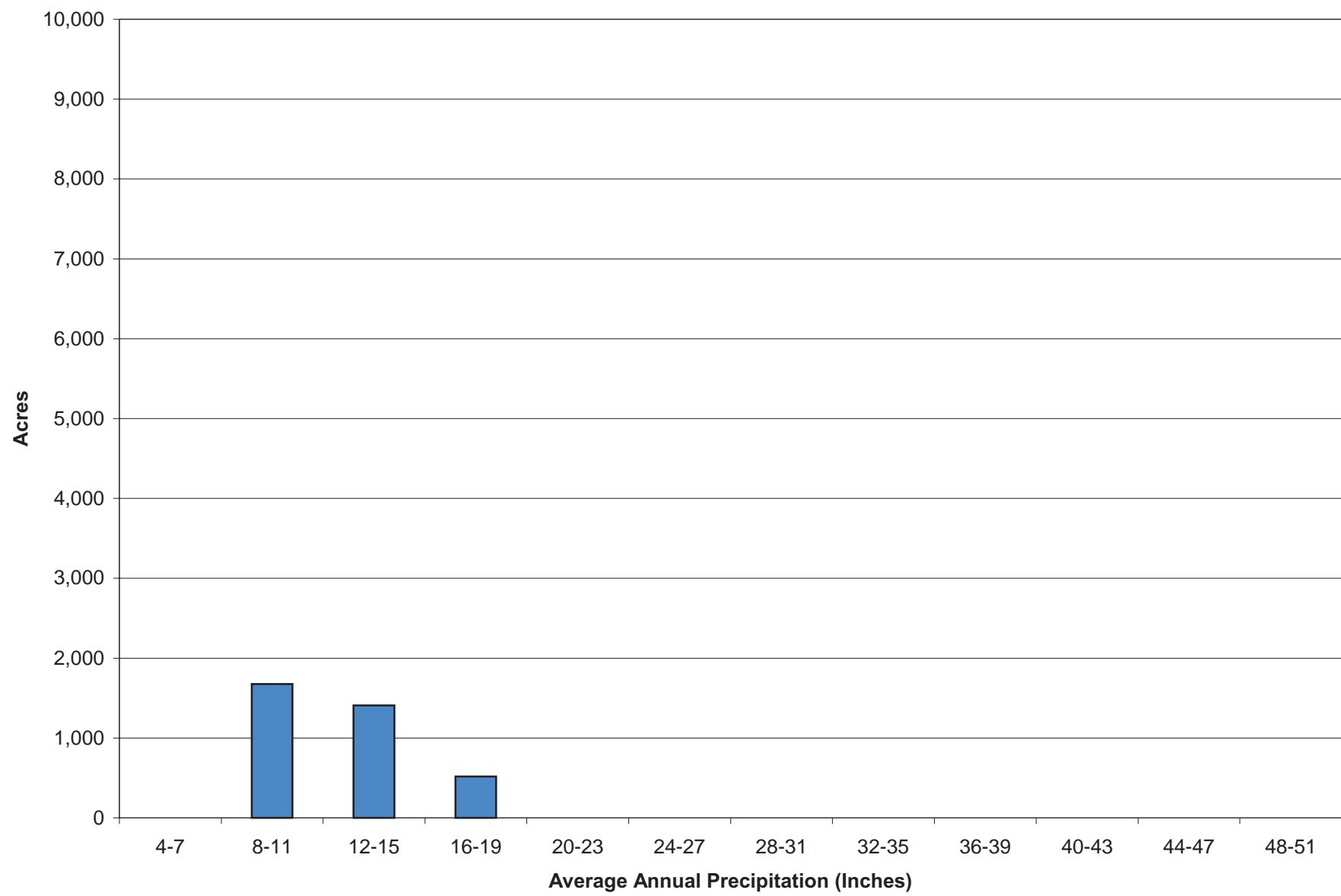


Figure C.33w Distribution of Precipitation for CG-14

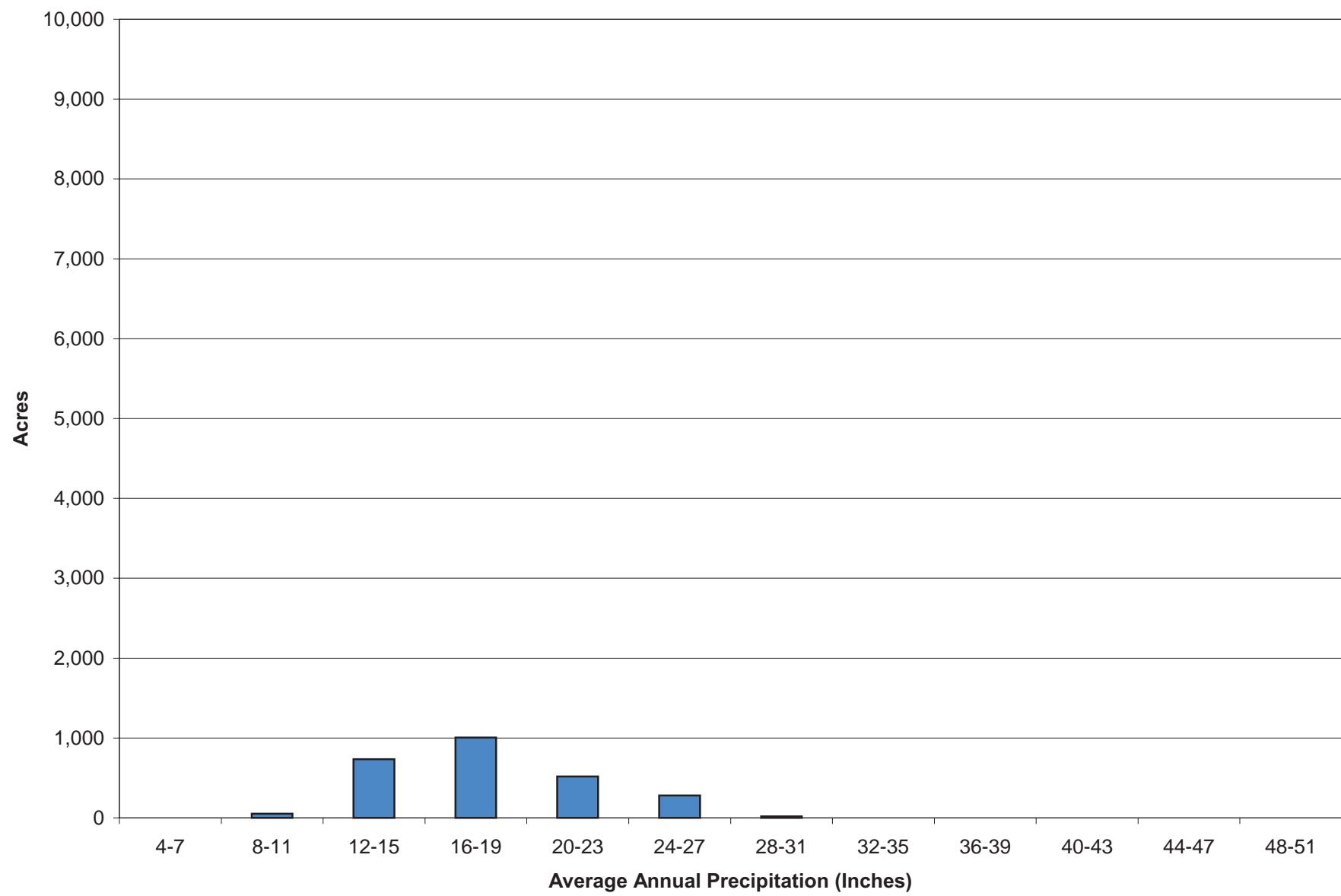


Figure C.33x Distribution of Precipitation for CG-T1

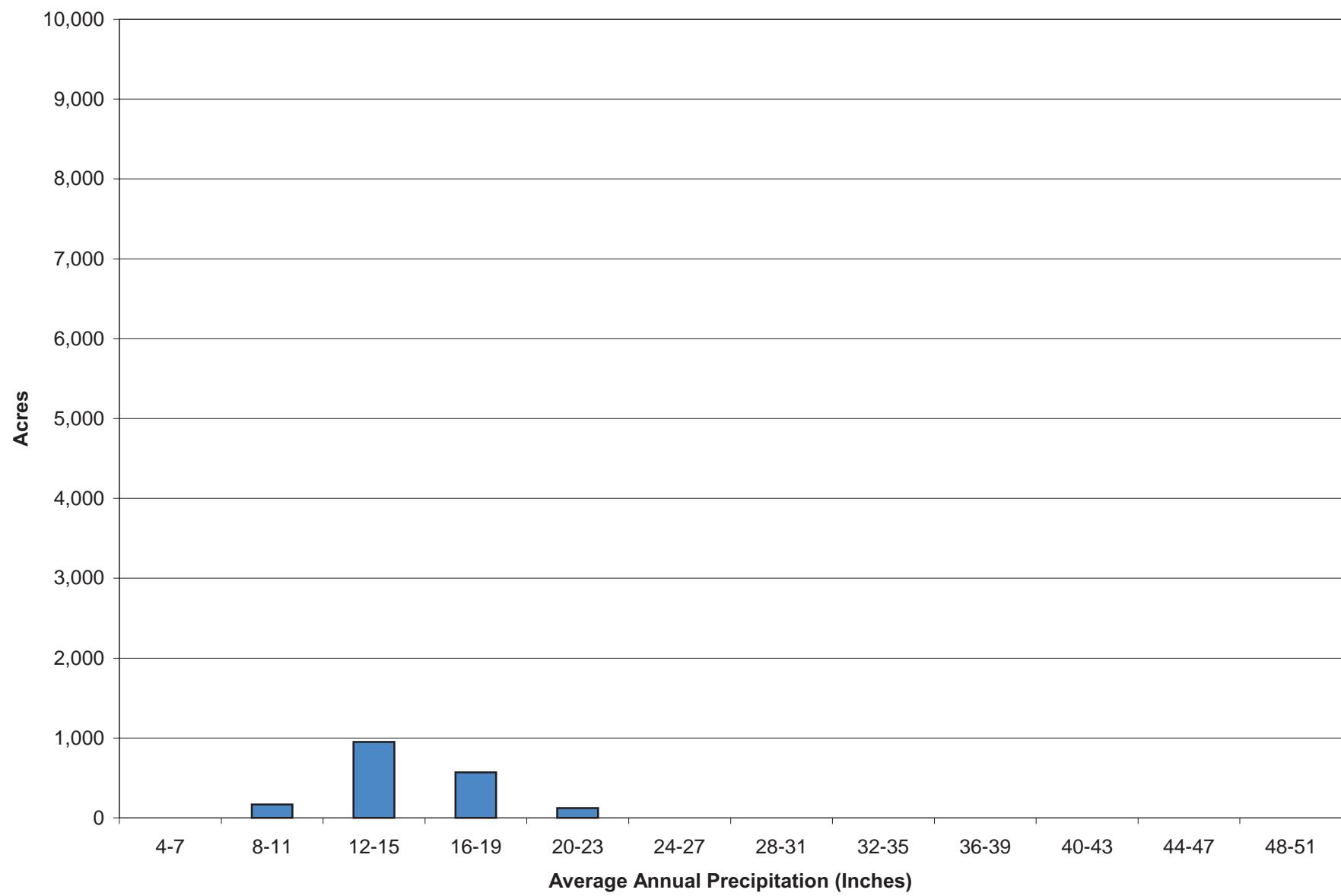


Figure C.33y Distribution of Precipitation for CG-T7

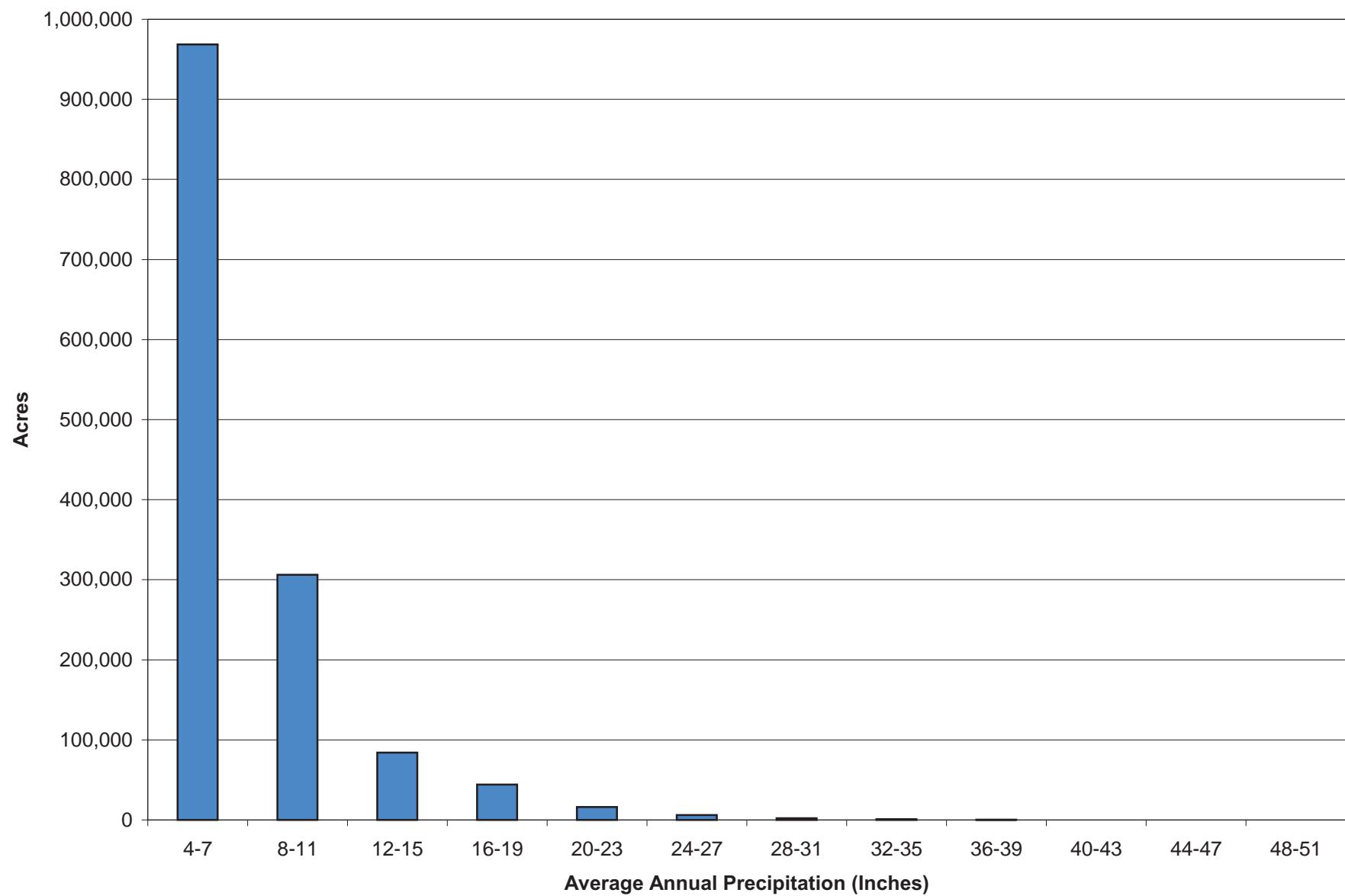


Figure C.33z Distribution of Precipitation for Antelope Valley Remainder

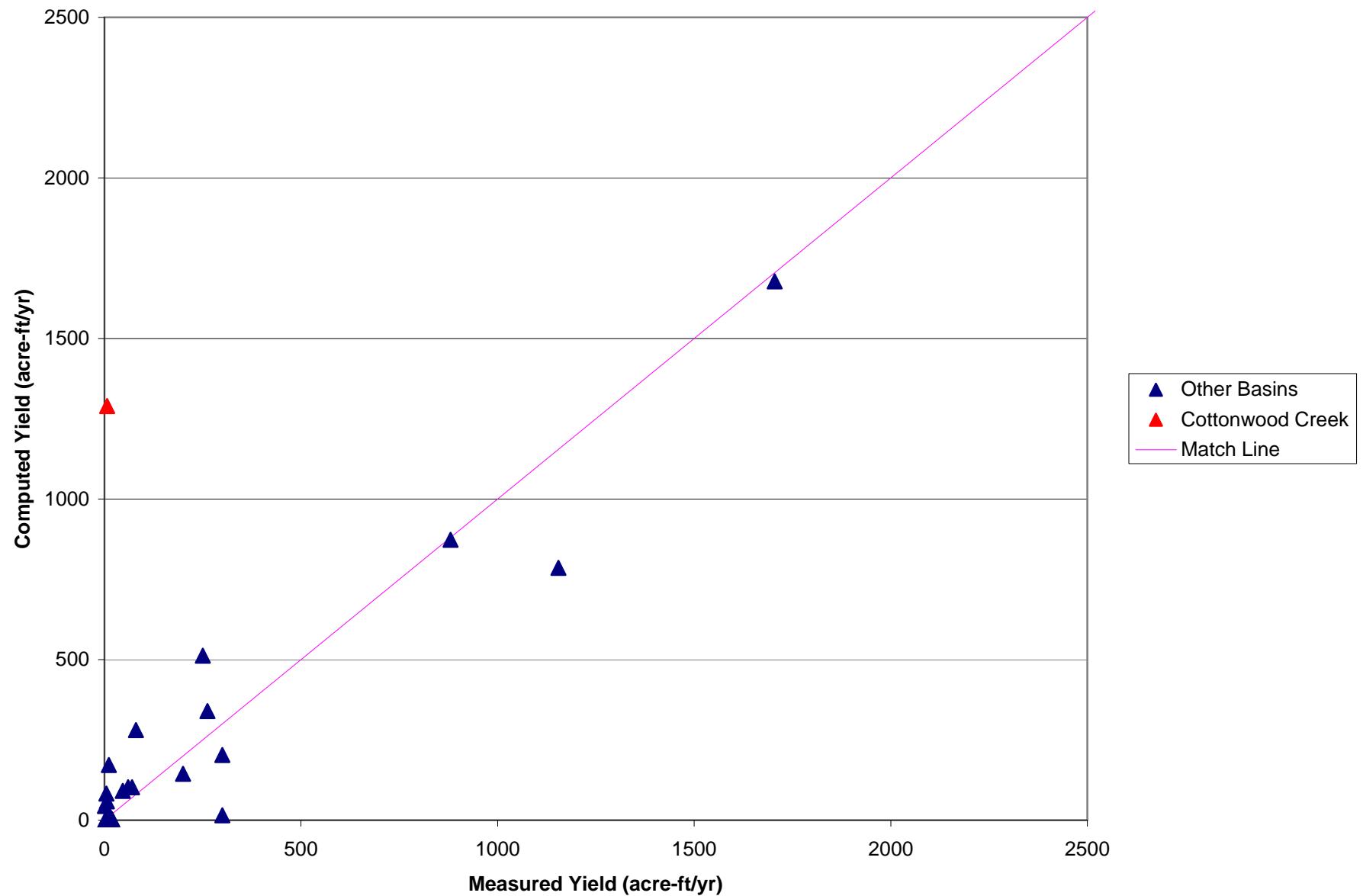


Figure C.34a Comparison of Measured and Computed Runoff for Small Watersheds

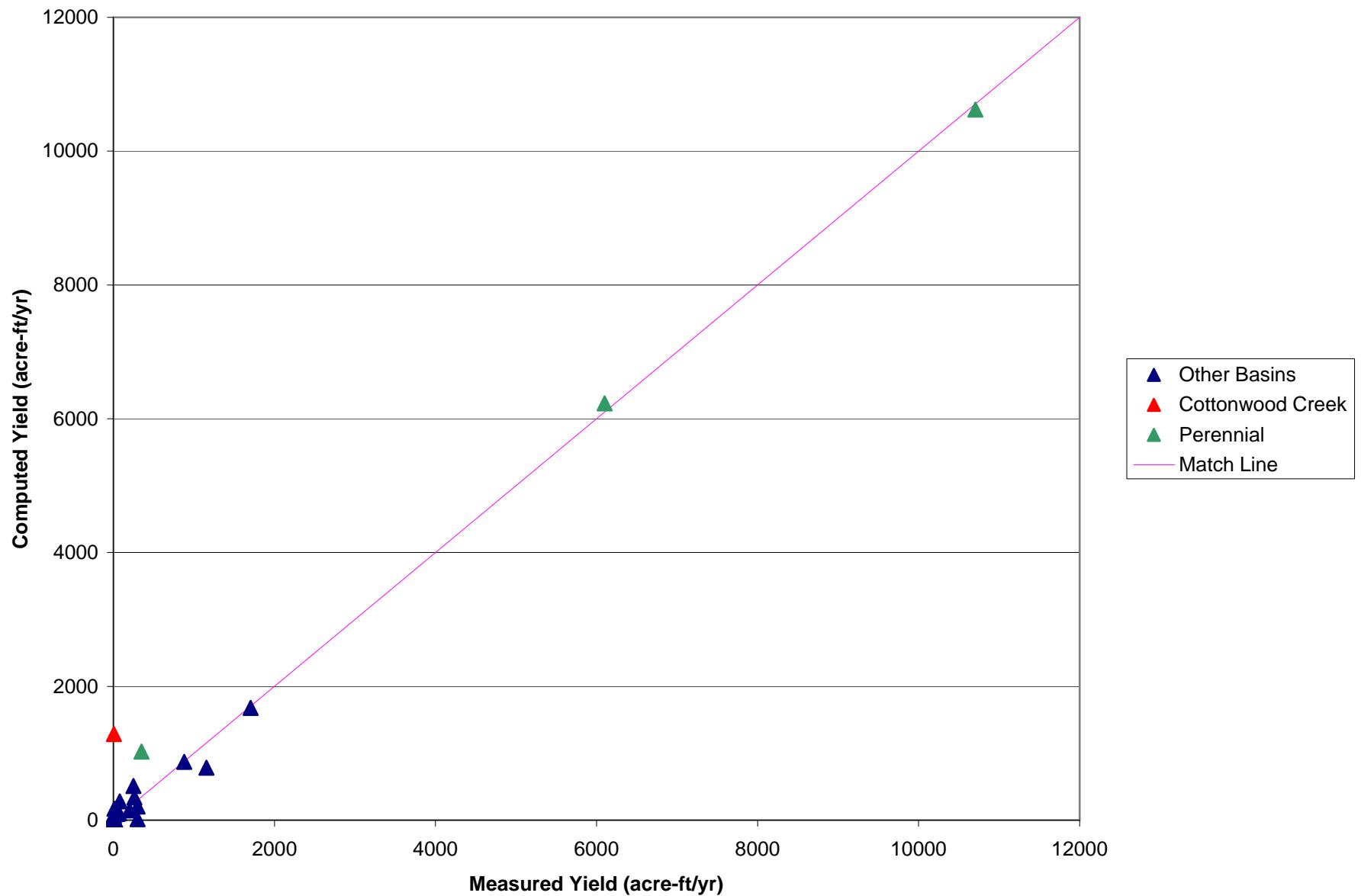


Figure C.34b Comparison of Measured and Computed Runoff for All Watersheds

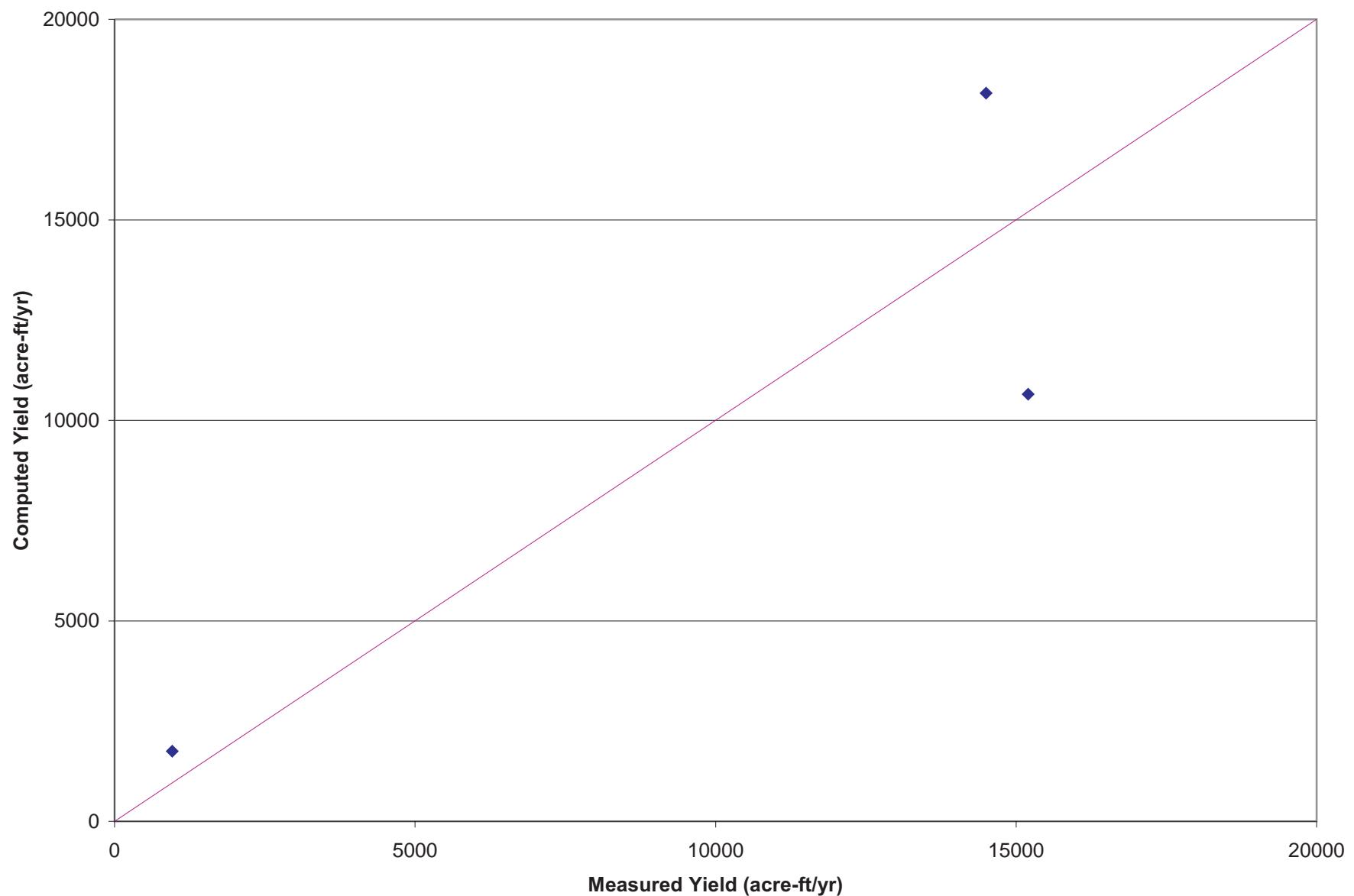


Figure C.35 Comparison of Measured and Computed Water Yield

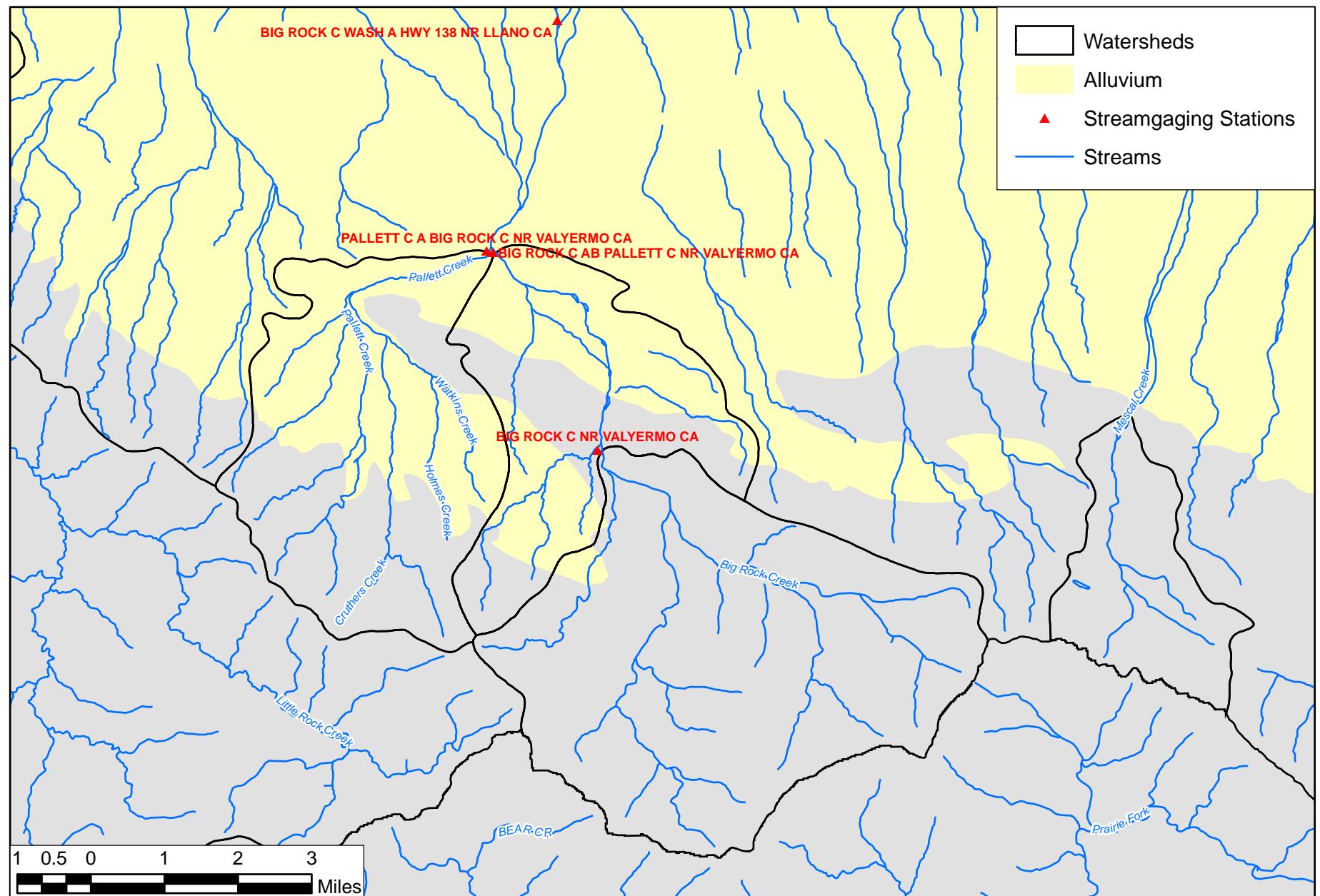


Figure C.36 Streamgaging Stations Along Big Rock Creek

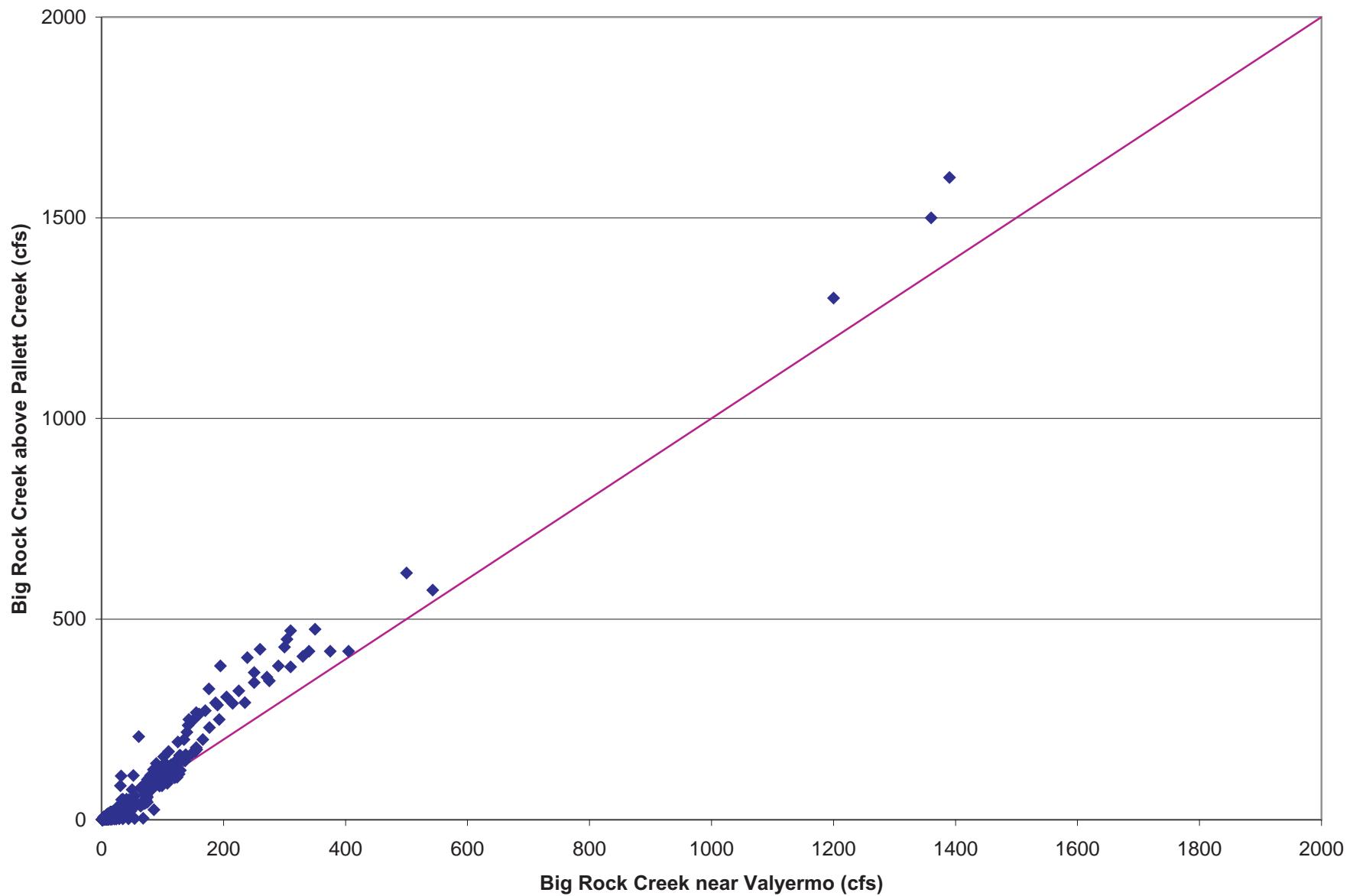


Figure C.37 Relation Between Streamflows at Big Rock Creek Near Valyermo and Big Rock Creek Above Pallett Creek

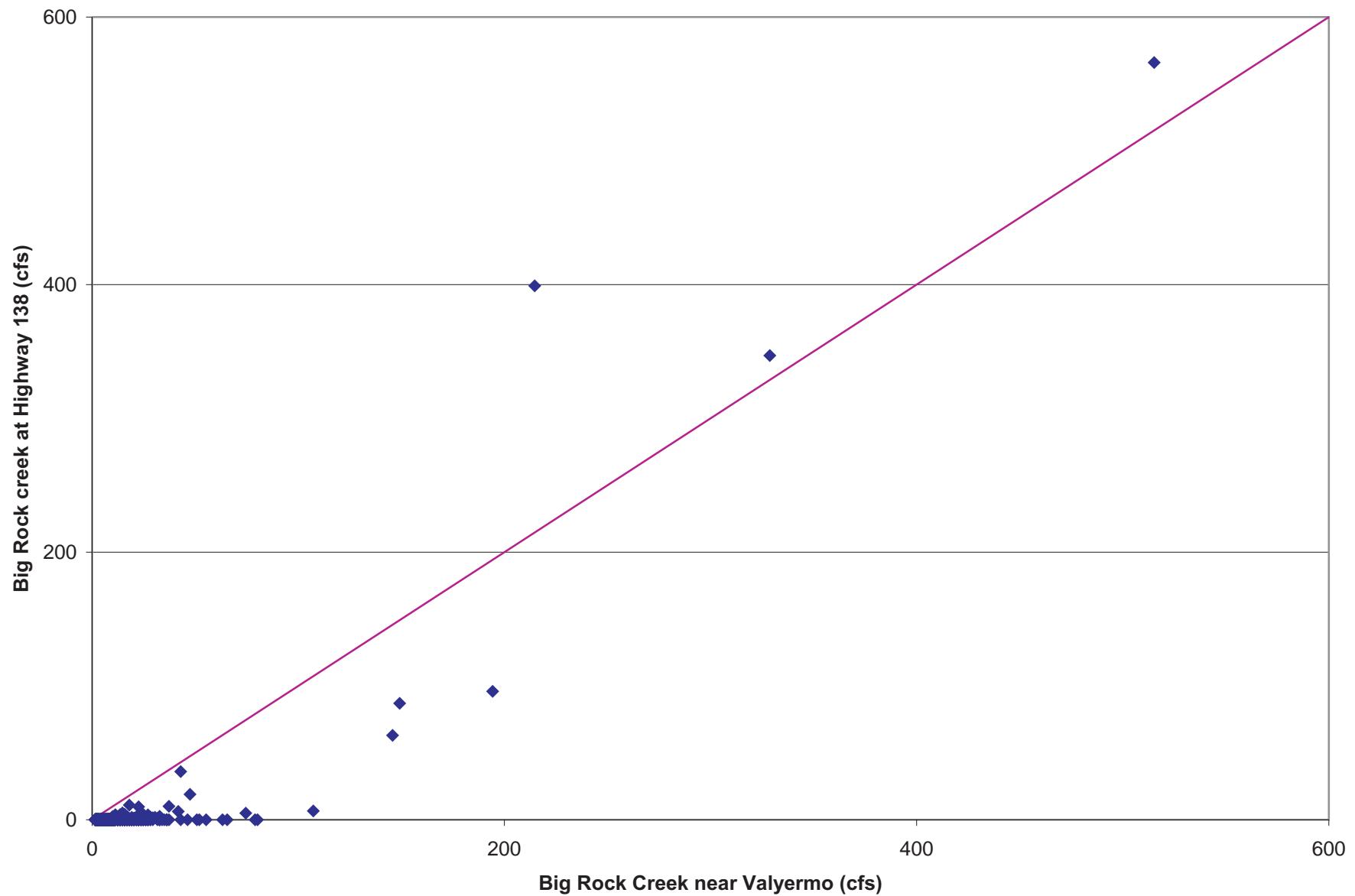


Figure C.38 Relation Between Streamflows at Big Rock Creek Above Pallett Creek and Big Rock Creek Near Highway 138

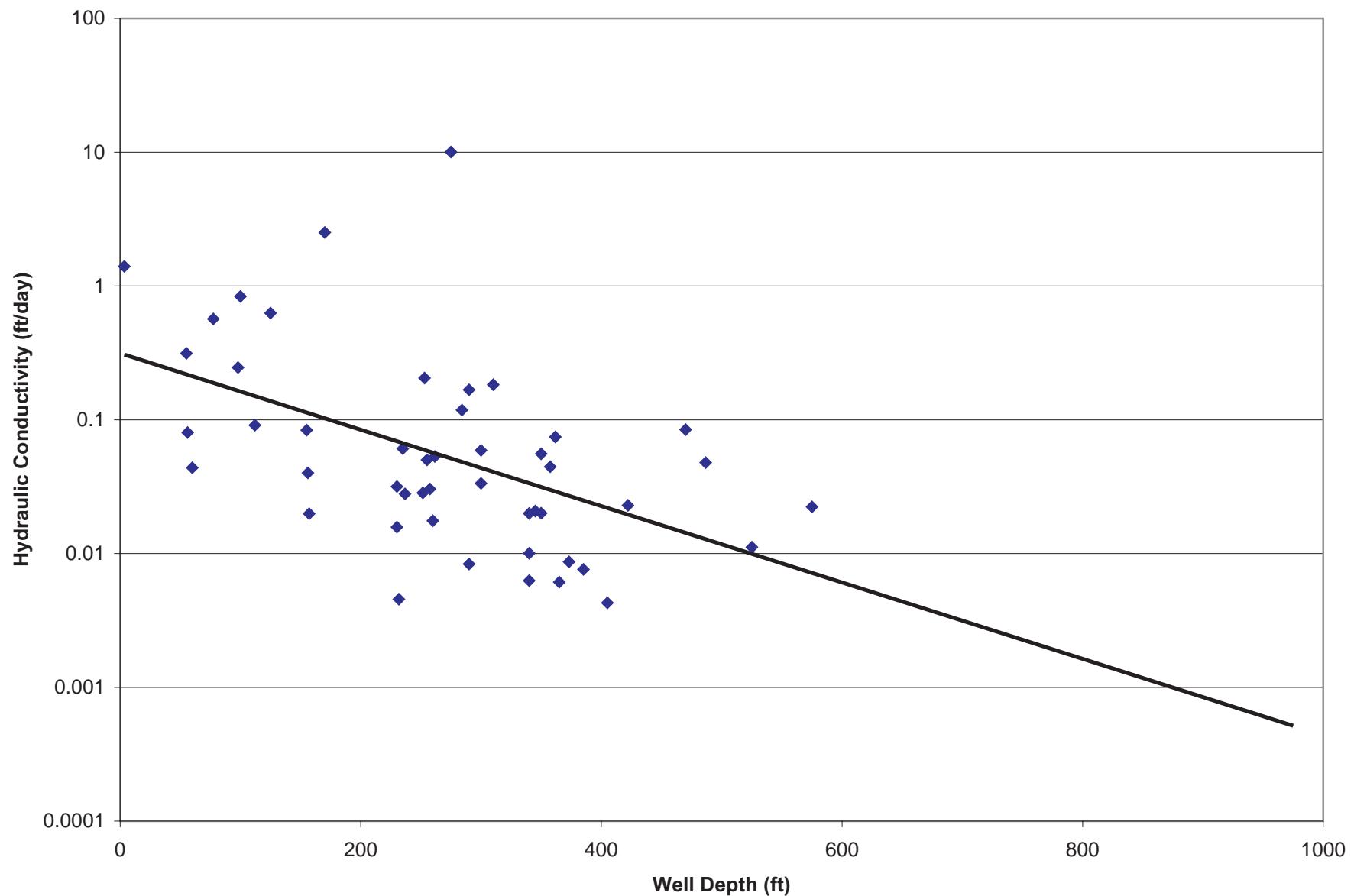


Figure C.39 Relation Between Hydraulic Conductivity and Depth

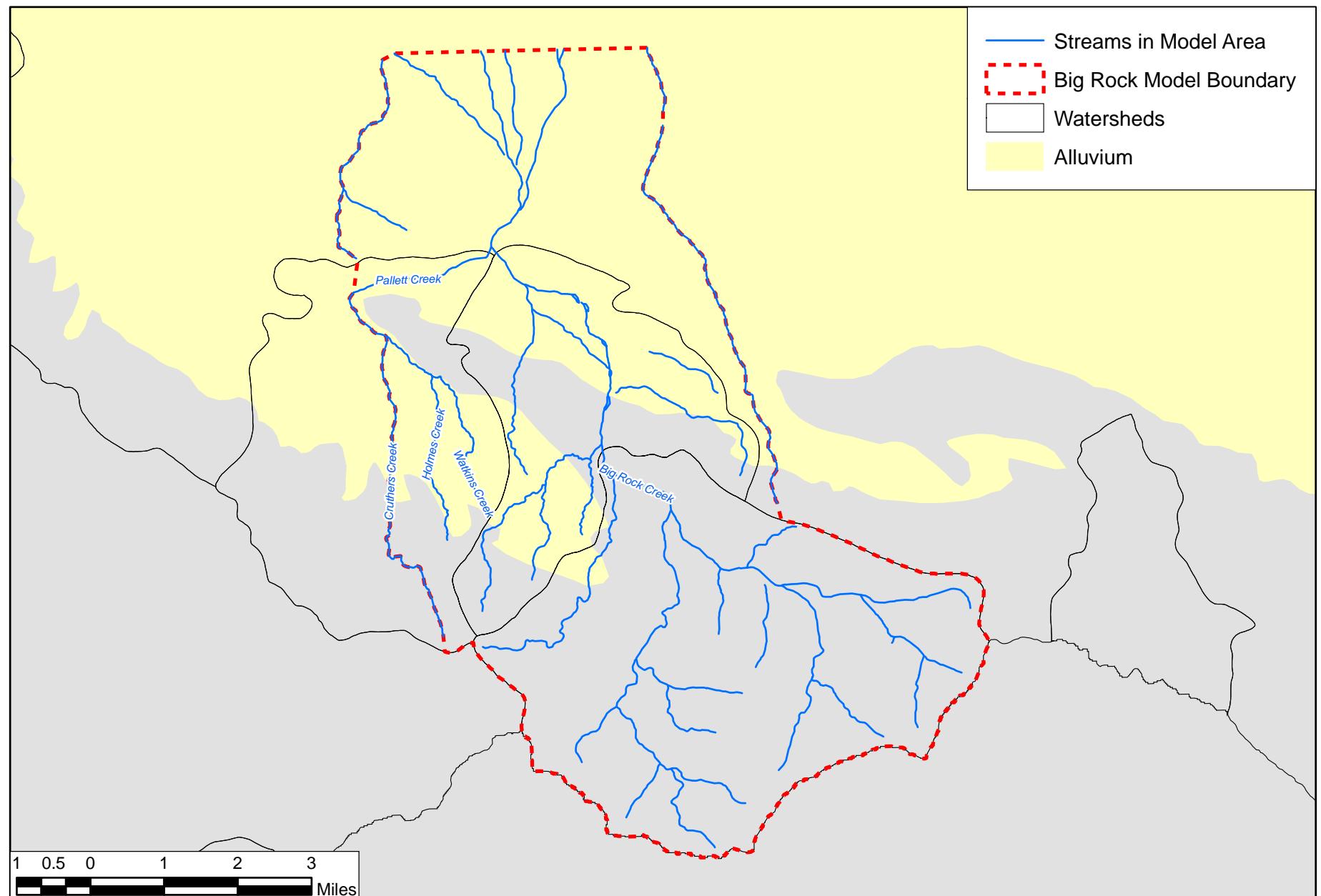


Figure C.40 Geographic Domain of Groundwater Model

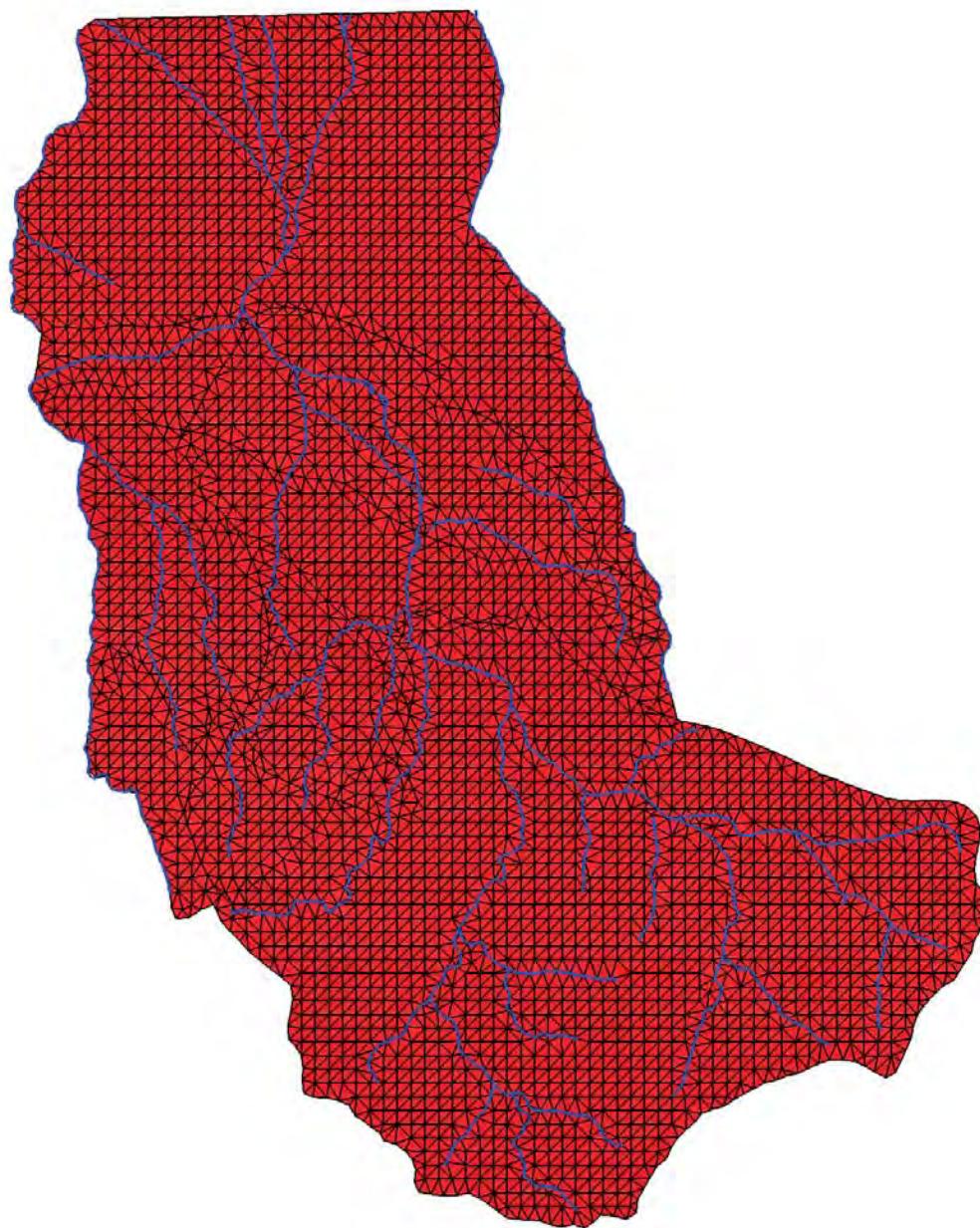


Figure C.41 Plan View of Big Rock Model Finite-Element Mesh

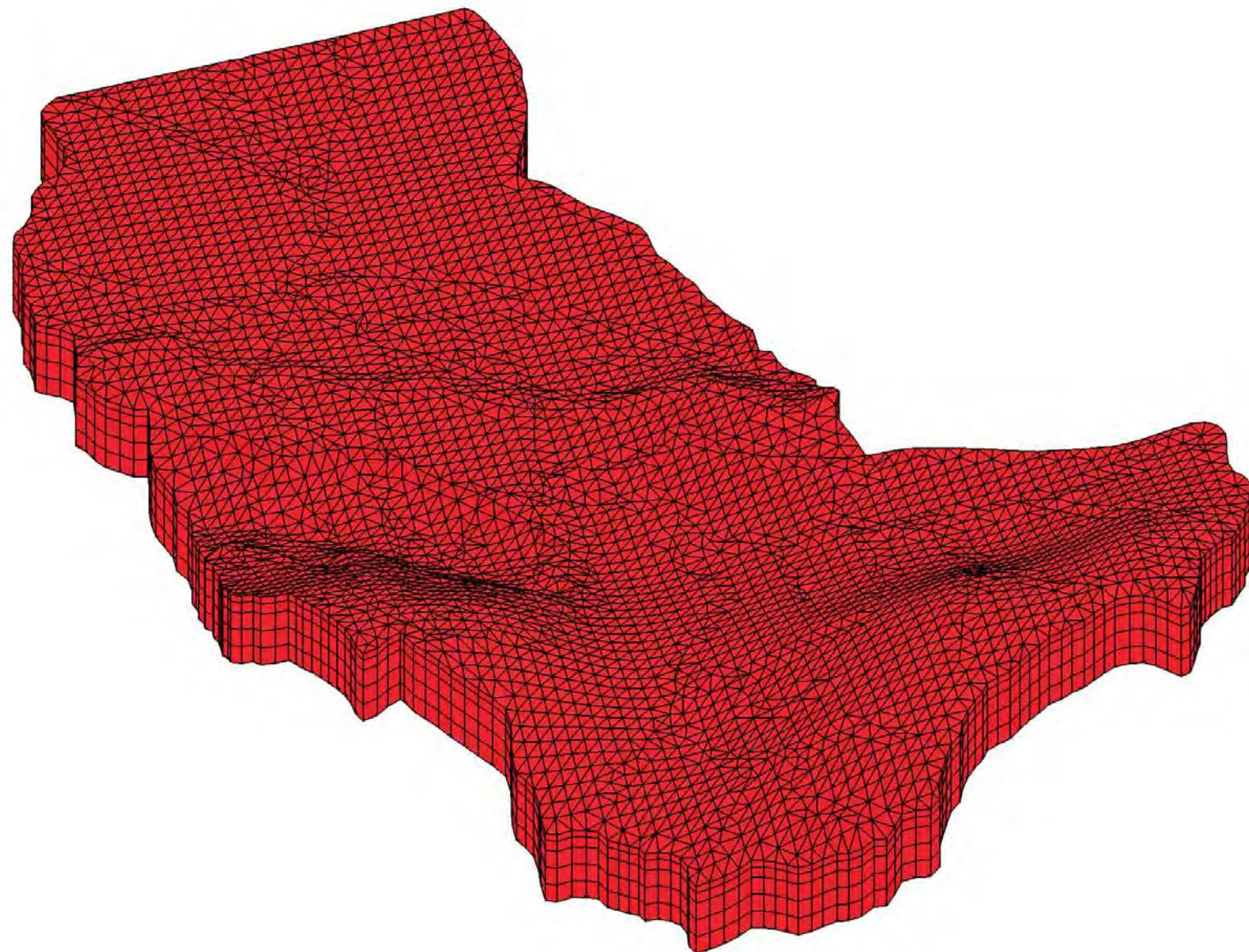


Figure C.42 Oblique View of Big Rock Model Finite-Element Mesh

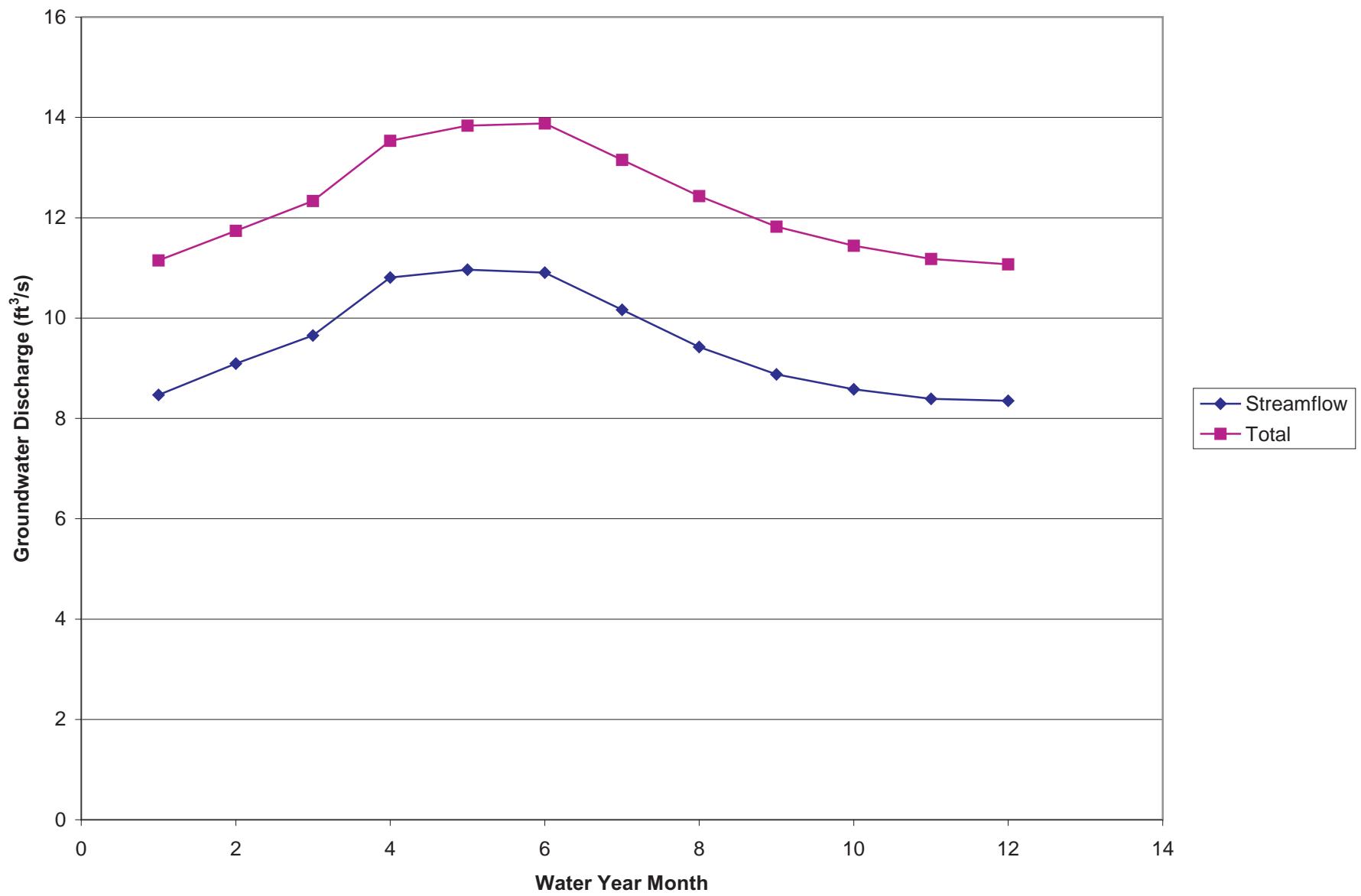


Figure C.43 Simulated Groundwater Discharges from Big Rock Creek Watershed

Table C.1 Precipitation Gages Within or Nearby Antelope Valley

Station	Number	Record Period	Record Count	Record Average ¹ (inches)	X (m)	Y (m)	Altitude (ft)
Acton Escondido FC261	040014	1949-2009	61	10.7	159,027	-389,239	2,960
Backus Ranch	040418	1949-1963	15	4.6	165,720	-339,155	2,650
Big Bear Lake	040741	1961-2009	49	21.7	287,787	-415,219	6,790
Big Pines Park FC83b	040779	1949-1996	48	25.1	212,883	-401,038	6,850
Boron	045123	1992-1996	5	5.2	214,250	-332,536	2,890
Crystal Lake FC283c	042198	1960-2009	50	36.3	197,731	-408,794	5,370
El Mirage Field	042771	1972-2009	38	6.0	219,840	-373,113	2,900
Fairmont	042941	1949-2009	61	15.8	143,363	-367,311	3,060
Lake Arrowhead	044671	1949-2009	61	40.0	255,922	-413,986	5,210
Lancaster FSS	044749	1974-2009	36	7.8	163,129	-363,262	2,350
Lebec	044863	1949-2009	61	13.2	103,510	-353,077	3,580
Llano Eberle Ranch	045002	1949-1965	17	6.8	208,066	-391,904	3,850
Mojave	045756	1949-2009	61	6.0	167,025	-328,026	2,740
Neenach	046122	1949-1963	15	7.6	129,463	-356,428	2,890
Palmdale	046624	1949-2009	61	7.4	172,611	-379,730	2,650
Pearblossom	046773	1985-2009	25	7.2	194,211	-388,525	3,050
Randsburg	047253	1949-2009	61	6.3	213,241	-291,833	3,570
Sandberg PRTL FC130b	047734	1949-1987	39	15.3	117,346	-362,151	4,030
Tehachapi	048826	1949-1997	49	11.0	139,532	-319,260	3,980
Tejon Rancho	048839	1949-2009	61	11.4	113,881	-330,741	1,420
Valyermo Fire Station 79	049250	1973-1985	13	10.5	195,865	-394,037	3,600
Victorville	049325	1949-2009	61	5.6	247,640	-383,467	2,850
Vincent Fire Station FC120	049345	1950-2000	51	8.4	171,302	-390,856	3,130

¹ Precipitation values for the years 1949 through 2005 were used in the analysis. Therefore, the "Record Average" column includes only those precipitation values through 2005.

Table C.2a Adjusted Monthly Precipitation for Acton Escondido FC261, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.18	0.00	1.85	1.68	0.95	0.87	0.00	0.38	0.00	0.00	0.00	0.05	5.96
1950	0.05	0.75	1.19	1.25	0.96	0.74	0.88	0.01	0.00	0.12	0.00	0.39	6.34
1951	0.04	0.13	0.06	1.61	0.33	0.43	0.55	0.25	0.00	0.31	0.00	0.00	3.71
1952	0.66	0.80	4.84	6.32	0.46	6.42	0.68	0.00	0.00	0.00	0.00	0.41	20.59
1953	0.00	2.02	2.07	0.27	0.28	0.23	0.71	0.56	0.00	0.00	0.00	0.00	6.14
1954	0.00	0.45	0.23	4.02	1.28	2.16	0.03	0.00	0.00	0.01	0.00	0.00	8.18
1955	0.00	1.10	0.64	3.32	0.66	0.07	0.89	1.32	0.00	0.00	0.00	0.00	8.00
1956	0.00	0.54	0.81	4.68	0.20	0.00	2.52	0.32	0.00	0.00	0.00	0.00	9.07
1957	0.17	0.00	0.10	4.02	0.88	1.47	0.51	0.81	0.18	0.00	0.00	0.04	8.18
1958	1.72	0.49	1.67	1.05	3.51	2.76	3.55	0.10	0.00	0.00	0.09	0.17	15.11
1959	0.52	0.14	0.06	1.16	2.73	0.00	0.31	0.00	0.00	0.00	0.00	0.50	5.42
1960	0.00	0.04	0.99	1.55	0.97	0.14	0.41	0.00	0.00	0.00	0.00	0.00	4.10
1961	0.01	2.42	0.14	0.32	0.05	1.16	0.08	0.00	0.00	0.00	0.87	0.00	5.05
1962	0.00	1.34	0.90	1.50	6.27	1.36	0.00	0.29	0.00	0.00	0.00	0.00	11.66
1963	0.24	0.00	0.00	0.30	1.88	1.27	1.27	0.00	0.37	0.00	0.11	1.33	6.77
1964	0.50	1.50	0.08	1.04	0.02	1.56	0.70	0.17	0.00	0.00	0.00	0.00	5.57
1965	0.64	1.06	0.79	0.26	0.12	0.61	3.18	0.00	0.00	0.24	0.64	0.29	7.83
1966	0.00	7.47	3.02	0.80	1.23	0.20	0.00	0.00	0.00	0.00	0.00	0.38	13.10
1967	0.04	2.61	2.71	1.66	0.04	1.45	3.51	0.25	0.00	0.00	0.37	0.52	13.16
1968	0.00	4.09	0.81	0.81	0.50	1.33	0.39	0.10	0.00	0.03	0.80	0.00	8.86
1969	0.75	0.29	0.91	7.73	6.75	0.66	0.86	0.32	0.36	0.31	0.00	0.00	18.94
1970	0.00	1.55	0.09	0.60	1.72	2.75	0.15	0.00	0.00	0.00	0.00	0.00	6.86
1971	0.02	5.04	2.97	0.26	0.29	0.29	0.50	0.17	0.00	0.00	0.00	0.10	9.64
1972	0.13	0.34	5.06	0.00	0.00	0.00	0.44	0.10	0.00	0.00	0.12	0.00	6.19
1973	0.46	1.20	0.89	2.14	3.90	2.15	0.00	0.00	0.00	0.00	0.00	0.00	10.74
1974	0.00	0.94	0.10	5.34	0.03	1.90	0.12	0.07	0.00	0.00	0.00	0.00	8.50
1975	1.87	0.25	1.53	0.22	2.01	1.70	1.40	0.00	0.00	0.00	0.00	0.10	9.08
1976	0.30	0.20	0.20	0.00	3.00	0.90	0.80	0.10	0.00	0.10	0.00	2.70	8.30
1977	0.10	0.40	0.20	2.30	0.10	1.10	0.00	2.30	0.00	0.00	1.90	0.00	8.40
1978	0.00	0.10	4.90	3.60	6.30	5.90	1.40	0.00	0.00	0.00	0.10	1.00	23.30
1979	0.20	1.70	2.00	5.00	2.70	5.90	0.00	0.00	0.00	0.00	0.00	0.23	17.73
1980	0.30	0.60	0.20	5.20	7.20	3.20	0.76	0.22	0.00	0.00	0.15	0.23	18.07
1981	0.00	0.00	0.40	2.29	1.30	2.80	0.60	0.10	0.00	0.00	0.00	0.00	7.49
1982	0.05	1.70	0.10	2.90	0.80	4.60	0.25	0.10	0.00	0.00	0.00	0.40	10.90
1983	0.30	3.20	1.20	4.00	3.30	8.30	2.20	0.10	0.00	0.00	2.70	0.50	25.80
1984	1.20	1.11	2.20	0.01	0.00	0.20	0.00	0.00	0.04	0.03	0.00	0.10	4.89
1985	0.06	0.94	5.85	0.35	0.43	0.54	0.00	0.14	0.00	0.00	0.00	0.19	8.50
1986	0.40	2.11	0.19	1.92	3.38	3.17	0.51	0.00	0.00	0.00	0.14	0.06	11.88
1987	0.15	0.96	0.39	1.24	0.63	0.93	0.14	0.36	0.10	0.00	0.00	0.11	5.01
1988	3.04	1.59	1.56	1.63	1.21	0.60	2.10	0.24	0.00	0.15	0.09	0.00	12.21
1989	0.00	0.77	1.33	2.29	2.08	4.28	0.76	0.22	0.04	0.00	0.00	0.70	12.48
1990	0.20	0.04	0.00	2.29	2.08	1.83	0.76	0.22	0.00	0.00	0.00	0.00	7.43
1991	0.00	0.30	1.33	1.30	2.08	7.10	0.00	0.00	0.00	0.03	0.00	0.00	12.14
1992	0.50	0.10	1.33	2.70	2.08	3.08	0.30	0.20	0.00	0.00	0.15	0.00	10.44
1993	1.20	0.00	4.20	10.20	6.90	1.80	0.00	0.00	0.50	0.00	0.00	0.00	24.80
1994	0.60	0.80	1.20	0.50	2.00	1.80	0.50	0.30	0.00	0.00	0.00	0.00	7.70
1995	0.40	0.60	0.90	9.31	0.90	4.80	1.10	0.00	0.30	0.03	0.00	0.00	18.34
1996	0.00	0.00	0.30	1.70	4.80	1.60	0.20	0.00	0.00	0.00	0.15	0.00	8.75
1997	0.60	0.91	1.70	2.48	0.40	0.00	0.20	0.00	0.00	0.00	0.00	0.55	6.84
1998	0.00	2.09	3.43	2.01	9.72	3.72	1.22	2.24	0.04	0.00	0.00	0.48	24.95
1999	0.08	0.90	0.71	2.29	2.08	0.59	1.30	0.08	0.51	0.00	0.00	0.37	8.90
2000	0.00	0.20	0.00	0.59	3.54	1.03	1.37	0.04	0.00	0.00	0.25	0.23	7.25
2001	0.38	1.11	1.33	2.29	2.08	1.83	0.76	0.22	0.04	0.03	0.15	0.23	10.46
2002	0.38	1.11	1.33	2.29	2.08	1.83	0.76	0.22	0.04	0.03	0.15	0.23	10.46
2003	0.38	1.11	1.33	2.29	2.08	1.83	0.76	0.22	0.04	0.03	0.15	0.23	10.46
2004	0.38	1.11	1.33	2.29	2.08	1.83	0.76	0.22	0.04	0.03	0.15	0.23	10.46
2005	0.38	1.11	1.33	4.96	1.49	1.29	0.76	0.20	0.00	0.16	0.04	0.51	12.23
2006	2.74	0.04	0.36	1.17	1.65	2.69	2.23	0.16	0.00	0.28	0.00	0.00	11.32
2007	0.23	0.04	0.55	0.35	1.64	0.20	0.27	0.00	0.00	0.00	0.00	1.05	4.33
2008	0.47	0.74	1.09	5.62	0.44	0.24	0.04	0.04	0.00	0.00	0.00	0.04	8.72
2009	0.00	3.25	1.64	0.27	4.68	0.39	0.08	0.08	0.00	0.00	0.00	0.00	10.39

¹ Adjusted for missing days.

Table C.2b Adjusted Monthly Precipitation for Backas Ranch, California(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.04	0.00	0.89	1.54	0.45	0.22	0.01	0.13	0.00	0.00	0.03	0.00	3.31
1950	0.00	0.31	0.99	0.40	0.31	0.34	0.24	0.00	0.00	0.00	0.00	0.08	2.67
1951	0.00	0.04	0.00	0.73	0.07	0.04	0.68	0.06	0.00	0.00	0.00	0.00	1.62
1952	0.44	0.17	1.73	3.75	0.26	3.77	0.13	0.00	0.00	0.00	0.00	0.04	10.29
1953	0.00	1.47	2.22	0.23	0.00	0.00	0.33	0.23	0.00	0.00	0.10	0.00	4.58
1954	0.00	0.33	0.08	1.76	0.82	1.07	0.00	0.00	0.00	0.00	0.00	0.00	4.06
1955	0.00	0.78	0.65	2.63	0.32	0.01	0.08	0.27	0.00	0.00	0.00	0.00	4.74
1956	0.00	0.17	0.31	1.55	0.00	0.00	0.97	0.33	0.00	0.06	0.00	0.00	3.39
1957	0.00	0.00	0.00	2.19	0.90	0.72	0.20	0.02	0.08	0.00	0.00	0.00	4.11
1958	1.41	0.31	1.74	0.43	3.70	2.91	2.26	0.00	0.00	0.16	0.00	0.20	13.12
1959	0.00	0.14	0.00	1.13	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.38	2.81
1960	0.00	0.00	1.01	1.31	1.31	0.00	0.30	0.00	0.00	0.02	0.01	0.23	4.19
1961	0.00	1.24	0.01	0.29	0.00	0.05	0.00	0.00	0.00	0.02	0.01	0.00	1.62
1962	0.00	0.92	0.79	0.95	3.35	0.40	0.00	0.00	0.00	0.02	0.01	0.06	6.50
1963	0.12	0.21	0.00	0.05	0.81	0.58	0.32	0.06	0.01	0.02	0.01	0.06	2.24

¹ Adjusted for missing days.

Table C.2c Adjusted Monthly Precipitation for Big Bear Lake, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1961	1.00	2.71	0.57	1.98	0.00	2.55	0.13	0.23	0.11	0.37	1.62	0.00	11.27
1962	0.16	2.80	3.14	5.89	8.98	3.71	0.00	1.09	0.00	0.14	0.11	0.08	26.10
1963	0.69	0.27	0.16	0.70	3.59	4.02	3.36	0.00	0.08	0.00	1.45	4.31	18.63
1964	1.22	3.45	1.00	4.03	0.47	5.83	2.17	1.97	0.00	0.80	0.25	0.00	21.19
1965	0.52	3.43	2.33	1.38	0.84	1.13	7.90	0.00	0.06	1.12	1.39	0.59	20.69
1966	0.00	16.29	6.06	1.58	1.98	1.32	0.00	0.13	0.04	0.44	0.14	0.18	28.16
1967	0.37	1.48	19.07	4.86	0.00	3.61	7.01	0.39	0.00	0.55	1.07	1.33	39.74
1968	0.00	4.59	5.08	1.31	1.25	2.10	1.57	0.10	0.00	2.00	0.63	0.00	18.63
1969	0.27	0.44	2.75	24.87	19.89	2.54	1.39	2.27	0.00	2.13	0.00	0.56	57.11
1970	0.09	1.78	0.24	1.59	1.94	4.44	1.91	0.00	0.19	0.26	3.87	0.00	16.31
1971	0.09	5.11	5.20	1.24	0.79	1.17	1.04	0.75	0.00	1.47	0.25	0.00	17.11
1972	1.79	0.79	12.98	0.00	0.02	0.00	0.73	0.02	1.59	0.08	0.62	0.02	18.64
1973	0.63	4.55	3.88	4.62	6.08	7.17	0.13	0.37	0.00	0.12	1.50	0.00	29.05
1974	0.00	2.46	0.45	7.86	0.42	4.54	0.56	0.27	0.00	1.38	0.64	0.97	19.55
1975	1.96	0.55	3.01	0.64	1.56	4.31	1.83	0.00	0.00	0.00	0.00	0.21	14.07
1976	0.96	2.89	0.25	0.00	5.48	3.29	1.22	0.41	0.03	1.52	0.00	5.03	21.08
1977	0.59	0.17	0.88	3.10	0.64	1.50	0.00	3.86	0.43	0.60	2.39	0.00	14.16
1978	0.00	0.55	2.54	9.77	9.26	11.04	3.58	0.35	0.00	0.08	0.03	0.48	37.68
1979	0.18	3.26	5.66	6.24	4.87	5.96	0.00	0.28	0.00	1.04	0.41	0.04	27.94
1980	1.85	0.03	0.57	11.85	17.34	5.67	0.83	1.14	0.00	1.06	0.83	0.00	41.17
1981	0.53	0.00	0.20	2.40	1.37	3.54	0.24	0.39	0.00	0.20	0.82	0.14	9.83
1982	0.57	0.82	0.00	6.36	2.33	7.25	2.46	0.93	0.35	0.76	1.72	0.21	23.76
1983	1.08	6.07	4.57	4.27	4.69	5.78	3.41	0.28	0.00	0.00	2.52	0.76	33.43
1984	1.31	3.40	4.78	0.16	0.15	0.04	0.38	0.00	0.05	5.05	3.15	0.85	19.32
1985	0.25	1.52	4.90	3.96	0.66	2.09	0.00	0.00	0.20	2.68	0.00	0.63	16.88
1986	0.61	5.51	1.42	1.97	5.95	3.97	0.20	0.00	0.00	0.15	1.55	1.42	22.75
1987	0.67	0.75	1.28	2.83	2.54	3.71	0.64	0.76	0.41	0.36	1.29	0.35	15.59
1988	3.25	1.27	2.81	2.99	0.63	0.37	2.32	0.71	0.02	0.02	1.61	0.00	16.00
1989	0.00	1.35	3.62	1.54	3.08	1.73	0.21	0.38	0.00	0.00	0.64	0.39	12.94
1990	0.60	0.05	0.48	2.76	5.64	1.42	0.73	0.41	0.10	0.74	0.04	0.00	12.97
1991	0.00	0.64	0.87	1.88	3.82	7.69	0.00	0.09	0.00	1.48	0.39	0.69	17.55
1992	1.04	0.54	3.05	2.46	5.94	4.18	0.38	0.40	0.00	0.89	2.09	0.02	20.99
1993	1.55	0.00	6.46	21.15	12.42	0.45	0.00	0.35	1.20	0.00	0.00	0.00	43.58
1994	0.10	1.73	1.55	0.94	7.83	3.70	0.95	0.29	0.00	0.11	2.01	0.00	19.21
1995	0.85	1.97	1.52	13.63	3.79	8.11	0.36	0.21	0.48	0.33	0.13	0.19	31.57
1996	0.00	0.00	0.96	1.85	8.49	2.36	0.70	0.12	0.00	0.33	0.17	0.12	15.10
1997	1.34	2.85	2.29	4.77	0.46	0.00	0.25	0.00	0.00	0.28	0.20	1.99	14.43
1998	0.65	1.88	4.57	3.05	3.55	3.64	1.87	2.31	0.00	0.22	1.60	1.19	24.53
1999	0.18	0.58	0.18	0.73	0.70	0.18	2.23	0.01	0.41	2.05	0.45	0.15	7.85
2000	0.00	0.08	0.00	0.46	8.45	1.86	1.37	0.07	0.11	0.00	3.19	0.01	15.60
2001	1.28	0.51	0.05	3.25	3.54	0.86	1.55	0.09	0.00	0.39	0.08	0.00	11.60
2002	0.00	2.03	0.78	0.46	0.23	1.14	0.34	0.00	0.00	0.15	0.00	0.42	5.55
2003	0.13	2.93	4.80	0.33	5.50	3.82	1.77	0.92	0.02	0.27	4.60	0.48	25.57
2004	0.00	1.55	3.97	0.60	3.70	1.18	0.35	0.00	0.05	0.00	1.61	0.13	13.14
2005	7.49	0.42	3.86	18.38	5.59	3.40	1.28	1.15	0.00	1.57	0.80	0.83	44.77
2006	2.46	0.00	0.57	3.23	3.83	5.40	2.95	0.02	0.87	0.06	0.00	0.62	20.01
2007	0.04	0.08	1.24	0.95	1.23	0.59	0.47	0.00	0.00	0.13	0.16	0.77	5.65
2008	0.10	1.70	3.07	12.85	2.67	0.30	0.43	0.12	0.00	0.70	0.30	0.05	22.29
2009	0.18	1.40	5.73	0.94	6.72	0.51	0.16	0.01	0.23	0.36	0.00	0.05	16.28

¹ Adjusted for missing days.

Table C.2d Adjusted Monthly Precipitation for Big Pines Park FC83-B, California
 (inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	1.54	0.00	3.22	7.34	2.66	2.64	0.18	0.54	0.00	0.00	0.00	0.00	18.12
1950	0.46	2.78	4.10	2.68	3.11	1.41	1.68	0.20	0.00	0.24	0.00	0.17	16.83
1951	0.20	1.56	0.03	2.73	1.13	1.29	3.30	1.15	0.00	0.15	0.00	0.05	11.59
1952	1.79	2.76	8.87	8.91	0.11	7.54	1.93	0.00	0.00	0.33	0.00	1.58	33.82
1953	0.00	3.66	5.08	0.76	1.99	1.66	1.03	0.52	0.00	0.16	0.00	0.00	14.86
1954	0.00	1.38	0.20	9.46	4.37	6.76	0.07	0.04	0.00	0.80	0.00	0.21	23.29
1955	0.00	3.36	2.75	8.44	2.11	0.62	1.48	2.02	0.00	0.04	0.00	0.00	20.82
1956	0.15	1.41	0.98	8.67	0.99	0.00	3.55	1.74	0.00	0.51	0.00	0.00	18.00
1957	0.18	0.00	0.49	10.20	3.28	1.23	1.51	1.04	0.07	0.11	0.00	0.02	18.13
1958	3.12	1.80	6.13	1.83	8.28	8.27	7.16	0.17	0.15	0.16	0.02	2.61	39.70
1959	0.24	0.61	0.00	2.20	10.36	0.00	1.17	0.00	0.00	0.03	0.31	0.78	15.70
1960	0.43	1.26	2.28	4.42	3.34	0.51	2.72	0.00	0.01	0.13	0.00	1.05	16.15
1961	1.47	5.18	0.42	1.47	0.00	1.62	0.20	0.01	0.00	0.03	2.35	0.00	12.75
1962	0.32	3.88	4.39	3.79	13.62	2.74	0.00	0.76	0.00	0.00	0.00	0.00	29.50
1963	0.79	0.00	0.09	0.82	2.77	2.71	2.50	0.00	0.14	0.00	0.10	5.01	14.93
1964	1.19	3.39	0.30	3.02	0.63	2.87	2.42	1.29	0.20	0.33	0.00	0.00	15.64
1965	0.83	4.23	2.52	0.82	0.80	1.24	9.22	0.06	0.43	0.51	3.92	0.61	25.19
1966	0.00	19.87	10.29	1.49	3.41	1.17	0.00	0.00	0.00	0.13	0.10	0.58	37.04
1967	0.04	3.20	12.97	5.59	0.36	7.07	8.78	0.27	0.00	1.53	2.50	1.02	43.33
1968	0.00	6.25	3.70	2.18	2.66	2.25	0.95	0.00	0.00	0.55	0.01	0.00	18.55
1969	0.32	0.79	2.50	25.47	20.18	2.12	1.77	0.89	0.19	0.73	0.00	0.00	54.96
1970	0.00	3.21	0.15	1.90	3.83	6.62	0.69	0.00	0.02	0.51	1.02	0.00	17.95
1971	0.00	6.32	5.55	1.08	1.48	0.84	1.13	0.68	0.00	0.33	0.01	0.00	17.42
1972	1.19	0.71	14.61	0.00	0.28	0.00	0.42	0.40	1.98	0.00	0.16	0.86	20.61
1973	0.60	3.17	1.88	4.62	10.29	6.19	0.01	0.90	0.00	0.00	0.11	0.00	27.77
1974	0.00	2.58	0.78	10.22	0.08	4.71	0.07	0.17	0.00	0.15	1.84	0.03	20.63
1975	1.01	0.29	3.83	0.70	2.90	6.13	3.81	0.00	0.00	0.00	0.00	0.32	18.99
1976	0.22	0.84	0.27	0.00	9.27	2.86	1.41	0.35	0.15	0.29	0.00	8.37	24.03
1977	0.33	0.58	0.66	5.57	0.46	2.88	0.00	5.94	0.00	0.00	3.47	0.00	19.89
1978	0.00	0.13	10.14	9.87	15.83	16.11	4.86	0.02	0.00	0.00	0.02	1.19	58.17
1979	0.48	3.53	5.47	11.75	9.00	8.09	0.00	0.30	0.00	0.15	0.26	0.59	39.62
1980	0.98	0.41	1.15	10.79	18.52	6.66	0.58	0.74	0.00	0.02	0.39	0.59	40.83
1981	0.00	0.00	2.00	4.60	2.19	5.40	1.12	0.30	0.00	0.00	0.00	0.00	15.61
1982	0.46	3.07	0.07	6.92	1.82	10.06	3.97	0.66	0.00	0.00	0.03	1.41	28.47
1983	1.00	6.26	5.65	6.75	6.86	11.47	7.80	0.35	0.00	0.00	1.95	1.63	49.72
1984	2.75	2.86	4.89	0.04	0.00	0.14	0.89	0.00	0.04	1.97	1.10	1.00	15.68
1985	0.15	3.24	9.58	1.12	0.88	1.78	0.00	0.80	0.00	1.01	0.00	0.43	18.99
1986	0.82	8.41	2.82	4.42	6.96	5.79	0.97	0.00	0.00	0.01	0.02	1.80	32.02
1987	0.61	1.91	1.72	3.92	4.30	3.20	0.30	2.70	0.50	0.10	0.00	0.40	19.66
1988	5.60	2.30	3.10	3.40	2.90	0.30	5.40	0.30	0.00	0.00	1.70	0.02	25.02
1989	0.00	0.80	3.03	4.29	4.30	1.00	0.01	0.05	0.00	0.00	0.00	1.20	14.68
1990	0.80	0.20	0.10	4.29	3.20	0.40	1.00	1.10	0.10	0.00	0.40	0.00	11.59
1991	0.00	0.60	3.03	2.60	4.60	10.90	0.00	0.10	0.00	0.30	0.10	0.06	22.29
1992	1.30	0.80	4.80	3.90	8.90	8.40	0.70	0.30	0.00	0.50	0.00	0.00	29.60
1993	1.30	0.00	7.40	17.17	15.60	3.50	0.00	0.00	1.70	0.00	0.00	0.00	46.67
1994	0.80	1.40	1.30	0.80	6.60	3.20	1.20	0.60	0.00	0.00	0.00	0.00	15.90
1995	1.30	1.40	2.50	15.00	4.40	10.30	0.60	0.50	0.90	0.20	0.40	0.00	37.50
1996	0.00	0.00	1.70	3.50	8.30	3.30	0.70	0.20	0.00	0.22	0.00	0.00	17.92

¹ Adjusted for missing days.

Table C.2e Adjusted Monthly Precipitation for Boron, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1992	0.13	0.00	0.52	0.80	2.71	2.26	0.05	0.00	0.00	0.02	0.00	0.00	6.49
1993	0.52	0.00	2.24	3.74	2.26	0.23	0.00	0.00	0.34	0.00	0.00	0.00	9.33
1994	0.17	0.26	0.34	0.17	0.49	0.74	0.00	0.00	0.00	0.00	0.00	0.00	2.17
1995	0.23	0.16	0.26	2.53	0.33	1.00	0.16	0.13	0.05	0.00	0.01	0.02	4.88
1996	0.00	0.00	0.41	0.55	2.03	0.29	0.00	0.00	0.00	0.00	0.00	0.00	3.28

¹ Adjusted for missing days.

Table C.2f Adjusted Monthly Precipitation for Crystal Lake FC283-C, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1960	1.15	1.20	2.53	6.16	3.49	0.87	3.30	0.09	0.00	0.00	0.00	0.04	18.83
1961	1.28	9.14	0.55	2.64	0.00	1.31	0.20	0.04	0.00	0.00	1.00	0.00	16.16
1962	0.03	3.03	6.54	5.53	21.44	2.45	0.00	1.21	0.09	0.00	0.00	0.00	40.32
1963	0.91	0.06	0.02	1.25	7.00	2.74	3.63	0.00	0.63	0.00	0.00	5.45	21.69
1964	1.52	3.95	0.05	4.25	0.25	3.48	4.40	1.41	0.63	0.11	0.00	0.00	20.05
1965	0.90	3.55	3.45	1.24	1.36	2.16	11.57	0.00	0.00	0.06	0.41	0.82	25.52
1966	0.00	35.50	15.44	1.19	3.12	0.92	0.05	0.45	0.00	0.00	0.00	0.79	57.46
1967	0.34	6.61	16.12	9.12	0.34	9.24	12.92	0.69	0.22	0.00	0.24	0.75	56.59
1968	0.00	11.52	2.84	2.84	3.80	2.61	1.20	0.21	0.12	0.87	0.01	0.00	26.02
1969	0.53	0.76	2.70	40.41	26.62	2.34	1.97	1.16	0.00	0.23	0.00	0.04	76.76
1970	0.03	3.18	0.03	2.29	7.79	8.24	0.67	0.01	0.12	0.08	0.45	0.00	22.89
1971	0.04	10.97	8.25	0.92	1.44	0.98	1.21	1.88	0.02	0.00	0.00	0.00	25.71
1972	1.29	0.91	14.00	0.00	0.39	0.00	0.35	0.55	0.65	0.00	0.36	0.25	18.75
1973	0.66	4.37	2.31	5.16	19.38	8.56	0.21	0.11	0.00	0.00	0.30	0.82	41.89
1974	0.10	3.87	1.74	15.62	0.00	6.04	0.47	0.27	0.00	0.25	0.16	0.82	29.34
1975	1.61	0.39	5.25	0.82	3.77	9.83	4.58	0.15	0.00	0.27	0.00	0.09	26.76
1976	1.01	0.68	4.88	0.00	13.16	3.71	2.68	0.24	0.22	0.00	0.10	8.43	35.11
1977	0.50	0.71	1.13	7.38	0.21	3.60	0.00	7.50	0.00	0.00	2.20	0.00	23.23
1978	0.00	0.40	14.20	13.99	20.84	26.08	6.22	0.08	0.00	0.00	0.54	2.40	84.75
1979	0.70	4.00	6.50	12.60	5.50	10.50	0.00	0.34	0.00	0.11	0.00	0.82	41.07
1980	1.90	0.46	1.04	16.52	7.24	5.79	2.33	0.70	0.00	0.00	0.30	0.82	37.10
1981	0.00	0.01	1.70	7.60	1.80	7.00	2.30	0.30	0.00	0.00	0.00	0.00	20.71
1982	0.13	5.60	0.40	7.70	2.00	14.70	4.60	1.20	0.00	0.20	0.08	3.10	39.71
1983	1.20	7.80	5.30	9.80	9.80	19.50	9.90	0.30	0.00	0.00	3.30	1.60	68.50
1984	4.10	4.10	7.60	0.20	0.00	0.40	0.30	0.00	0.10	0.20	1.60	0.90	19.50
1985	0.40	0.54	13.50	1.00	0.11	2.80	0.30	0.40	0.00	0.10	0.00	0.50	19.65
1986	1.00	10.50	1.30	8.10	9.40	8.00	2.00	0.00	0.00	0.00	0.00	2.80	43.10
1987	0.60	2.50	1.20	3.70	2.60	3.20	0.80	0.60	0.10	0.30	0.00	0.40	16.00
1988	10.00	3.40	4.40	4.90	5.70	0.60	8.60	0.70	0.15	0.00	1.10	0.70	40.25
1989	0.00	2.20	9.80	0.17	5.10	1.70	2.33	0.08	0.00	0.00	0.00	1.50	22.88
1990	1.40	0.50	0.30	9.30	5.30	0.70	1.80	1.80	0.00	0.00	0.50	0.00	21.60
1991	1.15	0.70	0.10	3.70	7.90	16.80	0.00	0.00	0.00	0.10	0.00	0.02	30.47
1992	1.94	0.10	5.40	6.60	21.60	14.80	0.50	0.70	0.00	1.30	0.10	0.00	53.04
1993	3.70	0.00	12.80	36.10	23.20	3.60	0.00	0.00	2.60	0.00	0.20	0.00	82.20
1994	1.10	1.60	1.40	0.90	9.50	5.20	2.30	1.60	0.00	0.00	0.00	0.00	23.60
1995	3.30	1.90	4.88	30.00	7.24	16.10	1.00	0.70	1.40	0.00	0.00	0.00	66.51
1996	0.00	0.20	2.60	7.41	15.00	4.90	1.70	0.00	0.00	0.00	0.10	0.00	31.91
1997	2.58	4.12	12.37	8.80	4.47	0.00	0.00	0.04	0.15	0.00	0.00	0.82	33.35
1998	1.15	3.81	4.08	3.31	21.75	8.67	0.00	0.70	0.00	0.00	0.00	0.00	43.46
1999	0.00	3.73	4.88	7.60	7.24	5.81	2.33	0.70	1.84	0.16	0.00	0.00	34.28
2000	0.00	0.00	0.00	1.88	12.76	6.94	6.38	0.16	0.00	0.00	0.01	0.82	28.95
2001	1.15	3.73	4.88	7.60	7.24	5.79	2.33	0.70	0.15	0.11	0.30	0.82	34.78
2002	1.15	3.73	4.88	7.60	7.24	5.79	2.33	0.70	0.15	0.11	0.30	0.82	34.78
2003	1.15	3.73	4.88	7.60	7.24	5.79	2.33	0.70	0.15	0.11	0.30	0.82	34.78
2004	1.15	3.73	4.88	7.60	7.24	5.79	2.33	0.70	0.15	0.11	0.30	0.82	34.78
2005	1.15	3.73	4.88	23.65	0.47	4.30	0.16	1.29	0.15	0.11	0.30	0.63	40.80
2006	1.15	3.73	4.88	7.60	7.24	5.79	2.33	0.86	0.00	0.04	0.04	0.00	33.64
2007	0.27	0.78	1.37	7.60	2.45	1.53	1.10	0.04	0.00	0.25	0.30	0.82	16.51
2008	1.15	3.73	3.68	14.05	4.22	0.31	0.04	2.77	0.00	0.35	0.23	0.82	31.34
2009	0.00	3.41	2.82	1.88	9.19	1.02	0.47	0.08	0.12	0.00	0.00	0.00	18.99

¹ Adjusted for missing days.

Table C.2g Adjusted Monthly Precipitation for El Mirage Field, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1972	0.12	0.00	1.03	0.00	0.00	0.00	0.05	0.00	0.05	0.15	0.36	0.29	2.06
1973	0.08	0.91	0.22	0.69	2.05	1.44	0.00	0.60	0.00	0.00	0.70	0.00	6.69
1974	0.04	0.45	0.07	3.21	0.00	0.30	0.07	0.90	0.00	0.25	0.65	0.65	6.59
1975	0.65	0.00	1.00	0.00	0.20	0.51	0.71	0.00	0.00	0.00	0.00	0.38	3.45
1976	0.07	0.00	0.10	0.00	1.19	0.34	0.06	0.00	0.12	0.12	0.00	2.62	4.62
1977	0.08	0.25	0.05	3.53	0.01	0.67	0.00	0.95	0.17	0.00	1.78	0.00	7.49
1978	0.02	0.06	2.14	1.88	2.11	2.53	0.62	0.00	0.00	0.49	0.40	0.68	10.93
1979	0.24	0.53	0.78	2.28	1.09	2.61	0.00	0.15	0.00	0.00	0.71	0.01	8.40
1980	0.12	0.00	0.04	1.79	4.24	1.72	0.04	0.68	0.00	0.08	0.00	0.00	8.71
1981	0.00	0.00	0.04	0.75	0.58	1.19	0.16	0.04	0.00	0.00	0.00	0.00	2.76
1982	0.57	0.59	0.00	1.31	0.51	2.49	1.35	0.41	0.00	0.16	1.33	0.17	8.89
1983	0.07	1.17	1.15	1.98	1.55	3.54	1.17	0.00	0.00	0.00	1.88	0.18	12.69
1984	0.87	0.68	0.77	0.00	0.00	0.06	0.00	0.04	0.04	0.86	1.38	0.10	4.80
1985	0.00	0.34	2.99	0.16	0.07	0.03	0.00	0.01	0.05	0.23	0.00	0.27	4.15
1986	0.07	0.84	0.27	0.36	0.62	1.45	0.08	0.00	0.00	0.12	0.01	0.01	3.83
1987	0.17	0.00	0.68	1.21	0.14	0.49	0.04	0.33	0.11	0.19	0.00	0.42	3.78
1988	0.90	0.82	0.84	1.37	0.48	0.35	0.87	0.03	0.05	0.01	0.11	0.00	5.83
1989	0.00	0.05	0.54	0.77	0.29	0.20	0.03	0.03	0.00	0.05	0.20	0.47	2.63
1990	0.00	0.00	0.00	0.83	0.36	0.01	0.04	0.46	0.02	0.00	1.43	0.05	3.20
1991	0.00	0.17	0.02	0.88	0.52	3.04	0.00	0.03	0.00	0.22	0.00	0.20	5.08
1992	0.17	0.05	1.19	1.53	3.11	2.48	0.35	0.26	0.00	0.23	0.10	0.00	9.47
1993	0.49	0.00	2.66	4.55	2.63	0.39	0.00	0.00	0.52	0.00	0.00	0.00	11.24
1994	0.15	0.26	0.43	0.37	0.36	0.94	0.04	0.09	0.00	0.00	0.00	0.40	3.04
1995	0.02	0.24	0.79	2.52	0.19	1.40	0.10	0.00	0.08	0.18	0.05	0.04	5.61
1996	0.00	0.01	0.02	0.54	1.50	0.24	0.02	0.03	0.00	0.00	0.03	0.00	2.39
1997	0.27	0.32	0.67	1.08	1.14	0.95	0.26	0.21	0.05	0.00	0.00	1.36	6.30
1998	0.01	0.40	1.77	0.57	4.55	1.64	0.24	2.10	0.33	0.00	0.02	1.37	13.00
1999	0.00	0.30	0.10	0.54	0.16	0.03	0.52	0.18	0.37	0.64	0.00	0.07	2.91
2000	0.00	0.00	0.00	0.16	0.91	0.12	0.47	0.00	0.00	0.00	0.78	0.00	2.44
2001	0.17	0.00	0.00	1.50	2.20	0.44	0.26	0.00	0.00	0.12	0.00	0.13	4.82
2002	0.29	0.48	0.69	0.14	0.00	0.16	0.10	0.02	0.00	0.33	0.00	0.00	2.21
2003	0.03	0.42	0.57	0.00	2.24	1.42	0.89	0.12	0.00	0.13	0.74	0.37	6.93
2004	0.00	0.98	0.17	0.01	1.66	0.30	0.31	0.00	0.00	0.00	0.04	0.37	3.84
2005	2.67	0.85	2.04	1.53	4.14	0.59	0.17	0.02	0.00	0.00	1.34	0.34	13.69
2006	1.50	0.02	0.14	0.35	0.07	0.95	0.54	0.00	0.14	0.31	0.00	0.00	4.02
2007	0.09	0.00	0.16	0.10	0.33	0.00	0.01	0.00	0.00	0.08	0.01	0.40	1.18
2008	0.18	0.03	1.32	1.35	0.25	0.07	0.00	0.07	0.00	0.74	0.00	0.01	4.02
2009	0.27	1.07	2.33	1.08	1.81	0.95	0.26	0.21	0.00	0.04	0.00	0.00	8.01

¹ Adjusted for missing days.

Table C.2h Adjusted Monthly Precipitation for Fairmont, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	-	-	-	2.60	0.80	1.92	0.05	0.22	0.00	0.00	0.00	0.00	5.59
1950	0.00	1.24	1.81	2.18	1.24	1.23	1.05	0.00	0.00	0.00	0.00	0.40	9.15
1951	0.28	0.54	0.07	1.48	0.55	0.21	0.77	0.00	0.00	0.00	0.00	0.00	3.90
1952	0.73	1.77	3.84	11.86	0.11	7.67	0.97	0.00	0.00	0.00	0.00	0.00	26.95
1953	0.00	3.02	3.66	0.44	0.17	0.67	1.12	0.22	0.00	0.00	0.00	0.00	9.30
1954	0.00	1.38	0.19	5.23	3.25	4.44	0.03	0.03	0.00	0.00	0.00	0.00	14.55
1955	0.00	1.53	1.61	4.98	1.64	0.07	0.76	2.20	0.00	0.00	0.00	0.00	12.79
1956	0.00	1.19	2.39	3.27	0.55	0.00	2.80	1.56	0.00	0.00	0.00	0.00	11.76
1957	0.00	0.00	0.28	6.89	1.27	1.46	1.36	0.58	0.00	0.00	0.00	0.00	11.84
1958	1.49	0.41	7.31	1.28	7.54	5.30	6.10	0.22	0.00	0.00	0.00	0.87	30.52
1959	0.18	0.13	0.00	2.77	5.44	0.00	0.22	0.00	0.00	0.00	0.00	0.45	9.19
1960	0.00	0.00	1.68	2.73	1.64	0.42	1.62	0.00	0.00	0.00	0.00	0.00	8.09
1961	0.02	3.47	0.51	1.10	0.00	0.65	0.17	0.00	0.00	0.00	0.64	0.00	6.56
1962	0.00	2.73	2.09	3.89	9.39	1.32	0.00	0.57	0.00	0.00	0.00	0.00	19.99
1963	0.07	0.00	0.03	2.38	2.03	1.88	0.16	0.46	0.00	0.07	2.15	9.23	
1964	1.29	2.17	0.00	2.86	0.30	1.15	1.20	1.05	0.11	0.00	0.06	0.00	10.19
1965	0.46	1.43	1.46	0.33	0.12	0.12	6.61	0.00	0.00	0.28	0.42	0.48	11.71
1966	0.00	13.66	6.43	1.21	0.90	0.20	0.00	0.00	0.00	0.00	0.00	0.28	22.68
1967	0.00	4.74	2.75	5.44	0.43	3.07	5.75	0.05	0.03	0.00	0.30	0.89	23.45
1968	0.00	6.87	1.64	1.09	0.85	1.41	0.75	0.12	0.00	0.00	0.00	0.00	12.73
1969	0.21	0.60	0.71	14.40	14.69	0.95	1.15	0.18	0.03	0.29	0.00	0.07	33.28
1970	0.00	0.97	0.07	0.76	1.36	4.58	0.00	0.00	0.06	0.03	0.00	0.00	7.83
1971	0.00	8.49	3.57	0.57	0.92	0.38	0.41	0.63	0.00	0.00	0.00	0.23	15.20
1972	0.08	0.32	8.36	0.00	0.09	0.00	0.06	0.07	0.25	0.00	0.00	0.00	9.23
1973	0.17	2.55	1.01	2.80	8.51	2.82	0.20	0.07	0.00	0.00	0.00	0.00	18.13
1974	0.24	1.62	1.09	5.69	0.00	2.93	0.34	0.10	0.00	0.09	0.00	0.00	12.10
1975	1.12	0.02	3.63	0.00	2.61	4.01	1.94	0.03	0.00	0.00	0.00	0.27	13.63
1976	0.49	0.11	0.16	0.00	3.76	1.25	0.69	0.14	0.01	0.00	0.00	3.90	10.51
1977	0.04	0.15	0.26	6.63	0.10	1.94	0.02	3.28	0.06	0.00	2.30	0.01	14.79
1978	0.00	0.22	8.35	6.89	10.18	10.71	2.79	0.00	0.00	0.00	0.33	0.88	40.35
1979	0.38	2.31	2.16	10.32	3.06	5.76	1.18	0.08	0.00	0.00	0.00	0.01	25.26
1980	0.24	0.80	2.25	5.38	10.05	1.67	0.59	0.75	0.00	0.00	0.00	0.00	21.73
1981	0.47	0.00	0.73	3.22	1.42	2.00	0.32	0.00	0.00	0.00	0.00	0.00	8.16
1982	1.19	3.05	0.05	3.33	1.03	2.00	2.97	0.06	0.00	0.00	0.00	0.06	13.74
1983	0.43	3.83	2.53	4.73	4.14	7.88	3.22	0.01	0.00	0.00	0.80	0.00	27.57
1984	1.93	1.72	3.32	0.00	0.00	0.22	0.01	0.00	0.00	0.75	0.00	0.23	8.18
1985	0.05	2.39	8.42	0.49	0.71	0.67	0.00	0.12	0.00	0.12	0.00	0.57	13.54
1986	0.56	4.58	0.55	2.84	5.82	5.41	0.60	0.00	0.00	0.14	0.00	0.40	20.90
1987	0.09	1.45	2.25	1.29	0.96	1.42	0.14	0.35	0.03	0.01	0.00	0.20	8.19
1988	1.39	3.87	2.93	2.92	1.37	0.81	3.60	0.60	0.00	0.00	0.07	0.03	17.59
1989	0.00	0.72	2.40	0.72	1.65	0.26	0.03	0.18	0.00	0.00	0.00	0.51	6.47
1990	0.56	0.08	0.00	3.18	2.27	0.16	0.16	0.27	0.02	0.00	0.51	0.12	7.33
1991	0.00	0.31	0.02	1.85	3.63	8.57	0.01	0.00	0.00	0.01	0.00	0.04	14.44
1992	0.25	0.00	3.84	1.97	12.38	4.62	0.40	0.22	0.00	0.12	0.00	0.00	23.80
1993	1.10	0.00	5.97	13.66	10.59	2.36	0.00	0.00	1.49	0.00	0.00	0.00	35.17
1994	0.41	1.03	0.90	0.43	4.48	1.55	0.72	0.46	0.00	0.00	0.00	0.08	10.06
1995	1.01	0.85	1.39	15.07	1.99	6.21	0.64	0.18	0.24	0.00	0.04	0.00	27.62
1996	0.00	0.00	1.88	0.26	5.29	1.11	0.34	0.24	0.00	0.00	0.00	0.00	9.12
1997	2.16	1.00	3.64	3.19	0.00	0.00	0.00	0.03	0.00	0.30	0.00	0.99	11.31
1998	0.17	1.52	4.72	2.35	15.78	3.43	1.62	5.09	0.12	0.00	0.18	1.27	36.25
1999	0.00	0.91	0.20	2.20	0.77	0.73	2.83	0.00	0.18	0.41	0.00	0.02	8.25
2000	0.00	0.28	0.00	0.59	6.44	2.94	1.82	0.00	0.02	0.00	0.36	0.04	12.49
2001	0.61	0.01	0.00	4.15	7.38	1.38	1.93	0.38	0.00	0.02	0.00	0.00	15.86
2002	0.22	1.60	1.21	0.98	0.42	0.70	0.01	0.06	0.00	0.00	0.00	0.00	5.20
2003	0.00	1.34	3.35	0.01	6.24	1.57	2.05	1.01	0.00	0.15	0.02	0.01	15.75
2004	0.02	1.20	1.81	0.19	6.23	0.65	0.07	0.00	0.00	0.00	0.00	0.00	10.17
2005	5.13	0.08	6.16	13.44	9.30	1.92	1.10	0.97	0.00	0.07	0.17	0.75	39.09
2006	2.80	0.00	0.21	4.17	3.07	3.82	2.98	0.20	0.02	0.38	0.10	0.01	17.76
2007	0.50	0.02	1.20	0.45	1.90	0.35	0.50	0.00	0.00	0.02	0.01	0.52	5.47
2008	0.10	0.10	2.25	13.29	1.47	0.02	0.13	0.38	0.00	0.00	0.00	0.02	17.76
2009	0.09	3.06	2.25	0.44	6.46	1.28	0.13	0.00	0.05	0.05	0.00	0.28	14.10

¹ Adjusted for missing days.

Table C.2i Adjusted Monthly Precipitation for Lake Arrowhead, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.99	0.00	8.62	14.12	7.25	4.43	0.20	2.73	0.00	0.00	0.00	0.00	38.34
1950	1.22	5.42	8.32	5.55	5.89	3.37	2.94	0.94	0.06	0.21	0.07	0.21	34.20
1951	0.74	3.11	0.05	5.02	3.28	2.12	4.42	0.95	0.00	0.23	0.32	0.36	20.60
1952	2.29	3.34	18.75	19.29	1.47	18.33	4.84	0.00	0.00	0.61	0.00	1.73	70.65
1953	0.00	6.37	6.46	2.93	1.20	4.27	2.38	1.40	0.00	0.00	0.17	0.00	25.18
1954	0.14	1.73	0.35	18.95	6.03	16.27	0.44	0.00	0.26	0.00	0.28	0.00	44.45
1955	0.00	6.61	3.13	10.67	6.00	1.18	1.92	4.21	0.00	0.13	0.65	0.00	34.50
1956	0.00	3.08	1.87	14.01	2.48	1.27	5.46	2.09	0.00	0.08	0.00	0.00	30.34
1957	0.37	0.00	1.33	17.68	4.77	2.81	3.10	5.22	0.12	0.00	0.00	0.00	35.40
1958	3.61	2.07	13.12	4.71	14.65	12.03	9.08	0.88	0.00	0.00	1.44	1.54	63.13
1959	0.45	1.29	0.00	3.69	13.40	0.02	1.50	0.12	0.00	0.18	0.20	0.03	20.88
1960	0.14	0.80	4.26	7.09	4.82	1.90	4.73	0.18	0.00	0.12	0.14	1.54	25.72
1961	1.88	8.84	0.90	2.64	0.00	3.03	0.59	0.00	0.00	0.00	1.56	0.02	19.46
1962	0.09	4.33	7.24	6.95	19.09	3.86	0.00	1.93	0.09	0.06	0.00	0.00	43.64
1963	0.25	0.03	0.10	1.71	5.02	4.34	5.48	0.00	0.36	0.00	0.69	6.59	24.57
1964	2.09	5.20	1.06	5.23	0.81	6.10	3.86	2.26	0.51	0.01	0.00	0.14	27.27
1965	0.66	5.21	5.75	2.61	1.32	2.80	14.98	0.13	0.12	0.17	0.65	0.99	35.39
1966	0.05	29.99	13.45	1.94	4.16	1.36	0.30	0.18	0.00	0.09	0.00	0.14	51.66
1967	0.83	3.64	27.87	9.58	0.04	10.62	15.37	1.57	0.11	0.08	0.38	2.13	72.22
1968	0.00	11.28	4.71	3.08	1.97	5.02	1.43	0.89	0.00	2.14	0.27	0.00	30.79
1969	0.38	0.92	3.95	45.92	35.94	5.34	2.87	2.69	0.00	0.18	0.00	0.05	98.24
1970	0.11	5.27	0.17	2.18	6.10	5.72	1.44	0.00	0.18	0.11	1.21	0.00	22.49
1971	0.23	9.26	8.27	2.74	1.57	1.44	2.17	3.03	0.00	0.07	0.00	0.00	28.78
1972	3.81	1.14	20.18	0.00	0.17	0.00	0.34	1.55	0.39	0.00	0.33	0.49	28.40
1973	1.37	6.83	4.95	7.39	13.96	10.58	0.22	0.53	0.00	0.00	0.05	0.00	45.88
1974	0.04	4.40	1.22	17.68	0.24	8.76	1.63	0.28	0.00	0.00	0.00	0.00	34.25
1975	3.13	1.07	5.36	1.66	4.81	8.55	5.07	0.70	0.00	0.00	0.00	0.57	30.92
1976	1.73	2.61	1.12	0.00	12.94	5.69	3.06	0.66	0.45	0.14	0.00	9.27	37.67
1977	1.21	0.67	1.73	5.01	0.84	4.43	0.01	8.31	0.01	0.00	3.19	0.00	25.41
1978	0.00	1.05	14.65	16.95	21.36	27.61	7.51	0.32	0.00	0.00	0.37	3.21	93.03
1979	0.29	8.60	7.76	9.97	9.41	10.33	0.00	0.67	0.00	0.52	0.05	0.00	47.60
1980	4.33	0.29	0.76	22.15	24.26	11.01	1.37	2.53	0.00	0.02	0.14	0.00	66.86
1981	0.00	0.11	2.15	6.59	2.54	5.78	1.99	0.57	0.00	0.03	0.05	0.00	19.81
1982	1.52	3.51	0.63	11.64	2.30	16.65	4.72	0.62	0.07	0.23	0.12	4.32	46.33
1983	0.98	11.35	6.86	12.02	12.45	14.31	8.01	0.50	0.06	0.00	3.47	2.03	72.04
1984	5.11	7.20	9.61	0.33	0.23	0.61	1.55	0.00	0.00	0.07	0.06	0.40	25.17
1985	0.76	5.32	15.95	3.25	2.58	5.47	0.73	0.06	0.25	0.26	0.00	1.17	35.80
1986	1.67	12.67	1.63	5.17	11.89	11.66	1.76	0.00	0.00	0.11	0.29	3.96	50.81
1987	0.57	2.13	1.69	6.92	3.38	4.85	2.53	0.69	0.00	0.20	0.02	0.76	23.74
1988	9.97	5.57	5.47	5.27	1.76	2.56	7.57	1.32	0.00	0.00	0.62	0.28	40.39
1989	0.00	4.44	9.54	3.42	6.91	3.38	0.00	1.04	0.00	0.00	0.00	1.94	30.67
1990	3.96	0.85	0.05	7.76	7.82	2.45	1.44	1.40	0.05	0.00	0.25	0.01	26.04
1991	0.00	2.25	0.13	3.10	8.61	20.94	0.06	0.00	0.00	0.17	0.00	0.10	35.36
1992	2.90	0.31	5.46	5.85	14.03	15.60	0.23	0.16	0.00	0.70	0.00	0.00	45.24
1993	5.82	0.00	14.59	36.93	25.68	3.65	0.00	0.00	4.21	0.00	0.00	0.00	90.88
1994	0.31	2.78	1.95	1.20	13.86	4.36	2.62	1.62	0.00	0.00	0.00	0.00	28.70
1995	4.10	3.13	4.93	29.62	9.26	19.27	0.85	1.23	1.88	0.08	0.16	0.00	74.51
1996	0.00	0.12	2.80	5.17	16.50	6.59	1.50	0.05	0.00	0.10	0.12	0.00	32.95
1997	3.08	7.03	9.25	19.52	1.01	0.00	0.73	1.05	1.61	0.07	0.00	1.58	44.92
1998	1.18	3.66	3.96	6.22	24.55	9.93	0.73	11.63	0.17	0.00	0.14	1.05	63.22
1999	0.00	3.15	0.56	3.03	1.98	1.85	7.03	0.00	0.81	0.16	0.30	0.06	18.93
2000	0.00	0.92	0.04	1.96	13.78	3.17	4.49	0.00	0.00	0.00	0.10	0.46	24.92
2001	2.04	0.28	0.03	8.22	8.99	0.00	0.81	0.24	0.00	0.00	0.00	0.00	20.61
2002	0.12	2.15	0.92	3.73	0.90	2.27	0.47	0.00	0.00	0.00	0.00	0.00	10.56
2003	0.00	9.00	4.20	0.00	10.31	7.09	5.37	1.05	0.00	0.71	0.00	0.00	37.73
2004	0.00	1.70	8.72	0.85	8.09	0.95	0.70	0.00	0.06	0.00	0.07	0.21	21.36
2005	19.23	0.03	10.14	36.46	7.91	4.04	1.86	1.26	0.00	0.00	0.00	0.62	81.55
2006	1.61	0.05	1.08	7.35	7.75	10.24	2.98	0.42	0.00	0.25	0.00	0.00	31.74
2007	0.00	0.40	0.00	2.92	3.21	0.00	1.91	1.05	0.00	0.07	0.13	1.50	11.19
2008	0.00	2.50	7.30	23.11	8.68	0.41	0.14	2.37	0.00	0.00	0.00	0.14	44.66
2009	0.00	0.03	6.63	10.14	7.91	16.47	0.18	0.00	1.61	0.07	0.14	0.00	43.17

¹ Adjusted for missing days.

Table C.2j Adjusted Monthly Precipitation for Lancaster FSS, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1974	-	-	-	1.58	1.88	1.17	0.34	0.07	0.00	0.71	0.00	0.00	5.75
1975	1.09	0.00	1.26	0.00	0.69	1.05	0.62	0.00	0.00	0.01	0.00	0.19	4.91
1976	0.23	0.05	0.00	0.00	1.39	0.69	0.39	0.06	0.00	0.00	0.00	1.28	4.09
1977	0.02	0.28	0.00	2.60	0.00	0.78	0.00	1.10	0.00	0.00	1.03	0.00	5.81
1978	0.00	0.08	4.04	2.61	3.97	2.54	0.89	0.00	0.00	0.20	0.24	0.88	15.45
1979	0.13	0.60	0.66	4.57	1.06	3.07	0.00	0.02	0.00	0.00	0.05	0.00	10.16
1980	0.05	0.26	0.08	2.12	5.71	1.39	0.29	0.28	0.00	0.00	0.00	0.00	10.18
1981	0.00	0.00	0.01	0.96	0.82	3.02	0.08	0.07	0.00	0.00	0.00	0.20	5.16
1982	0.40	1.61	0.00	1.26	0.83	3.17	1.60	0.00	0.00	0.00	0.00	0.41	9.28
1983	0.54	2.08	0.62	2.17	2.22	5.56	0.69	0.00	0.00	0.00	2.35	0.34	16.57
1984	0.76	0.83	2.45	0.00	0.00	0.08	0.00	0.00	0.00	0.70	0.00	0.22	5.04
1985	0.00	0.76	5.35	0.28	0.00	0.12	0.00	0.03	0.00	0.00	0.00	0.23	6.77
1986	0.14	1.58	0.13	2.00	1.08	1.66	0.07	0.00	0.00	0.16	0.00	0.00	6.82
1987	0.00	0.92	0.55	0.34	0.41	0.69	0.03	0.18	0.24	0.00	0.00	0.14	3.50
1988	2.39	1.21	1.27	1.93	0.57	0.18	0.53	0.13	0.00	0.02	0.47	0.00	8.70
1989	0.01	0.13	1.57	0.31	1.59	0.06	0.01	0.23	0.00	0.00	0.00	0.19	4.10
1990	0.05	0.05	0.00	0.76	0.52	0.15	0.11	0.06	0.00	0.00	0.01	0.00	1.71
1991	0.00	0.17	0.07	0.96	1.42	4.13	0.03	0.00	0.00	0.13	0.00	0.09	7.00
1992	0.22	0.00	1.80	1.82	5.81	2.49	0.16	0.05	0.00	0.08	0.00	0.00	12.43
1993	0.90	0.00	3.13	7.46	5.96	1.21	0.00	0.00	0.83	0.00	0.00	0.00	19.49
1994	0.30	0.51	0.58	0.22	1.40	0.64	0.40	0.09	0.00	0.00	0.00	0.00	4.14
1995	0.21	0.36	0.57	5.06	0.17	1.76	0.15	0.02	0.20	0.00	0.00	0.00	8.50
1996	0.00	0.00	0.52	0.72	1.61	0.12	0.03	0.00	0.00	0.02	0.00	0.00	3.02
1997	0.66	0.45	1.05	1.58	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.87	4.70
1998	0.00	0.46	2.25	0.95	6.23	2.85	0.34	0.94	0.00	0.00	0.16	0.73	14.91
1999	0.00	0.38	0.22	1.35	0.49	0.00	0.89	0.00	0.18	0.95	0.00	0.00	4.46
2000	0.00	0.04	1.05	1.58	1.76	1.12	1.82	0.00	0.08	0.00	0.12	0.00	7.57
2001	0.32	0.01	0.00	1.17	3.73	0.66	0.58	0.00	0.00	0.02	0.00	0.00	6.49
2002	0.24	0.60	0.63	0.20	0.06	0.30	0.00	0.02	0.00	0.00	0.00	0.01	2.06
2003	0.01	0.66	1.19	0.00	3.55	0.71	0.96	0.27	0.00	0.11	0.00	0.00	7.46
2004	0.23	0.32	0.57	0.01	1.88	0.23	0.05	0.00	0.00	0.00	0.00	0.00	3.29
2005	1.93	0.15	3.65	5.26	4.71	0.72	0.57	0.50	0.00	0.16	0.01	0.80	18.46
2006	1.77	0.00	0.19	0.83	1.00	1.02	0.68	0.02	0.00	0.02	0.00	0.00	5.53
2007	0.09	0.00	0.34	0.02	0.71	0.19	0.00	0.00	0.00	0.00	0.02	0.20	1.57
2008	0.18	0.50	0.09	3.73	0.48	0.00	0.01	0.07	0.00	0.00	0.00	0.02	5.08
2009	0.00	1.55	0.92	0.36	2.38	0.13	0.00	0.02	0.01	0.00	0.00	0.00	5.37

¹ Adjusted for missing days.

Table C.2k Adjusted Monthly Precipitation for Lebec, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.11	0.03	1.78	0.92	1.31	2.21	0.52	1.19	0.04	0.00	0.00	0.00	8.11
1950	0.24	0.55	2.18	2.09	1.71	0.76	0.31	0.35	0.00	0.00	0.00	0.78	8.97
1951	0.17	0.13	0.14	2.04	1.11	0.89	1.16	0.72	0.00	0.00	0.00	0.00	6.36
1952	0.36	0.37	2.20	6.32	1.20	5.10	1.15	0.00	0.00	0.11	0.00	0.09	16.90
1953	0.00	2.07	3.86	0.78	0.15	1.05	1.44	0.56	0.00	0.02	0.00	0.00	9.93
1954	0.14	1.86	0.30	3.33	2.34	2.24	0.10	0.09	0.00	0.00	0.00	0.00	10.40
1955	0.00	1.42	0.85	4.97	0.83	0.02	1.49	2.02	0.00	0.00	0.00	0.00	11.60
1956	0.00	0.93	2.69	2.48	0.67	0.08	1.80	0.60	0.00	0.00	0.00	0.00	9.25
1957	0.46	0.00	0.49	3.76	1.68	2.18	1.10	1.39	0.30	0.00	0.00	0.00	11.35
1958	0.53	0.80	2.49	1.18	5.85	3.48	3.00	0.56	0.00	0.00	0.00	0.96	18.85
1959	0.10	1.19	0.05	2.28	2.80	0.62	0.82	0.38	0.00	0.01	0.00	0.27	8.52
1960	0.00	0.00	3.43	2.84	1.96	0.32	0.99	0.03	0.00	0.00	0.00	0.00	9.57
1961	0.12	4.49	0.33	0.63	0.83	2.27	0.42	0.60	0.02	0.00	0.24	0.00	9.95
1962	0.14	2.32	0.94	3.76	10.31	1.67	0.12	0.20	0.00	0.00	0.00	0.00	19.46
1963	0.22	0.00	0.01	0.04	2.68	3.00	2.67	0.04	0.29	0.00	0.17	1.88	11.00
1964	2.31	4.26	0.33	1.28	0.64	2.33	0.23	0.54	0.02	0.00	0.13	0.06	12.13
1965	0.65	1.32	1.30	1.42	0.71	1.21	4.65	0.08	0.00	0.82	0.29	0.65	13.10
1966	0.02	6.39	3.32	1.15	1.56	0.34	0.00	0.14	0.00	0.00	0.00	0.21	13.13
1967	0.00	4.49	2.23	1.35	0.24	0.99	3.66	0.14	0.00	0.05	0.00	0.77	13.92
1968	0.00	4.17	0.71	2.31	0.55	1.77	0.98	0.30	0.00	0.01	0.16	0.00	10.96
1969	0.62	0.85	1.58	5.02	6.93	1.60	1.55	0.11	0.17	0.07	0.00	0.00	18.50
1970	0.17	0.84	0.81	1.38	4.00	3.34	1.59	0.00	0.02	0.03	0.00	0.00	12.18
1971	0.08	5.42	3.68	0.87	0.88	0.64	1.30	0.80	0.00	0.00	0.00	0.00	13.67
1972	0.33	0.82	8.10	0.02	0.05	0.05	0.47	0.00	0.14	0.00	0.11	0.03	10.12
1973	0.12	3.72	0.74	3.05	5.76	2.18	0.39	0.18	0.07	0.00	0.00	0.02	16.22
1974	0.15	2.02	1.17	5.19	0.38	2.01	0.88	0.03	0.00	0.05	1.12	0.00	13.00
1975	2.31	1.10	3.38	0.19	1.59	4.57	2.21	0.20	0.00	0.00	0.03	0.18	15.76
1976	1.09	0.49	0.91	0.02	6.49	0.42	1.08	0.14	0.07	0.03	0.00	2.89	13.63
1977	0.31	0.68	0.05	4.56	0.66	2.30	0.14	3.97	0.00	0.00	1.54	0.00	14.21
1978	0.00	0.91	2.97	2.91	6.95	9.47	2.17	1.32	0.00	0.00	0.10	1.38	28.18
1979	0.30	1.40	1.35	3.59	2.12	4.81	0.17	0.47	0.07	0.04	0.08	0.23	14.63
1980	0.23	0.40	0.89	2.91	5.48	2.47	1.41	0.76	0.00	0.00	0.08	0.26	14.89
1981	0.37	1.40	0.25	1.34	1.02	6.12	0.00	0.14	0.00	0.00	0.00	0.00	10.64
1982	0.50	1.14	0.26	2.25	0.73	3.38	0.88	0.00	0.04	0.00	0.00	0.26	9.44
1983	0.44	2.58	1.38	3.94	4.43	6.21	1.37	0.10	0.07	0.04	0.81	0.79	22.16
1984	1.65	2.19	1.78	0.06	0.53	0.50	0.00	0.00	0.15	0.08	0.00	0.13	7.07
1985	0.50	1.70	1.76	0.92	0.36	1.27	0.12	0.17	0.29	0.01	0.00	0.28	7.38
1986	0.16	1.33	0.32	1.84	1.69	2.15	1.83	0.25	0.00	0.00	0.00	0.09	9.66
1987	0.00	1.00	0.30	1.30	2.69	2.18	0.17	0.47	0.13	0.00	0.10	0.00	8.33
1988	0.67	2.47	2.95	2.44	2.18	1.22	1.45	0.34	0.15	0.04	0.00	0.16	14.07
1989	0.00	1.09	1.87	0.94	3.02	0.24	0.35	0.02	0.00	0.00	0.00	0.46	7.99
1990	0.38	0.03	0.60	1.68	1.00	0.16	0.17	0.53	0.00	0.00	0.00	0.15	4.70
1991	0.50	0.88	0.10	0.33	1.81	10.20	0.36	0.18	0.11	0.04	0.00	0.26	14.77
1992	0.55	0.02	2.21	1.34	2.69	3.04	0.17	0.01	0.07	0.04	0.08	0.26	10.48
1993	1.18	0.01	4.22	6.25	7.62	2.68	0.10	0.00	0.76	0.00	0.00	0.00	22.82
1994	0.20	0.89	1.04	0.82	5.02	2.86	1.23	1.25	0.00	0.00	0.00	0.20	13.51
1995	0.38	0.86	0.44	12.53	0.54	5.85	2.05	1.27	0.00	0.00	0.00	0.00	23.92
1996	0.00	0.10	2.31	1.51	2.15	0.73	0.24	0.00	0.00	0.00	0.00	0.00	7.04
1997	2.82	0.52	1.66	1.76	1.48	0.16	0.00	0.02	0.06	0.00	0.00	0.32	8.80
1998	1.01	1.35	6.76	2.25	12.49	3.22	2.41	2.46	0.37	0.00	0.00	1.27	33.59
1999	0.35	2.13	0.35	4.24	1.52	1.37	3.07	0.05	0.04	0.79	0.00	0.00	13.91
2000	0.00	0.37	0.19	1.05	3.99	1.54	2.04	0.05	0.16	0.00	0.06	0.00	9.45
2001	0.47	0.00	1.63	3.56	2.92	2.47	1.34	0.00	0.00	0.12	0.00	0.00	12.51
2002	0.30	1.64	0.78	0.63	0.05	0.39	0.10	0.47	0.00	0.00	0.00	0.02	4.38
2003	0.04	1.08	1.47	0.00	6.27	2.74	1.89	1.47	0.00	0.00	0.00	0.05	15.01
2004	0.06	0.77	1.37	1.07	4.30	0.46	0.22	0.00	0.00	0.00	0.00	0.00	8.25
2005	2.50	0.05	6.70	6.03	12.15	1.08	2.43	1.43	0.00	0.00	0.05	0.25	32.67
2006	3.66	0.44	0.45	2.31	0.02	3.56	1.39	0.16	0.00	0.12	0.00	0.00	12.11
2007	0.10	0.73	2.22	0.71	1.54	0.75	1.05	0.00	0.00	0.03	0.00	0.40	7.53
2008	0.54	0.53	0.49	6.47	0.59	0.07	0.00	0.37	0.00	0.00	0.00	0.00	9.06
2009	0.02	2.76	1.41	0.92	2.60	0.26	0.57	0.11	0.50	0.00	0.00	0.00	9.15

¹ Adjusted for missing days.

Table C.2I Adjusted Monthly Precipitation for Llano Eberte Ranch, California(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	1.02	0.00	1.34	2.73	0.10	0.40	0.02	0.08	0.00	0.18	0.01	0.05	5.93
1950	0.08	0.39	0.71	0.61	0.79	0.60	0.14	0.11	0.00	0.47	0.00	0.14	4.04
1951	0.00	0.31	0.02	1.07	0.13	0.23	0.63	0.70	0.00	0.22	0.01	0.02	3.35
1952	0.38	0.32	2.29	4.77	0.66	3.99	0.66	0.01	0.00	1.48	0.02	1.02	15.60
1953	0.00	2.25	2.42	0.12	1.43	0.10	0.32	0.03	0.00	0.02	0.15	0.00	6.84
1954	0.02	0.50	0.07	3.62	1.64	1.65	0.00	0.00	0.00	0.23	0.08	0.20	8.02
1955	0.00	1.59	0.33	2.95	0.38	0.04	0.72	0.37	0.00	0.00	0.15	0.04	6.58
1956	0.01	0.27	0.65	2.23	0.05	0.00	1.61	0.09	0.00	0.20	0.00	0.02	5.13
1957	0.00	0.00	0.00	4.16	0.96	0.84	0.21	0.01	0.00	0.13	0.05	0.05	6.41
1958	1.17	0.53	0.84	0.25	2.91	1.93	2.04	0.02	0.02	0.00	0.17	1.02	10.91
1959	0.54	0.25	0.00	1.39	1.44	0.00	0.07	0.00	0.00	0.09	0.04	0.61	4.43
1960	0.16	0.20	1.28	1.23	0.65	0.02	0.20	0.00	0.01	0.48	0.10	0.46	4.79
1961	0.05	1.42	0.07	0.20	0.00	0.49	0.00	0.00	0.00	0.20	1.54	0.00	3.97
1962	0.06	0.66	1.33	0.89	6.04	0.52	0.00	0.00	0.00	0.00	0.00	0.00	9.50
1963	0.34	0.00	0.05	0.09	1.39	1.17	0.46	0.00	0.22	0.00	0.38	2.67	6.77
1964	1.73	0.66	0.14	0.91	0.25	0.37	0.34	0.02	0.00	0.19	0.62	0.00	5.23
1965	0.23	2.19	0.00	0.07	0.05	0.37	2.73	0.00	0.04	0.35	1.13	0.23	7.39

¹ Adjusted for missing days.

Table C.2m Adjusted Monthly Precipitation for Mojave, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	-	-	-	0.68	0.44	0.17	0.00	0.00	0.00	0.00	0.02	0.00	1.31
1950	0.00	0.20	1.04	0.42	0.32	0.32	0.28	0.00	0.00	0.00	0.00	0.24	2.82
1951	0.00	0.10	0.00	1.09	0.24	0.11	0.48	0.28	0.00	0.00	0.00	0.00	2.30
1952	0.50	0.35	1.24	2.92	0.00	3.21	0.13	0.00	0.00	0.00	0.00	0.02	8.37
1953	0.01	1.59	1.92	0.35	0.02	0.15	0.29	0.15	0.00	0.00	0.02	0.00	4.50
1954	0.00	0.37	0.12	1.43	0.55	0.99	0.02	0.00	0.00	0.00	0.00	0.02	3.50
1955	0.00	0.77	0.42	1.21	0.19	0.00	0.11	0.19	0.00	0.00	0.00	0.00	2.89
1956	0.00	0.24	0.61	1.27	0.05	0.00	1.15	0.44	0.00	0.24	0.00	0.00	4.00
1957	0.06	0.00	0.00	1.85	0.82	0.57	0.29	0.02	0.01	0.00	0.00	0.00	3.62
1958	0.59	0.27	1.53	0.54	2.58	1.74	1.75	0.05	0.00	0.00	0.01	0.33	9.39
1959	0.16	0.13	0.00	1.13	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.74	3.00
1960	0.00	0.00	0.92	0.99	1.08	0.03	0.09	0.00	0.00	0.00	0.00	0.20	3.31
1961	0.00	0.97	0.00	0.32	0.00	0.07	0.00	0.00	0.00	0.00	0.69	0.00	2.05
1962	0.00	0.97	1.01	0.48	2.85	0.44	0.00	0.00	0.00	0.00	0.00	0.00	5.75
1963	0.05	0.00	0.08	0.83	0.80	0.27	0.00	0.41	0.00	0.29	1.64	0.00	4.37
1964	1.03	0.90	0.04	0.53	0.02	0.32	0.20	0.18	0.00	0.06	0.00	0.00	3.28
1965	0.30	0.52	0.12	0.00	0.00	1.31	2.08	0.00	0.01	0.24	0.26	0.00	4.84
1966	0.03	3.76	2.82	0.55	0.23	0.15	0.00	0.00	0.00	0.00	0.00	0.45	7.99
1967	0.06	1.07	1.15	1.54	0.00	0.58	1.51	0.00	0.00	0.01	0.00	0.67	6.59
1968	0.00	3.78	0.62	0.26	0.53	0.43	0.32	0.11	0.00	0.28	0.00	0.00	6.33
1969	0.14	0.48	0.27	4.35	4.89	0.14	0.62	0.01	0.18	0.20	0.00	0.00	11.28
1970	0.00	0.47	0.00	0.40	1.20	1.65	0.06	0.00	0.00	0.35	0.00	0.00	4.13
1971	0.00	2.68	1.48	0.04	0.15	0.00	0.11	0.41	0.00	0.00	0.00	0.15	5.02
1972	0.00	0.01	1.97	0.00	0.00	0.00	0.05	0.00	0.31	0.00	0.08	0.04	2.46
1973	0.00	0.93	0.17	0.64	3.00	1.10	0.06	0.20	0.00	0.00	0.11	0.00	6.21
1974	0.00	0.71	0.65	1.62	0.06	0.31	0.33	0.35	0.00	0.13	0.03	0.00	4.19
1975	1.74	0.00	0.97	0.02	0.35	0.84	0.63	0.00	0.00	0.00	0.00	0.09	4.64
1976	0.00	0.00	0.07	0.00	1.32	0.00	0.10	0.04	0.00	0.13	0.00	2.94	4.60
1977	0.05	0.57	0.24	2.12	0.02	1.09	0.00	1.28	0.00	0.00	1.30	0.00	6.67
1978	0.12	0.00	2.39	2.63	6.24	3.02	0.77	0.11	0.00	0.00	0.00	0.21	15.49
1979	0.05	0.57	0.38	3.74	0.39	2.23	0.00	0.11	0.04	0.05	0.19	0.21	7.97
1980	0.06	0.00	0.76	3.39	1.20	1.56	0.18	0.00	0.00	0.00	0.00	0.00	7.15
1981	0.00	0.57	0.05	1.09	0.56	2.87	0.02	0.03	0.00	0.00	0.00	0.89	6.08
1982	1.99	1.44	0.76	1.72	0.46	2.55	1.15	0.04	0.00	0.00	0.01	0.33	10.45
1983	0.06	1.47	1.04	2.55	3.39	4.43	0.49	0.00	0.00	0.00	2.02	0.18	15.63
1984	0.73	0.04	1.72	0.00	0.01	0.13	0.00	0.00	0.40	2.43	0.29	0.27	6.02
1985	0.00	0.72	3.35	0.11	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.28	4.67
1986	0.22	1.45	0.22	1.12	1.43	0.89	0.07	0.00	0.00	0.00	1.00	0.00	6.40
1987	0.00	0.66	0.57	0.63	1.18	0.00	0.00	0.12	0.15	0.00	0.00	0.00	3.31
1988	1.04	0.79	0.79	2.06	0.30	0.00	0.47	0.15	0.00	1.06	0.00	0.00	6.66
1989	0.00	0.22	0.65	0.18	0.19	0.20	0.00	0.30	0.00	0.00	0.00	0.19	1.93
1990	0.00	0.00	0.00	0.65	0.03	0.10	0.08	0.06	0.00	0.00	0.00	0.16	1.08
1991	0.00	0.41	0.02	0.90	1.23	3.07	0.00	0.00	0.00	0.02	0.00	0.00	5.65
1992	0.10	0.06	1.19	0.40	5.25	2.59	0.34	0.08	0.00	0.00	0.00	0.00	10.01
1993	0.71	0.00	2.72	4.95	3.93	0.79	0.00	0.00	0.40	0.00	0.00	0.00	13.50
1994	0.27	0.29	0.23	0.07	1.19	0.32	0.09	0.08	0.00	0.00	0.00	0.01	2.55
1995	0.36	0.55	0.27	6.46	0.39	2.72	0.10	0.00	0.35	0.00	1.94	0.00	13.14
1996	0.00	0.00	0.66	0.50	1.14	0.28	0.00	0.00	0.00	0.00	0.00	0.00	2.58
1997	0.57	0.65	1.41	0.64	0.00	0.00	0.09	0.00	0.00	0.13	0.00	0.95	4.44
1998	0.12	0.92	1.38	0.91	6.85	1.46	0.41	1.15	0.00	0.00	1.20	1.00	15.40
1999	0.00	0.34	0.00	0.50	0.12	0.06	0.95	0.00	0.00	0.98	0.00	0.00	2.95
2000	0.00	0.00	0.00	0.21	1.67	1.16	0.00	0.12	0.00	0.00	0.11	0.00	3.27
2001	0.24	0.00	0.00	1.26	3.26	1.31	1.23	0.00	0.00	0.00	0.00	0.00	7.30
2002	0.00	0.79	0.30	0.00	0.21	0.15	0.00	0.00	0.00	0.00	0.19	0.00	1.64
2003	0.00	0.82	1.80	0.08	2.66	0.27	0.65	0.13	0.00	1.41	1.13	0.75	9.71
2004	0.00	0.57	0.75	0.03	1.12	0.46	0.09	0.00	0.00	0.00	0.00	0.21	3.24
2005	2.48	0.10	0.76	1.09	3.55	0.86	0.30	0.11	0.04	0.02	0.19	0.21	9.72
2006	0.20	0.03	0.24	1.09	0.71	0.05	0.24	0.11	0.04	0.00	0.00	0.00	2.71
2007	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.04	0.00	0.50	0.21	1.15
2008	0.20	0.27	0.00	2.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87
2009	0.00	0.57	0.02	0.00	2.05	0.00	0.31	0.11	0.04	0.11	0.19	0.21	3.62

¹ Adjusted for missing days.

Table C.2n Adjusted Monthly Precipitation for Neenach, California(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.05	0.07	1.42	1.28	0.38	0.83	0.21	0.14	0.01	0.00	0.00	0.00	4.39
1950	0.03	0.00	0.90	0.88	0.53	0.60	0.20	0.12	0.00	0.00	0.00	0.00	3.26
1951	0.00	0.07	0.20	1.29	0.10	0.14	0.43	0.02	0.00	0.00	0.00	0.00	2.25
1952	0.40	0.32	2.55	5.47	0.61	6.59	0.45	0.00	0.00	0.04	0.00	0.04	16.47
1953	0.00	1.70	2.59	0.23	0.05	0.65	1.04	0.19	0.00	0.02	0.00	0.00	6.47
1954	0.00	1.37	0.23	4.71	1.61	2.13	0.03	0.00	0.00	0.00	0.00	0.00	10.08
1955	0.00	0.99	0.61	2.33	0.80	0.04	1.31	0.68	0.00	0.00	0.00	0.00	6.76
1956	0.00	0.51	1.52	1.16	0.10	0.00	1.62	0.75	0.00	0.01	0.00	0.00	5.67
1957	0.15	0.00	0.02	4.00	0.19	0.90	0.40	0.45	0.00	0.00	0.00	0.00	6.11
1958	0.29	0.34	3.03	0.51	4.38	1.62	2.39	0.62	0.00	0.00	0.00	0.72	13.90
1959	0.14	0.30	0.00	0.10	2.57	0.00	0.11	0.00	0.00	0.00	0.00	0.59	3.81
1960	0.00	0.00	1.10	1.67	2.08	0.00	0.62	0.00	0.00	0.00	0.00	0.00	5.47
1961	0.00	2.24	0.08	0.65	0.00	0.64	0.00	0.00	0.00	0.00	1.59	0.00	5.20
1962	0.00	2.36	0.91	1.81	8.61	0.80	0.00	0.99	0.00	0.00	0.00	0.00	15.48
1963	0.02	0.00	0.00	0.02	1.92	2.32	0.88	0.00	0.49	0.00	0.43	2.24	8.32

¹ Adjusted for missing days.

Table C.2o Adjusted Monthly Precipitation for Palmdale, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.31	0.00	1.46	1.73	0.50	0.31	0.02	0.13	0.00	0.00	0.06	0.00	4.52
1950	0.17	0.50	1.06	0.74	0.58	1.13	0.51	0.27	0.00	0.22	0.00	0.07	5.25
1951	0.00	0.10	0.00	1.35	0.18	0.30	0.82	0.35	0.00	0.00	0.00	0.00	3.10
1952	0.60	0.72	4.24	6.25	0.44	4.69	0.68	0.00	0.00	0.29	0.00	0.35	18.26
1953	0.00	1.90	2.01	0.06	0.32	0.18	0.62	0.23	0.00	0.00	0.13	0.00	5.45
1954	0.00	0.39	0.35	4.53	1.66	2.04	0.00	0.00	0.00	0.00	0.00	0.00	8.97
1955	0.00	1.31	0.81	2.84	0.22	0.00	1.00	0.04	0.00	0.00	0.00	0.00	6.22
1956	0.00	0.31	0.70	2.74	0.00	0.00	1.75	0.12	0.00	0.05	0.00	0.00	5.67
1957	0.30	0.00	0.03	3.61	0.73	0.65	0.35	0.17	0.00	0.02	0.00	0.00	5.86
1958	1.56	0.93	1.85	0.98	3.20	2.94	2.26	0.28	0.00	0.00	0.00	0.42	14.42
1959	0.74	0.22	0.00	0.96	1.89	0.00	0.23	0.00	0.00	0.00	0.13	0.19	4.36
1960	0.00	0.00	1.14	1.43	1.45	0.05	0.35	0.00	0.00	0.00	0.00	0.00	4.42
1961	0.23	1.30	0.08	0.34	0.00	0.47	0.04	0.00	0.00	0.00	0.65	0.00	3.11
1962	0.00	1.10	1.09	1.77	4.41	1.21	0.00	0.05	0.00	0.00	0.00	0.00	9.63
1963	0.07	0.00	0.03	0.02	0.90	1.03	0.83	0.00	0.00	0.00	0.10	1.70	4.68
1964	1.44	1.30	0.02	1.30	0.02	1.13	0.18	0.27	0.00	0.00	0.00	0.00	5.66
1965	0.26	1.09	0.23	0.11	0.00	0.27	1.52	0.00	0.00	0.49	0.13	0.09	4.19
1966	0.00	5.62	2.12	0.35	0.88	0.12	0.00	0.00	0.00	0.00	0.00	0.40	9.49
1967	0.00	1.82	1.58	1.28	0.00	0.27	1.80	0.00	0.02	0.00	0.28	0.42	7.47
1968	0.00	3.51	0.68	0.29	0.41	0.76	0.44	0.00	0.00	0.00	1.46	0.00	7.55
1969	0.22	0.06	0.52	3.41	4.22	0.26	0.67	0.25	0.40	0.17	0.00	0.00	10.18
1970	0.00	0.70	0.00	0.26	0.77	0.64	0.05	0.00	0.00	0.03	0.00	0.00	2.45
1971	0.02	2.86	2.00	0.03	0.19	0.29	0.25	0.17	0.00	0.03	0.00	0.00	5.84
1972	0.02	0.00	4.25	0.00	0.00	0.00	0.03	0.00	0.28	0.00	0.13	0.00	4.71
1973	0.09	1.26	0.50	1.67	2.98	1.50	0.00	0.00	0.00	0.00	0.08	0.00	8.08
1974	0.00	0.60	0.06	3.16	0.00	1.28	0.14	0.08	0.00	0.25	0.24	0.00	5.81
1975	1.20	0.00	1.35	0.12	0.71	1.16	0.77	0.00	0.00	0.00	0.00	0.24	5.55
1976	0.00	0.00	0.12	0.00	1.78	0.60	0.06	0.12	0.00	0.00	0.00	2.12	4.80
1977	0.04	0.22	0.17	2.92	0.02	0.40	0.00	1.66	0.25	0.00	1.25	0.00	6.93
1978	0.00	0.03	3.22	2.28	3.53	3.65	1.10	0.00	0.00	0.00	0.00	0.92	14.73
1979	0.06	0.69	1.00	4.73	1.28	2.61	0.00	0.00	0.00	0.00	0.00	0.00	10.37
1980	0.11	0.22	0.09	3.14	6.42	3.02	0.10	0.66	0.00	0.00	0.00	0.00	13.76
1981	0.00	0.00	0.26	1.64	0.58	2.11	0.17	0.00	0.00	0.00	0.00	0.00	4.76
1982	0.40	1.28	0.00	1.63	0.91	2.69	2.47	0.19	0.00	0.00	0.00	0.43	10.00
1983	0.00	2.01	0.96	2.89	2.74	5.22	0.80	0.00	0.00	0.00	0.58	0.05	15.25
1984	0.87	0.98	1.41	0.00	0.02	0.08	0.00	0.00	0.05	0.50	0.23	0.15	4.29
1985	0.00	0.61	5.27	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	6.14
1986	0.19	0.90	0.04	0.00	2.44	1.76	0.03	0.00	0.00	0.07	0.12	0.00	5.55
1987	0.01	0.00	0.74	0.63	0.47	0.37	0.00	0.20	0.71	0.00	0.00	0.49	3.62
1988	2.05	1.36	0.99	1.39	0.79	0.77	0.81	0.12	0.03	0.11	0.06	0.00	8.48
1989	0.00	0.02	1.71	0.47	1.29	0.06	0.00	0.24	0.00	0.00	0.00	0.46	4.25
1990	0.00	0.11	0.00	0.80	0.99	0.15	0.08	0.02	0.02	0.00	0.16	0.00	2.33
1991	0.00	0.22	0.01	1.20	1.11	4.17	0.00	0.00	0.00	0.21	0.01	0.11	7.04
1992	0.31	0.00	2.00	2.05	5.02	2.52	0.23	0.10	0.00	0.06	0.52	0.00	12.81
1993	0.43	0.00	3.02	7.50	4.86	0.99	0.00	0.00	0.37	0.00	0.00	0.00	17.17
1994	0.00	0.46	0.26	0.31	1.39	0.79	0.03	0.35	0.00	0.00	0.00	0.00	3.59
1995	0.07	0.21	0.69	5.35	0.44	2.25	0.13	0.00	0.07	0.03	0.02	0.00	9.26
1996	0.00	0.03	0.73	0.29	2.42	0.42	0.00	0.00	0.00	0.00	0.13	0.00	4.02
1997	0.93	0.41	1.19	0.81	0.05	0.00	0.14	0.00	0.00	0.00	0.00	1.20	4.73
1998	0.20	0.91	2.46	1.10	6.35	1.96	0.89	1.01	0.00	0.00	0.00	0.36	15.24
1999	0.03	0.45	0.13	0.35	0.23	0.19	0.83	0.00	0.06	0.57	0.00	0.00	2.84
2000	0.00	0.03	0.00	0.22	1.85	0.81	0.79	0.00	0.00	0.00	0.21	0.00	3.91
2001	0.19	0.00	0.00	1.69	2.51	0.63	0.83	0.00	0.00	0.00	0.00	0.00	5.85
2002	0.17	0.75	0.56	0.49	0.05	0.14	0.04	0.02	0.00	0.00	0.00	0.00	2.22
2003	0.00	0.39	1.54	0.00	3.79	2.03	0.77	0.41	0.00	0.09	0.00	0.01	9.03
2004	0.00	0.55	0.96	0.02	3.24	0.25	0.06	0.00	0.00	0.00	0.00	0.00	5.08
2005	3.53	0.46	4.27	3.91	5.60	0.93	0.96	0.25	0.00	0.22	0.10	0.73	20.96
2006	1.76	0.00	0.08	0.64	1.36	1.53	1.26	0.00	0.11	0.00	0.00	0.00	6.74
2007	0.42	0.00	0.43	0.11	0.42	0.00	0.03	0.00	0.00	0.00	0.01	0.62	2.04
2008	0.01	0.75	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.36
2009	0.00	1.47	1.56	0.00	2.92	0.23	0.00	0.00	0.00	0.00	0.00	0.00	6.19

¹ Adjusted for missing days.

Table C.2p Adjusted Monthly Precipitation for Pearblossom, California
 (inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1985	-	-	-	1.35	1.86	0.84	0.31	0.11	0.00	0.00	0.00	0.05	4.51
1986	0.34	1.30	0.57	1.26	0.86	1.96	0.11	0.00	0.00	0.09	0.56	0.00	7.05
1987	0.02	0.90	0.85	1.78	0.28	0.64	0.00	0.00	0.05	0.00	0.00	0.35	4.87
1988	2.61	1.19	3.08	1.12	0.99	0.03	1.13	0.03	0.02	0.00	3.07	0.00	13.28
1989	0.00	0.09	1.65	0.84	0.69	0.00	0.00	0.46	0.00	0.00	0.00	0.66	4.39
1990	0.00	0.00	0.00	0.73	0.75	0.00	0.41	0.16	0.00	0.00	0.68	0.00	2.73
1991	0.00	0.02	0.00	1.60	1.29	0.84	0.31	0.00	0.05	0.09	0.11	0.15	4.47
1992	0.00	0.00	0.85	2.50	4.04	2.51	0.77	0.13	0.00	0.10	0.05	0.00	10.95
1993	0.37	0.00	2.99	5.01	3.23	0.74	0.00	0.11	0.38	0.00	0.11	0.00	12.94
1994	0.00	0.14	0.39	0.74	1.86	1.10	0.12	0.00	0.00	0.00	0.00	0.00	4.35
1995	0.23	0.30	0.50	5.03	0.29	3.44	0.20	0.00	0.00	0.00	0.00	0.00	9.99
1996	0.00	0.00	0.78	0.40	1.96	1.29	0.00	0.00	0.00	0.64	0.20	0.00	5.27
1997	0.56	0.30	0.88	0.22	0.12	0.00	0.00	0.01	0.00	0.01	0.00	1.09	3.19
1998	0.00	0.47	2.58	0.76	5.30	2.13	0.70	0.64	0.00	0.00	0.61	0.42	13.61
1999	0.00	0.72	0.12	0.49	0.22	0.11	0.60	0.43	0.47	0.05	0.00	0.00	3.21
2000	0.00	0.00	0.00	0.24	1.90	0.50	0.63	0.01	0.00	0.00	0.65	0.00	3.93
2001	0.18	0.00	0.00	2.16	3.00	0.93	0.42	0.00	0.00	0.42	0.00	0.23	7.34
2002	0.21	0.55	0.63	0.22	0.03	0.04	0.14	0.05	0.00	0.00	0.00	0.00	1.87
2003	0.00	0.15	0.77	0.00	4.38	1.25	0.83	0.23	0.00	0.13	0.23	0.07	8.04
2004	0.00	0.75	0.49	0.00	2.34	0.63	0.10	0.00	0.00	0.00	0.00	0.00	4.32
2005	3.26	1.15	3.40	2.49	6.15	1.00	0.26	0.04	0.00	0.09	0.37	0.82	19.03
2006	1.57	0.00	0.00	0.46	0.88	0.85	0.68	0.15	0.00	0.63	0.00	0.15	5.36
2007	0.23	0.00	0.08	0.10	0.35	0.03	0.00	0.00	0.00	0.05	0.10	0.31	1.25
2008	0.00	1.06	0.32	1.89	0.42	0.05	0.00	0.56	0.00	0.42	0.00	0.00	4.72
2009	0.00	1.70	0.42	0.20	1.64	0.10	0.00	0.00	0.22	0.00	0.00	0.00	4.28

¹ Adjusted for missing days.

Table C.2q Adjusted Monthly Precipitation for Randsburg, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.03	0.00	0.47	1.25	0.44	0.68	0.00	0.08	0.00	0.00	0.13	0.00	3.08
1950	0.00	0.20	1.73	0.57	0.46	0.52	0.19	0.00	0.00	0.10	0.10	0.65	4.52
1951	0.00	0.33	0.23	0.30	0.06	0.00	0.35	0.74	0.00	0.38	0.00	0.00	2.39
1952	0.33	0.29	2.16	3.76	0.11	2.39	0.41	0.00	0.00	0.02	0.00	0.45	9.92
1953	0.00	0.59	1.19	0.33	0.01	0.08	0.23	0.01	0.00	0.00	0.00	0.00	2.44
1954	0.00	0.18	0.06	2.03	0.73	0.96	0.00	0.00	0.00	0.23	0.00	0.00	4.19
1955	0.00	1.35	0.82	0.98	0.46	0.00	0.28	0.20	0.00	0.00	0.05	0.00	4.14
1956	0.00	0.46	0.03	2.00	0.00	0.00	0.79	0.08	0.00	0.12	0.00	0.00	3.48
1957	0.06	0.00	0.00	1.68	0.70	0.43	0.00	0.03	0.00	0.01	0.00	0.09	3.00
1958	0.57	0.00	0.80	0.78	3.28	1.96	2.04	0.00	0.00	0.03	0.16	0.24	9.86
1959	1.00	0.05	0.00	1.10	1.65	0.00	0.00	0.00	0.00	0.00	0.20	0.68	4.68
1960	0.04	0.06	1.07	1.14	1.30	0.04	0.11	0.00	0.00	0.03	0.00	0.58	4.37
1961	0.07	1.01	0.00	0.13	0.00	0.14	0.00	0.00	0.00	0.00	0.41	0.00	1.76
1962	0.02	0.79	0.94	1.01	2.16	0.41	0.00	0.00	0.00	0.00	0.00	0.00	5.33
1963	0.06	0.00	0.04	0.34	1.22	0.54	0.23	0.00	0.22	0.00	0.60	1.17	4.42
1964	1.60	1.22	0.00	0.48	0.06	0.32	0.06	0.00	0.00	0.00	0.08	0.01	3.83
1965	0.22	0.50	0.30	0.07	0.04	1.14	2.73	0.00	0.19	0.33	0.22	0.02	5.76
1966	0.10	3.62	2.70	0.36	0.31	0.15	0.00	0.02	0.00	0.00	0.00	0.10	7.36
1967	0.01	0.84	1.31	1.38	0.00	0.22	1.74	0.00	0.00	0.04	0.54	0.41	6.49
1968	0.00	1.72	0.78	0.17	0.91	0.64	0.13	0.00	0.04	0.67	0.53	0.00	5.59
1969	0.30	0.24	0.25	4.02	4.76	0.38	0.66	0.09	0.15	0.26	0.00	0.00	11.11
1970	0.00	0.53	0.00	0.27	1.01	0.93	0.00	0.00	0.00	0.13	0.00	0.00	2.87
1971	0.02	1.73	1.11	0.00	0.14	0.00	0.16	0.10	0.00	0.05	0.16	0.24	3.71
1972	0.00	0.04	1.67	0.00	0.27	0.00	0.02	0.00	0.01	0.00	0.00	0.00	2.01
1973	0.00	1.02	0.17	0.70	2.60	1.09	0.00	0.28	0.00	0.03	0.00	0.00	5.89
1974	0.00	0.68	0.43	2.44	0.00	0.73	0.02	0.18	0.00	0.87	0.16	0.00	5.51
1975	1.10	0.03	0.61	0.00	0.74	0.46	0.49	0.06	0.00	0.02	0.00	0.49	4.00
1976	0.04	0.00	0.00	0.00	2.30	0.37	0.14	0.05	0.00	0.09	0.00	2.00	4.99
1977	0.03	0.33	0.06	1.25	0.00	0.81	0.00	1.01	0.00	0.00	1.30	0.00	4.79
1978	0.00	0.00	2.16	2.75	5.30	1.99	1.06	0.00	0.00	0.00	0.33	0.33	13.92
1979	0.52	0.07	0.02	2.56	0.16	2.18	0.00	0.06	0.00	0.12	0.08	0.05	5.82
1980	0.01	0.00	0.10	4.22	3.61	1.86	0.32	0.12	0.00	0.27	0.00	0.00	10.51
1981	0.00	0.00	0.07	1.26	0.41	3.32	0.06	0.24	0.00	0.00	0.00	0.02	5.38
1982	0.69	1.58	0.10	0.68	0.36	3.44	1.19	0.13	0.00	0.12	0.01	0.18	8.48
1983	0.48	2.52	1.34	2.49	3.70	5.00	0.51	0.00	0.15	0.00	1.51	0.25	17.95
1984	0.10	0.09	1.78	0.00	0.00	0.14	0.00	0.00	0.00	0.95	0.74	0.00	3.80
1985	0.00	1.09	3.63	0.27	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.32	5.41
1986	0.02	1.08	0.68	1.90	2.26	1.67	0.06	0.00	0.00	0.12	0.78	0.00	8.57
1987	0.00	0.62	0.00	1.24	0.20	0.72	0.00	0.33	0.46	0.00	0.01	0.26	3.84
1988	2.12	0.81	1.83	1.89	0.13	0.06	1.53	0.00	0.00	0.24	0.68	0.14	9.43
1989	0.00	0.26	0.75	0.19	0.51	0.57	0.00	0.01	0.00	0.00	0.01	0.00	2.30
1990	0.00	0.00	0.00	1.13	0.38	0.01	0.06	0.07	0.00	0.14	0.14	0.10	2.03
1991	0.00	0.21	0.01	0.94	1.53	4.18	0.00	0.04	0.00	0.01	0.00	0.39	7.31
1992	0.21	0.02	1.02	1.22	5.38	3.13	0.41	0.23	0.00	0.06	0.00	0.00	11.68
1993	3.02	0.00	3.10	4.06	3.17	0.50	0.00	0.01	0.41	0.00	0.00	0.00	14.27
1994	0.22	0.45	0.39	0.45	0.98	0.36	0.18	0.05	0.00	0.00	0.00	0.00	3.08
1995	0.36	0.37	0.30	6.21	0.79	2.31	0.93	0.04	0.00	0.00	0.10	0.00	11.41
1996	0.00	0.00	1.13	0.15	2.04	0.17	0.00	0.00	0.00	0.16	0.04	0.00	3.69
1997	0.72	0.93	1.36	0.61	0.01	0.00	0.04	0.00	0.00	0.08	0.00	2.30	6.05
1998	0.00	0.96	0.79	0.62	7.30	1.28	0.27	0.98	0.00	0.00	0.80	0.89	13.89
1999	0.02	0.21	0.00	0.37	0.10	0.23	1.78	0.31	0.00	0.37	0.00	0.18	3.58
2000	0.00	0.00	0.00	1.24	3.27	0.89	0.36	0.09	0.14	0.00	0.11	0.00	6.10
2001	0.19	0.22	0.02	2.24	3.16	0.45	0.73	0.08	0.00	0.14	0.00	0.00	7.24
2002	0.21	1.01	0.26	0.62	0.03	0.13	0.09	0.05	0.00	0.00	0.02	0.00	2.43
2003	0.11	0.99	2.01	0.10	2.59	0.39	0.68	0.32	0.00	0.12	0.02	0.50	7.83
2004	0.00	0.95	0.89	0.00	3.05	0.54	0.54	0.00	0.00	0.00	0.36	0.00	6.33
2005	2.78	0.44	1.52	4.15	2.96	1.63	0.18	0.13	0.00	0.34	0.57	0.48	15.18
2006	2.11	0.00	0.04	0.99	0.04	1.40	0.26	0.04	0.04	0.00	0.00	0.00	4.92
2007	0.31	0.00	0.20	0.01	0.35	0.29	0.18	0.00	0.00	0.00	0.01	0.00	1.35
2008	0.00	0.18	0.27	1.80	0.31	0.00	0.00	0.00	0.00	1.77	0.00	0.05	4.38
2009	0.00	2.54	1.11	0.25	2.42	0.05	0.00	0.00	0.03	0.02	0.00	0.00	6.42

¹ Adjusted for missing days.

Table C.2r Adjusted Monthly Precipitation for Sandberg PTRL FC130-B, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	-	-	-	2.06	0.46	1.53	0.13	0.67	0.04	0.00	0.00	0.00	4.89
1950	0.18	0.44	3.81	1.76	0.88	0.58	0.65	0.07	0.00	0.05	0.00	0.08	8.50
1951	0.06	0.36	0.04	1.29	1.03	0.80	1.60	0.01	0.00	0.00	0.00	0.00	5.19
1952	0.61	0.69	2.83	8.50	0.99	6.91	0.96	0.00	0.00	0.03	0.01	0.24	21.77
1953	0.00	2.60	3.68	0.31	0.10	0.15	1.96	0.35	0.00	0.00	0.00	0.00	9.15
1954	0.00	2.54	0.15	3.71	2.37	3.04	0.05	0.00	0.00	0.00	0.00	0.00	11.86
1955	0.00	2.08	1.19	4.90	1.18	0.25	2.16	1.64	0.00	0.00	0.00	0.00	13.40
1956	0.00	0.88	2.91	1.83	0.23	0.05	3.59	1.33	0.00	0.00	0.00	0.00	10.82
1957	0.41	0.00	1.84	6.62	2.21	0.88	0.71	1.11	0.10	0.00	0.00	0.00	13.88
1958	0.59	0.62	5.58	0.92	8.09	3.83	4.74	0.59	0.00	0.00	0.00	0.83	25.79
1959	0.07	0.75	0.00	2.59	4.44	0.15	0.58	0.00	0.00	0.00	0.00	1.25	9.83
1960	0.00	0.00	1.68	3.24	0.76	0.08	1.63	0.00	0.00	0.00	0.00	0.00	7.39
1961	0.02	4.72	0.11	1.57	1.02	1.36	0.43	0.50	0.00	0.00	1.08	0.15	10.96
1962	0.05	3.80	2.18	3.71	13.67	1.19	0.00	0.47	0.00	0.00	0.00	0.00	25.07
1963	0.14	0.02	0.01	0.13	2.92	2.52	1.91	0.02	0.66	0.00	0.37	1.97	10.67
1964	2.36	3.23	0.13	1.05	0.47	1.88	1.16	0.82	0.00	0.00	0.00	0.00	11.10
1965	0.77	2.32	1.15	0.27	0.06	1.71	5.68	0.00	0.01	0.42	0.27	0.54	13.20
1966	0.00	12.44	3.41	1.16	1.69	0.12	0.00	0.02	0.00	0.01	0.00	0.22	19.07
1967	0.01	6.29	1.52	5.10	0.28	2.56	7.01	0.76	0.00	0.00	0.00	1.01	24.54
1968	0.00	8.35	0.70	0.47	1.82	3.03	1.11	0.00	0.00	0.06	0.00	0.00	15.54
1969	0.58	0.35	0.44	11.34	9.82	0.51	0.97	0.27	0.30	0.13	0.00	0.00	24.71
1970	0.00	1.59	0.13	1.03	5.65	3.11	0.45	0.00	0.00	0.00	0.00	0.00	11.96
1971	0.00	8.00	3.65	0.11	1.86	0.20	0.83	0.83	0.00	0.00	0.12	0.00	15.60
1972	0.20	0.32	6.68	0.00	0.14	0.00	0.04	0.13	0.05	0.00	0.00	0.02	7.58
1973	0.03	4.05	0.41	3.56	9.67	2.68	0.10	0.04	0.00	0.00	0.00	0.01	20.55
1974	0.23	1.68	0.82	4.69	0.18	3.21	0.61	0.00	0.00	0.08	0.00	0.00	11.50
1975	1.16	0.17	3.97	0.15	1.83	5.81	2.76	0.01	0.00	0.00	0.00	0.05	15.91
1976	0.30	0.26	0.31	0.00	7.37	1.04	1.02	0.18	0.12	0.03	0.00	4.54	15.17
1977	0.41	0.58	0.33	6.87	0.14	2.03	0.00	4.88	0.05	0.00	1.95	0.05	17.29
1978	0.00	0.33	5.63	6.41	10.88	13.85	2.83	0.18	0.00	0.00	0.03	1.43	41.57
1979	0.09	2.21	3.05	6.75	2.51	4.92	0.34	0.00	0.00	0.00	0.00	0.57	20.44
1980	0.12	0.41	1.51	2.78	2.85	2.15	0.70	0.10	0.00	0.00	0.17	0.57	11.36
1981	0.09	0.00	0.31	1.68	1.93	3.81	0.41	0.13	0.00	0.00	0.00	0.00	8.36
1982	1.75	2.40	0.19	1.54	0.61	4.62	2.30	0.27	0.04	0.00	0.00	2.30	16.02
1983	0.27	3.01	1.42	4.00	4.42	11.59	2.27	0.10	0.00	0.00	2.49	2.21	31.78
1984	2.49	1.65	3.03	0.02	0.10	0.21	0.26	0.00	0.00	0.91	0.00	0.36	9.03
1985	0.09	1.48	4.42	0.86	0.22	1.04	0.11	0.09	0.03	0.06	0.00	0.69	9.09
1986	0.30	3.09	0.35	3.94	2.82	1.98	1.87	0.00	0.00	0.10	0.00	0.04	14.49
1987	0.12	1.91	0.27	0.88	0.79	2.74	0.54	0.25	0.07	0.00	0.02	2.55	10.14

¹ Adjusted for missing days.

Table C.2s Adjusted Monthly Precipitation for Tehachapi, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.03	0.16	1.06	3.02	2.06	2.24	0.08	0.71	0.00	0.00	0.00	0.00	9.36
1950	0.16	0.58	1.72	1.95	1.07	1.16	0.30	0.20	0.00	0.00	0.00	0.32	7.46
1951	0.20	1.37	0.73	1.62	0.67	0.42	3.02	0.43	0.00	0.00	0.00	0.00	8.46
1952	0.27	0.28	5.26	3.47	0.77	5.31	1.54	0.00	0.00	0.14	0.00	0.00	17.04
1953	0.00	3.12	3.10	1.85	0.40	0.95	1.35	1.07	0.00	0.00	0.16	0.00	12.00
1954	0.01	0.38	0.78	2.43	0.87	2.14	0.20	0.15	0.00	0.11	0.00	0.00	7.07
1955	0.00	1.12	0.65	2.82	0.97	0.00	0.71	0.32	0.00	0.00	0.00	0.00	6.59
1956	0.00	0.60	3.42	3.23	0.45	0.04	3.14	0.41	0.00	0.04	0.00	0.00	11.33
1957	0.32	0.00	0.17	2.90	1.22	1.20	1.16	0.98	0.22	0.00	0.00	0.00	8.17
1958	1.05	0.43	1.60	1.69	5.44	3.52	2.09	0.14	0.00	0.35	0.04	0.36	16.71
1959	0.27	0.75	0.12	0.00	1.83	0.02	0.47	0.23	0.00	0.00	0.06	0.79	4.54
1960	0.00	0.00	0.83	1.50	4.48	1.37	0.47	0.07	0.00	0.01	0.00	0.00	8.73
1961	0.07	3.01	0.13	0.62	0.30	1.56	0.20	0.32	0.00	0.00	1.08	0.00	7.29
1962	0.03	0.48	0.92	1.43	6.09	1.16	0.08	0.30	0.00	0.00	0.00	0.06	10.55
1963	0.13	0.00	0.00	0.27	1.29	1.49	1.46	0.09	0.66	0.00	1.36	1.34	8.09
1964	0.37	1.10	0.00	0.80	0.42	1.84	1.00	0.38	0.00	0.22	0.01	0.00	6.14
1965	0.29	1.02	4.43	0.78	0.19	1.28	2.68	0.00	0.00	0.44	1.18	0.00	12.29
1966	0.00	1.91	2.18	0.79	0.99	0.45	0.00	0.18	0.00	0.00	0.60	0.32	7.42
1967	0.00	2.42	3.87	1.33	0.10	0.97	3.55	0.19	0.00	0.00	0.06	2.13	14.62
1968	0.00	2.73	1.89	0.59	0.63	1.36	0.40	0.40	0.08	0.02	0.00	0.00	8.10
1969	0.48	1.21	2.24	5.16	5.69	1.60	1.16	0.02	0.00	0.26	0.00	0.12	17.94
1970	0.06	0.75	0.50	2.37	3.24	0.25	0.71	0.00	0.00	0.00	0.00	0.00	7.88
1971	0.00	6.22	2.01	0.42	0.79	0.66	1.20	0.81	0.00	0.03	0.16	0.04	12.34
1972	0.00	0.35	3.45	0.09	0.12	0.00	0.22	0.00	0.77	0.00	0.25	0.04	5.29
1973	0.19	2.51	3.31	2.40	1.56	3.87	0.67	2.06	0.00	0.00	0.46	0.00	17.03
1974	0.09	1.80	1.89	2.55	0.11	1.67	2.01	0.56	0.00	0.04	0.35	0.00	11.07
1975	2.23	0.51	1.06	0.19	1.23	1.72	1.35	0.00	0.00	0.00	0.07	0.44	8.80
1976	0.86	0.18	0.21	0.07	1.87	0.80	0.58	0.14	0.00	0.04	0.00	1.80	6.55
1977	0.82	0.56	0.00	2.66	0.71	1.62	0.00	2.35	0.29	0.00	1.54	0.00	10.55
1978	0.02	0.04	2.75	2.29	6.09	5.21	1.51	0.04	0.00	0.00	0.00	0.90	18.85
1979	0.00	0.47	1.27	3.91	2.13	2.22	0.03	0.26	0.00	0.00	0.51	0.29	11.09
1980	0.49	0.34	0.38	3.46	3.17	1.71	0.81	0.46	0.00	0.43	0.00	0.07	11.32
1981	0.28	0.01	0.61	1.81	0.71	3.75	0.22	0.49	0.00	0.00	0.00	0.00	7.88
1982	2.19	1.29	1.12	2.49	0.59	3.93	1.89	0.40	0.20	0.00	0.42	0.36	14.88
1983	0.95	2.47	3.13	3.55	2.47	11.59	1.34	0.26	0.00	0.00	2.65	0.13	28.54
1984	0.79	2.98	2.07	0.00	0.64	0.09	0.55	0.01	0.09	1.10	1.02	0.01	9.35
1985	0.31	1.91	3.25	1.17	1.09	1.37	0.12	0.10	0.52	0.00	0.00	0.48	10.32
1986	0.33	2.98	0.30	1.87	2.24	2.53	0.31	0.08	0.00	0.02	0.00	0.06	10.72
1987	0.14	0.99	0.81	1.63	1.50	2.18	0.35	0.47	0.60	0.00	0.00	0.32	8.99
1988	0.47	4.24	1.31	1.39	1.02	0.59	1.20	0.90	0.13	0.00	0.03	0.02	11.30
1989	0.00	1.91	1.69	0.26	1.04	0.79	0.13	0.44	0.00	0.00	0.00	0.96	7.22
1990	0.51	0.30	0.00	1.63	0.79	1.22	0.24	1.39	0.04	0.00	0.00	0.25	6.37
1991	0.05	0.81	0.74	1.05	1.61	5.83	0.00	0.18	0.00	0.55	0.00	0.00	10.82
1992	0.63	0.57	1.55	1.61	4.53	3.17	0.66	0.06	0.00	0.10	0.00	0.00	12.88
1993	1.18	0.05	4.50	5.78	4.51	1.46	0.01	0.00	0.82	0.00	0.00	0.00	18.31
1994	0.38	1.23	1.67	0.41	1.85	0.55	1.51	0.61	0.00	0.00	0.27	0.05	8.53
1995	0.30	1.44	1.42	9.09	0.49	6.23	1.31	0.86	0.14	0.05	0.63	0.00	21.96
1996	0.00	0.05	1.06	2.91	3.85	1.20	0.42	0.00	0.00	0.00	0.00	0.00	9.50
1997	1.58	1.07	2.47	3.30	0.95	0.00	0.18	0.00	0.00	0.08	0.27	0.24	10.14

¹ Adjusted for missing days.

Table C.2t Adjusted Monthly Precipitation for Tejon Rancho, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.05	0.10	1.45	1.59	3.02	2.15	0.16	1.32	0.00	0.00	0.00	0.00	9.84
1950	0.14	0.60	1.14	2.40	1.14	1.25	0.57	0.72	0.00	0.00	0.00	0.54	8.50
1951	0.65	0.72	0.68	3.90	1.19	0.48	2.95	0.43	0.00	0.00	0.00	0.00	11.00
1952	0.50	0.15	2.89	2.16	1.83	3.22	2.04	0.00	0.00	0.00	0.12	0.16	13.07
1953	0.00	1.72	2.85	1.11	0.30	1.67	1.74	0.55	0.01	0.04	0.25	0.00	10.24
1954	0.00	1.77	0.47	2.72	0.39	2.07	0.30	0.00	0.00	0.00	0.00	0.00	7.72
1955	0.00	0.71	0.56	4.14	0.99	0.04	1.48	1.05	0.00	0.00	0.00	0.00	8.97
1956	0.00	1.34	3.29	2.35	1.19	0.00	1.86	1.20	0.00	0.00	0.00	0.00	11.23
1957	0.93	0.00	0.28	2.15	1.06	2.97	1.28	1.23	0.84	0.00	0.00	0.00	10.74
1958	1.14	0.63	1.84	1.96	1.86	3.44	2.09	0.50	0.00	0.00	0.00	1.11	14.57
1959	0.00	1.42	0.04	0.44	2.15	0.15	0.79	0.35	0.00	0.00	0.00	0.28	5.62
1960	0.00	0.00	0.70	2.01	2.81	2.27	0.85	0.03	0.00	0.00	0.00	0.00	8.67
1961	0.03	3.25	0.48	0.89	0.89	2.48	0.70	0.42	0.06	0.00	0.35	0.00	9.55
1962	0.16	0.47	0.48	1.25	6.25	0.45	0.24	0.49	0.00	0.00	0.00	0.00	9.79
1963	0.88	0.00	0.00	0.05	2.41	1.92	2.62	0.81	0.42	0.00	0.35	1.21	10.67
1964	1.26	2.85	0.32	0.93	0.71	1.85	1.35	0.69	0.00	0.00	0.23	0.00	10.19
1965	0.81	0.84	2.02	1.74	0.89	0.71	3.06	0.00	0.00	0.00	0.00	0.82	10.89
1966	0.00	0.71	2.60	1.25	2.03	0.49	0.00	0.08	0.00	0.00	0.00	0.00	7.16
1967	0.00	0.98	2.30	1.39	0.35	1.66	5.41	0.54	0.00	0.00	0.09	0.70	13.42
1968	0.00	2.89	1.43	0.95	1.13	0.65	0.50	0.31	0.00	0.00	0.00	0.00	7.86
1969	1.95	1.44	2.12	3.01	4.03	1.54	1.69	0.00	0.19	0.07	0.00	0.00	16.04
1970	0.00	0.88	1.25	0.78	2.14	2.64	1.08	0.00	0.00	0.00	0.00	0.00	8.77
1971	0.00	4.19	1.46	1.33	0.59	0.98	1.82	2.25	0.00	0.00	0.18	0.15	12.95
1972	0.15	0.59	2.54	0.00	0.02	0.00	0.15	0.00	0.57	0.00	0.10	0.00	4.12
1973	1.09	2.45	2.37	1.93	1.91	4.61	0.88	0.00	0.00	0.03	0.00	0.00	15.27
1974	0.13	1.67	1.66	2.18	0.47	2.00	1.25	0.09	0.00	1.13	0.00	0.00	10.58
1975	1.85	1.29	0.94	0.44	1.55	3.12	2.32	0.09	0.00	0.00	0.27	0.60	12.47
1976	1.78	0.48	0.62	0.14	1.99	0.70	1.32	0.36	0.15	0.00	0.00	1.50	9.04
1977	1.11	0.28	0.00	1.93	0.25	2.52	0.32	1.65	0.00	0.00	0.79	0.00	8.85
1978	0.00	0.02	2.39	1.35	3.75	6.06	2.54	0.32	0.00	0.00	0.00	0.22	16.65
1979	0.01	1.33	1.33	3.38	2.01	2.93	0.40	0.52	0.00	0.00	0.00	0.05	11.97
1980	1.29	0.07	0.52	2.74	1.44	2.96	1.78	0.79	0.00	0.00	0.00	0.00	11.59
1981	0.07	0.04	0.34	1.00	1.62	4.23	2.44	0.96	0.00	0.00	0.00	0.00	10.70
1982	1.28	1.20	0.60	2.98	1.84	2.74	1.76	0.00	0.30	0.00	0.08	1.46	14.24
1983	1.30	2.16	0.90	4.32	1.75	7.16	1.43	0.16	0.00	0.00	1.46	0.34	20.98
1984	0.28	4.26	1.02	0.32	0.35	1.01	0.96	0.00	0.30	0.00	0.21	0.00	8.71
1985	0.31	2.33	2.06	1.54	1.59	0.31	0.00	0.18	0.11	0.00	0.00	1.27	9.70
1986	0.55	3.34	0.07	0.66	1.51	3.47	1.04	0.38	0.00	0.00	0.00	0.00	11.02
1987	0.00	1.34	0.80	3.00	1.16	1.94	0.69	0.35	0.00	0.00	0.00	0.00	9.28
1988	0.49	5.42	2.79	2.78	0.54	0.27	1.74	0.29	0.74	0.00	0.00	0.00	15.06
1989	0.20	2.74	1.55	1.84	1.44	1.07	0.60	0.46	0.00	0.00	0.00	0.90	10.80
1990	0.57	0.25	0.00	2.80	1.84	0.80	0.35	1.50	0.00	0.00	0.00	0.00	8.11
1991	0.00	1.54	0.67	0.84	0.60	7.86	0.00	0.25	0.06	0.00	0.00	0.00	11.82
1992	1.02	0.14	1.65	1.99	3.52	3.23	0.00	0.00	0.00	0.18	0.00	0.00	11.73
1993	0.79	0.00	3.02	4.49	2.27	2.04	0.49	0.48	1.24	0.00	0.00	0.00	14.82
1994	0.13	1.94	1.26	1.48	1.50	1.88	1.18	0.84	0.00	0.00	0.00	0.62	10.83
1995	0.20	2.89	2.45	4.68	1.28	6.01	2.15	0.98	0.42	0.00	0.06	0.00	21.12
1996	0.00	0.10	1.92	1.45	3.17	0.91	0.09	0.00	0.00	0.00	0.00	0.00	7.64
1997	1.11	0.98	0.84	3.89	1.89	0.16	0.06	0.00	0.00	0.00	0.00	0.18	9.11
1998	1.05	1.72	1.10	1.96	7.90	4.07	3.06	2.12	0.46	0.00	0.00	1.00	24.44
1999	0.49	1.90	2.25	3.24	1.75	1.01	1.73	0.00	0.00	0.10	0.00	0.00	12.47
2000	0.00	0.65	0.25	2.09	3.49	1.91	0.54	0.19	0.22	0.00	0.00	0.00	9.34
2001	0.82	0.00	0.03	3.88	2.38	0.93	2.43	0.00	0.00	0.00	0.00	0.00	10.47
2002	0.22	1.99	1.63	1.93	0.35	1.40	0.53	0.11	0.00	0.00	0.00	0.00	8.16
2003	0.00	1.67	2.26	0.00	4.11	1.08	2.76	1.02	0.00	0.39	0.48	0.00	13.77
2004	0.00	1.33	2.80	0.99	3.73	0.58	0.00	0.48	0.00	0.00	0.00	0.00	9.91
2005	2.42	0.18	2.23	1.93	2.41	2.02	2.04	1.22	0.09	0.00	0.08	0.22	14.83
2006	1.71	1.33	1.71	1.47	1.84	2.86	1.25	0.25	0.00	0.00	0.00	0.00	12.42
2007	0.23	0.78	1.36	1.50	3.58	1.72	1.52	0.00	0.00	0.00	0.00	0.22	10.92
2008	0.31	0.60	0.23	2.57	1.47	0.33	0.47	0.33	0.00	0.00	0.00	0.00	6.31
2009	0.47	1.71	1.33	0.48	2.32	0.48	0.45	0.44	0.24	0.03	0.00	0.00	7.96

¹ Adjusted for missing days.

Table C.2u Adjusted Monthly Precipitation for Valyermo Fire Station 79, California
 (inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1973	0.17	1.12	0.38	1.29	3.05	1.58	0.00	0.00	0.00	0.00	0.00	0.00	7.59
1974	0.00	0.78	0.16	3.94	0.00	0.90	0.08	0.17	0.00	0.11	0.08	0.00	6.22
1975	0.65	0.24	2.22	0.25	0.55	1.18	1.26	0.00	0.00	0.00	0.00	0.00	6.35
1976	0.00	0.09	0.00	0.00	3.27	0.36	0.23	0.12	0.00	0.05	0.00	3.54	7.66
1977	0.04	0.40	0.04	2.70	0.20	0.55	0.00	3.15	0.10	0.00	2.37	0.00	9.55
1978	0.03	0.06	2.74	2.78	5.40	5.48	1.24	0.00	0.00	0.00	0.27	0.78	18.78
1979	0.17	0.84	1.55	6.00	2.06	2.06	0.00	0.00	0.00	0.00	0.23	0.00	12.91
1980	0.08	0.16	0.11	3.02	7.37	3.11	0.17	1.89	0.00	0.37	0.00	0.00	16.28
1981	0.00	0.00	0.17	1.62	0.92	2.40	0.05	0.00	0.00	0.00	0.00	0.00	5.16
1982	0.19	1.90	0.00	1.18	0.61	4.23	0.07	0.62	0.05	0.00	0.00	0.62	9.48
1983	0.09	2.31	1.46	2.99	3.68	6.90	1.65	0.04	0.00	0.00	1.14	0.37	20.63
1984	1.10	0.80	1.37	0.00	0.30	0.04	0.02	0.00	0.04	1.89	0.53	1.26	7.35
1985	0.00	0.57	5.42	0.22	0.12	1.16	0.14	0.43	0.02	0.17	0.32	0.46	9.03

¹ Adjusted for missing days.

Table C.2v Adjusted Monthly Precipitation for Victorville, California

(inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	1.56	0.00	1.13	2.56	0.30	0.58	0.16	0.01	0.00	0.00	0.00	0.00	6.30
1950	0.03	0.35	0.18	0.30	0.47	0.87	0.03	0.06	0.00	0.49	0.00	0.01	2.79
1951	0.00	0.13	0.00	1.18	0.20	0.10	0.92	0.51	0.00	0.02	0.01	0.02	3.09
1952	0.45	0.10	1.81	3.37	0.00	2.02	0.30	0.00	0.00	0.06	0.03	0.88	9.02
1953	0.00	1.76	1.49	0.09	0.21	0.35	0.03	0.07	0.00	0.04	0.17	0.00	4.21
1954	0.00	0.21	0.10	2.79	0.15	0.99	0.02	0.04	0.02	0.07	0.00	0.11	4.50
1955	0.00	2.13	0.27	1.76	0.10	0.00	0.00	0.00	0.00	0.05	0.06	0.00	4.37
1956	0.00	0.22	0.37	1.91	0.02	0.00	0.79	0.00	0.00	0.33	0.00	0.00	3.64
1957	0.00	0.00	0.00	2.12	0.16	0.62	0.14	0.01	0.00	0.00	0.00	0.00	3.05
1958	1.37	0.24	0.65	0.11	1.68	1.24	1.29	0.26	0.00	0.00	0.04	0.04	6.92
1959	0.13	0.25	0.00	0.41	0.84	0.00	0.01	0.00	0.00	0.02	0.00	0.08	1.74
1960	0.04	0.21	1.22	0.68	0.38	0.01	0.14	0.02	0.00	0.03	0.00	0.20	2.93
1961	0.08	0.66	0.08	0.10	0.00	0.11	0.00	0.00	0.00	0.00	0.72	0.00	1.75
1962	0.05	0.48	0.69	0.31	1.58	0.06	0.00	0.04	0.00	0.00	0.00	0.00	3.21
1963	0.19	0.00	0.08	0.06	0.51	0.44	0.41	0.00	0.07	0.00	0.81	3.94	6.51
1964	1.92	0.29	0.00	0.45	0.11	0.31	0.07	0.13	0.00	0.03	0.00	0.00	3.31
1965	0.12	1.25	0.00	0.05	0.15	0.30	2.14	0.17	0.08	0.04	0.52	0.08	4.90
1966	0.00	1.93	2.00	0.27	0.52	0.44	0.00	0.00	0.00	0.03	0.16	0.15	5.50
1967	0.16	0.52	0.66	0.26	0.00	0.04	1.00	0.00	0.00	0.29	0.32	0.36	3.61
1968	0.00	1.51	0.77	0.06	0.09	0.48	0.26	0.00	0.12	0.74	0.00	0.04	4.07
1969	0.05	0.27	0.25	1.87	3.93	0.18	0.23	0.48	0.61	0.59	0.00	0.08	8.54
1970	0.00	0.66	0.01	0.15	0.49	1.05	0.10	0.00	0.00	0.00	0.01	0.00	2.47
1971	0.00	1.91	1.64	0.04	0.34	0.12	0.18	0.15	0.00	0.28	0.00	0.00	4.66
1972	0.29	0.02	1.10	0.00	0.00	0.00	0.05	0.00	0.54	0.00	0.14	0.14	2.28
1973	1.03	0.75	0.16	0.60	2.03	1.67	0.04	0.00	0.00	0.00	0.05	0.00	6.33
1974	0.00	0.33	0.01	2.00	0.00	0.29	0.07	0.58	0.00	0.46	0.78	0.00	4.52
1975	0.16	0.00	0.93	0.17	0.21	1.04	0.75	0.00	0.00	0.22	0.00	0.24	3.72
1976	0.08	0.00	0.21	0.00	1.84	0.44	0.05	0.09	0.00	0.00	0.00	0.00	3.62
1977	1.13	0.46	0.00	1.15	0.04	0.52	0.00	1.35	0.04	0.00	1.43	0.00	6.12
1978	0.00	0.08	1.77	1.93	3.35	3.63	0.61	0.09	0.00	0.00	0.11	0.80	12.37
1979	0.16	0.36	0.79	3.44	1.39	1.76	0.00	0.15	0.00	0.00	0.18	0.00	8.23
1980	0.13	0.00	0.00	1.89	4.45	2.06	0.39	0.42	0.04	0.00	0.00	0.05	9.43
1981	0.00	0.00	0.02	0.76	0.52	1.48	0.01	0.06	0.00	0.00	0.13	0.00	2.98
1982	0.13	0.30	0.00	1.41	0.52	2.25	1.12	0.16	0.00	0.03	0.13	0.04	6.09
1983	0.36	1.48	1.12	2.39	1.61	4.80	0.93	0.00	0.00	0.00	0.83	0.49	14.01
1984	1.20	0.57	0.60	0.00	0.01	0.00	0.00	0.00	0.00	1.45	0.39	0.13	4.35
1985	0.00	0.11	4.36	0.14	0.15	0.23	0.00	0.03	0.02	0.00	0.00	0.33	5.37
1986	0.32	2.34	0.68	0.30	1.30	1.19	0.85	0.00	0.00	0.15	0.18	0.08	7.39
1987	0.35	0.77	1.08	1.58	0.17	0.39	0.61	0.22	0.06	0.00	0.00	0.26	5.49
1988	1.05	0.87	1.40	1.14	0.31	0.22	0.89	0.01	0.00	0.00	0.88	0.00	6.77
1989	0.00	0.06	0.21	0.93	0.26	0.00	0.00	0.54	0.00	0.00	0.03	0.51	2.54
1990	0.02	0.01	0.04	1.05	0.51	0.06	0.06	0.86	0.03	0.02	1.39	0.12	4.17
1991	0.00	0.18	0.00	1.04	1.35	3.25	0.00	0.04	0.00	0.20	0.00	0.32	6.38
1992	0.42	0.27	1.43	1.46	2.51	2.59	0.17	0.02	0.00	0.31	0.00	0.00	9.18
1993	0.36	0.00	3.68	4.72	2.87	0.81	0.00	0.00	0.85	0.00	0.20	0.00	13.49
1994	0.01	0.19	0.41	0.29	0.49	1.28	0.36	0.50	0.00	0.00	0.12	0.00	3.65
1995	0.04	0.19	0.68	2.91	0.62	2.63	0.12	0.07	0.03	0.03	0.03	0.17	7.52
1996	0.00	0.00	0.62	0.47	1.48	0.15	0.01	0.05	0.00	0.44	0.02	0.00	3.24
1997	0.24	0.55	0.35	0.46	0.00	0.01	0.00	0.34	0.06	0.00	0.00	1.36	3.37
1998	0.01	0.43	2.65	0.51	5.39	1.01	0.33	0.73	0.00	0.00	0.64	1.08	12.78
1999	0.00	0.34	0.10	0.42	0.49	0.06	0.70	0.31	0.20	1.28	0.00	0.00	3.90
2000	0.00	0.00	0.00	0.03	1.23	0.17	0.84	0.00	0.00	0.00	0.05	0.00	2.32
2001	0.18	0.00	0.00	1.54	1.95	0.70	0.30	0.01	0.00	0.27	0.00	0.00	4.95
2002	0.15	0.63	0.52	0.12	0.00	0.27	0.18	0.00	0.00	0.00	0.00	0.00	1.87
2003	0.05	0.13	0.53	0.00	3.64	1.30	1.18	0.14	0.00	0.55	0.00	0.00	7.52
2004	0.00	1.24	0.45	0.05	1.95	0.11	0.23	0.00	0.00	0.00	0.13	0.00	4.16
2005	3.32	1.39	2.16	2.20	4.17	0.43	0.05	0.00	0.05	0.74	0.88	0.43	15.82
2006	1.48	0.00	0.13	0.37	0.45	0.81	0.68	0.00	0.02	0.00	0.00	0.00	3.94
2007	0.00	0.00	0.14	0.07	0.18	0.81	0.12	0.00	0.00	0.00	0.00	0.02	1.34
2008	0.31	0.49	0.92	1.30	0.10	0.00	0.00	0.02	0.05	0.15	0.20	0.27	3.82
2009	0.31	0.49	0.71	0.04	0.98	0.81	0.33	0.15	0.18	0.00	0.20	0.27	4.48

¹ Adjusted for missing days.

Table C.2w Adjusted Monthly Precipitation for Vincent Fire Station FC120, California
 (inches)¹

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0.33	0.00	1.40	1.76	0.40	0.65	0.00	0.13	0.00	0.00	0.00	0.00	4.67
1950	0.09	0.52	0.72	0.72	0.64	0.59	0.47	0.05	0.00	0.16	0.00	0.19	4.15
1951	0.02	0.24	0.06	1.36	0.24	0.18	0.40	0.49	0.00	0.21	0.00	0.00	3.20
1952	0.36	0.48	3.88	5.89	0.54	5.10	0.46	0.00	0.00	0.04	0.00	0.14	16.89
1953	0.00	2.02	1.93	0.19	0.68	0.14	0.56	0.22	0.00	0.00	0.00	0.00	5.74
1954	0.00	0.46	0.21	4.02	1.13	1.94	0.00	0.00	0.00	0.00	0.00	0.00	7.76
1955	0.00	0.87	0.41	3.58	0.35	0.00	0.45	0.70	0.00	0.00	0.00	0.00	6.36
1956	0.00	0.39	0.50	2.94	0.13	0.00	1.76	0.13	0.00	0.00	0.00	0.00	5.85
1957	0.22	0.02	0.02	3.24	0.84	0.83	0.28	0.13	0.08	0.00	0.00	0.00	5.66
1958	1.58	0.39	1.53	0.50	2.57	2.21	2.45	0.22	0.00	0.00	0.03	0.18	11.66
1959	1.28	0.10	0.00	1.05	2.16	0.00	0.12	0.00	0.00	0.00	0.00	0.11	4.82
1960	0.00	0.00	1.09	1.32	0.84	0.03	0.18	0.00	0.00	0.00	0.00	0.16	3.62
1961	0.08	1.56	0.14	0.40	0.00	0.70	0.00	0.00	0.00	0.00	3.76	0.00	6.64
1962	0.00	0.50	0.84	2.03	5.20	0.81	0.00	0.21	0.00	0.00	0.00	0.00	9.59
1963	0.02	0.00	0.01	0.05	1.50	1.20	1.06	0.00	0.50	0.00	0.00	1.38	5.72
1964	0.53	1.38	0.17	0.85	0.01	1.00	0.28	0.18	0.00	0.00	0.00	0.00	4.40
1965	0.49	1.74	0.18	0.09	0.10	0.36	2.57	0.00	0.00	0.41	0.37	0.22	6.53
1966	0.00	5.25	2.90	0.66	1.25	0.32	0.00	0.00	0.00	0.00	0.00	0.41	10.79
1967	0.03	1.88	1.12	1.10	0.00	0.76	2.19	0.14	0.00	0.00	1.37	0.52	9.11
1968	0.00	4.06	0.86	0.23	0.69	0.04	0.33	0.00	0.00	0.03	1.10	0.00	7.34
1969	0.13	0.12	0.65	5.31	4.72	0.76	0.57	0.48	0.00	0.00	0.00	0.00	12.74
1970	0.00	1.17	0.01	0.35	1.47	1.16	0.14	0.00	0.00	0.00	0.00	0.00	4.30
1971	0.11	3.83	2.60	0.11	0.33	0.22	0.33	0.14	0.00	0.00	0.00	0.04	7.71
1972	0.40	0.07	3.29	0.00	0.01	0.00	0.18	0.00	0.58	0.00	0.03	0.00	4.56
1973	0.02	0.95	0.57	1.31	2.90	1.75	0.00	0.00	0.00	0.00	0.00	0.00	7.50
1974	0.00	0.79	0.02	3.81	0.00	2.40	0.00	0.06	0.00	0.05	0.00	0.00	7.13
1975	2.18	0.00	2.15	0.17	0.89	1.37	1.36	0.00	0.00	0.06	0.00	0.00	8.18
1976	0.28	0.10	0.09	0.00	2.79	0.84	0.25	0.00	0.00	0.10	0.00	3.16	7.61
1977	0.27	0.52	0.04	2.41	0.14	0.72	0.00	2.06	0.00	0.00	1.72	0.00	7.88
1978	0.00	0.00	2.95	2.53	4.47	5.07	1.28	0.00	0.00	0.00	0.00	1.06	17.36
1979	0.03	0.38	1.49	4.93	1.32	2.89	0.00	0.00	0.00	0.00	0.00	0.10	11.14
1980	0.21	0.32	0.29	2.80	6.24	3.63	0.00	1.53	0.00	0.00	0.00	0.10	15.11
1981	0.00	0.00	0.26	1.63	0.93	3.05	0.37	0.00	0.00	0.00	0.00	0.00	6.24
1982	0.25	1.67	0.00	1.27	0.36	2.51	1.62	0.42	0.00	0.00	0.00	0.23	8.33
1983	0.09	2.08	0.40	1.36	1.96	6.38	1.87	0.11	0.00	0.00	2.39	0.52	17.16
1984	1.02	0.74	1.13	0.00	0.00	0.18	0.04	0.00	0.00	0.45	0.40	0.38	4.34
1985	0.00	0.57	3.80	0.23	0.10	0.40	0.00	0.22	0.00	0.08	0.00	0.12	5.52
1986	0.14	0.60	0.31	2.25	1.39	2.70	0.15	0.00	0.00	0.15	0.00	0.02	7.71
1987	0.27	1.11	0.98	1.06	0.14	0.81	0.05	0.07	0.63	0.00	0.00	0.17	5.29
1988	2.67	1.25	1.23	1.64	0.64	0.34	0.00	0.05	0.00	0.07	0.00	0.10	7.99
1989	0.12	0.29	2.41	0.20	1.00	0.71	0.00	0.14	0.00	0.00	0.00	0.48	5.35
1990	0.00	0.02	0.00	0.73	0.75	0.03	0.00	0.13	0.00	0.00	0.00	0.00	1.66
1991	0.00	0.00	0.29	0.87	1.15	5.70	0.00	0.00	0.00	0.00	0.00	0.23	8.24
1992	0.31	0.08	2.35	2.19	5.09	3.12	0.91	0.04	0.00	0.00	0.00	0.00	14.09
1993	0.87	0.00	3.51	7.11	6.81	1.51	0.00	0.02	0.47	0.00	0.00	0.00	20.30
1994	0.26	0.76	0.76	0.46	1.56	1.37	0.19	0.16	0.00	0.00	0.00	0.00	5.52
1995	0.01	0.53	0.85	7.48	1.15	3.71	0.00	0.00	0.46	0.00	0.00	0.00	14.19
1996	0.00	0.03	0.61	0.55	2.94	0.87	0.06	0.00	0.00	0.00	0.00	0.00	5.06
1997	0.83	0.88	1.69	2.14	0.26	0.00	0.00	0.00	0.00	0.00	0.00	1.21	7.01
1998	0.00	1.27	2.59	0.85	6.99	2.19	1.06	1.20	0.00	0.07	0.00	0.89	17.11
1999	0.00	0.51	0.22	0.62	0.21	1.17	1.90	0.24	0.00	0.06	0.00	0.00	4.93
2000	0.00	0.07	0.00	0.38	0.09	2.00	1.30	0.00	0.00	0.00	0.00	0.10	3.94

¹ Adjusted for missing days.

Table C.3 Average Annual Precipitation with Adjustment for Record Period

Station	Number	Record Period	Record Count	Record Average ¹ (inches)	Adjustment Factor ¹	Adjusted Average ¹ (inches)	X (m)	Y (m)	Altitude (ft)
Acton Escondido FC261	040014	1949-2009	61	10.7	1.00	10.7	159,027	-389,239	2,960
Backus Ranch	040418	1949-1963	15	4.6	1.15	5.5	165,720	-339,155	2,650
Big Bear Lake	040741	1961-2009	49	21.7	0.97	20.9	287,787	-415,219	6,790
Big Pines Park FC83b	040779	1949-1996	48	25.1	0.97	25.1	212,883	-401,038	6,850
Boron	045123	1992-1996	5	5.2	0.75	4.0	214,250	-332,536	2,890
Crystal Lake FC283c	042198	1960-2009	50	36.3	0.98	35.5	197,731	-408,794	5,370
El Mirage Field	042771	1972-2009	38	6.0	0.97	5.7	219,840	-373,113	2,900
Fairmont	042941	1949-2009	61	15.8	1.00	15.8	143,363	-367,311	3,060
Lake Arrowhead	044671	1949-2009	61	40.0	1.00	40.0	255,922	-413,986	5,210
Lancaster FSS	044749	1974-2009	36	7.8	0.95	7.3	163,129	-363,262	2,350
Lebec	044863	1949-2009	61	13.2	1.00	13.2	103,510	-353,077	3,580
Llano Eberle Ranch	045002	1949-1965	17	6.8	1.16	7.9	208,066	-391,904	3,850
Mojave	045756	1949-2009	61	6.0	1.00	6.0	167,025	-328,026	2,740
Neenach	046122	1949-1963	15	7.6	1.15	9.0	129,463	-356,428	2,890
Palmdale	046624	1949-2009	61	7.4	1.00	7.4	172,611	-379,730	2,650
Pearblossom	046773	1985-2009	25	7.2	1.03	7.2	194,211	-388,525	3,050
Randsburg	047253	1949-2009	61	6.3	1.00	6.3	213,241	-291,833	3,570
Sandberg PRTL FC130b	047734	1949-1987	39	15.3	0.99	15.3	117,346	-362,151	4,030
Tehachapi	048826	1949-1997	49	11.0	0.98	11.0	139,532	-319,260	3,980
Tejon Rancho	048839	1949-2009	61	11.4	1.00	11.3	113,881	-330,741	1,420
Valyermo Fire Station 79	049250	1973-1985	13	10.5	0.88	9.2	195,865	-394,037	3,600
Victorville	049325	1949-2009	61	5.6	1.00	5.6	247,640	-383,467	2,850
Vincent Fire Station FC120	049345	1950-2000	51	8.4	0.97	8.3	171,302	-390,856	3,130

¹ Precipitation values for the years 1949 through 2005 were used in the analysis. Therefore, the record averages, adjusted averages, and the adjustment factors were calculated using only those precipitation values through 2005.

Table C.4 Correlation of Annual Precipitation Among Sites

	Fairmont	Palmdale	Mojave	Ransburg	Victorville	Acton Escondido	Lebec	Sandberg	Lake Arrowhead	Crystal Lake	Big Bear Lake	Big Pines Park	Tehachapi	Tejon Rancho	Vincent Fire Station
Fairmont	1														
Palmdale	0.85	1													
Mojave	0.89	0.87	1												
Ransburg	0.80	0.89	0.91	1											
Victorville	0.77	0.86	0.83	0.89	1										
Acton Escondido	0.88	0.88	0.85	0.80	0.82	1									
Lebec	0.79	0.73	0.76	0.66	0.65	0.77	1								
Sandberg	0.74	0.59	0.68	0.56	0.57	0.73	0.73	1							
Lake Arrowhead	0.78	0.66	0.65	0.59	0.60	0.77	0.58	0.54	1						
Crystal Lake	0.93	0.81	0.86	0.82	0.75	0.88	0.77	0.76	0.79	1					
Big Bear Lake	0.71	0.62	0.56	0.50	0.52	0.68	0.50	0.43	0.92	0.68	1				
Big Pines Park	0.81	0.71	0.70	0.63	0.64	0.80	0.61	0.62	0.96	0.79	0.89	1			
Tehachapi	0.76	0.73	0.79	0.73	0.67	0.80	0.71	0.64	0.77	0.79	0.65	0.76	1		
Tejon Rancho	0.65	0.59	0.68	0.62	0.56	0.69	0.67	0.57	0.69	0.68	0.55	0.64	0.90	1	
Vincent Fire Station	0.73	0.79	0.69	0.66	0.67	0.79	0.65	0.45	0.85	0.71	0.73	0.86	0.75	0.69	1

**Table C.5 Summary of Regression Statistics
for Precipitation-Altitude Relations**

Intercept Geographic Form	r^2	s_e (inches)	Slope (inches/ft)
Constant	0.53	6.74	0.0053
Linear	0.60	6.56	0.0050
Quadratic	0.71	6.05	0.0025
Cubic	0.85	4.96	0.0015
Contoured	1	--	0.005

Table C.6 Precipitation Statistics for Subareas

Watershed Subarea ¹	Area (acres)	Precipitation ² (inches)		
		Mean	Minimum	Maximum
Eastern Buttes	104,000	8.7	7.9	12.8
Northern Buttes	6,000	9.2	7.8	12.2
Valley Floor	1,078,000	5.4	4.0	11.2
Tehachapi Mountains	131,000	13.1	7.7	29.0
San Gabriel Mountains	353,000	15.4	7.7	47.0
Total Watershed	1,672,000	8.3	4.0	47.0

¹ Areas identified on Figure C.11.

² Precipitation was calculated using the available precipitation values through 2005.

Table C.7 Streamflow Gages within Antelope Valley

Station Identification		Record Period				Stramflow Charactistics			
Station Number	Station Name	Begin Water Year	End Water Year	Record Period	Missing Years	Basin Area (acres)	Average Flow ¹ (acre-ft/yr)	Average Flow ¹ (inches/yr)	Basin Precipitation ² (inches/yr)
10263500	Big Rock Creek near Valyermo	1949	2009	61	0	14,700	13,100	11	30
10263665	Pallett Creek	2003	2005	3	0	9,700	3,100	3.8	21
10263900	Buckhorn Creek near Valyermo	1961	1966	6	0	300	170	6.8	45
10264000	Little Rock Creek above Little Rock Reservoir	1931	2005	49	26	31,100	12,500	4.8	27
10264100	Santiago Canyon Creek	2003	2005	3	0	7,300	1,600	2.6	18
10264502	Peachtree Creek	1989	1994	6	0	7,200	5.8	0.0097	10
10264508	Somerset Creek	1990	1994	5	0	400	26	0.78	7.0
10264510	Inn Creek	1990	1994	5	0	200	16	0.96	8.7
10264530	Pine Creek	1989	1994	6	0	1,000	55	0.66	16
10264550	City Ranch Creek	1989	1994	6	0	200	4.1	0.25	9.3
10264555	Estates Creek	1990	1994	5	0	200	25	1.5	12
10264560	Spencer Canyon Creek	1965	1973	8	1	2,300	9.0	0.047	13
10264590	Cottonwood Creek	1965	1972	8	0	22,700	8.7	0.0046	14
10264600	Oak Creek	1958	1986	29	0	10,000	920	1.1	18
10264605	Joshua Creek	1989	1994	6	0	2,500	2.9	0.014	12
10264600	Mojave Creen at Forbes Avenue	1997	2000	4	0	10,000	13	0.016	5.8
10264675	Rogers Lake Tributary	1989	2001	12	1	300	2.2	0.088	4.0
10264682	Mescal Creek	2003	2005	3	0	3,600	2,100	7.0	24

¹ Streamflow values for the years 1949 through 2005 were used in the analysis. Therefore, average streamflows were calculated using only those streamflow data through 2005.

² Precipitation values for the years 1949 through 2005 were used in the analysis. Therefore, the basin precipitation was calculated using only those precipitation values through 2005.

Table C.8a Monthly Streamflow for Big Rock Creek near Valyermo, 10263500
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	177	199	191	285	291	425	1,017	625	382	209	194	178	4,170
1950	190	166	260	312	505	434	448	406	235	164	136	123	3,380
1951	106	107	130	129	133	148	158	144	112	79	70	63	1,378
1952	64	65	526	1,116	990	1,833	3,796	3,342	2,455	1,594	1,010	715	17,507
1953	538	486	557	612	470	472	435	377	292	221	168	141	4,768
1954	135	137	152	667	723	738	1,857	794	529	513	372	355	6,973
1955	280	338	424	393	643	685	707	964	541	379	317	266	5,936
1956	270	257	240	1,041	465	365	521	691	368	224	199	156	4,797
1957	170	179	179	646	590	706	488	460	347	266	202	174	4,407
1958	166	176	1,422	550	2,728	3,231	5,776	5,160	2,782	1,465	895	621	24,972
1959	500	414	384	400	845	748	610	422	278	228	195	155	5,179
1960	147	145	156	196	269	290	241	237	145	108	103	90	2,128
1961	94	233	189	208	187	202	176	154	95	70	67	60	1,736
1962	66	81	293	187	4,931	1,255	2,255	1,923	1,204	883	650	486	14,216
1963	364	291	295	273	366	361	364	366	256	162	130	128	3,356
1964	140	218	268	219	217	222	396	451	298	196	149	115	2,889
1965	105	114	153	209	177	182	911	816	495	338	243	221	3,966
1966	180	6,890	4,037	5,192	2,144	1,550	1,238	1,079	857	645	457	326	24,596
1967	291	312	3,483	1,148	1,016	1,683	2,180	3,916	2,580	1,578	925	796	19,909
1968	646	953	645	684	1,079	1,010	816	731	517	406	405	319	8,211
1969	260	223	262	15,068	8,354	6,411	6,645	6,043	3,661	1,721	933	713	50,292
1970	692	689	570	599	704	1,618	822	692	505	394	279	197	7,760
1971	209	679	750	1,115	659	705	739	653	570	410	340	244	7,072
1972	243	251	1,053	713	547	584	548	362	311	250	265	174	5,301
1973	185	198	229	288	957	1,550	2,002	2,031	1,368	1,024	750	453	11,037
1974	349	398	375	538	563	1,554	1,085	875	556	498	422	270	7,485
1975	260	255	274	256	296	740	710	867	507	369	272	219	5,026
1976	218	229	212	212	631	671	630	713	434	340	294	861	5,445
1977	336	265	259	422	366	355	414	1,200	725	519	465	369	5,696
1978	264	237	933	3,347	9,588	26,486	8,528	6,589	5,431	1,891	1,311	1,105	65,711
1979	691	782	962	978	1,513	2,681	3,386	3,459	2,170	1,255	883	618	19,379
1980	461	355	341	1,452	17,380	6,239	4,182	4,447	2,596	1,447	1,113	681	40,693
1981	446	392	342	357	405	695	683	560	317	275	216	170	4,858
1982	147	151	171	254	307	1,048	3,138	1,685	1,073	891	580	543	9,988
1983	399	487	1,122	1,410	2,707	12,078	4,590	7,144	5,346	2,592	1,626	1,168	40,667
1984	1,164	756	1,434	843	667	659	571	409	275	270	192	200	7,441
1985	187	165	325	582	575	661	934	548	348	375	287	205	5,193
1986	189	497	588	1,157	2,948	2,479	1,721	1,224	727	580	474	336	12,919
1987	332	321	368	395	292	680	445	309	217	178	127	125	3,788
1988	401	873	345	644	1,010	1,950	2,194	1,398	1,040	743	714	679	11,992
1989	421	328	500	408	798	1,075	770	509	269	180	137	139	5,534
1990	92	111	144	185	279	405	381	294	187	144	117	104	2,443
1991	119	101	110	133	200	1,186	2,014	1,208	704	431	332	259	6,797
1992	244	266	284	521	4,104	2,344	2,770	3,085	1,697	823	359	346	16,842
1993	286	439	601	12,259	14,383	8,114	5,793	5,271	3,499	1,628	1,519	786	54,576
1994	689	497	473	414	580	881	630	480	310	177	221	192	5,543
1995	154	152	210	2,769	3,354	7,419	3,740	3,081	1,719	1,277	935	484	25,294
1996	452	365	376	344	1,673	1,305	816	497	314	276	202	141	6,760
1997	115	166	621	1,234	788	552	470	331	226	175	117	91	4,885
1998	104	119	519	376	4,381	3,412	3,073	6,089	4,241	2,014	1,287	758	26,372
1999	606	625	554	441	384	369	472	400	238	191	148	135	4,561
2000	169	146	152	157	500	781	975	675	348	240	269	188	4,599
2001	230	234	181	200	322	1,774	1,396	1,738	722	505	458	291	8,052
2002	257	269	271	262	222	217	222	163	107	94	84	73	2,242
2003	76	79	91	108	2,047	1,257	974	1,239	576	485	405	303	7,640
2004	248	254	372	336	527	978	620	335	245	276	185	162	4,539
2005	1,103	723	1,218	18,626	9,292	6,983	4,859	6,914	4,409	2,467	1,335	611	58,540
2006	586	633	497	676	863	1,376	3,120	1,861	1,230	917	632	412	12,804
2007	360	301	295	279	238	268	227	200	134	96	97	83	2,578
2008	76	78	86	883	1,156	1,073	992	954	588	516	415	261	7,079
2009	225	214	276	351	754	984	778	633	424	351	260	212	5,462

Table C.8b Monthly Streamflow for Pallett Creek, 10263665
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2002	0	33	40	39	29	31	26	19	6	0	0	0	222
2003	0	0	0	0	55	15	14	12	10	8	10	11	134
2004	10	16	20	17	24	22	12	6	0	0	0	0	126
2005	28	0	137	2,256	3,018	1,418	822	704	330	206	130	97	9,145

Table C.8c Monthly Streamflow for Buckhorn Creek near Valyermo, 10263900
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1961	0	2	0	0	0	0	0	0	0	0	0	0	2
1962	0	0	2	0	107	35	248	28	0	0	0	0	421
1963	0	0	0	0	6	4	5	2	0	0	0	7	24
1964	0	0	0	0	0	2	22	1	0	0	0	0	26
1965	0	0	0	0	0	0	95	43	0	0	0	0	138
1966	0	309	66	12	3	12	0	0	0	0	0	0	402

Table C.8d Monthly Streamflow for Little Rock Creek above Little Rock Reservoir, 10264000
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1949	0	0	47	191	394	884	1,259	325	54	9	0	0	5,112
1950	0	14	217	283	933	362	483	142	28	1	0	0	4,412
1951	0	0	0	45	62	110	84	116	14	1	0	0	2,383
1952	0	6	1,286	2,713	2,091	5,190	7,267	3,386	596	229	69	50	24,834
1953	38	210	450	861	374	463	337	201	67	10	0	0	4,964
1954	0	66	113	1,565	1,416	1,586	2,778	588	228	58	13	2	10,368
1955	4	337	368	689	1,558	1,390	851	1,669	307	106	20	2	9,256
1956	2	96	209	1,980	665	379	1,089	837	177	27	1	0	7,418
1957	0	20	92	1,333	1,216	1,033	415	336	97	9	0	0	6,509
1958	0	96	2,399	513	5,456	5,815	10,639	3,322	757	259	104	50	31,370
1959	76	182	273	359	1,423	1,111	483	201	34	1	0	0	6,103
1960	0	0	122	355	469	413	205	168	14	0	0	0	3,708
1961	0	299	209	238	205	164	120	47	9	0	0	0	3,251
1962	0	0	549	273	10,835	2,616	3,049	906	305	69	11	0	20,574
1963	0	64	106	132	631	344	454	318	76	6	0	61	4,154
1964	59	231	198	204	243	289	1,016	456	89	4	0	0	4,754
1965	0	4	210	198	137	131	3,115	1,109	197	26	10	0	7,103
1966	0	10,243	6,995	3,095	1,778	1,261	679	335	83	23	1	0	26,460
1967	0	376	5,474	1,107	1,075	2,424	4,033	5,231	1,051	259	109	56	23,162
1968	62	1,982	875	789	1,857	1,222	904	411	171	72	31	2	10,346
1969	0	55	152	11,776	9,288	8,724	6,698	2,831	878	339	239	97	43,046
1970	112	413	339	381	1,209	2,802	944	529	80	28	3	0	8,810
1971	0	1,211	1,103	2,279	1,010	853	602	425	168	46	2	0	9,670
1972	0	85	2,552	886	492	391	213	127	81	3	0	0	6,802
1973	0	89	203	286	2,977	2,612	3,425	1,759	270	30	9	0	13,632
1974	0	98	168	1,297	778	2,796	1,616	615	115	10	30	1	9,497
1975	10	39	224	185	408	1,701	1,582	1,255	209	20	0	0	7,608
1976	0	0	64	59	1,765	1,485	1,020	492	81	3	0	548	7,493
1977	97	99	130	505	415	378	593	2,463	510	76	11	7	7,260
1978	0	0	0	0	0	0	0	0	0	0	0	0	1,978
1979	102	188	525	1,226	2,344	4,798	5,681	2,671	775	157	44	33	20,522
2002	0	0	0	28	110	89	49	27	1	0	0	0	2,307
2003	0	0	40	105	3,974	2,156	1,497	1,477	192	24	0	0	11,468
2004	0	0	278	158	706	1,703	386	111	23	0	0	0	5,368
2005	1,820	594	2,601	19,998	14,705	9,314	5,368	5,277	1,128	321	153	90	63,373

Table C.8e Monthly Streamflow for Santiago Canyon Creek, 10264100
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2003	0	0	0	0	59	76	53	27	0	0	0	0	215
2004	0	0	0	0	15	17	0	0	0	0	0	0	32
2005	0	0	162	1,340	1,624	775	301	163	63	3	1	0	4,431

Table C.8f Monthly Streamflow for Peach Tree Creek, 10264502
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1989	0	0	1	0	0	0	0	0	0	0	0	0	3
1990	0	0	0	0	0	0	0	0	0	0	0	0	1
1991	1	0	0	0	0	3	0	0	0	0	0	0	4
1992	0	0	1	1	4	1	1	0	0	0	0	0	9
1993	2	0	1	3	1	1	0	0	0	0	0	0	8
1994	0	0	0	0	1	1	1	1	1	2	2	1	11

Table C.8f Monthly Streamflow for Somerset Creek, 10264508
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1989	0	0	0	0	2	1	0	1	1	1	0	1	6
1990	1	0	0	0	1	0	0	1	1	0	1	0	5
1991	0	1	0	1	1	6	0	0	0	0	0	0	9
1992	0	0	1	8	20	4	1	0	0	0	0	1	36
1993	0	0	4	35	30	0	0	1	2	1	1	1	75
1994	1	1	1	0	0	0	0	0	1	0	0	0	5
1995	0	0	0	6	0	1	0	0	0	0	0	0	7

Table C.8h Monthly Streamflow for Inn Creek, 10264510
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1989	0	0	3	2	0	0	0	2	2	2	1	2	15
1990	3	5	1	1	2	0	0	1	1	2	4	4	24
1991	0	1	0	1	2	8	0	0	1	1	0	1	16
1992	1	1	2	2	10	2	0	0	0	0	0	0	19
1993	0	1	4	9	4	0	0	0	1	0	0	0	19
1994	0	0	0	0	1	0	0	0	0	0	0	0	2
1995	0	0	0	5	0	2	0	0	0	0	0	0	8

Table C.8i Monthly Streamflow for Pine Creek, 10264530
(acre-feet)

Table C.8j Monthly Streamflow for City Ranch Creek, 10264550
(acre-feet)

Table C.8k Monthly Streamflow for Estates Creek, 10264555
(acre-feet)

Table C.8I Monthly Streamflow for Spencer Canyon Creek, 10264560
(acre-feet)

Table C.8m Monthly Streamflow for Cottonwood Creek, 10264590
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1965	0	0	0	0	0	0	0	0	0	0	2	0	2
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	1	0	0	1	10	0	0	0	0	0	12
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	1	36	15	0	0	0	0	0	0	52
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	1	0	0	0	0	0	0	0	0	0	0	1
1972	0	0	0	0	0	0	0	0	2	0	0	0	2

Table C.8n Monthly Streamflow for Oak Creek, 10264600
 (acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1958	0	0	4	12	27	54	625	446	178	108	49	49	1,551
1959	51	59	64	110	108	105	81	55	21	4	0	0	659
1960	0	0	0	3	39	25	22	22	7	0	0	0	118
1961	0	0	0	7	11	12	10	6	2	0	0	0	50
1962	0	0	0	0	139	89	321	199	98	9	4	0	859
1963	0	5	15	19	31	43	57	46	23	9	0	0	247
1964	0	8	12	12	11	12	18	18	10	2	0	0	105
1965	0	0	0	0	0	4	12	8	6	0	4	0	35
1966	0	12	30	42	44	69	60	51	18	1	0	0	329
1967	0	0	1	7	11	12	23	35	35	19	8	6	156
1968	6	16	24	25	27	54	58	49	11	6	6	3	284
1969	2	2	2	15	144	369	782	380	159	58	41	46	1,999
1970	54	53	55	110	170	138	73	65	42	25	4	2	792
1971	5	50	45	45	45	51	30	32	27	12	5	6	352
1972	9	15	30	26	23	17	20	18	43	4	2	2	210
1973	4	5	4	12	28	39	148	527	188	31	6	3	995
1974	6	20	40	56	48	54	54	35	14	5	2	1	335
1975	2	10	12	12	13	23	21	22	11	3	1	20	149
1976	1	3	2	2	3	6	7	6	2	2	2	1	37
1977	1	1	1	1	2	5	4	3	5	4	2	1	30
1978	1	0	2	3	295	2,631	733	487	230	129	69	62	4,643
1979	74	92	103	157	209	271	298	339	139	76	57	36	1,852
1980	39	43	48	76	163	251	183	140	86	55	13	7	1,105
1981	12	32	33	44	54	74	59	43	11	4	2	2	370
1982	3	5	6	16	16	31	35	52	58	28	10	9	269
1983	14	22	36	48	64	2,287	1,226	1,152	581	331	361	243	6,365
1984	245	230	290	267	205	202	146	107	67	75	84	43	1,961
1985	45	52	58	79	75	84	57	36	31	24	3	2	545
1986	4	12	18	25	37	43	35	45	16	2	1	1	240

Table C.8o Monthly Streamflow for Joshua Creek, 10264605
(acre-feet)

Table C.8p Monthly Streamflow for Mojave Creek at Forbes Avenue, 10264658
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	1	0	0	0	0	0	0	0	1
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	1	1	1	1	4	6	9	15	9	7	52

Table C.8q Monthly Streamflow for Rogers Lake Tributary, 10264675
(acre-feet)

Table C.8r Monthly Streamflow for Mescal Creek, 10264682
(acre-feet)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2002	0	1	0	0	0	0	0	0	0	0	0	0	1
2003	0	0	0	0	28	42	6	11	8	1	0	40	135
2004	0	0	6	0	14	23	30	2	0	0	0	0	75
2005	37	40	40	1,550	764	1,249	1,012	734	309	113	77	41	5,967

Table C.9 Average Annual Streamflow Adjusted for Record Period

Station Number	Station Name	Begin Water Year	End Water Year	Record Period	Average Discharge ¹ (acre-ft/yr)	Adjustment Factor ¹	Adjusted Discharge ¹ (acre-ft/yr)
10263500	Big Rock Creek near Valyermo	1949	2009	57	13,100	1	13,100
10263665	Pallett Creek	2003	2005	3	3,100	0.55	1,705
10263900	Buckhorn Creek near Valyermo	1961	1966	6	170	1.54	262
10264000	Little Rock Creek above Little Rock Reservoir	1931	2005	23	12,500	1.09	13,625
10264100	Santiago Canyon Creek	2003	2005	3	1,600	0.55	880
10264502	Peachtree Creek	1989	1994	6	5.8	0.85	5
10264508	Somerset Creek	1990	1994	5	26	0.76	20
10264510	Inn Creek	1990	1994	5	16	0.76	12
10264530	Pine Creek	1989	1994	6	55	0.85	47
10264550	City Ranch Creek	1989	1994	6	4.1	0.85	3
10264555	Estates Creek	1990	1994	5	25	0.76	19
10264560	Spencer Canyon Creek	1965	1973	8	9.0	0.67	6
10264590	Cottonwood Creek	1965	1972	8	8.7	0.75	7
10264600	Oak Creek	1958	1986	29	920	0.89	819
10264605	Joshua Creek	1989	1994	6	2.9	0.50	1
10264600	Mojave Creen at Forbes Avenue	1997	2000	4	13	0.84	11
10264675	Rogers Lake Tributary	1989	2001	12	2.2	0.94	2
10264682	Mescal Creek	2003	2005	3	2,100	0.55	1,155

¹ Streamflow values for the years 1949 through 2005 were used in the analysis. Therefore, the average discharges, adjusted average discharges, and the adjustment factors were calculated using only those streamflow values through 2005.

**Table C.10a Correlation of Annual Streamflow
Among Sites with Record for 1958-1979**

	Big Rock Creek	Little Rock Creek	Oak Creek
Big Rock Creek	1		
Little Rock Creek	0.98	1	
Oak creek	0.76	0.75	1

**Table C.10b Correlation of Annual Streamflow
Among Sites with Record for 1990-1994**

	Big Rock Creek	Peach Tree Creek	Somerset Creek	Inn Creek	Pine Creek	City Ranch Creek	Estates Creek	Joshua Creek	Rogers Lake Creek
Big Rock Creek	1								
Peach Tree Creek	0.33	1							
Somerset Creek	0.98	0.34	1						
Inn Creek	0.19	-0.74	0.27	1					
Pine Creek	0.98	0.22	0.92	0.19	1				
City Ranch Creek	0.40	0.24	0.55	0.31	0.21	1			
Estates Creek	0.91	0.69	0.89	-0.20	0.84	0.43	1		
Joshua Creek	0.28	0.38	0.46	0.23	0.06	0.86	0.34	1	
Rogers Lake Creek	0.81	0.34	0.90	0.32	0.67	0.86	0.77	0.73	1

Table C.11 Channel-Geometry Measurement Sites

Site Number	Site Name	USGS Number	Latitude	Longitude
CG-1A	Little Rock Creek above Little Rock Reservoir	10264000	34 27 43	118 01 04
CG-2A	Big Rock Creek near Valyermo	10263500	34 25 33	117 50 17
CG-3	Pallett Creek	10263665	34 27 38	117 51 50
CG-4A	Mescal Creek	10264682	34 25 32	117 42 43
CG-5	Unnamed ephemeral channel	--	34 45 58	118 42 38
CG-6	Unnamed ephemeral channel	--	34 46 56	118 39 14
CG-7	Spencer Canyon Creek	10264560	34 46 31	118 34 06
CG-8	Unnamed ephemeral channel	--	34 43 40	118 29 50
CG-9A	Unnamed ephemeral channel	--	34 43 33	118 28 36
CG-11	Pine Creek	10264530	34 35 59	118 14 30
CG-12A	City Ranch Creek	10264550	34 34 59	118 10 37
CG-13	Oak Creek	10264600	35 03 00	118 21 17
CG-14	Bean Creek Canyon Creek	--	34 57 48	118 22 00
CG-E1	Rogers Lake Tributary	10264675	34 58 07	117 53 32
CG-T1	Cottonwood Creek tributary	--	34 58 04	118 29 23
CG-T7	Cottonwood Creek ¹	--	34 50 33	118 43 10

¹ Two separate streams have the name Cottonwood Creek: this stream and that listed with the U. S. Geological Survey streamgaging station 10264590.

Table C.12 Channel-Geometry Estimates of Streamflow

Site Identification			Location Coordinates (degrees, minutes, seconds)		Estimated Streamflow (acre-ft/yr)	Measured Streamflow (acre-ft/yr)
Site Number	Site Name	USGS Number	Latitude	Longitude		
1A	Little Rock Creek above Reservoir	10264000	34 27 43	118 01 04	13,000	13,600
2A	Big Rock Creek near Valyermo	10263500	34 25 33	117 50 17	21,000	13,100
3	Pallett Creek near Valermo	10263665	34 27 38	117 51 50	1,300	1,700
4A	Mescal Creek near Pinion Hills	10264682	34 25 32	117 42 43	1,300	1,100
5	Unnamed ephemeral channel		34 45 58	118 42 38	300	
6	Unnamed ephemeral channel		34 46 56	118 39 14	300	
7	Spence Canyon Creek near Fairmont	10264560	34 46 31	118 34 06	2	8
8	Unnamed ephemeral channel		34 43 40	118 29 50	250	
9A	Unnamed ephemeral channel		34 43 33	118 28 36	200	
11	Pine Creek near Palmdale	10264530	34 35 59	118 14 30	50	50
12A	City Ranch Creek near Palmdale	10264550	34 34 59	118 10 37	140	4
13	Oak Creek near Mojave	10264600	35 03 00	118 21 17	900	820
14	Bean Creek Canyon		34 57 48	118 22 00	70	
E-1	Rogers Lake Tributary at Edwards AFB	10264675	34 58 07	117 53 32	1	3
T-1	Cottonwood Creek tributary		34 58 04	118 29 23	80	
T-7	Cottonwood Creek ¹		34 50 33	118 43 10	60	

¹ Two separate streams have the name Cottonwood Creek: this stream and that listed with the U. S. Geological Survey streamgaging station 10264590.

Table C.13 CIMIS Stations Within or Nearby Antelope Valley

Station Identification		Record Period (water years)	Location (degrees, minutes, seconds)		Altitude (feet)	Average Annual PET (inches)
Number	Name		Longitude	Latitude		
117	Victorville	1995-2006	117 15 40	34 28 42	2,890	67.1
192	Lake Arrowhead	2005-2006	117 13 08	34 15 28	5,148	49.6
197	Palmdale	2006	118 01 57	34 36 54	2,550	66.9
199	Big Bear Lake	2006	116 51 55	34 14 17	6,910	54.2

**Table C.14a Monthly CIMIS Data for Palmdale
and Calculation of Blaney-Criddle Coefficients**
Basic Data

Month	Year	Month	T _{max} (°C)	T _{min} (°C)	T _{avg} (°C)	PET (inches)	C (inches/°C)
April	2005	4	21	4	12	5.09	0.37
May	2005	5	27	8	17	7.55	0.47
June	2005	6	30	11	21	9.17	0.52
July	2005	7	37	18	28	10.04	0.49
August	2005	8	35	15	25	8.72	0.44
September	2005	9	29	9	19	5.96	0.36
October	2005	10	25	6	16	4.53	0.30
November	2005	11	21	2	11	2.98	0.23
December	2005	12	16	0	8	2.04	0.17
January	2006	1	15	-1	7	2.5	0.22
February	2006	2	18	-2	8	3.19	0.27
March	2006	3	15	1	8	3.82	0.33
April	2006	4	20	4	12	5.29	0.39
May	2006	5	30	10	20	8.36	0.49
June	2006	6	33	14	23	8.97	0.48
July	2006	7	36	18	27	9.56	0.46
August	2006	8	34	14	24	9.2	0.48
September	2006	9	31	10	21	6.55	0.37
October	2006	10	24	5	14	4.44	0.31
November	2006	11	21	1	11	3.02	0.23
December	2006	12	15	-4	6	2.11	0.20
January	2007	1	14	-4	5	2.56	0.25
February	2007	2	16	1	9	2.83	0.23
March	2007	3	23	4	13	5.22	0.37
April	2007	4	23	6	15	6.26	0.42
May	2007	5	28	9	18	8.32	0.51
June	2007	6	33	13	23	9.71	0.52
July	2007	7	37	17	27	10.66	0.52
August	2007	8	36	17	26	9.53	0.47

**Table C.14b Monthly CIMIS Data for Palmdale
and Calculation of Blaney-Criddle Coefficients**
Average Coefficients

Month	<i>C</i> (inches/ $^{\circ}$ C)
January	0.24
February	0.25
March	0.35
April	0.40
May	0.49
June	0.51
July	0.49
August	0.47
September	0.37
October	0.30
November	0.23
December	0.19

Table C.15 Average Annual PET Adjusted for Record Period

Station Identification		Record Period (water years)	Altitude (feet)	Unadjusted Annual PET (inches)	Adjustment Factor	Adjusted Annual PET (inches)
Number	Name					
117	Victorville	1995-2006	2,890	67.1	1	67.1
192	Lake Arrowhead	2005-2006	5,148	49.6	1.02	50.6
197	Palmdale	2006	2,550	67.0	0.99	66.3
199	Big Bear Lake	2006	6,910	54.2	0.99	53.7

Table C.16a. Monthly Average Minimum Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1949	9.1	0.8	-1.2	-4.4	-0.8	4.9	7.8	9.6	14.8	18.2	15.1	14.5
1950	7.4	5.3	-0.2	-1.5	2.3	3.7	8.2	9.6	12.5	20.1	17.0	13.4
1951	10.0	5.8	3.0	0.5	1.4	2.9	7.7	11.5	14.3	18.4	17.2	15.9
1952	8.1	3.2	0.1	-0.3	2.1	2.0	6.1	11.0	11.1	18.7	18.3	14.9
1953	10.7	1.5	0.5	2.8	-0.6	2.3	5.7	6.5	11.5	19.7	15.2	13.2
1954	7.3	4.1	-1.2	1.1	3.5	3.0	8.2	11.4	13.4	19.2	14.2	9.9
1955	4.7	5.0	-0.8	-1.5	-1.3	3.2	4.4	8.9	13.0	16.8	19.1	15.0
1956	8.7	2.8	2.7	2.9	-1.3	1.5	5.2	9.6	14.6	18.0	14.6	14.9
1957	7.4	0.7	-0.6	-3.4	4.1	4.4	5.5	8.3	15.3	16.4	16.9	14.7
1958	7.5	2.5	1.5	0.5	4.4	2.6	5.1	10.8	13.3	18.0	20.2	14.8
1959	10.9	4.0	2.1	2.6	1.8	4.9	10.0	10.0	17.0	21.9	18.2	14.5
1960	9.7	3.5	0.9	-0.5	1.9	5.7	7.0	10.0	18.0	21.1	18.3	16.5
1961	9.1	3.3	-0.5	-0.4	2.2	4.7	8.5	9.8	18.1	20.3	16.1	13.8
1962	9.3	3.5	1.0	0.3	3.8	2.6	9.1	8.8	14.7	19.2	19.0	15.3
1963	9.7	4.5	-0.2	-1.6	5.7	3.1	4.7	11.0	13.5	17.3	16.0	14.7
1964	11.1	4.3	-0.7	-1.2	-0.7	2.2	6.0	9.7	14.1	18.8	18.6	13.0
1965	11.9	1.7	3.3	1.1	1.7	4.0	6.4	10.7	12.6	17.2	18.5	11.7
1966	9.6	5.8	0.1	-1.3	-0.3	3.5	7.9	11.3	13.7	16.7	18.9	12.7
1967	8.2	4.9	0.4	0.2	0.3	4.2	2.2	9.6	11.7	19.3	19.4	14.5
1968	8.4	6.8	-0.4	-0.3	5.3	4.2	5.8	10.3	15.3	19.0	15.8	13.3
1969	8.7	3.3	-1.7	3.7	2.8	2.7	5.6	11.1	13.3	18.6	18.5	15.2
1970	5.8	3.1	-0.2	1.4	2.5	3.5	4.2	11.0	15.4	20.1	19.6	13.0
1971	8.5	4.0	0.5	-0.6	0.9	2.1	3.7	7.8	12.7	18.3	19.4	12.8
1972	6.1	1.6	-2.4	-1.7	1.5	6.8	6.4	10.7	14.9	19.2	17.2	13.1
1973	8.4	1.9	-2.9	-1.3	2.9	1.9	5.5	11.5	14.8	17.9	17.0	12.2
1974	7.1	3.3	-0.3	-0.3	-0.8	4.6	3.7	10.8	14.8	17.5	17.7	16.6
1975	9.0	2.3	-1.1	-2.5	1.5	2.7	3.8	9.9	14.2	16.8	15.9	15.3
1976	7.6	0.8	0.5	-2.0	2.9	2.7	4.7	12.6	14.1	18.1	14.1	14.5
1977	8.7	4.3	-1.9	0.2	1.7	0.3	6.8	7.6	16.2	18.4	18.7	13.3
1978	9.3	3.2	4.4	2.9	3.1	5.9	5.2	8.0	14.0	16.3	15.4	11.9
1979	10.0	2.5	-2.5	-0.7	0.1	4.1	6.0	9.3	11.6	13.7	13.9	12.5
1980	8.2	-0.2	-1.8	2.6	3.2	2.5	5.5	8.3	11.9	17.7	16.2	11.9

Table C.16a. Monthly Average Minimum Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1981	7.4	1.2	0.0	1.1	1.4	2.6	5.6	9.7	15.6	18.0	16.8	13.6
1982	5.9	4.3	2.3	-0.2	2.5	3.1	5.3	10.2	12.9	16.7	16.6	13.5
1983	6.9	2.3	-0.4	0.2	2.6	4.6	3.9	8.0	12.1	13.3	15.9	14.2
1984	8.1	3.9	1.8	-0.9	-0.7	3.9	5.0	11.6	13.7	19.6	18.2	15.9
1985	7.1	2.8	-1.1	-1.1	0.5	2.1	7.5	9.9	16.1	19.6	15.6	12.1
1986	8.4	3.7	-0.1	2.0	4.8	5.3	6.6	11.4	15.9	16.7	19.9	11.2
1987	7.5	3.5	-1.1	-1.1	1.8	2.9	8.3	11.7	16.0	15.3	18.1	14.4
1988	12.0	3.6	-0.5	0.2	1.7	3.3	7.3	9.9	14.2	20.1	17.8	14.3
1989	11.2	5.3	0.1	-1.5	1.6	6.4	10.6	11.4	14.6	19.0	16.8	14.7
1990	9.0	4.0	-0.1	0.6	1.3	5.5	9.7	10.8	15.4	20.1	17.5	15.0
1991	10.6	3.3	-3.3	0.9	4.3	2.7	6.3	9.6	14.3	18.9	17.7	17.1
1992	12.2	4.7	1.8	-1.1	4.2	5.5	9.1	13.4	15.3	17.9	19.4	15.4
1993	11.2	2.2	-0.7	1.6	3.5	6.4	6.9	11.7	14.7	16.6	17.9	14.4
1994	9.6	3.3	-0.1	0.8	1.6	6.5	8.8	10.6	16.5	20.0	20.0	15.1
1995	8.8	1.6	1.1	2.9	5.5	5.2	6.4	10.0	13.3	17.9	19.0	17.2
1996	9.4	6.7	2.7	2.9	5.9	5.2	8.5	12.9	15.8	20.7	19.3	15.5
1997	9.1	5.1	3.3	3.5	1.6	5.5	8.7	14.5	15.3	17.0	18.0	16.1
1998	8.7	5.7	-0.1	3.2	3.0	4.6	5.2	8.1	12.7	18.3	19.3	14.4
1999	7.1	3.2	-0.3	2.2	2.4	3.4	5.2	11.1	15.2	18.2	16.8	15.0
2000	10.1	4.8	-0.4	3.3	4.4	4.7	9.2	12.6	17.1	18.0	19.1	14.1
2001	10.2	1.2	2.0	0.2	2.5	6.2	6.3	14.6	17.7	18.6	19.3	16.2
2002	12.0	5.7	0.6	-0.4	2.3	3.7	8.5	11.1	16.3	20.3	18.2	16.2
2003	9.7	5.2	2.1	3.3	2.7	5.1	6.0	11.8	15.7	20.7	19.2	17.2
2004	12.5	3.0	1.8	1.2	2.2	7.7	9.0	12.4	16.1	19.8	18.7	14.9
2005	9.6	3.2	1.3	3.0	3.9	5.5	5.6	11.4	13.8	21.1	18.6	13.2

Table C.16b. Monthly Average Maximum Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1949	26.0	19.0	12.5	6.5	13.3	18.3	25.2	25.3	32.5	35.2	34.1	34.2
1950	25.7	23.5	13.6	12.0	18.8	21.3	27.0	28.8	32.3	36.6	37.5	32.0
1951	29.6	24.4	22.5	18.3	19.1	22.1	24.7	28.9	31.5	37.5	36.8	36.1
1952	27.3	20.6	15.8	13.4	19.8	15.8	23.7	30.1	29.2	35.9	37.1	33.3
1953	29.7	16.7	13.5	18.3	17.4	20.2	21.9	23.3	30.5	38.2	34.6	33.9
1954	26.2	20.4	17.0	14.9	20.6	18.0	26.9	30.6	32.2	37.9	34.1	33.6
1955	29.0	22.1	16.0	11.6	13.8	20.4	21.6	26.2	31.4	35.7	37.6	34.3
1956	28.1	19.0	16.8	17.7	15.9	23.9	23.7	27.5	34.4	36.4	35.7	36.9
1957	26.2	21.6	17.8	11.3	19.1	20.7	23.0	25.2	35.0	37.9	36.3	33.5
1958	23.2	17.6	16.4	16.4	17.9	15.4	22.5	30.1	31.6	35.6	38.6	34.5
1959	29.6	21.0	20.1	18.7	15.4	23.3	27.7	27.0	35.3	39.3	36.3	31.4
1960	29.2	22.0	16.0	12.6	15.6	22.6	24.8	29.0	36.4	38.1	37.1	35.4
1961	26.9	19.2	15.7	16.8	19.0	20.1	25.7	26.1	35.8	39.4	34.4	30.8
1962	25.5	18.0	13.6	14.6	14.4	16.1	27.2	24.7	32.5	36.0	37.0	34.6
1963	27.6	21.0	17.0	14.5	21.0	18.4	18.7	26.2	28.2	34.9	34.5	32.6
1964	25.8	17.9	15.9	13.4	16.6	17.6	21.2	25.2	30.4	35.9	35.1	31.8
1965	29.4	14.9	14.6	16.2	18.4	18.0	20.6	25.6	28.6	34.7	35.1	28.6
1966	30.1	18.6	12.1	13.1	14.1	20.7	25.5	28.2	32.5	34.6	35.9	32.3
1967	26.8	18.7	13.9	15.3	18.5	18.9	14.9	26.2	29.7	37.1	37.8	32.1
1968	28.9	21.3	12.0	14.4	18.9	19.3	22.6	27.0	32.7	35.2	32.5	32.4
1969	26.1	19.7	12.6	15.8	12.6	18.4	21.8	28.1	28.8	35.6	37.4	33.5
1970	23.8	19.1	16.1	15.3	18.2	18.8	20.8	28.5	32.5	37.2	37.1	32.0
1971	25.6	20.5	12.4	15.6	17.9	20.1	21.4	23.8	30.7	36.3	36.6	33.0
1972	24.2	19.7	11.7	14.9	19.6	25.3	23.9	27.7	32.6	36.8	35.2	30.6
1973	22.8	16.7	12.3	12.0	14.4	14.7	22.2	30.1	34.5	36.6	35.7	32.4
1974	26.6	18.2	16.3	11.5	17.4	19.1	22.6	27.5	35.0	35.4	35.8	35.1
1975	25.9	19.7	14.4	16.5	16.1	17.3	17.4	28.0	32.3	35.5	34.7	34.3
1976	26.0	20.2	17.5	17.9	17.2	18.7	21.0	29.0	31.9	35.9	33.6	30.0
1977	26.7	22.2	15.7	13.2	19.9	17.4	25.8	22.8	33.8	36.7	36.4	32.1
1978	29.1	21.2	17.4	13.6	15.8	19.5	20.3	28.1	33.3	36.7	35.5	30.6
1979	29.6	17.7	11.9	10.4	13.9	18.3	23.6	28.7	34.4	36.3	34.1	35.5
1980	26.7	18.1	16.5	15.4	17.6	17.5	23.8	24.2	31.2	37.2	34.7	32.7

Table C.16b. Monthly Average Maximum Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1981	27.8	21.3	18.7	16.2	18.5	18.4	25.4	28.1	35.9	37.0	37.7	33.4
1982	23.6	20.6	17.2	13.3	17.3	16.6	21.9	28.0	30.1	35.5	35.7	30.0
1983	25.1	16.2	12.8	14.9	16.0	17.2	17.9	28.3	31.1	34.8	34.3	33.5
1984	26.1	18.7	15.6	16.8	18.6	22.2	23.3	32.4	32.4	36.9	36.0	33.3
1985	23.6	17.3	8.6	13.1	17.6	18.1	26.6	28.2	35.6	37.7	36.1	28.2
1986	26.2	17.2	14.8	18.0	17.5	21.6	23.2	29.2	34.4	34.3	37.7	28.0
1987	25.5	20.4	14.1	13.2	16.7	18.9	28.3	28.5	34.6	34.0	35.9	33.2
1988	27.8	16.8	11.1	13.2	18.6	22.2	24.1	28.4	32.8	37.6	35.8	33.4
1989	30.9	19.3	13.6	13.6	14.5	22.2	28.8	28.4	33.0	37.8	34.2	32.8
1990	25.8	21.5	17.1	15.0	16.1	21.7	25.5	26.9	34.4	37.0	35.0	33.0
1991	28.0	19.4	12.1	13.7	21.5	15.2	22.8	26.7	31.1	36.5	35.5	34.1
1992	29.0	20.4	14.4	13.6	17.1	18.0	27.0	31.1	31.7	35.0	37.2	34.3
1993	27.7	18.3	11.7	12.1	14.1	22.5	25.9	28.9	32.8	33.3	35.5	34.3
1994	28.1	19.6	15.4	18.4	15.5	23.3	25.3	27.9	36.2	37.5	38.0	33.6
1995	26.6	16.1	15.2	13.6	21.5	19.3	23.0	24.8	32.0	37.6	37.6	35.7
1996	30.5	25.2	16.9	18.3	18.9	21.9	27.4	30.2	34.9	38.8	38.9	33.7
1997	27.4	20.6	16.1	15.8	19.1	25.6	24.9	33.4	32.1	36.8	37.6	34.3
1998	27.4	20.8	13.6	16.5	14.2	19.7	21.6	22.6	29.4	37.4	38.6	31.4
1999	26.0	20.2	15.3	18.4	19.0	21.5	21.4	28.9	32.8	36.3	36.7	35.5
2000	31.1	22.7	17.6	18.0	17.3	22.1	27.8	31.4	35.6	36.4	36.5	33.4
2001	25.6	17.5	17.7	14.1	14.4	21.8	22.4	33.3	34.4	34.8	37.0	34.3
2002	29.7	20.3	13.3	15.6	19.9	20.6	25.2	29.2	34.6	37.5	36.3	33.9
2003	25.6	20.5	13.6	19.1	16.2	21.1	19.6	28.3	32.7	38.0	36.3	35.7
2004	31.1	16.5	15.1	15.7	14.6	25.4	25.5	28.4	33.1	35.5	35.4	33.2
2005	24.2	17.1	14.6	14.0	15.3	19.3	22.8	28.3	30.4	37.5	36.0	30.6

Table C.16c. Monthly Average Average Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1949	17.6	9.9	5.7	1.1	6.2	11.6	16.5	17.4	23.6	26.7	24.6	24.3
1950	16.6	14.4	6.7	5.3	10.6	12.5	17.6	19.2	22.4	28.4	27.2	22.7
1951	19.8	15.1	12.7	9.4	10.2	12.5	16.2	20.2	22.9	27.9	27.0	26.0
1952	17.7	11.9	7.9	6.5	10.9	8.9	14.9	20.5	20.1	27.3	27.7	24.1
1953	20.2	9.1	7.0	10.5	8.4	11.3	13.8	14.9	21.0	29.0	24.9	23.5
1954	16.8	12.3	7.9	8.0	12.0	10.5	17.6	21.0	22.8	28.6	24.1	21.8
1955	16.8	13.6	7.6	5.0	6.3	11.8	13.0	17.6	22.2	26.2	28.3	24.6
1956	18.4	10.9	9.7	10.3	7.3	12.7	14.4	18.6	24.5	27.2	25.1	25.9
1957	16.8	11.1	8.6	4.0	11.6	12.6	14.3	16.7	25.1	27.1	26.6	24.1
1958	15.3	10.0	8.9	8.5	11.1	9.0	13.8	20.4	22.4	26.8	29.4	24.7
1959	20.3	12.5	11.1	10.7	8.6	14.1	18.9	18.5	26.1	30.6	27.2	23.0
1960	19.5	12.8	8.5	6.0	8.7	14.1	15.9	19.5	27.2	29.6	27.7	25.9
1961	18.0	11.2	7.6	8.2	10.6	12.4	17.1	17.9	27.0	29.9	25.3	22.3
1962	17.4	10.7	7.3	7.4	9.1	9.4	18.1	16.8	23.6	27.6	28.0	24.9
1963	18.7	12.8	8.4	6.5	13.4	10.7	11.7	18.6	20.8	26.1	25.3	23.6
1964	18.4	11.1	7.6	6.1	7.9	9.9	13.6	17.5	22.2	27.4	26.8	22.4
1965	20.6	8.3	8.9	8.7	10.1	11.0	13.5	18.2	20.6	25.9	26.8	20.1
1966	19.8	12.2	6.1	5.9	6.9	12.1	16.7	19.7	23.1	25.6	27.4	22.5
1967	17.5	11.8	7.1	7.7	9.4	11.5	8.6	17.9	20.7	28.2	28.6	23.3
1968	18.6	14.1	5.8	7.1	12.1	11.7	14.2	18.7	24.0	27.1	24.1	22.8
1969	17.4	11.5	5.4	9.8	7.7	10.5	13.7	19.6	21.0	27.1	28.0	24.3
1970	14.8	11.1	8.0	8.3	10.3	11.1	12.5	19.8	23.9	28.6	28.3	22.5
1971	17.0	12.3	6.4	7.5	9.4	11.1	12.5	15.8	21.7	27.3	28.0	22.9
1972	15.1	10.7	4.6	6.6	10.5	16.0	15.1	19.2	23.7	28.0	26.2	21.8
1973	15.6	9.3	4.7	5.4	8.7	8.3	13.9	20.8	24.6	27.2	26.3	22.3
1974	16.9	10.8	8.0	5.6	8.3	11.9	13.2	19.2	24.9	26.5	26.7	25.8
1975	17.4	11.0	6.6	7.0	8.8	10.0	10.6	19.0	23.3	26.1	25.3	24.8
1976	16.8	10.5	9.0	7.9	10.0	10.7	12.9	20.8	23.0	27.0	23.9	22.3
1977	17.7	13.2	6.9	6.7	10.8	8.9	16.3	15.2	25.0	27.6	27.5	22.7
1978	19.2	12.2	10.9	8.3	9.5	12.7	12.7	18.0	23.7	26.5	25.5	21.3
1979	19.8	10.1	4.7	4.9	7.0	11.2	14.8	19.0	23.0	25.0	24.0	24.0
1980	17.4	8.9	7.3	9.0	10.4	10.0	14.6	16.2	21.5	27.5	25.4	22.3

Table C.16c. Monthly Average Average Temperature at Palmdale, 46624
 (degrees Celcius)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1981	17.6	11.2	9.3	8.6	10.0	10.5	15.5	18.9	25.8	27.5	27.3	23.5
1982	14.8	12.5	9.7	6.6	9.9	9.9	13.6	19.1	21.5	26.1	26.1	21.8
1983	16.0	9.2	6.2	7.5	9.3	10.9	10.9	18.1	21.6	24.1	25.1	23.8
1984	17.1	11.3	8.7	7.9	9.0	13.1	14.2	22.0	23.0	28.2	27.1	24.6
1985	15.4	10.0	3.7	6.0	9.0	10.1	17.1	19.0	25.8	28.6	25.8	20.1
1986	17.3	10.4	7.4	10.0	11.2	13.5	14.9	20.3	25.1	25.5	28.8	19.6
1987	16.5	12.0	6.5	6.0	9.3	10.9	18.3	20.1	25.3	24.6	27.0	23.8
1988	19.9	10.2	5.3	6.7	10.1	12.7	15.7	19.2	23.5	28.9	26.8	23.8
1989	21.1	12.3	6.9	6.0	8.1	14.3	19.7	19.9	23.8	28.4	25.5	23.7
1990	17.4	12.8	8.5	7.8	8.7	13.6	17.6	18.8	24.9	28.6	26.2	24.0
1991	19.3	11.4	4.4	7.3	12.9	8.9	14.6	18.1	22.7	27.7	26.6	25.6
1992	20.6	12.5	8.1	6.2	10.7	11.7	18.1	22.3	23.5	26.4	28.3	24.8
1993	19.5	10.2	5.5	6.8	8.8	14.5	16.4	20.3	23.7	25.0	26.7	24.4
1994	18.9	11.4	7.6	9.6	8.6	14.9	17.0	19.2	26.3	28.8	29.0	24.4
1995	17.7	8.8	8.2	8.3	13.5	12.2	14.7	17.4	22.6	27.8	28.3	26.4
1996	19.9	16.0	9.8	10.6	12.4	13.5	18.0	21.5	25.3	29.7	29.1	24.6
1997	18.3	12.8	9.7	9.7	10.4	15.5	16.8	24.0	23.7	26.9	27.8	25.2
1998	18.1	13.3	6.7	9.9	8.6	12.2	13.4	15.3	21.1	27.9	29.0	22.9
1999	16.5	11.7	7.5	10.3	10.7	12.4	13.3	20.0	24.0	27.2	26.7	25.3
2000	20.6	13.8	8.6	10.6	10.9	13.4	18.5	22.0	26.3	27.2	27.8	23.7
2001	17.9	9.3	9.8	7.2	8.5	14.0	14.3	24.0	26.0	26.7	28.2	25.2
2002	20.9	13.0	6.9	7.6	11.1	12.2	16.8	20.2	25.5	28.9	27.3	25.0
2003	17.7	12.9	7.9	11.2	9.5	13.1	12.8	20.0	24.2	29.3	27.7	26.4
2004	21.8	9.8	8.4	8.4	8.4	16.5	17.2	20.4	24.6	27.7	27.0	24.0
2005	16.9	10.2	8.0	8.5	9.6	12.4	14.2	19.9	22.1	29.3	27.3	21.9

Table C.17 Monthly PET at Palmdale Based on Blaney-Criddle Equation
(inches)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
1949	4.9	2.9	2.0	2.0	2.7	4.7	6.2	7.9	9.6	10.0	9.0	7.0	68.8
1950	4.7	3.4	2.1	2.5	3.2	4.8	6.4	8.2	9.3	10.3	9.6	6.8	71.3
1951	5.2	3.4	2.6	2.9	3.2	4.8	6.1	8.5	9.4	10.2	9.6	7.3	73.2
1952	4.9	3.1	2.2	2.6	3.3	4.3	5.9	8.6	8.8	10.1	9.7	7.0	70.3
1953	5.2	2.8	2.1	3.0	3.0	4.6	5.7	7.3	9.0	10.5	9.1	6.9	69.2
1954	4.7	3.1	2.2	2.8	3.4	4.5	6.4	8.7	9.4	10.4	8.9	6.6	71.0
1955	4.8	3.3	2.1	2.4	2.7	4.7	5.5	7.9	9.2	9.9	9.8	7.1	69.5
1956	5.0	3.0	2.3	3.0	2.9	4.9	5.8	8.1	9.8	10.1	9.2	7.3	71.3
1957	4.7	3.0	2.2	2.3	3.4	4.9	5.8	7.7	9.9	10.1	9.5	7.0	70.4
1958	4.5	2.9	2.3	2.8	3.3	4.3	5.7	8.5	9.3	10.0	10.1	7.1	70.7
1959	5.2	3.2	2.4	3.1	3.0	5.1	6.6	8.1	10.1	10.8	9.6	6.8	74.1
1960	5.1	3.2	2.2	2.6	3.0	5.1	6.1	8.3	10.4	10.6	9.7	7.3	73.6
1961	4.9	3.0	2.1	2.8	3.3	4.8	6.3	8.0	10.3	10.7	9.2	6.7	72.1
1962	4.8	3.0	2.1	2.7	3.1	4.3	6.5	7.7	9.6	10.2	9.8	7.1	70.8
1963	5.0	3.2	2.2	2.6	3.6	4.6	5.3	8.1	8.9	9.8	9.2	6.9	69.4
1964	5.0	3.0	2.1	2.6	2.9	4.4	5.6	7.9	9.2	10.1	9.5	6.7	69.1
1965	5.3	2.7	2.3	2.8	3.2	4.6	5.6	8.0	8.9	9.8	9.5	6.3	69.0
1966	5.2	3.1	2.0	2.5	2.8	4.8	6.2	8.4	9.4	9.7	9.6	6.7	70.5
1967	4.8	3.1	2.1	2.7	3.1	4.7	4.7	7.9	8.9	10.3	9.9	6.9	69.2
1968	5.0	3.3	2.0	2.7	3.4	4.7	5.8	8.1	9.7	10.1	8.9	6.8	70.4
1969	4.8	3.0	2.0	3.0	2.9	4.5	5.7	8.3	9.0	10.0	9.8	7.0	70.0
1970	4.5	3.0	2.2	2.8	3.2	4.6	5.5	8.4	9.6	10.4	9.8	6.7	70.7
1971	4.8	3.1	2.0	2.7	3.1	4.6	5.4	7.5	9.1	10.1	9.8	6.8	69.1
1972	4.5	3.0	1.9	2.6	3.2	5.4	5.9	8.2	9.6	10.3	9.4	6.6	70.6
1973	4.6	2.8	1.9	2.5	3.0	4.2	5.7	8.6	9.8	10.1	9.4	6.7	69.2
1974	4.8	3.0	2.2	2.5	3.0	4.7	5.6	8.2	9.9	9.9	9.5	7.3	70.5
1975	4.8	3.0	2.1	2.7	3.0	4.4	5.1	8.2	9.5	9.8	9.2	7.1	68.9
1976	4.7	2.9	2.3	2.8	3.2	4.6	5.5	8.6	9.4	10.0	8.9	6.7	69.6
1977	4.9	3.2	2.1	2.6	3.3	4.3	6.1	7.4	9.9	10.2	9.7	6.8	70.3
1978	5.1	3.1	2.4	2.8	3.1	4.9	5.5	8.0	9.6	9.9	9.2	6.5	70.1
1979	5.2	2.9	1.9	2.4	2.8	4.6	5.9	8.2	9.4	9.6	8.9	7.0	68.8
1980	4.8	2.8	2.1	2.9	3.2	4.4	5.8	7.6	9.1	10.1	9.2	6.7	68.8

Table C.17 Monthly PET at Palmdale Based on Blaney-Criddle Equation
(inches)

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
1981	4.9	3.0	2.3	2.8	3.2	4.5	6.0	8.2	10.1	10.1	9.6	6.9	71.6
1982	4.5	3.1	2.3	2.6	3.2	4.4	5.6	8.2	9.1	9.8	9.4	6.6	68.9
1983	4.6	2.8	2.0	2.7	3.1	4.6	5.2	8.0	9.1	9.4	9.1	6.9	67.6
1984	4.8	3.0	2.2	2.8	3.1	4.9	5.7	8.9	9.4	10.3	9.6	7.1	71.8
1985	4.5	2.9	1.8	2.5	3.1	4.5	6.3	8.2	10.1	10.4	9.3	6.3	69.9
1986	4.8	2.9	2.1	3.0	3.3	5.0	5.9	8.5	9.9	9.7	9.9	6.2	71.3
1987	4.7	3.1	2.0	2.6	3.1	4.6	6.5	8.4	10.0	9.5	9.5	6.9	71.0
1988	5.2	2.9	1.9	2.6	3.2	4.9	6.0	8.2	9.5	10.4	9.5	6.9	71.4
1989	5.3	3.1	2.1	2.6	3.0	5.1	6.8	8.4	9.6	10.3	9.2	6.9	72.5
1990	4.8	3.2	2.2	2.7	3.0	5.0	6.4	8.2	9.9	10.4	9.4	7.0	72.2
1991	5.1	3.0	1.9	2.7	3.5	4.3	5.8	8.0	9.4	10.2	9.5	7.2	70.5
1992	5.3	3.2	2.2	2.6	3.3	4.7	6.5	8.9	9.5	9.9	9.8	7.1	73.0
1993	5.1	2.9	2.0	2.6	3.0	5.2	6.2	8.5	9.6	9.6	9.5	7.0	71.2
1994	5.0	3.0	2.1	2.9	3.0	5.2	6.3	8.3	10.2	10.4	10.0	7.0	73.6
1995	4.9	2.8	2.2	2.8	3.6	4.8	5.8	7.9	9.3	10.2	9.8	7.4	71.5
1996	5.2	3.5	2.3	3.1	3.5	5.0	6.4	8.8	10.0	10.6	10.0	7.1	75.5
1997	4.9	3.2	2.3	3.0	3.2	5.3	6.2	9.3	9.6	10.0	9.7	7.2	74.0
1998	4.9	3.2	2.1	3.0	3.0	4.8	5.6	7.4	9.0	10.2	10.0	6.8	69.9
1999	4.7	3.1	2.1	3.0	3.3	4.8	5.6	8.4	9.7	10.1	9.5	7.2	71.5
2000	5.3	3.3	2.2	3.1	3.3	5.0	6.5	8.9	10.2	10.1	9.7	6.9	74.5
2001	4.9	2.8	2.3	2.7	3.0	5.1	5.8	9.3	10.1	10.0	9.8	7.2	73.0
2002	5.3	3.2	2.1	2.7	3.3	4.8	6.2	8.5	10.0	10.5	9.6	7.1	73.3
2003	4.9	3.2	2.2	3.1	3.1	4.9	5.5	8.4	9.7	10.6	9.7	7.4	72.7
2004	5.4	2.9	2.2	2.8	3.0	5.5	6.3	8.5	9.8	10.2	9.6	7.0	73.2
2005	4.8	2.9	2.2	2.8	3.1	4.8	5.8	8.4	9.2	10.5	9.6	6.6	70.8

Table C.18 $NDVI_0$ and $NDVI_s$ Values Extracted from Satellite Images

Satellite Image			Parameters		Annual Weather ¹	
Year	Water Year	Month	$NDVI_0$	$NDVI_s$	PET (inches)	Precipitation (inches)
1985	1986	September	-0.06	0.76	71.3	14.2
1986	1986	January	-0.05	0.75		
1986	1986	February	-0.07	0.74		
1986	1986	June	-0.10	0.75		
1986	1986	August	-0.07	0.76		
1986	1986	September	-0.10	0.76		
2004	2005	September	-0.06	0.72	70.8	22.5
2004	2005	November	-0.06	0.73		
2005	2005	April	-0.06	0.74		
2005	2005	June	-0.07	0.76		
2005	2005	September	-0.06	0.75		

¹Annual PET at Plamdale for indicated water year. Average of annual precipitations at nine precipitation gages with continuous records for 1949-2005 (see Table C.1). Average average annual precipitation is 13.4 inches.

Table C.19 Summary NDVI* Statistics

Satellite Image		Watershed Subarea	NDVI*		
Year	Month		Minimum	Maximum	Mean
1985	September	Eastern Buttes	0.00	1.00	0.10
1986	January	Eastern Buttes	0.00	0.93	0.13
1986	February	Eastern Buttes	0.00	1.00	0.16
1986	June	Eastern Buttes	0.00	1.00	0.05
1986	August	Eastern Buttes	0.00	1.00	0.08
1986	September	Eastern Buttes	0.00	1.00	0.10
2004	September	Eastern Buttes	0.00	1.00	0.07
2004	November	Eastern Buttes	0.00	0.92	0.20
2005	April	Eastern Buttes	0.00	1.00	0.34
2005	June	Eastern Buttes	0.00	1.00	0.15
2005	September	Eastern Buttes	0.00	1.00	0.12
1985	September	Northern Buttes	0.00	0.17	0.11
1986	January	Northern Buttes	0.00	0.35	0.19
1986	February	Northern Buttes	0.00	0.59	0.25
1986	June	Northern Buttes	0.00	0.12	0.07
1986	August	Northern Buttes	0.00	0.30	0.09
1986	September	Northern Buttes	0.00	0.36	0.11
2004	September	Northern Buttes	0.00	0.14	0.07
2004	November	Northern Buttes	0.00	0.49	0.26
2005	April	Northern Buttes	0.00	0.53	0.31
2005	June	Northern Buttes	0.00	0.23	0.15
2005	September	Northern Buttes	0.00	0.23	0.12
1985	September	San Gabriel Mountains	0.00	1.00	0.26
1986	January	San Gabriel Mountains	0.00	1.00	0.33
1986	February	San Gabriel Mountains	0.00	1.00	0.42
1986	June	San Gabriel Mountains	0.00	1.00	0.23
1986	August	San Gabriel Mountains	0.00	1.00	0.25
1986	September	San Gabriel Mountains	0.00	1.00	0.26
2004	September	San Gabriel Mountains	0.00	1.00	0.22
2004	November	San Gabriel Mountains	0.00	1.00	0.31
2005	April	San Gabriel Mountains	0.00	1.00	0.39
2005	June	San Gabriel Mountains	0.00	1.00	0.28
2005	September	San Gabriel Mountains	0.00	1.00	0.28
1985	September	Tehachapi Mountains	0.00	0.98	0.24
1986	January	Tehachapi Mountains	0.00	1.00	0.30
1986	February	Tehachapi Mountains	0.00	1.00	0.37
1986	June	Tehachapi Mountains	0.00	0.97	0.21
1986	August	Tehachapi Mountains	0.00	0.96	0.22
1986	September	Tehachapi Mountains	0.00	0.98	0.25
2004	September	Tehachapi Mountains	0.00	1.00	0.22
2004	November	Tehachapi Mountains	0.00	0.97	0.32
2005	April	Tehachapi Mountains	0.00	0.98	0.41
2005	June	Tehachapi Mountains	0.00	1.00	0.28
2005	September	Tehachapi Mountains	0.00	1.00	0.26

**Table C.20 Precipitation-Quality Monitoring Stations
Within or Nearby Antelope Valley**

Station Name	Abbreviated Name	X (m)	Y (m)	Altitude (ft)
003N004W08G PRECIP	08G	-117.31778	34.36333	3421
004N004W03A PRECIP	03A	-117.27944	34.46806	2990
004N005W10D PRECIP	10D	-117.35917	34.47000	3213
004N005W33M PRECIP	33M	-117.41167	34.38722	3844
005N007W24D PRECIP	24D	-117.57139	34.51056	3349
006N013W10C PRECIP	10C	-118.24472	34.62861	2958
010N009W06J PRECIP	06J	-117.86444	34.98833	2280

Table C.21 Precipitation Chloride

Station Name	Abbreviated Name	Start Date	End Date	Chloride (mg/L)
003N004W08G PRECIP	08G	12-16-1994	02-08-1995	3
003N004W08G PRECIP	08G	02-08-1995	04-19-1995	2
003N004W08G PRECIP	08G	04-19-1995	11-01-1995	7
003N004W08G PRECIP	08G	11-01-1995	04-23-1996	1
003N004W08G PRECIP	08G	04-25-1996	11-20-1996	3
003N004W08G PRECIP	08G	11-20-1996	01-30-1997	2
003N004W08G PRECIP	08G	01-31-1997	04-01-1997	2
003N004W08G PRECIP	08G	04-12-1997	09-15-1997	9
003N004W08G PRECIP	08G	09-15-1997	09-27-1997	2
003N004W08G PRECIP	08G	09-29-1997	01-16-1998	1
003N004W08G PRECIP	08G	01-16-1998	04-02-1998	1
003N004W08G PRECIP	08G	04-02-1998	06-03-1998	1
003N004W08G PRECIP	08G	06-03-1998	10-20-1998	4
003N004W08G PRECIP	08G	10-20-1998	04-29-1999	13
003N004W08G PRECIP	08G	04-29-1999	10-25-1999	4
003N004W08G PRECIP	08G	10-25-1999	04-12-2000	1
003N004W08G PRECIP	08G	04-12-2000	10-20-2000	1
003N004W08G PRECIP	08G	10-20-2000	04-18-2001	1
003N004W08G PRECIP	08G	04-18-2001	10-17-2001	1
003N004W08G PRECIP	08G	10-17-2001	04-17-2002	1
003N004W08G PRECIP	08G	10-09-2002	04-16-2003	0
004N005W33M PRECIP	33M	12-16-1994	04-19-1995	6
004N005W33M PRECIP	33M	02-08-1995	04-19-1995	2
004N005W33M PRECIP	33M	04-19-1995	11-01-1995	19
004N005W33M PRECIP	33M	11-01-1995	04-23-1996	2
004N005W33M PRECIP	33M	04-25-1996	11-20-1996	16
004N005W33M PRECIP	33M	11-20-1996	01-30-1997	2
004N005W33M PRECIP	33M	01-31-1997	04-01-1997	5
004N005W33M PRECIP	33M	04-12-1997	09-15-1997	20
004N005W33M PRECIP	33M	09-15-1997	09-27-1997	11
004N005W33M PRECIP	33M	09-29-1997	01-16-1998	5
004N005W33M PRECIP	33M	01-16-1998	04-02-1998	2
004N005W33M PRECIP	33M	04-02-1998	06-03-1998	5
004N005W33M PRECIP	33M	06-03-1998	10-20-1998	8
004N005W33M PRECIP	33M	10-20-1998	04-28-1999	3
004N005W33M PRECIP	33M	04-28-1999	10-22-1999	22
004N005W33M PRECIP	33M	10-20-2000	04-19-2001	2
004N005W33M PRECIP	33M	04-19-2001	10-18-2001	1
004N005W33M PRECIP	33M	10-18-2001	04-18-2002	1
004N005W33M PRECIP	33M	04-18-2002	10-10-2002	2
004N005W33M PRECIP	33M	10-10-2002	04-17-2003	0
005N007W24D PRECIP	24D	12-19-1994	02-08-1995	13
005N007W24D PRECIP	24D	02-08-1995	04-20-1995	1
005N007W24D PRECIP	24D	04-20-1995	11-01-1995	8
005N007W24D PRECIP	24D	11-01-1995	04-23-1996	12
005N007W24D PRECIP	24D	04-25-1996	11-20-1996	28
005N007W24D PRECIP	24D	11-20-1996	01-31-1997	13
005N007W24D PRECIP	24D	01-31-1997	04-01-1997	28
005N007W24D PRECIP	24D	09-15-1997	09-27-1997	82
005N007W24D PRECIP	24D	09-27-1997	01-16-1998	10

Table C.21 Precipitation Chloride

Station Name	Abbreviated Name	Start Date	End Date	Chloride (mg/L)
005N007W24D PRECIP	24D	01-16-1998	04-02-1998	3
005N007W24D PRECIP	24D	04-02-1998	06-03-1998	11
005N007W24D PRECIP	24D	06-03-1998	10-20-1998	11
005N007W24D PRECIP	24D	10-20-1998	04-28-1999	32
005N007W24D PRECIP	24D	04-28-1999	10-21-1999	22
005N007W24D PRECIP	24D	04-12-2000	10-20-2000	22
005N007W24D PRECIP	24D	10-20-2000	04-19-2001	19
005N007W24D PRECIP	24D	04-18-2002	10-10-2002	67
005N007W24D PRECIP	24D	10-10-2002	04-17-2003	21
006N013W10C PRECIP	10C	07-07-1999	10-20-1999	
006N013W10C PRECIP	10C	10-20-1999	04-13-2000	1
006N013W10C PRECIP	10C	04-13-2000	10-20-2000	1
006N013W10C PRECIP	10C	10-20-2000	04-18-2001	1
006N013W10C PRECIP	10C	04-18-2001	10-18-2001	2
006N013W10C PRECIP	10C	10-18-2001	04-18-2002	1
006N013W10C PRECIP	10C	04-08-2002	10-09-2002	9
006N013W10C PRECIP	10C	10-09-2002	04-17-2003	0
010N009W06J PRECIP	06J	07-07-1999	10-20-1999	3
010N009W06J PRECIP	06J	10-20-1999	04-13-2000	1
010N009W06J PRECIP	06J	10-18-2000	04-18-2001	1
010N009W06J PRECIP	06J	04-18-2001	10-17-2001	0
010N009W06J PRECIP	06J	10-17-2001	04-17-2002	1
010N009W06J PRECIP	06J	04-17-2002	10-09-2002	29
010N009W06J PRECIP	06J	04-13-2000	10-18-2000	
010N009W06J PRECIP	06J	10-09-2002	04-16-2003	0
004N005W10D PRECIP	10D	12-16-1994	02-08-1995	9
004N005W10D PRECIP	10D	02-08-1995	04-19-1995	1
004N005W10D PRECIP	10D	04-19-1995	11-01-1995	14
004N005W10D PRECIP	10D	11-01-1995	04-23-1996	9
004N005W10D PRECIP	10D	11-01-1995	04-23-1996	9
004N005W10D PRECIP	10D	04-25-1996	11-20-1996	63
004N005W10D PRECIP	10D	11-20-1996	01-31-1997	8
004N005W10D PRECIP	10D	04-11-1997	09-15-1997	44
004N005W10D PRECIP	10D	09-16-1997	09-27-1997	17
004N005W10D PRECIP	10D	09-29-1997	01-16-1998	7
004N005W10D PRECIP	10D	01-16-1998	04-02-1998	3
004N005W10D PRECIP	10D	04-03-1998	06-02-1998	12
004N005W10D PRECIP	10D	06-03-1998	10-20-1998	7
004N005W10D PRECIP	10D	10-20-1998	04-28-1999	23
004N005W10D PRECIP	10D	04-28-1999	10-21-1999	12
004N005W10D PRECIP	10D	10-21-1999	04-12-2000	24
004N005W10D PRECIP	10D	04-12-2000	10-20-2000	16
004N005W10D PRECIP	10D	10-20-2000	04-18-2001	17
004N005W10D PRECIP	10D	04-18-2001	10-17-2001	21
004N005W10D PRECIP	10D	10-17-2001	04-17-2002	27
004N005W10D PRECIP	10D	04-17-2002	10-09-2002	41
004N005W10D PRECIP	10D	10-09-2002	04-16-2003	15
004N004W03A PRECIP	03A	12-19-1994	02-08-1995	12
004N004W03A PRECIP	03A	02-08-1995	04-20-1995	1
004N004W03A PRECIP	03A	04-20-1995	11-01-1995	16

Table C.21 Precipitation Chloride

Station Name	Abbreviated Name	Start Date	End Date	Chloride (mg/L)
004N004W03A PRECIP	03A	11-01-1995	04-23-1996	11
004N004W03A PRECIP	03A	04-25-1996	11-20-1996	67
004N004W03A PRECIP	03A	11-20-1996	01-30-1997	9
004N004W03A PRECIP	03A	01-31-1997	04-01-1997	9
004N004W03A PRECIP	03A	09-15-1997	09-27-1997	95
004N004W03A PRECIP	03A	09-29-1997	01-16-1998	7
004N004W03A PRECIP	03A	01-16-1998	04-02-1998	2
004N004W03A PRECIP	03A	04-02-1998	06-03-1998	11
004N004W03A PRECIP	03A	04-02-1998	06-03-1998	12
004N004W03A PRECIP	03A	04-02-1998	06-03-1998	12
004N004W03A PRECIP	03A	06-03-1998	10-20-1998	8
004N004W03A PRECIP	03A	10-20-1998	04-28-1999	24
004N004W03A PRECIP	03A	04-28-1999	10-22-1999	24
004N004W03A PRECIP	03A	04-14-2000	10-20-2000	30
004N004W03A PRECIP	03A	04-18-2001	10-17-2001	16
004N004W03A PRECIP	03A	10-17-2001	04-17-2002	44
004N004W03A PRECIP	03A	04-17-2002	10-09-2002	58
004N004W03A PRECIP	03A	10-09-2002	04-16-2003	16

**Table C.22 Groundwater-Quality Monitoring Wells
Within or Nearby Antelope Valley**

Well Name	Longitude	Latitude
343216117562601	-117.94146	34.53777
343259117593101	-117.99285	34.54971
343404117593101	-117.99285	34.56777
343434117500801	-117.83645	34.57610
343727118085202	-118.14868	34.62415
343743118144101	-118.24472	34.62861
343752118012001	-118.02313	34.63110
343811118050601	-118.08590	34.63638
343820118050103	-118.08452	34.63888
343822118051901	-118.08952	34.63943
343851118083801	-118.14488	34.64746
343943118081801	-118.13941	34.66195
344003118074901	-118.13099	34.66847
344005118081801	-118.13940	34.66795
344006118082601	-118.14089	34.66873
344008118074701	-118.13056	34.66891
344028118112601	-118.19032	34.67454
344042118130001	-118.21751	34.67866
344103118035501	-118.06614	34.68413
344104118053101	-118.09285	34.68443
344107118092401	-118.15887	34.68600
344109118092201	-118.15713	34.68593
344120118081301	-118.13714	34.68887
344125118075801	-118.13369	34.69013
344130118075701	-118.13324	34.69184
344135118044801	-118.08094	34.69311
344200118141001	-118.23702	34.69998
344209118183801	-118.31147	34.70248
344415118130301	-118.21763	34.73755
344636118320801	-118.53647	34.77665
344828118372601	-118.62481	34.80776
344830118372201	-118.62278	34.80833
345001118264501	-118.44675	34.83359
345002118424201	-118.71167	34.83389
345518118172601	-118.29147	34.92164
345701118153802	-118.26147	34.95025
345733118085201	-118.14869	34.95914

Table C.23 Groundwater Chloride

Well Name	Sample Date	Chloride (mg/L)
343216117562601	7/10/1997	4.2
343216117562601	7/25/2000	4.6
343216117562601	7/18/2002	6.0
343216117562601	8/15/2005	6.1
343259117593101	7/17/2002	10.4
343259117593101	8/16/2005	10.3
343404117593101	7/9/1997	8.1
343404117593101	7/25/2000	8.4
343404117593101	7/17/2002	9.9
343404117593101	8/16/2005	12.5
343434117500801	7/9/1997	19.0
343434117500801	7/26/2000	17.8
343434117500801	7/18/2002	20.0
343727118085202	7/9/1997	59.5
343727118085202	7/27/2000	62.4
343727118085202	7/16/2002	63.6
343727118085202	8/16/2005	69.4
343743118144101	10/20/1999	0.6
343743118144101	4/13/2000	1.4
343743118144101	10/20/2000	0.5
343743118144101	4/18/2001	2.3
343743118144101	10/18/2001	0.7
343743118144101	4/8/2002	9.1
343743118144101	10/9/2002	0.3
343752118012001	7/17/2002	22.0
343752118012001	9/1/2005	19.1
343811118050601	11/21/1997	10.2
343820118050103	11/21/1997	7.3
343822118051901	7/8/1997	2.4
343822118051901	11/22/1997	2.5
343822118051901	7/25/2000	2.8
343822118051901	7/17/2002	3.5
343822118051901	8/25/2005	3.8
343851118083801	8/5/2003	41.8
343943118081801	8/5/2003	14.0
344003118074901	8/7/2003	68.4
344005118081801	5/19/2006	145.0
344005118081801	5/19/2006	165.0
344005118081801	5/19/2006	185.0
344005118081801	5/19/2006	205.0
344005118081801	5/19/2006	212.0
344005118081801	5/19/2006	215.0
344006118082601	8/5/2003	90.3
344008118074701	7/10/1997	12.0
344008118074701	7/16/2002	29.2
344008118074701	8/12/2003	15.3
344008118074701	8/25/2005	11.3
344028118112601	8/6/2003	8.4
344042118130001	8/6/2003	52.7

Table C.23 Groundwater Chloride

Well Name	Sample Date	Chloride (mg/L)
344103118035501	8/12/2003	26.5
344103118035501	9/22/2003	43.1
344103118035501	9/24/2003	43.4
344103118035501	9/24/2003	56.1
344103118035501	9/24/2003	81.7
344103118035501	9/24/2003	82.9
344103118035501	9/24/2003	83.8
344103118035501	9/24/2003	84.4
344103118035501	5/25/2006	20.3
344103118035501	5/25/2006	21.4
344103118035501	5/25/2006	21.6
344103118035501	5/25/2006	21.8
344103118035501	5/25/2006	39.2
344104118053101	7/8/1997	3.5
344104118053101	7/27/2000	3.9
344104118053101	7/16/2002	3.6
344104118053101	8/17/2005	3.6
344107118092401	8/6/2003	3.6
344109118092201	8/5/2003	3.5
344120118081301	8/6/2003	5.1
344125118075801	8/7/2003	9.0
344125118075801	9/23/2003	12.1
344130118075701	8/7/2003	51.2
344135118044801	8/12/2003	55.3
344135118044801	5/4/2006	10.9
344135118044801	5/4/2006	12.0
344135118044801	5/4/2006	13.3
344135118044801	5/4/2006	33.7
344135118044801	5/4/2006	62.9
344200118141001	7/10/1997	53.9
344200118141001	8/17/2005	57.2
344209118183801	7/12/1995	13.0
344209118183801	7/30/1998	11.5
344209118183801	8/19/2003	12.3
344209118183801	8/22/2006	12.0
344415118130301	8/13/2003	29.2
344636118320801	7/12/1995	7.8
344636118320801	7/29/1998	7.6
344636118320801	8/20/2003	8.3
344636118320801	8/24/2006	8.1
344828118372601	7/12/1995	16.0
344828118372601	7/29/1998	16.5
344828118372601	8/19/2003	17.4
344828118372601	8/24/2006	27.4
344830118372201	10/20/1999	1.2
344830118372201	4/13/2000	1.2
344830118372201	10/19/2000	0.4
344830118372201	4/19/2001	14.0
344830118372201	10/18/2001	2.2
344830118372201	10/9/2002	0.3

Table C.23 Groundwater Chloride

Well Name	Sample Date	Chloride (mg/L)
345001118264501	7/12/1995	9.1
345001118264501	7/29/1998	9.2
345002118424201	5/13/2004	72.1
345002118424201	10/25/2004	78.0
345002118424201	2/28/2005	56.5
345518118172601	7/11/1995	42.0
345518118172601	7/29/1998	41.9
345518118172601	8/21/2003	22.5
345518118172601	8/29/2006	32.5
345701118153802	7/10/1995	10.0
345701118153802	7/28/1998	10.2
345701118153802	9/3/2003	10.1
345733118085201	7/10/1995	13.0
345733118085201	7/28/1998	13.1
345733118085201	8/26/2003	13.6
345733118085201	8/23/2006	12.9

Table C.24 Summary ET Statistics

Satellite Image		Watershed Subarea	ET (feet)		
Year	Month		Minimum	Maximum	Mean
1985	September	Eastern Buttes	0.0	0.52	0.05
1986	January	Eastern Buttes	0.0	0.22	0.03
1986	February	Eastern Buttes	0.0	0.28	0.04
1986	June	Eastern Buttes	0.0	0.82	0.04
1986	August	Eastern Buttes	0.0	0.82	0.06
1986	September	Eastern Buttes	0.0	0.52	0.05
2004	September	Eastern Buttes	0.0	0.58	0.04
2004	November	Eastern Buttes	0.0	0.22	0.05
2005	April	Eastern Buttes	0.0	0.48	0.16
2005	June	Eastern Buttes	0.0	0.76	0.12
2005	September	Eastern Buttes	0.0	0.55	0.06
1985	September	Northern Buttes	0.0	0.08	0.05
1986	January	Northern Buttes	0.0	0.08	0.04
1986	February	Northern Buttes	0.0	0.12	0.06
1986	June	Northern Buttes	0.0	0.08	0.05
1986	August	Northern Buttes	0.0	0.18	0.07
1986	September	Northern Buttes	0.0	0.09	0.05
2004	September	Northern Buttes	0.0	0.07	0.04
2004	November	Northern Buttes	0.0	0.11	0.06
2005	April	Northern Buttes	0.0	0.23	0.14
2005	June	Northern Buttes	0.0	0.15	0.11
2005	September	Northern Buttes	0.0	0.11	0.06
1985	September	San Gabriel Mountains	0.0	0.52	0.12
1986	January	San Gabriel Mountains	0.0	0.25	0.08
1986	February	San Gabriel Mountains	0.0	0.28	0.11
1986	June	San Gabriel Mountains	0.0	0.82	0.17
1986	August	San Gabriel Mountains	0.0	0.82	0.18
1986	September	San Gabriel Mountains	0.0	0.52	0.12
2004	September	San Gabriel Mountains	0.0	0.59	0.11
2004	November	San Gabriel Mountains	0.0	0.24	0.07
2005	April	San Gabriel Mountains	0.0	0.48	0.17
2005	June	San Gabriel Mountains	0.0	0.77	0.19
2005	September	San Gabriel Mountains	0.0	0.55	0.13
1985	September	Tehachapi Mountains	0.0	0.42	0.11
1986	January	Tehachapi Mountains	0.0	0.20	0.07
1986	February	Tehachapi Mountains	0.0	0.25	0.09
1986	June	Tehachapi Mountains	0.0	0.63	0.15
1986	August	Tehachapi Mountains	0.0	0.60	0.16
1986	September	Tehachapi Mountains	0.0	0.41	0.11
2004	September	Tehachapi Mountains	0.0	0.48	0.11
2004	November	Tehachapi Mountains	0.0	0.19	0.07
2005	April	Tehachapi Mountains	0.0	0.42	0.17
2005	June	Tehachapi Mountains	0.0	0.66	0.19
2005	September	Tehachapi Mountains	0.0	0.45	0.13

Table C.25 Watersheds Used in Developing Water-Yield Model

Station Number	Station Name	Basin Area (acres)	Average Flow (acre-ft/yr)	Average Flow (inches/yr)	Basin Precipitation (inches/yr)	Calibration Type
10263500	Big Rock Creen near Valyermo	14,700	13,100	11	30	Yield
10264000	Little Rock Creek above Little Rock Reservoir	31,100	12,500	4.8	27	Yield
10264600	Oak Creek	10,000	920	1.1	18	Yield
10263665	Pallett Creek	9,700	3,100	3.8	21	Runoff
10263900	Buckhorn Creek near Valyermo	300	170	6.8	45	Runoff
10264100	Santiago Canyon Creek	7,300	1,600	2.6	18	Runoff
10264502	Peachtree Creek	7,200	5.8	0.0097	10	Runoff
10264508	Somerset Creek	400	26	0.78	7.0	Runoff
10264510	Inn Creek	200	16	0.96	8.7	Runoff
10264530	Pine Creek	1,000	55	0.66	16	Runoff
10264550	City Ranch Creek	200	4.1	0.25	9.3	Runoff
10264555	Estates Creek	200	25	1.5	12	Runoff
10264560	Spencer Canyon Creek	2,300	9.0	0.047	13	Runoff
10264590	Cottonwood Creek	22,700	8.7	0.0046	14	Runoff
10264600	Mojave Creen at Forbes Avenye	10,000	13	0.016	5.8	Runoff
10264605	Joshua Creek	2,500	2.9	0.014	12	Runoff
10264675	Roger Lake Tributary	300	2.2	0.088	4.0	Runoff
10264682	Mescal Creek	3,600	2,100	7.0	24	Runoff
CG-5	Unnamed ephemeral channel	1,200	300	3		Runoff
CG-6	Unnamed ephemeral channel	2,500	300	1		Runoff
CG-8	Unnamed ephemeral channel	4,400	250	0.057		Runoff
CG-9A	Unnamed ephemeral channel	1,100	200	0.18		Runoff
CG-14	Bean Creek Canyon Creek	3,600	70	0.019		Runoff
CG-T1	Cottonwood Creek tributary	2,600	80	0.031		Runoff
CG-T7	Cottonwood Creek ¹	1,800	60	0.033		Runoff

¹Two separate streams have the name Cottonwood Creek: this stream and that listed with the U. S. Geological Survey streamgaging station 10264590.

Table C.26 Parameter Values for Water-Yield Model

Parameter	Description	Value	Units
a_R	Runoff coefficient	0.00103	
n_R	Runoff exponent	1.92	--
a_U	Groundwater outflow coefficient	0.00074	
n_U	Groundwater outflow exponent	1.92	--

Table C.27 Measured, Simulated, and Best-Estimate Water Yields and Components
 (acre-feet per year)

Name	Measured			Simulated			Best-Estimate		
	Runoff	Ground-Water	Yield	Runoff	Ground-Water	Yield	Runoff	Ground-Water	Yield
Big Rock	6,100	9,100	15,200	6,228	4,430	10,658	6,100	9,100	15,200
Little Rock	10,705	3,796	14,501	10,621	7,554	18,175	10,705	3,796	14,501
Oak	349	611	960	1,023	728	1,751	349	611	960
Pallett	1,705			1,678	1,194	2,871	1,678	1,194	2,871
Buckhorn	262			340	242	582	340	242	582
Santiago Canyon	880			873	621	1,495	873	621	1,495
Peachtree	5			83	59	141	83	59	141
Somerset	20			0	0	0	0	0	0
Inn	12			0	0	0	0	0	0
Pine	47			91	65	156	91	65	156
City Ranch	3			0	0	1	0	0	1
Estates	19			3	2	5	3	2	5
Spencer Canyon	6			58	41	100	58	41	100
Cottonwood	7			1,289	917	2,206	1,289	917	2,206
Joshua	1			44	31	76	44	31	76
Mojave	11			172	122	294	172	122	294
Rogers Lake	2			0	0	0	0	0	0
Mescal	1,155			786	559	1,345	786	559	1,345
CG-5	300			15	11	26	15	11	26
CG-6	300			203	144	347	203	144	347
CG-8	250			512	364	876	512	364	876
CG-9A	200			144	103	247	144	103	247
CG-14	70			103	73	175	103	73	175
CG-T1	80			280	199	480	280	199	480
CG-T7	60			103	73	176	103	73	176
Basin Remainder				15,063	10,714	25,777	15,063	10,714	25,777
Total				39,712	28,247	67,959	38,995	29,042	68,037

Table C.28 Annual Groundwater Recharge for 1949-2005
(acre-feet)

Year	Watershed Outflow				Playa Flooding	Groundwater Recharge
	Runoff	Groundwater	Yield	Diversions		
1949	12,400	9,600	22,000	1,000	0	21,000
1950	10,000	7,700	17,700	1,000	0	16,700
1951	4,100	3,200	7,300	1,000	0	6,300
1952	52,000	40,100	92,100	1,000	3,100	88,000
1953	14,200	10,900	25,100	1,000	0	24,100
1954	20,700	16,000	36,700	1,000	400	35,300
1955	17,600	13,600	31,200	1,000	0	30,200
1956	14,200	11,000	25,200	2,422	800	21,978
1957	13,100	10,100	23,200	1,752	400	21,048
1958	74,100	57,200	131,300	2,434	11,800	117,066
1959	15,400	11,900	27,300	1,311	200	25,789
1960	6,300	4,900	11,200	385	0	10,815
1961	5,200	4,000	9,200	0	0	9,200
1962	42,200	32,600	74,800	5,534	7,400	61,866
1963	10,000	7,700	17,700	136	0	17,564
1964	8,600	6,600	15,200	262	0	14,938
1965	11,800	9,100	20,900	1,318	0	19,582
1966	73,000	56,300	129,300	0	22,600	106,700
1967	59,100	45,600	104,700	0	6,600	98,100
1968	24,400	18,800	43,200	3,150	200	39,850
1969	149,300	115,200	264,500	2,105	74,400	187,995
1970	23,000	17,800	40,800	3,245	300	37,255
1971	21,000	16,200	37,200	3,052	500	33,648
1972	15,700	12,100	27,800	2,947	700	24,153
1973	32,800	25,300	58,100	3,195	100	54,805
1974	22,200	17,100	39,300	2,589	0	36,711
1975	14,900	11,500	26,400	3,099	0	23,301
1976	16,200	12,500	28,700	2,551	200	25,949
1977	16,900	13,000	29,900	968	0	28,932
1978	195,100	150,500	345,600	3,712	112,200	229,688
1979	57,500	44,400	101,900	2,863	2,700	96,337
1980	120,800	93,200	214,000	2,863	53,200	157,937
1981	14,400	11,100	25,500	2,678	0	22,822
1982	29,600	22,900	52,500	3,284	1,300	47,916
1983	120,700	93,100	213,800	1,913	37,300	174,587
1984	22,100	17,000	39,100	2,391	800	35,909
1985	15,400	11,900	27,300	2,835	0	24,465
1986	38,400	29,600	68,000	1,582	3,200	63,218
1987	11,200	8,700	19,900	1,000	0	18,900
1988	35,600	27,500	63,100	2,330	1,700	59,070
1989	16,400	12,700	29,100	2,100	0	27,000
1990	7,300	5,600	12,900	310	0	12,590
1991	20,200	15,600	35,800	1,036	500	34,264
1992	50,000	38,600	88,600	4,365	6,100	78,135
1993	162,000	125,000	287,000	2,964	68,500	215,536
1994	16,500	12,700	29,200	1,667	0	27,533

Table C.28 Annual Groundwater Recharge for 1949-2005
 (acre-feet)

Year	Watershed Outflow				Playa Flooding	Groundwater Recharge
	Runoff	Groundwater	Yield	Diversions		
1995	75,100	57,900	133,000	3,771	13,500	115,729
1996	20,100	15,500	35,600	3,043	1,400	31,157
1997	14,500	11,200	25,700	2,363	100	23,237
1998	78,300	60,400	138,700	5,040	14,800	118,860
1999	13,500	10,400	23,900	3,050	0	20,850
2000	13,700	10,500	24,200	6,500	0	17,700
2001	23,900	18,400	42,300	6,851	100	35,349
2002	6,700	5,100	11,800	0	0	11,800
2003	22,700	17,500	40,200	3,499	2,500	34,201
2004	13,500	10,400	23,900	3,959	100	19,841
2005	173,800	134,100	307,900	6,900	74,500	226,500
Average	38,400	29,600	68,000	2,400	9,200	56,400

**Table C.29 Recharge Factors Used
in Groundwater Model**

Month	Recharge Factor ¹
October	0.50
November	1.23
December	1.67
January	2.65
February	2.32
March	1.95
April	0.86
May	0.37
June	0.05
July	0.04
August	0.09
September	0.25

¹ Recharge factor is the monthly precipitation rate as a proportion of the average annual precipitation rate.