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Water Resources Data California Water Year 2000

Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River

By S.W. Anderson, J. Agajanian, and G.L. Rockwell

Water-Data Report CA-00-1

Prepared in cooperation with the
California Department of Water Resources and with other agencies

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PREFACE

This volume of the annual hydrologic data report of California is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for California are contained in four volumes:

Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin and Pacific Slope Basins from the Tijuana River to Santa Maria River

Volume 2. Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley

Volume 3. Southern Central Valley Basins and The Great Basin from Walker River to Truckee River

Volume 4. Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the individuals contributing significantly to the collection, processing, and tabulation of the data are given on page V.

This report was prepared in cooperation with the California Department of Water Resources and with other agencies, under the general supervision of Michael V. Shulters, District Chief, California.

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Water-resources data for the 2000 water year for California consist of records of stage, discharge, and water quality of streams, stage and contents in lakes and reservoirs, and water levels and water quality in wells. Volume 1 contains discharge records for 175 gaging stations and 13 crest-stage partial-record stations, stage and contents for 20 lakes and reservoirs, gage-height records for 2 stations, water quality for 27 streamflow-gaging stations and 3 partial-record stations, and precipitation data for 4 stations. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.

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SURFACE-WATER AND WATER-QUALITY STATIONS
IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station name designate type of data collected: (d), discharge; (l), elevation, gage heights, or contents; (c), chemical; (b), biological; (p), precipitation; (g) gage height; (t), water temperature; and (s), sediment]

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DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in California have been discontinued or converted to partial-record stations. Daily records were collected and are stored in NWIS for the period of record shown for each station.

Station No.	Station name	Drainage area (mi^2)	Period of record
09424050	Chemehuevi Wash Tributary near Needles	2.04	1960–62, 1966–68
09428530	Arch Creek near Earp	1.52	1961–71
10250600	Wildrose Creek near Wildrose Station	23.7	1961–73, 1975
10250800	Darwin Creek near Darwin	173	1963–89
10251000	Big Dip Creek near Stovepipe Wells	.95	1963–69
10251100	Salt Creek near Stovepipe Wells	—	1974–88
10251300	Amargosa River at Tecopa	3,090	1962–72, 1974–83
10251350	Horsethief Creek near Tecopa	3.06	1961–70
10252300	China Spring Creek near Mountain Pass	.94	1961–72
10252330	Wheaton Wash near Mountain Pass	10.2	1965–68
10253080	Sunflower Wash near Essex	3.04	1963–70
10253320	Quail Wash near Joshua Tree	100	1964–71
10253350	Fortynine Palms Creek near Twentynine Palms	8.55	1963–71
10253540	Corn Springs Wash near Desert Center	24.1	1964–71
10253600	Eagle Creek at Eagle Mountain	7.74	1961–66
10255200	Myer Creek Tributary near Jacumba	.11	1966–70
10255700	San Felipe Creek near Julian	89.2	1958–83
10255800	Coyote Creek near Borrego Springs	144	1951–83
10255805	Coyote Creek below Box Canyon, near Borrego Springs	154	1984–94
10255820	Yaqui Pass Wash near Borrego	.041	1965–69
10255850	Vallecito Creek near Julian	39.7	1964–83
10255885	San Felipe Creek near Westmorland	1,693	1961–91
10256000	Whitewater River at White Water	57.5	1949–79
10256050	Whitewater Municipal West Company Diversion at White Water	—	1966–70, 1971–73, 1975–81
10256060	Whitewater River at White Water Cutoff at White Water	59.1	1985–93
10256200	San Gorgonio River near Banning	14.8	1976–81
10256300	San Gorgonio River at Banning	44.2	1981
10256400	San Gorgonio River near White Water	154	1966–73, 1975–78
10257710	Chino Canyon Creek near Palm Springs	3.88	1975–85
10257800	Long Creek near Desert Hot Springs	19.6	1963–71
10258030	Tahquitz Creek at Palm Springs	—	1983
10258100	Palm Canyon Creek Tributary near Anza	.47	1967–73
10259600	Cottonwood Wash near Cottonwood Spring	.71	1960–72
10259920	Wasteway No. 1 near Mecca	—	1966–81
10260200	Pipes Creek near Yucca Valley	15.1	1958–71
10260400	Cushenbury Creek near Lucerne Valley	6.36	1957–71
10260620	Houston Creek above Lake Gregory, at Crestline	.35	1979–93
10260630	Abondigas Creek above Lake Gregory, at Crestline	1.15	1979–93
10260650	Houston Creek below Lake Gregory, at Crestline	2.68	1979–93
10260820	West Fork Mojave River below Silverwood Lake	34.0	1981–83
10261000	West Fork Mojave River near Hesperia	70.3	1905–22, 1930–71
10261100	Mojave River below Mojave River Fork Reservoir, near Hesperia	211	1972–74, 1981–97
10261900	Mojave River at Wild Crossing, near Helendale	957	1966–70
10262000	Mojave River near Hodge	1,091	1930–32, 1970–93
10263675	Big Rock Creek Wash at Highway 138, near Llano	53.1	1989–92
10264500	Little Rock Creek near Palmdale	78.0	1968
10264502	Peach Tree Creek near Littlerock	.04	1989–94
10264508	Somerset Creek at Palmdale	.50	1989–94
10264510	Inn Creek at Palmdale	.03	1989–94
10264530	Pine Creek near Palmdale	1.78	1989–94
10264550	City Ranch Creek near Palmdale	.39	1989–94
10264555	Estates Creek near Quartz Hill	.11	1989–94
10264590	Cottonwood Creek near Rosamond	35.7	1965–72
10264600	Oak Creek near Mojave	15.8	1957–86
10264605	Joshua Creek near Mojave	3.83	1989–94
10264658	Mojave Creek at Forbes Avenue, at Edwards Air Force Base	168	1996–00
10264710	Goler Gulch near Randsburg	41.3	1966–72
10264740	Cache Creek near Mojave	96.5	1965–72

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
10264750	Pine Tree Creek near Mojave	33.5	1958–79
10264770	Cottonwood Creek near Cantil	163	1966–72
10264870	Little Lake Creek near Little Lake	8.60	1964–68
10264878	Ninemile Creek near Brown	10.4	1962–71
10265160	Little Hot Creek below Hot Springs, near Mammoth Lakes	6.37	1990–95
10265200	Convict Creek near Mammoth Lakes	18.2	1925–78
10265500	Owens River near Round Valley	425	1909–23, 1928–40
10265700	Rock Creek at Little Round Valley, near Bishop	35.8	1925–78
10267000	Pine Creek at Division Box, near Bishop	36.4	1922–79
10268000	Owens River at Pleasant Valley, near Bishop	583	1918–40
10268700	Silver Canyon Creek near Laws	19.7	1930–78
10270960	Coyote Creek near Bishop	25.8	1991–96
10271210	Bishop Creek below Powerplant No. 6, near Bishop	104	1936–90
10276000	Big Pine Creek near Big Pine	39.0	1921–78
10276002	Giroux Ditch lower below Big Pine	—	1975–78
10276500	Tinemaha Creek near Big Pine	27.3	1907–11
10277000	Birch Creek near Big Pine	11.7	1907–11
10277400	Owens River below Tinemaha Reservoir, near Big Pine	1,964	1975–84
10277500	Owens River near Big Pine	1,976	1912–74
10278000	Taboose Creek near Aberdeen	11.2	1906–11
10278500	Goodale Creek near Aberdeen	11.2	1906–11
10281500	Oak Creek near Independence	24.1	1906–11
10281800	Independence Creek below Pi Canyon Creek, near Independence	18.1	1923–78
10282000	Independence Creek near Independence	18.8	1907–11
10282480	Mazourka Creek near Independence	15.6	1961–72
10284800	Inyo Creek near Lone Pine	1.54	1968–73
10285500	Tuttle Creek near Lone Pine	14.0	1909–11
10285700	Owens River at Keeler Bridge, near Lone Pine	2,604	1961–79
10286000	Cottonwood Creek near Olancha	40.1	1906–11, 1914–18, 1920–38, 1960–78
10286001	Cottonwood Creek Penstock weir, near Lone Pine	—	1906–11, 1914–18, 1919–78
10286002	Cottonwood Creek Diversion to powerhouse	—	1939–50, 1974, 1975–78
10287070	Mill Creek below Lundy Lake, near Mono Lake	18.1	1942–90
10287290	Rush Creek below Agnew Lake, near June Lake	23.3	1960–66, 1986–90
10287400	Rush Creek above Grant Lake, near June Lake	51.3	1937–79
10287900	Lee Vining Creek near Lee Vining	34.9	1935–79
10290000	Summers Creek near Bridgeport	8.26	1954–59
11010900	Wilson Creek Tributary near Dulzura	.61	1968–73
11011900	Potrero Creek Tributary near Barrett Junction	.78	1966–69
11012100	Miller Creek near Live Oak Springs	1.00	1962–64
11013000	Tijuana River near Dulzura	481	1937–90
11013500	Tijuana River near Nestor	1,695	1937–82
11013600	Jamul Creek at Lee Valley, near Jamul	2.26	1984–85, 1987–88
11013700	Jamul Creek Tributary near Jamul	2.47	1973
11014700	Telegraph Canyon Creek at Chula Vista	6.23	1973
11014850	Japacha Creek near Descanso	2.40	1965–67
11016000	Sweetwater River near Dehesa	112	1913–16
11021500	San Vicente Creek near Foster	66.0	1942
11022000	San Vicente Creek at San Vicente dam, at Foster	74.2	1937–41
11022350	Forester Creek at El Cajon	21.3	1983–93
11023200	San Clemente Canyon Creek at Miramar Naval Air Station	5.60	1973
11023250	Poway Creek near Poway	7.92	1978–87
11023310	Rattlesnake Creek at Poway	8.13	1978–89
11023315	Poway Creek Tributary at Oak Knoll Road, near Poway	.93	1972–75
11023318	Pomerado Creek at Glenoak Road, near Poway	2.43	1970–75
11023320	Pomerado Creek at Poway Road, near Poway	4.14	1971–75
11023330	Los Penasquitos Creek below Poway Creek, near Poway	31.2	1970–93
11023325	Beeler Creek at Pomerado Road, near Poway	5.46	1978–89
11023400	Carroll Creek near La Jolla	15.8	1985–86

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11023450	Carmel Creek near Del Mar	1.11	1985–86
11023500	Santa Ysabel Creek near Santa Ysabel	12.5	1914
11024500	Black Canyon Creek near Mesa Grande	15.3	1914, 1923–24
11026000	Santa Ysabel Creek near San Pasqual	128	1957–80
11027000	Guejito Creek near San Pasqual	22.5	1947–82
11027500	Guejito Creek at San Pasqual	27.7	1915, 1917, 1947–56
11029000	San Dieguito River near San Pasqual	249	1956–65
11029500	San Dieguito River at Bernardo	269	1912–15
11030500	San Dieguito River near Del Mar	338	1984–89
11030730	Escondido Creek near Olivenhain	64.6	1973
11031000	San Luis Rey River near Warner Springs	33.6	1913–15
11031500	Agua Caliente Creek near Warner Springs	19.0	1961–87
11033000	West Fork San Luis Rey River near Warner Springs	25.5	1913–15, 1957–86
11035000	San Luis Rey River at Lake Henshaw, near Mesa Grande	206	1912–22
11037650	Pauma Valley Water Company diversion near Pauma Valley	—	1966–70, 1972–81
11037700	Pauma Creek near Pauma Valley	11.0	1965–81
11037701	Pauma Creek and Diversion near Pauma Valley	11.0	1965–81
11038500	San Luis Rey River near Pala	317	1909–11, 1913–15
11039100	San Luis Rey River Tributary near Pala	1.01	1966–73
11039600	Bubble–Up Creek near Pala	4.11	1991
11039800	San Luis Rey River at Couser Canyon Bridge, near Pala	364	1986–93
11040000	San Luis Rey River at Monserate Narrows, near Pala	373	1938–41, 1947–86
11040200	Keys Creek Tributary at Valley Center	7.65	1970–83, 1991
11040500	San Luis Rey River at Bonsall	456	1912–15
11040700	San Luis Rey River below Moosa Canyon, near Bonsall	499	1984–85
11041000	San Luis Rey River near Bonsall	513	1930–79
11042490	Wilson Creek above Vail Lake, near Radec	122	1990–94
11042520	Temecula Creek at Nigger Canyon, near Temecula	320	1923–48
11042600	Temecula Creek below Vail Dam	320	1978
11044500	Santa Margarita River near Fallbrook	644	1925–80
11044600	Santa Margarita River Tributary near Fallbrook	.52	1962–65
11044900	De Luz Creek near Fallbrook	47.5	1951–65, 1990–91
11045000	Santa Margarita River near De Luz Station	705	1925–26
11046200	San Onofre Creek near San Onofre	34.6	1951–67
11046250	San Onofre Creek at San Onofre	42.2	1947–67, 1989
11046310	San Mateo Creek near San Onofre	91.9	1951–52
11046350	Cristianitos Creek near San Clemente	29.0	1951–67
11046370	San Mateo Creek at San Onofre	132	1947–67, 1984–85
11046500	San Juan Creek near San Juan Capistrano	106	1929–71
11046501	San Juan Creek near San Juan Capistrano plus canal	117	1955–71
11047000	Arroyo Trabuco near San Juan Capistrano	35.7	1930–72, 1980–81
11047200	Oso Creek at Crown Valley Parkway, near Mission Viejo	14.0	1970–81
11047500	Aliso Creek at El Toro	7.92	1931–80
11047700	Aliso Creek at South Laguna	34.4	1983–87
11048000	Irvine Ranch Drainage Canal, near Tustin	92.0	1931–40
11048555	San Diego Creek at Campus Drive, near Irvine	—	1978–79, 1983–85
11049600	Greenspot Pipeline near Mentone	—	1972–73
11051600	Santa Ana River spreading diversion near Mentone	213	1952–77
11054000	Mill Creek near Yucaipa (REVISED RECORDS IN WDR CA-92-1)	42.4	1920–38, 1948–86
11054600	Crafton near Mentone	—	1972–79
11056000	Santa Ana River near San Bernardino	306	1929–37, 1955–61
11056500	Little San Gorgonio River near Beaumont (REVISED RECORDS IN WDR CA-92-1)	1.74	1949–85
11057490	San Timoteo Creek at Loma Linda	125	1979–80
11058600	Waterman Canyon Creek near Arrowhead Springs	4.65	1912–14, 1920–85
11059000	Warm Creek Floodway at San Bernardino	75.1	1961–81
11059100	San Bernardino Water–Quality Control Plant at San Bernardino	—	1973–82
11060300	Lytle Creek at Channel, at San Bernardino	—	1929–30, 1932–57
11060500	Meeks and Daley Canal near Colton	—	1921–81
11062200	Fontana Union Water Co. Lytle Creek return flow channel near Fontana	—	1973–80
11062810	West San Bernardino County Water District Rialto Diversion near Fontana	—	1981
11063000	Cajon Creek near Keenbrook	40.6	1920–71, 1978–83

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11064000	Lytle Creek (East Channel) at San Bernardino	—	1929–57
11065800	Warm Creek near Colton	198	1921–61
11065801	Warm Creek near Colton plus diversion	259	1920–61
11066050	Santa Ana River at Colton	740	1962–66
11066100	Lytle Creek West Channel at Colton	—	1929–45
11066440	Santa Ana River at Mission Boulevard, at Riverside	808	1971–82
11066478	Riverside Water-Quality Control Plant Weir No. 1	—	1973–81
11066479	Riverside Water-Quality Control Plant Weir No. 2	—	1973–81
11066480	Riverside Water-Quality Control Plant at Riverside Narrows, near Arlington	—	1966–81
11066500	Santa Ana River at Riverside Narrows, near Arlington	853	1929–73
11066550	Sheehan Diversion at Riverside Narrows, near Arlington	—	1964–65, 1967–68
11066950	Day Creek Diversion near Etiwanda	—	1966–69, 1971
11067000	Day Creek near Etiwanda	4.56	1929–72
11068000	Santa Ana River at Auburndale Bridge, near Corona	1,010	1961–68
11069300	South Fork San Jacinto River tributary near Valle Vista	2.20	1962–67
11069501	San Jacinto River near San Jacinto plus canals	141	1949–81, 1983–89
11070000	Bautista Creek near Hemet	39.6	1948–69
11070050	Bautista Creek at Valle Vista	48.5	1970–87
11070232	East Fork Pigeon Pass Creek at Heacock Street, near Sunnymead	.48	1970–75
11070240	Sunnymead Channel at Alessandro Boulevard, near Sunnymead	13.3	1970–75, 1990–93
11070256	Perris Valley Storm Drain at Nandino Avenue, near March Air Force Base	50.6	1970–75, 1990–93
11070262	Perris Valley Storm Drain Lateral "B" near March Air Force Base	10.6	1970–75, 1990–93
11070263	Unnamed creek tributary to Perris Reservoir near Moreno Valley	.46	1989–91
11070375	San Jacinto River at Railroad Canyon Weir, near Elsinore	562	1952–84
11070465	Salt Creek at Murrieta Road, near Sun City	—	1984
11070475	Salt Creek at Railroad Canyon Reservoir, near Elsinore	122	1970–78
11072000	Temescal Creek near Corona	164	1929–80
11072200	Temescal Creek at Corona	249	1968–74
11073000	San Antonio Creek near Claremont	16.5	1917–72
11073200	San Antonio Creek below San Antonio Dam	26.9	1963–80
11073440	Chino Creek near Chino	107	1968–69
11073470	Cucamonga Creek near Upland	9.68	1929–75
11073500	Chino Creek near Prado	218	1929–40
11074500	Santa Ana River at county line, below Prado Dam	1,510	1919–42, 1945–60
11075730	Carbon Creek at Olinda	19.7	1931–38
11075740	Carbon Creek near Yorba Linda	20.1	1950–61
11077000	Santiago Creek near Villa Park	84.6	1921–63
11077001	Santiago Creek plus diversion near Villa Park	83.8	1921–31
11078100	Santa Ana River at Adams Avenue, near Costa Mesa	1,701	1975–77
11078110	Rubio Wash at Glendon Way	—	1973–75
11078120	Compton Creek at 120th Street	—	1974–75
11078130	Arcadia Wash at Grand Avenue	—	1974–75
11078140	Eaton Wash at Loftas Drive	—	1974–75
11078150	Limekiln Creek above Aliso Creek	—	1973–74
11078170	Puddingstone Creek below Puddingstone Dam	—	1974
11078190	Santa Fe Diversion Channel	—	1974
11078191	West Fork San Gabriel River below Cogswell Dam	—	1975
11080000	East Fork San Gabriel River at Camp Bonita	58.2	1928–32
11080500	East Fork San Gabriel River near Camp Bonita	84.6	1933–79
11081000	Bear Creek near Camp Rincon	28.2	1930–36
11081500	North Fork San Gabriel River at Camp Rincon	18.6	1930–36
11082000	West Fork San Gabriel River at Camp Rincon	104	1928–78
11083500	San Gabriel River near Azusa	214	1894, 1896–1959, 1961–66
11084000	Rogers Creek near Azusa	6.64	1918–62
11084500	Fish Creek near Duarte	6.36	1916–79
11085019	San Gabriel River below Valley Boulevard	—	1973–74
11086000	Dalton Creek near Glendora	7.24	1913–62
11086300	San Dimas Creek below San Dimas Dam	16.3	1957–78
11086400	San Dimas Creek near San Dimas	18.3	1917–56
11086500	Little Dalton Creek near Glendora	2.72	1939–68, 1970–71

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11086990	San Jose Creek near El Monte	87.8	1965–78
11087100	Rio Hondo Flood Flow Channel at Whittier Narrows Dam	—	1966–70
11087195	San Jose Creek near Whittier	88.7	1929–64
11087500	San Gabriel River at Pico	447	1929–78
11088000	San Gabriel River at Spring Street, near Los Alamitos	472	1937–51, 1953–79
11089000	Brea Creek at Fullerton	23.6	1931–69
11090000	Fullerton Creek at Fullerton	7.50	1936–64
11090200	Fullerton Creek at Richman Avenue, at Fullerton	12.1	1960–77, 1979–81
11090500	Coyote Creek near Artesia	120	1930–63
11090700	Coyote Creek at Los Alamitos	150	1964–78
11092450	Los Angeles River at Sepulveda Dam	158	1932–79
11093000	Pacoima Creek near San Fernando	28.3	1917–79
11093490	North Fork Mill Creek near La Canada	5.80	1966–73
11093500	Mill Creek near Colby Ranch	21.7	1931–34
11094000	Big Tujunga Creek below Mill Creek, near Colby Ranch (formerly Tujunga Creek)	64.9	1948–71
11094500	Big Tujunga Creek near Colby Ranch (formerly Tujunga Creek)	67.5	1931–50
11095000	Fox Creek near Colby Ranch	9.22	1931–37
11095500	Big Tujunga Creek near Sunland (formerly Tujunga Creek)	106	1917–77
11096000	Haines Creek near Tujunga	1.26	1917–34, 1936–61
11096500	Little Tujunga Creek near San Fernando	21.1	1929–73
11097500	Los Angeles River at Los Angeles	514	1930–79
11098500	Los Angeles River near Downey	599	1928–78
11099500	Sawpit Creek near Monrovia	5.21	1916–61
11100000	Santa Anita Creek near Sierra Madre (REVISED RECORDS IN WDR CA-92-1)	9.71	1917–70
11100500	Little Santa Anita Creek near Sierra Madre	1.84	1916–62
11101000	Eaton Creek near Pasadena	6.47	1918–66
11101380	Alhambra Wash at Klingerman Street, near Montebello	15.2	1976–79
11101500	Rio Hondo near Montebello	116	1929–78
11102000	Mission Creek near Montebello	4.16	1930–77
11102500	Rio Hondo near Downey	143	1928–79
11103500	Ballona Creek near Culver City	89.5	1928–78
11105500	Malibu Creek at Crater Camp, near Calabasas	105	1982–88
11106000	Calleguas Creek at Camarillo	168	1929–31, 1955–58
11106400	Conejo Creek above Highway 101, near Camarillo	64	1973–83
11106500	Conejo Creek near Camarillo	69	1928–31
11107000	Honda Barranca near Somis	2.5	1955–63
11107500	Beardsley Wash near Somis	13	1954–58
11107745	Santa Clara River above railroad station, near Lang	157	1950–68, 1970–77
11107860	Bouquet Creek near Saugus	51.6	1971–73, 1975,
11107922	South Fork Santa Clara River at Saugus	43.4	1976–77
11108000	Santa Clara River near Saugus	411	1930–55
11108075	Castaic Creek above Fish Creek, near Castaic	37.0	1977–78, 1989–93
11108080	Fish Creek above Castaic Creek, near Castaic	27.2	1977–78, 1989–93
11108090	Elderberry Canyon Creek above Castaic Creek, near Castaic	2.50	1978, 1989–93
11108095	Necktie Canyon Creek above Castaic Creek, near Castaic	2.12	1977–78, 1989–93
11108130	Elizabeth Lake Canyon Creek above Castaic Lake, near Castaic	43.7	1977–78, 1989–93
11108135	Castaic Lagoon Parshall Flume near Castaic	138	1977–78, 1988–96
11108145	Castaic Creek near Saugus	184	1947–76
11108500	Santa Clara River at Los Angeles–Ventura County Line	625	1953–96
11109100	Piru Creek below Thorn Meadows, near Stauffer	22.5	1972–78
11109200	Middle Fork Lockwood Creek near Stauffer	5.50	1972–78
11109250	Lockwood Creek at gorge, near Stauffer	58.7	1972–81
11110000	Piru Creek near Piru	437	1912–13, 1928–56, 1969–74
11111500	Sespe Creek near Wheeler Springs	49.5	1948–97
11112500	Fillmore Irrigation Company Canal near Fillmore	—	1940–51, 1972–83
11113001	Sespe Creek and Fillmore Irrigation Company Canal	—	1927–85, 1990–93
11113900	Saticoy Diversion near Saticoy	—	1969–81, 1983–87
11114500	Matilija Creek above reservoir, near Matilija Hot Springs	50.7	1948–69
11115500	Matilija Creek at Matilija Hot Springs	54.6	1928–88

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11116000	North Fork Matilija Creek at Matilija Hot Springs	15.6	1929–32, 1934–73, 1974–83
11116500	Ventura River near Ojai	70.7	1912–14, 1922–24, 1983–84
11116550	Ventura River near Meiners Oaks	76.4	1959–79, 1981–82, 1984–88
11117000	San Antonio Creek near Ojai	33.7	1928–32
11117600	Coyote Creek near Oak View	13.2	1959–88
11117800	Santa Ana Creek near Oak View	9.11	1959–88
11118000	Coyote Creek near Ventura	41.2	1928–32, 1934–58, 1970–82
11119660	San Ysidro Creek at Montecito	3.07	1980–83
11119700	Sycamore Creek at Santa Barbara	3.41	1971–72, 1980
11119760	Victoria Street drain at outlet, at Santa Barbara	0.625	1970–78
11119780	Arroyo Burro at Santa Barbara	6.65	1970–93
11119900	Atascadero Creek at Puente Road, near Goleta	3.86	1971–72
11120520	San Pedro Creek at Goleta	3.21	1971–72
11120530	Tecolotito Creek near Goleta	4.42	1970–72, 1980–82, 1987–91
11120550	Gaviota Creek near Gaviota	18.8	1967–86
11120600	Jalama Creek near Lompoc	20.5	1966–82
11120700	Canada Honda Creek near Lompoc	3.09	1959–62
11120800	Canada Honda Creek near Point Arguello	8.47	1959–62
11124000	Santa Cruz Creek above Stuke Canyon	64.9	1947–52
11125000	Cachuma Creek near Santa Ynez	23.8	1951–62
11126500	Santa Agueda Creek near Santa Ynez	55.8	1941–71, 1977–78
11127000	San Lucas Creek near Santa Ynez	3.2	1953–54
11127500	Zanja de Cota Creek near Santa Ynez	13.8	1955–61
11128000	Santa Ynez River at Grand Avenue, near Santa Ynez	513	1955–65
11128400	Alisal Creek near Solvang	12.3	1955, 1957–72
11128500	Santa Ynez River at Solvang	579	1928–40, 1946–99
11129000	Nojoqui Creek near Buellton	15.1	1953–54
11129500	Santa Ynez River at Buellton	611	1955–59
11130000	Zaca Creek at Buellton	39.4	1941–63
11130500	Santa Ynez River near Buellton	668	1952–74
11131000	Santa Ynez River at Santa Rosa Dam site, near Buellton	700	1955–64
11131500	Santa Ynez River at Coopers East Fork, near Lompoc	708	1955–76
11132000	Santa Ynez River below Santa Rita Creek, near Lompoc	733	1955–62
11134500	Santa Ynez River at 13th Street, near Lompoc	820	1955–75
11135000	Santa Ynez River at Pine Canyon, near Lompoc	884	1941–46, 1964–83
11135500	Santa Ynez River at barrier, near Surf	895	1947–65
11135800	San Antonio Creek at Los Alamos	34.9	1970–92, 1998, 1999
11136000	San Antonio Creek at Harris	93.7	1941–55
11136050	San Antonio Creek above Barka slough, near Orcutt	114	1985–87
11136150	San Antonio Creek Tributary near Casmalia	.28	1947–70
11136400	Wagon Road Creek near Stauffer	17.9	1972–78
11136480	Reyes Creek near Ventucopa	4.62	1972–78
11136500	Cuyama River near Ventucopa	89.9	1945–58
11136650	Aliso Canyon Creek near New Cuyama	16.1	1964–72
11137000	Cuyama River near Santa Maria	904	1930–62
11137400	Alamo Creek near Nipomo	83.3	1959–77
11137500	Alamo Creek near Santa Maria	86.6	1944–62
11137900	Huasna River near Arroyo Grande	10.3	1959–86
11138000	Huasna River near Santa Maria	117	1930–62
11138100	Cuyama River below Twitchell Dam	1,132	1959–83
11138500	Sisquoc River near Sisquoc	281	1943–99
11139000	La Brea Creek near Sisquoc	93.6	1944–73
11139350	Foxen Creek near Sisquoc	16.8	1966–73
11139500	Tepusquet Creek near Sisquoc	28.7	1944–87
11140585	Santa Maria River at Suey Crossing, near Santa Maria	—	1999
11140600	Bradley Ditch near Donovan Road, at Santa Maria	5.47	1970–92, 1998, 1999

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11140800	Blosser Ditch near Donovan Road, at Santa Maria	—	1972–76
11141000	Santa Maria River at Guadalupe	1,741	1940–87
11160020	San Lorenzo River near Boulder Creek	6.17	1968–92

DISCONTINUED LAKES AND RESERVOIRS

The following continuous-record lake stations in California have been discontinued. Daily records were collected and are stored in NWIS for the period of record shown for each location.

Station No.	Station name	Drainage area (mi^2)	Period of record
10260640	Lake Gregory at Crestline	2.66	1978–93
10287000	Mono Lake near Mono Lake	785	1912–90
11013200	Rodriquez Reservoir at Rodriquez Dam, Baja California, Mexico	977	1937–90
11014550	Lower Otay Lake near Chula Vista	99.0	1945–59, 1972–93
11020600	El Capitan Lake near Lakeside	188	1936–66, 1972–93
11022100	San Vicente Reservoir near Lakeside	74.2	1947–61, 1973–98
11030020	Lake Hodges near Escondido	303	1945–68, 1972–93
11030700	Lake Wohlford near Escondido	7.96	1972–93
11011000	Barrett Lake near Dulzura	245	1960–66, 1986–93
11117900	Lake Casitas near Casitas Springs	38.6	1986–87

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS

The following continuous-record water-quality stations in California have been discontinued. Daily records were collected and are stored in NWIS for the period of record shown for each location.

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
10254670	Alamo River at Drop No. 3, near Calipatria	—	WQ,B,C, T,S	1969–70, 1975–77, 1979–94
10254970	New River at International Boundary, at Calexico	—	B,C,T,S	1969–71, 1973–85
10261500	Mojave River at Lower Narrows, near Victorville	513	C,T	1962–81
10263675	Big Rock Creek Wash at Highway 138, near Llano	53.1	P	1989–92
10264502	Peach Tree Creek near Littlerock	.04	P	1989–94
10264508	Somerset Creek at Palmdale	.50	P	1989-94
10264510	Inn Creek at Palmdale	.03	P	1989-94
10264530	Pine Creek near Palmdale	1.78	P	1989-94
10264550	City Ranch Creek near Palmdale	.39	P	1989-94
10264555	Estates Creek near Quartz Hill	.11	P	1989-94
10264605	Joshua Creek near Mojave	3.83	P	1989–94
10265150	Hot Creek at flume, near Mammoth	68.3	C,T	1983–88
10277400	Owens River below Tinemaha Reservoir, near Big Pine	1,964	C,T	1975–81
11013500	Tijuana River near Nestor	1,695	T,S	1970–71, 1976, 1978
11022500	San Diego River near Santee	377	T,S	1970–78
11023000	San Diego River at Fashion Valley, at San Diego	429	T,S	1984
11030500	San Dieguito River near Del Mar	338	S	1984
11042000	San Luis Rey River at Oceanside	557	S	1969–78, 1984
11046000	Santa Margarita River at Ysidora	723	S	1969–78
11046500	San Juan Creek near San Juan Capistrano	106	T,S	1967–68, 1971, 1982
11046530	San Juan Creek at La Novia Street Bridge, at San Juan Capistrano	109	T,S	1986–88
11046550	San Juan Creek at San Juan Capistrano	117	T,S	1972–82, 1987
11047000	Arroyo Trabuco near San Juan Capistrano	35.7	T,S	1967, 1978
11047300	Arroyo Trabuco at San Juan Capistrano	54.1	T,S	1971–77, 1984
11048500	San Diego Creek at Culver Drive, near Irvine	41.8	T,S	1972–85
11048530	El Modena Irvine Channel near Irvine	—	T,S	1975–79
11048540	Peters Canyon Wash at Barranca Road, near Irvine	—	T,S	1975–79, 1983–85
11048550	San Diego Creek at Lane Road, near Irvine	—	T,S	1972–76
11048555	San Diego Creek at Campus Drive, near Irvine	—	T,S	1972–76, 1978–79, 1983–85
11051500	Santa Ana River near Mentone	210	C,T	1998–99

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
11056200	Santa Ana River at Waterman Avenue, at San Bernardino	339	T,S	1977, 1979
11057000	San Timoteo Creek near Redlands	118	T,S	1977–78
11059100	San Bernardino Water-Quality Control Plant at San Bernardino	—	C	1973–75, 1977–80
11059300	Santa Ana River at E Street, near San Bernardino	541	T,S	1982–83
11066460	Santa Ana River at MWD Crossing, near Arlington	852	WQ,T	1970–78, 1998–00
11066480	Riverside Water-Quality Control Plant at Riverside Narrows, near Arlington	—	C	1970–80, 1982
11066500	Santa Ana River at Riverside Narrows, near Arlington	853	C,T	1968–69
11067890	Santa Ana River at Prado Park, near Corona	1,010	T,S	1976–80
11068000	Santa Ana River at Auburndale Bridge, near Corona	1,010	C,T	1968
11070240	Sunnymead Channel at Alessandro Boulevard near Sunnymead	13.3	P	1990–93
11070262	Perris Valley Storm Drain Lateral "B" near March Air Force Base	10.6	P	1991
11070263	Unnamed creek tributary to Perris Reservoir near Moreno	.46	P	1990–91
11070270	Perris Valley Storm Drain at Nuevo Road, Near Perris	93.3	P	1990–97
11073360	Chino Creek at Schaefer Avenue, near Chino	48.9	WQ,S	1998
11073495	Cucamonga Creek near Mira Loma	75.8	WQ,C,T,S	1998–00
11074000	Santa Ana River below Prado Dam	1,490	B	1975–81
11075600	Santa Ana River at Imperial Highway, near Anaheim	1,544	T,S	1973–77, 1979
11075610	Santa Ana River above spreading diversion below Imperial Highway, near Anaheim	1,545	C,T	1999
11075620	Santa Ana River spreading diversion below Imperial Highway, near Anaheim	—	WQ	1975–79, 1981–85
11075755	Santa Ana River at Ball Road, at Anaheim	1,587	T,S	1977–80
11075760	Santa Ana River near Katella Avenue, at Orange	1,593	T,S	1974–76
11078000	Santa Ana River at Santa Ana	1,700	T,S	1968–69, 1971, 1973–80,1982–87
11078100	Santa Ana River at Adams Avenue, near Costa Mesa	1,701	T,S	1974–76
11102250	Mission Creek below Whittier Narrows Dam	—	C	1956–70
11103000	Los Angeles River at Long Beach	827	WQ,C,T,S	1973–92
11103010	Los Angeles River at Willow Street Bridge, at Long Beach	831	C,T	1974–75, 1981
11104000	Topanga Creek at Topanga Beach	18.0	WQ,S	1982–88
11104400	Malibu Creek at Cornell	37.6	WQ,S	1983–88
11105410	Cold Creek at Piuma Road, near Monte Nido	7.73	WQ,S	1982–84, 1986, 1987, 1988
11105500	Malibu Creek at Crater Camp, near Calabasas	105	WQ,S	1982–88
11105850	Arroyo Simi near Simi	70.6	T,S	1970–71, 1974–78
11108500	Santa Clara River at Los Angeles–Ventura County Line	625	WQ,B,T,S	1969–88
11109550	Piru Creek above Frenchmans Flat	308	C	1972–80
11109600	Piru Creek above Lake Piru	372	C	1972–80
11109800	Piru Creek below Santa Felicia Dam	425	C,T	1969, 1974–80
11110000	Piru Creek near Piru	437	C,T	1970–71
11110500	Hopper Creek near Piru	23.6	T,S	1977–78
11113000	Sespe Creek near Fillmore	251	C,S	1967–78
11113500	Santa Paula Creek near Santa Paula	38.4	C,T	1969–80
11113900	Saticoy Diversion near Saticoy	—	C,T	1969–71, 1982–87
11113910	Santa Clara River at diversion, near Saticoy	—	C	1971
11114000	Santa Clara River at Montalvo	1,577	T,S	1969–85, 1989–93
11117500	San Antonio Creek at Casitas Springs	51.2	T,S	1977–78
11118500	Ventura River near Ventura	188	WQ,T	1907–08, 1967–81, 1986
11119745	Mission Creek at Rocky Nook Park, at Santa Barbara	6.60	T,S	1984–86
11120000	Atascadero Creek near Goleta	18.9	T,S	1982
11120510	San Jose Creek at Goleta	9.42	S	1982–85
11120530	Tecolotito Creek near Goleta	4.42	S	1982
11120500	San Jose Creek near Goleta	5.51	WQ	1978–91
11120600	Jalama Creek near Lompoc	20.5	T	1981–83
11120900	Canada Honda Creek at Pt. Arguello	—	T	1981–83
11125500	Lake Cachuma near Santa Ynez	417	WQ	1998
11129800	Zaca Creek near Buellton	32.8	WQ	1997
11132500	Salsipuedes Creek near Lompoc	47.1	WQ,T	1982–98
11133000	Santa Ynez River at Narrows, near Lompoc	789	WQ	1978–88
11134800	Miguelito Creek at Lompoc	11.6	WQ	1980–86, 1988–97
11136100	San Antonio Creek near Casmalia	135	T	1981–83
11138500	Sisquoc River near Sisquoc	281	C	1978-99
11140585	Santa Maria River at Suey Crossing, near Santa Maria	—	S	1999–00
11141000	Santa Maria River at Guadalupe	1,741	T,S	1969–70

Type of record: WQ (Water quality); B (Biological); C (Conductivity); T (Temperature); S (Sediment); P (Precipitation).

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2000
VOLUME 1—SOUTHERN GREAT BASIN FROM MEXICAN BORDER TO MONO LAKE BASIN, AND PACIFIC SLOPE BASINS FROM TIJUANA RIVER TO SANTA MARIA RIVER

By S.W. Anderson, J. Agajanian, *and* G.L. Rockwell

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with State and Federal agencies, obtains a large amount of data pertaining to the water resources of California each water year. These data, accumulated during many water years, constitute a valuable database for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in this report series entitled "Water Resources Data—California."

This volume of the report includes records on surface water in the State. Specifically, it contains: (1) discharge records for 175 streamflow-gaging stations and 13 partial-record stations; (2) stage and content records for 20 lakes and reservoirs; (3) gage-height records for 2 stations; (4) precipitation records for 3 stations; and (5) water-quality records for 27 streamflow-gaging stations and 3 water-quality partial-record stations. Records included for stream stages are only a small fraction of those obtained during the water year.

The series of annual reports for California began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format changed to include data on quantities of surface water, quality of surface and ground water, and ground-water levels. From the 1985 through the 1993 water years, a separate volume for ground-water levels and quality was published for California.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for California were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 10 and 11." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." These Water-Supply Papers may be consulted in public libraries of principal cities of the United States, or if not out of print, they may be purchased from U.S. Geological Survey, Information Services, Box 25286, Denver Federal Center, Denver, CO 80225-0046.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. Each report has an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CA-00-1." For archiving and general distribution, the reports for 1971–74 water years also are identified as water-data reports. These water-data reports are for sale, in paper copy or on microfiche, by the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. For further ordering information, the Customer Inquiries telephone number is (703) 487-4650, between 8:30 a.m. and 5:30 p.m. Eastern Standard Time.

Additional information for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone at (916) 278-3100.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of records since 1903. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Antelope Valley-East Kern Water Agency, Russell E. Fuller, General Manager.

Borrego Water District, Tom Weber, General Manager.

California Department of Water Resources, Thomas M. Hannigan, Director.

Carpinteria Valley Water District, Charles B. Hamilton, General Manager/Secretary.

Casitas Municipal Water District, John J. Johnson, General Manager.

Chino Basin Water Conservation District, Barrett Kehl, General Manager.

Coachella Valley Water District, Thomas E. Levy, General Manager-Chief Engineer.

Desert Water Agency, Dan M. Ainsworth, General Manager.

Eastern Municipal Water District, John B. Brudin, General Manager.

Goleta Water District, Kevin D. Walsh, General Manager and Chief Engineer.

Imperial County Department of Public Works, Timothy B. Jones, Director.

Imperial Irrigation District, Michael King, Acting Manager, Water Department.

Lompoc, city of, Gary Keefe, Utility Director.

Mojave Water Agency, John W. Norman, General Manager.

Mono County, Energy Management Department, Daniel L. Lyster, Director.

Montecito Water District, Fred J. Adjarian, General Manager.

Oceanside, city of, Peter Weiss, City Engineer.

Orange County Public Facilities and Resources Department, Vicki L. Wilson, Director.

Orange County Water District, William R. Mills, Jr., General Manager.

Padre Dam Municipal Water District, August A. Caires, General Manager.

Pechanga Indian Reservation, Mark A. Macarro, Tribal Chairman.

Riverside County Flood Control and Water Conservation District, David P. Zappe, General Manager-Chief Engineer.

San Bernardino Environmental Public Works Agency-Flood Control District, Ken A. Miller, Director.

San Bernardino Valley Municipal Water District, G. Louis Fletcher, General Manager-Chief Engineer.

San Diego, city of, Larry Gardner, Water Utilities Director.

San Diego County Flood Control District, Tim Stanton, Manager.

San Juan Basin Authority, Donald J. Martinson, Administrator.

Santa Barbara, city of, Department of Public Works, David H. Johnson, Director.

Santa Barbara County Flood Control and Water Conservation District and Water Agency, Thomas D. Fayram, Deputy Director.

Santa Margarita River Watershed, James S. Jenks, Watermaster.

Santa Maria Valley Water Conservation District, Debi Askew, Secretary.

Santa Ynez River Water Conservation District, Bruce A. Wales, General Manager.

Sweetwater Authority, Al R. Sorensen, General Manager.

United Water Conservation District, Ms. Dana L. Wisehart, General Manager.

Ventura County Public Works Agency, Ronald C. Coons, Director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; Bureau of Reclamation, U.S. Department of the Interior; Edwards Air Force Base, U.S. Air Force; and Camp Pendleton Marine Corps Base, U.S. Marine Corps.

The following organizations aided in collecting records: California Department of Water Resources, Riverside County Flood Control and Water Conservation District, San Bernardino Valley Water Conservation Distirct, Southern California Edison Co., and United Water Conservation District.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins—the Mississippi, the Columbia, the Colorado, and the Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) provide the mechanism to evaluate the effectiveness of the significant reduction in SO_2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; (3) provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO_2 and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 2000 water year that began October 1, 1999, and ended September 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and contents data for lakes and reservoirs, and water-quality data for surface water. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station-Identification Numbers

Each streamsite data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream-order" system is used for regular surface-water stations and the "latitude-longitude" system is used for surface-water stations in California where only miscellaneous measurements are made.

Downstream-Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports has been in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 11119750, which appears just to the left of the station name, includes the two-digit part number "11" plus the six-digit downstream-order number "119750." The part number designates the major river basin; for example, part "11" is the Pacific Slope Basins in California.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig. 1).

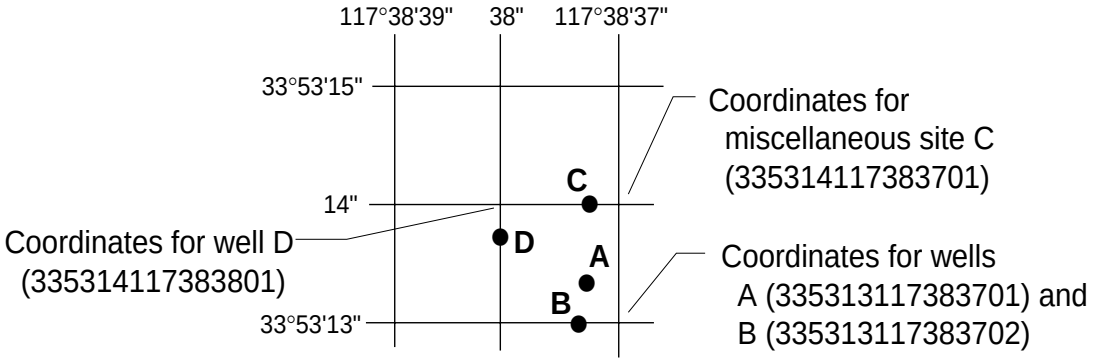


Figure 1. System for numbering miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake and reservoir contents, similarly, are those for which stage or contents may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records" or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown, by county, in figures 2 through 12.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake contents. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with digital recorders, data-collection platforms, or data loggers that sample stage values at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the U.S. Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in U.S. Geological Survey Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), Book 3, Chapters A1 through A19, and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge are prepared for any stage within the range of the measurements. If it is necessary to define extremes of discharge outside the range of current-meter measurements, the curves are extended using (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dam or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual

discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes or observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross-section area. Discharge is computed by multiplying path velocity by the appropriate stage-related coefficient and area.

In computing records of lake or reservoir contents, it is necessary to have available surveys, curves, or tables defining the relation of stage and contents. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relation. When this is done, the contents computed may become increasingly in error as time increases since the last survey. Discharges over lake or reservoir spillways are computed from stage-discharge relations in the same manner as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following records, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow to clarify information presented under the various headings of the station description.

LOCATION.—Information on locations is obtained from the most accurate maps available. The location of the gaging station is given with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council, or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time when the present station was not, and whose location was such that records from it reasonably can be considered equivalent with records from the present station.

REVISED RECORDS.—Published records, because of new information, occasionally are incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report is given in which the most recently revised figure was published.

GAGE.—The type of gage currently in use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.—All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph also is used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified.

EXTREMES FOR PERIOD OF RECORD.—Extremes may include maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.—Included is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.—Extremes given are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year that are greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330.

REVISIONS.—If a critical error is discovered in published records, a revision is included in the first report published following discovery of the error.

Occasionally the records of a discontinued gaging station may need revision. Because for these stations there would be no current or, possible, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office to determine if the published records were revised after the station was discontinued. If the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream-gaging stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also usually is expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS __–__, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation for tables containing complex data for the current water year. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS __–__," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which

the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data also are given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments follow to clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.—The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

INSTANTANEOUS PEAK FLOW.—The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.—The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, or about 326,000 gallons, or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Inches (IN.) indicates the depth to which the drainage area would be covered if all the runoff for a given period were distributed on it uniformly.

10 PERCENT EXCEEDS.—The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that is exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements generally are made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing the table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of measurements of stage and discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second (ft^3/s) for values less than 1 ft^3/s, to the nearest tenth between 1.0 and 10 ft^3/s, to whole numbers between 10 and 1,000 ft^3/s, and to three significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the measured discharge.

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 20192, maintains an index of sites as well as an index of records of discharge collected by other agencies but not published by the U.S. Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge measurement notes, gage-height records, temperature measurements, and rating tables are on file in the District Office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District Office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve various types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape or stored electronically in a data logger. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 2 through 12.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is the assurance that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, are made onsite when samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures are followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in "Techniques of Water-Resources Investigations," Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. All these references are listed in the section "Publications on Techniques of Water-Resources Investigations." Also, detailed information on collecting, treating, and shipping samples may be obtained from the District Office.

One sample can adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative value available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based on hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the District Office.

Historical and current (2000) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter (ng/L). If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter (µg/L) and could reflect contamination introduced during some phase of the procedure.

Water Temperature

Water temperatures are measured at the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District Office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations measured immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with the ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of suspended sediment, bed material, and bed load are included for some stations.

Estimates of bed-load and total-sediment discharge are included for some stations. Computations of monthly bed-load discharges are based on the relation between instantaneous water discharge and corresponding bed-load discharge for the station. Values of bed-load discharge used in defining this relation are based on samples obtained by use of the Helley-Smith or BL 84 bed-load samplers or by modified-Einstein or Meyer-Peter Muller computation procedures. Application of the bed-load-transport relation at a station was made on a daily basis or subdivided-day basis. The bed-load samplers are designed to collect time-weighted samples for the sediment moving within 0.25 ft of the streambed. Sediment moving in this portion of the flow cannot be sampled with standard suspended-sediment samplers. Calibration of the bed-load samplers has not been completed, and a trap efficiency of 1.0 has been assumed applicable to these devices. Error sources in the theoretical methods, based on analysis of bed-material characteristics, channel geometry, and associated hydraulic factors, are also undefined. In consequence, figures of bed-load discharge must be used with caution. They are estimates, at best, and are subject to revision.

Cross-Sectional Data

Cross-sectional surveys of water temperature, pH, specific conductance, dissolved oxygen, and suspended sediment are done at all NASQAN, NAWQA, and Hydrologic Benchmark Stations during various seasons and surface-water discharges. Documentation of cross-section variation of water quality is essential in order to determine how many samples in a cross section are necessary to ensure a representative composite sample.

Laboratory Measurements

Sediment samples, biochemical-oxygen-demand (BOD) samples, indicator-bacteria samples, and daily specific-conductance samples are analyzed locally. All other samples are analyzed in the U.S. Geological Survey's National Water-Quality Laboratory in Arvada, Colorado. Methods used to analyze sediment samples and to compute sediment records are described in the Techniques of Water-Resources Investigations, Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental-sample data cannot be interpreted adequately because the errors associated with the sample data are unknown. The various types of QC samples collected by this District are described in the following section. Procedures have been established for the storage of water quality-control data within the U.S. Geological Survey. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure the environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this District are:

Field blank is a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank is a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank is a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank is a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank is a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank is a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank is a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this District are:

Sequential sample is a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample is a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and other data obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.—See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.—This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the individual parameters.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor, temperature recorder, sediment-pumping sampler, or other sampling device is in operation at a station.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.—Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—If errors in water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, National Water Information System (NWIS), and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

ACCESS TO USGS WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://water.usgs.gov.

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of additional data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices. (See address on the back of the title page.)

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English (inch-pound) units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algae are mostly aquatic single-celled, colonial, or multicelled plants containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inch (IN., in.) as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it.

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by a well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestines of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35°C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all the organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41°C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus feacium, Streptococcus avium,* and their variants.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5˚C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample.

Base flow is flow in a channel sustained by ground-water discharge in the absence of direct runoff.

Bed load is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are the group of animals inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment in the sample. Dry mass is expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material: See Bed material.

Cells/volume (cells per volume) refers to the number of plankton cells or natural units counted using a microscope and grid or counting cell. Results are generally reported as cells or units per milliliter.

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell numbers of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere} \quad 4/3\ \pi r^3 \qquad \text{cone} \quad 1/3\ \pi r^3 h \qquad \text{cylinder} \quad \pi r^3 h.$$

From cell volume, total algal biomass expressed as biovolume ($\mu m^3/mL$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common green pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site that meets either of the following conditions:

1. Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent.

2. Water-quality, sediment, or other hydrologic measurements are recorded at least daily.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the station. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Cubic foot per second per day (CFS-DAY, cfs-day, cfs/d, or [(ft^3/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,317 gallons, or 2,447 cubic meters.

Daily record is a summary of streamflow, sediment, or water-quality values computed from data collected with sufficient frequency to obtain reliable estimates of daily mean values.

Daily record station is a site for which daily records of streamflow, sediment, or water-quality values are computed.

Datum, as used in this report, is an elevation above mean sea level to which all gage height readings are referenced.

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the volume of water (or more broadly, volume of fluid including solid- and dissolved-phase material), that passes a given point in a given period of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days in a year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1–March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Instantaneous discharge is the discharge at a particular instant of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) content of water in equilibrium with air is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During that analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to reflect the change. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n} \quad ,$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the samples are the same, to some positive number, when some or all the organisms in the sample are different.

Drainage area of a site on a stream is that area, measured in a horizontal plane, that has a common outlet at the site for its surface runoff. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that is occupied by a drainage system with a common outlet for its surface runoff (see "Drainage area").

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65˚C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue.

Extractable-organic halides (EOX) are organic compounds which contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried stream-bottom sediments. The ethyl-acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the stream-bottom sediments.

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level (see "Datum"). This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

Gage height (G.H.) is the water-surface elevation referenced to the gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Ground-water level is the elevation of the water table or another potentiometric surface at a particular location.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA web site:*

http://www.co-ops.nos.noaa.gov/tideglos.html

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the U.S. Geological Survey. Each hydrologic unit is identified by an 8-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site:*

http://www.co-ops.nos.noaa.gov/tideglos.html

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean high tide is the average of all high tides over a specified period.

Mean lower low water (MLLW) is the average of the lower low water height of each tidal day observed over the National Tidal Datum Epoch. The National Tidal Datum Epoch is the specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values.

Mean low tide is the average of all low tides over a specified period.

Mean water level is the average of all tides over a specified period.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Miscellaneous site, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are collected once, or more often on a random or discontinuous basis.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthicinvertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place. *See NOAA web site:*

http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), suspended organic carbon (SOC), or total organic carbon (TOC).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area of habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024–0.004	Sedimentation
Silt	.004–.062	Sedimentation
Sand	.062–2.0	Sedimentation/sieve
Gravel	2.0–64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for nativewater analysis.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periodic station is a site where stage, discharge, sediment, chemical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of any radioactive nuclide that yields 3.7×10^{-10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 0.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (*Pyrrhophyta*) are a group of algae that are free-swimming unicells characterized by a red pigment spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCN's) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCB's) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus, the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

River mile is the distance of a point on a river measured in miles from the river’s mouth along the low-water channel.

River mileage is the linear distance along the meandering path of a stream channel determined in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council.

Runoff in inches (IN., in.) is the depth, in inches, to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929. *See*:

http://www.co-ops.nos.noaa.gov/glossary/gloss_n.html#NGVD

Sediment is solid material that is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along or very close to the bed. In this report, bed load is considered to consist of particles in transit from the bed to an elevation equal to the top of the bed-load sampler nozzle (usually within 0.25 ft of the streambed).

Bed-load discharge (tons per day) is the quantity of sediment moving as bed load, reported as dry weight, that passes a cross section in a given time.

Suspended sediment is the sediment that is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

Mean concentration of suspended sediment is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the quantity of sediment moving in suspension, reported as dry weight, that passes a cross section in a given time. It is calculated in units of tons per day as follows:

$$\text{concentration (mg/L)} \times \text{discharge (ft}^3\text{/s)} \times 0.0027.$$

Suspended-sediment load is a term that refers to material in suspension. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration.

Suspended total residue at 105°C concentration is the concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). A small aliquot of the sample is used for the analysis.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, reported as dry weight, that passes a cross section in a given time.

Total sediment load or total load is a term that refers to the total sediment (bed load plus suspended-sediment load) that is in transport. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with total sediment discharge.

Seven-day 10-year low flow (7Q10, $7Q_{10}$) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The 7Q10 has a 10-percent chance of occurring in any given year.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Water ranges in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage: See "Gage height."

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic-organism collection and plexiglass strips for periphyton collection.

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Surface area of a lake or impoundment is that area encompassed by the boundary of the lake or impoundment as shown on U.S. Geological Survey topographic maps, or on other available maps or photographs. The computed surface areas reflect the water levels of the lakes or impoundments at the times when the information for the maps or photographs was obtained.

Surficial bed material is the top 0.1 to 0.2 ft of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus, the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Synoptic Studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom .....Animal
Phylum ..... Arthropoda
Class..... Insecta
Order ..... Ephemeroptera
Family ..... Ephemeridae
Genus ..... *Hexagenia*
Species ..... *Hexagenia limbata*

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that records water temperature in a digital format on punched paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot is the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is the rate representing a mass of 1 ton of a constituent in streamflow passing a cross section in 1 day. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the total amount of a given constituent in a representative suspended-sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a suspended-sediment mixture and that the analytical method determined all the constituent in the sample.)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total in bottom material.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total, recoverable is the amount of a given constituent that is in solution after a representative suspended-sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment and thus, the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Turbidity is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) or Formazin turbidity units (FTU) depending on the method and equipment used.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Volatile organic compounds (VOC's) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOC's are manmade chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water level is the water-surface elevation or stage of the free surface of a body of water above or below any datum (see "Gage height"), or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

Water table is the surface of a ground-water body at which the water is at atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2000, is called the "2000 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Well is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

Wet weight refers to the weight of animal tissue or other substance including its contained water.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI Book 1, Chapter D1. 1975. 65 p.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI Book 1, Chapter D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI Book 2, Chapter D1. 1974. 116 p.

2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI Book 2, Chapter D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI Book 2, Chapter E1. 1971. 126 p.

2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI Book 2, Chapter E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI Book 2, Chapter F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 p.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 p.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI Book 3, Chapter A3. 1968. 60 p.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI Book 3, Chapter A4. 1967. 44 p.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI Book 3. Chapter A5. 1967. 29 p.

3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI Book 3, Chapter A6. 1968. 13 p.

3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A7. 1968. 28 p.

3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A8. 1969. 65 p.

3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI Book 3, Chapter A9. 1989. 27 p.

3-A10. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI Book 3, Chapter A10. 1984. 59 p.

3-A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI Book 3, Chapter A11. 1969. 22 p.

3-A12. *Fluorometric procedures for dye tracing,* Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A12. 1986. 34 p.

3-A13. *Computation of continuous records of streamflow,* by E.J. Kennedy: USGS–TWRI Book 3, Chapter A13. 1983. 53 p.

3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI Book 3, Chapter A14. 1983. 46 p.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI Book 3, Chapter A15. 1984. 48 p.

3-A16. *Measurement of discharge using tracers,* by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI Book 3, Chapter A16. 1985. 52 p.

3-A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI Book 3, Chapter A17. 1985. 38 p.

3-A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI Book 3, Chapter A18. 1989. 52 p.

3-A19. *Levels at streamflow gaging stations,* by E.J. Kennedy: USGS–TWRI Book 3, Chapter A19. 1990. 31 p.

3-A20. *Simulation of soluable waste transport and buildup in surface waters using tracers,* by F.A. Kilpatrick: USGS–TWRI Book 3, Chapter A20. 1993. 38 p.

3-A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI Book 3, Chapter A21. 1995. 56 p.

Section B. Ground-Water Techniques

3-B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI Book 3, Chapter B1. 1971. 26 p.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G.D. Bennett: USGS–TWRI Book 3, Chapter B2. 1976. 172 p.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J.E. Reed: USGS–TWRI Book 3, Chapter B3. 1980. 106 p.

3-B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI Book 3, Chapter B4. 1990. 232 p.

3-B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI Book 3, Chapter B4. 1993. 8 p.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction,* by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI Book 3, Chapter B5. 1987. 15 p.

3-B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI Book 3, Chapter B6. 1987. 28 p.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI Book 3, Chapter B7. 1992. 190 p.

Section C. Sedimentation and Erosion Techniques

3-C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI Book 3, Chapter C1. 1970. 55 p.

3-C2. *Field methods for measurement of fluvial sediment,* by T.K. Edwards and G.D. Glysson: USGS–TWRI Book 3, Chapter C2. 1999. 89 p.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI Book 3, Chapter C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4-A1. *Some statistical tools in hydrology,* by H.C. Riggs: USGS–TWRI Book 4, Chapter A1. 1968. 39 p.

4-A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI Book 4, Chapter A2. 1968. 15 p.

Section B. Surface Water

4-B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI Book 4, Chapter B1. 1972. 18 p.

4-B2. *Storage analyses for water supply,* by H.C. Riggs and C.H. Hardison: USGS–TWRI Book 4, Chapter B2. 1973. 20 p.

4-B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI Book 4, Chapter B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4-D1. *Computation of rate and volume of stream depletion by wells,* by C.T. Jenkins: USGS–TWRI Book 4, Chapter D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI Book 5, Chapter A1. 1989. 545 p.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI Book 5, Chapter A2. 1971. 31 p.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments,* edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI Book 5, Chapter A3. 1987. 80 p.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI Book 5, Chapter A4. 1989. 363 p.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI Book 5, Chapter A5. 1977. 95 p.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI Book 5, Chapter A6. 1982. 181 p.

Section C. Sediment Analysis

5-C1. *Laboratory theory and methods for sediment analysis,* by H.P. Guy: USGS–TWRI Book 5, Chapter C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6-A1. *A modular three-dimensional finite-difference ground-water flow model,* by M.G. McDonald and A.W. Harbaugh: USGS–TWRI Book 6, Chapter A1. 1988. 586 p.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI Book 6, Chapter A2. 1991. 68 p.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI Book 6, Chapter A3. 1993. 136 p.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI Book 6, Chapter A4. 1992. 108 p.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI Book 6, Chapter A5. 1993. 243 p.

6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction,* by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI Book 6, Chapter A6. 1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI Book 7, Chapter C1. 1976. 116 p.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI Book 7, Chapter C2. 1978. 90 p.

7-C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI Book 7, Chapter C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8-A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI Book 8, Chapter A1. 1968. 23 p.

8-A2. *Installation and service manual for U.S. Geological Survey manometers,* by J.D. Craig: USGS–TWRI Book 8, Chapter A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI Book 8, Chapter B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling,* by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A1. 1998. 47 p.

9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A2. 1998. 94 p.

9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A3. 1998. 75 p.

9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A4. 1999. 156 p.

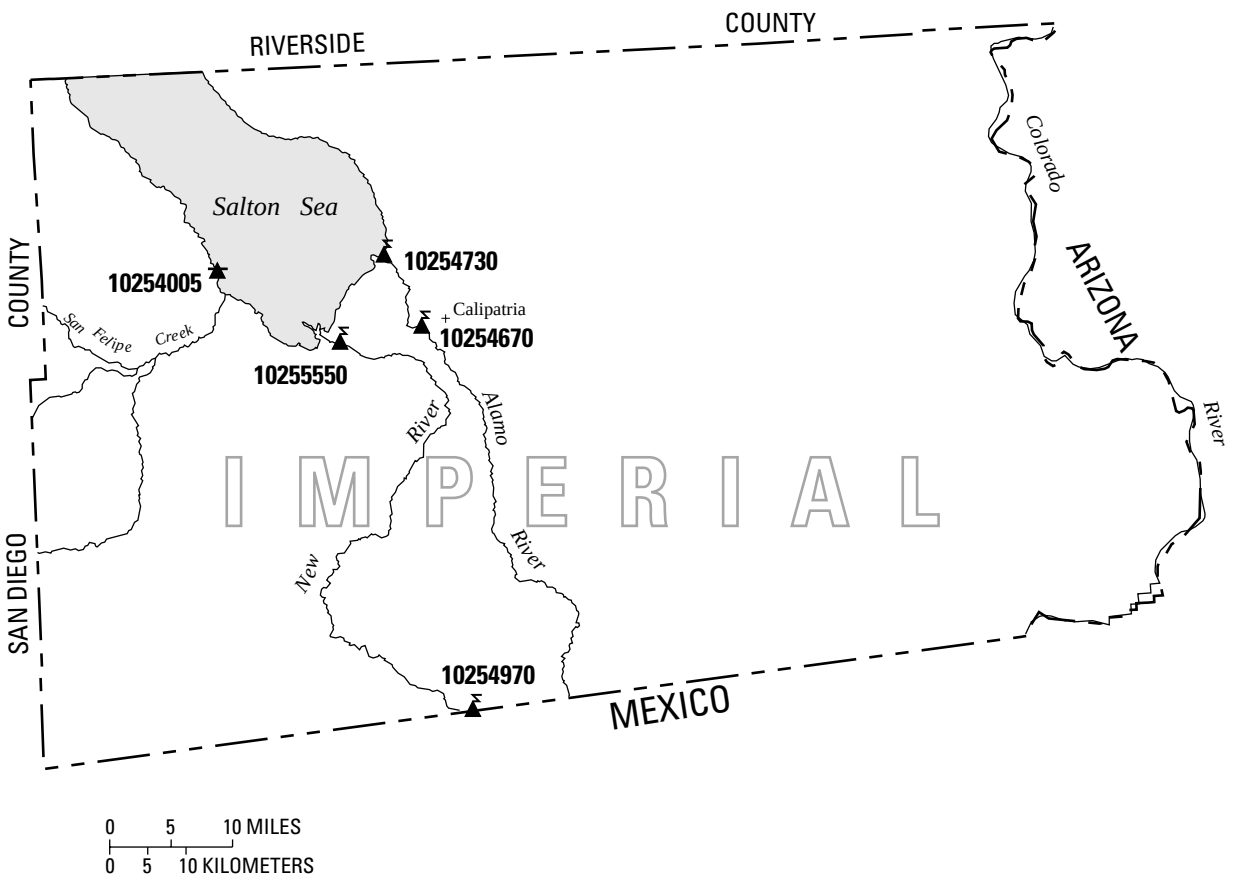
9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A5. 1999. 149 p.

9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements,* edited by F.D. Wilde and D.B. Radtke: USGS–TWRI Book 9, Chapter A6. 1998. Variously paginated.

9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators,* edited by D.N. Myers and F.D. Wilde: USGS–TWRI Book 9, Chapter A7. 1997 and 1999. Variously paginated.

9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-Material Samples,* by D.B. Radtke: USGS–TWRI Book 9, Chapter A8. 1998. 48 p.

9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities,* by S.L. Lane and R.G. Fay: USGS–TWRI Book 9, Chapter A9. 1998. 60 p.



EXPLANATION

- GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- RESERVOIR SITE AND ELEVATIONS

Figure 2. Location of discharge stations in Imperial County.

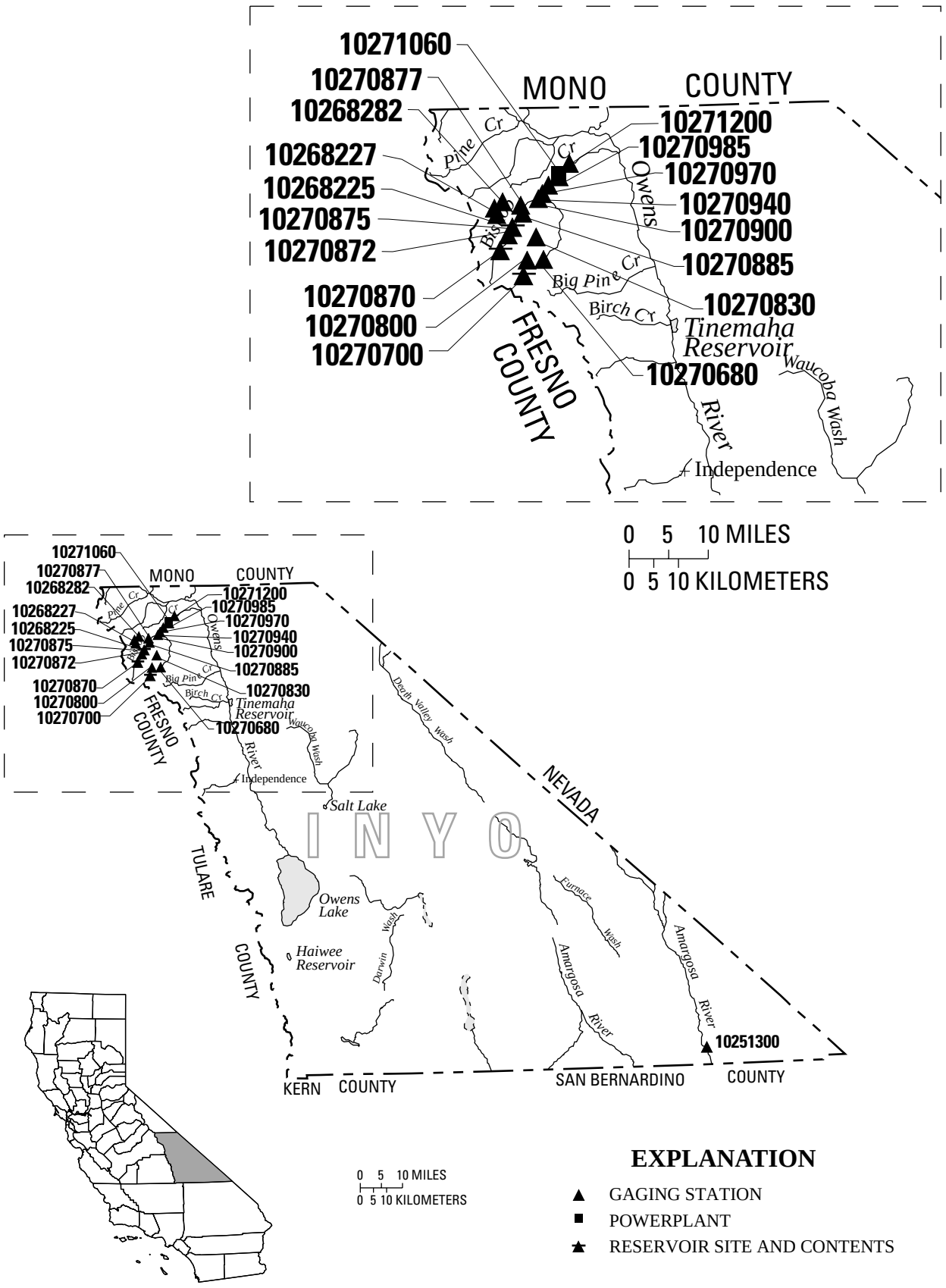


Figure 3. Location of discharge stations in Inyo County.

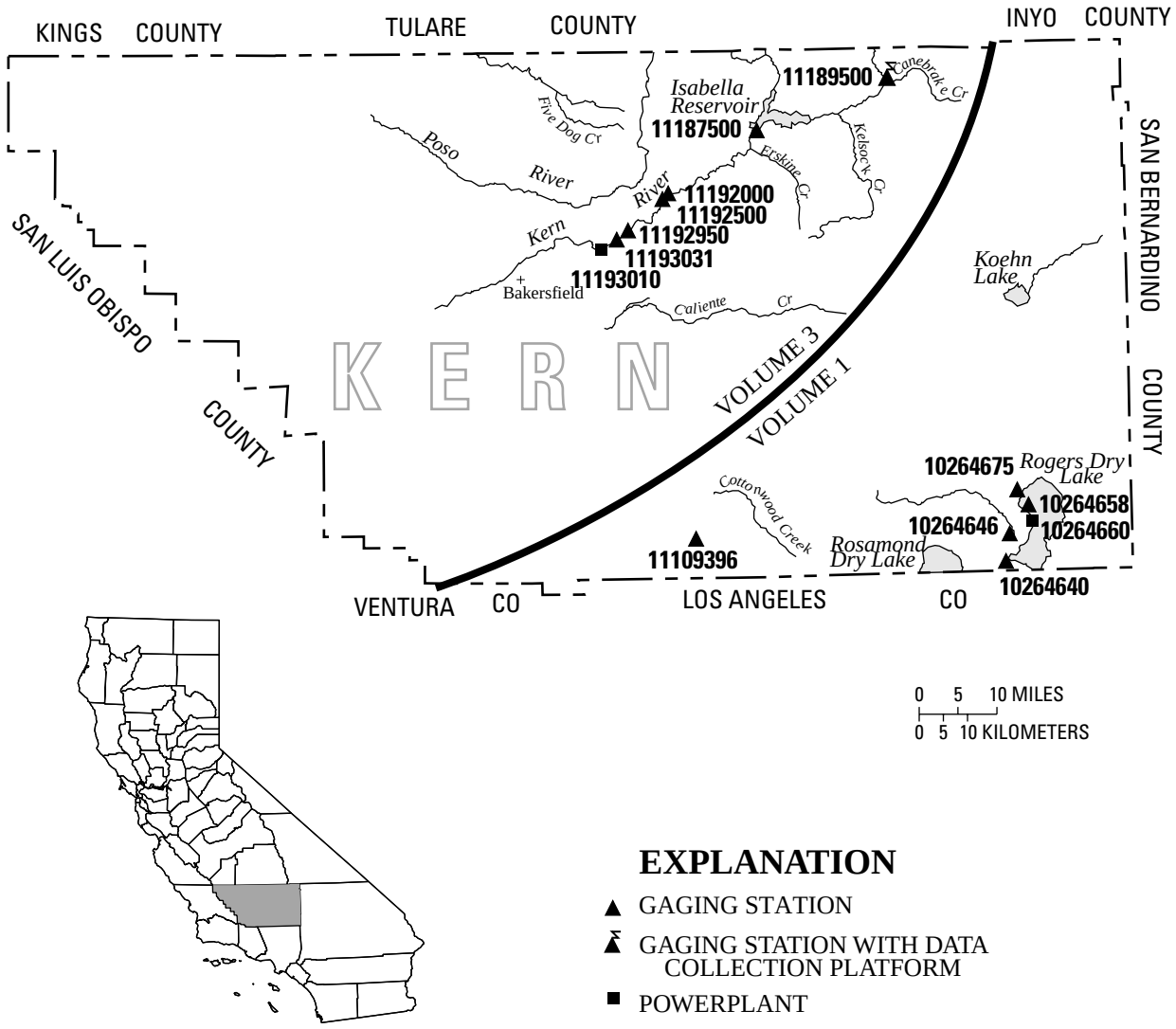


Figure 4. Location of discharge stations in Kern County.
(NOTE: Records for stations 11187500 through 11193031 published in volume 3.)

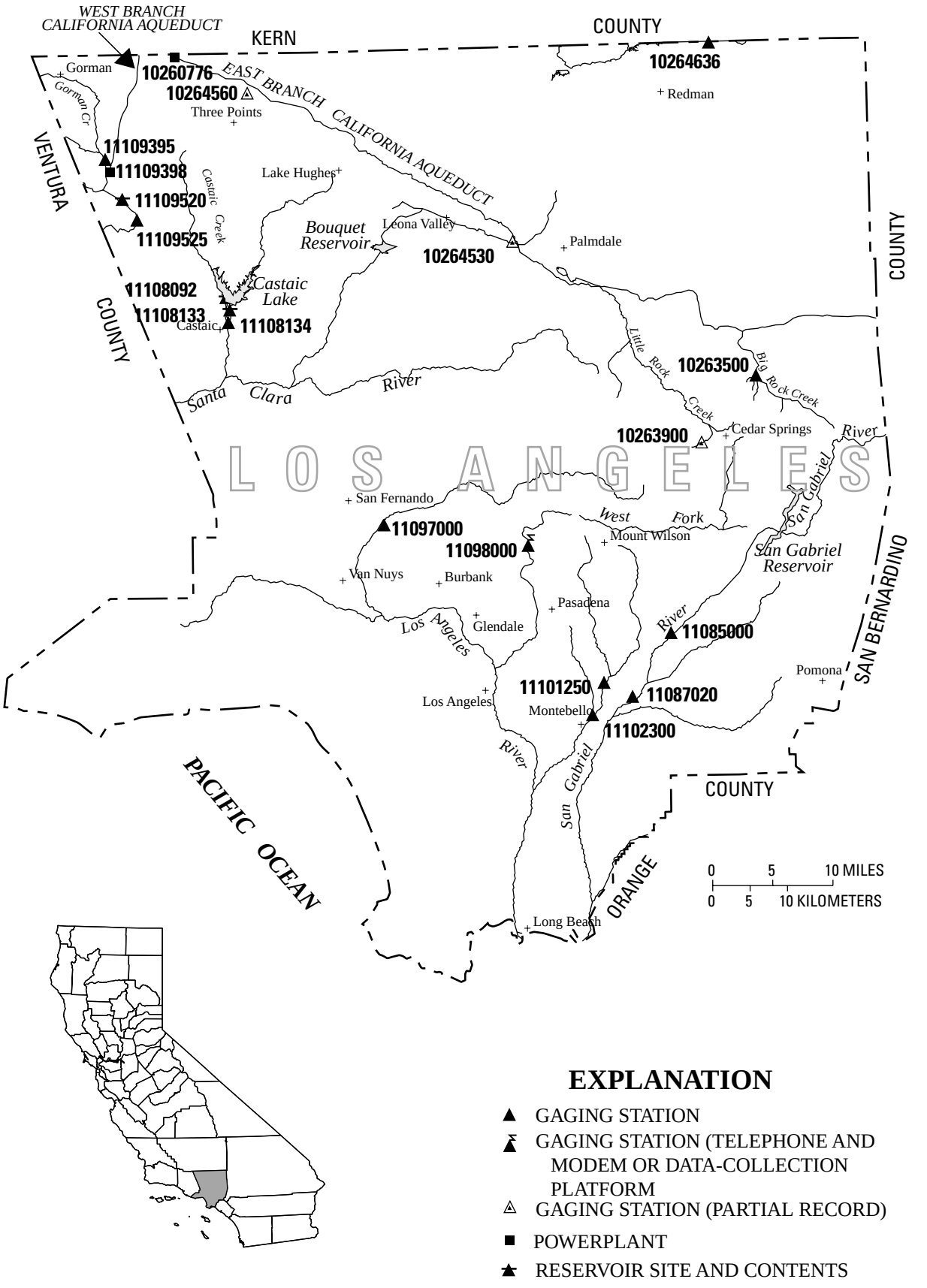


Figure 5. Location of discharge stations in Los Angeles County.

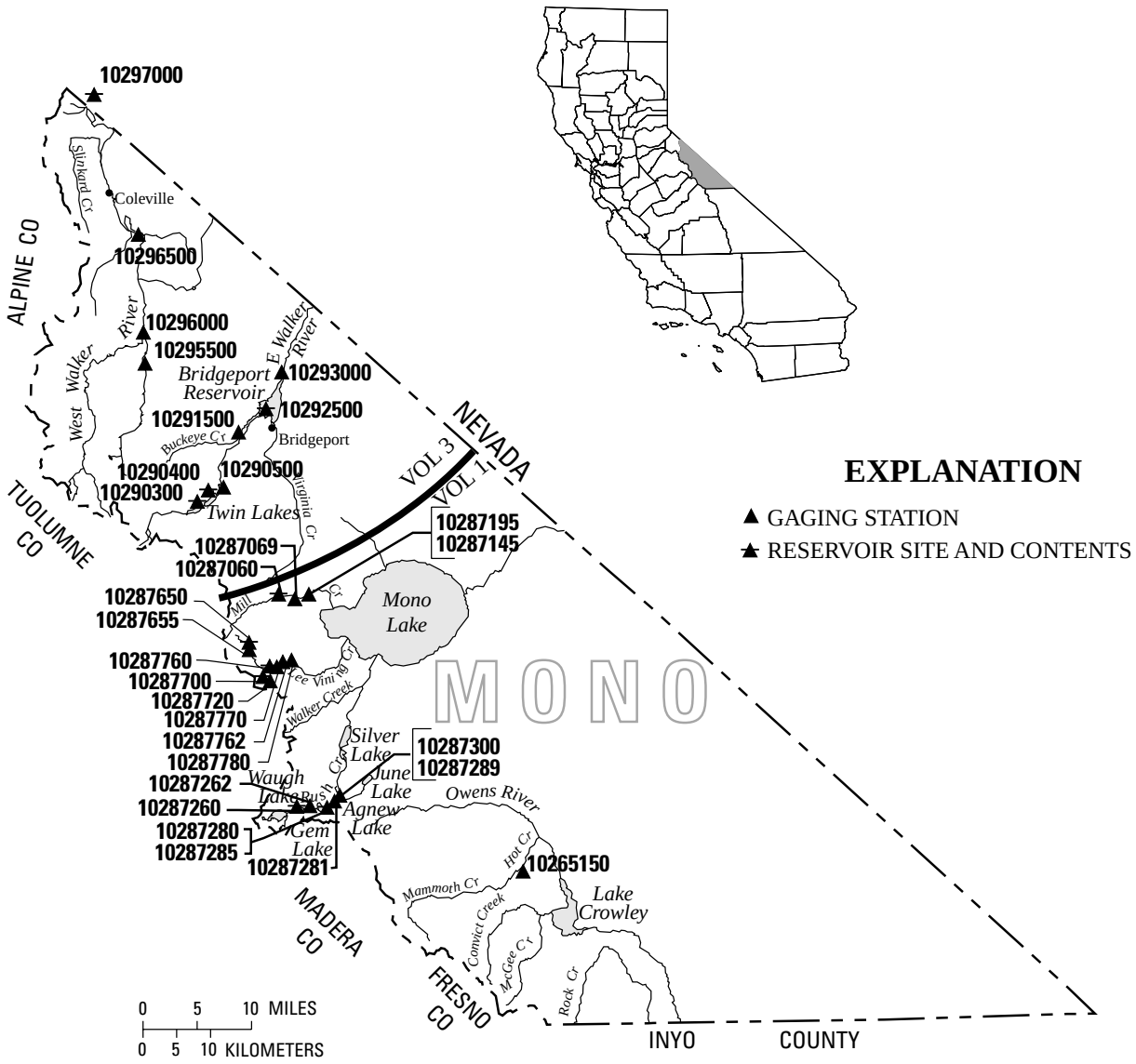


Figure 6. Location of discharge stations in Mono County.
(NOTE: Records for stations 10290300 through 10297000 published in volume 3.)

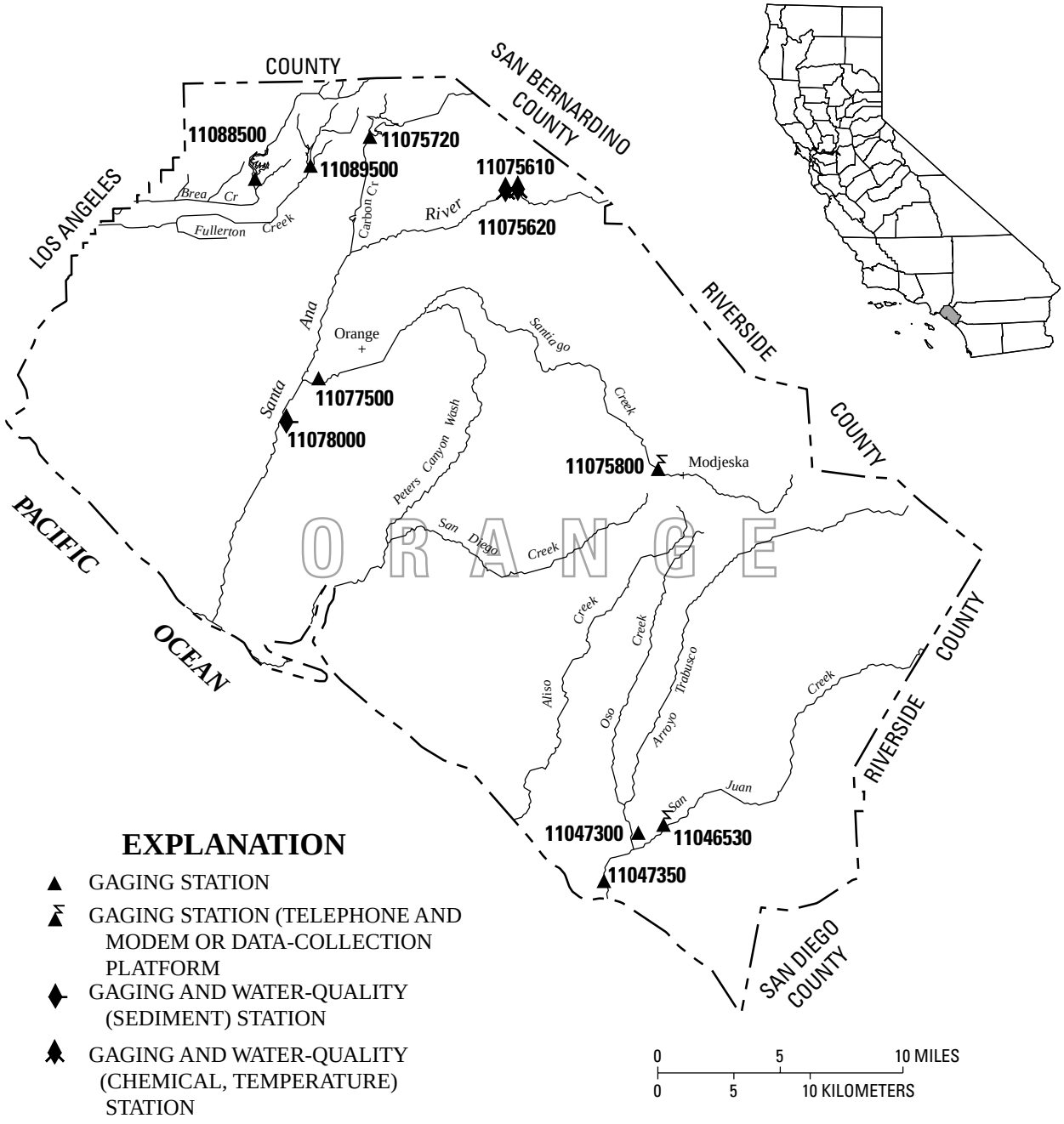
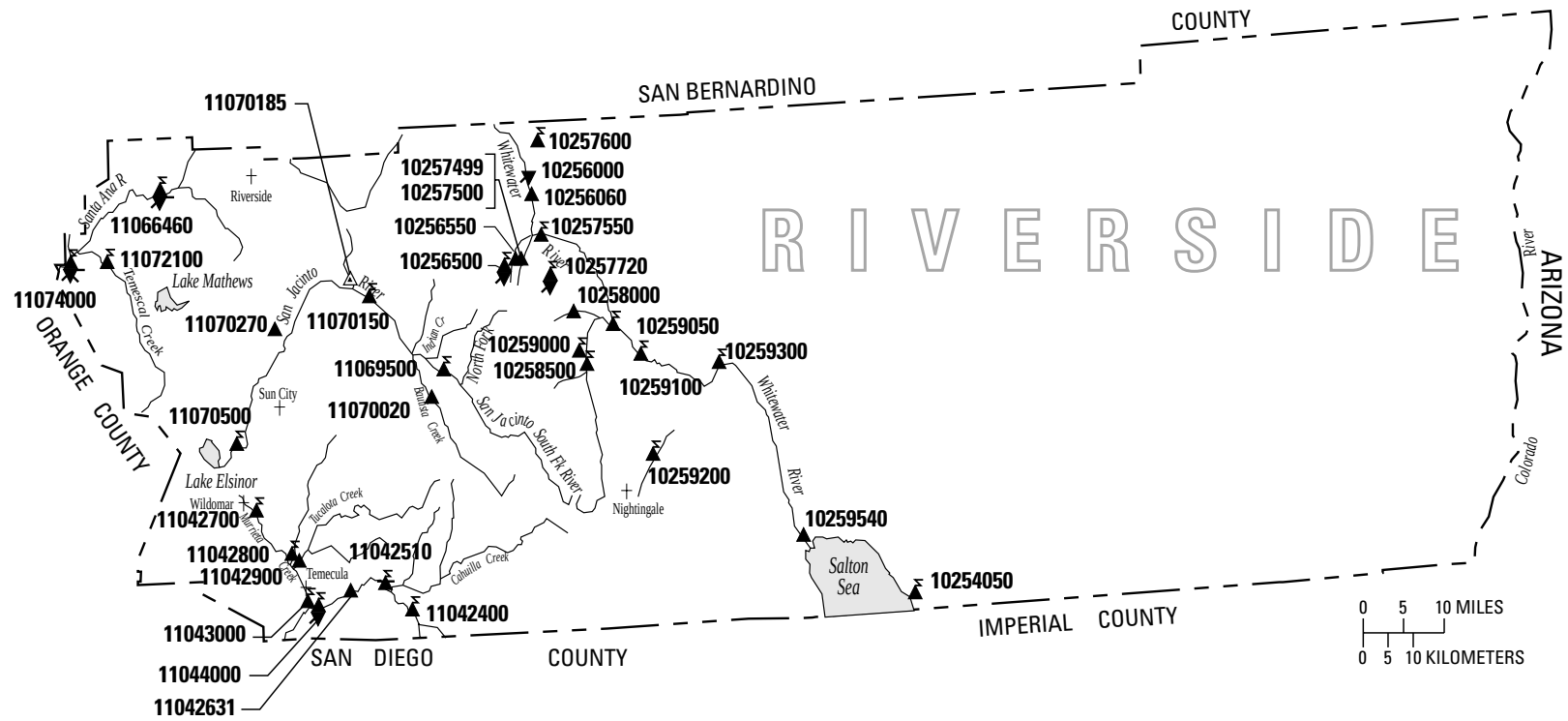


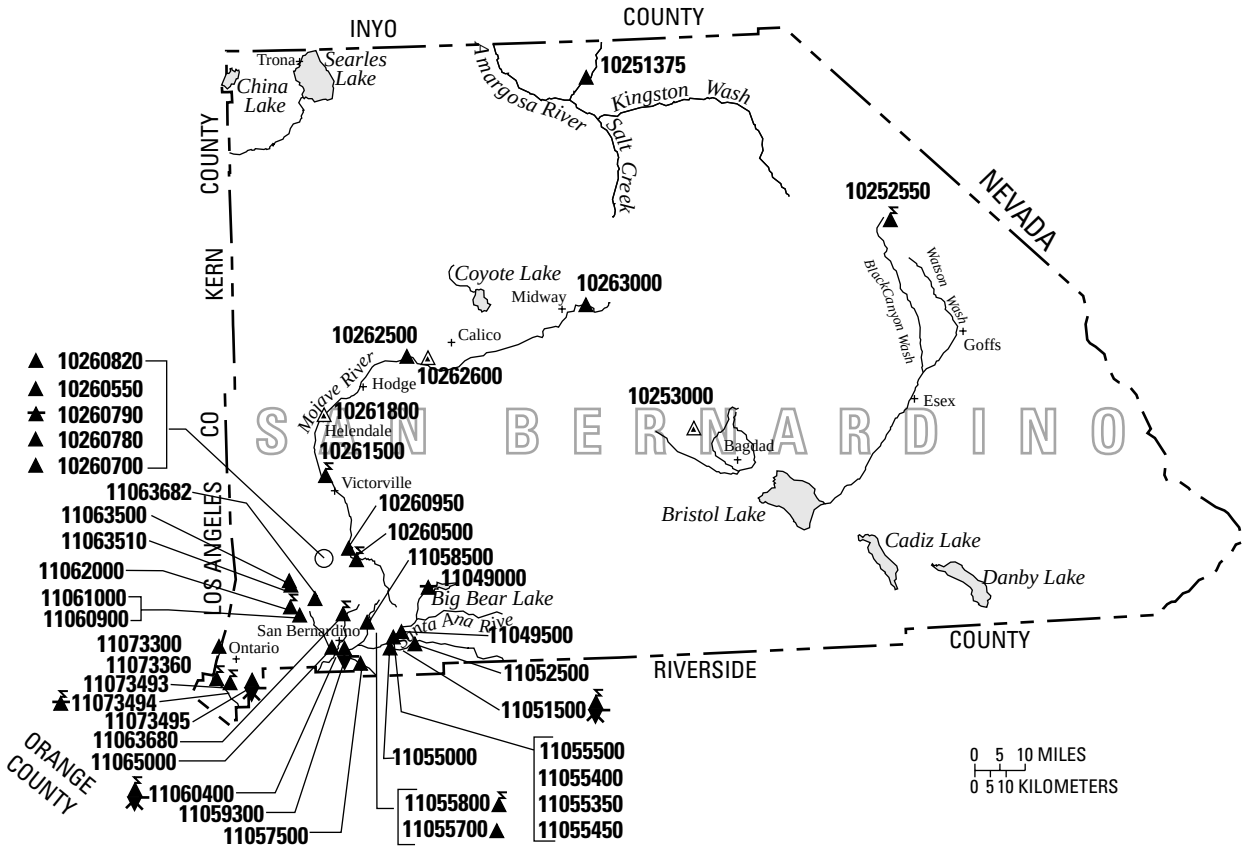
Figure 7. Location of discharge and water-quality stations in Orange County.



EXPLANATION

- GAGING STATION
- GAGING STATION (PARTIAL RECORD)
- GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- GAGING AND WATER-QUALITY (CHEMICAL) STATION
- GAGING (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM) AND WATER-QUALITY (CHEMICAL) STATION
- GAGING (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM) AND WATER-QUALITY (CHEMICAL, SEDIMENT) STATION
- GAGING (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM) AND WATER-QUALITY (CHEMICAL, TEMPERATURE, SEDIMENT) STATION
- WATER-QUALITY (CHEMICAL) STATION
- RESERVOIR SITE AND CONTENTS (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)

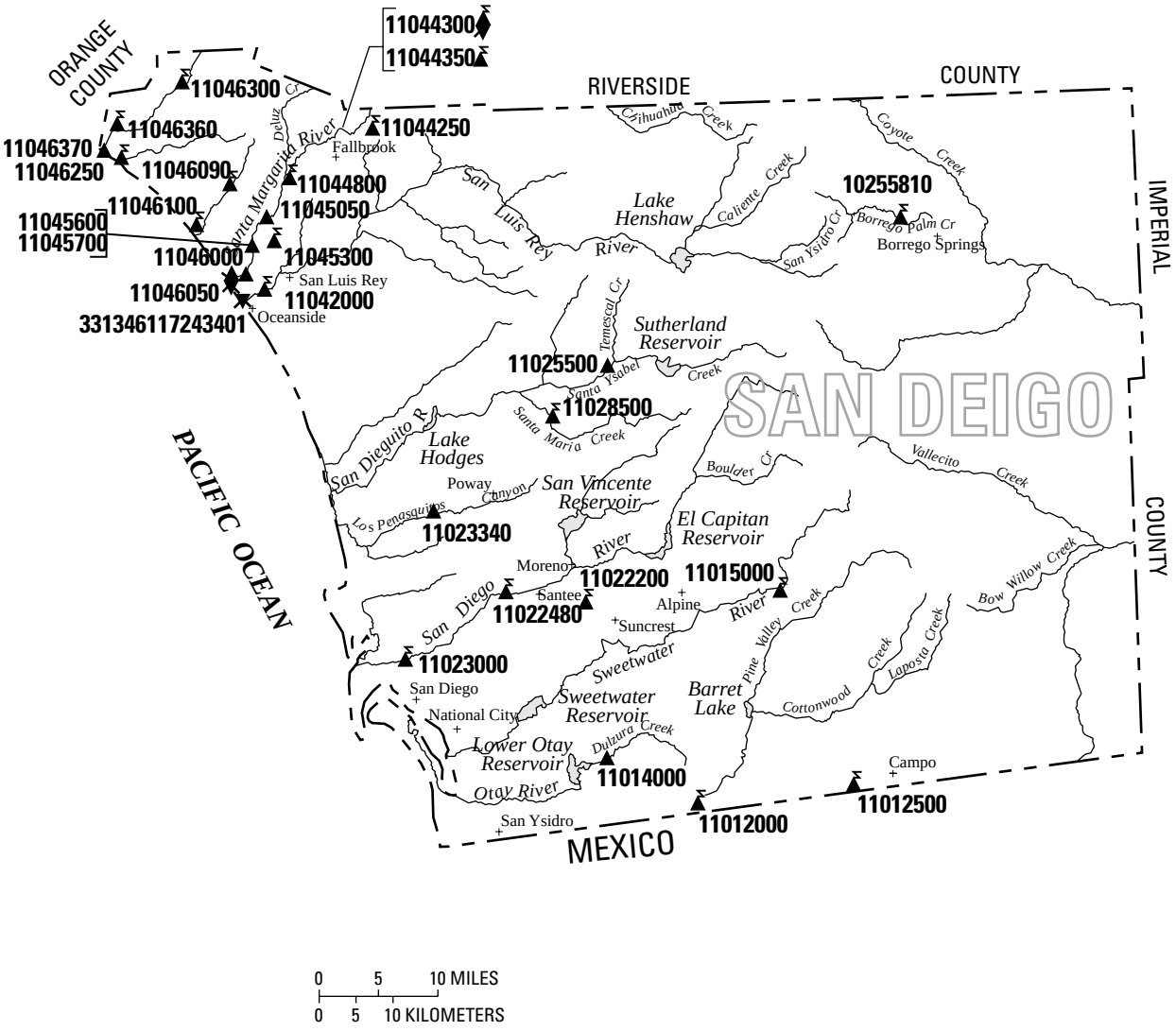
Figure 8. Location of discharge and water-quality stations in Riverside County.



EXPLANATION

- ▲ GAGING STATION
- ◬ GAGING STATION (PARTIAL RECORD)
- GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- GAGING AND WATER-QUALITY (SEDIMENT) STATION
- GAGING AND WATER-QUALITY (SEDIMENT, CHEMICAL, TEMPERATURE) STATION
- RESERVOIR SITE AND CONTENTS
- GAGING AND WATER-QUALITY (SEDIMENT, CHEMICAL, TEMPERATURE) STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- RESERVOIR SITE AND ELEVATION WITH DATA-COLLECTION PLATFORM

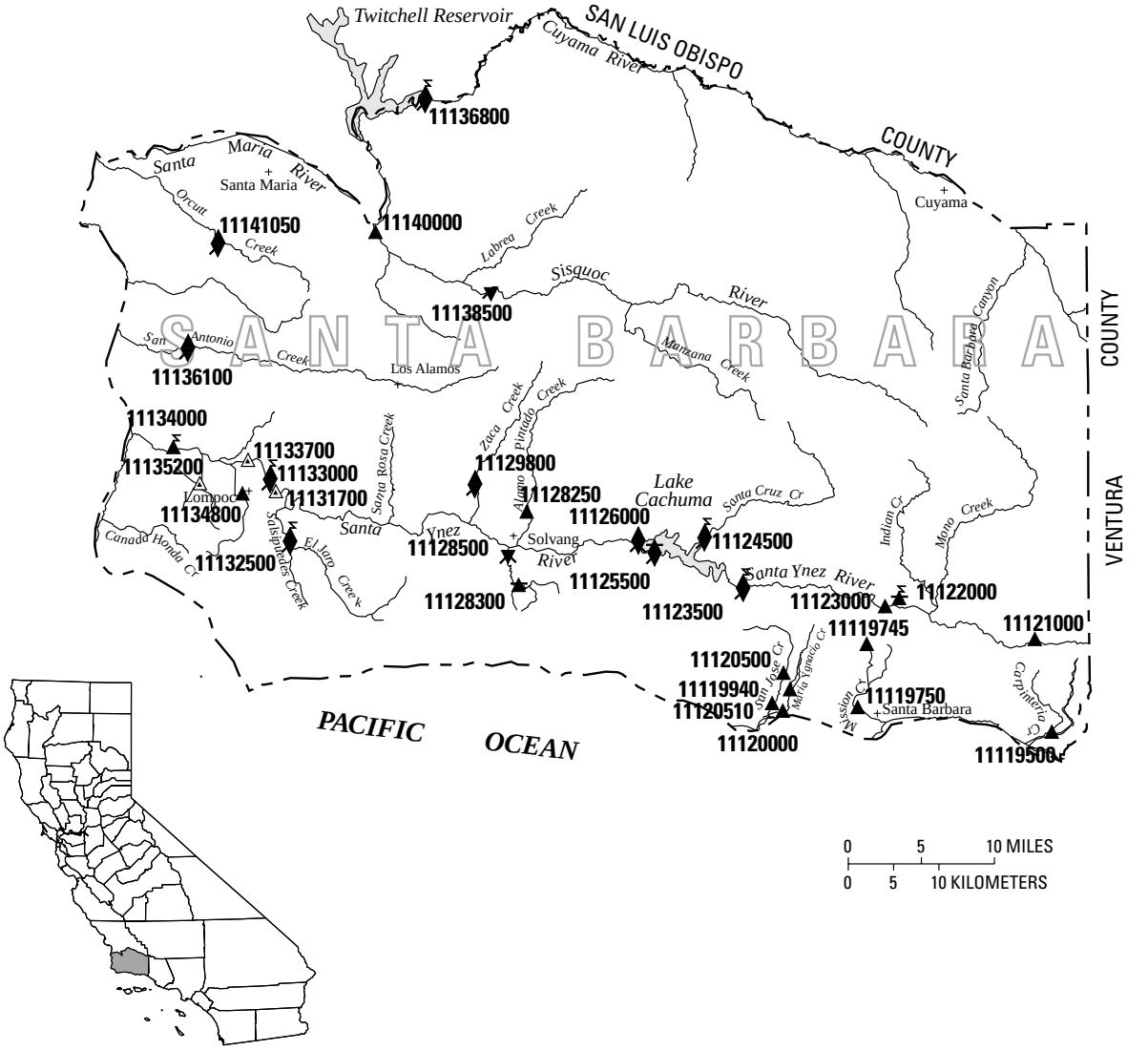
Figure 9. Location of discharge and water-quality stations in San Bernardino County.



EXPLANATION

- ▲ GAGING STATION
- ▲ GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- ▲ GAGING (TIDE) AND WATER-QUALITY (CHEMICAL, TEMPERATURE) STATION
- ▲ GAGING (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM) AND WATER-QUALITY (CHEMICAL) STATION
- ▲ WATER-QUALITY (CHEMICAL, TEMPERATURE) STATION

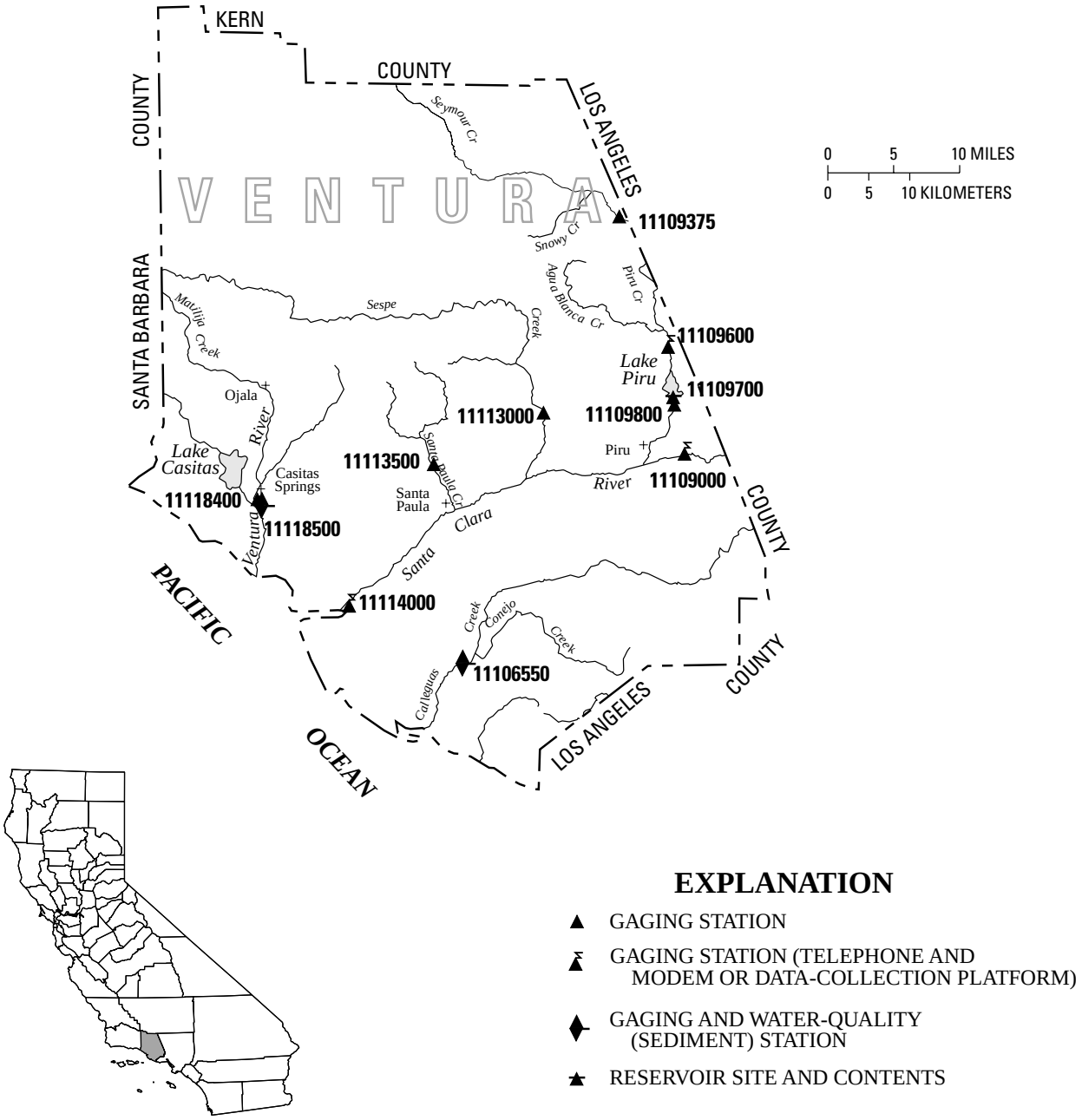
Figure 10. Location of discharge and water-quality stations in San Diego County.



EXPLANATION

- GAGING STATION
- GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- GAGING STATION (PARTIAL RECORD)
- GAGING AND WATER-QUALITY (SEDIMENT) STATION
- GAGING AND WATER-QUALITY (CHEMICAL) STATION
- GAGING AND WATER-QUALITY (CHEMICAL)(TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM) STATION
- GAGING AND WATER-QUALITY (CHEMICAL, TEMPERATURE) STATION
- GAGING AND WATER-QUALITY (CHEMICAL, TEMPERATURE) STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- RESERVOIR SITE AND CONTENTS
- RESERVOIR SITE AND CONTENTS (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- RESERVOIR SITE AND CONTENTS AND WATER-QUALITY (CHEMICAL) STATION
- WATER-QUALITY (CHEMICAL, TEMPERATURE) STATION
- WATER-QUALITY (CHEMICAL) STATION

Figure 11. Location of discharge and water-quality stations in Santa Barbara County.



EXPLANATION

- ▲ GAGING STATION
- ▲ GAGING STATION (TELEPHONE AND MODEM OR DATA-COLLECTION PLATFORM)
- ◆ GAGING AND WATER-QUALITY (SEDIMENT) STATION
- ★ RESERVOIR SITE AND CONTENTS

Figure 12. Location of discharge and water-quality stations in Ventura County.

SURFACE-WATER-DISCHARGE AND SURFACE-WATER-QUALITY RECORDS

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
e	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptable range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
ND	Not detected.
&	Biological organism estimated as dominant.
*	Instantaneous streamflow at the time of cross-sectional measurements.
**	Partial sampled width.
[1]	Laboratory value.
[2]	Laboratory fixed-end point titration.
A	Samples collected by another agency.
N	Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.
V	Analyte was detected in both the environmental sample and the associated blanks.
†	Sample collected using an automatic sampler.
M	Presence of material verified, but not quantified.

Dissolved Trace-Element Concentrations

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE: Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences, based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Data Precision

NOTE: Precision varies for different analytical methods used to determine the same constituent. The presence of trailing zeroes after the decimal in values printed in this report does not necessarily indicate that the method used for the determination is as precise as the level implied by the rightmost zero.

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UPPER AMARGOSA

10251300 AMARGOSA RIVER AT TECOPA, CA

LOCATION.—Lat 35°50'53", long 116°13'43", in NW 1/4 NW 1/4 SE 1/4 sec.9, T.20 N., R.7 E., Inyo County, Hydrologic Unit 18090202, on right bank, 20 ft upstream from Old Spanish Trail Road, and 0.2 mi west of Tecopa.

DRAINAGE AREA.—3,090 mi^2, approximately, much of which is noncontributing.

PERIOD OF RECORD.—October 1961 to August 1983, October 1991 to September 1995, 1998 (miscellaneous discharge), January 1999 to current year.

GAGE.—Water-stage recorder and culvert control. Elevation of gage is 1,310 ft above sea level, from topographic map. Prior to Oct. 16, 1991, at datum 16.52 ft higher.

REMARKS.—No estimated daily discharges. Records fair. City of Tecopa pumps water for municipal use upstream. See schematic diagram of Amargosa River Basin. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,600 ft^3/s, Aug. 19, 1983, determined from culvert computations and flow over road, gage height, 16.00 ft, datum then in use; no flow some days some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 16	2300	99	5.25	Mar 05	2300	46	4.95
Feb 23	2000	*107	5.29				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.17	.65	1.2	1.3	.58	.09	.11	.12	.15	.09	.05
2	.05	.18	.57	1.4	1.3	.28	.09	.12	.12	.15	.09	.05
3	.06	.19	.65	1.0	1.2	.16	.10	.13	.13	.14	.09	.05
4	.06	.19	.52	1.1	1.3	.12	.10	.12	.12	.14	.09	.05
5	.06	.22	.56	1.3	1.4	4.2	.10	.11	.12	.15	.09	.05
6	.07	.21	.70	1.1	1.3	13	.09	.11	.12	.15	.09	.05
7	.06	.22	.77	1.1	1.2	3.8	.10	.10	.12	.14	.09	.06
8	.07	.24	.79	1.1	1.3	4.2	.11	.10	.12	.13	.09	.06
9	.07	.27	.67	1.3	1.4	5.4	.09	.11	.13	.13	.09	.06
10	.08	.27	.84	1.3	1.2	1.5	.09	.10	.14	.13	.09	.06
11	.08	.29	.78	1.4	1.2	.49	.09	.11	.13	.13	.08	.06
12	.08	.31	.69	1.6	1.3	.36	.09	.12	.13	.12	.08	.05
13	.08	.32	.88	1.5	1.3	.23	.10	.13	.14	.12	.08	.05
14	.09	.32	.82	1.5	1.3	.18	.09	.13	.14	.13	.08	.05
15	.09	.33	.79	1.6	1.8	.18	.11	.12	.15	.13	.08	.05
16	.08	.36	.87	1.7	14	.14	.13	.12	.14	.12	.08	.05
17	.09	.36	.94	1.7	26	.14	.13	.13	.14	.12	.07	.05
18	.10	.34	.97	1.8	1.9	.12	.18	.13	.14	.12	.07	.05
19	.09	.34	1.1	1.7	.49	.11	.19	.13	.13	.12	.07	.05
20	.09	.38	.98	1.7	.38	.13	.18	.13	.14	.11	.07	.05
21	.10	.41	.90	1.5	2.2	.09	.16	.12	.14	.11	.07	.05
22	.10	.37	.78	1.4	.91	.09	.17	.12	.14	.11	.07	.05
23	.10	.36	.74	1.3	23	.10	.17	.12	.15	.11	.07	.05
24	.12	.42	.84	1.4	22	.10	.16	.12	.14	.11	.07	.05
25	.14	.45	.87	1.5	6.7	.12	.15	.13	.14	.11	.07	.05
26	.14	.47	1.0	1.8	3.8	.11	.13	.14	.15	.10	.06	.05
27	.15	.56	1.1	1.5	2.7	.12	.13	.14	.15	.09	.06	.05
28	.15	.55	1.1	1.3	2.6	.14	.10	.12	.15	.10	.06	.05
29	.14	.56	1.1	1.2	.79	.14	.11	.11	.14	.09	.06	.05
30	.13	.60	1.1	1.2	---	.14	.10	.11	.14	.09	.06	.06
31	.14	---	1.2	1.2	---	.10	---	.12	---	.09	.05	---
TOTAL	2.92	10.26	26.27	43.4	127.27	36.57	3.63	3.71	4.06	3.74	2.36	1.56
MEAN	.094	.34	.85	1.40	4.39	1.18	.12	.12	.14	.12	.076	.052
MAX	.15	.60	1.2	1.8	26	13	.19	.14	.15	.15	.09	.06
MIN	.05	.17	.52	1.0	.38	.09	.09	.10	.12	.09	.05	.05
AC-FT	5.8	20	52	86	252	73	7.2	7.4	8.1	7.4	4.7	3.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

MEAN	1.60	.93	4.34	6.87	12.2	6.73	1.43	.49	.14	.53	6.29	4.45
MAX	39.1	11.4	65.3	56.2	95.6	54.2	13.4	3.19	2.55	3.52	103	93.1
(WY)	1977	1966	1966	1995	1993	1983	1978	1977	1969	1965	1983	1976
MIN	.000	.005	.39	.70	.69	.36	.074	.018	.000	.000	.000	.000
(WY)	1972	1993	1994	1994	1979	1994	1994	1993	1966	1963	1962	1964

SUMMARY STATISTICS	FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	265.75			
ANNUAL MEAN	.73		3.87	
HIGHEST ANNUAL MEAN			14.9	1983
LOWEST ANNUAL MEAN			.22	1994
HIGHEST DAILY MEAN	26	Feb 17	1500	Feb 26 1969
LOWEST DAILY MEAN	.05	Oct 2	.00	Jul 23 1962
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 31	.00	Aug 1 1962
INSTANTANEOUS PEAK FLOW	107	Feb 23	10600	Aug 19 1983
INSTANTANEOUS PEAK STAGE	5.29	Feb 23	16.00	Aug 19 1983
ANNUAL RUNOFF (AC-FT)	527		2800	
10 PERCENT EXCEEDS	1.3		2.5	
50 PERCENT EXCEEDS	.13		.21	
90 PERCENT EXCEEDS	.06		.00	

10251375 AMARGOSA RIVER AT DUMONT DUNES, NEAR DEATH VALLEY, CA

LOCATION.—Lat 35°41'43", long 116°15'07", in SW 1/4 NE 1/4 sec.32, T.19 N., R.7 E., San Bernardino, Hydrologic Unit 18090203, on left bank, 0.12 mi west of dirt road crossing Amargosa River and entrance to Dumont Dunes Recreation Area, and 13.9 mi south of turnoff to Tecopa on State Highway 127.

DRAINAGE AREA.—3,284 mi^2.

PERIOD OF RECORD.—February 1999 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 660 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 127 ft^3/s, February 24, gage height, 8.78 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 800 ft^3/s, Sept. 12, 1999, gage height, 9.83 ft; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.2	1.5	2.4	2.3	5.7	1.8	.86	.40	.03	.00	.37
2	.94	1.2	1.7	2.3	2.3	6.3	1.8	.78	.38	.00	.00	.35
3	.92	1.1	2.2	2.3	2.3	e4.0	1.8	.84	.41	.00	.00	.32
4	.97	1.2	2.1	2.3	2.3	e3.8	1.8	.94	.36	.02	.00	.30
5	1.0	1.2	1.8	2.4	2.2	e9.5	1.7	.87	.29	.06	.00	.26
6	.99	1.2	1.8	2.5	2.2	e15	1.7	.82	.22	.05	.00	.22
7	.94	1.2	1.9	2.4	2.2	e7.0	1.7	.80	.19	.04	.00	.23
8	1.0	1.2	1.9	2.5	2.2	11	1.6	.77	.17	.04	.00	.28
9	1.0	1.2	1.9	2.4	2.3	9.7	1.5	.70	.25	.04	.00	.22
10	1.0	1.3	1.9	2.5	2.3	6.1	1.4	.60	.26	.04	.00	.18
11	.99	1.3	1.8	2.5	2.1	5.1	1.4	.67	.18	.04	.00	.19
12	.97	1.2	1.9	2.5	2.2	4.7	1.4	.79	.15	.04	.00	.17
13	.95	1.2	1.8	2.5	3.3	4.1	1.3	.88	.17	.04	.00	.15
14	.96	1.3	1.8	2.5	3.1	3.9	1.3	.88	.15	.03	.00	.14
15	.96	1.2	1.9	2.5	3.0	3.8	1.4	.84	.16	.02	.00	.14
16	.90	1.3	1.9	2.5	3.8	3.6	1.2	.79	.18	.00	.00	.10
17	.97	1.3	2.0	2.4	32	3.2	1.3	.85	.14	.00	.00	.07
18	1.1	1.3	2.0	2.6	24	3.2	1.3	.77	.12	.00	.00	.05
19	1.1	1.3	2.0	2.5	13	3.2	1.5	.76	.13	.00	.00	.04
20	1.1	1.3	2.0	2.5	10	2.8	1.6	.74	.20	.00	.00	.05
21	1.1	1.3	2.0	2.5	13	2.5	1.5	.70	.22	.00	.00	.04
22	1.1	1.4	2.0	2.4	15	2.4	1.6	.63	.21	.00	.00	.03
23	1.1	1.4	2.0	2.4	10	2.3	1.5	.52	.32	.00	.00	.09
24	1.1	1.5	2.1	2.4	40	2.4	1.2	.44	.21	.00	.00	.14
25	1.1	1.5	2.1	2.4	9.8	2.3	1.2	.34	.20	.00	.00	.17
26	1.1	1.5	2.1	2.4	6.8	2.4	1.4	.39	.27	.00	.00	.18
27	1.2	1.5	2.1	2.5	8.7	2.4	1.2	.41	.22	.00	.00	.21
28	1.1	1.5	2.1	2.4	9.0	2.6	.85	.35	.16	.00	.00	.18
29	1.0	1.5	2.2	2.3	6.0	2.3	.75	.33	.10	.00	.40	.18
30	1.1	1.5	2.2	2.3	---	2.1	.88	.28	.06	.00	3.4	.17
31	1.1	---	2.2	2.3	---	2.0	---	.35	---	.00	.49	---
TOTAL	31.79	39.3	60.9	75.3	237.4	141.4	42.58	20.69	6.48	0.49	4.29	5.22
MEAN	1.03	1.31	1.96	2.43	8.19	4.56	1.42	.67	.22	.016	.14	.17
MAX	1.2	1.5	2.2	2.6	40	15	1.8	.94	.41	.06	3.4	.37
MIN	.90	1.1	1.5	2.3	2.1	2.0	.75	.28	.06	.00	.00	.03
AC-FT	63	78	121	149	471	280	84	41	13	1.0	8.5	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	1.03	1.31	1.96	2.43	8.19	3.49	2.63	1.41	.59	.68	.41	2.23
MAX	1.03	1.31	1.96	2.43	8.19	4.56	3.84	2.15	.97	1.35	.68	4.29
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999	1999
MIN	1.03	1.31	1.96	2.43	8.19	2.41	1.42	.67	.22	.016	.14	.17
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	665.84			
ANNUAL MEAN	1.82		1.82	
HIGHEST ANNUAL MEAN			1.82	2000
LOWEST ANNUAL MEAN			1.82	2000
HIGHEST DAILY MEAN	40	Feb 24	40	Feb 24 2000
LOWEST DAILY MEAN	.00	Jul 2	.00	Jul 2 2000
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 16	.00	Jul 16 2000
INSTANTANEOUS PEAK FLOW	127	Feb 24	800	Sep 12 1999
INSTANTANEOUS PEAK STAGE	8.78	Feb 24	9.83	Sep 12 1999
ANNUAL RUNOFF (AC-FT)	1320		1320	
10 PERCENT EXCEEDS	3.0		2.6	
50 PERCENT EXCEEDS	1.1		1.2	
90 PERCENT EXCEEDS	.00		.04	

e Estimated.

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION. Lat 35 °14 42", long 115°17 53", in NW 1/4 NE 1/4 sec.6, T.13 N., R.16 E., San Bernardino County, Hydrologic Unit 15030102, on left bank and 6.6 mi south of Ivanpah.

DRAINAGE AREA. 0.84 mi ^{2}.

PERIOD OF RECORD. October 1963 to September 1981, May 1982 to current year.

REVISED RECORDS. WDR CA-82-1: 1979(M); WDR CA-96-1: Drainage area.

GAGE. Water-stage recorder and crest-stage gage. Elevation of gage is 5,640 ft above sea level, from topographic map.

REMARKS. Records fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD. Maximum discharge, 814 ft ^{3}/s, Aug. 12, 1979, gage height, 5.75 ft, from rating curve extended above 2.5 ft^3/s on basis of slope-conveyance studies; maximum gage height, 9.75 ft, July 15, 1996; no flow for most of each year.

EXTREMES FOR CURRENT YEAR. Peak discharges greater than base discharge of 10 ft ^{3}/s, from rating curve extended above 2.5 ft^3/s on basis of slope-conveyance studies, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	0930	23	1.44				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.43	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.47	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.46	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.48	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.44	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.35	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.31	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.03	.00
19	.00	.00	.00	.00	.00	.18	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	3.0	.16	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.87	.16	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.47	.16	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.46	.15	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.27	.13	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.15	.12	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.14	.11	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.16	.07	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.12	.02	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.01	.00	.00	.00	.00	.01	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	5.64	6.91	0.00	0.00	0.00	0.00	0.04	0.00
MEAN	.000	.000	.000	.000	.19	.22	.000	.000	.000	.000	.001	.000
MAX	.00	.00	.00	.00	3.0	.52	.00	.00	.00	.00	.03	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	11	14	.00	.00	.00	.00	.08	.00

10252550 CARUTHERS CREEK NEAR IVANPAH, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.082	.030	.11	.19	.20	.32	.077	.001	.001	.14	.25	.032
MAX	2.81	.67	1.27	2.22	1.44	2.23	.95	.010	.054	2.45	2.70	.34
(WY)	1977	1966	1966	1993	1980	1992	1965	1983	1972	1984	1979	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1964	1964	1964	1964	1967	1964	1965	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	3.41		12.59			
ANNUAL MEAN	.009		.034		.12	
HIGHEST ANNUAL MEAN					.36	1993
LOWEST ANNUAL MEAN					.001	1964
HIGHEST DAILY MEAN	.63	Sep 22	3.0	Feb 21	80	Aug 12 1979
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
INSTANTANEOUS PEAK FLOW			23	Feb 21	814	Aug 12 1979
INSTANTANEOUS PEAK STAGE			1.44	Feb 21	9.75	Jul 15 1996
ANNUAL RUNOFF (AC-FT)	6.8		25		85	
10 PERCENT EXCEEDS	.00		.07		.07	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

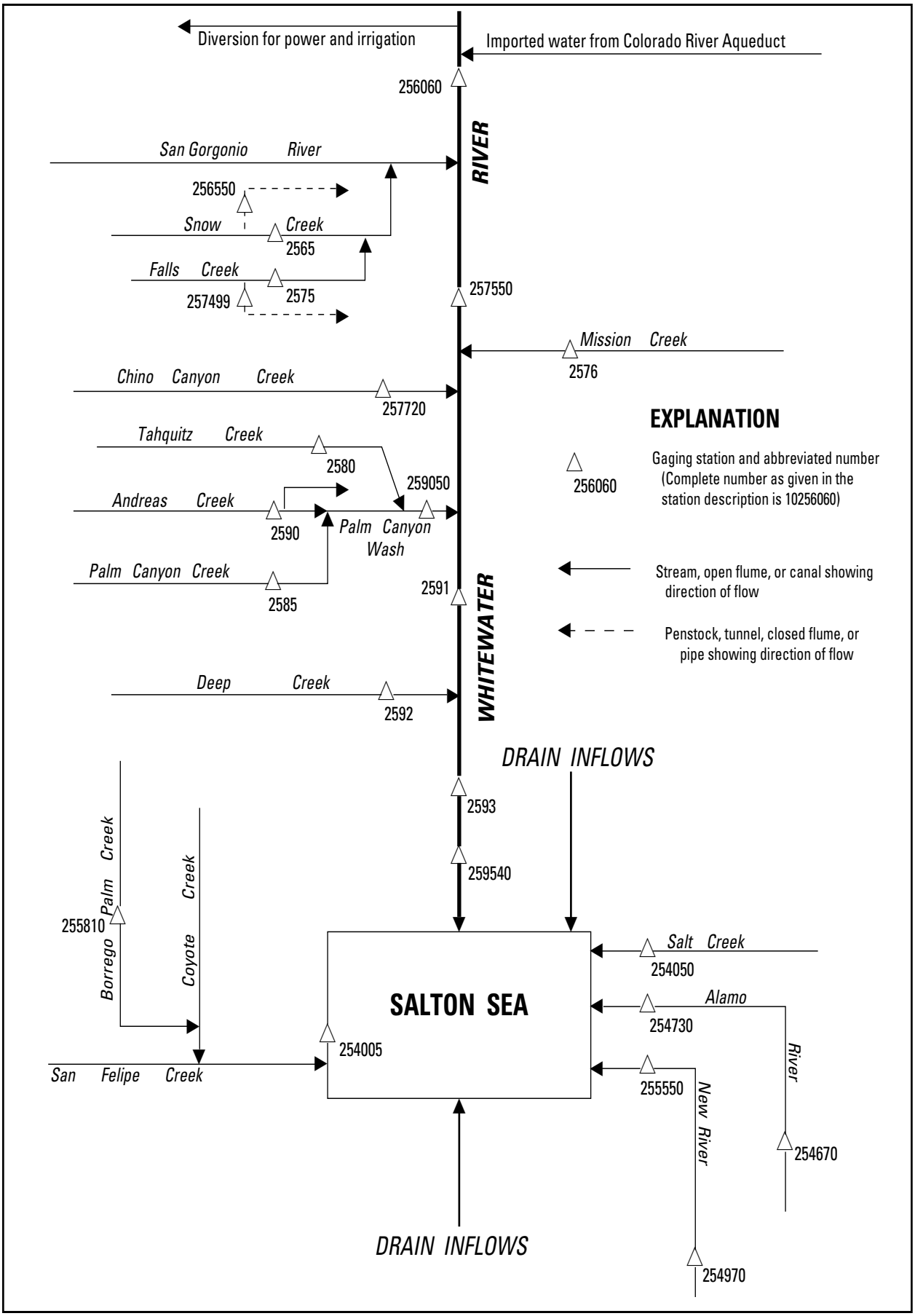

Figure 13. Diversions and storage in Salton Sea Basin.

10254005 SALTON SEA NEAR WESTMORLAND, CA

LOCATION.—Lat 33°11'33", long 115°49'59", in SE 1/4 SW 1/4 sec.21, T.11 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on western shore, at Sandy Beach, and 15.5 mi northwest of Westmorland.

DRAINAGE AREA.—8,360 mi^2, approximately.

PERIOD OF RECORD.—November 1904 to current year. Records prior to 1932 are published in WSP 735. Monthend elevations only prior to October 1987.

REVISED RECORDS.—WDR CA-87-1: 1980–85.

GAGE.—Water-stage recorder. Datum of gage is sea level. See WSP 1734 for history of changes prior to Mar. 2, 1956.

REMARKS.—Bottom of sea is 277.7 ft below sea level. See WSP 300, 735, and 918 for condensed history of Salton Sea. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 195.9 ft below sea level, in February and March 1907; minimum since 1906, 251.6 ft below sea level in November 1924.

EXTREMES FOR CURRENT YEAR.—Maximum daily elevation, 227.3 ft below sea level, Apr. 30 to May 17 and May 24 to June 6; minimum, 228.2 ft below sea level, Sept. 23–30.

ELEVATION (FEET BELOW SEA LEVEL), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-227.9	-228.0	-228.1	-228.1	e-227.8	-227.6	-227.4	-227.3	-227.3	-227.5	-227.7	-227.9
2	-227.9	-228.0	-228.1	-228.1	e-227.8	-227.6	-227.4	-227.3	-227.3	-227.5	-227.7	-228.0
3	-227.9	-228.1	-228.1	-228.1	e-227.8	-227.6	-227.4	-227.3	-227.3	-227.5	-227.7	-228.0
4	-228.0	-228.1	-228.1	e-228.1	e-227.8	-227.6	-227.4	-227.3	-227.3	-227.6	-227.7	-228.0
5	-228.0	-228.1	-228.1	e-228.1	-227.8	-227.6	-227.4	-227.3	-227.3	-227.6	-227.7	-228.0
6	-228.0	-228.1	-228.1	e-228.1	-227.8	-227.6	-227.4	-227.3	-227.3	-227.6	-227.7	-228.0
7	-228.0	-228.1	-228.1	e-228.1	-227.8	-227.6	-227.4	-227.3	-227.4	-227.6	-227.7	-228.0
8	-228.0	-228.1	-228.1	e-228.1	-227.8	-227.6	-227.4	-227.3	-227.4	-227.6	-227.7	-228.0
9	-228.0	-228.1	-228.1	e-228.1	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
10	-228.0	-228.1	-228.1	e-228.0	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
11	-228.0	-228.1	-228.1	e-228.0	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
12	-228.0	-228.1	-228.1	e-228.0	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
13	-228.1	-228.1	-228.1	e-228.0	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
14	-228.1	-228.1	-228.1	e-228.0	-227.8	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
15	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
16	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.5	-227.4	-227.3	-227.4	-227.6	-227.8	-228.1
17	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.4	-227.4	-227.3	-227.4	-227.7	-227.8	-228.1
18	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.4	-227.4	-227.4	-227.4	-227.7	-227.8	-228.1
19	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.4	-227.4	-227.4	-227.4	-227.7	-227.8	-228.1
20	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.4	-227.4	-227.4	-227.4	-227.7	-227.8	-228.1
21	-228.1	-228.1	-228.1	e-228.0	-227.7	-227.4	-227.4	-227.4	-227.4	-227.7	-227.8	-228.1
22	-228.1	-228.1	-228.1	e-227.9	-227.7	-227.4	-227.4	-227.4	-227.4	-227.7	-227.8	-228.1
23	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.4	-227.4	-227.7	-227.9	-228.2
24	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
25	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
26	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
27	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
28	-228.1	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
29	-228.0	-228.1	-228.1	e-227.9	-227.6	-227.4	-227.4	-227.3	-227.4	-227.7	-227.9	-228.2
30	-228.0	-228.1	-228.1	e-227.9	---	-227.4	-227.3	-227.3	-227.4	-227.7	-227.9	-228.2
31	-228.0	---	-228.1	e-227.8	---	-227.4	---	-227.3	---	-227.7	-227.9	---
MAX	-227.90	-228.00	-228.10	-227.80	-227.60	-227.40	-227.30	-227.30	-227.30	-227.50	-227.70	-227.90
MIN	-228.10	-228.10	-228.10	-228.10	-227.80	-227.60	-227.40	-227.40	-227.40	-227.70	-227.90	-228.20

CAL YR 1999 MAX -227.10 MIN -228.10
WTR YR 2000 MAX -227.30 MIN -228.20

e Estimated.

FLOW FROM MEXICO AT INTERNATIONAL BOUNDARY

The following table lists the monthly and annual flows, in acre-feet, of the Alamo River and the New River (station 10254970) at the United States–Mexico International Boundary. Data for the Alamo River provided by the Imperial Irrigation District and is not reviewed by the U.S. Geological Survey.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Alamo River	130	150	170	185	166	168	159	177	169	168	160	129
New River	13,670	14,420	16,250	17,020	14,690	16,400	14,540	14,400	12,980	12,170	12,570	11,050

CAL YR 1999: Alamo River 1,690 acre-ft WTR YR 2000: 1,930 acre-ft
CAL YR 1999: New River 183,700 acre-ft WTR YR 2000: 170,100 acre-ft

10254050 SALT CREEK NEAR MECCA, CA

LOCATION.—Lat 33°26'49", long 115°50'33", in SE 1/4 SW 1/4 sec.28, T.8 S., R.11 E., Riverside County, Hydrologic Unit 18100200, on pier of Southern Pacific railroad bridge, 0.3 mi upstream from mouth, and 16 mi southeast of Mecca.

DRAINAGE AREA.—269 mi^2.

PERIOD OF RECORD.—January 1961 to current year (since October 1990, low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 230 ft below sea level, from topographic map. Prior to Dec. 21, 1984, at same site, at datum 2.50 ft lower.

REMARKS.—Records fair above 1 ft^3/s and poor below. No regulation or diversion upstream from station. No discharge records computed above 20 ft^3/s since October 1990. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge (January 1961 to September 1990), 9,900 ft^3/s, Sept. 24, 1976, gage height, 16.8 ft, present datum, from floodmarks, from rating curve extended above 20 ft^3/s on basis of contracted-opening measurement of peak flow; maximum gage height, 19.4 ft, present datum, Mar. 2, 1983 (backwater from Salton Sea and channel vegetation); no flow for many days since 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.95	1.7	2.2	2.1	1.5	.07	.00	.00	.00	.00
2	.00	.00	.95	1.8	2.2	2.1	1.2	.00	.00	.00	.00	.00
3	.00	.00	.95	1.7	2.2	2.1	1.0	.00	.00	.00	.00	.00
4	.00	.00	.95	1.6	2.2	2.1	1.0	.00	.00	.00	.00	.00
5	.00	.00	.93	1.7	2.2	2.2	1.1	.00	.00	.00	.00	.00
6	.00	.00	.98	1.7	2.2	2.4	1.1	.00	.00	.00	.00	.00
7	.00	.00	1.1	1.7	2.2	2.7	1.0	.00	.00	.00	.00	.00
8	.00	.00	1.1	1.6	2.1	2.4	.89	.00	.00	.00	.00	.00
9	.00	.00	1.1	1.7	2.1	2.3	.82	.00	.00	.00	.00	.00
10	.00	.00	1.1	1.8	2.3	2.4	.77	.00	.00	.00	.00	.00
11	.00	.00	1.3	1.8	2.1	2.4	.66	.00	.00	.00	.00	.00
12	.00	.00	1.4	1.9	2.0	2.3	.58	.00	.00	.00	.00	.00
13	.00	.00	1.3	2.0	2.5	2.2	.53	.00	.00	.00	.00	.00
14	.00	.00	1.4	2.0	2.3	2.1	.49	.00	.00	.00	.00	.00
15	.00	.00	1.5	2.1	2.2	2.0	.49	.00	.00	.00	.00	.00
16	.00	.00	1.5	2.1	2.2	1.9	.47	.00	.00	.00	.00	.00
17	.00	.00	1.5	2.1	2.1	1.8	.46	.00	.00	.00	.00	.00
18	.00	.00	1.6	2.2	2.0	1.7	.51	.00	.00	.00	.00	.00
19	.00	.07	1.6	2.3	1.9	1.7	.54	.00	.00	.00	.00	.00
20	.00	.25	1.7	2.2	2.0	1.6	.54	.00	.00	.00	.00	.00
21	.00	.38	1.6	2.2	2.5	1.6	.54	.00	.00	.00	.00	.00
22	.00	.42	1.5	2.1	3.6	1.5	.55	.00	.00	.00	.00	.00
23	.00	.42	1.5	2.1	3.2	1.3	.53	.00	.00	.00	.00	.00
24	.00	.46	1.3	2.0	2.6	1.4	.47	.00	.00	.00	.00	.00
25	.00	.56	1.4	2.0	2.4	1.6	.40	.00	.00	.00	.00	.00
26	.00	.64	1.6	2.1	2.2	1.7	.34	.00	.00	.00	.00	.00
27	.00	.73	1.6	2.2	2.2	1.7	.29	.00	.00	.00	.00	.00
28	.00	.78	1.7	2.1	2.1	1.7	.25	.00	.00	.00	.00	.00
29	.00	.82	1.7	2.0	2.2	1.8	.21	.00	.00	.00	---	.00
30	.00	.89	1.8	2.1	---	1.7	.15	.00	.00	.00	---	.00
31	.00	---	1.7	2.1	---	1.6	---	.00	---	.00	.00	---
TOTAL	0.00	6.42	42.31	60.7	66.2	60.1	19.38	0.07	0.00	0.00	---	0.00
MEAN	.000	.21	1.36	1.96	2.28	1.94	.65	.002	.000	.000	---	.000
MAX	.00	.89	1.8	2.3	3.6	2.7	1.5	.07	.00	.00	---	.00
MIN	.00	.00	.93	1.6	1.9	1.3	.15	.00	.00	.00	---	.00
AC-FT	.00	13	84	120	131	119	38	.1	.00	.00	---	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1990, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.61	7.45	8.05	9.86	11.6	13.5	5.56	3.86	2.85	3.40	5.05	7.02
MAX	12.6	22.1	14.8	18.8	45.5	137	11.9	12.7	7.50	21.0	55.6	76.5
(WY)	1964	1981	1966	1977	1980	1983	1980	1980	1975	1986	1983	1976
MIN	1.55	1.05	1.59	4.13	4.26	3.79	2.37	1.49	.86	.41	.70	.59
(WY)	1990	1979	1979	1990	1990	1990	1986	1986	1989	1989	1989	1978

SUMMARY STATISTICS	WATER YEARS 1962 - 1990	
ANNUAL MEAN	6.97	
HIGHEST ANNUAL MEAN	23.7	1983
LOWEST ANNUAL MEAN	2.57	1989
HIGHEST DAILY MEAN	2830	Mar 2 1983
LOWEST DAILY MEAN	.06	Nov 1 1978
ANNUAL SEVEN-DAY MINIMUM	.07	Oct 30 1978
INSTANTANEOUS PEAK FLOW	9900	Sep 24 1976
INSTANTANEOUS PEAK STAGE	19.40	Mar 2 1983
ANNUAL RUNOFF (AC-FT)	5050	
10 PERCENT EXCEEDS	10	
50 PERCENT EXCEEDS	4.6	
90 PERCENT EXCEEDS	1.3	

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA

LOCATION.—Lat 33°06'16", long 115°32'39", on line between secs.19 and 20, T.12 S., R.14 E., Imperial County, Hydrologic Unit 18100200, on right bank, 2.2 mi southwest of Calipatria.

PERIOD OF RECORD.—October 1979 to current year. Records prior to October 1979 in files of the Imperial Irrigation District.
CHEMICAL DATA: Water years 1969–70, 1975–77, 1979–94.
BIOLOGICAL DATA: Water years 1979–81.
SPECIFIC CONDUCTANCE: Water years 1969–70, 1975–77, 1979–84.
WATER TEMPERATURE: Water years 1969–70, 1975–77, 1979–84.
SEDIMENT DATA: Water years 1979–94.

REVISED RECORDS.—WDR CA-95-1: 1993(M).

GAGE.—Water-stage recorder and broad-crested weir. Elevation of gage is 185 ft below sea level, from topographic map.

REMARKS.—Records excellent below 950 ft^3/s and good above. Flow is mainly return from irrigated areas. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,980 ft^3/s, Mar. 27, 1992, gage height, 6.56 ft, from rating curve extended above 1,000 ft^3/s; maximum gage height, 7.20 ft, Jan. 17, 1993 (affected by backwater); minimum daily, 259 ft^3/s, Jan. 2, 1985.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	768	673	710	499	560	648	875	924	757	694	700	686
2	800	700	654	383	603	680	841	933	774	749	746	688
3	763	768	625	348	621	721	771	964	812	702	771	689
4	760	809	584	490	619	754	796	938	789	690	704	653
5	757	798	610	641	655	803	856	944	720	711	698	653
6	748	730	538	642	634	714	833	941	733	723	714	668
7	785	693	577	724	566	677	895	932	756	780	682	682
8	782	648	654	716	562	780	956	892	730	794	682	695
9	800	645	655	719	637	853	991	906	711	766	676	681
10	829	665	665	633	635	814	988	936	757	741	652	684
11	802	689	674	594	612	742	957	889	734	751	651	658
12	796	722	669	632	589	714	973	898	712	773	652	671
13	836	700	599	621	581	661	963	911	745	753	698	723
14	849	666	569	600	526	704	975	892	736	777	670	767
15	897	653	585	598	524	755	977	817	723	804	660	777
16	822	650	616	611	612	849	973	812	717	732	677	780
17	834	708	622	569	620	917	887	838	773	713	668	823
18	789	688	615	613	650	904	897	883	739	694	680	775
19	769	668	646	625	678	885	935	852	757	733	671	796
20	795	670	594	636	673	831	970	865	824	768	667	815
21	843	711	596	599	643	779	989	873	767	795	634	806
22	808	651	638	583	621	822	978	852	764	791	668	763
23	808	634	646	575	617	878	959	790	752	688	672	746
24	793	696	625	529	643	890	937	848	752	727	686	745
25	707	706	512	550	650	927	919	887	739	724	696	704
26	746	609	387	624	641	929	953	889	764	730	708	739
27	809	640	385	668	620	844	975	852	751	773	677	813
28	835	640	569	660	578	893	983	845	719	774	635	825
29	840	605	679	624	627	927	951	768	731	786	692	850
30	788	639	679	580	---	917	928	726	722	716	822	870
31	726	---	636	533	---	889	---	767	---	669	729	---
TOTAL	24684	20474	18813	18419	17797	25101	27881	27064	22460	23021	21338	22225
MEAN	796	682	607	594	614	810	929	873	749	743	688	741
MAX	897	809	710	724	678	929	991	964	824	804	822	870
MIN	707	605	385	348	524	648	771	726	711	669	634	653
AC-FT	48960	40610	37320	36530	35300	49790	55300	53680	44550	45660	42320	44080

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	780	667	552	531	602	823	953	844	706	702	704	727
MAX	895	809	666	640	718	947	1208	1000	888	888	846	847
(WY)	1992	1991	1991	1993	1991	1995	1994	1994	1994	1994	1994	1994
MIN	655	569	379	392	445	697	812	706	515	556	593	632
(WY)	1982	1982	1986	1995	1980	1987	1986	1982	1982	1982	1982	1986

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	261052		269277			
ANNUAL MEAN	715		736		716	
HIGHEST ANNUAL MEAN					833	1994
LOWEST ANNUAL MEAN					628	1982
HIGHEST DAILY MEAN	1100	Jul 13	991	Apr 9	4670	Mar 27 1992
LOWEST DAILY MEAN	385	Dec 27	348	Jan 3	259	Jan 2 1985
ANNUAL SEVEN-DAY MINIMUM	514	Feb 8	520	Dec 31	277	Dec 31 1984
INSTANTANEOUS PEAK FLOW			1020	Apr 9	5980	Mar 27 1992
INSTANTANEOUS PEAK STAGE			2.62	Apr 9	(a)7.20	Jan 17 1993
ANNUAL RUNOFF (AC-FT)	517800		534100		518900	
10 PERCENT EXCEEDS	848		905		924	
50 PERCENT EXCEEDS	714		724		707	
90 PERCENT EXCEEDS	587		604		515	

(a) Affected by backwater.

10254730 ALAMO RIVER NEAR NILAND, CA

LOCATION.—Lat 33°11'56", long 115°35'46", in SW 1/4 NW 1/4 sec.23, T.11 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on left bank, 1.0 mi upstream from mouth, and 4.5 mi southwest of Niland.

PERIOD OF RECORD.—January 1943 to September 1960 (monthly discharge only, published in WSP 1743), October 1960 to current year.

GAGE.—Acoustic-velocity meter and water-stage recorder. Elevation of gage is 220 ft below sea level, from topographic map. Prior to Oct. 1, 1986, at site 0.4 mi downstream at different datum.

REMARKS.—Records fair. Discharge mainly represents seepage and return flow from irrigated areas. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 4,500 ft^3/s, Aug. 17, 1977, estimated by Imperial Irrigation District; minimum daily, 288 ft^3/s, Jan. 2, 1966, Dec. 15, 1984.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863	803	830	602	623	748	998	1090	958	885	870	852
2	918	840	779	454	691	780	946	1100	995	939	918	846
3	898	908	747	386	713	838	886	1130	1010	916	949	813
4	878	938	694	530	739	874	886	1120	976	885	924	806
5	896	929	734	713	768	917	942	1100	923	881	904	738
6	892	867	659	774	760	855	979	1110	903	900	906	785
7	892	827	659	843	656	804	1040	1100	939	958	839	799
8	910	765	760	842	636	884	1140	1040	927	967	844	834
9	918	760	776	837	734	961	1190	1070	924	939	854	817
10	929	773	792	758	778	926	1250	1120	930	939	814	804
11	905	807	814	715	744	860	1210	1100	911	949	812	804
12	894	851	802	749	704	846	1190	1090	887	967	797	822
13	920	852	701	747	674	792	1190	1090	924	930	849	874
14	938	796	651	732	640	828	1200	1100	930	967	827	926
15	1000	758	670	711	623	878	1230	1030	909	986	826	960
16	957	769	692	689	728	970	1220	1000	896	923	856	959
17	948	846	739	652	770	1060	1130	1040	922	893	837	1010
18	886	847	724	691	794	1040	1090	1050	891	874	837	943
19	864	824	756	740	822	1030	1130	1050	901	898	809	970
20	905	827	682	759	820	986	1170	1030	1000	930	804	998
21	957	822	673	723	765	968	1200	1030	986	958	742	998
22	957	789	745	691	744	1000	1210	1050	986	958	772	939
23	914	740	771	680	726	1040	1180	1000	939	876	783	894
24	906	836	741	631	748	1040	1130	1000	930	883	817	890
25	830	830	594	640	773	1060	1120	1040	918	862	822	845
26	851	707	451	725	758	1070	1160	1080	958	904	813	856
27	913	722	444	803	728	972	1160	1050	949	949	791	955
28	948	744	636	760	693	1010	1160	1060	930	958	736	979
29	966	683	788	727	703	1050	1180	995	923	986	802	998
30	948	733	800	648	---	1030	1130	928	925	930	930	998
31	868	---	760	607	---	998	---	986	---	853	902	---
TOTAL	28269	24193	22064	21559	21055	29115	33647	32779	28100	28643	25986	26712
MEAN	912	806	712	695	726	939	1122	1057	937	924	838	890
MAX	1000	938	830	843	822	1070	1250	1130	1010	986	949	1010
MIN	830	683	444	386	623	748	886	928	887	853	736	738
AC-FT	56070	47990	43760	42760	41760	57750	66740	65020	55740	56810	51540	52980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2000, BY WATER YEAR (WY)

MEAN	943	762	643	642	755	975	1090	966	829	833	843	900
MAX	1159	851	792	834	970	1144	1272	1182	981	1027	1278	1271
(WY)	1964	1991	1973	1972	1964	1963	1980	1975	1963	1963	1977	1962
MIN	742	616	416	396	495	734	797	684	646	636	656	667
(WY)	1986	1966	1986	1978	1993	1987	1965	1964	1964	1985	1986	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1961 - 2000	
ANNUAL TOTAL	311151		322122			
ANNUAL MEAN	852		880		849	
HIGHEST ANNUAL MEAN					991	1963
LOWEST ANNUAL MEAN					680	1986
HIGHEST DAILY MEAN	1220	May 2	1250	Apr 10	e4500	Aug 17 1977
LOWEST DAILY MEAN	444	Dec 27	386	Jan 3	288	Jan 2 1966
ANNUAL SEVEN-DAY MINIMUM	587	Feb 8	603	Dec 31	323	Dec 27 1965
ANNUAL RUNOFF (AC-FT)	617200		638900		614900	
10 PERCENT EXCEEDS	1050		1070		1110	
50 PERCENT EXCEEDS	847		886		842	
90 PERCENT EXCEEDS	675		704		611	

e Estimated.

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA

LOCATION.—Lat 32°39'57", long 115°30'08", in SW 1/4 SE 1/4 sec.14, T.17 S., R.14 E., Imperial County, Hydrologic Unit 18100200, on left bank, 200 ft downstream from bridge on Second Street, and 0.2 mi downstream from International Boundary in Calexico.
PERIOD OF RECORD.—October 1979 to current year. October 1945 to September 1979, in files of Imperial Irrigation District.
CHEMICAL DATA: Water years 1969–71, 1973–85.
BIOLOGICAL DATA: Water years 1973–81.
SPECIFIC CONDUCTANCE: Water years 1974–81.
WATER TEMPERATURE: Water years 1974–81.
SEDIMENT DATA: Water years 1975–85.
GAGE.—Water-stage recorder. Elevation of gage is 35 ft below sea level, from topographic map.
REMARKS.—Records excellent. Discharge represents seepage and return flow from irrigated areas. See schematic diagram of Salton Sea Basin.
EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 833 ft^3/s, Dec. 9, 1982, Sept. 25, 1997, gage height, 14.73 ft; minimum daily, 98 ft^3/s, Nov. 23, 28–29, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	210	241	224	272	279	239	246	215	202	221	209
2	230	231	238	241	270	262	231	268	212	199	221	212
3	227	258	228	263	258	246	235	286	205	198	220	200
4	226	276	237	277	256	248	247	263	196	200	212	201
5	223	261	225	274	249	251	242	258	201	202	200	197
6	223	258	229	258	254	273	236	252	235	204	199	187
7	214	266	260	248	263	293	235	239	245	198	201	181
8	217	272	271	240	262	292	238	236	232	194	218	177
9	219	272	263	239	264	295	246	244	223	197	217	174
10	216	255	253	239	261	298	233	256	218	206	218	174
11	216	248	241	242	256	292	236	246	214	211	225	184
12	226	250	238	243	252	284	236	250	223	222	208	182
13	228	246	260	251	237	292	230	274	220	212	196	179
14	225	235	262	256	252	285	223	250	239	201	209	186
15	222	240	270	268	269	268	217	226	232	198	214	192
16	224	239	286	272	258	259	227	215	218	196	202	185
17	216	235	285	279	254	261	234	206	201	191	201	179
18	216	225	277	315	245	267	237	200	203	188	200	182
19	216	210	258	335	239	265	247	213	208	188	195	191
20	233	203	273	317	234	261	234	224	223	190	189	197
21	248	205	300	290	245	255	240	217	228	187	194	196
22	241	221	291	286	253	263	242	217	221	184	192	190
23	227	244	277	300	269	258	249	221	215	185	191	182
24	218	246	280	323	255	256	267	220	208	191	194	180
25	220	239	264	346	239	251	282	214	203	190	192	176
26	228	240	272	336	246	228	277	223	217	188	196	170
27	222	252	302	318	251	228	285	228	233	197	196	171
28	220	252	307	302	260	259	280	215	231	201	189	177
29	216	240	295	274	281	280	262	221	221	197	196	180
30	203	239	272	261	---	267	243	216	202	202	212	181
31	198	---	239	263	---	251	---	215	---	216	217	---
TOTAL	6890	7268	8194	8580	7404	8267	7330	7259	6542	6135	6335	5572
MEAN	222	242	264	277	255	267	244	234	218	198	204	186
MAX	248	276	307	346	281	298	285	286	245	222	225	212
MIN	198	203	225	224	234	228	217	200	196	184	189	170
AC-FT	13670	14420	16250	17020	14690	16400	14540	14400	12980	12170	12570	11050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	222	214	255	259	265	282	288	264	223	230	262	241
MAX	370	334	374	366	375	395	452	389	321	394	441	399
(WY)	1984	1985	1987	1987	1987	1986	1986	1984	1984	1984	1984	1983
MIN	126	108	112	162	179	190	188	177	154	139	139	152
(WY)	1997	1997	1997	1996	1991	1995	1996	1990	1992	1994	1996	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	92606		85776			
ANNUAL MEAN	254		234		250	
HIGHEST ANNUAL MEAN					362	1986
LOWEST ANNUAL MEAN					181	1996
HIGHEST DAILY MEAN	495	Apr 5	346	Jan 25	735	Dec 9 1982
LOWEST DAILY MEAN	195	Sep 8	170	Sep 26	98	Nov 23 1996
ANNUAL SEVEN-DAY MINIMUM	198	Sep 3	176	Sep 24	99	Nov 23 1996
INSTANTANEOUS PEAK FLOW			363	Jan 25	833	Dec 9 1982
INSTANTANEOUS PEAK STAGE			10.69	Jan 25	14.73	Dec 9 1982
ANNUAL RUNOFF (AC-FT)	183700		170100		181300	
10 PERCENT EXCEEDS	302		277		362	
50 PERCENT EXCEEDS	245		233		233	
90 PERCENT EXCEEDS	209		192		161	

10255550 NEW RIVER NEAR WESTMORLAND, CA

LOCATION.—Lat 33°06'17", long 115°39'49", in SW 1/4 SW 1/4 sec.19, T.12 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on right bank, 3.5 mi upstream from mouth, and 5.2 mi northwest of Westmorland.

PERIOD OF RECORD.—January 1943 to current year. (Monthly discharge only, January 1943 to September 1960 published in WSP 1734; daily discharge available in files of the U.S. Geological Survey.)

GAGE.—Water-stage recorder. Elevation of gage is 220 ft below sea level, from topographic map.

REMARKS.—Records good. Discharge mainly represents seepage and return flow from irrigated areas. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3,000 ft^3/s, Aug. 17, 18, 1977, estimated by Imperial Irrigation District; minimum daily, 150 ft^3/s, Mar. 7, 1945.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	602	581	590	566	686	730	755	668	635	675	591
2	680	605	603	517	594	696	706	748	696	636	668	569
3	633	618	618	491	645	700	717	743	677	613	602	537
4	632	645	628	534	615	703	727	780	697	607	628	522
5	647	661	577	584	586	678	750	773	647	579	622	514
6	634	700	556	598	595	680	754	767	631	590	614	515
7	629	680	527	612	565	665	731	768	639	597	626	499
8	645	641	573	648	584	672	717	739	664	624	654	553
9	639	619	606	603	598	695	745	742	702	626	668	574
10	630	605	690	566	611	701	778	729	695	635	660	562
11	607	626	688	569	570	749	776	707	681	641	650	564
12	637	625	603	578	577	747	759	723	634	615	648	560
13	654	603	558	602	574	733	769	744	621	625	657	548
14	676	582	554	612	586	711	790	743	628	621	612	566
15	697	583	573	576	606	740	771	728	644	653	563	580
16	708	587	608	582	611	747	766	749	658	633	571	596
17	733	602	628	567	618	741	772	682	688	613	605	591
18	710	586	663	561	600	736	793	707	685	614	611	571
19	669	585	631	564	641	745	833	723	658	584	610	592
20	641	571	595	614	642	732	800	714	630	555	609	575
21	669	568	615	662	660	735	776	714	651	595	604	611
22	689	552	641	639	624	743	781	713	660	655	543	630
23	677	573	653	610	607	768	784	717	672	638	546	633
24	675	617	610	579	618	801	716	718	683	620	551	640
25	655	627	550	589	615	809	717	727	672	614	547	614
26	638	549	502	638	611	799	738	743	632	633	581	606
27	670	555	493	661	621	716	800	756	602	620	591	629
28	668	607	567	645	643	706	836	762	613	631	596	640
29	661	580	613	636	694	717	826	712	668	646	573	638
30	647	596	649	614	---	722	797	675	654	680	608	670
31	630	---	670	560	---	727	---	674	---	664	704	---
TOTAL	20473	18150	18623	18401	17677	22500	22955	22675	19750	19292	18997	17490
MEAN	660	605	601	594	610	726	765	731	658	622	613	583
MAX	733	700	690	662	694	809	836	780	702	680	704	670
MIN	607	549	493	491	565	665	706	674	602	555	543	499
AC-FT	40610	36000	36940	36500	35060	44630	45530	44980	39170	38270	37680	34690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	642	564	547	563	598	680	729	664	593	597	614	619
MAX	837	760	707	795	789	829	953	853	763	808	913	807
(WY)	1953	1954	1963	1944	1944	1998	1993	1953	1953	1979	1977	1963
MIN	471	408	386	387	458	516	541	485	436	442	460	486
(WY)	1978	1965	1968	1978	1965	1965	1965	1964	1964	1964	1964	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	246537		236983			
ANNUAL MEAN	675		647		617	
HIGHEST ANNUAL MEAN					741	1953
LOWEST ANNUAL MEAN					484	1965
HIGHEST DAILY MEAN	942	Apr 9	836	Apr 28	e3000	Aug 17 1977
LOWEST DAILY MEAN	493	Dec 27	491	Jan 3	150	Mar 7 1945
ANNUAL SEVEN-DAY MINIMUM	547	Sep 2	530	Sep 2	284	Mar 4 1945
ANNUAL RUNOFF (AC-FT)	489000		470100		447000	
10 PERCENT EXCEEDS	808		746		763	
50 PERCENT EXCEEDS	661		636		607	
90 PERCENT EXCEEDS	571		567		483	

e Estimated.

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, CA

LOCATION.—Lat 33°16'44", long 116°25'45", in Anza-Borrego Desert State Park, San Diego County, Hydrologic Unit 18100200, on left bank, 3.3 mi northwest of Borrego Springs.

DRAINAGE AREA.—21.8 mi^2.

PERIOD OF RECORD.—October 1950 to September 1993, October 1994 to current year. Prior to October 1960, published as Palm Canyon Creek near Borrego Springs. Monthly discharge only for October to November 1950, published in WSP 1734.

REVISED RECORDS.—WSP 2128: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,200 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation or diversion upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,640 ft^3/s, Aug. 16, 1979, gage height, 9.8 ft, from floodmarks, on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15 ft^3/s, or maximum, from rating curve extended above 72 ft^3/s on basis of slope-area measurements at gage heights 7.50 and 9.80 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	0315	5.1	2.53				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.49	.62	.81	.95	.59	.14	.00	.00	.00	.00
2	.00	.00	.50	.75	.74	.90	.57	.13	.00	.00	.00	.00
3	.00	.00	.48	.68	.71	.92	.55	.13	.00	.00	.00	.00
4	.00	.00	.47	.62	.71	.93	.51	.12	.00	.00	.00	.00
5	.00	.00	.46	.62	.71	1.7	.48	.12	.00	.00	.00	.00
6	.00	.00	.47	.61	.70	2.3	.52	.12	.00	.00	.00	.00
7	.00	.00	.50	.62	.70	1.5	.54	.13	.00	.00	.00	.00
8	.00	.00	.51	.61	.69	1.6	.52	.12	.00	.00	.00	.00
9	.00	.00	.51	.60	.67	2.0	.55	.12	.00	.00	.00	.00
10	.00	.00	.59	.62	.70	1.3	.54	.12	.00	.00	.00	.00
11	.00	.00	.59	.61	.86	1.1	.50	.11	.00	.00	.00	.00
12	.00	.00	.54	.59	1.5	.95	.47	.11	.00	.00	.00	.00
13	.00	.00	.56	.61	1.2	.87	.44	.12	.00	.00	.00	.00
14	.00	.00	.55	.63	1.0	.82	.48	.13	.00	.00	.00	.00
15	.00	.00	.56	.65	.93	.79	.62	.10	.00	.00	.00	.00
16	.00	.00	.57	.69	.88	.75	.63	.10	.00	.00	.00	.00
17	.00	.00	.56	.78	1.8	.74	.61	.10	.00	.00	.00	.00
18	.00	.00	.57	.82	1.2	.68	1.3	.09	.00	.00	.00	.00
19	.00	.01	.59	.83	.97	.64	1.5	.08	.00	.00	.00	.00
20	.00	.11	.59	.84	1.5	.65	.87	.06	.00	.00	.00	.00
21	.00	.15	.62	.84	2.8	.67	.68	.03	.00	.00	.00	.00
22	.00	.17	.60	.84	3.5	.65	.65	.02	.00	.00	.00	.00
23	.00	.18	.59	.83	1.9	.64	.53	.00	.00	.00	.00	.00
24	.00	.18	.56	.83	2.7	.65	.41	.00	.00	.00	.00	.00
25	.00	.19	.58	.80	1.6	.68	.31	.00	.00	.00	.00	.00
26	.00	.28	.59	.81	1.2	.63	.26	.00	.00	.00	.00	.00
27	.00	.44	.60	.77	1.1	.70	.23	.00	.00	.00	.00	.00
28	.00	.47	.61	.70	1.2	.76	.19	.00	.00	.00	.00	.00
29	.00	.48	.58	.69	1.0	.69	.19	.00	.00	.00	.00	.00
30	.00	.47	.57	.70	---	.63	.17	.00	.00	.00	.00	.00
31	.00	---	.60	.76	---	.59	---	.00	---	.00	.00	---
TOTAL	0.00	3.13	17.16	21.97	35.98	29.38	16.41	2.30	0.00	0.00	0.00	0.00
MEAN	.000	.10	.55	.71	1.24	.95	.55	.074	.000	.000	.000	.000
MAX	.00	.48	.62	.84	3.5	2.3	1.5	.14	.00	.00	.00	.00
MIN	.00	.00	.46	.59	.67	.59	.17	.00	.00	.00	.00	.00
AC-FT	.00	6.2	34	44	71	58	33	4.6	.00	.00	.00	.00

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.17	.33	.80	1.71	2.89	3.08	1.67	.70	.24	.19	.46	.15
MAX	2.83	2.97	5.29	27.4	32.5	29.3	11.2	7.55	3.96	4.46	10.6	3.27
(WY)	1984	1984	1984	1993	1980	1983	1980	1980	1980	1979	1979	1983
MIN	.000	.000	.000	.000	.030	.073	.007	.000	.000	.000	.000	.000
(WY)	1951	1951	1963	1972	1972	1972	1972	1961	1954	1952	1951	1951

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	143.80		126.33			
ANNUAL MEAN	.39		.35		1.02	
HIGHEST ANNUAL MEAN					7.61	1980
LOWEST ANNUAL MEAN					.009	1972
HIGHEST DAILY MEAN	1.9	Apr 5	3.5	Feb 22	277	Aug 16 1979
LOWEST DAILY MEAN	.00	Jun 19	.00	Oct 1	.00	Oct 1 1950
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 19	.00	Oct 1	.00	Oct 1 1950
INSTANTANEOUS PEAK FLOW			5.1	Feb 22	2640	Aug 16 1979
INSTANTANEOUS PEAK STAGE			2.53	Feb 22	9.80	Aug 16 1979
ANNUAL RUNOFF (AC-FT)	285		251		742	
10 PERCENT EXCEEDS	1.0		.84		2.1	
50 PERCENT EXCEEDS	.08		.04		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

10256000 WHITEWATER RIVER AT WHITE WATER, CA

LOCATION.—Lat 33°56'48", long 116°38'24", in NW 1/4 NE 1/4 sec.2, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, 1.5 mi north of White Water, and 3.5 mi upstream from San Gorgonio River.

DRAINAGE AREA.—57.5 mi^2.

PERIOD OF RECORD.—Water years 1967–1981, 1997 to current year.
CHEMICAL DATA: Water years 1967–1981, 1997 to current year.
SEDIMENT DATA: Water year 1972.

REMARKS.—Chemical-quality records for water years 1975–1981 were furnished by California Department of Water Resources. Water discharge records were collected during water years 1949–1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV												
15...	1350	4.4	8.6	381	21.0	180	16	51	13	4.6	.4	14
16...	1645	--	--	--	17.5	--	--	--	--	--	--	--

DATE	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV												
15...	14	164	190	5	3.6	.9	17	32	<.1	<.02	.47	.02
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV											
15...	<.05	<.01	.55	.31	229	236	--	e13	.02	<10	e2
16...	--	--	--	--	--	--	<2	--	--	--	--

e Estimated.
< Actual value is known to be less than the value shown.

10256060 WHITEWATER RIVER AT WHITE WATER CUTOFF, AT WHITE WATER, CA

LOCATION.—Lat 33°55'31", long 116°38'07", in NE 1/4 SE 1/4 sec.11, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on center pier of White Water Cutoff (old Highway 99) bridge, 0.1 mi east of White Water, 0.75 mi downstream from Metropolitan Water District's Colorado River Aqueduct turnout, and 2.0 mi upstream from San Gorgonio River.

DRAINAGE AREA.—59.1 mi^2.

PERIOD OF RECORD.—October 1985 to September 1987 and October 1988 to September 1990. Discharge measurements for the period October 1984 to September 1985 available in files of the U.S. Geological Survey. Discharge measurements only, October 1987 to September 1988, October 1990 to current year. Station discontinued as continuous-record site effective Sept. 30, 1993.

CHEMICAL DATA: Water years 1972–76, 1978–96.

GAGE.—None. Elevation of station is 1,360 ft above sea level, from topographic map.

REMARKS.—Indeterminate stage-discharge relationship. At times, imported water is released to the Whitewater River from the Colorado River Aqueduct at a point 0.75 mi upstream. Water is diverted out of the basin 16.5 mi upstream to powerplants in the San Gorgonio River Basin and then to an area north of Banning for irrigation. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD (1986–87 and 1989–90).—Maximum discharge, 2,020 ft^3/s, Feb. 15, 1986, gage height, 11.97 ft, from rating curve extended above 900 ft^3/s; no flow for many days in some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Time	Discharge (ft^3/s)
Oct. 6	1025	3.0
Nov. 2	1630	3.6
Dec. 8	1105	3.9
Jan. 5	1240	5.5
Feb. 2	1150	2.9
Mar. 2	1047	545
Apr. 5	1320	.77
May 4	1225	2.9
July 10	1455	.68
Aug. 2	1535	.86
Sept. 6	0935	1.2

10256500 SNOW CREEK NEAR WHITE WATER, CA

LOCATION.—Lat 33°52'14", long 116°40'49", in NW 1/4 NW 1/4 sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on left bank, at upstream side of Desert Water Agency Diversion Dam, 0.1 mi downstream from East Fork, and 4.4 mi southwest of White Water.

DRAINAGE AREA.—10.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July to December 1921, May 1922 to February 1927, December 1927 to September 1931, October 1959 to current year. Yearly discharges for 1929–31, published in WSP 1314. Discharge records for Snow Creek Diversion (station 10256550) since October 1978, and those for creek only October 1978 through September 1988 available in files of the U.S. Geological Survey.

REVISED RECORDS.—WDR CA-89-1: Drainage area. WDR CA-90-1: 1980 Combined discharge. WDR CA-93-1: 1991. WDR CA-96-1: 1969(M), 1976(M).

GAGE.—Water-stage recorder, crest-stage gage, and broad-crested weir on creek, nonrecording flow meter on diversion. Elevation of gage is 2,000 ft above sea level, from topographic map. Prior to October 1931, at various sites within 500 ft of present site at different datums. October 1959 to Oct. 6, 1970, at site 40 ft upstream at present datum. Oct. 6, 1970, to Oct. 25, 1978, at site 290 ft upstream from diversion at present datum. Gage moved to present site 10 ft downstream from diversion Oct. 25, 1978.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Diversion (station 10256550) 10 ft upstream, generally taking most of the base flow. For combined record of creek and diversion, see station 10256501. Published record prior to 1989 represents entire flow from basin (combined creek plus diversion prior to March 1927 and October 1978 to September 1988; creek only, upstream from diversion, December 1927 to September 1931, and October 1959 to September 1978). Both creek only and combined flow published beginning October 1989. Statistics for station 10256501 (combined flow) reflect equivalent total flow from basin. See schematic diagram of Salton Sea Basin.

COOPERATION.—Records for diversion provided by Desert Water Agency.

EXTREMES FOR PERIOD OF RECORD (Combined creek and diversion).— Maximum discharge, 9,900 ft^3/s, Jan. 25, 1969, gage height, 13.8 ft, from floodmarks, site and datum then in use, from rating curve extended above 55 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 2.1 ft^3/s, June 23–27, Sept. 5–11, 1961.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 29.9 ft^3/s on basis of broad-crested weir computations:

		Creek only	Combined creek and diversion	
Date	Time	Discharge (ft^3/s)	Gage height (ft)	Discharge (ft^3/s)
Feb. 21	0345	37	3.09	37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.24	.10	3.7	.36	e6.5	.52	2.2	.16	.21	.34	.83
2	.36	.21	.14	3.8	.32	6.1	.38	2.2	.44	.20	.34	.80
3	.36	.19	.19	2.4	.36	5.9	.37	2.6	.32	.18	.51	.73
4	.36	.21	.20	.33	.26	5.7	.51	3.1	.23	.19	.31	.63
5	.42	.24	.19	.31	.25	6.3	1.5	3.3	.14	.19	.25	.54
6	.31	.26	.20	.30	.21	5.5	1.7	2.8	.14	.21	.28	.47
7	.39	.28	.21	.28	.18	5.2	1.6	3.3	.11	.31	.32	2.1
8	.36	.31	.33	.28	.16	7.2	1.6	4.5	.25	.32	.30	3.4
9	.36	.36	1.5	.28	.19	6.3	1.9	3.6	.70	.34	.24	3.3
10	.36	.35	3.7	.29	1.6	6.3	1.6	2.9	.65	.32	.24	3.3
11	.36	.33	3.7	.29	5.0	6.8	1.4	2.7	.59	.30	.24	3.1
12	.36	.32	3.7	.29	6.8	7.2	1.3	2.1	.50	.29	.34	3.2
13	.35	.31	2.2	.28	4.9	4.7	1.2	1.6	.39	.26	.32	1.5
14	.37	.32	.57	.27	4.7	2.6	1.5	1.3	.26	.22	.32	.37
15	.43	.42	.58	.27	4.5	2.6	1.4	1.1	.26	.19	2.3	.34
16	.49	1.0	.49	2.4	6.2	2.9	.99	1.1	.42	.17	1.8	.36
17	.56	1.6	.31	4.1	8.9	2.8	3.5	.94	.55	.17	.42	.37
18	.62	.34	.30	4.0	4.6	2.5	15	.69	.61	.15	.39	.38
19	.61	.36	.43	3.9	5.2	2.2	13	.51	.52	.16	.30	.29
20	.61	.35	.42	3.8	7.3	2.5	9.5	.46	.44	.18	.24	.33
21	.55	3.4	.31	3.8	27	2.2	4.6	.56	.42	.32	.26	.41
22	.42	1.4	.32	3.8	12	1.6	3.9	.71	.38	.33	.29	.40
23	.44	.14	.34	3.8	15	1.2	3.6	.79	.32	.31	.42	.44
24	.46	.15	.34	e3.9	14	.91	3.1	.94	.32	.28	1.5	.43
25	.48	.16	.34	4.0	8.6	.81	2.9	1.0	.38	.23	6.2	.39
26	.47	.18	.36	2.2	7.2	.73	3.1	.81	.30	.24	4.5	.40
27	.50	.19	.37	.70	6.9	.86	3.7	.58	.25	.25	.80	.42
28	.37	.19	.37	.52	8.0	1.3	4.0	.41	.23	.23	2.0	.42
29	.17	.17	.37	.42	6.9	1.3	3.0	.28	.21	.20	4.4	.43
30	.21	.12	.36	.40	---	1.0	2.4	.18	.20	.25	4.4	.34
31	.23	---	.76	.40	---	.69	---	.06	---	.33	2.2	---
TOTAL	12.73	14.10	23.70	55.51	167.59	110.40	94.77	49.32	10.69	7.53	36.77	30.42
MEAN	.41	.47	.76	1.79	5.78	3.56	3.16	1.59	.36	.24	1.19	1.01
MAX	.62	3.4	3.7	4.1	27	7.2	15	4.5	.70	.34	6.2	3.4
MIN	.17	.12	.10	.27	.16	.69	.37	.06	.11	.15	.24	.29
AC-FT	25	28	47	110	332	219	188	98	21	15	73	60

e Estimated.

10256500 SNOW CREEK NEAR WHITE WATER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.18	3.48	5.51	14.3	22.0	16.8	11.2	11.4	6.63	3.72	2.96	2.27
MAX	6.55	13.3	24.0	131	173	71.5	28.6	40.8	31.7	14.4	18.0	7.55
(WY)	1993	1984	1984	1993	1980	1995	1983	1983	1983	1983	1983	1983
MIN	.008	.30	.000	.85	1.72	.52	1.09	.29	.14	.000	.001	.17
(WY)	1985	1982	1982	1999	1999	1999	1984	1984	1984	1981	1981	1981

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1979 - 2000	
ANNUAL TOTAL	385.99		613.53			
ANNUAL MEAN	1.06		1.68		8.46	
HIGHEST ANNUAL MEAN					28.4	1980
LOWEST ANNUAL MEAN					1.35	1999
HIGHEST DAILY MEAN	6.6	Feb 10	27	Feb 21	909	Jan 7 1993
LOWEST DAILY MEAN	.00	Jun 26	.06	May 31	.00	Nov 8 1978
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 26	.16	Nov 26	.00	Oct 5 1979
INSTANTANEOUS PEAK FLOW			37	Feb 21	1910	Jan 7 1993
INSTANTANEOUS PEAK STAGE			3.09	Feb 21	7.35	Jan 7 1993
ANNUAL RUNOFF (AC-FT)	766		1220		6130	
10 PERCENT EXCEEDS	3.6		4.5		19	
50 PERCENT EXCEEDS	.37		.43		3.1	
90 PERCENT EXCEEDS	.14		.20		.20	

10256501 SNOW CREEK NEAR WHITE WATER, CA—Continued

SNOW CREEK AND SNOW CREEK DIVERSION NEAR WHITE WATER

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.2	3.5	3.7	3.8	e6.5	5.7	7.4	4.8	3.7	e3.4	4.2
2	3.0	3.2	3.4	3.8	3.7	6.1	5.6	7.4	5.0	3.7	3.3	4.0
3	3.0	3.2	3.7	3.8	3.8	5.9	5.6	7.9	4.8	3.7	e3.3	4.0
4	3.0	3.2	3.6	3.7	3.5	5.7	5.7	8.4	4.7	3.7	e3.1	4.0
5	2.9	3.2	3.5	3.6	3.8	6.3	6.7	8.5	4.7	3.7	3.0	3.4
6	2.9	3.3	3.5	3.6	3.8	5.5	6.3	8.1	4.6	3.7	2.9	3.7
7	3.0	3.4	3.5	3.6	3.8	5.2	6.3	8.7	4.5	3.7	e3.1	3.7
8	2.9	3.4	3.6	3.6	3.8	7.2	6.3	9.9	4.4	3.7	3.2	3.4
9	2.9	3.5	3.5	3.6	3.8	6.3	6.8	9.0	4.5	3.7	e3.0	3.3
10	2.9	3.4	3.7	3.6	4.2	6.3	6.3	8.3	4.4	3.7	e3.0	3.3
11	2.9	3.3	3.7	3.6	5.0	6.8	6.2	8.0	4.4	3.7	2.8	3.1
12	3.0	3.4	3.7	3.6	6.8	7.2	6.1	7.5	4.3	3.6	e3.1	3.2
13	2.9	3.3	3.7	3.6	4.9	6.7	6.0	6.8	4.2	3.7	e3.1	3.3
14	3.0	3.4	3.8	3.5	4.7	6.1	6.7	6.6	4.1	3.6	3.0	3.5
15	2.9	3.4	3.8	3.5	4.5	7.1	6.6	6.3	4.1	3.6	4.2	3.4
16	3.1	4.0	3.7	4.0	6.2	7.9	6.2	6.0	4.2	3.6	2.8	3.1
17	3.2	3.4	3.7	4.1	8.9	7.8	7.1	6.2	4.3	3.6	e3.2	3.3
18	3.2	3.4	3.5	4.0	4.6	7.5	15	5.2	4.4	3.6	e3.2	3.1
19	3.1	3.5	3.6	3.9	5.2	7.1	13	5.4	4.3	3.6	e3.1	3.1
20	3.2	3.3	3.8	3.8	7.3	7.0	12	5.4	4.2	e3.6	e3.0	3.3
21	3.0	3.5	3.7	3.8	27	7.1	9.9	5.4	4.2	e3.7	3.0	3.4
22	3.2	3.4	3.5	3.8	12	6.4	9.3	5.7	4.2	e3.7	3.2	3.4
23	3.2	3.3	3.6	3.8	15	6.0	8.8	5.7	4.1	3.5	e3.2	3.4
24	3.3	3.2	3.5	e3.9	14	5.9	8.3	5.7	3.9	e3.6	3.1	3.2
25	3.3	3.6	3.7	4.0	8.6	5.8	8.1	5.7	4.0	3.5	6.7	3.4
26	3.3	3.6	3.6	3.9	7.2	5.7	8.5	5.4	3.9	3.5	5.2	3.5
27	3.3	3.6	3.6	4.1	6.9	5.9	9.0	5.2	3.8	3.5	3.8	3.6
28	3.2	3.5	3.7	3.9	8.0	6.4	9.3	5.0	3.7	3.4	4.3	3.7
29	3.2	3.5	3.7	3.8	6.9	6.4	8.2	4.9	3.7	3.3	4.4	3.8
30	3.2	3.4	3.6	3.8	---	6.0	7.5	4.8	3.7	e3.3	4.4	3.5
31	3.2	---	3.8	3.8	---	5.7	---	4.7	---	e3.4	4.0	---
TOTAL	95.4	102.0	112.5	116.8	201.7	199.5	233.1	205.2	128.1	111.6	108.1	104.3
MEAN	3.08	3.40	3.63	3.77	6.96	6.44	7.77	6.62	4.27	3.60	3.49	3.48
MAX	3.3	4.0	3.8	4.1	27	7.9	15	9.9	5.0	3.7	6.7	4.2
MIN	2.9	3.2	3.4	3.5	3.5	5.2	5.6	4.7	3.7	3.3	2.8	3.1
AC-FT	189	202	223	232	400	396	462	407	254	221	214	207

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

MEAN	4.77	7.30	10.4	14.8	16.4	14.3	12.7	12.8	9.31	6.27	5.33	5.33
MAX	10.7	82.5	76.7	178	173	72.0	36.7	45.7	37.6	20.2	20.7	32.5
(WY)	1984	1966	1967	1969	1980	1995	1969	1983	1983	1983	1983	1976
MIN	2.76	2.75	3.11	3.30	3.40	3.39	3.16	2.55	2.35	2.31	2.35	2.40
(WY)	1962	1963	1963	1961	1961	1961	1961	1961	1961	1961	1960	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1921 - 2000	
ANNUAL TOTAL	1403.5		1718.3			
ANNUAL MEAN	3.85		4.69		10.1	
HIGHEST ANNUAL MEAN					33.0	1969
LOWEST ANNUAL MEAN					2.96	1961
HIGHEST DAILY MEAN	6.6	Feb 10	27	Feb 21	3490	Jan 25 1969
LOWEST DAILY MEAN	2.8	Jul 2	2.8	Aug 11	2.1	Jun 23 1961
ANNUAL SEVEN-DAY MINIMUM	2.8	Jul 21	2.9	Oct 5	2.1	Sep 5 1961
INSTANTANEOUS PEAK FLOW			37	Feb 21	9900	Jan 25 1969
INSTANTANEOUS PEAK STAGE					13.80	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	2780		3410		7310	
10 PERCENT EXCEEDS	5.2		7.2		16	
50 PERCENT EXCEEDS	3.6		3.7		5.7	
90 PERCENT EXCEEDS	2.9		3.1		3.2	

e Estimated.

10256500 SNOW CREEK NEAR WHITE WATER, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1972–76, 1978 to current year.
CHEMICAL DATA: Water years 1972–76, 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV											
15...	1040	a3.4	8.0	115	14.0	36	13	.96	1.8	.6	8.9
18...	1250	a3.4	--	--	13.0	--	--	--	--	--	--

DATE	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV											
15...	33	54	66	1.4	<.1	22	1.4	<.1	<.02	<.05	<.01
18...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV											
15...	<.05	<.01	.43	.11	79	82	--	<16	<.01	<10	<3
18...	--	--	--	--	--	--	<2	--	--	--	--

a Discharge represents total flow (creek plus diversion).
< Actual value is known to be less than the value shown.

10257500 FALLS CREEK NEAR WHITE WATER, CA

LOCATION.—Lat 33°52'10", long 116°40'15", in SW 1/4 NE 1/4 sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank, at upstream side of Desert Water Agency Diversion Dam, 0.75 mi upstream from confluence with Snow Creek, and 4.4 mi southwest of White Water.

DRAINAGE AREA.—4.14 mi^2.

PERIOD OF RECORD.—September 1922 to January 1927, January 1928 to July 1931, and October 1994 to current year. Previous gage destroyed by flood of Aug. 29, 1931. Monthly and yearly discharges for 1922–31, published in WSP 1314. Discharge records for Falls Creek Diversion (station 10257499) since October 1994 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder, broad-crested weir, and crest-stage gage on creek, totalizing flow meter on diversion. Auxiliary gage 0.25 mi downstream with crest-stage gage and culvert control. Elevation of gage is 1,940 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation upstream from station. Diversion (station 10257499) immediately upstream takes a varying portion of the base flow. For combined record of creek and diversion, see station 10257501. Published record prior to 1995 represents entire flow from basin. Records for the period 1922–1931 (prior to construction of diversion) are equivalent to those for station 10257501. Both creek only and combined flow published beginning October 1994. Statistics for station 10257501 (combined flow) reflect equivalent total flow from basin. See schematic diagram of Salton Sea Basin.

COOPERATION.—Records for diversion provided by Desert Water Agency.

EXTREMES FOR PERIOD OF RECORD (Combined creek and diversion).— Maximum discharge, 154 ft^3/s, Jan. 10, 1995, gage height, 6.14 ft (creek gage; no diversion at peak), from rating curve extended above 6.5 ft^3/s on basis of critical depth computations; maximum gage height, 6.24 ft, Feb. 14, 1998; minimum daily, 0.10 ft^3/s, Sept. 11, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended as noted above:

Date	Time	Creek only Discharge (ft^3/s)	Creek only Gage height (ft)	Combined creek and diversion Discharge (ft^3/s)
Feb. 21	0430	7.7	4.66	7.7

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.43	.55	.66	.67	1.1	.13	.32	.51	.28	.22	.35
2	.29	.43	.58	.68	.66	1.0	.13	.32	.46	.27	.21	.34
3	.29	.43	.55	.67	.65	1.0	.14	.41	.44	.27	.21	.31
4	.31	.44	.60	.68	.66	1.0	.21	.50	.42	.27	.21	.29
5	.30	.47	.60	.67	.66	1.4	.39	.48	.37	.29	.20	.26
6	.32	.46	.60	.67	.63	1.1	.30	.43	.41	.29	.20	.25
7	.34	.49	.58	.66	.61	1.0	.24	.45	.40	.29	.21	.29
8	.33	.49	.58	.66	.61	1.4	.25	.62	.45	.30	.20	.43
9	.32	.51	.60	.66	.60	1.2	.34	.45	.56	.31	.19	.29
10	.32	.50	.61	.66	.67	1.1	.28	.31	.53	.32	.19	.27
11	.31	.49	.60	.66	.84	1.1	.26	.22	.52	.30	.19	.26
12	.31	.45	.60	.64	1.1	1.2	.24	.13	.48	.29	.20	.24
13	.30	.45	.60	.65	.80	1.2	.25	.07	.43	.27	.20	.23
14	.30	.45	.60	.64	.87	.84	.39	.03	.38	.25	.20	.23
15	.32	.46	.60	.64	.73	.38	.32	.08	.35	.25	.22	.22
16	.35	.46	.60	.72	1.1	.49	.26	.30	.35	.24	.25	.22
17	.40	.44	.60	.79	1.4	.44	.58	.00	.41	.24	.22	.23
18	.44	.51	.60	.70	.95	.34	2.5	.19	.45	.24	.22	.23
19	.42	.53	.59	.66	.83	.39	1.7	.65	.43	.23	.20	.22
20	.42	.50	.61	.65	1.5	.67	1.3	.64	.39	.23	.19	.23
21	.41	.56	.63	.66	5.0	.31	.83	.65	.37	.24	.20	.26
22	.40	.58	.60	.66	1.9	.25	.71	.67	.37	.24	.20	.28
23	.41	.60	.64	.66	2.5	.22	.63	.69	.38	.23	.22	.31
24	.41	.60	.66	.65	1.8	.20	.51	.76	.35	.22	.26	.31
25	.42	.59	.66	.86	1.4	.19	.51	.83	.36	.22	.37	.29
26	.42	.60	.67	1.1	1.3	.17	.59	.77	.37	.22	.37	.28
27	.43	.60	.67	.86	1.3	.20	.72	.68	.32	.22	.29	.28
28	.43	.60	.66	.74	1.4	.26	.73	.62	.31	.21	.40	.28
29	.41	.59	.66	.73	1.2	.21	.55	.59	.30	.21	.53	.28
30	.43	.58	.66	.69	---	.18	.39	.54	.29	.20	.52	.27
31	.43	---	.67	.66	---	.15	---	.51	---	.21	.40	---
TOTAL	11.30	15.29	19.03	21.69	34.34	20.69	16.38	13.91	12.16	7.85	7.89	8.23
MEAN	.36	.51	.61	.70	1.18	.67	.55	.45	.41	.25	.25	.27
MAX	.44	.60	.67	1.1	5.0	1.4	2.5	.83	.56	.32	.53	.43
MIN	.29	.43	.55	.64	.60	.15	.13	.00	.29	.20	.19	.22
AC-FT	22	30	38	43	68	41	32	28	24	16	16	16

10257500 FALLS CREEK NEAR WHITE WATER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.08	1.32	1.67	1.74	2.18	1.88	1.94	1.77	1.33	.96	.88	.99
MAX	2.52	2.81	5.68	4.58	8.08	8.75	7.90	4.25	3.33	2.37	2.67	2.23
(WY)	1923	1923	1927	1995	1998	1995	1926	1926	1998	1926	1926	1926
MIN	.36	.51	.50	.31	.38	.15	.15	.13	.23	.25	.24	.27
(WY)	2000	2000	1999	1999	1999	1997	1997	1997	1996	2000	1997	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1923 - 2000	
ANNUAL TOTAL	135.99		188.76			
ANNUAL MEAN	.37		.52		1.47	
HIGHEST ANNUAL MEAN					2.77	1926
LOWEST ANNUAL MEAN					.42	1999
HIGHEST DAILY MEAN	1.3	Apr 12	5.0	Feb 21	50	Mar 5 1995
LOWEST DAILY MEAN	.01	May 19	.00	May 17	.00	Apr 16 1997
ANNUAL SEVEN-DAY MINIMUM	.04	May 15	.11	May 12	.00	Apr 13 1997
INSTANTANEOUS PEAK FLOW			7.7	Feb 21	154	Jan 10 1995
INSTANTANEOUS PEAK STAGE			4.66	Feb 21	6.24	Feb 14 1998
ANNUAL RUNOFF (AC-FT)	270		374		1060	
10 PERCENT EXCEEDS	.69		.83		2.7	
50 PERCENT EXCEEDS	.32		.43		1.2	
90 PERCENT EXCEEDS	.09		.21		.28	

10257501 FALLS CREEK NEAR WHITE WATER, CA—Continued

FALLS CREEK AND FALLS CREEK DIVERSION NEAR WHITE WATER

COMBINED DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.43	.55	.66	.67	1.1	.58	.77	.51	.28	.22	.35
2	.29	.43	.58	.68	.66	1.0	.58	.77	.46	.27	.21	.34
3	.29	.43	.55	.67	.65	1.0	.59	.86	.44	.27	.21	.31
4	.31	.44	.60	.68	.66	1.0	.66	.95	.42	.27	.21	.29
5	.30	.47	.60	.67	.66	1.4	.81	.93	.37	.29	.20	.26
6	.32	.46	.60	.67	.63	1.1	.75	.88	.41	.29	.20	.25
7	.34	.49	.58	.66	.61	1.0	.69	.90	.40	.29	.21	.29
8	.33	.49	.58	.66	.61	1.4	.70	1.1	.45	.30	.20	.43
9	.32	.51	.60	.66	.60	1.2	.79	.85	.56	.31	.19	.29
10	.32	.50	.61	.66	.67	1.1	.73	.63	.53	.32	.19	.27
11	.31	.49	.60	.66	.84	1.1	.71	.67	.52	.30	.19	.26
12	.31	.45	.60	.64	1.1	1.2	.69	.58	.48	.29	.20	.24
13	.30	.45	.60	.65	.80	1.2	.70	.52	.43	.27	.20	.23
14	.30	.45	.60	.64	.87	1.0	.84	.48	.38	.25	.20	.23
15	.32	.46	.60	.64	.73	.83	.77	.53	.35	.25	.22	.22
16	.35	.46	.60	.72	1.1	.94	.71	.58	.35	.24	.25	.22
17	.40	.44	.60	.79	1.4	.89	.95	.45	.41	.24	.22	.23
18	.44	.51	.60	.70	.95	.79	2.5	.49	.45	.24	.22	.23
19	.42	.53	.59	.66	.83	.84	1.7	.65	.43	.23	.20	.22
20	.42	.50	.61	.65	1.5	1.1	1.4	.64	.39	.23	.19	.23
21	.41	.56	.63	.66	5.0	.73	1.3	.65	.37	.24	.20	.26
22	.40	.58	.60	.66	1.9	.70	1.2	.67	.37	.24	.20	.28
23	.41	.60	.64	.66	2.5	.67	1.1	.69	.38	.23	.22	.31
24	.41	.60	.66	.65	1.8	.65	.96	.76	.35	.22	.26	.31
25	.42	.59	.66	.86	1.4	.64	.96	.83	.36	.22	.37	.29
26	.42	.60	.67	1.1	1.3	.62	1.0	.77	.37	.22	.37	.28
27	.43	.60	.67	.86	1.3	.65	1.2	.68	.32	.22	.29	.28
28	.43	.60	.66	.74	1.4	.71	1.1	.62	.31	.21	.40	.28
29	.41	.59	.66	.73	1.2	.66	1.0	.59	.30	.21	.53	.28
30	.43	.58	.66	.69	---	.63	.84	.54	.29	.20	.52	.27
31	.43	---	.67	.66	---	.54	---	.51	---	.21	.40	---
TOTAL	11.30	15.29	19.03	21.69	34.34	28.39	28.51	21.54	12.16	7.85	7.89	8.23
MEAN	.36	.51	.61	.70	1.18	.92	.95	.69	.41	.25	.25	.27
MAX	.44	.60	.67	1.1	5.0	1.4	2.5	1.1	.56	.32	.53	.43
MIN	.29	.43	.55	.64	.60	.54	.58	.45	.29	.20	.19	.22
AC-FT	22	30	38	43	68	56	57	43	24	16	16	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

MEAN	.77	1.08	1.07	1.73	2.96	2.50	1.46	1.74	1.35	1.01	.78	.90
MAX	1.40	1.64	1.71	4.58	8.08	8.75	2.92	4.05	3.33	2.32	1.76	1.52
(WY)	1996	1997	1997	1995	1998	1995	1995	1998	1998	1995	1995	1995
MIN	.36	.51	.61	.70	.61	.34	.31	.29	.29	.25	.24	.27
(WY)	2000	2000	2000	2000	1997	1997	1997	1997	1997	2000	1997	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	209.99		216.22			
ANNUAL MEAN	.58		.59		1.44	
HIGHEST ANNUAL MEAN					2.99	1995
LOWEST ANNUAL MEAN					.59	2000
HIGHEST DAILY MEAN	1.3	Apr 12	5.0	Feb 21	50	Mar 5 1995
LOWEST DAILY MEAN	.25	Jun 25	.19	Aug 9	.10	Sep 11 1997
ANNUAL SEVEN-DAY MINIMUM	.26	Jun 25	.20	Aug 8	.13	Sep 8 1997
INSTANTANEOUS PEAK FLOW			7.7	Feb 21	154	Jan 10 1995
ANNUAL RUNOFF (AC-FT)	417		429		1040	
10 PERCENT EXCEEDS	.89		1.0		2.9	
50 PERCENT EXCEEDS	.53		.56		.85	
90 PERCENT EXCEEDS	.29		.23		.27	

10257550 WHITEWATER RIVER AT WINDY POINT, NEAR WHITE WATER, CA

LOCATION.—Lat 33°53'56", long 116°37'13", in SW 1/4 NE 1/4 sec.24, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank, 200 ft north of Highway 111, 2.0 mi southeast of White Water, and 3.8 mi east of the junction of Highway 111 and Interstate 10.

DRAINAGE AREA.—264 mi^2.

PERIOD OF RECORD.—October 1984 to September 1987, October 1989 to current year. Discharge measurements only, October 1987 to September 1989. Discharge measurements for the period July 1982 to September 1984 available in files of the U.S. Geological Survey.

REVISED RECORDS.—WDR CA-88-1: Drainage area.

GAGE.—Water-stage recorder and concrete control; auxiliary water-stage recorder on overflow channel since Jan. 23, 1992. Elevation of gage is 1,040 ft above sea level, from topographic map.

REMARKS.—Records fair except for discharges below 50 ft^3/s and estimated daily discharges, which are poor. Imported water is released to the Whitewater River from the Colorado River Aqueduct at a point 2.75 mi upstream for ground-water recharge in the upper Coachella Valley. Water is diverted out of the basin 18.5 mi upstream to powerplants in the San Gorgonio River Basin and then to an area north of Banning for irrigation. See schematic diagram of Salton Sea Basin.

COOPERATION.—Records of diversion out of basin provided by Southern California Edison Co. Records of Colorado River Aqueduct releases provided by Metropolitan Water District.

EXTREMES FOR PERIOD OF RECORD.—Maximum computed discharge, 2,530 ft^3/s, Jan. 10, 1995, gage height, 8.32 ft, main channel, from rating curve extended above 400 ft^3/s on basis of critical-depth computation (flow in overflow channel at peak); maximum probably exceeded during flood of Jan. 16, 1993, but discharge is unknown; no flow for several days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	.26	1.1	1.8	.84	457	102	.00	.00	.00	.00	113
2	2.8	.35	1.9	1.7	.75	459	102	.00	.00	.00	.00	129
3	3.7	1.5	1.6	2.2	.86	467	103	.00	.00	.00	.00	128
4	3.2	.78	1.3	2.3	.68	521	102	81	.00	.00	.00	126
5	.36	1.9	2.0	2.7	.23	551	e51	144	.00	.00	.00	67
6	1.2	2.8	1.6	1.3	.62	546	e.00	137	.00	.00	.00	.00
7	1.8	1.4	1.9	1.4	.70	530	e.00	124	.00	.00	.00	.00
8	.62	1.7	1.5	1.8	.27	537	e.00	55	.00	.00	.00	.00
9	1.3	2.1	1.5	2.3	.51	529	e.00	.00	.00	.00	.00	.00
10	2.9	.79	1.9	1.5	.99	506	e.00	.00	.00	.00	.00	.00
11	1.1	.81	2.1	1.6	5.7	506	e.00	.00	.00	.00	.00	.00
12	.01	1.3	1.4	2.0	9.3	498	.00	.00	.00	.00	.00	.00
13	.38	2.3	1.7	1.8	6.2	495	.00	.00	.00	.00	.00	173
14	.29	3.4	1.8	3.5	42	489	.00	.00	.00	.00	.00	181
15	1.1	1.9	2.1	1.8	128	467	.00	.00	.00	.00	.00	.00
16	1.9	e1.2	1.8	1.7	162	473	.00	.00	.00	.00	.00	.00
17	2.0	e1.2	2.0	4.1	170	473	.00	.00	.00	.00	.00	.00
18	1.8	e1.4	1.7	2.5	169	466	19	.00	.00	.00	.00	.00
19	1.3	e1.4	1.4	.66	163	447	8.4	.00	.00	.00	.00	.00
20	2.0	e1.7	.81	.44	175	472	7.8	.00	.00	.00	.00	.00
21	1.8	e1.7	.47	1.3	153	474	4.0	.00	.00	.00	.00	.00
22	1.1	e1.9	.65	1.2	144	466	2.7	.00	.00	.00	.00	.00
23	.98	1.9	1.9	1.5	370	456	1.1	.00	.00	.00	.00	.00
24	2.1	5.9	2.3	1.9	408	454	.10	.00	.00	.00	.00	.00
25	1.7	1.5	1.7	3.5	463	449	.00	.00	.00	.00	.00	.00
26	4.4	1.1	1.2	4.1	467	451	.00	.00	.00	.00	.00	.00
27	1.4	1.3	1.6	2.0	456	450	.00	.00	.00	.00	.00	.00
28	.69	1.0	1.7	1.0	454	448	.00	.00	.00	.00	.00	.00
29	1.6	1.1	1.9	1.1	459	463	.00	.00	.00	.00	.00	.00
30	1.3	1.7	1.5	.82	---	293	.00	.00	.00	.00	.00	.00
31	1.3	---	1.7	1.5	---	99	---	.00	---	.00	44	---
TOTAL	51.33	49.29	49.73	59.02	4410.65	14392	503.10	541.00	0.00	0.00	44.00	917.00
MEAN	1.66	1.64	1.60	1.90	152	464	16.8	17.5	.000	.000	1.42	30.6
MAX	4.4	5.9	2.3	4.1	467	551	103	144	.00	.00	44	181
MIN	.01	.26	.47	.44	.23	99	.00	.00	.00	.00	.00	.00
AC-FT	102	98	99	117	8750	28550	998	1070	.00	.00	87	1820
a	0	0	0	0	9100	33160	1550	1380	0	0	176	2470
b	0	0	0	0	0	0	0	0	0	0	0	0

e Estimated.
a Discharge, in acre-feet, of imported water released to river 2.75 mi upstream.
b Discharge, in acre-feet, diverted out of basin 18.5 mi upstream.

10257550 WHITEWATER RIVER AT WINDY POINT, NEAR WHITE WATER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	141	124	99.6	108	129	151	144	122	142	93.7	100	120
MAX	596	499	477	598	595	464	316	390	516	417	378	463
(WY)	1987	1987	1987	1987	1987	2000	1986	1998	1998	1986	1986	1986
MIN	.025	.000	.000	.000	3.16	3.97	.026	.000	.000	.000	.000	.000
(WY)	1992	1992	1990	1992	1991	1989	1991	1987	1987	1989	1987	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1985 - 2000	
ANNUAL TOTAL	39469.45		21017.12			
ANNUAL MEAN	108		57.4		130	
HIGHEST ANNUAL MEAN					308	1986
LOWEST ANNUAL MEAN					11.9	1991
HIGHEST DAILY MEAN	488	Jun 9	551	Mar 5	2600	Jan 7 1993
LOWEST DAILY MEAN	.00	May 28	.00	Apr 6	.00	Mar 4 1985
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 23	.00	Apr 6	.00	Feb 16 1986
INSTANTANEOUS PEAK FLOW			609	Mar 5	2530	Jan 10 1995
INSTANTANEOUS PEAK STAGE			5.36	Mar 5	8.32	Jan 10 1995
ANNUAL RUNOFF (AC-FT)	78290		41690		94090	
10 PERCENT EXCEEDS	409		316		356	
50 PERCENT EXCEEDS	4.6		.83		26	
90 PERCENT EXCEEDS	.44		.00		.00	

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA

LOCATION.—Lat 34°00'40", long 116°37'38", in NE 1/4 SW 1/4 sec.12, T.2 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank, in Mission Creek Indian Reservation, 0.6 mi downstream from West Fork, and 6.8 mi northwest of Desert Hot Springs.

DRAINAGE AREA.—35.7 mi^2.

PERIOD OF RECORD.—October 1967 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete scour limiter since November 1988. Elevation of gage is 2,400 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Slight regulation of low flow by two small dams with a combined capacity of about 3 acre-ft, 2 mi upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,750 ft^3/s, Aug. 17, 1983, gage height, 3.33 ft, on basis of slope-conveyance study of peak flow; maximum gage height, 6.40 ft, Jan. 25, 1969; maximum gage height since November 1988, 5.80 ft, from crest-stage gage, Jan. 16, 1993, discharge not determined; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended above 36 ft^3/s on basis of critical depth computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1400	5.6	1.80				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.01	e.01	.06	.24	.17	.40	.55	.12	.00	.00	.00	.00
2	e.00	e.01	.07	.25	.17	.42	.52	.10	.00	.00	.00	.00
3	e.00	e.01	.06	.27	.18	.44	.45	.10	.00	.00	.00	.00
4	e.00	.01	.07	.27	.18	.48	.41	.06	.00	.00	.00	.00
5	e.00	.02	.07	.26	.16	2.5	.39	.08	.00	.00	.00	.00
6	e.01	.02	.07	.22	.16	1.8	.39	.09	.00	.00	.00	.00
7	e.02	.01	.07	.21	.16	1.2	.36	.09	.00	.00	.00	.00
8	e.02	.02	.07	.23	.15	1.9	.33	.09	.00	.00	.00	.00
9	e.02	.03	.11	.22	.14	1.7	.35	.08	.00	.00	.00	.00
10	e.01	.02	.13	.23	.17	1.3	.35	.07	.00	.00	.00	.00
11	e.01	.03	.15	.23	.19	1.2	.33	.11	.00	.00	.00	.00
12	e.02	.02	.15	.22	.24	1.2	.29	.13	.00	.00	.00	.00
13	e.02	.01	.16	.22	.17	1.1	.28	.10	.00	.00	.00	.00
14	e.01	.01	.17	.21	.16	1.0	.35	.07	.00	.00	.00	.00
15	e.01	.01	.13	.20	.15	.95	.39	.07	.00	.00	.00	.00
16	e.01	.02	.13	.21	.18	.87	.36	.10	.00	.00	.00	.00
17	e.02	.04	.12	.18	.21	.85	.41	.12	.00	.00	.00	.00
18	e.01	.06	.12	.16	.20	.82	.60	.07	.00	.00	.00	.00
19	e.01	.06	.12	.16	.17	.74	.39	.04	.00	.00	.00	.00
20	e.02	.06	.11	.14	.24	.77	.30	.02	.00	.00	.00	.00
21	e.01	.07	.13	.15	1.7	.83	.28	.01	.00	.00	.00	.00
22	e.01	.08	.13	.16	.74	.78	.29	.00	.00	.00	.00	.00
23	e.01	.07	.16	.17	1.3	.73	.25	.00	.00	.00	.00	.00
24	e.02	.07	.17	.16	1.0	.69	.21	.00	.00	.00	.00	.00
25	e.01	.07	.18	.15	.69	.64	.17	.00	.00	.00	.00	.00
26	e.02	.06	.20	.16	.51	.60	.13	.01	.00	.00	.00	.00
27	e.02	.06	.20	.17	.47	.64	.12	.00	.00	.00	.00	.00
28	e.02	.06	.20	.18	.44	.63	.15	.00	.00	.00	.00	.00
29	e.01	.06	.20	.19	.42	.60	.18	.00	.00	.00	.00	.00
30	e.01	.05	.21	.19	---	.56	.16	.00	.00	.00	.00	.00
31	e.01	---	.22	.18	---	.55	---	.00	---	.00	.00	---
TOTAL	0.38	1.13	4.14	6.19	10.82	28.89	9.74	1.73	0.00	0.00	0.00	0.00
MEAN	.012	.038	.13	.20	.37	.93	.32	.056	.000	.000	.000	.000
MAX	.02	.08	.22	.27	1.7	2.5	.60	.13	.00	.00	.00	.00
MIN	.00	.01	.06	.14	.14	.40	.12	.00	.00	.00	.00	.00
AC-FT	.8	2.2	8.2	12	21	57	19	3.4	.00	.00	.00	.00

e Estimated.

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.85	1.08	1.15	3.42	8.44	6.66	5.40	4.39	2.81	1.88	1.44	.94
MAX	3.83	4.54	4.51	29.2	174	49.6	31.6	25.8	16.4	10.1	5.42	4.74
(WY)	1970	1984	1979	1980	1980	1980	1993	1993	1993	1980	1983	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1968	1969	1969	1968	1968	1989	1968	1968	1968	1972	1968	1968

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	105.27		63.02			
ANNUAL MEAN	.29		.17		3.17	
HIGHEST ANNUAL MEAN					28.3	1980
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	12	Jul 12	2.5	Mar 5	540	Feb 18 1980
LOWEST DAILY MEAN	.00	Jun 13	.00	Oct 2	.00	Oct 1 1967
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 13	.00	May 27	.00	Oct 1 1967
INSTANTANEOUS PEAK FLOW			5.6	Mar 5	1750	Aug 17 1983
INSTANTANEOUS PEAK STAGE			1.80	Mar 5	6.40	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	209		125		2300	
10 PERCENT EXCEEDS	.81		.49		6.0	
50 PERCENT EXCEEDS	.10		.05		.58	
90 PERCENT EXCEEDS	.00		.00		.00	

10257720 CHINO CANYON CREEK BELOW TRAMWAY, NEAR PALM SPRINGS, CA

LOCATION.—Lat 33°50'39", long 116°36'16", in NW 1/4 NE 1/4 sec.7, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank, 0.5 mi downstream from tram building, 3.5 mi west of Highway 111 on road leading to Palm Springs aerial tramway, and 5.5 mi west of Palm Springs.

DRAINAGE AREA.—4.71 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1986 to current year.

REVISED RECORDS.—WDR CA-89-1: 1987(M).

GAGE.—Water-stage recorder and crest-stage gage. Concrete control with low-water v-notch weir since June 25, 1996. Elevation of gage is 2,100 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. Two small diversions 2 mi upstream, one for city of Palm Springs and one for Palm Springs aerial tramway. October 1974 to July 1985, data published as Chino Canyon Creek near Palm Springs (station 10257710), with station located 0.45 mi upstream from present location. Previous gage destroyed by debris flow on July 19, 1985. Data for these sites are roughly equivalent. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 153 ft^3/s, Jan. 7, 1993, gage height, 10.18 ft, from rating curve extended above 35 ft^3/s on basis of critical depth computation; maximum gage height, 10.32 ft, Feb. 14, 1998; no flow for many days in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	e.05	.17	.00	.25	.27	.14	.08	.08	.07	.10
2	.01	.05	e.06	.18	.00	.25	.26	.13	.08	.08	.06	.11
3	.01	.06	e.06	.10	.00	.23	.25	.13	.08	.08	.06	.10
4	.01	.06	e.07	.05	.00	.22	.24	.13	.07	.08	.07	.11
5	.01	.05	e.08	.07	.00	.45	.24	.15	.07	.08	.07	.12
6	.01	.04	e.10	.04	.00	.37	.25	.15	.08	.08	.08	.11
7	.01	.04	e.13	.07	.00	.37	.23	.14	.06	.08	.08	.18
8	.01	e.04	e.18	.00	.00	.49	.22	.13	.07	.08	.08	.07
9	.01	e.05	.27	.00	.00	.43	.23	.13	.07	.07	.07	.08
10	.01	e.05	.41	.00	.10	.37	.24	.12	.06	.07	.07	.08
11	.01	e.04	.42	.00	.22	e.40	.24	.16	.06	.08	.07	.08
12	.01	e.04	.38	.00	.20	e.40	.22	.15	.05	.09	.08	.06
13	.01	e.05	.33	.00	.12	e.37	.21	.13	.05	.08	.07	.07
14	.01	e.06	.18	.00	.08	e.33	.27	.13	.06	.08	.07	.11
15	.02	e.08	.00	.00	.11	e.31	.29	.13	.06	.08	.08	.10
16	.03	e.08	.00	.00	.16	e.30	.26	.17	.06	.08	.07	.07
17	.06	.08	.03	.00	.20	e.28	.33	.17	.07	.08	.07	.10
18	.06	.11	.04	.11	.11	.26	.44	.12	.07	.08	.09	.08
19	.04	e.11	.12	.21	.06	.25	.34	.12	.07	.07	.08	.07
20	.03	e.10	.13	.16	.24	.29	.27	.10	.07	.07	.08	.09
21	.05	e.11	.11	e.08	.71	.32	.28	.09	.06	.08	.09	.10
22	.05	e.10	.14	e.06	.47	.30	.27	.08	.04	.07	.09	.13
23	.05	e.09	.06	e.06	.63	.29	.24	.09	.06	.07	.10	.14
24	.03	e.08	.07	e.06	.54	.27	.21	.10	.09	.07	.11	.12
25	.02	e.07	.02	e.06	.41	.26	.18	.11	.09	.07	.08	.11
26	.04	e.08	.01	.01	.33	.25	.15	.10	.07	.07	.04	.12
27	.05	e.08	.00	.15	.31	.26	.14	.09	.07	.07	.08	.10
28	.05	e.07	.00	.00	.29	.26	.16	.08	.07	.07	.14	.11
29	.04	e.07	.08	.00	.27	.27	.18	.08	.07	.06	.11	.12
30	.08	e.06	.11	.00	---	.27	.16	.08	.07	.07	.08	.11
31	.07	---	.01	.00	---	.28	---	.08	---	.07	.07	---
TOTAL	0.92	2.06	3.65	1.64	5.56	9.65	7.27	3.71	2.03	2.34	2.46	3.05
MEAN	.030	.069	.12	.053	.19	.31	.24	.12	.068	.075	.079	.10
MAX	.08	.11	.42	.21	.71	.49	.44	.17	.09	.09	.14	.18
MIN	.01	.04	.00	.00	.00	.22	.14	.08	.04	.06	.04	.06
AC-FT	1.8	4.1	7.2	3.3	11	19	14	7.4	4.0	4.6	4.9	6.0

e Estimated.

10257720 CHINO CANYON CREEK BELOW TRAMWAY, NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.29	.41	.51	1.83	2.57	2.06	1.29	.68	.25	.070	.099	.24
MAX	1.19	1.32	1.49	14.0	17.8	8.82	3.85	2.34	.88	.28	.65	1.38
(WY)	1994	1987	1994	1993	1993	1993	1993	1998	1998	1987	1993	1993
MIN	.000	.000	.000	.031	.095	.022	.047	.002	.000	.000	.000	.000
(WY)	1991	1991	1991	1991	1999	1999	1999	1999	1992	1989	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1987 - 2000	
ANNUAL TOTAL	26.53		44.34			
ANNUAL MEAN	.073		.12		.85	
HIGHEST ANNUAL MEAN					4.02	1993
LOWEST ANNUAL MEAN					.086	1999
HIGHEST DAILY MEAN	1.2	Jan 6	.71	Feb 21	49	Jan 17 1993
LOWEST DAILY MEAN	.00	Jan 14	.00	Dec 15	.00	Jun 15 1989
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 12	.00	Jan 8	.00	Jun 15 1989
INSTANTANEOUS PEAK FLOW			2.0	Feb 23	153	Jan 7 1993
INSTANTANEOUS PEAK STAGE			9.60	Feb 23	10.32	Feb 14 1998
ANNUAL RUNOFF (AC-FT)	53		88		615	
10 PERCENT EXCEEDS	.27		.27		2.0	
50 PERCENT EXCEEDS	.01		.08		.22	
90 PERCENT EXCEEDS	.00		.01		.00	

10257720 CHINO CANYON CREEK BELOW TRAMWAY, NEAR PALM SPRINGS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1987 to current year.
CHEMICAL DATA: Water years 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV											
16...	0755	.09	8.2	215	12.5	83	29	2.6	5.0	.5	11
18...	0645	.13	--	--	10.5	--	--	--	--	--	--

DATE	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV											
16...	22	101	124	2.8	<.1	21	4.9	<.1	<.02	<.05	<.01
18...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV											
16...	<.05	<.01	1.8	.18	129	137	--	e12	<.01	<10	<3
18...	--	--	--	--	--	--	<2	--	--	--	--

e Estimated.
< Actual value is known to be less than the value shown.

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA

LOCATION.—Lat 33°48'18", long 116°33'30", in SW 1/4 SW 1/4 sec.22, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, 2.2 mi southwest of Palm Springs, and 7 mi upstream from mouth.

DRAINAGE AREA.—16.9 mi^2.

PERIOD OF RECORD.—October 1947 to September 1982, October 1983 to current year.

REVISED RECORDS.—WSP 1244: 1948, 1951. WDR CA-88-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 762.5 ft above sea level (levels by Riverside County Flood Control District). Prior to Aug. 25, 1970, at datum 2.00 ft higher.

REMARKS.—Records fair. No regulation or diversion upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,900 ft^3/s, Nov. 22, 1965, Jan. 25, 1969, gage height, 12.34 ft, from rating curve extended above 70 ft^3/s on basis of slope-area measurements at gage heights 10.45 and 12.34 ft; maximum gage height, 15.78 ft, Sept. 7, 1981, from debris wave produced by thunderstorm following a brushfire; no flow for parts of most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 85 ft^3/s, or maximum, from rating curve extended above 147 ft^3/s on basis of slope-area measurements at gage heights 10.45 and 12.34 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1030	2.5	3.77				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.20	.32	.36	.65	1.1	.72	.02	.00	.00	.00
2	.00	.00	.20	.32	.36	.62	1.0	.70	.01	.00	e.00	.00
3	.00	.00	.21	.32	.35	.60	.89	.72	.00	.00	e.00	.00
4	.00	.00	.23	.31	.35	.59	.75	.69	.00	.00	e.00	.00
5	.00	.00	.20	.32	.36	1.0	.88	.67	.00	.00	e.00	.00
6	.00	.00	.24	.31	.36	1.1	1.0	.64	.00	.00	e.00	.00
7	.00	.00	.28	.30	.35	.76	.98	.58	.00	.00	e.00	.00
8	.00	.00	.35	.31	.36	.91	.90	.55	.00	.00	.00	.00
9	.00	.00	.36	.32	.36	1.1	.83	.51	.00	.00	.00	.00
10	.00	.00	.36	.32	.37	.86	.81	.45	.00	.00	.00	.00
11	.00	.00	.36	.31	.39	.82	.85	.42	.00	.00	.00	.00
12	.00	.00	.36	.32	.50	.81	.82	.42	.00	.00	.00	.00
13	.00	.00	.36	.32	.57	.80	.92	.40	.00	.00	.00	.00
14	.00	.00	.35	.31	.49	.76	.88	.37	.00	.00	.00	.00
15	.00	.00	.34	.31	.45	.72	1.1	.33	.00	.00	.00	.00
16	.00	.00	.34	.30	.48	.70	1.2	.31	.00	.00	.00	.00
17	.00	.00	.34	.30	.64	.67	1.2	.31	.00	.00	.00	.00
18	.00	.00	.34	.34	.56	.64	1.5	.29	.00	.00	.00	.00
19	.00	.00	.33	.34	.50	.92	1.6	.30	.00	.00	.00	.00
20	.00	.00	.31	.35	.52	1.1	1.5	.28	.00	.00	.00	.00
21	.00	.00	.31	.35	1.9	1.3	1.4	.25	.00	.00	.00	.00
22	.00	.00	.32	.34	1.6	1.2	1.4	.20	.00	.00	.00	.00
23	.00	.02	.31	.33	1.3	1.1	1.4	.17	.00	.00	.00	.00
24	.00	.06	.32	.33	1.7	.99	1.2	.13	.00	.00	.00	.00
25	.00	.08	.34	.33	1.0	.87	1.1	.11	.00	.00	.00	.00
26	.00	.11	.33	.34	.81	.82	.95	.08	.00	.00	.00	.00
27	.00	.14	.33	.36	.73	.92	.78	.04	.00	.00	.00	.00
28	.00	.16	.35	.36	.72	1.2	.76	.04	.00	.00	.00	.00
29	.00	.17	.33	.36	.69	1.3	.74	.03	.00	.00	.00	.00
30	.00	.18	.33	.36	---	1.3	.73	.03	.00	.00	.00	.00
31	.00	---	.33	.36	---	1.2	---	.01	---	.00	.00	---
TOTAL	0.00	0.92	9.66	10.17	19.13	28.33	31.17	10.75	0.03	0.00	0.00	0.00
MEAN	.000	.031	.31	.33	.66	.91	1.04	.35	.001	.000	.000	.000
MAX	.00	.18	.36	.36	1.9	1.3	1.6	.72	.02	.00	.00	.00
MIN	.00	.00	.20	.30	.35	.59	.73	.01	.00	.00	.00	.00
AC-FT	.00	1.8	19	20	38	56	62	21	.06	.00	.00	.00

e Estimated.

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.57	1.73	3.42	6.10	7.52	8.46	10.9	14.1	7.39	2.37	.99	.72
MAX	8.64	43.1	72.5	81.3	117	72.0	57.3	78.3	58.0	24.9	6.36	4.88
(WY)	1984	1966	1967	1993	1980	1995	1969	1969	1980	1980	1980	1976
MIN	.000	.000	.000	.000	.21	.17	.063	.000	.000	.000	.000	.000
(WY)	1948	1948	1948	1948	1964	1961	1961	1961	1961	1956	1948	1948

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	202.20		110.16			
ANNUAL MEAN	.55		.30		5.34	
HIGHEST ANNUAL MEAN					32.9	1980
LOWEST ANNUAL MEAN					.088	1961
HIGHEST DAILY MEAN	2.9	Feb 10	1.9	Feb 21	1080	Jan 25 1969
LOWEST DAILY MEAN	.00	Jun 26	.00	Oct 1	.00	Oct 1 1947
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 26	.00	Oct 1	.00	Oct 1 1947
INSTANTANEOUS PEAK FLOW			2.5	Feb 21	2900	Nov 22 1965
INSTANTANEOUS PEAK STAGE			3.77	Feb 21	15.78	Sep 7 1981
ANNUAL RUNOFF (AC-FT)	401		219		3870	
10 PERCENT EXCEEDS	1.4		.91		12	
50 PERCENT EXCEEDS	.27		.08		1.0	
90 PERCENT EXCEEDS	.00		.00		.00	

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.—Lat 33°44'42", long 116°32'05", in SW 1/4 SE 1/4 sec.11, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank, 0.8 mi upstream from Murray Canyon Creek, and 6 mi south of Palm Springs.

DRAINAGE AREA.—93.1 mi^2.

PERIOD OF RECORD.—January 1930 to January 1942, October 1947 to current year.

REVISED RECORDS.—WSP 1314: 1936(M). WDR CA-88-1: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 700 ft above sea level, from topographic map. Prior to Jan. 14, 1942, at datum 0.2 ft higher.

REMARKS.—Records poor. No regulation or diversion upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,000 ft^3/s, Feb. 21, 1980, gage height, 7.29 ft, from rating curve extended above 650 ft^3/s on basis of slope-area measurements at gage heights 6.38 ft and 6.81 ft; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 950 ft^3/s on basis of slope-area measurement at gage height 6.81 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 25	1545	1,110	5.08				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.97	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.61	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.7	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.75	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.47	.13	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.40	.55	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.31	.09	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	1.6	.25	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	4.8	.20	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	3.6	.18	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	6.9	.12	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	3.1	.05	.00	.00	.00	.00	35	.00
26	.00	.00	.00	.00	2.1	.01	.00	.00	.00	.00	e.10	.00
27	.00	.00	.00	.00	1.5	.04	.00	.00	.00	.00	e.02	.00
28	.00	.00	.00	.00	1.6	.06	.00	.00	.00	.00	e.00	.00
29	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.05	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	26.50	20.81	0.77	0.00	0.00	0.00	35.17	0.00
MEAN	.000	.000	.000	.000	.91	.67	.026	.000	.000	.000	1.13	.000
MAX	.00	.00	.00	.00	6.9	2.0	.55	.00	.00	.00	35	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	53	41	1.5	.00	.00	.00	70	.00

e Estimated.

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.35	.82	3.77	8.67	19.3	19.0	7.36	2.24	.68	.76	.98	.84
MAX	5.95	20.6	39.6	203	318	188	80.8	24.1	9.87	15.1	33.0	19.5
(WY)	1984	1966	1983	1993	1980	1983	1958	1983	1980	1979	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1933	1950	1951	1951	1951	1934	1934	1931	1931	1932	1930

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	69.37		83.25			
ANNUAL MEAN	.19		.23		5.35	
HIGHEST ANNUAL MEAN					47.4	1980
LOWEST ANNUAL MEAN					.000	1972
HIGHEST DAILY MEAN	28	Jul 12	35	Aug 25	2040	Feb 21 1980
LOWEST DAILY MEAN	.00	Feb 22	.00	Oct 1	.00	Jul 16 1930
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 24	.00	Oct 1	.00	Jul 16 1930
INSTANTANEOUS PEAK FLOW			1110	Aug 25	7000	Feb 21 1980
INSTANTANEOUS PEAK STAGE			5.08	Aug 25	7.29	Feb 21 1980
ANNUAL RUNOFF (AC-FT)	138		165		3870	
10 PERCENT EXCEEDS	.34		.11		6.4	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA

LOCATION.—Lat 33°45'36", long 116°32'57", in SE 1/4 SE 1/4 sec.3, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank, at U.S. Bureau of Indian Affairs Diversion Dam, 1.1 mi upstream from mouth, and 5.1 mi south of Palm Springs.

DRAINAGE AREA.—8.65 mi^2.

PERIOD OF RECORD.—October 1948 to current year.

REVISED RECORDS.—WDR CA-88-1: Drainage area. WDR CA-91-1: 1986(M), 1988(M).

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 800 ft above sea level, from topographic map. Prior to Mar. 25, 1949, reference point at same site at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. One small diversion for domestic use about 1 mi upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,960 ft^3/s, Aug. 31, 1954, gage height, 7.11 ft, from rating curve extended above 80 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended above 98 ft^3/s by theoretical computations of flow over weir:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	2045	13	2.70				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.4	1.5	1.7	1.8	2.4	2.1	1.6	.92	.56	.54	.80
2	.72	1.4	1.6	1.8	1.8	2.4	2.0	1.6	.89	.58	.49	.82
3	.71	1.4	1.6	1.8	1.8	2.4	2.0	1.6	.82	.57	.49	.84
4	.75	1.4	1.6	1.7	1.8	2.4	1.9	1.6	.80	.61	.42	.78
5	.74	1.4	1.7	1.7	1.8	3.1	1.9	1.6	.75	.62	.39	.73
6	.76	1.5	1.7	1.7	1.8	2.7	2.0	1.6	.77	.60	.40	.68
7	.88	1.6	1.7	1.7	1.8	2.4	1.9	1.3	.76	.60	.50	1.1
8	.87	1.7	1.7	1.7	1.8	2.8	1.9	1.5	.77	.60	.47	1.1
9	.83	1.6	1.7	1.7	1.9	2.7	1.9	1.5	.94	.62	.43	.78
10	.82	1.6	1.7	1.7	2.0	2.6	1.9	1.4	.93	.59	.38	.75
11	.81	1.6	1.7	1.8	2.4	2.6	1.9	1.5	.91	.58	.37	.77
12	.81	1.5	1.7	1.7	3.3	2.6	1.8	1.5	.85	.59	.47	.73
13	.79	1.5	1.7	1.8	2.4	2.7	1.8	1.4	.75	.55	.51	.68
14	e.85	1.5	1.7	1.7	2.0	2.6	1.9	1.4	.66	.50	.47	.69
15	e.90	1.5	1.7	1.8	2.0	2.6	1.9	1.4	.63	.48	.50	.69
16	e1.0	1.6	1.7	1.8	2.4	2.6	1.9	1.5	.60	.48	.57	.71
17	e1.2	1.6	1.7	1.7	2.8	2.6	1.9	1.5	.75	.48	.55	.75
18	1.3	1.7	1.7	1.6	2.3	2.5	2.8	1.4	.87	.44	.57	.80
19	1.4	1.7	1.6	1.6	2.2	2.4	2.3	1.3	.78	.41	.53	.71
20	1.4	1.7	1.7	1.8	2.9	2.3	2.2	1.2	.74	.40	.43	.72
21	1.4	1.7	1.7	1.8	6.7	2.3	2.1	1.1	.77	.45	.44	.84
22	1.4	1.6	1.7	1.8	4.2	2.3	2.2	1.1	.77	.50	.49	.90
23	1.4	1.6	1.6	1.8	4.6	2.4	2.1	1.1	.78	.47	.60	.96
24	1.4	1.6	1.6	1.8	4.0	2.3	2.2	1.1	.72	.43	.91	.93
25	1.5	1.6	1.6	1.9	2.9	2.3	2.0	1.2	.78	.36	.94	.89
26	1.4	1.6	1.6	2.0	2.7	2.3	1.8	1.2	.78	.34	.78	.87
27	1.4	1.7	1.6	1.8	2.6	2.4	1.8	1.2	.63	.36	.69	.90
28	1.4	1.9	1.7	1.8	2.7	2.4	1.8	1.1	.63	.35	.94	.90
29	1.4	1.7	1.6	1.8	2.5	2.4	2.1	.94	.66	.37	1.2	.90
30	1.4	1.5	1.6	1.8	---	2.3	1.9	.89	.59	.39	1.2	.88
31	1.4	---	1.7	1.8	---	2.1	---	.90	---	.50	.93	---
TOTAL	33.79	47.4	51.4	54.6	75.9	76.9	59.9	41.23	23.00	15.38	18.60	24.60
MEAN	1.09	1.58	1.66	1.76	2.62	2.48	2.00	1.33	.77	.50	.60	.82
MAX	1.5	1.9	1.7	2.0	6.7	3.1	2.8	1.6	.94	.62	1.2	1.1
MIN	.71	1.4	1.5	1.6	1.8	2.1	1.8	.89	.59	.34	.37	.68
AC-FT	67	94	102	108	151	153	119	82	46	31	37	49

e Estimated.

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.36	2.18	3.09	4.71	5.68	5.95	4.39	3.04	1.96	1.40	1.38	1.27
MAX	5.60	19.2	30.2	46.5	56.4	33.7	20.0	17.4	12.4	7.51	9.52	6.05
(WY)	1984	1966	1967	1993	1980	1980	1983	1983	1983	1983	1983	1983
MIN	.38	.60	.96	.95	1.02	.99	.68	.51	.23	.087	.14	.24
(WY)	1966	1963	1963	1976	1961	1961	1961	1961	1961	1961	1963	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	524.17		522.70			
ANNUAL MEAN	1.44		1.43		3.02	
HIGHEST ANNUAL MEAN					12.4	1983
LOWEST ANNUAL MEAN					.66	1961
HIGHEST DAILY MEAN	2.7	Jul 8	6.7	Feb 21	395	Dec 6 1966
LOWEST DAILY MEAN	.60	Jul 2	.34	Jul 26	.00	Jun 27 1961
ANNUAL SEVEN-DAY MINIMUM	.63	Jun 29	.37	Jul 24	.00	Jul 13 1963
INSTANTANEOUS PEAK FLOW			13	Feb 23	1960	Aug 31 1954
INSTANTANEOUS PEAK STAGE			2.70	Feb 23	7.11	Aug 31 1954
ANNUAL RUNOFF (AC-FT)	1040		1040		2190	
10 PERCENT EXCEEDS	2.1		2.4		5.4	
50 PERCENT EXCEEDS	1.5		1.5		1.7	
90 PERCENT EXCEEDS	.71		.54		.60	

10259050 PALM CANYON WASH NEAR CATHEDRAL CITY, CA

LOCATION.—Lat 33°47'49", long 116°28'44", in SE 1/4 NE 1/4 sec.29, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank, 500 ft downstream from Golf Club Drive, 0.4 mi upstream from Whitewater River, and 1.5 mi northeast of Cathedral City.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—January 1988 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 330 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation upstream from station. Two diversions for domestic use upstream from station on Andreas Creek. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,280 ft^3/s, Jan. 16, 1993, gage height, 8.70 ft, from rating curve extended above 1,350 ft^3/s; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	3.1	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	31	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.4	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.03	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	1.20	3.10	0.00	0.00	0.00	0.00	40.72	0.00
MEAN	.000	.000	.000	.000	.041	.10	.000	.000	.000	.000	1.31	.000
MAX	.00	.00	.00	.00	1.2	3.1	.00	.00	.00	.00	31	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	2.4	6.1	.00	.00	.00	.00	81	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.002	.047	17.5	4.78	8.36	.29	1.66	1.70	.15	.48	.25
MAX	.000	.023	.45	202	35.2	93.3	3.81	18.3	22.1	1.32	1.77	2.23
(WY)	1988	1997	1993	1993	1993	1995	1993	1998	1998	1999	1989	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1988	1988	1988	1989	1988	1988	1988	1988	1988	1990	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	40.80		45.02			
ANNUAL MEAN	.11		.12		2.95	
HIGHEST ANNUAL MEAN					20.4	1993
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	30	Jul 12	31	Aug 25	1700	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
INSTANTANEOUS PEAK FLOW			819	Aug 25	8280	Jan 16 1993
INSTANTANEOUS PEAK STAGE			7.66	Aug 25	8.70	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	81		89		2140	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259100 WHITEWATER RIVER AT RANCHO MIRAGE, CA

LOCATION.—Lat 33°44'58", long 116°25'19", in NW 1/4 SW 1/4 sec.12, T.5 S., R.5 E., Riverside County, Hydrologic Unit 18100200, on right bank, 0.2 mi upstream from Magnesia Spring Canyon storm channel, and 2.7 mi northwest of the intersection of Highways 111 and 74.

DRAINAGE AREA.—588 mi^2.

PERIOD OF RECORD.—March 1989 to current year.

REVISED RECORDS.—WDR CA-93-1: 1989–92(M). WDR CA-95-1: 1993, 1993(M).

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 230 ft above sea level, from topographic map. Prior to Dec. 4, 1997, at datum 10.00 ft lower.

REMARKS.—Records good. No regulation upstream from station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs. Water from the Colorado River Basin is imported for ground-water recharge and irrigation. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,060 ft^3/s, Jan. 7, 1993, gage height, 5.93 ft, datum then in use, from rating curve extended above 1,460 ft^3/s on basis of critical depth computations; maximum gage height, 8.09 ft (present datum), Feb. 14, 1998; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.9	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.82	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.15	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.13	0.17	0.00	0.00	0.00	0.00	0.00	7.37	0.00
MEAN	.000	.000	.000	.004	.006	.000	.000	.000	.000	.000	.24	.000
MAX	.00	.00	.00	.13	.17	.00	.00	.00	.00	.00	4.9	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.3	.3	.00	.00	.00	.00	.00	15	.00

10259100 WHITEWATER RIVER AT RANCHO MIRAGE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.003	.003	.030	29.9	6.70	6.85	.035	.031	.008	.023	.12	.16
MAX	.016	.021	.18	310	52.3	66.0	.21	.27	.051	.23	.78	1.30
(WY)	1993	1990	1993	1993	1993	1995	1993	1993	1998	1999	1989	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1991	1994	1994	1997	1990	1989	1989	1989	1989	1990	1989

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	7.75		7.67			
ANNUAL MEAN	.021		.021		3.67	
HIGHEST ANNUAL MEAN					30.4	1993
LOWEST ANNUAL MEAN					.002	1996
HIGHEST DAILY MEAN	5.7	Jul 13	4.9	Aug 25	2950	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Mar 30 1989
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Mar 30 1989
INSTANTANEOUS PEAK FLOW			137	Aug 25	9060	Jan 7 1993
INSTANTANEOUS PEAK STAGE			7.24	Aug 25	8.09	Feb 14 1998
ANNUAL RUNOFF (AC-FT)	15		15		2660	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259200 DEEP CREEK NEAR PALM DESERT, CA

LOCATION.—Lat 33°37'52", long 116°23'29", in NE 1/4 SE 1/4 sec.19, T.6 S., R.6 E., Riverside County, Hydrologic Unit 18100200, on left bank, 500 ft downstream from unnamed tributary, and 6.3 mi south of Palm Desert.

DRAINAGE AREA.—30.6 mi^2.

PERIOD OF RECORD.—May 1962 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 1,440 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,100 ft^3/s, Sept. 10, 1976, gage height, 7.84 ft inside, 11.5 ft from floodmarks, from rating curve extended above 40 ft^3/s on basis of slope-area measurement at gage heights 2.68, 5.15, and 7.84 ft; maximum gage height, 10.27 ft, Aug. 14, 1984; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 20 ft^3/s, or maximum, from rating curve extended above 52 ft^3/s on basis of slope-area measurement at gage heights 5.15 and 10.27 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 25	1445	1,140	5.17	Aug. 29	1315	128	3.19

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.36	.20	.06	.00	.00	.00	.04
2	.00	.00	.00	.00	.00	.35	.20	.05	.00	.00	.00	.02
3	.00	.00	.00	.00	.00	.35	.19	.05	.00	.00	.00	.02
4	.00	.00	.00	.00	.00	.34	.18	.05	.00	.00	.00	.02
5	.00	.00	.00	.00	.00	.36	.17	.04	.00	.00	.00	.02
6	.00	.00	.00	.00	.00	.41	.17	.04	.00	.00	.00	.03
7	.00	.00	.00	.00	.00	.41	.16	.05	.00	.00	.00	.03
8	.00	.00	.00	.00	.00	.42	.16	.05	.00	.00	.00	.02
9	.00	.00	.00	.00	.00	.41	.16	.04	.00	.00	.00	.01
10	.00	.00	.00	.00	.00	.40	.17	.03	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.38	.16	.04	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.38	.15	.03	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.37	.15	.03	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.35	.14	.02	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.35	.14	.02	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.32	.13	.02	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.33	.12	.02	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.32	.12	.01	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.32	.12	.01	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.32	.12	.01	.00	.00	.00	.00
21	.00	.00	.00	.00	.89	.31	.10	.01	.00	.00	.00	.00
22	.00	.00	.00	.00	.88	.30	.10	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.54	.28	.09	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	1.6	.28	.09	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.67	.28	.08	.01	.00	.00	e36	.00
26	.00	.00	.00	.00	.49	.27	.07	.00	.00	.00	e.10	.00
27	.00	.00	.00	.00	.43	.26	.06	.00	.00	.00	e.03	.00
28	.00	.00	.00	.00	.39	.25	.05	.00	.00	.00	e.01	.00
29	.00	.00	.00	.00	.37	.24	.06	.00	.00	.00	7.3	.00
30	.00	.00	.00	.00	---	.23	.06	.00	.00	.00	.71	.00
31	.00	---	.00	.00	---	.22	---	.00	---	.00	.08	---
TOTAL	0.00	0.00	0.00	0.00	6.26	10.17	3.87	0.69	0.00	0.00	44.23	0.21
MEAN	.000	.000	.000	.000	.22	.33	.13	.022	.000	.000	1.43	.007
MAX	.00	.00	.00	.00	1.6	.42	.20	.06	.00	.00	36	.04
MIN	.00	.00	.00	.00	.00	.22	.05	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	12	20	7.7	1.4	.00	.00	88	.4

e Estimated.

10259200 DEEP CREEK NEAR PALM DESERT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.23	.86	1.90	4.48	7.89	6.04	2.12	.84	.33	.78	1.02	1.26
MAX	4.62	16.3	23.5	88.6	101	49.3	12.4	7.15	3.97	11.8	15.3	38.1
(WY)	1984	1966	1983	1993	1980	1983	1983	1983	1983	1979	1984	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1963	1963	1963	1963	1963	1963	1963	1962	1962	1962	1962	1962

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1962 - 2000		
ANNUAL TOTAL	11.66			65.43					
ANNUAL MEAN	.032			.18			2.29		
HIGHEST ANNUAL MEAN							15.1		1993
LOWEST ANNUAL MEAN							.002		1963
HIGHEST DAILY MEAN	.17	Feb	8	36	Aug	25	850	Sep 10	1976
LOWEST DAILY MEAN	.00	Jan	1	.00	Oct	1	.00	May 1	1962
ANNUAL SEVEN-DAY MINIMUM	.00	Jan	1	.00	Oct	1	.00	May 1	1962
INSTANTANEOUS PEAK FLOW				1140	Aug	25	7100	Sep 10	1976
INSTANTANEOUS PEAK STAGE				5.17	Aug	25	10.27	Aug 14	1984
ANNUAL RUNOFF (AC-FT)	23			130			1660		
10 PERCENT EXCEEDS	.10			.28			2.9		
50 PERCENT EXCEEDS	.00			.00			.05		
90 PERCENT EXCEEDS	.00			.00			.00		

10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION. Lat 33 °44 14", long 116°14 07", in SE 1/4 NE 1/4 sec.15, T.5 S., R.7 E., Riverside County, Hydrologic Unit 18100200, on right bank of concrete drop structure, 1,000 ft upstream from Monroe Street bridge, and 1.7 mi northwest of Indio.

DRAINAGE AREA. 1,073 mi^2.

PERIOD OF RECORD. March 1966 to current year.

REVISED RECORDS. WDR CA-72-1: 1971.

GAGE. Water-stage recorder and crest-stage gage. Concrete control since Oct. 1, 1979. Elevation of gage is sea level, from topographic map. Prior to Oct. 1, 1979, water-stage recorder at site 0.5 mi upstream at different datum. Oct. 1, 1979, to Feb. 17, 1983; and Feb. 18, 1983, to Nov. 18, 1991, at same site at different datums.

REMARKS. Records good. No regulation upstream from station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs. Water from the Colorado River Basin is imported for ground-water recharge and irrigation. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD. Maximum discharge, 11,400 ft^3/s, Jan. 25, 1969, gage height, 14.41 ft, site and datum then in use, from rating curve extended above 1,300 ft^3/s on basis of slope-area measurement at gage height 15.3 ft for flood of Nov. 22, 1965; no flow for all or most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD. Flood of Mar. 2 or 3, 1938, reached a discharge of 29,000 ft^3/s, on basis of slope-area measurement, at site 5.0 mi upstream. Flood of Nov. 22, 1965, reached a stage of 15.3 ft, from floodmark, at site and datum used prior to Oct. 1, 1979, discharge 14,100 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR. Peak discharges greater than base discharge of 200 ft^3/s, or maximum, from rating curve extended above 480 ft^3/s on basis of critical-depth computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 23	2400	2.0	7.20	Mar. 5	1715	2.0	7.20

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00
22	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	1.2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.65	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1.92	0.57	0.00	0.00	0.09	0.17	0.00	0.00	0.00	0.00	0.01	0.00
MEAN	.062	.019	.000	.000	.003	.005	.000	.000	.000	.000	.000	.000
MAX	1.2	.50	.00	.00	.09	.17	.00	.00	.00	.00	.01	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3.8	1.1	.00	.00	.2	.3	.00	.00	.00	.00	.02	.00

10259300 WHITEWATER RIVER AT INDIO, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.010	.080	2.31	21.4	13.2	4.68	.019	.010	.009	1.10	1.09	2.55
MAX	.17	.88	61.3	513	278	56.2	.17	.35	.19	32.1	29.4	86.2
(WY)	1979	1979	1967	1993	1980	1978	1984	1972	1968	1979	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1967	1967	1968	1967	1967	1966	1966	1966	1966	1967	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	2.52		2.76			
ANNUAL MEAN	.007		.008		3.85	
HIGHEST ANNUAL MEAN					47.4	1993
LOWEST ANNUAL MEAN					.000	1973
HIGHEST DAILY MEAN	1.2	Oct 23	1.2	Oct 23	5000	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Mar 1 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Mar 1 1966
INSTANTANEOUS PEAK FLOW			2.0	Oct 23	11400	Jan 25 1969
INSTANTANEOUS PEAK STAGE			7.20	Oct 23	14.41	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	5.0		5.5		2790	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259540 WHITEWATER RIVER NEAR MECCA, CA

LOCATION.—Lat 33°31'29", long 116°04'36", in NW 1/4 NW 1/4 sec.32, T.7 S., R.9 E., Riverside County, Hydrologic Unit 18100200, on left bank, 1.6 mi upstream from mouth at Salton Sea, and 3.3 mi south of Mecca.

DRAINAGE AREA.—1,495 mi^2.

PERIOD OF RECORD.—October 1960 to current year (since October 1992, low-flow records only).

GAGE.—Water-stage recorder. Datum of gage is 221 ft below sea level (levels by Coachella Valley Water District). Oct. 1, 1960, to Mar. 22, 1967, at site 1.3 mi downstream and Mar. 23, 1967, to July 22, 1970, at site 0.7 mi downstream at different datums.

REMARKS.—Records poor. Most flow represents seepage and return flow from irrigated areas. No discharge records computed above 200 ft^3/s since October 1992. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,500 ft^3/s (estimated), Jan. 25, 1969; minimum daily, 37 ft^3/s, Nov. 25–29, 1960.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	75	66	67	71	70	75	71	67	68	70	70
2	57	69	67	66	71	71	77	70	65	69	69	71
3	60	71	66	65	69	73	77	71	62	68	69	69
4	60	71	67	66	73	73	75	71	62	70	69	70
5	65	71	66	70	73	75	75	75	62	68	70	73
6	64	72	66	66	74	78	76	78	65	68	72	68
7	61	74	67	68	73	75	75	74	67	67	71	70
8	62	74	66	66	71	73	74	71	67	69	74	70
9	61	73	65	68	70	73	74	69	65	70	76	70
10	61	70	66	70	70	75	75	71	66	70	77	69
11	62	71	62	73	71	74	76	71	66	69	77	71
12	64	69	63	74	74	76	74	70	64	67	81	73
13	66	68	63	72	73	77	76	68	65	67	81	73
14	67	71	61	70	72	76	76	70	65	69	81	76
15	66	85	60	73	70	78	74	70	63	70	80	72
16	69	71	62	72	73	77	77	67	65	69	79	74
17	70	69	64	69	70	77	73	68	64	67	80	76
18	67	69	66	71	70	78	71	68	65	66	79	78
19	74	68	67	72	72	80	71	70	63	64	80	78
20	71	86	65	71	75	79	73	70	64	66	77	78
21	69	68	66	71	75	76	73	68	65	66	75	74
22	70	66	64	70	75	77	74	66	65	67	71	75
23	73	67	64	69	74	78	75	68	65	68	73	75
24	71	66	64	72	75	80	72	69	65	69	71	74
25	71	67	64	75	73	78	73	70	67	68	73	71
26	74	66	62	75	72	77	73	72	66	67	71	69
27	72	66	62	73	73	76	74	68	65	68	70	68
28	72	66	62	73	75	79	76	69	66	68	72	71
29	75	64	65	74	72	79	75	68	68	70	74	70
30	72	64	69	75	---	78	71	65	69	70	80	66
31	74	---	67	73	---	75	---	68	---	70	75	---
TOTAL	2079	2107	2004	2189	2099	2361	2230	2164	1953	2112	2317	2162
MEAN	67.1	70.2	64.6	70.6	72.4	76.2	74.3	69.8	65.1	68.1	74.7	72.1
MAX	75	86	69	75	75	80	77	78	69	70	81	78
MIN	57	64	60	65	69	70	71	65	62	64	69	66
AC-FT	4120	4180	3970	4340	4160	4680	4420	4290	3870	4190	4600	4290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	99.9	94.9	95.0	107	125	124	119	118	107	107	120	115
MAX	147	149	141	236	396	222	172	173	145	198	183	220
(WY)	1976	1966	1983	1969	1980	1978	1976	1976	1975	1979	1983	1976
MIN	53.9	44.4	45.4	51.4	56.6	71.8	77.9	80.7	66.9	57.4	80.3	74.1
(WY)	1961	1961	1961	1961	1961	1961	1961	1992	1987	1987	1992	1992

SUMMARY STATISTICS	WATER YEARS 1961 - 1992	
ANNUAL MEAN	111	
HIGHEST ANNUAL MEAN	156	1976
LOWEST ANNUAL MEAN	68.4	1961
HIGHEST DAILY MEAN	e2500	Jan 25 1969
LOWEST DAILY MEAN	37	Nov 25 1960
ANNUAL SEVEN-DAY MINIMUM	37	Nov 24 1960
ANNUAL RUNOFF (AC-FT)	80380	
10 PERCENT EXCEEDS	140	
50 PERCENT EXCEEDS	108	
90 PERCENT EXCEEDS	76	

e Estimated.

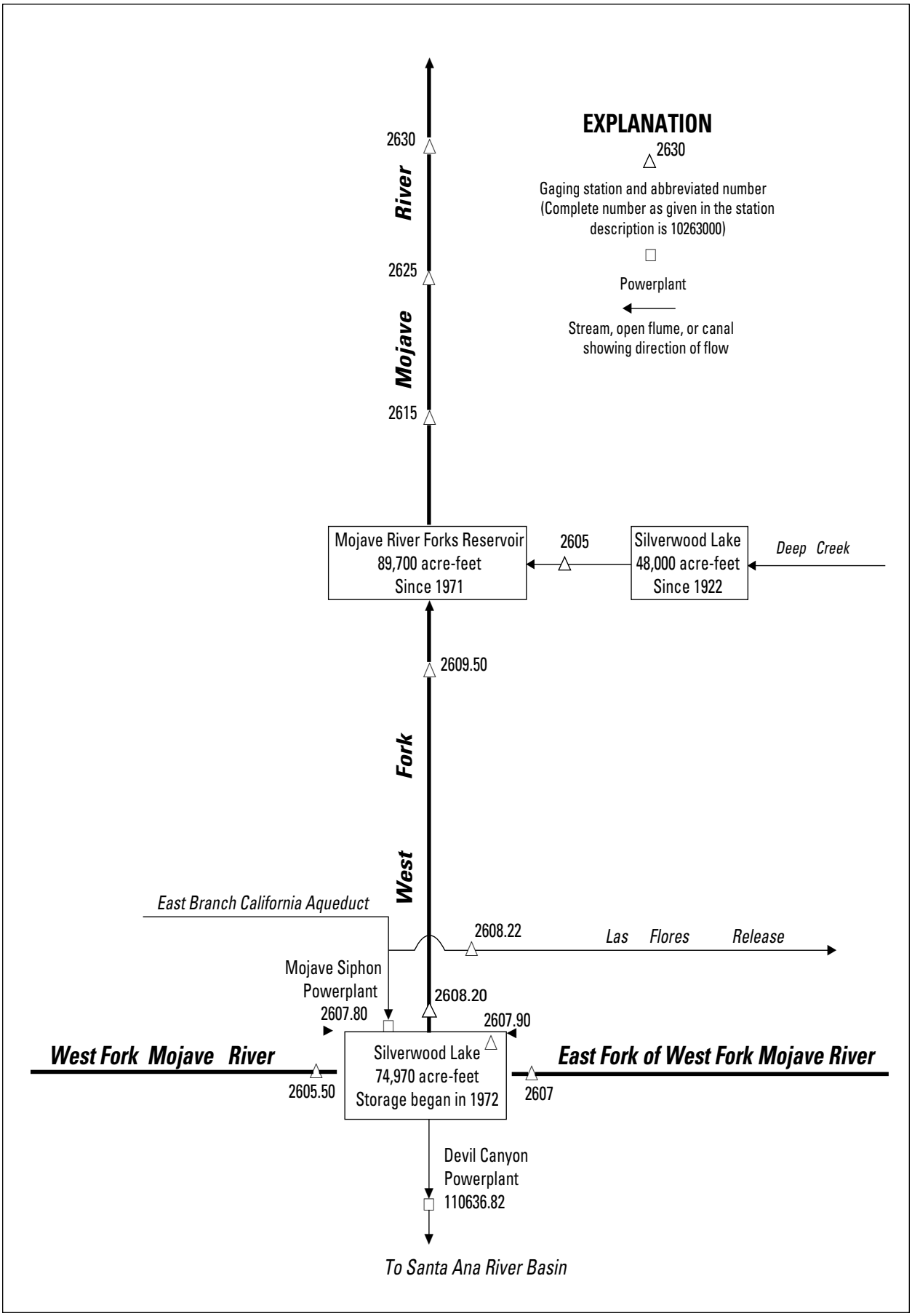

Figure 14. Diversions and storage in Mojave River Basin.

10260500 DEEP CREEK NEAR HESPERIA, CA

LOCATION.—Lat 34°20'28", long 117°13'39", in NE 1/4 SE 1/4 sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 0.5 mi upstream from confluence with West Fork Mojave River at Mojave River Forks Dam, 7 mi southeast of Hesperia, and 11 mi downstream from Lake Arrowhead.

DRAINAGE AREA.—134 mi^2.

PERIOD OF RECORD.—October 1904 to September 1922, October 1929 to current year. Prior to January 1930, monthly discharge only, published in WSP 1314.

REVISED RECORDS.—WSP 1314: 1931(M). WSP 1927: Drainage area.

GAGE.—Water-stage recorder. Broad-crested weir since December 1938. Elevation of gage is 3,050 ft above sea level, from topographic map. See WSP 1314 for history of changes prior to Dec. 10, 1938.

REMARKS.—Records good except for estimated daily discharges, which are fair. Slight regulation by Lake Arrowhead, capacity, 48,000 acre-ft, principally used for recreation. Sewage effulent from Lake Arrowhead area is released above gage at times. See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,600 ft^3/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow; maximum gage height, 23.81 ft, Feb. 10, 1978 (backwater from Mojave River Forks Reservoir); no flow, July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 400 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	0615	1,920	4.25	Aug. 25	1900	1,250	3.75
Apr. 18	0245	483	3.03				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	5.3	7.0	7.3	8.0	49	54	23	4.9	1.4	.74	2.1
2	1.6	5.3	7.0	7.7	8.0	46	46	22	4.6	1.3	.90	2.1
3	1.5	5.4	7.2	7.6	7.9	46	50	20	4.2	1.2	.96	1.9
4	1.5	5.6	7.2	7.5	7.9	43	59	19	4.0	1.2	.89	1.8
5	1.6	5.7	7.2	7.6	7.8	61	63	18	3.8	1.3	.77	1.9
6	1.6	5.7	7.2	7.7	7.8	72	60	17	3.7	1.3	.71	1.8
7	1.7	5.9	7.2	7.5	7.7	58	55	16	3.6	1.2	.70	1.9
8	1.7	6.0	7.2	7.5	7.9	87	52	16	3.5	1.2	.70	2.0
9	1.8	6.3	7.2	7.5	7.9	97	52	16	3.8	1.3	.70	1.9
10	1.9	6.9	7.2	7.6	8.1	74	46	15	4.2	1.3	.74	1.8
11	2.1	6.9	7.2	7.6	16	75	39	14	4.2	1.3	.75	1.7
12	2.3	6.9	7.2	7.5	18	89	35	12	3.8	1.2	.76	1.6
13	2.3	6.9	7.2	7.6	19	99	33	9.6	3.4	1.2	.67	1.7
14	2.3	6.9	7.2	7.5	13	110	31	9.6	3.1	1.1	.63	1.8
15	2.3	6.9	7.3	7.4	13	122	31	9.7	2.9	1.1	.73	e1.7
16	2.4	7.0	7.3	7.5	13	139	27	9.7	2.7	.90	.78	e1.6
17	2.9	7.1	7.3	7.6	34	142	25	9.6	2.5	.84	.81	e1.5
18	3.4	6.5	7.3	7.8	24	126	231	9.6	2.4	.74	.78	1.4
19	3.7	6.4	7.1	7.8	18	117	108	9.5	2.3	.69	.77	1.4
20	4.1	6.7	7.1	7.9	18	121	103	9.4	2.3	.73	e.80	1.4
21	4.4	6.7	7.1	7.8	560	84	107	9.4	2.2	.64	e.82	1.5
22	4.5	6.7	7.0	7.8	118	69	87	9.1	2.1	.62	e.84	1.6
23	4.6	6.7	6.9	7.9	143	67	74	8.5	2.0	.57	.86	1.5
24	4.7	6.7	6.8	7.8	136	66	61	8.3	1.9	.56	.88	1.6
25	4.7	6.9	6.8	7.9	68	72	52	8.3	1.9	.58	76	1.7
26	4.8	7.1	6.9	8.2	52	78	45	8.3	1.9	.58	28	1.7
27	4.9	7.2	6.9	9.0	49	83	39	8.0	1.8	.53	5.9	1.9
28	4.9	7.2	7.1	8.3	80	74	34	6.3	1.6	.55	3.5	2.3
29	5.2	7.2	7.0	8.1	58	73	30	5.6	1.5	.51	2.7	2.0
30	5.3	7.1	7.0	7.9	---	68	27	5.2	1.5	.54	2.4	1.8
31	5.2	---	7.1	8.0	---	66	---	4.9	---	.55	2.2	---
TOTAL	97.4	195.8	220.4	240.4	1529.0	2573	1756	366.6	88.3	28.73	139.39	52.6
MEAN	3.14	6.53	7.11	7.75	52.7	83.0	58.5	11.8	2.94	.93	4.50	1.75
MAX	5.3	7.2	7.3	9.0	560	142	231	23	4.9	1.4	76	2.3
MIN	1.5	5.3	6.8	7.3	7.7	43	25	4.9	1.5	.51	.63	1.4
AC-FT	193	388	437	477	3030	5100	3480	727	175	57	276	104

e Estimated.

10260500 DEEP CREEK NEAR HESPERIA, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.25	19.3	55.6	133	212	216	144	65.1	17.7	5.69	3.24	3.59
MAX	42.0	606	843	2062	2028	1539	747	456	80.4	25.9	29.2	54.3
(WY)	1984	1966	1922	1993	1993	1978	1958	1998	1998	1969	1983	1976
MIN	.23	1.14	2.53	4.56	6.07	4.87	3.20	2.37	1.14	.14	.13	.10
(WY)	1934	1957	1905	1951	1951	1956	1951	1934	1956	1961	1933	1933

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1905 - 2000	
ANNUAL TOTAL	3383.17		7287.62			
ANNUAL MEAN	9.27		19.9		72.6	
HIGHEST ANNUAL MEAN					411	1993
LOWEST ANNUAL MEAN					3.06	1951
HIGHEST DAILY MEAN	68	Apr 15	560	Feb 21	14700	Jan 25 1969
LOWEST DAILY MEAN	.54	Aug 5	.51	Jul 29	.00	Jul 17 1961
ANNUAL SEVEN-DAY MINIMUM	.61	Jul 31	.55	Jul 25	.07	Jul 12 1961
INSTANTANEOUS PEAK FLOW			1920	Feb 21	46600	Mar 2 1938
INSTANTANEOUS PEAK STAGE			4.25	Feb 21	23.81	Feb 10 1978
ANNUAL RUNOFF (AC-FT)	6710		14450		52560	
10 PERCENT EXCEEDS	17		66		141	
50 PERCENT EXCEEDS	7.1		6.9		10	
90 PERCENT EXCEEDS	.80		.89		.99	

10260550 WEST FORK MOJAVE RIVER ABOVE SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°17'06", long 117°22'16", in NW 1/4 SE 1/4 sec.2, T.2 N., R.5 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, on left bank, 1.5 mi upstream from Silverwood Lake, and 10.6 mi southwest of Hesperia.

DRAINAGE AREA.—3.22 mi^2.

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1961–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 3,550 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of the Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 584 ft^3/s, Feb. 23, 1998, gage height, 3.88 ft; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.05	.05	2.3	1.0	1.3	.35	.00	.00	.00
2	.00	.00	.02	.05	.04	2.0	.96	1.2	.32	.00	.00	.00
3	.00	.00	.02	.05	.04	1.9	.92	1.2	.30	.00	.00	.00
4	.00	.00	.02	.05	.04	1.7	.89	1.1	.27	.00	.00	.00
5	.00	.00	.03	.04	.04	9.9	.85	1.1	.25	.00	.00	.00
6	.00	.00	.03	.04	.04	7.2	.82	1.0	.22	.00	.00	.00
7	.00	.00	.03	.04	.03	4.6	.78	.95	.21	.00	.00	.00
8	.00	.00	.03	.04	.03	26	.85	.90	.28	.00	.00	.00
9	.00	.00	.04	.04	.03	14	.82	.89	.30	.00	.00	.00
10	.00	.00	.03	.04	.09	8.4	.78	.92	.26	.00	.00	.00
11	.00	.00	.04	.04	.08	6.8	.78	.89	.22	.00	.00	.00
12	.00	.00	.04	.04	.17	5.9	.75	.85	.19	.00	.00	.00
13	.00	.00	.04	.04	.11	5.2	.71	.81	.17	.00	.00	.00
14	.00	.00	.04	.04	.25	4.5	.76	.78	.12	.00	.00	.00
15	.00	.00	.04	.04	.36	4.0	.85	.76	.10	.00	.00	.00
16	.00	.00	.04	.03	2.3	3.3	.81	.82	.09	.00	.00	.00
17	.00	.00	.04	.03	1.6	2.9	2.1	.78	.08	.00	.00	.00
18	.00	.00	.04	.04	.82	2.6	10	.73	.06	.00	.00	.00
19	.00	.00	.04	.04	.63	2.4	5.0	.71	.06	.00	.00	.00
20	.00	.00	.03	.04	6.9	2.2	3.2	.64	.05	.00	.00	.00
21	.00	.01	.03	.04	22	2.0	2.6	.57	.03	.00	.00	.00
22	.00	.00	.03	.04	8.2	1.8	2.5	.53	.02	.00	.00	.00
23	.00	.01	.03	.04	29	1.7	2.2	.52	.01	.00	.00	.00
24	.00	.01	.03	.04	13	1.6	1.9	.55	.01	.00	.00	.00
25	.00	.02	.04	.06	5.4	1.5	1.8	.62	.00	.00	.00	.00
26	.00	.02	.04	.05	3.6	1.4	1.7	.58	.00	.00	.00	.00
27	.00	.01	.04	.05	3.2	1.3	1.5	.50	.00	.00	.00	.00
28	.00	.01	.04	.04	2.9	1.2	1.5	.45	.00	.00	.00	.00
29	.00	.01	.04	.04	2.4	1.2	1.4	.40	.00	.00	.00	.00
30	.00	.00	.04	.04	---	1.1	1.3	.40	.00	.00	.00	.00
31	.00	---	.04	.05	---	1.1	---	.38	---	.00	.00	---
TOTAL	0.00	0.10	1.05	1.31	103.35	133.7	52.03	23.83	3.97	0.00	0.00	0.00
MEAN	.000	.003	.034	.042	3.56	4.31	1.73	.77	.13	.000	.000	.000
MAX	.00	.02	.04	.06	29	26	10	1.3	.35	.00	.00	.00
MIN	.00	.00	.01	.03	.03	1.1	.71	.38	.00	.00	.00	.00
AC-FT	.00	.2	2.1	2.6	205	265	103	47	7.9	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	.065	.15	1.17	3.10	9.08	5.20	3.52	4.03	1.36	.37	.087	.052
MAX	.25	.41	4.49	12.8	26.5	12.5	10.5	17.1	5.94	1.81	.44	.26
(WY)	1999	1999	1997	1997	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	.003	.034	.042	1.10	.74	1.03	.48	.13	.000	.000	.000
(WY)	1998	2000	2000	2000	1999	1999	1997	1997	2000	1997	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	173.89		319.34			
ANNUAL MEAN	.48		.87		2.31	
HIGHEST ANNUAL MEAN					6.29	1998
LOWEST ANNUAL MEAN					.57	1999
HIGHEST DAILY MEAN	8.9	Apr 12	29	Feb 23	278	Feb 23 1998
LOWEST DAILY MEAN	.00	Jul 6	.00	Oct 1	.00	Jul 7 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 6	.00	Oct 1	.00	Jul 7 1996
INSTANTANEOUS PEAK FLOW			180	Feb 23	584	Feb 23 1998
INSTANTANEOUS PEAK STAGE			2.98	Feb 23	3.88	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	345		633		1680	
10 PERCENT EXCEEDS	1.2		2.0		6.1	
50 PERCENT EXCEEDS	.04		.04		.35	
90 PERCENT EXCEEDS	.00		.00		.00	

10260700 EAST FORK OF WEST FORK MOJAVE RIVER ABOVE SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°16'13", long 117°17'31", in NW 1/4 SW 1/4 sec.10, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, on right bank, 0.8 mi downstream from Houston Creek, 1.5 mi upstream from Silverwood Lake, and 10.8 mi south of Hesperia.

DRAINAGE AREA.—11.2 mi^2.

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1961–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 3,590 ft above sea level, from topographic map.

REMARKS.—Flow slightly regulated by Lake Gregory 3.2 mi upstream. See schematic diagram of the Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,440 ft^3/s, Feb. 23, 1998, gage height, 6.92 ft; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.20	.35	6.0	3.6	3.1	.74	.00	.00	.00
2	.00	.00	.00	.20	.31	5.1	3.1	2.9	.69	.00	.00	.00
3	.00	.00	.00	.20	.28	4.5	2.9	2.7	.64	.00	.00	.00
4	.00	.00	.00	.21	.28	4.5	2.7	2.6	.61	.00	.00	.00
5	.00	.00	.00	.23	.28	22	2.6	2.5	.56	.00	.00	.00
6	.00	.00	.00	.23	.28	19	2.6	2.5	.51	.00	.00	.00
7	.00	.00	.00	.23	.28	14	2.4	2.4	.47	.00	.00	.00
8	.00	.00	.00	.23	.28	43	2.1	2.3	.57	.00	.00	.00
9	.00	.00	.00	.23	.28	30	2.1	2.2	.68	.00	.00	.00
10	.00	.00	.00	.23	2.9	19	2.0	2.1	.59	.00	.00	.00
11	.00	.00	.00	.23	2.0	17	1.9	2.0	.51	.00	.00	.00
12	.00	.00	.00	.23	4.9	15	1.8	1.9	.43	.00	.00	.00
13	.00	.00	.00	.23	1.2	14	1.8	2.0	.37	.00	.00	.00
14	.00	.00	.03	.23	.87	14	1.8	1.8	.30	.00	.00	.00
15	.00	.00	.08	.23	.71	13	1.8	1.7	.25	.00	.00	.00
16	.00	.00	.11	.23	3.6	12	1.7	2.0	.23	.00	.00	.
17	.00	.00	.12	.23	2.8	11	14	1.8	.21	.00	.00	.00
18	.00	.00	.13	.23	1.3	9.4	26	1.7	.21	.00	.00	.00
19	.00	.00	.13	.23	.99	8.9	14	1.5	.19	.00	.00	.00
20	.00	.00	.13	.23	8.3	8.2	9.5	1.5	.18	.00	.00	.00
21	.00	.00	.14	.23	48	6.7	8.2	1.4	.17	.00	.00	.00
22	.00	.00	.13	.23	21	5.9	6.9	1.3	.15	.00	.00	.00
23	.00	.00	.13	.23	70	5.5	6.0	1.2	.15	.00	.00	.00
24	.00	.00	.14	.23	38	5.1	5.2	1.1	.13	.00	.00	.00
25	.00	.00	.15	.38	15	4.9	4.6	1.3	.13	.00	.00	.00
26	.00	.00	.16	.53	9.7	4.7	4.2	1.3	.12	.00	.00	.00
27	.00	.00	.18	.32	11	4.7	3.8	1.1	.10	.00	.00	.00
28	.00	.00	.18	.28	11	4.6	3.7	.97	.10	.00	.00	.00
29	.00	.00	.18	.28	8.0	4.4	3.4	.85	.06	.00	.00	.00
30	.00	.00	.18	.28	---	4.0	3.1	.80	.02	.00	.00	.00
31	.00	---	.19	.43	---	3.7	---	.79	---	.00	.00	---
TOTAL	0.00	0.00	2.49	7.91	263.89	343.8	149.5	55.31	10.07	0.00	0.00	0.00
MEAN	.000	.000	.080	.26	9.10	11.1	4.98	1.78	.34	.000	.000	.000
MAX	.00	.00	.19	.53	70	43	26	3.1	.74	.00	.00	.00
MIN	.00	.00	.00	.20	.28	3.7	1.7	.79	.02	.00	.00	.00
AC-FT	.00	.00	4.9	16	523	682	297	110	20	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	.13	.74	2.52	7.59	27.0	15.0	11.7	11.7	3.79	1.05	.22	.51
MAX	.45	2.10	9.36	29.5	84.8	38.0	43.0	53.2	17.5	5.18	1.11	2.56
(WY)	1999	1997	1997	1997	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.080	.26	5.11	1.64	1.89	.65	.17	.000	.000	.000
(WY)	1998	2000	2000	2000	1999	1999	1997	1997	1997	2000	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	451.45		832.97			
ANNUAL MEAN	1.24		2.28		6.71	
HIGHEST ANNUAL MEAN					20.5	1998
LOWEST ANNUAL MEAN					1.47	1999
HIGHEST DAILY MEAN	15	Feb 10	70	Feb 23	577	Feb 23 1998
LOWEST DAILY MEAN	.00	Jul 23	.00	Oct 1	.00	Jul 12 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 23	.00	Oct 1	.00	Jul 12 1996
INSTANTANEOUS PEAK FLOW			266	Feb 23	1440	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.73	Feb 23	6.92	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	895		1650		4860	
10 PERCENT EXCEEDS	3.8		5.6		17	
50 PERCENT EXCEEDS	.17		.14		.66	
90 PERCENT EXCEEDS	.00		.00		.00	

10260776 EAST BRANCH CALIFORNIA AQUEDUCT AT ALAMO POWERPLANT, NEAR GORMAN, CA

LOCATION.—Lat 34°48'56", long 118°41'03", in NW 1/4 NE 1/4 sec.4, T.8 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, in powerplant 2.2 mi downstream from Tehachapi Tunnel on the East Branch California Aqueduct, and 9 mi east of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources. Published as "Alamo Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meter in pen stock and water-stage recorder in bypass flume. Elevation of gage is 2,932.5 ft above sea level (levels by California Department of Water Resources).

REMARKS.—Upstream the flow splits as it leaves the Tehachapi Tunnel. Flow at this site represents East Branch California Aqueduct water flowing southeast to Silverwood Lake. Flow at this site has three components which are combined for publication: flow through the powerplant, occasional bypass flow through the Alamo Bypass (Cottonwood Chute) and estimated leakage. The West Branch California Aqueduct flows through William Warne Powerplant (station 11109398). See schematic of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,510 ft^3/s, July 12, 1997; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	104	921	646	1250	973	1170	1150	1140	1780	800	1710
2	1050	20	809	1240	1290	1050	1340	1250	1120	1190	1540	1450
3	1690	107	1060	1320	977	1370	1230	1320	1190	1070	1340	1380
4	1260	22	1040	1220	971	1280	1240	1430	960	1540	1170	1430
5	1360	12	1230	1080	999	1850	1760	1170	1180	1280	2020	1100
6	1470	21	972	1010	1170	1680	1780	1230	1170	1080	1540	1310
7	1410	32	955	1070	1090	1450	1200	1400	1420	1310	1260	1120
8	1470	32	2070	1170	1120	1570	1560	1230	1610	1310	1370	1240
9	1250	70	2090	1340	1610	1260	1400	1160	1710	1360	1430	1450
10	1360	6.1	2090	1210	1640	773	1160	1510	1280	1490	1820	1990
11	1460	6.1	2090	1150	1480	809	1420	1660	1510	1310	1610	1160
12	1510	37	2090	1120	1130	1150	1270	1630	1170	1210	1740	1010
13	1440	31	2090	1130	1340	865	1150	1550	1480	1080	1390	1190
14	1400	9.6	2090	1120	929	885	1200	1600	1440	1260	1080	1420
15	1410	10	1870	1380	1110	1080	1420	1270	833	1080	1140	1370
16	1360	9.6	1360	1430	727	991	1780	1400	1500	1680	1270	1500
17	1920	29	829	1400	710	1270	1420	1080	1780	1060	1150	1790
18	1220	7.6	964	1360	952	1280	1480	1430	1720	1040	1160	1330
19	1460	.00	1080	1360	1130	1800	1200	1270	1080	1270	1920	1240
20	1090	8.6	673	1060	1330	1730	1030	1070	1320	1270	2020	1350
21	1340	605	839	1090	970	1430	1040	1660	1600	1760	1500	987
22	1360	28	1300	1140	1010	1630	1160	1260	1460	1960	1270	1120
23	1770	16	1100	1270	1160	1520	1220	1200	1350	1880	1300	1250
24	2220	1100	1070	1250	691	1530	904	1200	1540	1840	1340	2000
25	752	1160	1240	1050	756	1390	1260	1310	1720	1570	1410	1240
26	1240	962	1180	974	866	1640	810	1220	1250	1290	1950	1440
27	1330	604	1080	1200	893	1340	1180	1190	1380	1370	2270	1160
28	1320	515	1050	1240	930	1270	1110	1510	1860	1440	1340	1240
29	1280	760	859	1200	817	1300	1370	1430	1770	1910	1620	1280
30	958	751	1310	1030	---	1300	1830	722	1910	1370	1850	1020
31	1120	---	993	1230	---	1070	---	1200	---	886	1220	---
TOTAL	42340	7075.60	40394	36490	31048	40536	39094	40712	42453	42946	45840	40277
MEAN	1366	236	1303	1177	1071	1308	1303	1313	1415	1385	1479	1343
MAX	2220	1160	2090	1430	1640	1850	1830	1660	1910	1960	2270	2000
MIN	752	.00	673	646	691	773	810	722	833	886	800	987
AC-FT	83980	14030	80120	72380	61580	80400	77540	80750	84210	85180	90920	79890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	553	217	443	368	287	638	1083	1060	1128	1254	1262	1140
MAX	1366	381	1303	1177	1071	1308	1367	1328	1415	1560	1479	1343
(WY)	2000	1998	2000	2000	2000	2000	1997	1997	2000	1997	2000	2000
MIN	28.0	51.3	94.7	62.1	1.46	217	683	722	922	852	1044	820
(WY)	1996	1997	1997	1999	1998	1998	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	299740.20		449205.60			
ANNUAL MEAN	821		1227		788	
HIGHEST ANNUAL MEAN					1227	2000
LOWEST ANNUAL MEAN					603	1998
HIGHEST DAILY MEAN	2220	Oct 24	2270	Aug 27	2510	Jul 12 1997
LOWEST DAILY MEAN	.00	Jan 6	.00	Nov 19	.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 6	11	Nov 14	.00	Feb 4 1997
INSTANTANEOUS PEAK FLOW					2510	Jul 12 1997
ANNUAL RUNOFF (AC-FT)	594500		891000		571200	
10 PERCENT EXCEEDS	1360		1760		1430	
50 PERCENT EXCEEDS	947		1250		864	
90 PERCENT EXCEEDS	.00		792		.00	

10260780 EAST BRANCH CALIFORNIA AQUEDUCT AT MOJAVE SIPHON POWERPLANT, NEAR HESPERIA, CA

LOCATION.—Lat 34°16'25", long 117°19'24", in SE 1/4 NW 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in powerplant and bypass channel, 0.2 mi north of Silverwood Lake, and 8.3 mi south of Hesperia.

PERIOD OF RECORD.—October 1995 to current year. Unpublished record for water years 1975 to 1994 available in files of the California Department of Water Resources. Published as "Mojave Siphon Powerplant" prior to October 1999.

REVISED RECORDS.—WDR CA-00-1: 1997–99.

GAGE.—Acoustic-velocity meters on intake pipes. Water stage recorder in stilling well on bypass flume. Elevation of powerplant is 3,182 ft above sea level. Elevation of bypass gage is 3,372.5 ft above sea level (from California Department of Water Resources).

REMARKS.—Flow at this site represents East Branch California Aqueduct water to Silverwood Lake. Flow at this site has two components which are combined for publication: flow through the powerplant, and bypass flow through the flume. See schematic diagram of Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,200 ft^3/s, July 14, 1997; no flow for many days in some years.

REVISIONS.—The monthly acre-feet totals for water years 1997 to 1999 were published in error. The daily value tables for these years are published with the revised acre-feet totals. These supercede figures published in the reports for 1997, 1998 and 1999.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	.00	.00	4.5	.50	.00	910	848	1590	1010	792	1870
2	592	.00	.00	3.5	.50	.00	647	878	1190	664	1420	1130
3	126	.00	.00	4.5	.50	.00	887	1260	1130	1490	1710	458
4	260	.00	.00	4.5	.50	.00	835	1540	1080	1620	1090	414
5	303	.00	.00	4.0	.50	.00	893	961	1140	1570	919	443
6	211	.00	.00	4.0	.50	.00	1520	901	951	1450	953	490
7	199	.00	.00	5.0	.50	2.5	1460	898	1090	1160	877	787
8	300	.00	.00	6.1	.50	361	1100	600	853	1010	815	1030
9	117	.00	.00	6.6	.50	319	1200	448	1030	994	1180	612
10	299	.00	.00	6.6	.00	.50	1060	565	556	1010	1350	617
11	300	.00	.00	7.6	.00	22	1110	1480	690	1010	1170	786
12	264	.00	.00	8.1	.50	504	811	984	757	1770	966	544
13	242	.00	.00	7.1	5.0	560	1330	1190	739	1120	1330	364
14	253	.00	.00	7.1	.50	732	1740	1140	779	2200	1260	1900
15	164	.00	.00	5.5	.50	1180	1820	1200	871	1520	1210	1140
16	166	.00	.00	6.6	.50	1350	1830	1150	902	1050	1430	703
17	169	.00	.00	6.1	.50	731	1550	1310	940	1100	2110	1270
18	165	.00	.00	5.5	.50	814	1430	1860	576	1040	1360	924
19	165	.00	.00	4.5	.50	829	1500	1340	1230	1670	674	852
20	167	.00	.00	5.0	.50	714	1480	700	878	1700	1200	1480
21	169	.00	.00	6.1	.50	612	1530	1200	1220	1400	1110	1410
22	.00	.00	.00	5.5	.50	605	1510	665	1300	1180	1100	1400
23	53	.00	.00	3.5	.00	859	1410	1160	1620	1100	1020	1060
24	91	.00	.00	.50	.00	420	1070	1160	911	856	1740	931
25	65	.00	.00	.50	.00	15	913	1600	817	920	1320	952
26	42	.00	.00	.50	.00	14	1270	1830	1000	1510	961	875
27	68	.00	.00	.50	.00	13	1230	1310	1560	1650	674	775
28	.00	.00	6.1	.50	.00	267	1320	1150	1060	1410	589	1380
29	.00	.00	9.1	.50	---	763	922	1140	1020	899	410	948
30	.00	.00	9.1	113	---	1380	762	1140	960	908	618	933
31	.00	---	5.0	1.0	---	1260	---	1260	---	891	1430	---
TOTAL	5036.00	0.00	29.30	244.50	14.50	14327.00	37050	34868	30440	38882	34788	28478
MEAN	162	.000	.95	7.89	.52	462	1235	1125	1015	1254	1122	949
MAX	592	.00	9.1	113	5.0	1380	1830	1860	1620	2200	2110	1900
MIN	.00	.00	.00	.50	.00	.00	647	448	556	664	410	364
AC-FT	9990	.00	58	485	29	28420	73490	69160	60380	77120	69000	56490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	92.5	34.2	122	64.2	112	315	1123	1021	944	1128	1077	1017
MAX	162	68.4	243	121	220	462	1235	1125	1015	1254	1122	1086
(WY)	1997	1996	1996	1996	1996	1997	1997	1997	1997	1997	1997	1996
MIN	22.6	.000	.95	7.89	.52	169	1010	916	873	1001	1031	949
(WY)	1996	1997	1997	1997	1997	1996	1996	1996	1996	1996	1996	1997

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	200889.20		224157.30			
ANNUAL MEAN	549		614		589	
HIGHEST ANNUAL MEAN					614	1997
LOWEST ANNUAL MEAN					563	1996
HIGHEST DAILY MEAN	1530	Apr 18	2200	Jul 14	2200	Jul 14 1997
LOWEST DAILY MEAN	.00	Oct 22	.00	Oct 22	.00	Oct 11 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 28	.00	Oct 28	.00	Oct 11 1995
ANNUAL RUNOFF (AC-FT)	398500		444600		426400	
10 PERCENT EXCEEDS	1180		1430		1280	
50 PERCENT EXCEEDS	510		605		589	
90 PERCENT EXCEEDS	.00		.00		.00	

10260780 EAST BRANCH CALIFORNIA AQUEDUCT AT MOJAVE SIPHON POWERPLANT, NEAR HESPERIA, CA Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660	259	610	346	.00	3.5	745	1050	944	517	766	892
2	771	13	332	308	.00	3.5	939	1100	1070	526	848	947
3	545	346	.50	350	.00	18	958	1070	723	501	681	840
4	825	673	230	321	.00	4.0	980	1220	811	507	516	595
5	1240	648	238	301	22	4.0	556	1400	803	509	562	834
6	982	1050	275	272	10	.00	1030	1350	918	532	816	758
7	319	1040	550	309	6.1	4.0	849	1250	666	554	899	1060
8	342	567	462	352	5.5	.00	962	508	758	520	1580	959
9	44	504	302	346	19	.00	885	558	757	479	1620	985
10	14	397	20	344	25	.00	935	482	760	452	759	1110
11	12	331	20	245	21	.00	1140	366	793	452	744	711
12	87	17	20	276	.50	.00	926	739	708	562	709	638
13	430	394	410	41	.00	.00	1080	407	766	499	338	756
14	368	40	20	228	6.1	.00	707	454	815	513	204	393
15	358	17	338	249	6.1	.00	1060	508	1030	688	1430	560
16	515	63	299	462	13	.00	938	557	775	743	1910	520
17	112	316	244	672	.00	.00	1060	603	751	852	1660	779
18	41	214	235	530	12	.00	908	641	946	837	889	2.0
19	30	5.0	21	148	4.5	.00	752	560	756	700	921	653
20	48	162	555	260	4.5	3.0	1120	511	775	1090	608	471
21	596	367	21	52	4.5	3.0	884	582	666	1000	721	647
22	469	30	565	47	4.5	3.0	880	418	498	763	951	544
23	423	40	276	51	4.0	493	873	406	190	766	429	710
24	473	189	245	45	.00	528	748	561	598	514	1110	636
25	850	346	210	52	4.0	483	561	548	351	1100	895	683
26	1520	.00	23	31	4.0	519	536	596	770	749	918	408
27	1070	155	275	.00	4.0	730	797	691	650	742	893	241
28	246	301	23	.00	6.6	634	914	852	598	788	920	494
29	169	314	306	.00	---	830	1100	768	758	692	821	865
30	305	164	267	.00	---	592	1120	718	627	560	668	790
31	261	---	253	.00	---	634	---	1320	---	584	858	---
TOTAL	14125	8962.00	7645.50	6638.00	186.90	5489.00	26943	22794	22031	20291	27644	20481.0
MEAN	456	299	247	214	6.67	177	898	735	734	655	892	683
MAX	1520	1050	610	672	25	830	1140	1400	1070	1100	1910	1110
MIN	12	.00	.50	.00	.00	.00	536	366	190	452	204	2.0
AC-FT	28020	17780	15160	13170	371	10890	53440	45210	43700	40250	54830	40620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1998, BY WATER YEAR (WY)

MEAN	214	122	163	114	77.5	269	1048	925	874	970	1015	906
MAX	456	299	247	214	220	462	1235	1125	1015	1254	1122	1086
(WY)	1998	1998	1998	1998	1996	1997	1997	1997	1997	1997	1997	1996
MIN	22.6	.000	.95	7.89	.52	169	898	735	734	655	892	683
(WY)	1996	1997	1997	1997	1997	1996	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1996 - 1998	
ANNUAL TOTAL	249824.50		183230.40			
ANNUAL MEAN	684		502		560	
HIGHEST ANNUAL MEAN					614	1997
LOWEST ANNUAL MEAN					502	1998
HIGHEST DAILY MEAN	2200	Jul 14	1910	Aug 16	2200	Jul 14 1997
LOWEST DAILY MEAN	.00	Feb 10	.00	Nov 26	.00	Oct 11 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 23	.00	Jan 27	.00	Oct 11 1995
ANNUAL RUNOFF (AC-FT)	495500		363400		405500	
10 PERCENT EXCEEDS	1440		981		1200	
50 PERCENT EXCEEDS	674		514		531	
90 PERCENT EXCEEDS	.50		4.0		.00	

10260780 EAST BRANCH CALIFORNIA AQUEDUCT AT MOJAVE SIPHON POWERPLANT, NEAR HESPERIA, CA Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	681	31	5.5	5.0	4.0	.00	597	407	880	961	770	1060
2	522	390	5.0	447	3.5	.00	789	267	788	897	851	1070
3	682	417	242	14	4.0	.00	284	403	797	724	989	1060
4	687	26	234	12	3.5	.00	357	469	715	646	929	1050
5	649	258	191	8.5	3.0	70	722	566	577	806	1020	1050
6	526	225	6.6	29	.50	718	360	551	604	964	981	1240
7	704	35	424	4.0	.50	853	739	523	621	622	989	1140
8	661	24	191	20	1.5	1120	430	350	794	845	856	977
9	748	224	28	23	2.0	1320	465	228	661	1300	893	1050
10	783	273	31	20	3.5	1270	703	669	746	1270	893	1040
11	782	319	112	23	18	1170	692	596	789	856	954	1040
12	784	26	139	112	21	1190	500	476	558	931	841	928
13	809	27	25	112	95	1110	700	517	497	1030	1180	1130
14	798	11	36	119	142	1260	616	389	926	998	817	1150
15	843	29	264	94	16	815	476	441	1060	1590	948	1030
16	642	160	28	34	2.5	972	518	6.6	716	1140	1040	1060
17	501	176	21	23	1.0	972	516	616	753	955	884	1090
18	325	377	24	21	.00	867	592	721	788	1190	973	955
19	261	373	23	18	.00	932	510	870	1060	1370	1050	1020
20	26	329	29	15	.00	999	314	779	1070	1290	1180	978
21	25	24	240	4.5	.00	4.0	637	599	1210	1370	797	1020
22	340	46	219	4.0	.00	286	597	431	1090	1150	910	978
23	482	258	134	83	.00	344	392	425	868	1070	1040	836
24	432	272	22	65	.00	587	401	873	686	1080	1220	890
25	326	330	25	78	.00	386	432	739	542	1270	1030	808
26	136	32	97	119	.00	3.5	892	579	611	1290	1140	888
27	339	294	117	85	.00	73	893	785	607	1240	1090	851
28	322	261	284	74	.00	843	686	715	869	1170	793	928
29	306	7.5	350	44	---	534	927	528	757	1150	1110	895
30	363	190	370	27	---	584	772	380	916	896	1060	885
31	22	---	433	3.5	---	276	---	565	---	951	1060	---
TOTAL	15507	5444.5	4350.1	1740.5	321.50	19558.50	17509	16463.6	23556	33022	30288	30097
MEAN	500	181	140	56.1	11.5	631	584	531	785	1065	977	1003
MAX	843	417	433	447	142	1320	927	873	1210	1590	1220	1240
MIN	22	7.5	5.0	3.5	.00	.00	284	6.6	497	622	770	808
AC-FT	30760	10800	8630	3450	638	38790	34730	32660	46720	65500	60080	59700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	285	137	158	99.7	61.1	360	932	827	852	994	1005	930
MAX	500	299	247	214	220	631	1235	1125	1015	1254	1122	1086
(WY)	1999	1998	1998	1998	1996	1999	1997	1997	1997	1997	1997	1996
MIN	22.6	.000	.95	7.89	.52	169	584	531	734	655	892	683
(WY)	1996	1997	1997	1997	1997	1996	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	177799.50		197857.70			
ANNUAL MEAN	487		542		555	
HIGHEST ANNUAL MEAN					614	1997
LOWEST ANNUAL MEAN					502	1998
HIGHEST DAILY MEAN	1910	Aug 16	1590	Jul 15	2200	Jul 14 1997
LOWEST DAILY MEAN	.00	Jan 27	.00	Feb 18	.00	Oct 11 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 27	.00	Feb 18	.00	Oct 11 1995
ANNUAL RUNOFF (AC-FT)	352700		392500		402300	
10 PERCENT EXCEEDS	946		1070		1180	
50 PERCENT EXCEEDS	508		551		536	
90 PERCENT EXCEEDS	4.0		6.2		.00	

10260780 EAST BRANCH CALIFORNIA AQUEDUCT AT MOJAVE SIPHON POWERPLANT, NEAR HESPERIA, CA Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	974	12	904	739	1190	855	1040	1210	748	1580	705	1720
2	1020	8.6	809	1260	1290	975	1050	1290	925	938	1190	1170
3	957	7.1	1010	1000	874	1150	1150	1370	905	819	1190	1310
4	1510	6.6	930	887	957	1160	1120	1070	1020	1330	837	1170
5	1080	7.6	838	987	1010	1320	1340	953	786	1050	1260	957
6	1290	8.6	821	1010	1060	1440	1380	1030	1040	876	1290	1080
7	1290	8.1	730	1100	1090	1900	1370	1050	1130	907	1030	942
8	1040	6.1	2000	1050	1020	1420	1390	1130	1130	1120	1060	1070
9	1170	6.1	2030	1280	1530	1310	1300	1140	1470	1160	1450	1390
10	1170	6.1	2010	1260	1360	740	1040	1130	1100	1490	1310	1470
11	1250	6.6	2010	1140	1640	700	1320	1300	1310	873	1430	1030
12	1470	14	2010	1020	1140	991	1120	1600	1350	949	1550	945
13	1300	6.1	2000	1070	1210	865	957	1340	1190	846	1380	892
14	1220	6.1	2020	842	754	694	1010	1480	1140	894	814	1300
15	1250	6.1	1870	1360	1070	983	1280	1150	681	961	884	864
16	948	5.5	1440	1280	663	921	1750	1270	866	1240	959	1290
17	1720	6.6	730	1370	706	1170	1150	1000	1490	795	840	1740
18	1510	.00	963	1380	1050	1090	1480	1050	1360	929	946	1330
19	1290	136	689	1300	1100	1430	895	1140	1170	1020	1480	1100
20	1080	438	699	1200	1170	1790	964	699	1100	1240	1720	1080
21	942	310	716	992	812	1300	810	1550	1170	1350	1550	701
22	970	97	1120	1000	1020	1510	1120	1330	1390	1470	1080	786
23	1550	100	1030	1080	1120	1420	1050	1200	791	1610	843	1190
24	1870	224	782	1190	714	1590	666	936	1110	1470	1210	1560
25	1210	564	926	930	538	1240	1170	951	1450	1520	1060	1130
26	1300	568	1050	1030	895	1320	581	1120	1220	1050	1690	1260
27	1220	765	998	965	892	1400	1140	1080	946	1250	1800	1140
28	1230	420	925	1160	814	1300	931	1210	1560	998	1290	1040
29	893	657	1010	1130	785	1170	1040	1060	1500	1530	1250	1040
30	630	810	1260	1060	---	1020	1540	889	1660	1170	1850	1010
31	458	---	1020	1080	---	878	---	973	---	1090	951	---
TOTAL	36812	5216.90	37350	34152	29474	37052	34154	35701	34708	35525	37899	34707
MEAN	1187	174	1205	1102	1016	1195	1138	1152	1157	1146	1223	1157
MAX	1870	810	2030	1380	1640	1900	1750	1600	1660	1610	1850	1740
MIN	458	.00	689	739	538	694	581	699	681	795	705	701
AC-FT	73020	10350	74080	67740	58460	73490	67740	70810	68840	70460	75170	68840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	466	144	367	300	256	527	973	892	913	1024	1049	976
MAX	1187	299	1205	1102	1016	1195	1235	1152	1157	1254	1223	1157
(WY)	2000	1998	2000	2000	2000	2000	1997	2000	2000	1997	2000	2000
MIN	22.6	.000	.95	7.89	.52	169	584	531	734	655	892	683
(WY)	1996	1997	1997	1997	1997	1996	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	251935.00		392750.90			
ANNUAL MEAN	690		1073		659	
HIGHEST ANNUAL MEAN					1073	2000
LOWEST ANNUAL MEAN					502	1998
HIGHEST DAILY MEAN	2030	Dec 9	2030	Dec 9	2200	Jul 14 1997
LOWEST DAILY MEAN	.00	Feb 18	.00	Nov 18	.00	Oct 11 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 18	6.3	Nov 12	.00	Oct 11 1995
ANNUAL RUNOFF (AC-FT)	499700		779000		477500	
10 PERCENT EXCEEDS	1230		1510		1290	
50 PERCENT EXCEEDS	772		1080		713	
90 PERCENT EXCEEDS	5.9		692		.50	

10260790 SILVERWOOD LAKE NEAR HESPERIA, CA

LOCATION.—Lat 34°18'15", long 117°19'05", in SW 1/4 NE 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in control structure, near spillway of Cedar Springs Dam, and 8.7 mi south of Hesperia.

DRAINAGE AREA.—34.0 mi^2.

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1972–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Lake is formed by earthfill dam completed in 1972. Capacity, 74,970 acre-ft, at spillway crest of 3,355 ft. Dead storage at invert of outlet structure, 3,967 acre-ft, elevation, 3,235 ft. Lake is a holding basin for East Branch California Aqueduct. See REMARKS for station 10260820. See schematic diagram of Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 74,843 acre-ft, Oct. 24, 1999, elevation, 3,354.87 ft; minimum, 38,006 acre-ft, Mar. 22, 1996, elevation, 3,310.24 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 74,843 acre-ft, Oct. 24, elevation, 3,354.87 ft; minimum, 50,673 acre-ft, Dec. 7, elevation, 3,327.40.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by California Department of Water Resources, dated January 1978)

3,300	31,395	3,335	56,811
3,315	41,311	3,345	65,554
3,325	48,732	3,355	74,970

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71283	72169	51444	68753	70129	68921	70280	70856	71539	72389	70729	70374
2	71178	71606	51229	69819	70421	68400	70092	71121	71473	71958	69697	70412
3	70809	70809	51436	70045	69763	68474	69753	71530	71112	71387	69200	70998
4	71577	69922	51292	70233	69388	68391	69763	71587	71169	71930	69398	70998
5	71444	69052	51372	70365	69313	68865	69847	71406	70506	71577	68700	70412
6	71587	68307	51308	70101	69145	69351	70346	70875	70572	71245	68812	70403
7	71710	67660	50673	70129	68968	70742	70639	71102	70431	70686	66786	70120
8	71292	66770	52808	70129	68409	71691	71254	71245	70355	70847	68745	69866
9	71634	65745	54709	70412	69005	72092	71501	71131	70667	71008	68438	70271
10	71691	65129	56870	70705	69295	71235	71112	70572	70771	71691	68848	70648
11	71863	64641	59598	70922	70450	70818	71587	70780	70960	71074	69155	70318
12	72322	63619	62093	70903	70941	70771	71663	71701	70425	70941	69455	69735
13	72369	62402	64264	70828	71425	70459	70941	72197	71264	70355	70355	69351
14	72503	61372	65863	70176	70884	69491	69725	73003	71235	70035	70751	69575
15	72580	59970	67983	70554	70970	69341	69416	72513	70393	70111	69960	69136
16	72111	58619	69238	70365	70676	69154	72503	72666	69979	70393	68967	69089
17	72859	57258	69276	70742	70421	69145	72111	72178	70686	69725	67946	70516
18	73272	56056	69566	70932	70393	68874	72647	71958	71159	69585	67079	70742
19	73060	54767	69285	71017	70459	69070	72283	71853	70894	69538	67521	70620
20	72993	54471	69192	70979	71302	69810	72312	70620	70884	69697	67844	70506
21	72465	54028	69098	70676	71330	69716	71796	71387	70979	70158	68549	69444
22	72235	52930	69763	70111	71321	70186	72216	71730	71064	70374	67770	68688
23	73128	52116	69847	69998	71987	70280	72465	71625	70403	70875	66731	68326
24	74843	51691	69575	70111	71634	70875	71558	70960	70054	71169	66914	69557
25	74551	52075	69388	70035	70544	70913	71911	70695	70648	71634	66465	69688
26	74677	51955	69388	70412	70393	71017	71131	71036	70393	71169	67503	69838
27	74745	52188	69472	70214	70252	71207	71378	71520	69585	71102	68595	69988
28	74638	51715	69201	70223	69810	71444	71752	71968	70242	70601	68642	69819
29	74259	51229	69108	70506	69238	70989	70337	72197	70884	71264	68660	69510
30	74201	51316	69397	70318	---	70894	70894	71853	71530	71055	70148	69951
31	73745	---	69304	70223	---	70554	---	71882	---	70752	69379	---
MAX	74843	72169	69847	71017	71987	72092	72647	73003	71539	72389	70751	70998
MIN	70809	51229	50673	68753	68409	68391	69416	70572	69585	69538	66465	68326
a	3353.70	3328.20	3348.98	3349.96	3348.91	3350.31	3350.67	3351.72	3351.35	3350.52	3349.06	3349.67
b	+2234	-22429	+17988	+919	-985	+1316	+340	+988	-352	-778	-1373	+572

CAL YR 1999 b -4403
WTR YR 2000 b -1560

a Elevation, in feet, at end of month.
b Change in contents, in acre feet.

10260820 WEST FORK MOJAVE RIVER BELOW SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°18'15", long 117°19'06", in SW 1/4 NE 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in control room under spillway at Cedar Springs Dam, and 8.7 mi south of Hesperia.

DRAINAGE AREA.—34.0 mi^2.

PERIOD OF RECORD.—October 1980 to September 1983, October 1995 to current year. Unpublished records for water years 1973–95 available in files of the California Department of Water Resources.

GAGE.—Flowmeter on release valve and theoretical rating on two slide gates. Elevation of gage is 3,180 ft above sea level, from topographic map. Prior to October 1983, at recording site 0.3 mi downstream, at different datum.

REMARKS.—Flow regulated by Silverwood Lake (station 10260790). Lake stores water received from the East Branch California Aqueduct through Mojave Siphon Powerplant (station 10260780) until it is transferred to Santa Ana River Basin area through Devil Canyon Powerplant (station 11063682). Las Flores Release from East Branch California Aqueduct (station 10260822) delivers water to vicinity of West Fork Mojave River. See schematic diagram of Mojave River Basin.

COOPERATION.—Records collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,290 ft^3/s, Mar. 2, 1983, gage height, 7.51 ft, site and datum then in use; no flow for most of every year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	24	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	49	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	29	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	16	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	41	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	40	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	42	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	41	18	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	40	37	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	17	13	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	20	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	39	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	75	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	88	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	49	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	49	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	49	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	369.00	339.00	68.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	12.7	10.9	2.27	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	88	49	37	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	732	672	135	.00	.00	.00	.00	.00
a	6.0	0	0	0	376	961	802	402	94	32	41	0

a Flow, in acre-feet, through Las Flores Release, provided by California Department of Water Resources.

10260820 WEST FORK MOJAVE RIVER BELOW SILVERWOOD LAKE, NEAR HESPERIA, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.045	.67	9.40	18.6	83.7	116	28.5	27.0	4.85	.66	1.88	.16
MAX	.19	4.03	50.8	73.9	403	739	87.8	126	28.9	2.65	14.6	1.18
(WY)	1983	1983	1983	1997	1983	1983	1998	1998	1998	1997	1997	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1996	1996	1996	1999	1999	1999	1997	1997	1981	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL			776.00			
ANNUAL MEAN			2.12		24.0	
HIGHEST ANNUAL MEAN					118	1983
LOWEST ANNUAL MEAN					.000	1999
HIGHEST DAILY MEAN			88	Feb 25	1990	Mar 3 1983
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1980
INSTANTANEOUS PEAK FLOW			88	Feb 25	2290	Mar 2 1983
INSTANTANEOUS PEAK STAGE					7.51	Mar 2 1983
ANNUAL RUNOFF (AC-FT)			1540		17420	
TOTAL FLOW (AC-FT) a	2250		2710			
10 PERCENT EXCEEDS	.00		.00		42	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

a Flow, in acre-feet, through Las Flores Release, provided by California Department of Water Resources.

10260950 WEST FORK MOJAVE RIVER ABOVE MOJAVE RIVER FORKS RESERVOIR, NEAR HESPERIA, CA

LOCATION.—Lat 34°20'20", long 117°15'25", in NW 1/4 NW 1/4 sec.24, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, on upstream wingwall of concrete double-box culvert on Arrowhead Lake Road, 0.1 mi northeast of junction with Highway 174, 4.5 mi downstream from Cedar Springs Dam on Silverwood Lake, and 6.5 mi southeast of Hesperia.

DRAINAGE AREA.—70.3 mi^2.

PERIOD OF RECORD.—October 1974 to current year. October 1974 to September 1991 published incorrectly as station 10261000. Records for station 10261000 are not equivalent due to difference in drainage area.

REVISED RECORDS.—WDR CA-84: 1983.

GAGE.—Water-stage recorder. Elevation of gage is 3,040 ft above sea level, from topographic map.

REMARKS.—Records poor. Regulated by Silverwood Lake (holding basin for imported water from East Branch California Aqueduct), total capacity, 74,970 acre-ft, 4.5 mi upstream, which releases all natural inflow as soon as possible after a storm. See schematic diagram of Mojave River Basin.

EXTREMES FOR THE PERIOD OF RECORD.—Maximum discharge, 11,300 ft^3/s, Feb. 10, 1978, gage height unknown, on basis of slope-area measurement of peak flow; maximum gage height, 23.2 ft, Feb. 10, 1978, backwater from Mojave River Forks Reservoir; no flow for several months in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 26,100 ft^3/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow for station 10261000 at site 1.5 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	14	7.3	4.4	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	12	9.3	3.8	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	13	9.4	3.9	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	14	9.1	5.5	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	29	8.8	4.3	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	29	8.7	3.9	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	23	8.4	3.8	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	71	8.1	3.4	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	119	7.4	2.3	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	99	7.4	2.2	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	32	7.4	2.0	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	27	7.2	1.8	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	26	6.8	.59	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	33	5.4	.53	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	90	5.0	.46	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	88	5.0	.60	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	81	29	.58	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	82	99	.48	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	83	100	.35	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	65	63	.30	.00	.00	.00	.00
21	.00	.00	.00	.00	163	18	23	.34	.00	.00	.00	.00
22	.00	.00	.00	.00	32	14	18	.25	.00	.00	.00	.00
23	.00	.00	.00	.00	134	2.8	15	.27	.00	.00	.00	.00
24	.00	.00	.00	.00	119	.67	13	.23	.00	.00	.00	.00
25	.00	.00	.00	.00	134	.29	12	.30	.00	.00	.00	.00
26	.00	.00	.00	.00	59	.15	11	.24	.00	.00	.00	.00
27	.00	.00	.00	.00	61	1.2	10	.02	.00	.00	.00	.00
28	.00	.00	.00	.00	66	.38	5.9	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	29	.06	5.0	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	4.8	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.92	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	797.00	1068.47	529.4	46.84	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	27.5	34.5	17.6	1.51	.000	.000	.000	.000
MAX	.00	.00	.00	.00	163	119	100	5.5	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	4.8	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	1580	2120	1050	93	.00	.00	.00	.00

10260950 WEST FORK MOJAVE RIVER ABOVE MOJAVE RIVER FORKS RESERVOIR, NEAR HESPERIA, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.60	4.75	13.9	71.6	157	150	51.9	33.0	13.9	1.41	.55	.66
MAX	41.8	50.4	68.6	810	883	948	253	296	169	10.1	11.4	8.29
(WY)	1994	1993	1984	1993	1993	1983	1980	1978	1978	1998	1997	1993
MIN	.000	.000	.000	.000	.055	.24	.000	.000	.000	.000	.000	.000
(WY)	1975	1975	1976	1975	1999	1977	1987	1984	1975	1975	1975	1975

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	650.32		2441.71			
ANNUAL MEAN	1.78		6.67		41.1	
HIGHEST ANNUAL MEAN					183	1978
LOWEST ANNUAL MEAN					.94	1987
HIGHEST DAILY MEAN	32	Apr 14	163	Feb 21	4900	Feb 10 1978
LOWEST DAILY MEAN	.00	Jan 14	.00	Oct 1	.00	Oct 1 1974
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 14	.00	Oct 1	.00	Oct 1 1974
INSTANTANEOUS PEAK FLOW			642	Feb 21	11300	Feb 10 1978
INSTANTANEOUS PEAK STAGE			2.10	Feb 21	23.20	Feb 10 1978
ANNUAL RUNOFF (AC-FT)	1290		4840		29770	
10 PERCENT EXCEEDS	6.8		13		65	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA

LOCATION.—Lat 34°34'23", long 117°19'11", in SW 1/4 SE 1/4 sec.29, T.6 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, 650 ft upstream from bridge on county road (formerly U.S. Highway 66), 0.6 mi downstream from Atchison, Topeka, & Santa Fe Railway bridge, and 3 mi northwest of Victorville.

DRAINAGE AREA.—513 mi^2.

PERIOD OF RECORD.—February 1899 to September 1906, October 1930 to current year. Monthly discharge only for January to September 1906, October, November 1930, published in WSP 1314. Prior to October 1936, published as "at Victorville" and as "near Victorville" in 1937.
CHEMICAL DATA: Specific conductance 1975–81.
WATER TEMPERATURE: Water years 1962–80.

REVISED RECORDS.—WSP 1927: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 2,643.01 ft above sea level. See WSP 1314 for history of gage changes prior to Mar. 28, 1938. Mar. 28, 1938, to Apr. 14, 1966, at site 350 ft upstream at datum 5.00 ft higher; Apr. 15, 1966, to July 17, 1969, at site 350 ft upstream at datum 3.00 ft higher.

REMARKS.—Records fair except for periods of estimated daily discharge, which are poor. Flow regulated by Mojave River Forks Reservoir, capacity, 89,700 acre-ft, since 1971, 17.8 mi upstream; Silverwood Lake, capacity, 74,970 acre-ft, since 1972; and Lake Arrowhead, capacity, 48,000 acre-ft, since 1922. Some water is imported into basin. Diversions and pumping for irrigation and for Mojave State Fish Hatchery upstream from station. See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 70,600 ft^3/s, Mar. 2, 1938, gage height, 23.7 ft, present datum, from rating curve extended above 10,000 ft^3/s on basis of slope-area measurement of peak flow; no flow Sept. 21–23, 1995.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	7.7	15	18	18	22	12	8.4	2.7	1.4	1.3	1.4
2	3.0	8.7	15	20	16	20	12	8.3	2.5	1.7	e1.3	e1.4
3	3.2	9.5	16	17	16	21	13	7.0	2.4	1.7	e1.3	1.3
4	3.1	8.8	18	16	17	22	12	6.0	2.5	1.7	e1.3	1.3
5	3.0	8.3	18	15	23	22	12	6.4	2.4	1.5	e1.3	e1.6
6	3.1	7.5	21	15	19	28	12	6.0	2.7	e1.8	e1.4	e1.6
7	5.6	8.8	14	15	17	22	13	6.1	3.0	e1.7	e1.4	1.5
8	9.5	9.9	14	16	16	18	11	5.7	3.1	e1.6	e1.4	e1.5
9	8.3	9.7	13	17	16	17	9.6	5.8	3.6	e1.5	e1.4	1.5
10	6.7	12	13	17	17	16	8.9	6.2	3.7	e1.5	e1.5	e1.5
11	5.4	10	14	16	17	22	8.9	6.6	3.6	1.5	1.5	e1.4
12	5.5	10	16	16	18	23	9.0	6.6	3.3	e1.5	1.5	e1.4
13	6.0	9.6	18	17	19	19	9.7	6.6	3.0	e1.5	1.4	e1.4
14	8.5	12	16	19	18	15	11	5.5	2.7	e1.5	1.6	e1.5
15	6.2	11	16	18	16	18	12	6.8	2.5	e1.5	e1.6	e1.6
16	8.3	11	14	16	17	20	11	6.6	2.4	1.5	1.6	e1.6
17	6.3	10	16	23	19	17	12	6.8	2.4	e1.6	1.7	1.5
18	6.3	10	16	16	17	16	39	6.6	2.1	1.6	1.7	e1.5
19	7.8	10	16	15	15	15	14	6.5	2.1	1.6	e1.6	1.5
20	e7.8	14	17	15	19	15	13	6.2	2.3	e1.5	1.4	1.5
21	e7.9	13	17	14	104	14	19	6.3	2.3	e1.5	1.4	1.5
22	e8.0	13	16	14	23	13	17	5.4	2.1	e1.4	1.2	1.6
23	e8.0	12	15	16	69	12	13	4.9	2.2	e1.3	e1.2	1.6
24	e8.1	12	18	17	34	11	11	5.7	2.2	e1.3	e1.2	e1.6
25	e8.1	15	18	16	21	11	8.9	6.7	2.3	e1.2	e1.2	1.6
26	8.2	15	19	17	18	11	8.3	7.1	2.3	e1.2	1.1	e1.7
27	7.6	16	19	15	19	12	7.6	6.4	2.2	e1.2	1.2	e1.6
28	7.8	15	17	18	20	13	7.4	5.8	2.0	e1.2	1.3	e1.5
29	8.0	15	16	18	21	12	7.2	5.5	1.9	e1.3	1.5	e1.4
30	7.5	14	16	17	---	12	7.1	4.2	1.9	e1.3	1.3	1.4
31	7.4	---	17	17	---	11	---	2.9	---	1.3	1.4	---
TOTAL	203.4	338.5	504	516	679	520	361.6	191.6	76.4	45.6	43.2	45.0
MEAN	6.56	11.3	16.3	16.6	23.4	16.8	12.1	6.18	2.55	1.47	1.39	1.50
MAX	9.5	16	21	23	104	28	39	8.4	3.7	1.8	1.7	1.7
MIN	3.0	7.5	13	14	15	11	7.1	2.9	1.9	1.2	1.1	1.3
AC-FT	403	671	1000	1020	1350	1030	717	380	152	90	86	89

e Estimated.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.7	35.2	51.0	97.4	209	221	126	48.3	21.4	14.7	14.8	16.7
MAX	58.2	222	376	1487	2334	2229	1015	312	157	32.5	29.3	41.7
(WY)	1977	1966	1967	1993	1993	1938	1958	1998	1978	1969	1969	1976
MIN	3.19	10.3	13.5	16.0	18.2	12.6	11.6	6.18	2.55	1.47	1.39	1.50
(WY)	1998	1998	1995	1998	1991	1990	1990	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	4286.7		3524.3			
ANNUAL MEAN	11.7		9.63		72.6	
HIGHEST ANNUAL MEAN					402	1969
LOWEST ANNUAL MEAN					9.63	2000
HIGHEST DAILY MEAN	59	Jul 11	104	Feb 21	21000	Feb 25 1969
LOWEST DAILY MEAN	1.7	Aug 24	1.1	Aug 26	.00	Sep 21 1995
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 23	1.2	Aug 22	.37	Sep 20 1995
INSTANTANEOUS PEAK FLOW			482	Feb 23	70600	Mar 2 1938
INSTANTANEOUS PEAK STAGE			3.10	Feb 23	23.70	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	8500		6990		52590	
10 PERCENT EXCEEDS	22		18		54	
50 PERCENT EXCEEDS	12		8.1		26	
90 PERCENT EXCEEDS	2.1		1.4		10	

10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.—Lat 34°54'25", long 117°01'19", in SW 1/4 SE 1/4 sec.31, T.10 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, 75 ft upstream from bridge on U.S. Highway 91, at Barstow.

DRAINAGE AREA.—1,291 mi^2.

PERIOD OF RECORD.—October 1930 to current year.

REVISED RECORDS.—WSP 1564: 1932.

GAGE.—Water-stage recorder. Datum of gage is 2,089.34 ft above sea level.

REMARKS.—Flow regulated by Mojave River Forks Reservoir, capacity, 89,700 acre-ft, since 1971, 60 mi upstream; Silverwood Lake, capacity, 74,970 acre-ft, since 1972, and Lake Arrowhead, capacity, 48,000 acre-ft, since 1922. Some water is imported into basin. Diversions and pumping for irrigation of about 15,000 acres upstream from station. See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 64,300 ft^3/s, Mar. 3, 1938, gage height, 8.60 ft, on basis of slope-area measurement of peak flow; no flow for all or most of each year. No flow for 2000 Water Year.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.001	.35	3.36	24.7	95.5	111	40.6	5.37	.001	.004	.021	.016
MAX	.061	20.2	116	747	1640	1962	547	93.5	.080	.090	1.31	.71
(WY)	1959	1966	1967	1969	1993	1938	1941	1941	1972	1958	1979	1984
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	0.17					
ANNUAL MEAN	.000				23.0	
HIGHEST ANNUAL MEAN					202	1969
LOWEST ANNUAL MEAN					.000	1931
HIGHEST DAILY MEAN	.17	Apr 12			18100	Mar 3 1938
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1930
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1930
INSTANTANEOUS PEAK FLOW					64300	Mar 3 1938
INSTANTANEOUS PEAK STAGE					8.60	Mar 3 1938
ANNUAL RUNOFF (AC-FT)	.3				16680	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.—Lat 35°02'14", long 116°23'00", in NW 1/4 SE 1/4 sec.18, T.11 N., R.6 E., San Bernardino County, Hydrologic Unit 18090208, on right bank side of right pier of Union Pacific Railroad bridge, 0.3 mi west of Afton, and 63 mi east of Barstow.

DRAINAGE AREA.—2,121 mi^2.

PERIOD OF RECORD.—October 1929 to September 1932, October 1952 to current year. Records for water year 1930 incomplete; yearly estimate published in WSP 1314. Records for water years 1979 and 1980 incomplete; discharge measurements only were published at that time.

REVISED RECORDS.—WSP 1564: 1931. WDR CA-00-1: 1982(M).

GAGE.—Water-stage recorder. Datum of gage is 1,398.15 ft above sea level. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi downstream at different datum; October 1952 to May 1978, at datum 2 ft higher.

REMARKS.—Records poor. Natural flow affected by ground-water withdrawals, diversions, municipal use, and storage in reservoirs 100 mi upstream. For description of upstream reservoirs see Mojave River at Barstow (station 10262500). See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,000 ft^3/s, Jan. 26, 1969, gage height, 12.40 ft (present datum), from rating curve extended above 3,200 ft^3/s on basis of slope-area measurement of peak flow; no flow at times during many years.

REVISIONS.—The maximum discharge for water year 1982 has been revised to 410 ft^3/s, Aug. 25, 1982, gage height, 5.25 ft.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 15	0515	20	2.90				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.46	.62	.96	.64	.66	.55	.33	.07	.02	.00	.11
2	.28	.46	.61	.86	.64	.61	.56	.30	.07	.02	.00	.12
3	.26	.45	.61	.84	.64	.64	.53	.26	.07	.02	.00	.13
4	.29	.42	.60	.85	.65	.65	.54	.24	.07	.02	.00	.12
5	.29	.42	.61	.90	.68	.78	.50	.24	.05	.03	.00	.11
6	.31	.41	.63	.85	.68	.66	.45	.24	.05	.04	.00	.11
7	.34	.44	.68	.89	.68	.63	.47	.23	.06	.05	.00	.14
8	.37	.45	.64	.90	.71	.61	.45	.25	.06	.04	.00	.16
9	.38	.45	.62	.93	.74	.63	.41	.24	.08	.05	.00	.11
10	.38	.44	.66	.86	.73	.59	.42	.20	.10	.04	.00	.12
11	.38	.45	.64	.87	.74	.59	.42	.24	.09	.04	.00	.12
12	.39	.45	.64	.84	.77	.60	.42	.28	.08	.03	.00	.13
13	.39	.48	.68	.79	.73	.59	.40	.29	.08	.03	.00	.13
14	.40	.44	.64	.84	.64	.59	.41	.27	.07	.03	.56	.11
15	.41	.46	.66	.84	.64	.59	.44	.25	.05	.02	2.8	.10
16	.88	.49	.68	.84	.67	.56	.43	.26	.03	.01	.05	.09
17	.45	.49	.69	.78	.70	.55	.45	.30	.03	.01	.04	.09
18	.44	.47	.70	.74	.64	.53	.48	.25	.02	.01	.02	.09
19	.43	.48	.75	.74	.64	.58	.45	.21	.03	.01	.01	.10
20	.42	.52	.80	.74	.69	.62	.44	.20	.04	.01	.02	.09
21	.45	.50	.82	.74	.74	.61	.43	.17	.05	.01	.03	.09
22	.43	.48	.80	.73	.76	.62	.43	.15	.04	.01	.04	.09
23	.43	.50	.79	.70	.95	.65	.37	.12	.06	.01	.04	.12
24	.41	.52	.80	.72	1.0	.65	.38	.10	.07	.01	.04	.14
25	.42	.53	.84	.69	.70	.65	.39	.11	.06	.00	.06	.13
26	.43	.56	.84	.69	.64	.61	.36	.10	.07	.00	.16	.15
27	.43	.56	.83	.64	.67	.65	.34	.10	.05	.00	.08	.15
28	.42	.56	.84	.61	.64	.68	.30	.08	.04	.00	.09	.14
29	.42	.56	.87	.62	.63	.61	.31	.07	.02	.00	.15	.14
30	.43	.59	.83	.64	---	.60	.33	.06	.03	.00	.18	.16
31	.45	---	.91	.66	---	.57	---	.06	---	.00	.13	---
TOTAL	12.51	14.49	22.33	24.30	20.38	19.16	12.86	6.20	1.69	0.57	4.50	3.59
MEAN	.40	.48	.72	.78	.70	.62	.43	.20	.056	.018	.15	.12
MAX	.88	.59	.91	.96	1.0	.78	.56	.33	.10	.05	2.8	.16
MIN	.26	.41	.60	.61	.63	.53	.30	.06	.02	.00	.00	.09
AC-FT	25	29	44	48	40	38	26	12	3.4	1.1	8.9	7.1

10263000 MOJAVE RIVER AT AFTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.75	.94	2.72	13.3	43.3	17.5	2.82	.66	.40	.67	1.33	.87
MAX	2.97	2.29	63.9	347	876	415	56.4	1.80	1.58	3.83	18.0	5.46
(WY)	1993	1981	1966	1969	1993	1978	1969	1931	1981	1999	1984	1998
MIN	.000	.000	.21	.34	.59	.22	.20	.099	.000	.000	.000	.000
(WY)	1967	1969	1978	1976	1975	1975	1977	1977	1976	1966	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	290.48		142.58			
ANNUAL MEAN	.80		.39		6.90	
HIGHEST ANNUAL MEAN					100	1969
LOWEST ANNUAL MEAN					.22	1975
HIGHEST DAILY MEAN	87	Jul 29	2.8	Aug 15	10000	Feb 20 1993
LOWEST DAILY MEAN	.07	Jun 30	.00	Jul 25	.00	Jun 28 1961
ANNUAL SEVEN-DAY MINIMUM	.07	Jun 29	.00	Jul 25	.00	Jul 14 1961
INSTANTANEOUS PEAK FLOW			20	Aug 15	18000	Jan 26 1969
INSTANTANEOUS PEAK STAGE			2.90	Aug 15	12.40	Jan 26 1969
ANNUAL RUNOFF (AC-FT)	576		283		5000	
10 PERCENT EXCEEDS	.80		.75		1.6	
50 PERCENT EXCEEDS	.46		.42		.74	
90 PERCENT EXCEEDS	.13		.02		.05	

10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.—Lat 34°25'15", long 117°50'19", in SE 1/4 NE 1/4 sec.20, T.4 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank, 0.1 mi upstream from Punchbowl Canyon, and 1.9 mi southeast of Valyermo.

DRAINAGE AREA.—22.9 mi^2.

PERIOD OF RECORD.—January 1923 to current year. Monthly discharge only for June 1938 to January 1939, published in WSP 1314. Prior to October 1954, published as Rock Creek near Valyermo.

REVISED RECORDS.—WSP 1314: 1938–39. WSP 1564: 1932, 1937, 1939(M). WSP 1927: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 4,050 ft above sea level, from topographic map. Prior to May 4, 1938, at same site at different datums. May 4, 1938, to Jan. 26, 1939, at site 0.2 mi downstream (below Punchbowl Canyon) at different datum.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,300 ft^3/s, Mar. 2, 1938, gage height, unknown, on basis of slope-area measurement of peak flow; maximum gage height, 7.70 ft, Jan. 25, 1969; minimum daily, 0.70 ft^3/s, Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2245	175	2.94				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.7	2.7	2.4	2.6	2.4	9.7	11	18	e6.9	4.5	7.1	5.8
2	e2.7	2.8	2.4	2.5	2.4	9.0	9.8	17	e6.9	4.9	6.5	5.8
3	2.7	2.8	2.4	2.4	2.3	8.8	9.5	17	e6.9	4.6	5.7	5.2
4	2.7	2.7	2.4	2.5	2.1	8.9	10	16	6.9	e4.5	4.7	4.4
5	2.7	2.6	2.4	2.4	2.1	11	11	15	e6.9	e4.4	e4.4	3.9
6	2.8	2.6	2.4	2.3	2.1	10	11	15	e6.9	4.3	e4.2	3.1
7	2.8	2.6	2.4	2.3	2.0	9.4	11	14	e6.8	4.3	e4.0	2.4
8	2.8	2.6	2.4	2.3	2.1	10	11	14	e6.7	e4.1	3.8	2.4
9	2.8	2.6	2.4	2.3	2.1	9.9	11	13	e6.6	3.9	3.6	2.4
10	2.8	2.6	2.4	2.4	2.0	9.4	11	13	e6.5	2.7	3.5	2.4
11	2.9	2.4	2.4	2.4	2.1	9.2	10	13	e6.4	2.4	3.3	2.6
12	2.8	2.4	2.4	2.4	4.2	10	9.9	12	6.3	2.5	3.4	2.7
13	2.8	2.4	2.5	2.5	3.5	12	9.8	11	6.2	e2.5	4.2	2.7
14	2.8	2.4	2.6	2.6	3.4	14	10	11	e6.1	2.4	4.0	2.8
15	2.9	2.4	2.6	2.6	3.4	17	10	10	e6.0	2.3	3.7	3.0
16	2.9	2.4	2.6	2.7	5.0	19	9.5	11	e5.9	4.0	3.7	2.9
17	2.9	2.3	2.6	2.8	4.6	20	18	11	e5.8	e4.0	3.7	2.7
18	2.8	2.3	2.6	2.8	4.6	18	26	10	e5.7	e4.0	3.6	2.8
19	2.8	2.3	2.6	2.8	5.0	18	22	9.5	5.6	e4.0	3.1	2.7
20	2.8	2.3	2.6	2.8	27	19	23	9.1	5.4	e4.0	2.9	2.7
21	2.8	2.3	2.6	2.8	64	16	27	8.5	5.3	e3.9	3.3	2.5
22	2.8	2.3	2.4	2.8	20	14	28	7.9	5.0	e3.9	3.5	2.8
23	2.7	2.3	2.3	2.8	18	13	28	7.5	4.8	e3.9	4.1	3.0
24	2.7	2.3	2.3	2.8	14	13	26	7.6	e4.8	e3.9	4.5	3.1
25	2.6	2.3	2.3	2.6	11	12	24	7.4	e4.8	3.9	5.1	2.9
26	2.6	2.3	2.4	2.6	10	12	23	7.2	e4.8	3.8	5.0	2.9
27	2.6	2.4	2.4	2.6	10	13	22	7.0	e4.8	3.5	4.6	3.2
28	2.6	2.4	2.4	2.6	11	13	22	e7.0	4.8	3.1	5.0	3.2
29	2.7	2.3	2.6	2.6	10	13	20	e7.0	4.6	3.0	6.1	3.1
30	2.7	2.4	2.8	2.5	---	12	18	e7.0	4.7	6.0	6.0	3.1
31	2.6	---	2.8	2.4	---	11	---	e7.0	---	7.9	5.5	---
TOTAL	85.3	73.5	76.8	79.5	252.4	394.3	492.5	340.7	175.8	121.1	135.8	95.2
MEAN	2.75	2.45	2.48	2.56	8.70	12.7	16.4	11.0	5.86	3.91	4.38	3.17
MAX	2.9	2.8	2.8	2.8	64	20	28	18	6.9	7.9	7.1	5.8
MIN	2.6	2.3	2.3	2.3	2.0	8.8	9.5	7.0	4.6	2.3	2.9	2.4
AC-FT	169	146	152	158	501	782	977	676	349	240	269	189

e Estimated.

10263500 BIG ROCK CREEK NEAR VALYERMO, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.15	7.38	10.3	18.5	31.1	37.8	30.9	28.0	19.0	11.0	7.91	6.25
MAX	19.0	116	67.0	245	303	432	144	120	91.4	42.2	26.5	19.7
(WY)	1984	1966	1947	1969	1980	1978	1978	1941	1978	1983	1983	1983
MIN	1.05	1.09	1.80	2.10	2.39	2.40	2.67	2.35	1.61	1.15	1.09	1.01
(WY)	1952	1952	1991	1951	1951	1951	1951	1951	1961	1961	1961	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1923 - 2000	
ANNUAL TOTAL	1638.1		2322.9			
ANNUAL MEAN	4.49		6.35		17.8	
HIGHEST ANNUAL MEAN					90.9	1978
LOWEST ANNUAL MEAN					1.91	1951
HIGHEST DAILY MEAN	9.9	Apr 21	64	Feb 21	3300	Mar 2 1938
LOWEST DAILY MEAN	1.9	Sep 8	2.0	Feb 7	.70	Nov 5 1951
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 6	2.1	Feb 4	.87	Nov 3 1951
INSTANTANEOUS PEAK FLOW			175	Feb 20	8300	Mar 2 1938
INSTANTANEOUS PEAK STAGE			2.94	Feb 20	7.70	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	3250		4610		12870	
10 PERCENT EXCEEDS	7.6		13		37	
50 PERCENT EXCEEDS	3.6		3.8		7.4	
90 PERCENT EXCEEDS	2.3		2.4		2.6	

10264636 SLED TRACK CANAL AT LANCASTER BOULEVARD, NEAR ROGERS LAKE, CA

LOCATION.—Lat 34°49'19", long 117°52'20", in NE 1/4 NW 1/4 sec.6, T.8 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank at culvert under Lancaster Boulevard, 1.1 mi northeast of intersection of East 120th Avenue and Lancaster Boulevard, approximately 0.25 mi south of Rogers Lake.

DRAINAGE AREA.—Not determined.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.—July 1996 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,275 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 66 ft^3/s, Mar. 14, 1998, gage height, 2.95 ft, datum then in use; maximum gage height, 10.80 ft, Feb. 23, 2000; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.79	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.81	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.32	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00	.05
23	.00	.00	.00	.00	3.6	.00	.00	.00	.00	.00	.00	.05
24	.00	.00	.00	.00	3.2	.00	.00	.00	.00	.00	.00	.06
25	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.02
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	e.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	7.98	1.61	0.00	0.00	0.00	0.00	0.00	0.25
MEAN	.000	.000	.000	.000	.28	.052	.000	.000	.000	.000	.000	.008
MAX	.00	.00	.00	.00	3.6	.81	.00	.00	.00	.00	.00	.06
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	16	3.2	.00	.00	.00	.00	.00	.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	.000	.035	.067	.000	.24	.17	.000	.000	.000	.000	.000	.002
MAX	.000	.14	.26	.000	.70	.65	.000	.000	.000	.000	.000	.008
(WY)	1997	1997	1998	1997	1998	1998	1996	1996	1996	1996	1996	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1998	1999	1997	1997	1997	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	9.84			
ANNUAL MEAN	.027		.039	
HIGHEST ANNUAL MEAN			.13	1998
LOWEST ANNUAL MEAN			.000	1996
HIGHEST DAILY MEAN	3.6	Feb 23	20	Mar 14 1998
LOWEST DAILY MEAN	.00	Oct 1	.00	Apr 11 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	.00	Apr 11 1996
INSTANTANEOUS PEAK FLOW	17	Feb 23	66	Mar 14 1998
INSTANTANEOUS PEAK STAGE	10.80	Feb 23	10.80	Feb 23 2000
ANNUAL RUNOFF (AC-FT)	20		28	
10 PERCENT EXCEEDS	.00		.00	
50 PERCENT EXCEEDS	.00		.00	
90 PERCENT EXCEEDS	.00		.00	

e Estimated.

10264636 SLED TRACK CANAL AT LANCASTER BOULEVARD, NEAR ROGERS LAKE, CA Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.—July 1996 to current year.

INSTRUMENTATION.—Recording tipping-bucket rain gage since July 1996.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 1.38 in., Sept. 25, 1997; no rainfall for many days in most years.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall recorded, 0.38 in., Feb. 23; no rainfall for many days.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.29	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.03	.00	.00	.12	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.38	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.20	0.90	0.30	0.26	0.00	0.00	0.00	0.06	0.00
MAX	.00	.00	.00	.17	.38	.29	.14	.00	.00	.00	.04	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1999 TOTAL 0.21 MAX .21 MIN .00
WTR YR 2000 TOTAL 1.72 MAX .38 MIN .00

10264640 BUCKHORN CREEK AT EAST 120TH AVENUE, NEAR ROGERS LAKE, CA

LOCATION.—Lat 34°50'18", long 117°54'59", in SE 1/4 SW 1/4 sec.27, T.9 N., R.10 W., Kern County, Hydrologic Unit 18090206, on left bank, on west side of 120th Avenue, 250 ft south of Lancaster Boulevard, and approximately 0.25 mi southwest of Rogers Lake.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—May 1996 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,270 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 118 ft^3/s, Feb. 23, 1998, gage height, 2.81 ft, datum then in use; maximum gage height, 4.46 ft, Feb. 23, 2000; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.12	.00
3	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.26	.00
4	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.07	.00
5	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.03	.00
6	.00	.00	e.00	.00	.00	1.5	.00	.00	.00	.00	.03	.00
7	.00	.00	e.00	.00	.00	.75	.00	.00	.00	.00	.02	.00
8	.00	.00	e.00	.00	.00	.55	.00	.00	.00	.00	.01	.00
9	.00	.00	e.00	.00	.00	.08	.00	.00	.00	.00	.01	.00
10	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.05	.01	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.38	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	2.34	4.64	0.00	0.00	0.00	0.00	0.55	0.00
MEAN	.000	.000	.000	.000	.081	.15	.000	.000	.000	.000	.018	.000
MAX	.00	.00	.00	.00	1.6	1.5	.00	.00	.00	.00	.26	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	4.6	9.2	.00	.00	.00	.00	1.1	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	.001	.013	.098	.003	.46	.037	.003	.000	.000	.000	.004	.057
MAX	.003	.050	.32	.014	1.79	.15	.011	.000	.000	.000	.018	.28
(WY)	1997	1997	1998	1997	1998	2000	1999	1997	1996	1996	2000	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1998	1997	1997	1997	1997	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	0.33		7.53			
ANNUAL MEAN	.001		.021		.055	
HIGHEST ANNUAL MEAN					.16	1998
LOWEST ANNUAL MEAN					.001	1999
HIGHEST DAILY MEAN	.06	Apr 13	1.6	Feb 23	45	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	May 10 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	May 10 1996
INSTANTANEOUS PEAK FLOW			19	Feb 23	118	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.46	Feb 23	4.46	Feb 23 2000
ANNUAL RUNOFF (AC-FT)	.7		15		40	
10 PERCENT EXCEEDS	.00		.01		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264646 SOUTH DRAINAGE BISSELL/ROSAMOND HILLS NEAR EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°53'18", long 117°58'23", in NE 1/4 NW 1/4 sec.7, T.9 N., R.10 W., Kern County, Hydrologic Unit 18090206, 1.8 mi southwest of intersection of Forbes Avenue and Rosamond Boulevard, and 2.3 mi southwest of Edwards Air Force Base.

DRAINAGE AREA.—9.25 mi^2.

PERIOD OF RECORD.—June 1996 to current year.

INSTRUMENTATION.—Recording tipping-bucket rain gage since June 1996.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 2.39 in., Feb. 23, 1998; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall, 0.60 in., Mar. 5; no rainfall for many days.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	---
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
5	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00	---
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
8	.00	.00	.00	.00	.03	.04	.00	.00	.00	.00	.00	---
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.06	.00	.00	.24	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.21	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.31	.00	.00	.00	.00	.00	---	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00
23	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00	---	.00
24	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	---	.00
25	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	---	.00
26	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	---	.00
27	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	---	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00
30	.00	.00	.00	.01	---	.00	.00	.00	.00	.00	---	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	---	---
TOTAL	0.00	0.00	0.00	0.23	1.41	0.64	0.38	0.00	0.00	0.00	0.06	0.00
MAX	.00	.00	.00	.15	.52	.60	.24	.00	.00	.00	.06	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1999 TOTAL 1.70 MAX .48 MIN .00
WTR YR 2000 TOTAL 2.72 MAX .60 MIN .00

10264658 MOJAVE CREEK AT FORBES AVENUE, AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°56'20", long 117°56'25", in NW 1/4 NE 1/4 sec.28, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, 38 ft north of intersection of Forbes Avenue and Mojave Boulevard, at Edwards Air Force Base.

DRAINAGE AREA.—168 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March 1996 to September 2000 (discontinued).

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,358 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 13.0 ft^3/s, Aug. 1, 2000, maximum gage height, 11.24 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 13.0 ft^3/s, Aug. 1, gage height, 11.24 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.00	e.01	e.01	e.01	.02	.08	.14	.19	.56	.04
2	e.00	e.00	e.00	e.01	e.01	e.01	.03	.06	.14	.15	.47	.06
3	e.00	e.00	e.00	e.01	e.01	.01	.02	.06	.14	.18	.27	.07
4	e.00	e.00	e.00	e.01	e.01	.01	.02	.07	.14	.17	.33	.07
5	e.00	e.00	e.00	e.01	e.01	.12	.02	.07	.13	.16	.29	.06
6	e.00	e.00	e.01	e.01	e.01	.01	.03	.07	.13	.17	.26	.06
7	e.00	e.00	e.01	e.01	e.01	.01	.05	.07	.11	.20	.22	.08
8	e.00	e.00	e.01	e.01	e.01	.01	.06	.08	.11	.21	.20	.13
9	e.00	e.00	e.01	e.01	e.01	.01	.06	.08	.12	.21	.13	.20
10	e.00	e.00	e.01	e.01	e.01	.01	.07	.07	.12	.27	.17	.10
11	e.00	e.00	e.01	e.01	e.01	.01	.09	.08	.14	.28	.15	.10
12	e.00	e.00	e.01	e.01	e.01	.01	.08	.09	.14	.25	.10	.11
13	e.00	e.00	e.01	e.01	e.01	.02	.08	.08	.15	.26	.14	.11
14	e.00	e.00	e.01	e.01	e.01	.02	.08	.08	.15	.23	.12	.08
15	e.00	e.00	e.01	e.01	e.01	.02	.07	.09	.15	.22	.13	.10
16	e.00	e.00	e.01	e.01	e.01	.02	.08	.09	.15	.22	.07	.12
17	e.00	e.00	e.01	e.01	e.01	.02	.16	.11	.14	.28	.06	.09
18	e.00	e.00	e.01	e.01	e.01	.02	.08	.10	.12	.27	.07	.11
19	e.00	e.00	e.01	e.01	e.01	.02	.06	.10	.13	.24	.09	.12
20	e.00	e.00	e.01	e.01	e.01	.02	.07	.09	.17	.23	.07	.12
21	e.00	e.00	e.01	e.01	e.01	.02	.07	.09	.14	.28	.07	.14
22	e.00	e.00	e.01	e.01	e.01	.02	.06	.11	.16	.28	.10	.13
23	e.00	e.00	e.01	e.01	e.01	.02	.06	.10	.17	.26	.06	.11
24	e.00	e.00	e.01	e.01	e.01	.02	.07	.09	.15	.29	.08	.12
25	e.00	e.00	e.01	e.01	e.01	.02	.08	.11	.15	.35	.12	.14
26	e.00	e.00	e.01	e.01	e.01	.02	.07	.13	.16	.29	.10	.17
27	e.00	e.00	e.01	e.01	e.01	.02	.08	.10	.18	.30	.10	.13
28	e.00	e.00	e.01	e.01	e.01	.02	.06	.10	.16	.32	.08	.14
29	e.00	e.00	e.01	e.01	e.01	.02	.07	.13	.16	.33	.07	.16
30	e.00	e.00	e.01	e.01	---	.03	.07	.12	.18	.36	.04	.16
31	e.00	---	e.01	e.01	---	.02	---	.13	---	.27	.04	---
TOTAL	0.00	0.00	0.26	0.31	0.29	0.62	1.92	2.83	4.33	7.72	4.76	3.33
MEAN	.000	.000	.008	.010	.010	.020	.064	.091	.14	.25	.15	.11
MAX	.00	.00	.01	.01	.01	.12	.16	.13	.18	.36	.56	.20
MIN	.00	.00	.00	.01	.01	.01	.02	.06	.11	.15	.04	.04
AC-FT	.00	.00	.5	.6	.6	1.2	3.8	5.6	8.6	15	9.4	6.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	.000	.000	.002	.002	.006	.005	.013	.018	.029	.050	.031	.022
MAX	.000	.000	.008	.010	.013	.020	.064	.091	.14	.25	.15	.11
(WY)	1997	1997	2000	2000	1998	2000	2000	2000	2000	2000	2000	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1997	1997	1997	1997	1997	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	0.26		26.37			
ANNUAL MEAN	.001		.072		.018	
HIGHEST ANNUAL MEAN					.072	2000
LOWEST ANNUAL MEAN					.000	1997
HIGHEST DAILY MEAN	.01	Dec 6	.56	Aug 1	.56	Aug 1 2000
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Mar 16 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Mar 16 1996
INSTANTANEOUS PEAK FLOW			13	Aug 1	13	Aug 1 2000
INSTANTANEOUS PEAK STAGE			11.24	Aug 1	11.24	Aug 1 2000
ANNUAL RUNOFF (AC-FT)	.5		52		13	
10 PERCENT EXCEEDS	.00		.18		.06	
50 PERCENT EXCEEDS	.00		.02		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264658 MOJAVE CREEK AT FORBES AVENUE, AT EDWARDS AIR FORCE BASE, CA—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.—June 1996 to current year.

INSTRUMENTATION.—Recording tipping-bucket rain gage since June 1996.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 2.23 in., Feb. 23,1998; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall, 0.50 in., Mar. 5; no rainfall for many days.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.38	.00
2	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00
3	.00	---	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
4	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.02	.00	---	.00	.00	.00	---
9	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	---	.00	---	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	---	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
17	---	.00	.00	.02	.00	.00	.25	.00	.00	.00	.00	.00
18	---	.00	---	.00	.00	.00	.10	.00	.00	.00	.00	.00
19	---	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
20	---	.00	.00	---	.03	---	.00	.00	.00	.00	.00	.00
21	---	.00	.00	.00	.05	---	.01	.00	.00	.00	.00	---
22	---	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	---
23	---	.00	.00	.00	.01	.00	.00	.00	.00	---	.00	.00
24	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	---	.00	.00	.00	.00	.00	---	---	.00	.00	.00	.00
26	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	---	.00	.00	.01	.00	.00	.00	.00	.00	.00	.06	.00
30	---	.00	.00	.01	---	---	.00	.00	.00	.00	.00	.00
31	---	---	.00	.00	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.04	0.20	0.53	0.36	0.00	0.00	0.00	0.56	0.00
MAX	.00	.00	.00	.02	.05	.50	.25	.00	.00	.00	.38	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

WTR YR 2000 TOTAL 1.69 MAX .50 MIN .00

10264660 MOJAVE CREEK AT ROSAMOND BOULEVARD, AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°54'51", long 117°55'00", in SE 1/4 SE 1/4 sec.34, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, on right bank corner of Rosamond Boulevard and Lancaster Boulevard, and 0.8 mi southeast of Edwards Air Force Base.

DRAINAGE AREA.—174.85 mi^2.

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,310 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 42 ft^3/s, July 10, 1999, gage height, 5.34 ft; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
2	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
3	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e3.0	.00
4	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.10	.00
5	.00	.00	.00	.00	.00	3.9	.00	.00	.00	.00	e.00	.00
6	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	e.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
13	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
21	.00	.00	.00	.00	.24	.00	.00	.00	.00	.00	e.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
23	.00	.00	.00	.00	3.8	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	e.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	4.16	4.07	0.00	0.00	0.00	0.00	3.10	0.00
MEAN	.000	.000	.000	.000	.14	.13	.000	.000	.000	.000	.10	.000
MAX	.00	.00	.00	.00	3.8	3.9	.00	.00	.00	.00	3.0	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	8.3	8.1	.00	.00	.00	.00	6.1	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	.000	.000	.002	.000	.22	.082	.000	.001	.000	.038	.033	.016
MAX	.000	.000	.005	.000	.53	.13	.000	.002	.000	.11	.10	.047
(WY)	1998	1998	1998	1998	1998	2000	1998	1998	1998	1999	2000	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1998	1999	1999	1998	1999	1998	1998	1998	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	3.51		11.33			
ANNUAL MEAN	.010		.031		.032	
HIGHEST ANNUAL MEAN					.055	1998
LOWEST ANNUAL MEAN					.010	1999
HIGHEST DAILY MEAN	3.5	Jul 10	3.9	Mar 5	5.7	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1997
INSTANTANEOUS PEAK FLOW			24	Feb 23	42	Jul 10 1999
INSTANTANEOUS PEAK STAGE			4.68	Feb 23	5.34	Jul 10 1999
ANNUAL RUNOFF (AC-FT)	7.0		22		23	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264675 ROGERS LAKE TRIBUTARY AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°58'06", long 117°53'29", in NE 1/4 NW 1/4 sec.13, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, on right bank, at culvert on U.S. Government Railroad, 330 ft east of Rosamond Boulevard, and 0.75 mi west of Rogers Lake.

DRAINAGE AREA.—1.73 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1988 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,340 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station. Inflow can occur from artificial ditch 10 ft upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11 ft^3/s, Apr. 14, 1989, and Feb. 12, 1992, gage height, 4.82 ft, from rating curve on basis of culvert computations; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.06	0.10	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.002	.003	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.06	.09	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.1	.2	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

MEAN	.000	.000	.004	.006	.019	.005	.002	.000	.000	.000	.000	.001
MAX	.003	.000	.028	.052	.13	.029	.018	.004	.001	.001	.002	.010
(WY)	1993	1989	1993	1993	1998	1991	1989	1991	1991	1999	1995	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1989	1989	1989	1990	1990	1989	1989	1989	1989	1989

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	0.03		0.16			
ANNUAL MEAN	.000		.000		.003	
HIGHEST ANNUAL MEAN					.012	1998
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	.03	Jul 13	.09	Mar 5	2.5	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1988
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1988
INSTANTANEOUS PEAK FLOW			2.8	Mar 5	11	Apr 14 1989
INSTANTANEOUS PEAK STAGE			4.12	Mar 5	4.82	Apr 14 1989
ANNUAL RUNOFF (AC-FT)	.06		.3		2.3	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264675 ROGERS LAKE TRIBUTARY AT EDWARDS AIR FORCE BASE, CA—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.—January 1989 to current year.

INSTRUMENTATION.—Recording tipping-bucket rain gage since Feb. 21, 1989.

REMARKS.—No data from Nov. 2–4, 2000.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 1.03 in., Feb. 12, 1992; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall recorded, 0.18 in., Mar. 5; no rainfall for many days.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
2	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
3	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.18	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.05	.00	.00	.10	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.05	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.13	0.51	0.21	0.15	0.00	0.00	0.00	0.11	0.00
MAX	.00	.00	.00	.08	.12	.18	.10	.00	.00	.00	.05	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1999 TOTAL 1.36 MAX .62 MIN .00
WTR YR 2000 TOTAL 1.11 MAX .18 MIN .00

10265150 HOT CREEK AT FLUME, NEAR MAMMOTH, CA

LOCATION.—Lat 37°40'08", long 118°49'00", in SW 1/4 SE 1/4 sec.19, T.3 S., R.29 E., Mono County, Hydrologic Unit 18090102, on right bank, 2.6 mi north of Whitmore Hot Springs, and 8.4 mi east of Mammoth.

DRAINAGE AREA.—68.3 mi^2.

PERIOD OF RECORD.—November 1982 to current year. Daily discharges for 1986 published in Water-Resources Investigations Report 89-4033 as "Hot Creek Flume."
SPECIFIC CONDUCTANCE: Water years 1983–88.
WATER TEMPERATURE: Water years 1983–88.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 6,950 ft above sea level, from topographic map.

REMARKS.—Records good. Minor diversions for domestic and agricultural use upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 433 ft^3/s, Jan. 2, 1997, gage height, 4.38 ft; minimum daily, 29 ft^3/s, several days in 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 80 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 29	0445	150	2.30				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	50	48	44	50	46	45	54	110	80	55	51
2	50	50	47	43	49	46	45	54	110	79	55	52
3	50	50	45	44	48	48	46	57	110	79	55	51
4	50	50	45	44	48	48	44	61	110	76	60	51
5	50	50	46	44	47	48	45	72	120	75	60	50
6	50	50	46	42	46	47	44	72	120	74	58	50
7	50	49	45	43	46	45	44	76	120	71	57	50
8	50	50	44	44	46	46	44	85	120	69	56	49
9	49	50	46	44	46	45	44	93	120	69	56	49
10	49	50	44	45	47	46	44	94	95	67	55	49
11	49	49	44	45	45	47	43	83	84	64	55	49
12	49	49	45	45	44	47	44	72	81	63	54	49
13	49	49	45	46	47	47	51	67	82	61	54	49
14	49	49	44	45	60	48	50	63	89	59	54	49
15	49	49	44	47	53	48	47	62	97	59	53	49
16	49	50	45	47	53	48	46	63	100	59	53	48
17	49	51	45	48	49	47	48	62	110	59	52	48
18	49	50	45	58	49	46	46	60	110	56	52	48
19	49	51	45	52	47	46	46	59	100	55	52	48
20	48	52	45	49	48	46	46	59	100	55	52	48
21	48	50	45	48	47	44	45	63	98	55	52	48
22	49	47	43	47	47	44	45	76	94	54	52	48
23	48	47	45	47	45	45	45	100	93	54	52	48
24	48	46	44	50	46	45	45	110	93	54	52	48
25	48	47	45	55	48	45	45	110	89	54	52	48
26	48	48	44	55	49	45	46	130	88	54	52	48
27	48	48	45	51	47	46	47	120	87	54	51	48
28	49	48	44	47	48	46	48	130	86	55	51	48
29	48	48	44	47	47	46	49	140	81	55	52	48
30	50	48	44	46	---	46	50	130	79	55	52	49
31	50	---	45	44	---	45	---	120	---	55	52	---
TOTAL	1521	1475	1391	1456	1392	1432	1377	2597	2976	1928	1668	1468
MEAN	49.1	49.2	44.9	47.0	48.0	46.2	45.9	83.8	99.2	62.2	53.8	48.9
MAX	50	52	48	58	60	48	51	140	120	80	60	52
MIN	48	46	43	42	44	44	43	54	79	54	51	48
AC-FT	3020	2930	2760	2890	2760	2840	2730	5150	5900	3820	3310	2910

10265150 HOT CREEK AT FLUME, NEAR MAMMOTH, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	46.6	45.5	42.6	46.5	43.8	44.9	48.0	70.2	100	90.3	64.7	54.1
MAX	68.3	64.6	57.7	94.7	58.2	55.2	60.4	113	159	214	135	92.7
(WY)	1999	1999	1996	1997	1997	1997	1996	1996	1995	1995	1995	1995
MIN	31.8	32.4	29.6	31.9	32.7	35.0	35.4	38.4	44.5	38.4	35.6	32.6
(WY)	1995	1995	1993	1993	1993	1992	1992	1991	1992	1990	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	22501		20681			
ANNUAL MEAN	61.6		56.5		58.2	
HIGHEST ANNUAL MEAN					79.1	1995
LOWEST ANNUAL MEAN					37.5	1992
HIGHEST DAILY MEAN	160	Jun 17	140	May 29	310	Jan 3 1997
LOWEST DAILY MEAN	43	Dec 22	42	Jan 6	29	Nov 23 1992
ANNUAL SEVEN-DAY MINIMUM	44	Dec 22	43	Jan 1	29	Dec 8 1992
INSTANTANEOUS PEAK FLOW			150	May 29	433	Jan 2 1997
INSTANTANEOUS PEAK STAGE			2.30	May 29	4.38	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	44630		41020		42160	
10 PERCENT EXCEEDS	92		85		96	
50 PERCENT EXCEEDS	53		49		50	
90 PERCENT EXCEEDS	48		45		34	

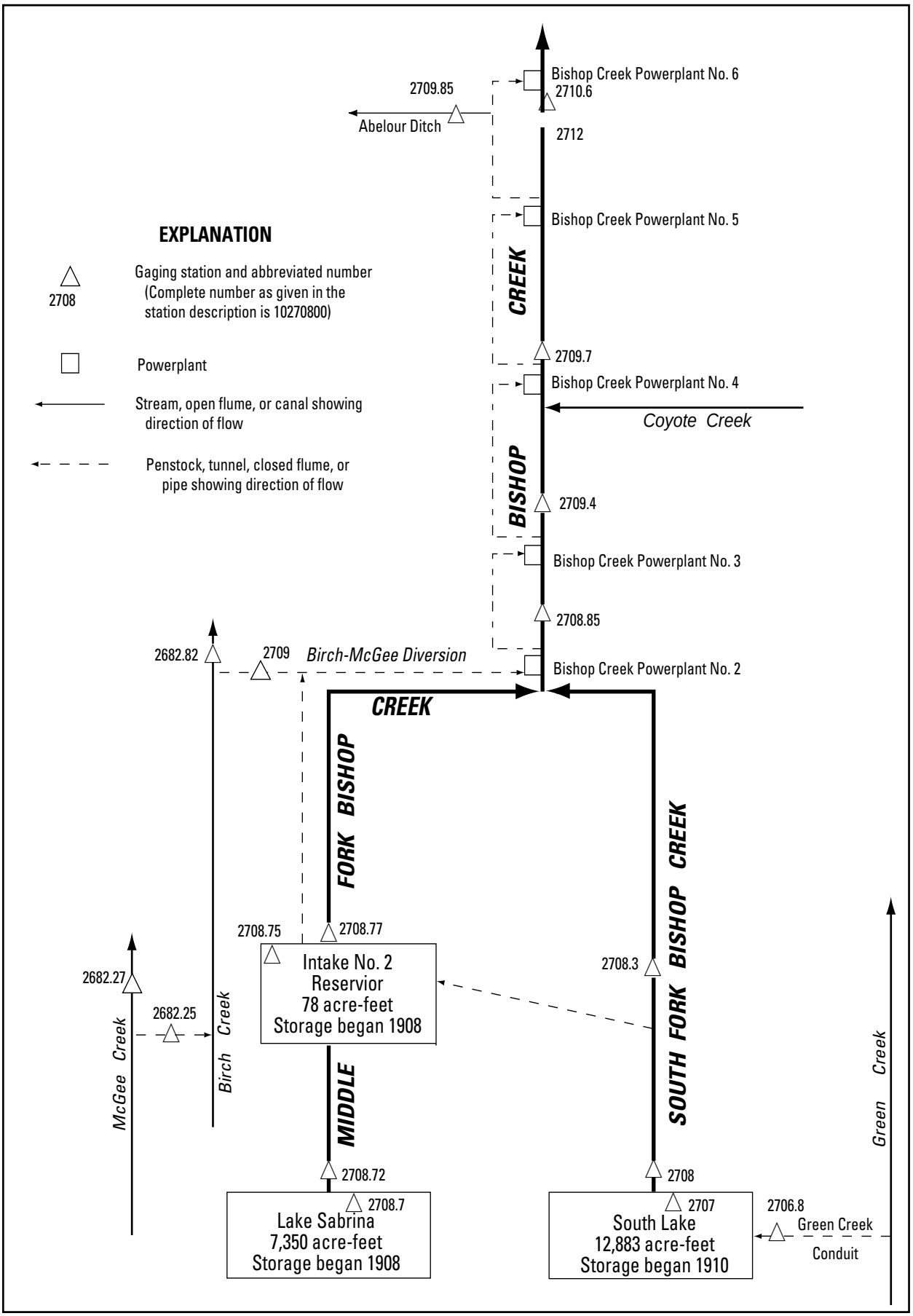

Figure 15. Diversions and storage in Bishop Creek Basin.

10268225 MCGEE CREEK DIVERSION NEAR BISHOP, CA

LOCATION.—Lat 37°16'32", long 118°37'09", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 5 ft downstream from outlet of diversion pipe, 80 ft upstream from tributary to Birch Creek, and 13.5 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Cipolletti weir. Elevation of gage is 8,630 ft above sea level, from topographic map.

REMARKS.—Records not computed for the winter months. Flow limited by size of diversion pipe from McGee Creek. Water flows down Birch Creek and then is diverted to Bishop Creek Powerplant No. 2 Conduit via Birch–McGee Creek Diversion (station 10270900). See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.84	---	---	---	---	---	---	7.2	15	7.8	4.9
2	1.8	.84	---	---	---	---	---	---	7.0	14	8.5	4.7
3	1.7	.84	---	---	---	---	---	1.8	7.1	13	8.7	4.6
4	1.7	.84	---	---	---	---	---	2.3	7.4	11	8.1	4.4
5	1.6	.84	---	---	---	---	---	2.7	7.8	10	7.6	4.4
6	1.5	.81	---	---	---	---	---	2.9	8.1	9.5	7.3	4.4
7	1.4	.74	---	---	---	---	---	3.2	8.3	9.2	7.3	4.3
8	1.3	.85	---	---	---	---	---	3.2	8.4	9.0	6.9	4.2
9	1.2	.97	---	---	---	---	---	3.4	8.1	8.9	6.5	4.1
10	1.2	4.2	---	---	---	---	---	3.5	7.9	8.7	6.0	3.9
11	1.2	8.3	---	---	---	---	---	3.3	7.7	8.7	5.8	3.8
12	1.2	8.1	---	---	---	---	---	3.0	7.5	8.8	5.6	3.8
13	1.2	7.7	---	---	---	---	---	2.9	7.7	8.9	5.5	3.7
14	1.2	7.5	---	---	---	---	---	2.6	8.0	8.8	5.4	3.7
15	1.1	6.9	---	---	---	---	---	2.3	8.4	8.8	5.3	3.6
16	1.1	6.2	---	---	---	---	---	2.2	9.1	9.2	5.3	3.5
17	1.1	5.7	---	---	---	---	---	2.0	13	9.2	5.2	3.5
18	1.1	5.0	---	---	---	---	---	1.9	16	8.7	5.1	3.4
19	1.1	4.4	---	---	---	---	---	1.9	16	8.2	5.1	3.3
20	1.1	4.0	---	---	---	---	---	2.1	16	7.8	5.0	3.3
21	1.1	2.5	---	---	---	---	---	2.6	15	7.8	5.0	3.2
22	1.1	1.9	---	---	---	---	---	3.5	14	7.8	4.9	3.2
23	1.0	1.7	---	---	---	---	---	5.3	13	7.6	4.9	3.2
24	.95	1.8	---	---	---	---	---	7.1	13	7.7	4.8	3.2
25	.95	1.8	---	---	---	---	---	8.0	13	7.6	5.0	3.1
26	.95	1.7	---	---	---	---	---	8.5	13	8.4	4.9	2.9
27	.86	1.6	---	---	---	---	---	9.2	13	8.4	4.8	2.8
28	.93	1.6	---	---	---	---	---	9.8	13	8.0	4.8	2.8
29	.84	---	---	---	---	---	---	10	13	7.6	4.9	2.8
30	.84	---	---	---	---	---	---	10	14	7.4	4.9	2.7
31	.84	---	---	---	---	---	---	8.9	---	7.5	4.8	---
TOTAL	36.96	---	---	---	---	---	---	---	320.7	281.2	181.7	109.4
MEAN	1.19	---	---	---	---	---	---	---	10.7	9.07	5.86	3.65
MAX	1.8	---	---	---	---	---	---	---	16	15	8.7	4.9
MIN	.84	---	---	---	---	---	---	---	7.0	7.4	4.8	2.7
AC-FT	73	---	---	---	---	---	---	---	636	558	360	217

10268227 MCGEE CREEK BELOW DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°16'40", long 118°37'49", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in diversion dam, 1.9 mi downstream from Longley Lake, and 14.0 mi southwest of Bishop.

PERIOD OF RECORD.—October 1999 to September 2000. Unpublished records prior to October 1999 available in files of Southern California Edison Co.

GAGE.—Non-recording gage observed intermittently. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.—Most of the water is diverted at McGee Creek Diversion Dam to Bishop Creek Powerplant No. 2 for power development. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	1.3
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	1.5	---	---
7	---	---	---	---	---	---	---	---	1.4	---	---	---
8	---	---	---	---	---	---	---	---	---	---	1.4	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	1.3	1.4	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	1.5	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	1.7	1.4	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	1.5	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

10268282 BIRCH CREEK BELOW DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°16'42", long 118°36'40", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, below diversion dam at convergence of Birch Creek and tributary to Birch Creek, and 13.9 mi southwest of Bishop.

PERIOD OF RECORD.—October 1995 to current year.

GAGE.—Non-recording gage observed intermittently. Elevation of gage is 8,290 ft above sea level, from topographic map.

REMARKS.—Water from McGee Creek enters Birch Creek via McGee Creek Diversion (station 10268225) 0.5 mi upstream from Birch Creek Diversion Dam. Most of the water is diverted 15 ft upstream at Birch Creek Diversion Dam to Bishop Creek Powerplant No. 2 for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	.46	.44
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	.46	.49	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	2.8	---	---	---	---	---	---	---	---	---	---
6	---	---	---	.51	---	---	---	---	---	1.0	---	---
7	---	---	---	---	---	---	---	---	.44	.56	---	---
8	---	---	---	---	---	---	---	---	---	---	.44	---
9	---	---	.46	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	.42	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	.54	---	---
13	---	---	---	---	---	---	---	---	---	---	---	.44
14	---	---	---	---	---	---	---	---	---	---	---	---
15	.40	.54	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	.42	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	.44	---	---	---	---
19	---	---	---	---	---	---	---	---	1.8	.49	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	.46	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	.44	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	.38	---	---	---	---	---
27	.40	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	.44	---	---	---
29	---	---	---	---	---	---	---	.44	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	.42	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

10270680 GREEN CREEK CONDUIT OUTLET NEAR BISHOP, CA

LOCATION.—Lat 37°10'14", long 118°33'50", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, 75 ft downstream from outlet of diversion pipe, 0.1 mi upstream from South Lake, and 16.2 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,800 ft above sea level, from topographic map.

REMARKS.—Records not computed for the winter months. Flow limited by size of diversion pipe from Green Creek. Water is used for power development downstream from South Lake. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	---	2.1	1.1	.16	.21
2	.00	---	---	---	---	---	---	---	2.1	1.0	.17	.18
3	.00	---	---	---	---	---	---	---	2.2	.91	.21	.12
4	.00	---	---	---	---	---	---	---	2.2	.83	.26	.06
5	.00	---	---	---	---	---	---	---	2.4	.70	.25	.05
6	.00	---	---	---	---	---	---	---	2.5	.60	.22	.05
7	.00	---	---	---	---	---	---	---	2.3	.55	.20	.04
8	.00	---	---	---	---	---	---	---	2.2	.49	.17	.03
9	.00	---	---	---	---	---	---	---	1.9	.45	.14	.03
10	.00	---	---	---	---	---	---	---	1.6	.45	.12	.02
11	.00	---	---	---	---	---	---	---	1.4	.43	.10	.00
12	.00	---	---	---	---	---	---	---	1.3	.35	.08	.00
13	.00	---	---	---	---	---	---	---	1.4	.35	.08	.00
14	.00	---	---	---	---	---	---	---	1.9	.33	.07	.00
15	.00	---	---	---	---	---	---	---	2.4	.33	.06	.00
16	.00	---	---	---	---	---	---	---	2.4	.32	.07	.00
17	.00	---	---	---	---	---	---	---	2.4	.32	.08	.00
18	.00	---	---	---	---	---	---	---	2.3	.28	.08	.00
19	---	---	---	---	---	---	---	---	2.3	.26	.07	.00
20	---	---	---	---	---	---	---	---	2.0	.25	.06	.00
21	---	---	---	---	---	---	---	---	1.9	.22	.05	---
22	---	---	---	---	---	---	---	---	1.8	.21	.05	---
23	---	---	---	---	---	---	---	1.2	1.7	.21	.05	---
24	---	---	---	---	---	---	---	1.1	1.5	.20	.05	---
25	---	---	---	---	---	---	---	1.0	1.4	.19	.09	---
26	---	---	---	---	---	---	---	1.0	1.3	.20	.13	---
27	---	---	---	---	---	---	---	1.1	1.2	.21	.13	---
28	---	---	---	---	---	---	---	1.1	1.1	.20	.13	---
29	---	---	---	---	---	---	---	.87	1.0	.18	.20	---
30	---	---	---	---	---	---	---	.70	1.0	.17	.26	---
31	---	---	---	---	---	---	---	1.3	---	.16	.25	---
TOTAL	---	---	---	---	---	---	---	---	55.2	12.45	4.04	---
MEAN	---	---	---	---	---	---	---	---	1.84	.40	.13	---
MAX	---	---	---	---	---	---	---	---	2.5	1.1	.26	---
MIN	---	---	---	---	---	---	---	---	1.0	.16	.05	---
AC-FT	---	---	---	---	---	---	---	---	109	25	8.0	---

10270700 SOUTH LAKE NEAR BISHOP, CA

LOCATION.—Lat 37°10'21", long 118°33'52", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, near spillway, at right abutment of Hillside Dam, on South Fork Bishop Creek, and 16.0 mi southwest of Bishop.

DRAINAGE AREA.—12.9 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1910. Usable capacity, 12,883 acre-ft, between elevations 9,621.20 ft, invert of outlet tunnel, and 9,751.31 ft, crest of spillway. Water is received from Green Creek via Green Creek Conduit (station 10270680). Figures given represent usable contents. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 13,038 acre-ft, Aug. 4, 1993, elevation, 9,752.21 ft; minimum, 280 acre-ft, Apr. 18–25, 1993, elevation, unknown.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 11,763 acre-ft, Aug. 9, elevation, 9,744.74 ft; minimum, 1,853 acre-ft, Apr. 30, elevation, 9,655.91 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 5, 1981)

9,621.2	0	9,690	4,533
9,630	417	9,710	6,654
9,650	1,493	9,730	9,392
9,670	2,820	9,756	13,704

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11226	9821	8023	6390	5776	5328	3940	1876	5011	9892	11577	11340
2	11162	9755	7965	6370	5752	5315	3842	1894	5174	10005	11600	11315
3	11108	9634	7886	6349	5732	5307	3751	1940	5344	10091	11633	11307
4	11050	9552	7818	6327	5714	5291	3658	2012	5534	10165	11674	11287
5	10987	9501	7744	6286	5691	5263	3563	2089	5732	10236	11695	11269
6	10934	9446	7673	6271	5669	5242	3462	2171	5918	10303	11724	11251
7	10895	9386	7586	6246	5650	5228	3370	2264	6092	10356	11744	11218
8	10838	9321	7526	6222	5628	5206	3278	2357	6226	10401	11754	11191
9	10780	9267	7444	6196	5601	5197	3185	2408	6330	10468	11763	11165
10	10725	9214	7373	6178	5581	5187	3091	e2451	6413	10532	11758	11143
11	10668	9162	7317	6147	5566	5173	3003	e2501	6502	10602	11758	11109
12	10608	9100	7242	6121	5562	5148	2913	2600	6613	10665	11746	11083
13	10550	9044	7172	6101	5558	5128	2828	2630	6762	10723	11741	11052
14	10492	8994	7104	6073	5553	5109	2748	2652	6965	10794	11716	11027
15	10434	8930	7033	6048	5539	5089	2669	2669	7177	10859	11700	10993
16	10375	8869	6970	6040	5531	5068	2588	2671	7404	10924	11674	10954
17	10372	8797	6899	6020	5513	5046	2514	2672	7624	10991	11645	10934
18	10316	8761	6829	6012	5500	5029	2434	2657	7858	11040	11619	10893
19	10251	8701	6760	5989	5486	5004	2360	2690	8068	11088	11592	10871
20	10192	8635	6714	5970	5469	4956	2286	2755	8261	11132	11569	10836
21	10135	8569	6679	5943	5450	4935	2211	2859	8433	11168	11534	10802
22	10089	8517	6660	5930	5433	4932	2136	3006	8600	11203	11505	10770
23	10054	8461	6632	5908	5422	4902	2056	3190	8761	11241	11475	10734
24	10034	8414	6607	5895	5412	4809	1988	3386	8917	11269	11442	10710
25	10019	8366	6583	5885	5399	4705	1933	3586	9056	11292	11421	10683
26	10002	8316	6557	5861	5382	4590	1909	3789	9186	11351	11412	10650
27	9983	8258	6527	5845	5369	4465	1893	4020	9309	11397	11401	10620
28	9947	8206	6501	5829	5354	4360	1877	4283	9439	11437	11388	10587
29	9923	8154	6481	5809	5341	4259	1857	4515	9586	11477	11383	10555
30	9889	8084	6452	5802	---	4146	1853	4703	9743	11508	11378	10527
31	9854	---	6422	5790	---	4038	---	4863	---	11543	11368	---
MAX	11226	9821	8023	6390	5776	5328	3940	4863	9743	11543	11763	11340
MIN	9854	8084	6422	5790	5341	4038	1853	1876	5011	9892	11368	10527
a	9732.97	9721.22	9707.96	9702.21	9697.99	9684.69	9655.91	9693.34	9732.26	9743.42	9742.36	9737.21
b	-1464	-1770	-1662	-632	-449	-1303	-2185	+3010	+4880	+1800	-175	-841

CAL YR 1999 MAX 12620 MIN 3368 b -1057
WTR YR 2000 MAX 11763 MIN 1853 b -791

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10270800 SOUTH FORK BISHOP CREEK BELOW SOUTH LAKE, NEAR BISHOP, CA

LOCATION.—Lat 37°10'38", long 118°33'44", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, near weir on Weir Lake, 0.3 mi downstream from South Lake, and 15.7 mi southwest of Bishop.

DRAINAGE AREA.—13.4 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and sharp-crested weir. Elevation of gage is 9,580 ft above sea level, from topographic map.

REMARKS.—Flow regulated by South Lake (station 10270700). Green Creek Conduit (station 10270680) diverts water into basin at South Lake. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 142 ft^3/s, July 31, 1995, gage height, 1.44 ft; minimum daily, 6.7 ft^3/s, Apr. 4, 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	22	34	17	17	17	59	29	18	14	19	32
2	37	38	37	17	17	17	58	33	16	14	21	32
3	37	66	39	17	16	17	58	27	16	14	22	26
4	37	44	39	17	16	17	56	17	16	14	22	25
5	37	29	39	17	16	17	58	14	16	15	22	25
6	37	33	39	17	16	17	58	14	16	15	22	25
7	37	33	39	17	16	16	58	14	16	15	22	25
8	37	33	39	17	16	17	57	15	16	15	22	25
9	37	32	39	17	16	17	57	15	16	15	22	25
10	37	32	39	17	16	17	57	15	16	15	22	25
11	38	33	39	16	16	17	57	15	16	15	22	25
12	38	33	39	16	17	18	55	16	16	15	25	25
13	38	33	39	16	17	18	54	19	16	15	23	25
14	38	33	39	16	17	18	52	19	16	15	29	25
15	38	33	39	17	17	18	52	22	16	15	29	25
16	38	33	39	17	17	18	51	25	16	15	31	24
17	38	33	38	17	17	17	51	27	16	15	31	24
18	38	33	38	17	17	17	52	29	16	15	31	24
19	37	33	38	17	17	17	53	26	16	15	31	24
20	35	33	25	17	17	24	52	22	16	15	31	24
21	35	33	18	17	17	24	52	20	16	16	31	24
22	35	33	17	16	17	24	51	16	16	14	31	21
23	23	33	17	16	17	30	52	16	16	15	31	25
24	16	33	17	16	17	53	51	14	16	15	31	25
25	16	33	17	16	17	58	47	14	16	19	31	25
26	16	33	17	16	16	62	38	14	15	16	32	25
27	16	33	17	16	17	64	34	14	15	16	32	25
28	20	33	17	16	17	60	34	14	15	16	32	25
29	22	34	17	16	17	59	34	14	15	16	32	25
30	22	34	17	17	---	59	33	14	15	16	32	25
31	22	---	17	17	---	59	---	20	---	16	32	---
TOTAL	989	1024	944	515	483	903	1531	583	477	471	846	755
MEAN	31.9	34.1	30.5	16.6	16.7	29.1	51.0	18.8	15.9	15.2	27.3	25.2
MAX	38	66	39	17	17	64	59	33	18	19	32	32
MIN	16	22	17	16	16	16	33	14	15	14	19	21
AC-FT	1960	2030	1870	1020	958	1790	3040	1160	946	934	1680	1500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	26.1	23.8	24.1	24.2	29.7	30.6	29.3	21.8	18.2	33.3	42.2	33.4
MAX	41.6	41.1	35.7	35.8	54.2	61.6	57.4	36.7	28.8	61.4	87.7	47.6
(WY)	1998	1998	1999	1993	1993	1997	1996	1996	1996	1995	1995	1998
MIN	10.8	10.6	9.98	7.59	7.45	7.75	7.74	10.6	7.70	9.45	20.5	25.2
(WY)	1991	1991	1991	1991	1991	1991	1992	1994	1991	1991	1991	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	9798		9521			
ANNUAL MEAN	26.8		26.0		28.0	
HIGHEST ANNUAL MEAN					38.7	1995
LOWEST ANNUAL MEAN					12.4	1991
HIGHEST DAILY MEAN	66	Nov 3	66	Nov 3	139	Jul 31 1995
LOWEST DAILY MEAN	14	Jun 29	14	May 5	6.7	Apr 4 1994
ANNUAL SEVEN-DAY MINIMUM	14	Jun 29	14	May 24	6.9	Apr 9 1991
INSTANTANEOUS PEAK FLOW			68	Nov 2	142	Jul 31 1995
INSTANTANEOUS PEAK STAGE			.89	Nov 2	1.44	Jul 31 1995
ANNUAL RUNOFF (AC-FT)	19430		18880		20320	
10 PERCENT EXCEEDS	37		39		53	
50 PERCENT EXCEEDS	28		22		23	
90 PERCENT EXCEEDS	17		15		9.8	

10270830 SOUTH FORK BISHOP CREEK BELOW SOUTH FORK DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°14'27", long 118°33'52", in SE 1/4 NW 1/4 sec.22, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, at diversion dam and aqueduct, and 10.5 mi southwest of Bishop.

DRAINAGE AREA.—27.8 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 7,130 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft^3/s. Flow regulated by South Lake (station 10270700). Most of the water is diverted by South Fork Diversion Dam to Intake No. 2 Reservoir (station 10270875) for power development downstream. South Fork Diversion Dam spill bypasses this station. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e20	7.7	7.4	7.6	e9.4	e8.7	10	10	11	10	11
2	11	---	7.7	7.4	7.6	e9.4	e8.7	11	11	11	10	11
3	11	---	7.7	7.4	7.6	e9.4	e8.7	10	11	11	10	10
4	10	---	7.6	7.4	7.6	e9.4	e8.7	11	11	11	10	10
5	10	7.9	7.6	7.4	7.6	e9.4	e8.7	11	10	11	10	10
6	10	8.0	7.8	7.6	7.5	e9.4	e8.7	10	11	11	10	10
7	10	7.9	7.6	7.7	7.5	e9.4	e8.7	10	11	11	10	10
8	10	7.9	7.6	7.7	7.6	e9.4	e8.7	10	11	11	10	10
9	10	7.9	7.7	7.7	7.5	e9.4	e8.7	10	11	11	10	10
10	10	7.9	7.8	7.7	7.6	e9.4	e8.7	10	11	11	11	10
11	11	7.8	7.8	7.7	7.6	e9.4	e8.7	10	11	11	11	10
12	10	7.8	7.7	7.7	7.6	e9.4	e8.7	10	11	11	12	10
13	11	8.1	7.6	7.7	7.6	e9.4	e8.0	10	10	11	12	10
14	11	8.0	7.6	7.7	7.6	e9.4	7.5	10	10	11	12	10
15	11	7.9	7.6	7.7	7.6	e9.4	7.6	10	10	11	12	10
16	11	7.9	7.8	7.7	7.6	e8.7	7.5	10	10	11	12	10
17	11	7.8	7.7	7.7	7.6	e8.1	7.4	11	10	11	12	10
18	11	7.8	7.7	7.7	7.6	e8.1	7.6	10	10	10	12	10
19	11	7.8	7.6	7.7	7.6	e8.1	7.6	10	10	10	12	10
20	11	7.9	7.5	7.6	7.6	e8.1	7.5	10	10	10	12	10
21	11	7.8	7.6	7.7	7.6	e8.3	7.5	10	10	10	12	10
22	11	7.8	7.5	7.6	7.6	e8.3	8.7	10	10	10	12	10
23	11	7.8	7.4	7.6	7.5	e8.3	10	10	11	10	11	10
24	11	7.8	7.4	7.6	7.6	e8.3	8.8	10	10	10	11	10
25	11	7.8	7.4	7.6	7.6	e8.5	7.4	10	11	10	11	10
26	11	7.8	7.4	7.6	7.6	e8.5	7.5	10	10	10	10	11
27	11	7.8	7.4	7.6	7.6	e8.5	7.7	10	10	10	10	11
28	10	7.9	7.5	7.6	e7.6	e8.5	11	10	10	10	10	11
29	11	7.8	7.4	7.6	e8.5	e8.7	11	10	11	10	10	11
30	11	7.6	7.4	7.6	---	e8.7	10	10	10	10	11	11
31	11	---	7.4	7.6	---	e8.7	---	10	---	10	11	---
TOTAL	332	---	235.2	236.0	220.9	275.4	254.7	314	313	327	339	307
MEAN	10.7	---	7.59	7.61	7.62	8.88	8.49	10.1	10.4	10.5	10.9	10.2
MAX	11	---	7.8	7.7	8.5	9.4	11	11	11	11	12	11
MIN	10	---	7.4	7.4	7.5	8.1	7.4	10	10	10	10	10
AC-FT	659	---	467	468	438	546	505	623	621	649	672	609

e Estimated.

10270870 LAKE SABRINA NEAR BISHOP, CA

LOCATION.—Lat 38°12'44", long 118°36'42", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in valve house, at base of dam, on Middle Fork Bishop Creek, and 15.8 mi southwest of Bishop.

DRAINAGE AREA.—16.5 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1908. Usable capacity, 7,350 acre-ft, between elevations 9,068.42 ft, invert of outlet, and 9,131.62 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 7,598 acre-ft, July 10, 1995, elevation, 9,132.89 ft; minimum, no storage on several days in 1994 and 2000.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 7,406 acre-ft, July 1, elevation, 9,131.91; minimum, no storage on several days.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 12, 1981)

9,068.42	0	9,100	1,926
9,070	1	9,110	3,501
9,080	15	9,120	5,196
9,090	558	9,135	7,912

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5916	5029	3633	2994	2514	1724	e.00	172	3386	7406	7094	6507
2	5887	4965	3605	2974	2504	1667	e.00	207	3554	7399	7113	6502
3	5851	4835	3577	2946	2495	1609	e.00	262	3727	7373	7144	6488
4	5825	4722	e3555	2926	2481	1551	e.00	325	3922	7348	7173	6475
5	5791	4655	e3535	2900	2470	1512	e.00	391	4128	7307	7188	6460
6	5757	4600	e3510	2882	2453	1451	e.00	471	4314	7274	7198	6451
7	5719	4549	e3495	2858	2439	1376	e.00	566	4475	7231	7192	6421
8	5688	4496	e3475	2836	2427	1288	e.00	632	4629	7188	7186	6400
9	5654	4443	3445	2809	2411	1205	e.00	721	4744	7161	7169	6374
10	5619	4397	3424	2792	2408	1114	3.1	797	4827	7132	7148	6352
11	5590	4358	3406	2773	2401	1019	3.0	848	4896	7148	7113	6325
12	5549	4319	3385	2751	2399	923	3.0	879	4980	7153	7073	6301
13	5513	4282	3368	2730	2410	834	4.3	906	5092	7163	7034	6277
14	5480	4250	3352	2708	2413	740	7.6	936	5284	7169	6980	6251
15	5446	4223	3330	2699	2413	648	8.8	944	5497	7173	6947	6225
16	5407	4196	3311	2688	2416	566	7.8	948	5732	7184	6909	6195
17	5370	4169	3290	2667	2405	476	9.9	959	5962	7200	6871	6175
18	5407	4140	3275	2666	2374	398	11	949	6199	7198	6831	6164
19	5370	4120	3256	2653	2316	331	12	981	6432	7184	6800	6123
20	5294	4080	3236	2634	2260	260	12	1044	6634	7163	6756	6101
21	5261	4041	3216	2616	2211	205	13	1137	6798	7140	6708	6077
22	5224	3972	3195	2598	2158	115	13	1267	6919	7128	6664	6055
23	5184	3934	3176	2589	2117	14	12	1448	7011	7113	6617	6031
24	5161	3897	3156	2583	2058	14	24	1663	7101	7092	6577	6011
25	5144	3859	3137	2575	2006	14	32	1874	7188	7090	6545	5989
26	5126	3822	3114	2565	1943	14	50	2087	7243	7101	6539	5967
27	5114	3782	3096	2556	1893	e.00	90	2322	7287	7109	6532	5944
28	5093	3744	3075	2548	1837	e.00	113	2595	7305	7113	6520	5914
29	5079	3709	3056	2535	1784	e.00	125	2844	7361	7107	6520	5896
30	5060	3668	3035	2526	---	e.00	142	3046	7391	7099	6520	5865
31	5043	---	3018	2529	---	e.00	---	3226	---	7094	6511	---
MAX	5916	5029	3633	2994	2514	1724	142	3226	7391	7406	7198	6507
MIN	5043	3668	3018	2526	1784	.00	.00	172	3386	7090	6511	5865
a	9119.12	9111.01	9107.04	9103.95	9099.04		9085.26	9108.32	9131.83	9130.30	9127.25	9123.76
b	-901	-1375	-650	-489	-745	-1784	+142	+3084	+4165	-297	-583	-646

CAL YR 1999 MAX 7399 MIN 631 b -122
WTR YR 2000 MAX 7406 MIN .00 b -79

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre feet.

10270872 MIDDLE FORK BISHOP CREEK BELOW LAKE SABRINA, NEAR BISHOP, CA

LOCATION.—Lat 37°12'50", long 118°36'34", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, 800 ft downstream from Lake Sabrina Dam, and 15.6 mi southwest of Bishop.

DRAINAGE AREA.—16.7 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and sharp-crested weir. Elevation of gage is 9,050 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Lake Sabrina (station 10270870). Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 270 ft^3/s, July 10, 1995, gage height, 2.15 ft; minimum daily, 6.5 ft^3/s, Mar. 19–27, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	25	15	15	42	8.2	14	18	95	48	37
2	29	37	21	17	15	41	8.2	13	17	95	44	34
3	29	74	15	17	15	40	8.2	13	17	86	44	28
4	29	68	15	15	14	40	8.4	13	17	78	44	26
5	29	40	15	15	14	40	9.1	14	18	75	44	26
6	29	35	15	15	14	40	8.6	14	18	73	44	26
7	28	34	15	15	14	44	10	14	17	69	44	26
8	28	34	15	15	14	49	11	15	16	68	44	26
9	28	34	15	15	14	54	11	15	17	67	44	26
10	28	31	15	15	14	59	11	14	24	63	43	26
11	28	27	15	15	14	57	12	17	27	59	46	26
12	28	27	15	15	14	57	12	18	27	55	46	26
13	28	27	15	15	14	58	13	18	25	54	49	26
14	28	24	15	15	14	58	15	19	17	53	48	26
15	28	21	15	15	14	57	15	24	17	53	46	25
16	28	19	15	15	14	56	15	27	18	53	46	25
17	28	19	15	15	18	58	14	27	18	53	46	25
18	28	21	15	15	30	58	14	27	18	55	47	25
19	28	21	15	15	40	56	14	26	19	55	46	25
20	27	23	15	15	42	55	13	24	20	55	46	25
21	27	24	15	15	40	59	13	21	35	54	46	25
22	27	28	15	15	39	80	13	18	48	48	46	25
23	27	24	15	15	39	75	13	14	61	50	46	25
24	19	26	15	15	41	26	13	14	67	52	43	25
25	17	26	15	15	41	16	13	14	67	49	42	25
26	16	26	15	15	41	13	13	15	68	48	42	25
27	16	26	15	15	41	12	13	15	71	48	42	25
28	15	26	15	15	41	10	14	15	74	48	44	25
29	15	25	15	15	40	9.4	14	15	80	48	42	25
30	15	25	15	15	---	9.1	14	15	87	48	42	25
31	15	---	15	15	---	8.6	---	16	---	48	42	---
TOTAL	774	887	481	469	720	1337.1	363.7	538	1043	1855	1386	785
MEAN	25.0	29.6	15.5	15.1	24.8	43.1	12.1	17.4	34.8	59.8	44.7	26.2
MAX	29	74	25	17	42	80	15	27	87	95	49	37
MIN	15	15	15	15	14	8.6	8.2	13	16	48	42	25
AC-FT	1540	1760	954	930	1430	2650	721	1070	2070	3680	2750	1560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	21.4	20.1	18.0	22.5	28.9	26.6	22.1	23.7	39.7	79.5	54.5	34.3
MAX	40.9	36.4	30.3	35.2	46.1	43.1	41.1	43.4	91.1	147	107	49.4
(WY)	1998	1999	1999	1994	1997	2000	1996	1996	1997	1995	1995	1995
MIN	11.8	8.56	10.2	7.63	7.11	6.91	10.4	9.28	9.14	30.6	33.8	22.7
(WY)	1991	1993	1993	1991	1991	1991	1993	1994	1994	1994	1992	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	10421		10638.8			
ANNUAL MEAN	28.6		29.1		32.7	
HIGHEST ANNUAL MEAN					47.8	1995
LOWEST ANNUAL MEAN					18.4	1991
HIGHEST DAILY MEAN	93	Jul 15	95	Jul 1	244	Jul 21 1998
LOWEST DAILY MEAN	13	Mar 31	8.2	Apr 1	6.5	Mar 19 1991
ANNUAL SEVEN-DAY MINIMUM	13	Mar 31	8.5	Mar 31	6.5	Mar 19 1991
INSTANTANEOUS PEAK FLOW			97	Jul 1	270	Jul 10 1995
INSTANTANEOUS PEAK STAGE			1.09	Jul 1	2.15	Jul 10 1995
ANNUAL RUNOFF (AC-FT)	20670		21100		23680	
10 PERCENT EXCEEDS	41		55		64	
50 PERCENT EXCEEDS	23		25		24	
90 PERCENT EXCEEDS	15		14		10	

10270875 INTAKE NO. 2 RESERVOIR NEAR BISHOP, CA

LOCATION.—Lat 38°14'53", long 118°34'53", in SE 1/4 SW 1/4 sec.16, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in outlet structure, 50 ft upstream from Bishop Creek Dam, on Middle Fork Bishop Creek, and 13.0 mi southwest of Bishop.

DRAINAGE AREA.—31.6 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed by rock-fill dam completed in 1908. Capacity, 78 acre-ft, between elevations 8,077 ft, invert of outlet, and 8,098.81 ft, crest of spillway, all of which are available for release. Water is received from South Fork Bishop Creek via conduit on right bank. Most of the water is diverted through conduit to Bishop Creek Powerplant No. 2 for power development on Bishop Creek. Figures given represent total contents. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 101 acre-ft, July 9, 1995, elevation, 8,100.67 ft; minimum, 8.6 acre-ft, Nov. 2, 1998, elevation, 8,088.36 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 85 acre-ft, Nov. 3, elevation, 8,099.49 ft; minimum, 34 acre-ft, Nov. 1, elevation, 8,094.27 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 12, 1981)

8,077	0	8,094	32
8,082	1	8,098	68
8,086	5	8,102	120
8,090	12		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	34	72	70	73	70	66	66	70	84	75	70
2	69	50	72	73	72	71	67	69	67	84	66	72
3	70	85	71	74	72	71	68	69	72	83	73	70
4	70	84	72	72	72	70	66	71	71	81	70	68
5	70	77	72	71	71	69	70	69	73	80	69	68
6	70	76	72	69	69	67	68	68	69	79	65	69
7	70	74	72	68	70	73	69	75	72	78	69	68
8	69	74	73	67	69	74	68	63	70	75	69	66
9	69	75	73	67	69	70	66	66	61	72	70	66
10	68	76	71	66	70	70	66	68	60	70	68	67
11	68	76	71	67	70	68	67	61	62	74	68	70
12	67	75	71	66	68	66	70	60	66	70	67	71
13	67	74	70	67	72	68	73	61	75	74	65	70
14	70	72	70	68	65	69	67	58	73	70	72	73
15	71	75	71	67	66	68	66	59	69	70	71	72
16	71	74	70	66	67	70	66	60	79	70	70	71
17	71	72	70	65	71	74	66	60	79	71	69	66
18	71	72	72	66	75	74	66	64	77	71	68	65
19	72	73	72	66	72	73	69	65	80	71	68	67
20	72	73	70	66	74	73	67	64	79	70	68	70
21	73	73	69	65	70	78	66	64	81	73	67	76
22	73	76	68	70	71	79	66	69	82	71	66	72
23	73	74	69	71	69	74	73	73	82	69	68	73
24	73	74	71	72	71	69	72	71	83	72	69	75
25	73	74	71	71	70	69	71	70	83	72	69	75
26	73	73	71	70	70	71	67	70	82	73	75	74
27	71	73	70	71	70	73	70	74	82	71	67	73
28	73	72	71	73	70	68	68	77	82	70	74	72
29	73	72	71	71	68	66	68	73	83	68	75	71
30	73	71	71	72	---	67	74	64	84	66	74	71
31	60	---	71	71	---	66	---	57	---	65	72	---
MAX	73	85	73	74	75	79	74	77	84	84	75	76
MIN	60	34	68	65	65	66	66	57	60	65	65	65
a	8097.23	8098.29	8098.25	8098.25	8097.97	8097.82	8098.52	8096.91	8099.37	8097.70	8098.35	8098.24
b	-9	+11	0	0	-3	-2	+8	-17	+27	-19	+7	-1

CAL YR 1999 MAX 86 MIN 34 b 0
WTR YR 2000 MAX 85 MIN 34 b +2

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10270877 MIDDLE FORK BISHOP CREEK BELOW INTAKE NO. 2 RESERVOIR, NEAR BISHOP, CA

LOCATION.—Lat 37°15'16", long 118°34'39", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 0.1 mi upstream from bridge on South Lake Road, 0.7 mi downstream from Bishop Creek Dam, 0.9 mi upstream from confluence with South Fork Bishop Creek, and 12.6 mi southwest of Bishop.

DRAINAGE AREA.—31.9 mi^2.

PERIOD OF RECORD.—October 1990 to current year (low-flow records only). Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 7,830 ft above sea level, from topographic map.

REMARKS.—No records computed above 30 ft^3/s. Flow regulated by Intake No. 2 Reservoir (station 10270875), where most of the water is diverted to Bishop Creek Powerplant No. 2. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	---	7.5	7.5	7.5	e7.5	7.5	11	11	---	11	11
2	11	---	7.5	e7.5	7.5	7.5	7.5	11	11	---	11	11
3	11	---	7.5	7.5	7.5	7.5	7.4	11	11	---	12	11
4	11	---	7.5	7.5	7.5	7.5	7.3	11	11	---	11	11
5	11	22	7.5	7.4	7.5	7.5	7.3	11	11	28	11	11
6	11	12	7.5	7.3	7.5	7.4	7.3	11	11	21	11	11
7	11	12	7.5	7.3	7.5	7.3	7.3	11	11	15	11	11
8	11	12	7.5	7.3	7.5	7.3	7.3	11	11	11	11	11
9	11	9.7	7.5	7.3	7.5	7.3	7.3	11	11	11	11	11
10	11	7.6	7.5	7.4	7.5	7.3	7.3	11	11	11	11	11
11	11	7.6	7.5	7.5	7.5	7.3	7.3	11	11	11	11	11
12	11	7.6	7.5	7.5	7.5	7.3	7.3	11	11	11	11	11
13	11	7.5	e7.5	7.5	7.6	7.3	7.4	11	11	11	11	11
14	11	7.5	7.5	7.5	7.7	7.3	7.5	11	11	11	11	11
15	11	7.5	7.5	7.5	7.5	7.3	7.5	11	11	11	11	11
16	11	7.5	7.5	7.5	7.5	7.3	7.5	11	14	11	11	11
17	11	7.5	7.5	7.5	7.5	7.3	7.5	11	24	11	11	11
18	11	7.5	7.5	7.6	7.5	7.3	7.5	11	17	11	11	11
19	11	7.5	7.5	7.5	7.5	7.4	7.5	11	19	11	11	11
20	11	7.5	7.5	7.5	7.5	7.6	7.5	11	21	11	11	11
21	11	7.5	7.5	7.5	7.5	7.6	7.5	11	26	11	11	11
22	11	7.5	7.5	7.5	7.5	12	7.5	11	---	11	11	11
23	11	7.7	7.5	7.5	7.5	11	7.5	11	---	11	11	11
24	11	7.5	7.5	7.5	e7.5	7.6	7.5	11	---	11	11	11
25	11	7.5	7.5	7.5	7.5	7.5	7.5	11	---	11	11	11
26	11	7.5	7.5	7.5	7.5	7.5	8.7	11	---	11	11	11
27	11	7.5	7.5	7.5	7.5	7.5	10	11	---	11	11	11
28	11	7.5	7.5	7.5	7.5	7.5	11	14	---	11	11	11
29	11	7.5	7.5	e7.5	7.5	7.5	11	14	---	11	11	11
30	11	7.5	7.5	7.5	---	7.5	11	11	---	11	11	11
31	19	---	7.5	7.5	---	7.5	---	11	---	11	11	---
TOTAL	349	---	232.5	231.6	217.8	238.2	237.2	347	---	---	342	330
MEAN	11.3	---	7.50	7.47	7.51	7.68	7.91	11.2	---	---	11.0	11.0
MAX	19	---	7.5	7.6	7.7	12	11	14	---	---	12	11
MIN	11	---	7.5	7.3	7.5	7.3	7.3	11	---	---	11	11
AC-FT	692	---	461	459	432	472	470	688	---	---	678	655

e Estimated.

10270885 BISHOP CREEK BELOW INTAKE NO. 3 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°16'27", long 118°34'17", in NE 1/4 NE 1/4 sec.9, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 125 ft downstream from dam, 0.7 mi downstream from confluence of South Fork and Middle Fork Bishop Creek, and 9.5 mi southwest of Bishop.

DRAINAGE AREA.—64.5 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 7,130 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft^3/s. Flow regulated by Intake No. 3 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 3. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	---	19	19	15	15	14	15	15	---	15	14
2	15	---	18	19	15	15	14	15	15	---	15	14
3	14	---	18	19	15	15	14	15	15	---	15	14
4	14	---	18	19	15	15	14	15	15	19	14	14
5	14	20	19	18	15	15	14	15	15	15	14	14
6	14	18	18	19	15	15	14	15	15	15	14	14
7	14	18	18	19	15	15	14	15	15	15	14	14
8	14	18	18	19	15	15	14	15	15	15	14	14
9	14	19	18	19	15	15	14	15	15	15	14	14
10	14	18	19	19	15	15	14	16	15	15	14	14
11	14	18	19	18	15	15	14	15	15	15	14	14
12	14	18	19	18	15	15	15	15	15	15	14	14
13	15	18	18	19	15	15	15	15	15	15	14	14
14	15	18	18	19	15	15	15	15	15	15	14	14
15	15	19	18	19	15	15	15	15	15	15	14	14
16	15	19	19	19	15	15	15	15	---	15	14	14
17	15	19	19	19	15	15	15	15	---	15	14	14
18	15	19	18	19	15	15	15	15	15	15	14	14
19	15	19	18	19	15	15	15	15	15	15	14	14
20	15	19	18	17	15	15	15	15	15	15	14	14
21	15	19	19	14	15	15	15	15	15	15	14	14
22	15	19	19	14	15	---	15	15	17	15	14	14
23	15	19	19	14	15	---	15	15	---	15	14	14
24	15	19	19	14	15	15	15	15	---	15	14	14
25	15	19	19	15	15	14	15	15	---	15	14	14
26	15	19	19	15	15	14	15	15	---	15	14	14
27	---	19	19	15	15	14	15	15	---	15	14	14
28	---	19	19	15	15	14	15	15	---	15	14	14
29	---	19	19	15	15	14	15	15	---	15	14	14
30	---	19	19	15	---	14	15	15	---	15	14	14
31	---	---	19	15	---	14	---	15	---	15	14	---
TOTAL	---	---	576	536	435	---	439	466	---	---	437	420
MEAN	---	---	18.6	17.3	15.0	---	14.6	15.0	---	---	14.1	14.0
MAX	---	---	19	19	15	---	15	16	---	---	15	14
MIN	---	---	18	14	15	---	14	15	---	---	14	14
AC-FT	---	---	1140	1060	863	---	871	924	---	---	867	833

10270900 BIRCH–MCGEE DIVERSION TO BISHOP CREEK POWERPLANT NO. 2, NEAR BISHOP, CA

LOCATION.—Lat 37°16'26", long 118°34'45", in NW 1/4 NE 1/4 sec.9, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in conduit, 100 ft upstream from penstock to Bishop Creek Powerplant No. 2, and 11.9 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 7,950 ft above sea level, from topographic map.

REMARKS.—Conduit diverts water from Birch Creek and discharges into penstock to Bishop Creek Powerplant No. 2. Birch Creek receives water from McGee Creek via McGee Creek Diversion (station 10268225). See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	.09	4.2	4.3	4.1	3.8	3.9	3.6	15	33	19	14
2	7.8	.09	4.1	4.2	4.0	3.8	4.1	4.4	16	32	20	13
3	7.7	.09	4.1	4.3	4.0	3.8	4.1	5.7	19	31	21	13
4	7.5	.09	4.1	4.3	4.1	3.9	4.1	6.1	19	28	19	12
5	7.3	2.4	4.1	4.3	4.0	3.8	4.0	6.6	21	25	19	12
6	7.3	3.6	4.2	4.3	4.0	3.8	4.0	6.7	22	24	18	12
7	6.9	3.6	4.1	4.3	4.0	3.8	4.0	7.3	23	23	18	11
8	6.8	3.9	4.3	4.3	4.0	3.8	3.9	7.1	23	22	17	11
9	6.7	4.1	4.4	4.4	4.0	3.8	3.8	7.3	21	22	17	11
10	6.6	7.5	4.4	4.3	4.0	3.8	3.8	7.3	19	22	16	11
11	6.6	12	4.4	4.4	4.1	3.9	3.8	7.1	19	21	15	10
12	6.4	13	4.5	4.2	4.1	3.9	3.8	6.8	19	22	15	10
13	6.2	13	4.5	4.1	4.5	4.0	3.9	6.5	22	21	15	9.8
14	6.3	12	4.5	4.0	4.5	4.0	3.8	6.3	25	21	14	9.7
15	6.6	12	4.5	4.2	4.0	4.0	3.7	6.0	27	21	14	9.5
16	6.6	12	4.4	4.1	4.0	4.1	3.7	6.1	30	22	14	9.2
17	6.5	11	4.5	4.1	3.9	4.0	3.8	5.6	32	22	14	6.7
18	6.5	10	4.5	4.3	3.9	4.1	3.8	5.5	26	21	14	5.7
19	6.5	10	4.5	4.1	3.9	4.1	3.8	5.5	28	20	14	5.7
20	6.4	8.9	4.5	4.1	3.9	3.9	3.7	5.7	35	20	13	6.9
21	6.4	7.4	4.4	4.0	3.9	3.8	3.6	6.1	34	19	13	8.7
22	6.3	5.8	4.4	4.0	4.0	3.9	3.6	7.6	34	19	13	8.2
23	6.3	6.4	4.4	4.1	3.9	3.9	3.6	11	34	19	13	8.7
24	6.2	6.4	4.4	4.1	3.9	4.0	3.6	13	33	19	13	8.6
25	6.1	6.4	4.4	4.1	3.9	4.1	3.6	14	33	19	13	8.5
26	6.1	6.3	4.4	4.0	3.9	4.2	3.6	15	32	20	13	8.4
27	4.3	6.2	4.4	4.0	3.9	4.1	3.6	16	31	20	13	8.3
28	1.6	6.1	4.4	4.0	3.9	4.0	3.7	18	32	19	13	8.2
29	.06	5.2	4.4	4.0	3.9	4.0	3.7	18	32	19	14	8.0
30	.06	4.3	4.3	4.0	---	3.9	3.7	18	33	18	14	7.9
31	.08	---	4.3	3.9	---	3.8	---	17	---	19	13	---
TOTAL	180.60	199.86	135.0	128.8	116.2	121.8	113.8	276.9	789	683	471	286.7
MEAN	5.83	6.66	4.35	4.15	4.01	3.93	3.79	8.93	26.3	22.0	15.2	9.56
MAX	7.9	13	4.5	4.4	4.5	4.2	4.1	18	35	33	21	14
MIN	.06	.09	4.1	3.9	3.9	3.8	3.6	3.6	15	18	13	5.7
AC-FT	358	396	268	255	230	242	226	549	1560	1350	934	569

10270940 BISHOP CREEK BELOW INTAKE NO. 4 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°18'10", long 118°31'45", in NW 1/4 NW 1/4 sec.36, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 300 ft downstream from dam, 1.6 mi upstream from Coyote Creek, and 7.5 mi southwest of Bishop.

DRAINAGE AREA.—72.7 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft^3/s. Flow regulated by Intake No. 4 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 4. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	---	6.3	6.3	6.0	6.1	6.2	6.3	6.3	---	5.7	6.2
2	5.8	---	6.3	6.2	6.0	6.1	6.2	6.3	6.3	---	5.7	6.1
3	5.8	---	6.3	6.1	6.1	6.1	6.3	6.3	6.4	---	7.2	6.1
4	5.8	---	6.2	6.1	6.0	6.2	6.3	6.3	6.4	---	5.6	6.3
5	5.8	---	6.1	6.1	6.0	6.2	6.3	6.3	6.4	---	5.5	6.3
6	5.8	14	6.2	6.3	6.1	6.1	6.3	6.3	6.4	---	5.5	6.3
7	5.8	8.3	6.4	6.4	6.1	6.1	6.3	6.3	6.4	19	5.5	6.3
8	5.8	7.3	6.9	6.4	6.1	6.1	6.3	6.2	6.4	14	5.6	6.3
9	5.8	6.1	6.4	6.4	6.1	6.1	6.3	6.2	6.4	11	5.7	6.3
10	5.8	6.1	6.1	6.4	6.1	6.1	6.2	6.3	6.4	9.3	5.7	6.4
11	5.8	6.1	6.1	6.4	6.0	6.1	6.3	6.2	6.4	6.7	5.7	6.4
12	5.8	6.1	6.1	6.4	6.0	6.1	6.4	6.1	6.4	6.7	5.7	6.4
13	5.8	6.1	6.2	6.4	6.1	6.2	6.4	6.2	6.4	6.7	5.7	6.4
14	5.8	6.1	6.1	6.4	6.1	6.2	6.3	6.3	7.7	6.7	5.7	6.4
15	5.8	6.3	6.1	6.4	6.1	6.2	6.3	6.3	17	6.7	5.7	6.4
16	5.8	6.3	6.1	6.4	6.1	5.8	6.4	6.3	9.9	6.7	5.7	6.4
17	5.8	6.2	6.1	6.4	6.1	5.3	6.4	6.3	---	6.7	5.6	6.4
18	5.8	6.1	6.2	6.4	6.1	5.4	6.3	6.3	18	6.7	5.5	6.4
19	5.8	6.1	6.3	6.3	6.1	5.2	6.4	6.3	19	6.7	5.5	6.0
20	5.8	6.1	6.3	6.3	6.1	5.2	6.4	6.4	---	6.7	5.5	5.5
21	5.8	6.1	6.3	6.0	6.1	6.5	6.4	6.5	---	6.7	5.5	5.5
22	5.8	6.1	6.3	6.0	6.1	---	6.5	6.4	---	6.7	5.5	5.5
23	5.8	6.3	6.3	6.0	6.1	---	6.5	6.4	---	6.7	5.5	5.5
24	5.8	6.3	6.3	6.0	6.6	13	6.4	6.4	---	6.7	5.5	5.5
25	5.9	6.3	6.3	6.0	6.1	6.2	6.5	6.3	---	6.7	5.5	5.5
26	---	6.3	6.3	6.0	6.1	7.4	6.4	6.3	---	6.7	5.6	5.5
27	---	6.2	6.3	6.0	6.1	8.3	6.4	6.3	---	6.7	5.7	5.5
28	---	6.1	6.3	6.0	6.1	7.9	6.4	20	---	6.7	5.7	5.5
29	---	6.1	6.3	6.0	6.1	5.6	6.3	20	---	6.7	5.7	5.4
30	---	6.3	6.3	6.0	---	6.1	6.4	12	---	6.7	5.7	5.4
31	---	---	6.3	6.0	---	6.2	---	7.0	---	6.1	5.7	---
TOTAL	---	---	194.1	192.5	176.8	---	190.5	229.1	---	---	175.6	180.1
MEAN	---	---	6.26	6.21	6.10	---	6.35	7.39	---	---	5.66	6.00
MAX	---	---	6.9	6.4	6.6	---	6.5	20	---	---	7.2	6.4
MIN	---	---	6.1	6.0	6.0	---	6.2	6.1	---	---	5.5	5.4
AC-FT	---	---	385	382	351	---	378	454	---	---	348	357

10270970 BISHOP CREEK BELOW INTAKE NO. 5 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°19'27", long 118°29'57", in NE 1/4 SE 1/4 sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 400 ft downstream from dam, 1.0 mi downstream from Coyote Creek, and 6.0 mi southwest of Bishop.

DRAINAGE AREA.—100 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 5,280 ft above sea level, from topographic map.

REMARKS.—No records computed above 30 ft^3/s. Flow regulated by Intake No. 5 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 5. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	---	22	19	20	19	19	18	19	---	20	21
2	20	---	22	20	20	19	19	19	19	---	19	21
3	20	---	21	20	19	19	19	20	19	---	---	21
4	20	---	22	20	19	19	21	20	19	21	19	21
5	20	---	22	20	19	19	21	20	19	19	21	21
6	20	20	22	20	21	19	20	20	19	19	21	21
7	20	21	22	20	---	19	19	20	19	19	26	21
8	20	19	24	20	---	19	19	20	19	20	29	21
9	20	18	22	20	---	19	19	20	19	22	25	21
10	20	19	21	20	---	19	19	21	19	20	21	21
11	20	19	21	20	---	19	20	19	19	19	21	21
12	20	19	21	20	---	19	20	19	19	19	21	21
13	20	19	20	20	---	19	---	19	19	19	21	21
14	20	19	19	20	---	19	---	19	19	19	21	21
15	20	18	19	20	---	19	---	19	20	19	21	21
16	20	21	19	20	---	18	---	19	19	19	21	21
17	20	22	19	20	---	18	---	19	21	20	21	21
18	20	22	19	20	---	21	---	19	19	19	21	21
19	20	22	19	20	---	21	---	19	19	19	21	21
20	20	22	19	20	---	21	---	19	19	19	21	21
21	20	22	19	20	---	21	---	19	20	19	21	21
22	20	22	19	20	---	---	19	19	26	19	21	20
23	20	22	19	20	---	---	19	19	---	19	21	20
24	20	22	19	20	---	---	18	19	---	19	21	20
25	---	22	19	20	24	23	18	19	---	19	21	20
26	---	22	19	20	24	25	18	20	---	19	21	20
27	---	22	19	20	24	27	18	19	---	19	22	20
28	---	22	19	20	21	24	18	19	---	19	22	20
29	---	22	19	20	19	20	18	19	---	19	22	20
30	---	22	19	20	---	20	18	19	---	20	22	20
31	---	---	19	20	---	20	---	19	---	19	21	---
TOTAL	---	---	624	619	---	---	---	598	---	---	---	621
MEAN	---	---	20.1	20.0	---	---	---	19.3	---	---	---	20.7
MAX	---	---	24	20	---	---	---	21	---	---	---	21
MIN	---	---	19	19	---	---	---	18	---	---	---	20
AC-FT	---	---	1240	1230	---	---	---	1190	---	---	---	1230

10270985 ABELOUR DITCH NEAR BISHOP, CA

LOCATION.—Lat 37°20'30", long 118°28'41", in SE 1/4 NE 1/4 sec.17, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, on left bank, 400 ft upstream from Highway 168 road crossing, 0.6 mi downstream from outlet in penstock to Bishop Creek Powerplant No. 6, and 4.8 mi west of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 4,750 ft above sea level, from topographic map.

REMARKS.—Ditch diverts water from Bishop Creek Powerplant No. 6 Penstock for irrigation and domestic use. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3.3 ft^3/s, May 7, 1995; minimum daily, no flow Nov. 3, 4, 1998, Nov. 2, 3, 1999.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.91	1.8	1.9	1.7	1.8	2.0	1.8	2.1	1.9	2.3	1.8
2	2.2	.00	1.8	1.9	1.7	1.8	2.0	1.8	2.0	1.9	2.2	1.8
3	2.2	.00	1.8	1.9	1.7	1.8	2.0	1.8	1.9	1.8	2.3	1.9
4	2.2	1.4	1.9	1.9	1.7	1.8	2.1	1.8	1.9	1.8	2.0	2.0
5	2.3	2.2	1.9	1.9	1.7	1.8	2.1	1.8	1.9	1.8	2.0	2.0
6	2.2	2.2	1.9	1.8	1.7	1.7	2.0	1.8	1.8	1.8	2.0	2.0
7	2.2	2.3	1.9	1.8	1.7	1.7	2.0	1.8	1.8	1.8	2.1	2.0
8	2.2	2.3	1.9	1.8	1.6	1.7	2.0	1.8	1.8	1.8	2.1	2.0
9	2.2	2.3	1.9	1.8	1.6	1.7	2.0	1.9	2.1	1.8	2.1	2.0
10	2.2	2.3	1.9	1.8	1.7	1.7	2.1	1.9	2.1	1.8	2.2	2.0
11	2.2	2.3	1.9	1.7	1.7	1.9	2.1	1.9	2.1	1.7	2.4	2.0
12	2.2	2.3	1.8	1.7	1.7	1.9	2.1	1.9	2.5	1.7	2.3	2.0
13	2.3	2.3	1.8	1.7	1.7	1.9	2.1	1.9	2.6	1.7	2.4	2.0
14	2.3	2.3	1.9	1.7	1.6	1.9	2.0	1.9	2.6	1.7	2.4	2.0
15	2.3	2.1	1.9	1.7	1.6	1.9	2.0	1.9	2.7	1.7	2.5	2.0
16	2.3	1.8	1.9	1.7	1.6	1.8	2.0	1.9	2.5	1.7	2.6	2.0
17	2.3	1.8	1.8	1.7	1.6	1.8	2.0	1.8	2.0	1.8	2.4	2.0
18	2.3	1.8	1.8	1.7	1.6	1.8	2.0	1.8	2.0	2.1	2.4	2.0
19	2.3	1.8	1.8	1.7	1.6	1.8	2.0	1.8	2.0	2.1	2.4	2.0
20	2.3	1.7	1.9	1.7	1.5	1.8	2.0	1.8	2.0	2.1	2.4	2.0
21	2.3	1.7	1.9	1.7	1.5	1.8	1.9	1.8	1.9	2.2	2.1	2.0
22	2.3	1.7	1.9	1.7	1.5	1.8	1.9	1.8	1.9	2.2	1.9	2.0
23	2.3	1.7	1.9	1.7	1.5	1.9	1.9	2.0	1.9	2.2	1.9	2.0
24	2.4	1.7	1.9	1.7	1.8	1.9	1.9	2.1	1.9	2.2	1.9	2.0
25	2.5	1.7	1.9	1.7	2.0	1.9	1.9	2.0	1.9	2.2	1.8	2.0
26	2.5	1.7	1.9	1.7	2.1	2.0	1.9	2.0	1.9	2.2	1.9	2.0
27	2.5	1.7	1.9	1.7	2.1	1.9	2.0	1.9	1.9	2.2	1.8	2.0
28	2.5	1.7	1.9	1.7	1.9	1.9	1.9	1.9	1.9	2.2	1.8	2.0
29	2.5	1.7	1.9	1.7	1.8	2.0	1.9	1.9	1.9	2.3	1.8	2.0
30	2.6	1.8	1.9	1.7	---	2.0	1.9	1.9	1.9	2.2	1.8	2.0
31	2.5	---	1.9	1.7	---	2.0	---	2.1	---	2.3	1.8	---
TOTAL	71.8	53.21	58.1	54.2	49.2	57.1	59.7	58.2	61.4	60.9	66.0	59.5
MEAN	2.32	1.77	1.87	1.75	1.70	1.84	1.99	1.88	2.05	1.96	2.13	1.98
MAX	2.6	2.3	1.9	1.9	2.1	2.0	2.1	2.1	2.7	2.3	2.6	2.0
MIN	2.2	.00	1.8	1.7	1.5	1.7	1.9	1.8	1.8	1.7	1.8	1.8
AC-FT	142	106	115	108	98	113	118	115	122	121	131	118

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	2.04	1.78	1.87	1.92	1.91	1.93	2.01	2.09	2.16	2.16	2.23	2.19
MAX	2.32	2.20	2.01	2.30	2.11	2.06	2.41	2.42	2.47	2.62	2.73	2.52
(WY)	2000	1994	1998	1997	1997	1997	1996	1995	1993	1995	1996	1995
MIN	1.87	1.04	1.75	1.75	1.70	1.70	1.83	1.88	1.90	1.91	1.85	1.89
(WY)	1991	1997	1999	2000	2000	1991	1999	2000	1992	1992	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	739.51		709.31			
ANNUAL MEAN	2.03		1.94		2.03	
HIGHEST ANNUAL MEAN					2.19	1996
LOWEST ANNUAL MEAN					1.85	1991
HIGHEST DAILY MEAN	2.6	May 14	2.7	Jun 15	3.3	May 7 1995
LOWEST DAILY MEAN	.00	Nov 2	.00	Nov 2	.00	Nov 3 1998
ANNUAL SEVEN-DAY MINIMUM	1.3	Nov 1	1.3	Nov 1	.01	Oct 29 1998
ANNUAL RUNOFF (AC-FT)	1470		1410		1470	
10 PERCENT EXCEEDS	2.3		2.3		2.4	
50 PERCENT EXCEEDS	2.0		1.9		2.0	
90 PERCENT EXCEEDS	1.8		1.7		1.8	

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA

LOCATION.—Lat 37°21'00", long 118°27'42", in SE 1/4 SE 1/4 sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, on left bank, adjacent to Powerplant No. 6 tailrace, and 3.8 mi west of Bishop.

DRAINAGE AREA.—104 mi^2.

PERIOD OF RECORD.—October 1990 to current year. If records for Bishop Creek Powerplant No. 6 Conduit (station 10271060) are combined with this record, a record equivalent to that published since October 1936 as Bishop Creek below Powerplant No. 6, near Bishop, discontinued September 1990, can be obtained. Monthly and yearly mean discharge prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 4,510 ft above sea level, from topographic map.

REMARKS.—Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir (stations 10270700, 10270870, and 10270875), combined capacity, 20,311 acre-ft, and five powerplants. Water is diverted into basin via Birch–McGee Diversion (station 10270900). Water is diverted out of basin via Abelour Ditch (station 10270985) for irrigation and domestic use. Diversion to Bishop Creek Powerplant No. 6 (station 10271060) bypasses this station and is published as a line item below. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 453 ft^3/s, July 23, 1998, gage height, 3.77 ft; no flow on many days in July and August 1992.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	64	1.3	.82	.82	.42	1.3	.91	3.2	69	2.2	2.4
2	.96	59	1.2	.82	.82	.48	1.3	.77	.48	69	2.2	.92
3	.96	117	1.1	.82	.82	.48	1.5	.68	.37	57	15	.81
4	.96	144	1.1	.82	.82	.48	1.5	.59	1.6	42	3.2	.82
5	.96	103	1.1	.82	.82	.50	1.5	.59	3.8	31	.89	.82
6	.96	90	1.1	.86	.82	.89	1.4	.58	5.1	26	.68	.82
7	.96	88	1.2	.82	1.0	1.9	1.3	.61	1.8	19	.54	.82
8	.90	90	1.3	.82	.82	1.9	1.3	.64	2.8	15	.55	.82
9	.82	89	1.2	.82	.73	1.9	1.3	1.1	12	12	.57	.82
10	.82	74	1.0	.82	.69	1.9	1.3	3.8	8.5	8.3	.55	.82
11	.82	7.0	.96	.82	.69	1.9	1.8	1.3	6.5	2.0	.47	.82
12	.82	5.3	.96	.82	.58	1.9	3.1	1.2	86	1.3	.44	.94
13	.82	5.3	.97	.82	.65	1.9	3.3	.96	108	.48	.44	.82
14	.82	5.3	.96	.82	.77	1.9	.72	.88	130	.54	.41	.82
15	.82	4.0	.96	.82	.58	1.9	.45	.65	138	.71	2.0	.82
16	.86	1.9	.96	.90	.58	1.7	.35	.67	91	.41	91	.82
17	.93	1.9	.96	.77	.58	1.7	.41	.63	34	.35	88	.82
18	.96	1.9	.96	.82	.69	1.7	.39	.61	28	.32	1.6	.82
19	.96	1.9	.96	.82	.63	1.7	.36	.62	26	.33	1.3	.82
20	.96	1.9	.96	.85	.51	1.6	.36	.53	32	.33	1.1	.82
21	.96	1.8	.89	.76	.68	1.5	.42	.50	30	.31	1.0	.82
22	.96	1.7	.96	.83	.47	9.4	.37	.44	37	.29	1.0	.80
23	.96	1.5	.96	.82	5.4	18	.49	.44	46	.29	.99	.82
24	.90	1.5	.96	.82	5.8	2.1	.44	.38	52	.29	1.0	.87
25	4.8	1.5	.96	.86	.62	1.5	.42	.42	58	.27	1.1	.89
26	9.1	1.5	.96	.69	.41	1.5	.69	.40	52	.23	1.1	.65
27	1.6	1.5	.96	.82	.39	1.3	1.6	.37	45	.24	1.2	.26
28	11	1.5	.96	.82	.39	1.3	1.2	10	44	.24	.96	.22
29	20	1.3	.96	.82	.39	1.3	1.0	15	53	.28	1.1	.23
30	23	1.3	.95	.83	---	1.3	.98	8.5	61	.27	1.1	.22
31	27	---	.82	.82	---	1.3	---	11	---	1.2	1.0	---
TOTAL	118.28	969.5	31.55	25.39	28.97	69.25	32.55	65.77	1197.15	358.98	224.69	23.97
MEAN	3.82	32.3	1.02	.82	1.00	2.23	1.08	2.12	39.9	11.6	7.25	.80
MAX	27	144	1.3	.90	5.8	18	3.3	15	138	69	91	2.4
MIN	.82	1.3	.82	.69	.39	.42	.35	.37	.37	.23	.41	.22
AC-FT	235	1920	63	50	57	137	65	130	2370	712	446	48
a	4920	3420	4380	3520	3890	6100	5890	6450	6160	7390	6410	4820

a Diversion, in acre-feet, to Bishop Creek Powerplant No. 6, provided by Southern California Edison Co.

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.56	8.15	1.51	5.44	2.43	2.62	2.56	7.32	33.4	76.1	37.1	6.71
MAX	37.4	32.3	5.34	38.6	10.9	7.54	15.9	29.9	86.7	240	171	37.5
(WY)	1998	2000	1996	1997	1998	1994	1996	1996	1997	1995	1995	1998
MIN	.11	.19	.19	.17	.21	.19	.18	.12	.064	.035	.048	.082
(WY)	1993	1991	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	2609.32		3146.05			
ANNUAL MEAN	7.15		8.60		16.0	
HIGHEST ANNUAL MEAN					43.2	1995
LOWEST ANNUAL MEAN					.34	1992
HIGHEST DAILY MEAN	144	Nov 4	144	Nov 4	420	Jul 24 1998
LOWEST DAILY MEAN	.29	Jul 29	.22	Sep 28	.00	Jul 27 1992
ANNUAL SEVEN-DAY MINIMUM	.56	May 8	.26	Jul 24	.00	Jul 27 1992
INSTANTANEOUS PEAK FLOW			163	Nov 4	453	Jul 23 1998
INSTANTANEOUS PEAK STAGE			2.17	Nov 4	3.77	Jul 23 1998
ANNUAL RUNOFF (AC-FT)	5180		6240		11560	
ANNUAL DIVERSION (AC-FT) a	65720		63360			
10 PERCENT EXCEEDS	23		26		52	
50 PERCENT EXCEEDS	1.2		.96		1.5	
90 PERCENT EXCEEDS	.89		.42		.18	

a Diversion, in acre-feet, to Bishop Creek Powerplant No. 6, provided by Southern California Edison Co.

10287060 LUNDY LAKE NEAR LEE VINING, CA

LOCATION.—Lat 38°01'56", long 119°13'11", in NW 1/4 SE 1/4 sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, near right abutment of spillway of Lundy Lake Dam, on Mill Creek, and 7.6 mi northwest of Lee Vining.

DRAINAGE AREA.—16.3 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1910. Usable capacity, 4,113 acre-ft, between elevations 7,766.43 ft, invert of outlet, and 7,807.81 ft, crest of spillway. Figures given represent usable contents. Water is used for power development and irrigation downstream.

COOPERATION.—Records were collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 4,191 acre-ft, July 22, 1998, elevation, 7,808.40 ft; minimum, 440 acre-ft, Apr. 19, 1993, elevation, 7,773.08 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 3,395 acre-ft, July 1, elevation, 7,802.20 ft; minimum, 908 acre-ft, May 21, elevation, 7,778.66 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 17, 1981)

7,766.43	0	7,790	2,001
7,770	213	7,800	3,126
7,780	1,027	7,810	4,406

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2314	2219	2048	1763	1761	1846	1673	1616	1809	3395	2975	2748
2	2323	2208	2036	1752	1757	1851	1672	1599	1861	3391	2969	2729
3	2320	2199	2030	1755	1754	1830	1666	1567	1919	3368	2981	2717
4	2319	2193	2024	1756	1753	1840	1661	1563	1985	3349	3005	2702
5	2331	2181	2001	1763	1752	1848	1673	1535	2066	3313	3020	2682
6	2335	2178	1998	1763	1758	1846	1667	1527	2131	3280	3033	e2668
7	2321	2172	1987	1756	1757	1856	1677	1512	2212	3254	3030	e2652
8	2323	2182	1982	1757	1761	1850	1666	1517	2256	3237	3031	e2636
9	2306	2158	1959	1756	1750	1848	1698	1511	2262	3229	3039	e2620
10	2340	2151	1960	1757	1750	1839	1676	1481	2255	3230	3039	e2604
11	2330	2148	1952	1756	1751	1830	1672	1443	2237	3223	3025	e2588
12	2326	2131	1938	1748	1778	1835	1680	1395	2225	3225	3025	e2585
13	2299	2128	1929	1742	1787	1816	1679	1332	2253	3222	3007	e2582
14	2315	2129	1912	1736	1804	1795	1670	1281	2338	3208	2990	e2578
15	2298	2107	1909	1743	1799	1789	1671	1215	2427	3201	2978	e2575
16	2298	2108	1905	1746	1800	1792	1663	1156	2545	3185	2966	e2571
17	2291	2101	1896	1733	1804	1805	1672	1086	2656	3175	2961	e2568
18	2279	2084	1882	1742	1800	1781	1650	1028	2764	3171	2940	e2565
19	2289	2099	1867	1746	1795	1779	1647	963	2852	3153	2925	e2561
20	2285	2085	1851	1738	1811	1782	1639	919	2916	3148	2911	e2558
21	2275	2087	1848	1743	1817	1767	1619	908	2981	3153	2892	e2554
22	2275	2089	1840	1740	1817	1764	1600	943	3044	3141	2878	e2551
23	2268	2067	1816	1747	1816	1759	1585	1035	3114	3126	2854	e2548
24	2269	2064	1808	1747	1811	1741	1569	1125	3171	3111	2849	e2544
25	2278	2066	1798	1756	1815	1735	1553	1233	3225	3101	2832	e2542
26	2253	2069	1781	1750	1842	1718	1557	1322	3264	3082	2818	e2541
27	2251	2071	1767	1753	1835	1711	1579	1422	3299	3056	2801	e2539
28	2245	2068	1772	1752	1835	1704	1566	1574	3333	3042	2785	e2537
29	2238	2078	1773	1752	1831	1696	1585	1670	3360	3021	2774	e2535
30	2234	2059	1767	1754	---	1687	1598	1732	3380	3009	2767	e2533
31	2227	---	1754	1753	---	1680	---	1777	---	2979	2757	---
MAX	2340	2219	2048	1763	1842	1856	1698	1777	3380	3395	3039	2748
MIN	2227	2059	1754	1733	1750	1680	1553	908	1809	2979	2757	2533
a	7792.12	7790.55	7787.60	7787.59	7788.36	7786.87	7786.05	7787.83	7802.08	7798.76	7796.86	
b	-96	-168	-305	-1	+78	-151	-82	+179	+1603	-401	-222	-224

CAL YR 1999 MAX 4159 MIN 966 b -276
WTR YR 2000 MAX 3395 MIN 908 b +210

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287069 MILL CREEK FLUME BELOW LUNDY LAKE, NEAR LEE VINING, CA

LOCATION.—Lat 38°01'59", long 119°12'56", in SE 1/4 NE 1/4 sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, on left bank, 20 ft upstream from Deer Creek, 70 ft downstream from road culvert, 1,400 ft downstream from Lundy Lake Dam, and 7.5 mi northwest of Lee Vining.

DRAINAGE AREA.—18.1 mi^2.

PERIOD OF RECORD.—October 1990 to current year. If records for Upper Conway Ditch and Lundy Powerplant Tailrace (stations 10287145 and 10287195) are combined with this record, a record equivalent to that published since October 1942 as "Mill Creek below Lundy Lake, near Mono Lake" can be obtained. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and 5-ft Cipolletti weir (since May 12, 1992) set in Parshall flume. Elevation of gage is 7,760 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Lundy Lake (station 10287060). Most of the water is diverted at Lundy Lake via Lundy Powerplant to Upper Conway Ditch and Lundy Powerplant Tailrace for power development and irrigation.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 154 ft^3/s, July 21, 1998, gage height, 2.65 ft; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.6	.54	.00	.00	.00	.00	.00	.00	4.6	3.6	2.6
2	5.3	6.4	.52	.00	.00	.00	.00	.00	.00	4.6	3.6	2.6
3	5.1	6.1	.53	.00	.00	.00	.00	.00	.00	4.6	3.6	2.5
4	5.0	6.1	.53	.00	.00	.00	.00	.00	.00	4.6	3.6	2.4
5	5.0	8.8	.49	.00	.00	.00	.00	.00	.02	4.5	3.6	2.4
6	4.8	5.5	.45	.00	.00	.00	.00	.00	.11	4.3	3.6	2.3
7	4.9	5.6	.45	.00	.00	.00	.00	.00	.26	4.2	3.6	2.2
8	5.2	5.8	.45	.00	.00	.00	.00	.00	.44	4.1	3.6	2.2
9	5.0	5.8	.40	.00	.00	.00	.00	.00	.45	4.1	3.6	2.1
10	5.0	5.8	.38	.00	.00	.00	.00	.00	.48	4.1	3.6	2.1
11	5.0	5.7	.38	.00	.00	.00	.00	.00	.55	4.1	3.6	2.0
12	5.0	5.7	.36	.00	.00	.00	.00	.00	.61	4.1	3.6	2.0
13	5.0	5.7	.31	.00	.00	.00	.00	.00	.68	4.1	3.6	2.0
14	5.0	5.7	.31	.00	.00	.00	.00	.00	.71	4.1	3.6	1.9
15	4.9	5.6	.31	.00	.00	.00	.00	.00	.81	4.1	3.5	1.9
16	4.6	5.5	.28	.00	.00	.00	.00	.00	.95	4.1	3.5	1.9
17	4.6	5.5	.25	.00	.00	.00	.00	.00	1.1	4.1	3.4	1.9
18	4.4	5.4	.23	.00	.00	.00	.00	.00	1.2	4.1	3.3	1.9
19	4.4	5.2	.19	.00	.00	.00	.00	.00	1.4	4.1	3.3	1.9
20	4.4	5.1	.19	.00	.00	.00	.00	.00	1.6	4.1	3.2	1.9
21	5.0	5.1	.19	.00	.00	.00	.00	.00	1.9	4.0	3.2	1.9
22	5.3	3.3	.17	.00	.00	.00	.00	.00	2.2	3.9	3.1	1.9
23	5.5	1.3	.14	.00	.00	.00	.00	.00	2.6	3.9	3.1	1.9
24	5.1	.96	.14	.00	.00	.00	.00	.00	2.9	3.9	3.0	1.9
25	5.1	.70	.14	.00	.00	.00	.00	.00	3.2	3.9	2.9	1.8
26	5.1	.66	.10	.00	.00	.00	.00	.00	3.5	3.9	2.9	1.7
27	4.8	.61	.09	.00	.00	.00	.00	.00	3.9	3.9	2.8	1.7
28	4.6	.61	.09	.00	.00	.00	.00	.00	4.1	3.8	2.8	1.7
29	5.2	.61	.06	.00	.00	.00	.00	.00	4.2	3.7	2.8	1.7
30	5.9	.61	.03	.00	---	.00	.00	.00	4.4	3.6	2.8	1.7
31	6.6	---	.00	.00	---	.00	---	.00	---	3.6	2.7	---
TOTAL	156.1	132.06	8.70	0.00	0.00	0.00	0.00	0.00	44.27	126.8	102.7	60.6
MEAN	5.04	4.40	.28	.000	.000	.000	.000	.000	1.48	4.09	3.31	2.02
MAX	6.6	8.8	.54	.00	.00	.00	.00	.00	4.4	4.6	3.6	2.6
MIN	4.4	.61	.00	.00	.00	.00	.00	.00	.00	3.6	2.7	1.7
AC-FT	310	262	17	.00	.00	.00	.00	.00	88	252	204	120
a	0	0	0	0	0	0	0	309	337	289	0	0
b	343	353	706	396	391	718	1210	3380	3480	2300	1170	681

a Diversion, in acre-feet, to Upper Conway Ditch, provided by Southern California Edison Co.
b Diversion, in acre-feet, to Lundy Powerplant Tailrace, provided by Southern California Edison Co.

10287069 MILL CREEK FLUME BELOW LUNDY LAKE, NEAR LEE VINING, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.94	1.38	.57	1.13	.45	.12	.008	.20	10.1	25.7	7.04	3.02
MAX	5.04	4.40	2.17	8.57	1.79	.70	.044	1.23	35.8	98.2	31.4	5.74
(WY)	2000	2000	1996	1997	1997	1996	1994	1997	1997	1995	1995	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.61	1.72	.17	.000
(WY)	1991	1991	1991	1991	1991	1991	1991	1991	1993	1994	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	930.74		631.23			
ANNUAL MEAN	2.55		1.72		4.34	
HIGHEST ANNUAL MEAN					14.1	1995
LOWEST ANNUAL MEAN					.69	1992
HIGHEST DAILY MEAN	34	Jul 3	8.8	Nov 5	137	Jul 21 1998
LOWEST DAILY MEAN	.00	Feb 22	.00	Dec 31	.00	Oct 1 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 22	.00	Dec 31	.00	Oct 1 1990
INSTANTANEOUS PEAK FLOW			14	Nov 5	154	Jul 21 1998
INSTANTANEOUS PEAK STAGE			1.33	Nov 5	2.65	Jul 21 1998
ANNUAL RUNOFF (AC-FT)	1850		1250		3140	
ANNUAL DIVERSION (AC-FT) a	1660		935			
ANNUAL DIVERSION (AC-FT) b	16520		15120			
10 PERCENT EXCEEDS	6.1		5.0		6.3	
50 PERCENT EXCEEDS	.61		.44		.53	
90 PERCENT EXCEEDS	.00		.00		.00	

a Diversion, in acre-feet, to Upper Conway Ditch, provided by Southern California Edison Co.
b Diversion, in acre-feet, to Lundy Powerplant Tailrace, provided by Southern California Edison Co.

10287260 WAUGH LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'04", long 119°10'52", unsurveyed, T.2 S., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, near outlet, at base of Rush Creek Meadows Dam, on Rush Creek, and 6.0 mi southwest of town of June Lake.

DRAINAGE AREA.—15.3 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—No records computed during the winter months. Reservoir is formed by concrete dam completed in 1925. Total capacity, 5,277 acre-ft, between elevations 9,368.60 ft, invert of outlet, and 9,415.61 ft, crest of spillway, all of which are available for release. Figures given represent total contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 18, 1981)

9,375	0	9,400	2,670
9,380	148	9,405	3,447
9,385	681	9,410	4,277
9,390	1,283	9,418	5,727
9,395	1,948		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1923	---	---	---	---	---	---	309	3171	5458	e5023	5056
2	1714	---	---	---	---	---	---	373	3148	5413	5184	4997
3	1510	---	---	---	---	---	---	444	3170	5405	5221	4994
4	1312	---	---	---	---	---	---	493	3262	5385	5234	4988
5	1124	---	---	---	---	---	---	502	3328	5386	5254	4972
6	942	---	---	---	---	---	---	489	3349	5371	5252	4952
7	784	---	---	---	---	---	---	444	3319	5360	5212	4918
8	620	---	---	---	---	---	---	366	3215	5297	5230	4869
9	460	---	---	---	---	---	---	436	2974	5306	5217	4821
10	306	---	---	---	---	---	---	e353	2754	5327	5193	4773
11	152	---	---	---	---	---	384	269	2640	5342	5146	4714
12	---	---	---	---	---	---	482	.90	2882	5336	5065	4612
13	---	---	---	---	---	---	579	1.2	3351	5329	5030	4468
14	---	---	---	---	---	---	655	.70	3941	5321	5061	4284
15	---	---	---	---	---	---	675	.50	4513	5323	4979	4087
16	---	---	---	---	---	---	710	.50	5124	5332	4950	3884
17	---	---	---	---	---	---	749	48	5529	5327	4909	3684
18	---	---	---	---	---	---	587	191	5556	5308	4880	3489
19	---	---	---	---	---	---	.60	412	5503	5299	4878	3298
20	---	---	---	---	---	---	.40	710	5494	5295	e4873	3112
21	---	---	---	---	---	---	.50	1071	5499	5288	e4864	2934
22	---	---	---	---	---	---	.50	1518	5494	5293	e4860	2754
23	---	---	---	---	---	---	.50	1958	5501	5297	e4869	2582
24	---	---	---	---	---	---	.50	2435	5535	5286	e4878	2412
25	---	---	---	---	---	---	.80	2641	5552	5291	e4889	2243
26	---	---	---	---	---	---	5.3	2706	5535	5381	e4901	2078
27	---	---	---	---	---	---	e4.0	2951	5546	5327	e4912	1917
28	---	---	---	---	---	---	2.5	3163	5415	e5267	e4927	1759
29	---	---	---	---	---	---	1.5	3263	5480	e5209	e4950	1605
30	---	---	---	---	---	---	267	3257	5480	e5159	e4977	1457
31	---	---	---	---	---	---	---	3204	---	e5093	e5008	---
MAX	---	---	---	---	---	---	---	3263	5556	5458	5254	5056
MIN	---	---	---	---	---	---	---	.50	2640	5093	4860	1457
a							9381.20	9403.48	9416.70			9391.36
b								+2937	+2276	-387	-85	-3551

WTR YR 2000 b -687

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287262 RUSH CREEK BELOW WAUGH LAKE, NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'04", long 119°10'50", unsurveyed, T.2 S., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, 500 ft downstream from Rush Creek Meadows Dam, on Rush Creek, and 6.0 mi southwest of town of June Lake.

DRAINAGE AREA.—15.27 mi^2.

PERIOD OF RECORD.—August 1999 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 9,375 ft above sea level, from topographic map.

REMARKS.—No records computed above 50 ft^3/s or for the winter months. Flow regulated by Waugh Lake (station 10287260).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	48	18
2	---	---	---	---	---	---	---	---	---	---	34	18
3	---	---	---	---	---	---	---	---	---	---	33	18
4	---	---	---	---	---	---	---	---	---	---	33	18
5	---	---	---	---	---	---	---	---	---	---	33	20
6	---	---	---	---	---	---	---	---	---	---	33	22
7	---	---	---	---	---	---	---	---	---	---	33	26
8	---	---	---	---	---	---	---	---	---	---	33	30
9	---	---	---	---	---	---	---	---	---	---	34	30
10	---	---	---	---	---	---	---	---	---	---	34	30
11	---	---	---	---	---	---	29	---	---	---	33	35
12	48	---	---	---	---	---	4.8	45	---	---	33	46
13	---	---	---	---	---	---	4.7	---	14	---	33	---
14	---	---	---	---	---	---	4.7	---	26	---	33	---
15	---	---	---	---	---	---	4.6	33	38	---	33	---
16	---	---	---	---	---	---	4.7	---	39	---	33	---
17	---	---	---	---	---	---	4.6	---	---	---	28	---
18	---	---	---	---	---	---	---	27	---	---	21	---
19	---	---	---	---	---	---	---	29	---	---	18	---
20	---	---	---	---	---	---	---	31	---	48	18	---
21	---	---	---	---	---	---	47	33	---	48	18	---
22	---	---	---	---	---	---	---	34	---	47	18	---
23	---	---	---	---	---	---	---	36	---	46	18	---
24	---	---	---	---	---	---	---	40	---	46	18	---
25	---	---	---	---	---	---	---	---	---	47	18	---
26	---	---	---	---	---	---	---	---	---	---	18	---
27	---	---	---	---	---	---	---	---	---	---	18	---
28	---	---	---	---	---	---	---	---	---	---	18	---
29	---	---	---	---	---	---	---	---	---	---	18	---
30	---	---	---	---	---	---	---	---	---	---	18	---
31	---	---	---	---	---	---	---	---	---	---	18	---
TOTAL	---	---	---	---	---	---	---	---	---	---	829	---
MEAN	---	---	---	---	---	---	---	---	---	---	26.7	---
MAX	---	---	---	---	---	---	---	---	---	---	48	---
MIN	---	---	---	---	---	---	---	---	---	---	18	---
AC-FT	---	---	---	---	---	---	---	---	---	---	1640	---

10287280 GEM LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'07", long 119°08'25", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, 100 ft downstream from left abutment of dam, on Rush Creek, and 4.0 mi southwest of town of June Lake.

DRAINAGE AREA.—22.0 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by concrete dam completed in 1916. Usable capacity, 17,798 acre-ft, between elevations 8,964.33 ft, invert of outlet, and 9,053.64 ft, crest of upper spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 17,763 acre-ft, June 19, 2000, elevation, 9,053.51 ft; minimum, 128 acre-ft, several days in 2000, elevation, 8,970.38 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 17,763 acre-ft, June 19, elevation, 9,053.51 ft; minimum, 128 acre-ft, several days, elevation, 8,970.38 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Sept. 1, 1981)

8,980	441	9,010	6,547
8,985	1,348	9,025	10,121
8,990	2,300	9,040	14,023
9,000	4,345	9,055	18,187

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16366	13381	9611	6703	5583	4579	1795	3172	12638	17662	16851	16770
2	16372	13235	9476	6681	5523	4540	1799	3487	13124	17620	16837	16770
3	16369	13097	9339	6619	5476	4495	1660	3816	13606	17571	16829	16778
4	16358	12947	9321	6554	5428	4483	1542	4169	14114	17530	16776	16778
5	16335	12806	9290	6497	5417	4480	1188	4500	14620	17475	16764	16756
6	16313	12660	9160	6431	5408	4427	987	4832	15118	17424	16759	16731
7	16282	12522	9046	6376	5351	4374	884	5141	15602	17360	16770	16708
8	16241	12380	8926	6356	5307	4310	644	5454	16058	17301	16773	16691
9	16191	12260	8797	6343	5242	4216	417	5776	16475	17230	16784	16669
10	16135	12138	8667	6320	5189	4135	300	6069	16873	17182	16778	16643
11	16066	12013	8636	6277	5154	4047	179	6329	17235	17159	16787	16618
12	16017	11905	8638	6217	5152	3959	128	6524	17346	17140	16790	16543
13	15827	11782	8473	6147	5180	3867	128	6653	17312	16885	16790	16503
14	15632	11665	8339	6080	5165	3778	128	6776	17317	16834	16787	16506
15	15442	11550	8201	6040	5088	3695	128	6889	17334	16787	16742	16514
16	15244	11418	8104	6055	5038	3612	128	6960	17349	16750	16745	16509
17	15052	11310	7967	5997	4985	3530	128	6979	17470	16733	16742	16526
18	14953	11198	7948	6026	4940	3447	142	7075	17740	16711	16725	16587
19	14862	11093	7922	5968	4940	3351	291	7216	17763	16686	16708	16674
20	14768	10961	7780	5914	4940	3261	850	7406	17679	16683	16700	16776
21	14669	10834	7639	5894	4892	3192	1502	7639	17637	16677	16702	16820
22	14576	10706	7495	5874	4847	3102	1637	7825	17637	16677	16702	16801
23	14487	10568	7369	5865	4810	3011	1704	8002	17662	16677	16697	16792
24	14387	10436	7232	5883	4765	2928	1780	8175	17670	16694	16700	16787
25	14297	10310	7193	5871	4728	2843	1881	8648	17721	16711	16719	16767
26	14198	10170	7160	5814	4706	2764	2047	9236	17687	16733	16736	16747
27	14084	10132	7048	5785	4735	2671	2280	9884	17668	16753	16745	16722
28	13943	9998	6916	5712	4685	2521	2493	10525	17665	16784	16739	16736
29	13807	9882	6854	5698	4631	2349	2669	11139	17628	16798	16753	16702
30	13664	9753	6792	5705	---	2170	2873	11662	17659	16823	16773	16691
31	13522	---	6722	5641	---	1988	---	12156	---	16843	16778	---
MAX	16372	13381	9611	6703	5583	4579	2873	12156	17763	17662	16851	16820
MIN	13522	9753	6722	5641	4631	1988	128	3172	12638	16677	16697	16503
a	9038.12	9023.52	9010.77	9007.00	9001.34	8988.40	8992.91	9032.95	9053.14	9050.26	9050.03	9049.72
b	-2833	-3769	-3031	-1081	-1010	-2643	+885	+9283	+5503	-816	-65	-87

CAL YR 1999 MAX 17482 MIN 139 b -2695
WTR YR 2000 MAX 17763 MIN 128 b +336

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287281 RUSH CREEK BELOW GEM LAKE, NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'05", long 119°08'26", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, 100 ft downstream from left abutment of dam on Rush Creek, and 4.0 mi southwest of town of June Lake.

DRAINAGE AREA.—22.0 mi^2.

PERIOD OF RECORD.—October 18, 1999 to September 2000. Unpublished records prior to October 1999 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 8,979 ft above sea level (from topographic map).

REMARKS.—Flow regulated by Gem Lake (station 10287280) 100 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2
2	---	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2
3	---	1.1	1.2	1.2	1.2	1.2	1.1	1.3	1.2	1.2	1.2	1.2
4	---	1.2	1.2	1.2	1.2	1.2	.65	1.3	1.2	1.2	1.2	1.2
5	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
6	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
7	---	1.2	1.2	1.3	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
8	---	1.2	1.2	1.3	1.3	1.2	.00	1.3	1.2	1.2	1.2	1.2
9	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
10	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
11	---	1.2	1.2	1.2	1.2	1.2	.00	1.2	1.3	1.2	1.2	1.2
12	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
13	---	1.2	1.2	1.2	1.3	1.2	.00	1.2	1.2	1.2	1.2	1.2
14	---	1.2	1.2	1.2	1.3	1.2	.00	1.2	1.2	1.2	1.2	1.2
15	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
16	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
17	---	1.2	1.3	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
18	---	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
19	1.3	1.2	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
20	1.3	1.1	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
21	1.2	1.1	1.2	1.2	1.2	1.2	.00	1.2	1.3	1.2	1.2	1.2
22	1.1	1.1	1.2	1.2	1.2	1.2	.00	1.3	1.3	1.2	1.2	1.2
23	1.1	1.1	1.3	1.2	1.2	1.2	.00	1.3	1.2	1.2	1.2	1.2
24	1.1	1.1	1.2	1.2	1.2	1.1	.90	1.2	1.2	1.2	1.2	1.2
25	1.1	1.1	1.2	1.2	1.2	1.1	1.3	1.3	1.3	1.2	1.2	1.2
26	1.1	1.0	1.2	1.2	1.2	1.1	1.3	1.2	1.3	1.2	1.2	1.2
27	1.1	1.0	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2
28	1.1	1.0	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2
29	1.1	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2
30	1.1	1.2	1.2	1.2	---	1.2	1.3	1.3	1.2	1.2	1.2	1.2
31	1.1	---	1.2	1.2	---	1.2	---	1.2	---	1.2	1.2	---
TOTAL	---	34.5	37.5	37.4	35.1	36.9	12.85	39.4	37.2	37.2	37.2	36.0
MEAN	---	1.15	1.21	1.21	1.21	1.19	.43	1.27	1.24	1.20	1.20	1.20
MAX	---	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.2
MIN	---	1.0	1.2	1.2	1.2	1.1	.00	1.2	1.2	1.2	1.2	1.2
AC-FT	---	68	74	74	70	73	25	78	74	74	74	71

10287285 AGNEW LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'30", long 119°07'52", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in boat house, at left abutment of dam on Rush Creek, and 3.3 mi southwest of town of June Lake.

DRAINAGE AREA.—23.3 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by concrete dam completed in 1916. Usable capacity, 810 acre-ft, between elevations 8,470.00 ft, invert of outlet, and 8,495.88 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 871 acre-ft, Aug. 30, 1995, elevation, 8,497.40 ft; minimum, 22 acre-ft, Feb. 28, 1991, elevation, 8,470.97 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 849 acre-ft, June 19, elevation, 8,496.84 ft; minimum, 37 acre-ft, Mar. 27, 31, Apr. 1, minimum elevation, 8,471.59 ft, Apr. 1.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 25, 1981)

8,470	0	8,485	415
8,475	122	8,490	587
8,480	260	8,498	896

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	809	150	114	74	56	47	37	378	818	830	806	801
2	809	149	113	73	55	47	38	390	818	827	808	802
3	809	147	112	72	54	46	39	404	819	824	809	801
4	807	146	111	71	53	46	40	420	818	820	809	797
5	802	145	109	69	52	45	41	433	818	815	808	797
6	801	143	108	68	51	45	42	447	818	813	808	797
7	801	142	107	67	50	44	44	461	816	810	807	798
8	803	143	105	65	49	45	45	473	817	810	807	798
9	803	141	104	64	48	44	46	489	817	811	804	798
10	803	141	102	63	48	43	48	502	816	813	802	798
11	802	139	101	62	47	43	57	513	817	812	802	797
12	803	138	100	61	48	42	113	522	823	811	802	797
13	803	137	99	60	51	42	170	529	820	809	802	797
14	804	135	98	59	53	42	202	536	819	808	801	797
15	805	135	96	60	52	42	232	544	820	809	801	796
16	805	134	95	61	52	42	263	549	819	808	801	793
17	806	133	94	62	51	42	298	555	821	808	801	792
18	764	132	93	62	50	42	320	562	840	809	798	792
19	685	132	92	63	49	42	319	573	849	810	796	792
20	609	131	90	63	49	41	320	588	848	811	796	792
21	531	129	89	62	49	40	321	609	843	807	796	790
22	452	127	88	61	48	40	322	637	841	806	796	789
23	374	126	86	60	49	39	324	666	842	805	796	789
24	301	125	85	61	48	38	327	696	841	806	796	789
25	235	123	84	61	48	38	332	729	845	806	798	789
26	174	122	83	60	46	38	339	759	842	805	800	789
27	155	120	81	60	49	37	346	794	839	805	801	789
28	156	118	80	58	48	38	354	820	839	805	801	789
29	154	117	78	57	48	38	362	819	833	805	802	789
30	153	116	77	58	---	38	370	818	830	805	805	789
31	152	---	76	57	---	37	---	819	---	805	806	---
MAX	809	150	114	74	56	47	370	820	849	830	809	802
MIN	152	116	76	57	46	37	37	378	816	805	796	789
a	8476.14	8474.77	8473.21	8472.42	8472.03	8471.60	8483.58	8496.11	8496.37	8495.76	8495.78	8495.34
b	-658	-36	-40	-19	-9	-11	+333	+449	+11	-25	+1	-17

CAL YR 1999 MAX 835 MIN 26 b +50
WTR YR 2000 MAX 849 MIN 37 b -21

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287289 RUSH CREEK FLUME BELOW AGNEW LAKE, NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'33", long 119°07'47", in NE 1/4 SW 1/4 sec.20, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 600 ft downstream from Agnew Lake Dam, and 3.4 mi southwest of town of June Lake.

DRAINAGE AREA.—23.3 mi^2.

PERIOD OF RECORD.—October 1990 to current year. If records for Rush Creek Powerplant Tailrace (station 10287300) are combined with this record, a record equivalent to that published since October 1951 as Rush Creek below Agnew Lake (station 10287290) can be obtained. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and Parshall flume. A 4-ft Cipolletti weir is set in the Parshall flume at times. Elevation of gage is 8,440 ft above sea level, from topographic map.

REMARKS.—Flow regulated for power development by Waugh, Gem, and Agnew Lakes (stations 10287260, 10287280, and 10287285, respectively). Most of the water is diverted at either Gem or Agnew Lakes to Rush Creek Powerplant Tailrace via Rush Creek Powerplant.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 441 ft^3/s, July 30, 1995, gage height, 4.90 ft; no flow for many days in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.4	e2.3	2.2	2.2	e2.0	2.0	1.7	13	56	1.9	3.1
2	1.7	2.4	e2.3	2.3	2.2	e2.0	2.1	1.7	12	48	1.8	2.6
3	1.8	2.4	2.3	2.3	2.2	e2.0	2.2	1.8	12	36	1.7	2.6
4	2.3	2.4	2.3	2.2	e2.2	e2.0	2.2	1.7	16	26	2.3	3.8
5	3.2	2.4	2.4	2.2	e2.2	e2.0	e1.7	1.7	15	13	1.9	1.9
6	2.0	2.4	2.4	2.3	2.2	e2.0	1.3	1.7	15	5.3	2.0	2.0
7	1.3	2.4	2.4	2.3	2.1	e2.0	1.3	1.8	14	4.5	2.2	2.1
8	1.4	2.4	2.3	2.2	2.1	e2.0	1.3	1.8	11	3.5	2.0	2.0
9	1.4	2.4	2.4	2.2	2.0	e2.0	e1.3	1.7	9.8	2.4	3.2	2.5
10	1.6	2.4	2.3	2.2	e2.1	e2.0	1.2	1.6	8.8	2.8	2.6	2.5
11	1.9	2.4	2.3	2.3	e2.0	e2.0	1.3	1.5	8.4	3.3	1.7	2.5
12	1.4	2.4	2.3	2.2	2.0	e2.0	1.3	1.3	20	3.8	1.7	2.6
13	1.4	2.4	2.3	e2.2	2.0	e2.0	e1.5	1.3	19	3.6	1.8	2.6
14	1.4	2.4	2.3	2.2	2.0	e2.0	e1.5	1.3	15	2.8	1.9	2.7
15	1.4	2.4	2.3	e2.2	2.0	e2.0	1.5	1.3	16	2.1	1.8	2.7
16	1.4	2.3	2.3	e2.2	2.0	e2.0	1.5	1.3	16	3.1	1.6	3.3
17	1.4	2.3	2.4	2.2	2.0	e2.0	1.5	1.3	16	2.1	1.9	2.7
18	1.9	2.4	2.2	e2.2	2.0	e2.0	1.6	1.4	69	2.1	2.3	2.6
19	2.3	2.3	2.2	2.2	2.0	e2.0	1.6	1.4	209	2.1	2.0	2.6
20	2.0	2.3	2.3	2.2	2.0	e2.0	1.6	1.4	219	2.2	1.6	2.6
21	2.9	e2.3	2.2	2.2	2.0	2.0	1.5	1.4	173	4.1	1.5	2.8
22	4.8	2.3	2.3	2.2	1.9	2.0	1.6	1.4	137	2.6	1.5	2.4
23	4.6	2.3	2.3	2.2	2.8	2.0	1.6	1.5	134	2.3	1.6	2.5
24	4.4	2.3	2.3	2.2	e2.5	2.0	1.5	1.5	129	2.0	1.5	2.4
25	4.2	2.3	2.3	2.2	e2.3	2.0	1.6	1.5	164	2.1	1.6	2.3
26	3.5	2.3	2.3	2.2	e2.1	2.1	1.7	1.5	143	2.3	1.6	2.2
27	2.8	2.3	2.3	2.2	e2.0	2.1	1.6	1.5	112	2.2	1.5	2.0
28	2.4	2.3	2.3	2.2	e2.0	2.0	1.6	7.2	108	2.0	1.7	1.9
29	2.4	2.2	2.3	2.2	e2.0	2.0	1.6	18	93	2.1	1.5	1.8
30	2.4	2.2	2.3	2.2	---	2.0	1.6	15	62	1.9	1.6	1.8
31	2.4	---	2.3	2.4	---	2.0	---	13	---	1.7	1.7	---
TOTAL	72.0	70.4	71.5	68.9	61.1	62.2	47.4	94.2	1989.0	250.0	57.2	74.1
MEAN	2.32	2.35	2.31	2.22	2.11	2.01	1.58	3.04	66.3	8.06	1.85	2.47
MAX	4.8	2.4	2.4	2.4	2.8	2.1	2.2	18	219	56	3.2	3.8
MIN	1.3	2.2	2.2	2.2	1.9	2.0	1.2	1.3	8.4	1.7	1.5	1.8
AC-FT	143	140	142	137	121	123	94	187	3950	496	113	147
a	5170	3610	2810	1200	1350	2670	1770	1300	4350	4300	1620	3390

e Estimated.
a Diversion, in acre-feet, to Rush Creek Powerplant Tailrace, provided by Southern California Edison Co.

10287289 RUSH CREEK FLUME BELOW AGNEW LAKE, NEAR JUNE LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.91	2.03	.95	1.16	.88	.97	1.44	1.41	22.2	48.4	10.6	1.09
MAX	3.06	4.89	2.31	4.72	2.11	2.01	2.99	3.89	81.8	218	89.8	2.47
(WY)	1996	1999	2000	1997	2000	2000	1996	1998	1995	1995	1995	2000
MIN	.085	.39	.23	.27	.19	.13	.040	.045	.049	.031	.005	.015
(WY)	1995	1994	1991	1991	1991	1995	1994	1994	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	1717.88		2918.0			
ANNUAL MEAN	4.71		7.97		7.81	
HIGHEST ANNUAL MEAN					33.6	1995
LOWEST ANNUAL MEAN					.41	1994
HIGHEST DAILY MEAN	107	Jul 2	219	Jun 20	397	Jul 30 1995
LOWEST DAILY MEAN	.26	Mar 11	1.2	Apr 10	.00	Oct 27 1990
ANNUAL SEVEN-DAY MINIMUM	.26	Mar 10	1.3	Apr 6	.00	Mar 12 1991
INSTANTANEOUS PEAK FLOW			281	Jun 19	441	Jul 30 1995
INSTANTANEOUS PEAK STAGE			4.80	Jun 19	4.90	Jul 30 1995
ANNUAL RUNOFF (AC-FT)	3410		5790		5660	
ANNUAL DIVERSION (AC-FT) a	36410		33540			
10 PERCENT EXCEEDS	8.5		9.1		4.8	
50 PERCENT EXCEEDS	1.7		2.2		.91	
90 PERCENT EXCEEDS	.55		1.5		.07	

a Diversion, in acre-feet, to Rush Creek Powerplant Tailrace, provided by Southern California Edison Co.

10287650 SADDLEBAG LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°57'56", long 119°16'18", unsurveyed, T.1 N., R.24 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, near left abutment of dam, on Lee Vining Creek, and 8.2 mi west of Lee Vining.

DRAINAGE AREA.—4.55 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

REVISED RECORDS.—WDR CA-98-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1921. Usable capacity, 9,789 acre-ft, between elevations 10,048.80 ft, invert of outlet, and 10,090.40 ft, crest of spillway. At times, a cofferdam 600 ft upstream affects the storage below about 800 acre-ft, due to the constriction of flow past the cofferdam. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 9,454 acre-ft, Aug. 24, 25, 1995, elevation, 10,089.26 ft; minimum, 558 acre-ft, Apr. 5, 23, 24, 27, 1995, elevation, 10,051.84 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 6,356 acre-ft, Oct. 1, elevation, 10,077.95 ft; minimum, 2,000 acre-ft, several days, elevation, unknown.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Feb. 8, 1985)

10,050	217	10,070	4,392
10,055	1,163	10,080	6,890
10,060	2,172	10,091	9,970

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6356	5843	5327	4359	3724	e3216	e2422	e2015	e3320	5212	5275	5256
2	6341	5825	5310	4331	3694	e3193	e2394	e2020	e3450	5229	5290	5251
3	6325	5810	5261	4298	3672	e3170	e2366	e2025	3604	5244	5322	5241
4	6305	5790	5229	4268	3644	e3146	e2339	e2030	3676	5253	5342	5229
5	6302	5775	5192	4237	3615	e3123	e2311	e2035	3761	5202	5352	5214
6	6274	5758	5172	4209	3588	e3100	e2284	e2040	3838	5204	5357	5194
7	6259	5705	5121	4179	3563	e3077	e2260	e2045	3907	5204	5364	5177
8	6246	5733	5119	4151	3536	e3054	e2240	e2049	3978	5207	5366	5155
9	6228	5715	5067	4118	3513	e3031	e2220	e2053	e4020	5212	5366	5133
10	6210	5690	5040	4092	3495	e3008	e2200	e2057	e4062	5219	5361	5119
11	6192	5683	5006	4085	3477	e2985	e2180	e2060	e4104	5231	5359	5106
12	6174	5663	4994	4057	3468	e2962	e2160	e2064	e4146	5244	5354	5094
13	6159	5643	4941	4030	3506	2942	e2140	e2068	4190	5248	5347	5084
14	6141	5628	4909	3999	3511	2914	e2120	e2072	4272	5253	5339	5070
15	6120	5608	4877	3992	3486	2883	e2100	e2076	4354	5261	5334	5058
16	6105	5563	4846	3988	3466	2855	e2080	e2080	4451	5268	5329	5045
17	6085	5578	4820	3971	3441	2825	e2060	e2085	4535	5278	5325	5033
18	6069	5565	4783	3974	3417	2797	e2040	e2100	4613	5280	5317	5023
19	6049	5575	4755	3946	3392	2771	e2020	e2130	4680	5283	5310	5014
20	6034	5555	4721	3918	3381	2747	e2000	e2160	4738	5283	5302	5001
21	6016	5528	4692	3891	3352	2712	e2000	e2200	4796	5280	5295	4987
22	5998	5513	4659	3866	3339	2684	e2000	e2270	4829	5278	5288	4979
23	5980	5483	4630	3861	3330	2654	e2000	e2350	4882	5275	5278	4970
24	5962	5468	4599	3886	3301	2628	e2000	e2440	4928	5273	5271	4960
25	5944	5443	4568	3875	3274	2600	e2000	e2550	4979	5271	5266	4950
26	5929	5416	4540	3852	3261	2573	e2001	e2670	5026	5271	5261	4938
27	5927	5396	4509	3824	3268	2545	e2002	e2780	5077	5268	5256	4928
28	5914	5379	4478	3797	3241	2518	e2004	e2890	5119	5263	5253	4919
29	5894	5406	4447	3770	3234	2492	e2006	e2990	5153	5261	5261	4902
30	5881	5344	4423	3770	---	2465	e2010	e3090	5187	5258	5266	4892
31	5858	---	4385	3749	---	e2450	---	e3200	---	5263	5261	---
MAX	6356	5843	5327	4359	3724	3216	2422	3200	5187	5283	5366	5256
MIN	5858	5344	4385	3749	3234	2450	2000	2015	3320	5202	5253	4892
a	10076.00	10073.94	10069.97	10067.23	10064.94				10073.30	10073.61	10073.60	10072.09
b	-508	-514	-959	-636	-515	-784	-440	+1190	+1987	+76	-2	-369

CAL YR 1999 MAX 6817 MIN 2829 b -124
WTR YR 2000 MAX 6356 MIN 2000 b -1474

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287655 LEE VINING CREEK BELOW SADDLEBAG LAKE, NEAR LEE VINING, CA

LOCATION.—Lat 37°57'52", long 119°16'20", in SE 1/4 SE 1/4 sec.12, T.1 N., R.24 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 500 ft downstream from Saddlebag Lake Dam, and 8.1 mi west of Lee Vining.

DRAINAGE AREA.—4.43 mi^2.

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 10,050 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Saddlebag Lake (station 10287650) 500 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33 ft^3/s, Mar. 23, 1998, gage height, 2.99 ft; minimum daily, 7.9 ft^3/s, several days in 2000.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	9.2	14	15	14	e14	14	9.2	12	11	8.6	8.4
2	9.2	9.1	17	15	15	e14	14	9.3	12	11	8.6	8.4
3	9.2	9.2	17	15	15	e14	14	9.4	12	11	8.6	8.4
4	9.2	9.1	17	15	14	e14	14	9.5	12	11	8.6	8.4
5	9.2	9.1	17	15	14	e14	14	9.5	11	11	8.6	8.4
6	9.3	9.1	16	15	14	e14	14	9.6	10	11	8.5	10
7	9.4	9.1	16	15	14	e14	14	9.7	10	11	8.6	12
8	9.5	9.1	16	15	14	e14	14	9.7	10	11	8.5	12
9	9.5	9.1	16	15	14	e14	14	9.7	10	11	8.5	12
10	9.5	9.8	16	15	14	e14	14	9.8	10	11	8.5	9.9
11	9.4	10	16	15	14	e14	14	9.8	10	11	8.6	8.0
12	9.5	10	16	15	14	e14	14	9.8	10	11	8.6	8.0
13	9.4	10	16	15	14	e15	14	9.8	10	11	8.6	8.0
14	9.4	10	16	15	14	16	14	9.8	10	11	8.5	8.1
15	9.4	10	16	15	14	15	14	9.7	10	11	8.5	8.1
16	9.4	10	16	15	14	15	14	9.7	10	11	8.5	8.1
17	9.4	10	16	15	14	15	14	9.7	11	11	8.5	8.0
18	9.4	10	16	15	14	15	14	9.7	11	11	8.5	8.1
19	9.3	10	15	15	14	15	13	9.8	11	11	8.5	8.0
20	9.3	10	15	15	14	15	11	9.8	10	11	8.5	8.0
21	9.3	10	15	15	14	15	9.0	9.9	9.8	11	8.5	8.0
22	9.3	10	15	15	14	15	9.0	10	9.9	11	8.5	8.1
23	9.3	10	15	15	14	15	9.0	10	9.9	11	8.5	7.9
24	9.3	10	15	15	14	15	9.0	10	10	11	8.5	7.9
25	9.3	10	15	15	14	15	9.0	11	10	11	8.5	7.9
26	9.3	10	15	15	14	14	9.0	11	10	11	8.5	7.9
27	9.3	10	15	15	14	14	9.1	11	10	10	8.5	7.9
28	9.3	10	15	15	14	14	9.1	11	11	10	8.5	7.9
29	9.2	10	15	14	14	14	9.1	11	11	10	8.4	7.9
30	9.2	10	15	14	---	14	9.1	11	11	10	8.5	7.9
31	9.2	---	15	15	---	14	---	11	---	9.5	8.5	---
TOTAL	289.1	291.9	485	463	408	448	366.4	309.9	314.6	335.5	264.3	257.6
MEAN	9.33	9.73	15.6	14.9	14.1	14.5	12.2	10.0	10.5	10.8	8.53	8.59
MAX	9.5	10	17	15	15	16	14	11	12	11	8.6	12
MIN	9.2	9.1	14	14	14	14	9.0	9.2	9.8	9.5	8.4	7.9
AC-FT	573	579	962	918	809	889	727	615	624	665	524	511

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	10.7	11.1	13.0	14.8	13.0	13.7	15.0	9.80	10.9	10.3	9.53	9.31
MAX	13.6	13.8	15.6	15.1	14.1	16.8	22.6	10.5	11.1	10.8	10.2	10.0
(WY)	1999	1999	2000	1998	2000	1998	1998	1999	1998	2000	1999	1998
MIN	9.09	9.73	9.15	14.4	11.0	9.92	10.1	8.96	10.5	9.89	8.53	8.59
(WY)	1998	2000	1998	1999	1999	1999	1999	1998	2000	1999	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	3991.3		4233.3			
ANNUAL MEAN	10.9		11.6		11.8	
HIGHEST ANNUAL MEAN					12.2	1998
LOWEST ANNUAL MEAN					11.5	1999
HIGHEST DAILY MEAN	17	Dec 2	17	Dec 2	33	Mar 24 1998
LOWEST DAILY MEAN	9.0	Mar 28	7.9	Sep 23	7.9	Sep 23 2000
ANNUAL SEVEN-DAY MINIMUM	9.0	Mar 25	7.9	Sep 23	7.9	Sep 23 2000
INSTANTANEOUS PEAK FLOW			17	Dec 1	33	Mar 23 1998
INSTANTANEOUS PEAK STAGE			.89	Dec 1	2.99	Mar 23 1998
ANNUAL RUNOFF (AC-FT)	7920		8400		8520	
10 PERCENT EXCEEDS	15		15		15	
50 PERCENT EXCEEDS	10		11		10	
90 PERCENT EXCEEDS	9.2		8.5		9.0	

e Estimated.

10287700 TIOGA LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°55'41", long 119°15'01", in SE 1/4 SE 1/4 sec.19, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, at left abutment of dam, on Glacier Creek, and 7.4 mi west of Lee Vining.

DRAINAGE AREA.—3.67 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1928. Usable capacity, 1,254 acre-ft, between elevations 9,626.72 ft, invert of outlet, and 9,650.28 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 1,284 acre-ft, June 13, 1996, elevation, 9,650.68 ft; minimum, 88 acre-ft, several days in 1992, elevation, 9,628.95 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 1,238 acre-ft, June 25, elevation, 9,650.06 ft; minimum, 110 acre-ft, Jan. 12, 14, Feb. 11, elevation, 9,629.48 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 19, 1981)

9,626.72	0	9,640	609
9,630	131	9,646	962
9,635	356	9,652	1,383

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1125	676	124	133	e113	114	112	143	997	1193	1203	1151
2	1120	639	124	131	111	115	113	152	1020	1180	1204	1149
3	1116	605	125	132	113	114	113	162	1046	1169	1212	1143
4	1112	571	127	123	113	113	114	166	1083	1155	1217	1137
5	1108	538	128	118	112	113	115	165	1115	1150	1220	1129
6	1104	506	129	115	111	113	116	164	1140	1157	1222	1119
7	1103	475	129	114	111	113	116	164	1155	1163	1224	1103
8	1101	446	131	113	111	114	117	153	1159	1168	1225	1087
9	1099	417	132	113	111	113	117	151	1154	1174	1225	1071
10	1097	390	136	113	111	113	117	148	1146	1182	1222	1063
11	1095	365	133	116	110	113	118	141	1141	1189	1221	1062
12	1093	339	135	110	112	112	120	136	1143	1195	1219	1062
13	1091	316	133	112	e112	112	122	133	1165	1200	1216	1061
14	1080	294	134	110	e113	112	120	131	1185	1205	1213	1061
15	1063	272	134	112	e113	112	118	137	1201	1211	1210	1059
16	1045	248	134	114	113	112	117	146	1217	1217	1207	1057
17	1028	233	135	113	e115	112	117	154	1223	1220	1203	1056
18	1011	215	134	115	118	113	116	170	1233	1220	1199	1055
19	994	201	134	114	115	112	116	200	1235	1219	1194	1054
20	977	187	134	112	114	113	116	246	1233	1218	1189	1053
21	961	172	134	112	114	112	117	308	1234	1217	1184	1052
22	944	160	134	111	114	112	118	384	1234	1215	1178	1051
23	928	148	134	114	115	112	118	457	1234	1214	1173	1049
24	911	141	134	115	114	112	119	536	1234	1212	1166	1048
25	895	135	134	112	114	112	121	609	1238	1211	1164	1047
26	879	131	134	115	113	112	126	671	1230	1210	1159	1045
27	857	129	134	113	116	112	133	766	1223	1208	1157	1044
28	827	126	134	e113	115	112	134	851	1217	1206	1152	1042
29	788	125	133	e113	115	112	133	918	1209	1204	1152	1040
30	750	122	133	e113	---	112	136	957	1202	1202	1157	1039
31	712	---	133	e113	---	113	---	976	---	1202	1155	---
MAX	1125	676	136	133	118	115	136	976	1238	1220	1225	1151
MIN	712	122	124	110	110	112	112	131	997	1150	1152	1039
a	9641.86	9629.78	9630.05		9629.61	9629.54	9630.11	9646.22	9649.55	9649.56	9648.89	9647.18
b	-417	-590	+11	-20	+2	-2	+23	+840	+226	0	-47	-116

CAL YR 1999 MAX 1269 MIN 118 b +12
WTR YR 2000 MAX 1238 MIN 110 b -90

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287720 GLACIER CREEK BELOW TIOGA LAKE, NEAR LEE VINING, CA

LOCATION.—Lat 37°56'10", long 119°13'48", in SE 1/4 SE 1/4 sec.19, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 300 ft downstream from Tioga Lake Dam, and 7.3 mi west of Lee Vining.

DRAINAGE AREA.—3.67 mi^2.

PERIOD OF RECORD.—October 1997 to current year. Unpublished records prior to October 1997 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,620 ft above sea level, from topographic map.

REMARKS.—Records not computed for the winter months. Flow regulated by Tioga Lake (station 10287700) 300 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	21	1.9	---	---	---	---	11	18	16	6.7	6.7
2	4.5	21	1.6	---	---	---	---	13	18	16	6.7	6.7
3	4.5	20	1.1	---	---	---	1.1	15	18	16	6.8	6.7
4	4.5	20	1.1	---	---	---	1.3	17	19	16	6.9	6.7
5	4.5	19	1.1	---	---	---	1.5	17	19	10	6.9	6.7
6	3.8	18	1.2	---	---	---	1.7	16	19	5.0	6.9	8.9
7	2.9	18	1.2	---	---	---	1.8	16	19	5.1	6.9	11
8	2.9	17	1.1	---	---	---	2.1	15	19	5.1	6.9	11
9	2.9	17	1.2	---	---	---	2.3	14	19	5.1	6.9	11
10	2.9	16	1.3	---	---	---	2.4	13	19	5.1	6.8	6.4
11	2.9	15	1.3	---	---	---	2.5	12	19	5.1	6.9	3.1
12	2.9	15	1.3	---	---	---	3.0	11	19	5.2	6.9	3.1
13	2.9	14	1.2	---	---	---	4.3	9.3	19	5.1	6.8	3.1
14	7.5	14	1.2	---	---	---	4.1	8.7	19	5.2	6.8	3.1
15	11	13	1.3	---	---	---	3.2	5.7	19	5.2	6.8	3.1
16	11	12	1.3	---	---	---	2.7	3.6	19	5.2	6.8	3.1
17	11	12	1.3	---	---	---	2.6	3.8	19	6.1	6.8	3.1
18	11	11	1.3	---	---	---	2.4	4.0	19	6.9	6.8	3.1
19	11	10	1.3	---	---	---	2.0	4.5	19	7.0	6.8	3.1
20	11	9.7	1.3	---	---	---	2.0	5.1	17	7.0	6.8	3.0
21	11	9.0	1.2	---	---	---	2.2	5.8	16	6.9	6.8	2.9
22	11	8.1	1.2	---	---	---	2.7	6.7	16	6.9	6.8	2.9
23	11	7.0	1.2	---	---	---	2.9	7.5	16	6.9	6.7	3.0
24	10	5.7	1.2	---	---	---	3.0	8.1	16	6.8	6.7	2.9
25	10	4.6	1.1	---	---	---	3.6	8.6	16	6.7	6.7	2.9
26	10	3.7	1.1	---	---	---	5.1	8.9	16	6.7	6.7	2.9
27	14	3.1	1.1	---	---	---	7.6	9.5	16	6.7	6.8	2.9
28	20	2.7	1.1	---	---	---	9.3	10	16	6.7	6.7	2.9
29	22	2.4	1.0	---	---	---	9.5	10	16	6.7	6.7	2.9
30	22	2.0	1.0	---	---	---	9.4	15	16	6.7	6.7	3.0
31	21	---	---	---	---	---	---	18	---	6.7	6.8	---
TOTAL	282.1	361.0	---	---	---	---	---	322.8	535	231.8	210.7	141.9
MEAN	9.10	12.0	---	---	---	---	---	10.4	17.8	7.48	6.80	4.73
MAX	22	21	---	---	---	---	---	18	19	16	6.9	11
MIN	2.9	2.0	---	---	---	---	---	3.6	16	5.0	6.7	2.9
AC-FT	560	716	---	---	---	---	---	640	1060	460	418	281

10287760 ELLERY LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°56'08", long 119°13'50", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, at base of Rhinedollar Dam, on Lee Vining Creek, and 6.3 mi west of town of Lee Vining.

DRAINAGE AREA.—16.7 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1927. Usable capacity, 493 acre-ft, between elevations 9,478.53 ft, invert of outlet, and 9,492.53 ft, crest of spillway. Radial gates are occasionally closed, which increases elevation to 9,496.53 ft and capacity to 749 acre-ft. Lake receives water from Saddlebag and Tioga Lakes (stations 10287650 and 10287700) and releases it via Poole Powerplant Conduit (station 10287762) to Poole Powerplant. Figures given represent usable contents.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 677 acre-ft, Jan. 2, 1997, elevation, 9,495.43 ft; minimum, 195 acre-ft, Aug. 13, 1996, elevation, 9,487.17 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 562 acre-ft, May 27, elevation, 9,493.63 ft; minimum, 396 acre-ft, June 11, elevation, 9,490.89 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 18, 1981)

9,485	96	9,493	522
9,489	290	9,497	780

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	517	451	455	456	445	467	468	520	493	440	456
2	445	504	446	455	460	436	470	446	525	471	456	449
3	445	471	446	455	456	428	482	425	532	462	484	442
4	443	448	449	458	448	425	500	e430	547	467	512	440
5	446	438	456	460	444	425	485	e427	536	458	511	440
6	449	437	462	455	441	425	465	e425	533	444	516	446
7	452	441	468	446	445	424	456	e423	523	440	520	466
8	453	446	473	438	441	430	451	e425	503	432	509	486
9	455	448	467	434	442	432	437	e424	465	431	483	501
10	455	452	462	434	447	431	426	e425	420	437	454	504
11	455	457	461	433	447	422	419	e423	396	451	438	508
12	454	461	462	441	440	418	425	e421	415	467	434	509
13	449	464	452	448	437	418	435	e420	511	469	431	509
14	455	466	447	445	422	422	430	e418	546	465	430	509
15	459	468	441	441	433	427	427	422	548	466	431	509
16	459	468	438	434	440	434	427	413	550	476	435	509
17	456	467	440	432	442	439	428	415	539	482	439	509
18	456	465	441	432	448	446	428	440	548	480	437	509
19	456	467	441	430	455	453	425	462	528	472	434	509
20	456	463	442	428	451	459	425	472	523	460	435	510
21	456	456	438	430	445	465	433	506	528	448	438	509
22	456	452	439	432	446	461	444	525	528	435	440	493
23	455	452	442	440	445	459	455	530	517	419	441	473
24	453	451	444	446	446	457	467	539	513	407	444	473
25	452	451	446	451	446	455	486	545	518	403	448	473
26	450	451	448	451	443	456	480	533	506	406	449	473
27	453	448	451	450	444	458	483	562	503	409	451	473
28	479	448	452	452	446	460	467	548	510	411	451	471
29	493	448	455	450	448	462	448	534	506	412	454	470
30	494	451	458	449	---	463	444	523	504	416	469	470
31	496	---	454	451	---	465	---	513	---	428	465	---
MAX	496	517	473	460	460	465	500	562	550	493	520	510
MIN	443	437	438	428	422	418	419	413	396	403	430	440
a	9492.57	9491.83	9491.88	9491.83	9491.78	9492.07	9491.70	9492.85	9492.70	9491.43	9492.07	9492.14
b	+52	-45	+3	-3	-3	+17	-21	+69	-9	-76	+37	+5

CAL YR 1999 MAX 573 MIN 406 b +16
WTR YR 2000 MAX 562 MIN 396 b +26

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287770 LEE VINING CREEK BELOW RHINEDOLLAR DAM, NEAR LEE VINING, CA

LOCATION.—Lat 37°56'10", long 119°13'48", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 100 ft downstream from Rhinedollar Dam Spillway, and 6.3 mi west of Lee Vining.

DRAINAGE AREA.—16.7 mi^2.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,450 ft above sea level, from topographic map.

REMARKS.—Flow regulated for power development by Saddlebag, Tioga, and Ellery Lakes (stations 10287650, 10287700, and 10287760). Most of the water is diverted at Ellery Lake to Poole Powerplant via Poole Powerplant Conduit intake (station 10287762).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 310 ft^3/s, July 9, 1995, gage height, 4.63 ft; maximum gage height, 5.52 ft, Mar. 22, 1993, (backwater from snow); no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	18	.00	.00	.00	.00	.00	.00	18	6.1	.00	.00
2	.00	26	.00	.00	.00	.00	.00	.00	28	.00	.00	.00
3	.00	.60	.00	.00	.00	.00	.00	.00	34	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	1.5	.00	49	.00	18	.00
5	.00	.00	.00	.00	.00	.00	9.4	.00	58	.00	16	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	42	.00	23	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	39	.00	29	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	21	.00	29	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.50	.00	3.7	1.3
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.6
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.1
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	13
13	.00	.11	.00	.00	.00	.00	.00	.00	1.0	.00	.00	14
14	.00	.02	.00	.00	.00	.00	.00	.00	52	.00	.00	14
15	.00	.00	.00	.00	.00	.00	.00	.00	63	.00	.00	14
16	.00	.00	.00	.00	.00	.00	.00	.00	75	.00	.00	14
17	.00	.00	.00	.00	.00	.00	.00	.00	60	.00	.00	13
18	.00	.00	.00	.00	.00	.00	.00	.00	57	.00	.00	14
19	.00	.00	.00	.00	.00	.00	.00	.00	56	.00	.00	14
20	.00	.00	.00	.00	.00	.00	.00	.00	32	.00	.00	15
21	.00	.00	.00	.00	.00	.00	.00	1.6	36	.00	.00	14
22	.00	.00	.00	.00	.00	.00	.00	20	37	.00	.00	10
23	.00	.00	.00	.00	.00	.00	.00	35	35	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	42	19	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	63	30	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	46	19	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	53	8.7	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	79	13	.00	.00	.00
29	.41	.00	.00	.00	.00	.00	.00	51	13	.00	.00	.00
30	1.4	.00	.00	.00	---	.00	.00	36	8.3	.00	.00	.00
31	1.3	---	.00	.00	---	.00	---	21	---	.00	.00	---
TOTAL	3.11	44.73	0.00	0.00	0.00	0.00	10.90	447.60	904.50	6.10	118.70	166.00
MEAN	.10	1.49	.000	.000	.000	.000	.36	14.4	30.1	.20	3.83	5.53
MAX	1.4	26	.00	.00	.00	.00	9.4	79	75	6.1	29	15
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	6.2	89	.00	.00	.00	.00	22	888	1790	12	235	329
a	1070	137	112	1010	879	982	1830	4180	4660	2530	1250	556

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	1.39	.27	.000	1.93	.59	.51	1.51	8.41	31.7	24.9	1.43	.65
MAX	5.65	1.49	.000	19.3	5.40	2.62	14.1	41.1	58.1	130	9.89	5.53
(WY)	1995	2000	1991	1997	1996	1992	1996	1997	1995	1995	1995	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1992	1991	1991	1991	1992	1991	1991	1994	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	2030.46		1701.64			
ANNUAL MEAN	5.56		4.65		6.13	
HIGHEST ANNUAL MEAN					17.3	1995
LOWEST ANNUAL MEAN					.27	1994
HIGHEST DAILY MEAN	109	Jun 18	79	May 28	271	Jul 9 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1990
INSTANTANEOUS PEAK FLOW			110	May 28	310	Jul 9 1995
INSTANTANEOUS PEAK STAGE			2.90	May 28	5.52	Mar 22 1993
ANNUAL RUNOFF (AC-FT)	4030		3380		4440	
ANNUAL DIVERSION (AC-FT) a	21670		19200			
10 PERCENT EXCEEDS	14		18		10	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

a Diversion, in acre-feet, to Poole Powerplant, provided by Southern California Edison Co.

10287780 LEE VINING CREEK BELOW POOLE POWERPLANT, NEAR LEE VINING, CA

LOCATION.—Lat 37°56'41", long 119°12'42", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, at culvert 0.2 mi downstream from Poole Powerplant, and 4.9 mi west of town of Lee Vining.

DRAINAGE AREA.—26.3 mi^2.

PERIOD OF RECORD.—April 1999 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 7,820 ft (revised) above sea level, from topographic map.

REMARKS.—Records not computed above 50 ft^3/s. Flow regulated by Poole Powerplant (station 10287762) and Ellery Lake (station 10287760).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	15	21	22	21	24	27	---	---	---	32	27
2	19	33	27	22	22	27	29	---	---	---	33	26
3	19	---	24	22	24	28	28	---	---	---	32	26
4	19	46	23	22	24	24	28	---	---	---	29	27
5	17	37	21	24	23	22	43	---	---	---	21	24
6	19	31	21	26	23	22	49	---	---	---	11	20
7	20	29	21	25	21	22	43	---	---	---	11	18
8	20	29	22	26	23	20	48	---	---	---	12	18
9	20	30	26	24	21	20	48	---	---	---	38	17
10	20	28	24	22	21	22	48	---	---	---	39	19
11	20	28	24	23	23	24	47	---	---	---	32	11
12	20	28	24	20	26	24	45	---	---	49	25	11
13	21	28	26	20	26	24	47	---	---	48	24	12
14	20	27	26	23	22	24	43	---	---	48	23	16
15	24	27	26	24	18	23	38	---	---	48	23	15
16	26	27	24	27	21	23	35	47	---	47	23	15
17	26	28	23	25	23	23	35	47	---	47	23	15
18	24	28	22	27	23	23	33	47	---	47	23	13
19	25	28	22	25	23	23	32	---	---	---	22	14
20	25	27	22	24	29	23	32	---	---	---	20	14
21	25	27	24	22	26	24	28	---	---	---	20	15
22	26	24	23	22	24	29	27	---	---	---	21	24
23	25	23	22	23	24	27	28	---	---	50	23	28
24	25	21	21	25	23	27	33	---	---	46	22	18
25	25	20	22	26	23	28	36	---	---	39	21	18
26	25	21	22	25	23	27	---	---	---	38	22	17
27	26	20	22	24	23	33	---	---	---	36	23	17
28	27	19	22	22	23	32	---	---	---	34	23	18
29	30	19	21	23	23	32	---	---	---	34	23	18
30	36	19	21	23	---	29	---	---	---	32	24	18
31	34	---	24	21	---	27	---	---	---	32	27	---
TOTAL	727	---	713	729	669	780	---	---	---	---	745	549
MEAN	23.5	---	23.0	23.5	23.1	25.2	---	---	---	---	24.0	18.3
MAX	36	---	27	27	29	33	---	---	---	---	39	28
MIN	17	---	21	20	18	20	---	---	---	---	11	11
AC-FT	1440	---	1410	1450	1330	1550	---	---	---	---	1480	1090

TIJUANA RIVER BASIN

11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.—Lat 32°34'30", long 116°45'11", in NW 1/4 SW 1/4 sec.26, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on right bank, 0.8 mi upstream from confluence with Tecate Creek, 5.1 mi south of Dulzura, and 11.3 mi downstream from Barrett Lake.

DRAINAGE AREA.—310 mi^2.

PERIOD OF RECORD.—October 1936 to current year.

REVISED RECORDS.—WSP 1245: 1937–1938. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 569.40 ft above sea level (levels by International Boundary and Water Commission).

REMARKS.—Records fair. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft, and Barrett Lake (station 11011000), capacity, 44,760 acre-ft. Water diverted from Barrett Lake through San Diego and Dulzura Conduits to Lower Otay Lake (station 11014550).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,700 ft^3/s, Feb. 21, 1980, gage height, 11.15 ft, from rating curve extended above 8,700 ft^3/s; no flow for part of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.69	.34	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.60	.25	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.66	.22	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.90	.15	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	2.3	.11	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	5.2	.13	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	3.3	.13	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	2.4	.06	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.1	.01	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	1.2	.01	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	1.1	.02	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	1.0	.01	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.90	.12	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.79	.05	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.78	.01	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.38	.69	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	4.1	.68	.04	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	2.7	.71	.07	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	2.0	.69	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	1.3	.66	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	1.0	.64	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.86	.66	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.91	.74	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.76	.65	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.59	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.45	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	14.01	38.58	1.73	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.48	1.24	.058	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	4.1	5.2	.34	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.45	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	28	77	3.4	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

MEAN	1.15	.75	2.43	18.7	52.0	70.0	35.6	12.6	4.54	1.40	1.09	1.10
MAX	66.0	18.8	40.5	605	1200	1443	676	296	99.5	47.5	24.4	57.4
(WY)	1994	1984	1984	1993	1980	1983	1941	1983	1980	1980	1980	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1937	1937	1950	1951	1951	1951	1955	1947	1940	1939	1938	1937

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1937 - 2000	
ANNUAL TOTAL	295.57		54.32			
ANNUAL MEAN	.81		.15		16.6	
HIGHEST ANNUAL MEAN					243	1983
LOWEST ANNUAL MEAN					.000	1956
HIGHEST DAILY MEAN	9.4	Apr 2	5.2	Mar 6	8430	Feb 21 1980
LOWEST DAILY MEAN	.00	May 28	.00	Oct 1	.00	Oct 1 1936
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 6	.00	Oct 1	.00	Oct 1 1936
INSTANTANEOUS PEAK FLOW			7.3	Mar 6	11700	Feb 21 1980
INSTANTANEOUS PEAK STAGE			2.47	Mar 6	11.15	Feb 21 1980
ANNUAL RUNOFF (AC-FT)	586		108		12020	
10 PERCENT EXCEEDS	2.4		.61		10	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.—Lat 32°35'28", long 116°31'29", in NE 1/4 SE 1/4 sec.24, T.18 S., R.4 E., San Diego County, Hydrologic Unit 18070305, on left bank, just upstream from bridge on State Highway 94, and 3.5 mi southwest of Campo.

DRAINAGE AREA.—85.0 mi^2, of which 3 mi^2 are in Mexico.

PERIOD OF RECORD.—October 1936 to current year.

REVISED RECORDS.—WSP 1635: 1937–38(M), 1940(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 2,178.92 ft above sea level. Prior to Dec. 1, 1954, at datum 1 ft higher.

REMARKS.—Records good except for discharges below 1 ft^3/s, which are fair. Peaks are attenuated by small conservation reservoir 1 mi upstream since August 1956. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,580 ft^3/s, Jan. 16, 1993, gage height, 6.86 ft, from rating curve extended above 340 ft^3/s; no flow for part of some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.07	.18	.23	.21	2.1	.86	.23	.10	.03	.00	.00
2	.06	.08	.18	.22	.20	1.9	.59	.22	.09	.03	.00	.00
3	.06	.09	.18	.20	.20	1.8	.46	.22	.08	.03	.00	.00
4	.07	.09	.17	.20	.21	1.8	.42	.22	.06	.02	.00	.00
5	.07	.10	.17	.20	.22	3.8	.40	.22	.08	.02	.00	.00
6	.11	.12	.17	.21	.22	6.9	.39	.21	.07	.02	.00	.00
7	.10	.13	.18	.20	.22	4.6	.38	.21	.06	.02	.00	.00
8	.06	.15	.18	.21	.22	4.9	.36	.23	.07	.02	.00	.00
9	.06	.15	.18	.20	.23	4.9	.36	.23	.09	.02	.00	.00
10	.06	.14	.20	.23	.23	3.7	.36	.22	.12	.03	.00	.00
11	.06	.13	.20	.21	.24	3.0	.35	.24	.10	.04	.00	.00
12	.06	.11	.20	.20	.31	2.6	.33	.22	.08	.05	.00	.00
13	.06	.10	.21	.20	.26	2.5	.32	.19	.10	.04	.00	.00
14	.06	.10	.20	.20	.26	2.3	.34	.20	.08	.04	.00	.00
15	.08	.11	.20	.20	.26	1.9	.35	.22	.05	.03	.00	.00
16	.08	.12	.18	.21	.28	1.8	.37	.25	.05	.03	.00	.00
17	.07	.14	.19	.20	.36	1.6	.39	.26	.06	.02	.00	.00
18	.07	.15	.19	.21	.56	1.3	.67	.23	.01	.02	.00	.00
19	.07	.15	.19	.21	.52	.90	.93	.20	.03	.01	.00	.00
20	.06	.15	.19	.21	.80	.88	.61	.15	.06	.00	.00	.00
21	.06	.16	.19	.21	4.5	1.0	.48	.12	.06	.00	.00	.00
22	.07	.15	.19	.21	21	1.0	.46	.13	.06	.00	.00	.00
23	.07	.16	.19	.21	6.2	1.1	.51	.17	.04	.00	.00	.00
24	.07	.15	.18	.21	5.7	.94	.42	.23	.04	.00	.00	.00
25	.07	.14	.18	.22	3.6	.79	.34	.28	.08	.00	.00	.00
26	.08	.14	.19	.22	2.8	.84	.29	.27	.09	.00	.00	.00
27	.09	.15	.19	.20	2.4	.91	.27	.17	.06	.00	.00	.00
28	.10	.16	.20	.20	2.4	1.2	.27	.12	.04	.00	.00	.00
29	.10	.16	.19	.20	2.2	1.4	.26	.10	.03	.00	.00	.00
30	.07	.16	.20	.21	---	1.3	.24	.11	.03	.00	.00	.00
31	.07	---	.22	.22	---	1.1	---	.11	---	.00	.00	---
TOTAL	2.23	3.91	5.86	6.46	56.81	66.76	12.78	6.18	1.97	0.52	0.00	0.00
MEAN	.072	.13	.19	.21	1.96	2.15	.43	.20	.066	.017	.000	.000
MAX	.11	.16	.22	.23	21	6.9	.93	.28	.12	.05	.00	.00
MIN	.06	.07	.17	.20	.20	.79	.24	.10	.01	.00	.00	.00
AC-FT	4.4	7.8	12	13	113	132	25	12	3.9	1.0	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.79	1.46	2.61	5.67	8.09	11.7	7.49	3.54	1.80	.94	.86	.65
MAX	14.3	20.7	25.7	140	74.5	153	121	52.2	30.4	20.1	26.5	16.5
(WY)	1984	1984	1984	1993	1980	1983	1983	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1937	1949	1949	1957	1957	1956	1957	1957	1950	1947	1946	1947

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1937 - 2000	
ANNUAL TOTAL	830.50		163.48			
ANNUAL MEAN	2.28		.45		3.78	
HIGHEST ANNUAL MEAN					39.6	1983
LOWEST ANNUAL MEAN					.000	1957
HIGHEST DAILY MEAN	16	Apr 2	21	Feb 22	745	Jan 16 1993
LOWEST DAILY MEAN	.04	Aug 29	.00	Jul 20	.00	Oct 1 1936
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 25	.00	Jul 20	.00	Oct 1 1936
INSTANTANEOUS PEAK FLOW			31	Feb 22	1580	Jan 16 1993
INSTANTANEOUS PEAK STAGE			2.12	Feb 22	6.86	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	1650		324		2740	
10 PERCENT EXCEEDS	5.9		.92		9.0	
50 PERCENT EXCEEDS	.30		.15		.10	
90 PERCENT EXCEEDS	.07		.00		.00	

11014000 JAMUL CREEK NEAR JAMUL, CA

LOCATION.—Lat 32°38'15", long 116°53'00", in NW 1/4 NE 1/4 sec.4, T.18 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on right bank, 300 ft upstream from Otay Road crossing, at upper end of Lower Otay Lake, 1.4 mi downstream from Dulzura Creek, and 5.5 mi south of Jamul.

DRAINAGE AREA.—70.1 mi^2.

PERIOD OF RECORD.—April 1940 to December 1940, April 1941 to September 1978, October 1985 to current year.

REVISED RECORDS.—WSP 1565: 1952, 1954. WSP 1715: 1944, 1946. WDR CA-93-1: Drainage area. WDR CA-94-1: Datum of gage.

GAGE.—Water-stage recorder and broad-crested weir control with low-water venturi-type flume. Datum of gage is 511.89 ft above sea level. Prior to Oct. 1, 1951, at datum 1.00 ft higher.

REMARKS.—Records good. No regulation upstream from station. Water is diverted from Cottonwood Creek at Barrett Lake (station 11011000) via San Diego and Dulzura Conduit into Dulzura Creek, a tributary to Jamul Creek, and is included in discharge for this station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,870 ft^3/s, Mar. 5, 1995, gage height, 7.59 ft, present datum, from rating curve extended above 1,200 ft^3/s on basis of critical-depth computations; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 1,200 ft^3/s on basis of critical-depth computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	0115	56	2.65				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	26	26	32	33	20	35	40	37	32	29	27
2	27	26	26	32	33	21	35	40	37	32	12	27
3	27	26	26	32	33	25	35	39	37	31	4.7	27
4	27	26	25	12	33	25	35	39	36	31	14	27
5	27	27	25	17	33	28	35	40	37	31	21	27
6	27	27	26	29	33	9.0	36	40	37	31	22	26
7	27	27	25	28	10	5.6	36	39	38	31	27	27
8	27	27	30	29	5.3	5.1	36	39	38	31	27	27
9	27	27	31	30	3.9	10	34	39	38	31	27	27
10	27	27	33	33	3.1	18	34	38	38	29	27	27
11	26	26	31	33	2.9	24	34	39	38	30	27	26
12	26	26	30	33	3.6	25	34	39	38	30	27	26
13	26	26	31	33	2.7	25	34	38	38	30	27	26
14	26	27	29	33	2.3	24	35	39	38	30	28	26
15	27	26	28	33	2.1	30	35	39	34	30	28	26
16	27	26	30	33	2.0	34	35	39	33	30	27	26
17	27	27	31	33	2.1	35	36	39	33	29	28	26
18	26	27	31	33	1.8	35	36	39	33	29	27	26
19	26	27	31	33	1.6	35	35	39	33	29	28	26
20	26	27	31	33	7.5	35	35	39	32	29	28	27
21	26	27	30	33	19	34	35	38	32	29	28	27
22	26	26	31	33	25	34	35	37	32	29	28	27
23	26	25	35	33	13	34	35	37	32	29	28	27
24	26	25	35	33	14	35	36	38	31	29	28	27
25	25	25	35	33	13	35	35	38	32	29	28	27
26	26	25	35	33	13	34	35	38	31	29	27	27
27	26	25	35	33	13	35	35	37	31	29	28	27
28	26	25	16	33	14	35	35	37	32	29	28	27
29	26	25	20	33	20	35	34	37	32	30	28	27
30	25	25	30	33	---	35	35	37	32	29	28	27
31	25	---	32	34	---	35	---	37	---	29	28	---
TOTAL	816	784	910	968	392.9	849.7	1050	1193	1040	926	792.7	800
MEAN	26.3	26.1	29.4	31.2	13.5	27.4	35.0	38.5	34.7	29.9	25.6	26.7
MAX	27	27	35	34	33	35	36	40	38	32	29	27
MIN	25	25	16	12	1.6	5.1	34	37	31	29	4.7	26
AC-FT	1620	1560	1800	1920	779	1690	2080	2370	2060	1840	1570	1590

11014000 JAMUL CREEK NEAR JAMUL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.14	9.24	10.2	18.0	20.3	29.8	19.6	15.4	15.4	13.0	11.5	9.17
MAX	40.2	45.6	62.5	415	188	254	101	49.1	49.6	51.7	44.4	37.4
(WY)	1948	1946	1946	1993	1998	1995	1958	1954	1952	1995	1995	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1950	1951	1951	1958	1961	1959	1955	1956	1953	1950	1949	1949

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	9886.5		10522.3			
ANNUAL MEAN	27.1		28.7		14.7	
HIGHEST ANNUAL MEAN					55.2	1995
LOWEST ANNUAL MEAN					.000	1961
HIGHEST DAILY MEAN	41	Aug 28	40	May 1	2320	Jan 16 1993
LOWEST DAILY MEAN	3.5	Jan 8	1.6	Feb 19	.00	Jul 17 1949
ANNUAL SEVEN-DAY MINIMUM	10	Jan 22	2.1	Feb 13	.00	Jul 17 1949
INSTANTANEOUS PEAK FLOW			56	Feb 22	5870	Mar 5 1995
INSTANTANEOUS PEAK STAGE			2.65	Feb 22	7.59	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	19610		20870		10650	
10 PERCENT EXCEEDS	33		37		38	
50 PERCENT EXCEEDS	26		29		.40	
90 PERCENT EXCEEDS	24		21		.00	

11015000 SWEETWATER RIVER NEAR DESCANSO, CA

LOCATION.—Lat 32°50'05", long 116°37'20", in NW 1/4 SE 1/4 sec.25, T.15 S., R.3 E., San Diego County, Hydrologic Unit 18070304, near right bank, at Los Terrenitos Road Bridge, 0.7 mi downstream from unnamed tributary, and 1.3 mi south of Descanso.

DRAINAGE AREA.—45.4 mi^2.

PERIOD OF RECORD.—October 1905 to September 1927 (monthly discharge only for some months, published in WSP 1315-B), October 1956 to current year. Prior to October 1927, records unadjusted for diversion. October 1956 to September 1977, both unadjusted records and combined records of river plus diversion (station 11015001) were published. No diversion since November 1976.

REVISED RECORD.—WSP 1315-B: 1922(M). WDR CA-73-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 3,269.24 ft above sea level. Prior to June 25, 1927, nonrecording gages at several sites and datums, upstream about 0.1 mi. Diversion gage at site 0.3 mi upstream, October 1956 to September 1984, at different datum.

REMARKS.—Records fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,200 ft^3/s, Feb. 16, 1927, gage height, 13.2 ft, from floodmarks, site and datum then in use, on basis of slope-area measurement of peak flow; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 1,150 ft^3/s on basis of slope area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2030	39	5.57				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.02	.08	.20	1.4	.97	.55	.11	.00	.00	.00
2	.00	.00	.03	.16	.18	1.2	.91	.47	.09	.00	.00	.00
3	.00	.00	.03	.07	.15	1.1	.84	.43	.07	.00	.00	.00
4	.00	.00	.03	.06	.15	1.0	.78	.41	.05	.00	.00	.00
5	.00	.00	.04	.06	.15	5.0	.82	.40	.03	.00	.00	.00
6	.00	.00	.04	.05	.16	5.5	.78	.39	.00	.00	.00	.00
7	.00	.00	.04	.06	.15	3.8	.75	.36	.00	.00	.00	.00
8	.00	.00	.04	.07	.15	4.4	.72	e.37	.00	.00	.00	.00
9	.00	.00	.04	.07	.15	4.7	.74	e.36	.12	.00	.00	.00
10	.00	.00	.05	.08	.19	3.6	.73	.37	.10	.00	.00	.00
11	.00	.00	.05	.08	.41	3.0	.72	.36	.06	.00	.00	.00
12	.00	.00	.05	.08	1.0	2.7	.64	.34	.00	.00	.00	.00
13	.00	.00	.05	.08	.53	2.4	.66	.30	.00	.00	.00	.00
14	.00	.00	.05	.08	.49	2.2	.83	.29	.00	.00	.00	.00
15	.00	.00	.05	.08	.30	2.0	.99	.29	.00	.00	.00	.00
16	.00	.00	.05	.09	.65	1.7	.97	.31	.00	.00	.00	.00
17	.00	.00	.05	.08	1.3	1.5	1.1	.32	e.00	.00	.00	.00
18	.00	.00	.05	.08	.46	1.3	2.2	.30	e.00	.00	.00	.00
19	.00	.00	.05	.08	.29	1.2	1.9	.27	e.00	.00	.00	.00
20	.00	.00	.05	.08	.90	1.3	1.7	.25	e.00	.00	.00	.00
21	.00	.00	.05	.08	9.5	1.1	1.6	.22	e.00	.00	.00	.00
22	.00	.00	.05	.08	4.5	.92	1.6	.19	e.00	.00	.00	.00
23	.00	.00	.05	.08	3.0	.86	1.5	.19	.00	.00	.00	.00
24	.00	.00	.05	.08	3.5	.84	1.3	.23	.00	.00	.00	.00
25	.00	.00	.05	.10	2.1	.74	1.2	.28	.00	.00	.00	.00
26	.00	.00	.05	.12	1.5	.63	1.1	.32	.00	.00	.00	.00
27	.00	.00	.05	.08	1.4	.81	.92	.24	.00	.00	.00	.00
28	.00	.00	.05	.08	2.0	1.1	.82	.18	.00	.00	.00	.00
29	.00	.00	.05	.08	1.6	1.0	.75	.16	.00	.00	.00	.00
30	.00	.01	.05	.08	---	1.1	.61	.15	.00	.00	.00	.00
31	.00	---	.06	.27	---	.98	---	.14	---	.00	.00	---
TOTAL	0.00	0.01	1.42	2.70	37.06	61.08	31.15	9.44	0.63	0.00	0.00	0.00
MEAN	.000	.000	.046	.087	1.28	1.97	1.04	.30	.021	.000	.000	.000
MAX	.00	.01	.06	.27	9.5	5.5	2.2	.55	.12	.00	.00	.00
MIN	.00	.00	.02	.05	.15	.63	.61	.14	.00	.00	.00	.00
AC-FT	.00	.02	2.8	5.4	74	121	62	19	1.2	.00	.00	.00

e Estimated.

11015000 SWEETWATER RIVER NEAR DESCANSO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.20	1.48	4.65	12.7	28.8	38.2	20.0	7.99	3.08	.86	.46	.31
MAX	3.53	24.0	83.5	304	336	382	138	68.5	25.5	8.68	8.45	6.16
(WY)	1984	1966	1967	1993	1980	1983	1983	1983	1983	1980	1983	1978
MIN	.000	.000	.000	.000	.000	.042	.010	.000	.000	.000	.000	.000
(WY)	1957	1957	1957	1961	1961	1961	1961	1961	1959	1957	1957	1957

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	583.46		143.49			
ANNUAL MEAN	1.60		.39		9.79	
HIGHEST ANNUAL MEAN					71.2	1983
LOWEST ANNUAL MEAN					.004	1961
HIGHEST DAILY MEAN	9.2	Apr 4	9.5	Feb 21	2500	Feb 20 1980
LOWEST DAILY MEAN	.00	Jul 23	.00	Oct 1	.00	Oct 1 1956
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 23	.00	Oct 1	.00	Oct 1 1956
INSTANTANEOUS PEAK FLOW			39	Feb 21	8600	Mar 5 1995
INSTANTANEOUS PEAK STAGE			5.57	Feb 21	13.22	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	1160		285		7100	
10 PERCENT EXCEEDS	4.4		1.1		13	
50 PERCENT EXCEEDS	.18		.04		.33	
90 PERCENT EXCEEDS	.00		.00		.00	

11022200 LOS COCHES CREEK NEAR LAKESIDE, CA

LOCATION.—Lat 32°50'10", long 116°53'58", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on upstream right bank side of bridge, on Old Highway 8, 2.7 mi upstream from mouth, and 1.9 mi southeast of Lakeside.

DRAINAGE AREA.—12.2 mi^2.

PERIOD OF RECORD.—October 1983 to current year.

REVISED RECORDS.—WDR CA-86-1: Drainage area.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,090 ft^3/s, Mar. 5, 1995, gage height, 9.74 ft, from rating curve extended above 209 ft^3/s on basis of critical-depth computations; minimum daily, 0.04 ft^3/s, Oct. 26, 31, Nov. 2, 3, 5, and 6, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 10	1215	77	4.01	Feb. 21	1830	142	4.86

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.19	e.38	1.4	.63	1.9	.85	.62	.20	.22	.13	.14
2	.24	.19	e.40	.78	.58	1.4	.84	.58	.21	.22	.12	.14
3	.24	.20	e.40	.59	.56	1.7	.82	.62	.20	.23	.12	.14
4	.24	.21	.38	.57	.57	1.4	.82	.61	.20	.22	.12	.15
5	.24	.23	.40	.57	.70	12	.87	.53	.21	.22	.12	.15
6	.24	.26	.40	.54	.76	2.1	.84	.48	.21	.24	.12	.13
7	.23	.27	.40	.54	.55	2.2	.83	.48	.22	.25	.14	.20
8	.22	.29	.40	.55	.55	2.6	.83	.50	.23	.24	.13	.15
9	.21	.31	e.40	.55	.58	1.5	.84	.49	.23	.24	.11	.16
10	.21	.31	7.2	.55	1.1	1.3	.84	.46	.27	.24	.13	.15
11	.20	.30	.85	.55	1.3	1.2	.75	.44	.31	.24	.14	.14
12	.19	.28	.60	.58	4.5	1.2	.64	.44	.24	.23	.11	.13
13	.19	.28	.57	.58	.73	1.2	.63	.39	.23	.23	.11	.13
14	.19	.32	.53	.56	.65	1.2	.66	1.6	.23	.24	.11	.15
15	.21	.33	.50	.55	.67	1.2	.70	.45	.22	.22	.13	.15
16	.21	.33	.48	.68	2.2	1.1	.73	.33	.22	.23	.12	.14
17	.21	.36	.47	.63	2.4	1.1	6.1	.29	.21	.21	.12	.13
18	.20	.39	.47	.58	.84	1.1	5.1	.24	.22	.20	.12	.13
19	.20	.38	.48	.56	.77	1.1	1.2	.23	.25	.17	.12	.16
20	.19	.40	.45	.57	8.3	1.2	1.0	.23	.23	.18	.13	.17
21	.18	.43	.47	.58	48	1.0	.97	.23	.22	.17	.13	.21
22	.16	.40	.40	.61	4.1	.91	1.1	.22	.22	.17	.13	.19
23	.16	.39	.43	.62	17	.92	.95	.23	.23	.16	.13	.19
24	.16	.38	.43	.61	3.3	1.0	.90	.29	.25	.15	.14	.18
25	.16	.38	.44	.68	1.8	.92	.84	.33	.27	.14	.13	.17
26	.17	.39	.44	1.1	1.6	.92	.78	.76	.24	.14	.13	.18
27	.18	.38	.46	.68	1.7	.98	.78	.28	.22	.15	.15	.20
28	.19	.39	.46	.79	2.2	.99	.81	.25	.23	.15	.17	.19
29	.19	.36	.47	.83	1.4	.98	.74	.22	.23	.15	.19	.19
30	.18	e.36	.47	.61	---	.96	.67	.21	.23	.15	.21	.19
31	.19	---	.77	.84	---	.91	---	.21	---	.14	.15	---
TOTAL	6.22	9.69	21.40	20.43	110.04	50.19	34.43	13.24	6.88	6.14	4.11	4.83
MEAN	.20	.32	.69	.66	3.79	1.62	1.15	.43	.23	.20	.13	.16
MAX	.24	.43	7.2	1.4	48	12	6.1	1.6	.31	.25	.21	.21
MIN	.16	.19	.38	.54	.55	.91	.63	.21	.20	.14	.11	.13
AC-FT	12	19	42	41	218	100	68	26	14	12	8.2	9.6

e Estimated.

11022200 LOS COCHES CREEK NEAR LAKESIDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.46	1.19	1.84	4.83	6.07	5.94	2.96	1.41	.80	.39	.26	.27
MAX	1.37	4.58	6.09	40.2	28.3	31.1	13.5	6.25	3.67	1.31	.69	.64
(WY)	1988	1984	1985	1993	1998	1995	1998	1998	1995	1995	1998	1998
MIN	.066	.17	.32	.66	1.09	.78	.45	.25	.16	.096	.079	.077
(WY)	1998	1993	1990	1989	1989	1989	1989	1984	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	416.25		287.60			
ANNUAL MEAN	1.14		.79		2.18	
HIGHEST ANNUAL MEAN					6.77	1993
LOWEST ANNUAL MEAN					.50	1989
HIGHEST DAILY MEAN	28	Jan 25	48	Feb 21	248	Mar 5 1995
LOWEST DAILY MEAN	.14	Aug 2	.11	Aug 9	.04	Oct 26 1997
ANNUAL SEVEN-DAY MINIMUM	.15	Jul 30	.12	Aug 12	.04	Oct 31 1997
INSTANTANEOUS PEAK FLOW			142	Feb 21	1090	Mar 5 1995
INSTANTANEOUS PEAK STAGE			4.86	Feb 21	9.74	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	826		570		1580	
10 PERCENT EXCEEDS	1.9		1.1		3.5	
50 PERCENT EXCEEDS	.48		.33		.56	
90 PERCENT EXCEEDS	.17		.14		.16	

11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA

LOCATION.—Lat 32°50'25", long 117°01'30", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, near right bank, at Mast Road Bridge, 0.7 mi upstream from Old Mission Damsite, 2.8 mi west of Santee, and 14.2 mi downstream from El Capitan Reservoir.

DRAINAGE AREA.—368 mi^2.

PERIOD OF RECORD.—May 1912 to December 1915, April 1916 to current year. Monthly discharge only for some periods and yearly estimates only for 1924–25, published in WSP-1315-B. Prior to September 1981 published as "near Santee" (station 11022500).

REVISED RECORDS.—WSP 1565: 1955–56. WSP 1635: 1922, 1926(M), 1927. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 300 ft above sea level, from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 0.7 mi downstream at different datum. Nov. 10, 1920, to Jan. 19, 1982, at site 2.6 mi downstream at different datum.

REMARKS.—Records fair. Flow regulated by Cuyamaca Reservoir, capacity, 11,740 acre-ft, El Capitan Reservoir (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 45,400 ft^3/s, Feb. 16, 1927, gage height, 18.1 ft, site and datum then in use, from floodmarks, on basis of slope-area measurement of peak flow; no flow for many days some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 70,200 ft^3/s, Jan. 27, 1916, gage height, 25.1 ft, site and datum in use prior to Nov. 10, 1920, from floodmarks, based on slope-conveyance computation of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.7	3.0	8.9	3.9	22	4.8	5.4	2.3	1.3	.81	.92
2	1.8	2.2	3.1	4.4	5.3	17	4.7	5.3	2.2	1.2	.82	.86
3	1.9	2.3	2.6	3.7	4.4	22	4.4	5.4	2.2	1.1	.80	.85
4	2.1	2.1	2.3	4.7	4.5	17	4.5	5.1	2.2	1.1	.82	.83
5	2.0	1.9	2.2	3.6	4.7	153	4.7	5.2	2.2	1.1	.81	.88
6	2.0	1.9	2.2	3.6	4.5	33	5.1	4.7	2.1	1.1	.79	.95
7	2.1	2.0	2.4	3.5	4.6	26	5.1	4.2	2.1	1.2	.75	8.6
8	1.8	2.2	2.5	4.0	4.9	34	4.9	4.1	2.0	1.1	.78	3.3
9	1.6	2.2	2.8	4.1	4.7	23	4.8	4.7	2.2	1.0	.77	1.4
10	1.5	2.1	36	3.7	15	18	5.4	4.4	2.2	.98	.76	1.1
11	1.5	2.2	5.9	4.6	28	16	5.3	3.9	2.0	.97	.72	1.0
12	1.9	2.1	4.7	4.1	81	15	4.4	3.6	1.9	.99	.72	.97
13	2.0	2.2	4.3	4.2	12	14	4.1	3.5	2.1	.97	.70	1.0
14	1.9	2.2	4.1	4.0	8.9	14	7.1	5.6	1.9	.97	.68	1.0
15	1.9	2.2	3.5	4.0	7.5	13	4.1	4.9	1.8	.92	.72	1.1
16	1.9	2.4	3.2	6.3	16	13	3.8	3.9	2.1	.85	.78	1.1
17	1.8	2.5	3.1	4.9	24	12	61	3.2	1.9	.79	.73	1.2
18	1.8	2.3	3.3	4.2	7.5	11	52	3.2	1.7	.80	.75	1.4
19	1.6	2.4	3.4	4.5	6.1	10	13	3.6	1.6	.82	.74	1.4
20	1.5	2.6	3.2	4.3	56	9.8	11	3.3	1.8	1.3	.75	3.1
21	1.5	2.7	3.1	4.0	572	9.4	11	3.0	1.8	1.1	.75	1.4
22	2.0	3.5	2.9	4.0	101	8.4	11	2.7	1.7	1.0	.79	1.6
23	1.9	3.5	2.6	4.3	211	7.9	9.4	2.6	1.6	.97	.85	2.2
24	1.7	3.3	2.6	4.0	74	7.7	8.7	2.7	1.5	.97	.85	1.7
25	1.8	2.4	2.6	3.9	47	7.5	8.5	2.9	1.6	.91	.86	1.8
26	1.8	2.0	2.7	6.3	40	7.3	7.6	9.2	1.6	.81	.83	2.3
27	1.9	2.2	3.2	4.0	35	6.2	7.0	4.3	1.5	.84	.82	2.9
28	2.0	2.9	3.7	4.0	37	5.3	6.4	3.5	1.4	.82	.82	2.4
29	1.9	3.0	3.9	4.4	21	5.3	5.9	2.8	1.3	.82	.91	2.0
30	1.8	3.1	3.4	4.4	---	5.5	5.8	2.4	1.4	.82	1.6	1.7
31	1.7	---	4.1	4.7	---	5.3	---	2.3	---	.81	1.1	---
TOTAL	56.6	72.3	132.6	137.3	1441.5	568.6	295.5	125.6	55.9	30.43	25.38	52.96
MEAN	1.83	2.41	4.28	4.43	49.7	18.3	9.85	4.05	1.86	.98	.82	1.77
MAX	2.1	3.5	36	8.9	572	153	61	9.2	2.3	1.3	1.6	8.6
MIN	1.5	1.7	2.2	3.5	3.9	5.3	3.8	2.3	1.3	.79	.68	.83
AC-FT	112	143	263	272	2860	1130	586	249	111	60	50	105

11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.15	5.84	20.9	32.4	94.5	81.0	48.6	18.0	4.81	3.05	2.75	1.91
MAX	20.8	78.8	728	410	1871	683	1324	379	181	156	139	38.3
(WY)	1988	1986	1922	1993	1927	1941	1941	1915	1980	1980	1980	1980
MIN	.000	.000	.000	.000	.000	.019	.000	.000	.000	.000	.000	.000
(WY)	1913	1913	1913	1951	1951	1951	1951	1913	1913	1912	1913	1913

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1912 - 2000	
ANNUAL TOTAL	3162.4		2994.67			
ANNUAL MEAN	8.66		8.18		25.9	
HIGHEST ANNUAL MEAN					219	1922
LOWEST ANNUAL MEAN					.002	1951
HIGHEST DAILY MEAN	198	Jan 25	572	Feb 21	27300	Feb 16 1927
LOWEST DAILY MEAN	1.3	Sep 13	.68	Aug 14	.00	Jun 19 1912
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 11	.72	Aug 11	.00	Jun 19 1912
INSTANTANEOUS PEAK FLOW			1570	Feb 21	45400	Feb 16 1927
INSTANTANEOUS PEAK STAGE			8.86	Feb 21	18.10	Feb 16 1927
ANNUAL RUNOFF (AC-FT)	6270		5940		18760	
10 PERCENT EXCEEDS	14		12		29	
50 PERCENT EXCEEDS	3.2		2.6		1.5	
90 PERCENT EXCEEDS	1.9		.85		.00	

11023000 SAN DIEGO RIVER AT FASHION VALLEY, AT SAN DIEGO, CA

LOCATION.—Lat 32°45'54", long 117°10'04", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on left bank, 2.6 mi upstream from mouth, 500 ft upstream from Fashion Valley Road crossing, 0.4 mi downstream from unnamed tributary, and 26.4 mi downstream from El Capitan Reservoir.

DRAINAGE AREA.—429 mi^2.

PERIOD OF RECORD.—October 1912 to January 1916 published as San Diego River at San Diego (monthly discharge only, published in WSP 1315-B), January 1982 to current year. Records for Oct. 1, 1981, to Jan. 17, 1982, published in WDR CA-82-1, are in error and should not be used.
WATER TEMPERATURE: Water year 1994.
SEDIMENT DATA: Water year 1994.

REVISED RECORDS.—See PERIOD OF RECORD.

GAGE.—Water-stage recorder. Elevation of gage is 20 ft above sea level, from topographic map. See WSP 1315-B for history of changes for period October 1912 to January 1916.

REMARKS.—Records good below 10 ft^3/s and fair above. Flow regulated by Cuyamaca Reservoir, capacity, 11,740 acre-ft; El Capitan Reservoir (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 75,000 ft^3/s, Jan. 27, 1916, gage height, 19.3 ft, site and datum then in use, estimated on basis of upstream station, San Diego River near Santee; no flow at times during some years. Maximum discharge recorded since storage began in El Capitan Reservoir and San Vicente Reservoir, 9,430 ft^3/s, Mar. 6, 1995, gage height, 13.47 ft, from rating curve extended above 5,800 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.5	2.4	8.6	8.5	32	9.0	6.7	3.8	1.5	1.1	1.6
2	1.3	1.4	2.4	8.9	7.1	26	8.9	6.2	3.0	1.5	1.2	1.4
3	1.4	1.3	2.9	8.4	6.4	23	8.5	6.2	2.9	1.5	1.3	1.4
4	1.4	1.4	3.4	7.6	5.7	21	7.1	5.8	2.8	1.5	1.2	1.4
5	1.4	1.4	3.0	6.8	5.3	236	7.0	5.6	2.4	1.4	1.2	1.3
6	1.4	1.5	2.6	6.1	5.3	182	7.5	5.9	2.2	1.3	1.3	.97
7	1.4	1.6	3.3	6.0	5.5	64	8.2	5.9	2.0	.97	1.4	1.0
8	1.3	1.7	3.6	6.1	5.7	61	10	5.9	1.8	1.0	1.5	1.1
9	1.4	1.7	3.5	6.3	5.2	59	8.1	5.6	1.8	1.2	1.4	1.2
10	1.4	1.6	6.2	6.6	6.8	37	7.4	5.2	1.8	1.2	1.2	1.2
11	1.2	1.5	11	7.6	29	28	7.1	5.3	1.9	1.2	1.1	1.1
12	1.0	1.6	16	7.4	139	23	6.5	5.5	1.8	1.1	.98	1.0
13	1.1	1.4	14	5.9	110	21	6.2	5.6	1.7	.87	1.0	.99
14	1.1	1.6	11	5.5	44	18	6.4	5.4	1.8	.86	.98	.97
15	1.1	1.8	9.3	5.7	23	16	7.5	5.3	1.8	1.1	1.0	.93
16	1.3	1.8	7.7	5.6	22	16	6.6	5.0	1.7	1.2	.94	.91
17	1.5	1.9	8.3	5.8	47	16	34	4.9	1.8	1.3	.93	.89
18	1.7	2.0	8.8	6.0	38	16	157	4.5	1.7	1.2	.93	.88
19	1.4	1.9	6.9	5.6	24	16	67	4.1	1.7	1.1	.98	.88
20	1.3	1.7	5.9	5.1	61	16	28	4.3	1.7	1.1	1.0	.93
21	1.2	1.9	5.4	4.7	806	18	19	4.1	1.6	1.2	1.0	1.0
22	1.1	1.8	4.9	4.9	565	13	20	3.6	1.5	1.5	.94	.98
23	1.3	1.7	4.1	4.8	273	11	16	3.2	1.2	1.5	.90	1.1
24	1.4	1.6	4.2	4.9	347	11	13	3.4	1.3	1.6	.81	1.3
25	1.3	1.6	4.2	5.5	97	11	11	3.7	1.4	1.3	.86	1.3
26	.99	1.7	4.3	8.4	64	11	9.6	3.9	1.5	1.2	.92	1.1
27	1.0	1.8	4.4	9.0	55	11	9.1	4.5	1.6	1.2	1.1	.94
28	1.1	2.0	4.3	6.9	55	10	8.1	4.4	1.6	.98	1.1	.94
29	1.3	2.1	4.3	6.8	42	10	7.5	5.4	1.4	.99	1.2	.98
30	1.5	2.2	4.4	6.5	---	9.1	7.1	5.3	1.4	1.1	1.3	1.1
31	1.5	---	6.3	7.9	---	8.3	---	4.8	---	1.2	1.6	---
TOTAL	40.29	50.7	183.0	201.9	2902.5	1050.4	528.4	155.2	56.6	37.87	34.37	32.79
MEAN	1.30	1.69	5.90	6.51	100	33.9	17.6	5.01	1.89	1.22	1.11	1.09
MAX	1.7	2.2	16	9.0	806	236	157	6.7	3.8	1.6	1.6	1.6
MIN	.99	1.3	2.4	4.7	5.2	8.3	6.2	3.2	1.2	.86	.81	.88
AC-FT	80	101	363	400	5760	2080	1050	308	112	75	68	65

11023000 SAN DIEGO RIVER AT FASHION VALLEY, AT SAN DIEGO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.29	27.5	43.0	100	121	146	48.8	18.0	7.03	3.09	2.48	3.43
MAX	31.2	144	143	683	668	777	242	135	21.3	8.93	9.47	20.0
(WY)	1987	1986	1985	1993	1998	1983	1983	1983	1983	1983	1983	1986
MIN	.62	.87	5.09	6.51	20.5	8.38	7.69	2.45	1.30	.25	.54	.033
(WY)	1990	1990	1990	2000	1989	1984	1989	1996	1985	1985	1985	1984

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1982 - 2000	
ANNUAL TOTAL	4970.89		5274.02			
ANNUAL MEAN	13.6		14.4		43.4	
HIGHEST ANNUAL MEAN					125	1983
LOWEST ANNUAL MEAN					11.5	1989
HIGHEST DAILY MEAN	336	Jan 26	806	Feb 21	4760	Mar 3 1983
LOWEST DAILY MEAN	.99	Oct 26	.81	Aug 24	.00	Sep 7 1984
ANNUAL SEVEN-DAY MINIMUM	1.2	Oct 22	.91	Sep 14	.00	Sep 13 1984
INSTANTANEOUS PEAK FLOW			2270	Feb 21	9430	Mar 6 1995
INSTANTANEOUS PEAK STAGE			10.89	Feb 21	13.47	Mar 6 1995
ANNUAL RUNOFF (AC-FT)	9860		10460		31450	
10 PERCENT EXCEEDS	26		20		79	
50 PERCENT EXCEEDS	4.1		2.8		7.2	
90 PERCENT EXCEEDS	1.4		1.0		.79	

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA

LOCATION.—Lat 32°56'35", long 117°07'15", in Los Penasquitos Grant, San Diego County, Hydrologic Unit 18070304, on left bank, 1.0 mi downstream from Cypress Creek, and 5.5 mi southwest of Poway.

DRAINAGE AREA.—42.1 mi^2.

PERIOD OF RECORD.—October 1964 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 260 ft above sea level, from topographic map.

REMARKS.—Records fair. Flow partly regulated by several conservation reservoirs upstream from station. Pumping from wells along stream for irrigation. Flow augmented by reclaimed water from Poway area.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,750 ft^3/s, Feb. 21, 1980, gage height, 10.26 ft, from rating curve extended above 1,400 ft^3/s; maximum gage height, 10.92 ft, Jan. 4, 1995; no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 400 ft^3/s, or maximum, from rating curve extended above 2,130 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0830	413	4.73	Mar. 5	1215	479	4.97
Feb. 23	1915	994	6.37				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.4	5.7	89	2.5	6.1	2.7	2.4	2.3	1.8	1.3	2.5
2	2.5	2.5	6.0	10	2.0	2.8	2.5	2.5	2.2	1.6	1.2	2.2
3	2.3	2.4	5.3	2.3	1.9	5.2	2.7	2.5	2.0	1.6	1.3	1.8
4	2.2	2.7	5.9	1.8	2.0	7.9	2.8	2.9	1.8	1.6	1.4	1.7
5	2.3	2.8	6.8	1.6	2.3	144	3.1	2.9	2.0	1.8	1.2	1.8
6	2.7	2.8	4.4	1.7	2.4	38	3.2	2.5	2.1	1.9	1.1	1.9
7	2.7	2.6	2.3	1.6	2.2	9.4	3.4	2.2	2.2	1.9	1.2	1.9
8	2.4	2.8	2.0	1.7	2.8	24	3.3	3.1	2.2	1.9	1.4	2.6
9	2.3	3.4	1.9	1.7	2.1	12	3.3	3.0	2.5	1.7	1.3	2.4
10	2.0	3.2	7.3	1.7	18	4.1	3.6	2.9	2.2	1.9	1.3	2.0
11	2.0	2.8	3.3	1.7	64	3.3	3.5	2.7	2.3	1.9	1.1	2.4
12	2.0	3.5	2.0	1.9	114	3.0	3.3	2.8	2.4	2.1	1.2	1.8
13	2.0	4.5	1.9	1.9	10	2.8	3.3	2.7	2.3	2.0	1.4	2.0
14	2.2	2.6	1.9	1.9	8.3	2.6	3.5	2.4	2.4	2.0	2.0	2.1
15	3.0	2.4	1.9	2.0	8.1	2.6	4.5	2.5	2.2	2.0	1.3	2.4
16	3.3	2.3	1.9	2.2	35	2.6	3.5	3.6	2.3	1.7	1.4	2.5
17	3.0	2.3	1.8	3.1	59	2.5	57	3.1	2.2	1.9	1.3	2.1
18	2.4	2.3	1.7	2.0	6.0	2.6	139	3.1	2.5	2.0	1.5	2.0
19	2.5	2.3	1.6	2.1	3.4	2.5	11	2.9	2.1	1.8	1.3	2.3
20	2.4	2.2	1.7	2.0	83	3.1	5.2	3.0	2.2	1.7	1.2	2.6
21	2.4	2.2	1.6	2.2	424	2.5	4.8	2.5	2.1	1.8	1.4	2.8
22	2.2	2.2	1.6	1.9	56	2.8	11	2.5	2.2	1.8	1.6	5.7
23	2.3	2.1	1.6	1.9	197	2.4	4.4	2.8	2.2	1.6	1.6	32
24	2.2	2.1	1.6	1.9	46	2.5	3.5	3.1	2.1	1.6	1.6	3.6
25	2.1	2.1	1.6	4.9	8.8	2.6	3.2	3.9	2.2	1.6	1.7	2.2
26	2.2	2.1	1.7	13	5.4	2.8	3.0	7.1	2.2	1.6	1.6	2.1
27	2.6	3.4	1.6	2.6	5.9	3.1	3.0	3.4	2.0	1.5	1.7	2.3
28	2.8	5.1	1.5	2.0	18	3.0	2.8	2.7	1.9	1.5	2.0	2.4
29	3.0	5.5	1.5	1.9	4.0	2.9	2.6	2.4	1.8	1.5	2.6	2.8
30	2.7	5.3	1.6	1.8	---	2.9	2.5	2.6	1.9	1.5	4.1	2.7
31	2.2	---	19	7.1	---	2.9	---	2.4	---	1.5	3.0	---
TOTAL	75.2	86.9	102.2	175.1	1194.1	311.5	305.2	91.1	65.0	54.3	49.3	101.6
MEAN	2.43	2.90	3.30	5.65	41.2	10.0	10.2	2.94	2.17	1.75	1.59	3.39
MAX	3.3	5.5	19	89	424	144	139	7.1	2.5	2.1	4.1	32
MIN	2.0	2.1	1.5	1.6	1.9	2.4	2.5	2.2	1.8	1.5	1.1	1.7
AC-FT	149	172	203	347	2370	618	605	181	129	108	98	202

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.65	6.05	9.11	24.6	34.2	33.8	9.46	3.22	1.64	1.13	1.04	1.64
MAX	7.09	28.7	51.6	233	277	213	50.0	22.0	6.58	3.25	3.59	13.9
(WY)	1997	1986	1966	1993	1998	1983	1998	1998	1998	1999	1998	1997
MIN	.030	.10	.23	.23	.41	.75	.27	.14	.056	.009	.020	.028
(WY)	1976	1978	1974	1976	1965	1965	1977	1974	1974	1977	1975	1975

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	2196.9		2611.5			
ANNUAL MEAN	6.02		7.14		10.5	
HIGHEST ANNUAL MEAN					39.4	1998
LOWEST ANNUAL MEAN					.80	1965
HIGHEST DAILY MEAN	209	Jan 25	424	Feb 21	1400	Mar 1 1978
LOWEST DAILY MEAN	1.5	Dec 28	1.1	Aug 6	.00	May 16 1968
ANNUAL SEVEN-DAY MINIMUM	1.6	Dec 23	1.2	Aug 5	.00	Jul 18 1977
INSTANTANEOUS PEAK FLOW			994	Feb 23	4750	Feb 21 1980
INSTANTANEOUS PEAK STAGE			6.37	Feb 23	10.92	Jan 4 1995
ANNUAL RUNOFF (AC-FT)	4360		5180		7620	
10 PERCENT EXCEEDS	6.5		6.0		12	
50 PERCENT EXCEEDS	2.7		2.4		1.5	
90 PERCENT EXCEEDS	2.0		1.6		.26	

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

´LOCATION.—Lat 33°06'25", long 116°51'55", in NW 1/4 NE 1/4 sec.27, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank, 1.6 mi downstream from Temescal Creek, 4.5 mi north of Ramona, and 5.0 mi downstream from Sutherland Reservoir.

DRAINAGE AREA.—112 mi^2.

PERIOD OF RECORD.—February 1912 to February 1923 (monthly discharge only for November and December 1919), October 1943 to current year.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 847.88 ft above sea level (levels by city of San Diego Water Department). See WSP 1315-B for history of changes prior to Feb. 3, 1923.

REMARKS.—Records good above 1 ft^3/s and fair below. Flow regulated by Sutherland Reservoir, capacity, 29,680 acre-ft, since July 1954. Some small diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,400 ft^3/s, Jan. 27, 1916, gage height, 14.0 ft, datum then in use, from rating curve extended above 1,500 ft^3/s on basis of slope-conveyance study of peak flow; maximum gage height, 14.25 ft, Feb. 21, 1980; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.14	.72	.60	2.9	1.2	.36	.03	.00	.00	.00
2	.00	.00	.18	.69	.55	2.7	1.1	.29	.02	.00	.00	.00
3	.00	.00	.22	.60	.49	2.6	1.1	.24	.02	.00	.00	.00
4	.00	.00	.22	.59	.53	2.8	1.1	.24	.01	.00	.00	.00
5	.00	.00	.22	.49	.58	5.5	1.2	.25	.01	.00	.00	.00
6	.00	.00	.29	.49	.68	13	1.1	.26	.00	.00	.00	.00
7	.00	.00	.33	.49	.71	7.6	1.1	.23	.00	.00	.00	.00
8	.00	.00	.33	.49	.69	6.9	1.3	.28	.00	.00	.00	.00
9	.00	.00	.33	.49	.72	8.4	1.4	.16	.00	.00	.00	.00
10	.00	.00	.73	.49	.83	6.7	1.4	.11	.00	.00	.00	.00
11	.00	.00	.46	.55	1.1	5.0	1.5	.09	.00	.00	.00	.00
12	.00	.00	.33	.54	1.3	4.2	1.4	.06	.00	.00	.00	.00
13	.00	.00	.33	.49	1.4	3.8	1.2	.05	.00	.00	.00	.00
14	.00	.00	.33	.49	2.0	3.4	1.4	.04	.00	.00	.00	.00
15	.00	.00	.33	.49	1.7	2.9	2.1	.05	.00	.00	.00	.00
16	.00	.00	.37	.49	1.8	2.7	2.0	.09	.00	.00	.00	.00
17	.00	.00	.41	.49	3.3	2.5	2.3	.07	.00	.00	.00	.00
18	.00	.00	.41	.46	2.2	2.2	4.6	.06	.00	.00	.00	.00
19	.00	.00	.39	.41	1.6	2.1	3.6	.06	.00	.00	.00	.00
20	.00	.00	.36	.39	2.6	2.0	2.5	.04	.00	.00	.00	.00
21	.00	.01	.33	.34	9.5	1.8	1.7	.03	.00	.00	.00	.00
22	.00	.02	.33	.33	9.0	1.6	2.0	.02	.00	.00	.00	.00
23	.00	.04	.33	.33	7.5	1.6	2.0	.02	.00	.00	.00	.00
24	.00	.05	.33	.33	7.5	1.6	1.7	.10	.00	.00	.00	.00
25	.00	.06	.33	.42	4.9	1.6	1.4	.25	.00	.00	.00	.00
26	.00	.08	.33	.63	3.7	1.5	.98	.31	.00	.00	.00	.00
27	.00	.09	.34	.49	3.2	1.6	.64	.18	.00	.00	.00	.00
28	.00	.10	.37	.48	3.2	1.8	.64	.10	.00	.00	.00	.00
29	.00	.11	.41	.43	2.9	1.8	.62	.05	.00	.00	.00	.00
30	.00	.12	.41	.45	---	1.6	.46	.04	.00	.00	.00	.00
31	.00	---	.45	.65	---	1.5	---	.03	---	.00	.00	---
TOTAL	0.00	0.68	10.67	15.22	76.78	107.9	46.74	4.16	0.09	0.00	0.00	0.00
MEAN	.000	.023	.34	.49	2.65	3.48	1.56	.13	.003	.000	.000	.000
MAX	.00	.12	.73	.72	9.5	13	4.6	.36	.03	.00	.00	.00
MIN	.00	.00	.14	.33	.49	1.5	.46	.02	.00	.00	.00	.00
AC-FT	.00	1.3	21	30	152	214	93	8.3	.2	.00	.00	.00

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.76	4.16	28.3	106	70.6	72.7	38.9	27.8	9.07	2.83	1.53	.98
MAX	16.9	17.3	330	1690	345	249	153	221	47.0	15.6	10.5	8.63
(WY)	1917	1947	1922	1916	1916	1922	1922	1915	1915	1915	1916	1916
MIN	.000	.000	.000	1.70	3.54	6.37	4.75	1.10	.037	.000	.000	.000
(WY)	1948	1949	1951	1948	1912	1951	1951	1947	1951	1946	1921	1921

SUMMARY STATISTICS	WATER YEARS 1912 - 1954	
ANNUAL MEAN	30.7	
HIGHEST ANNUAL MEAN	206	1916
LOWEST ANNUAL MEAN	1.77	1951
HIGHEST DAILY MEAN	14100	Jan 27 1916
LOWEST DAILY MEAN	.00	Aug 16 1912
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 17 1912
INSTANTANEOUS PEAK FLOW	28400	Jan 27 1916
INSTANTANEOUS PEAK STAGE	14.00	Jan 27 1916
ANNUAL RUNOFF (AC-FT)	22250	
10 PERCENT EXCEEDS	50	
50 PERCENT EXCEEDS	4.1	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.49	2.09	5.26	15.4	41.6	42.9	19.7	8.35	3.50	1.10	.67	.39
MAX	6.30	43.5	124	220	795	425	207	110	42.2	13.8	11.9	7.07
(WY)	1981	1966	1967	1993	1980	1980	1983	1983	1983	1980	1983	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1959	1961	1961	1961	1959	1956	1955	1955	1955

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	771.08		262.24			
ANNUAL MEAN	2.11		.72		11.6	
HIGHEST ANNUAL MEAN					131	1980
LOWEST ANNUAL MEAN					.000	1961
HIGHEST DAILY MEAN	16	Jan 27	13	Mar 6	6190	Feb 21 1980
LOWEST DAILY MEAN	.00	Jul 11	.00	Oct 1	.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 11	.00	Oct 1	.00	Oct 1 1954
INSTANTANEOUS PEAK FLOW			20	Feb 23	10700	Feb 21 1980
INSTANTANEOUS PEAK STAGE			2.50	Feb 23	14.25	Feb 21 1980
ANNUAL RUNOFF (AC-FT)	1530		520		8420	
10 PERCENT EXCEEDS	5.5		2.0		13	
50 PERCENT EXCEEDS	.33		.05		.13	
90 PERCENT EXCEEDS	.00		.00		.00	

11028500 SANTA MARIA CREEK NEAR RAMONA, CA

LOCATION.—Lat 33°03'08", long 116°56'41", in SE 1/4 SE 1/4 sec.11, T.13 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank, 3.8 mi northwest of Ramona, and 4.6 mi upstream from mouth.

DRAINAGE AREA.—57.6 mi^2.

PERIOD OF RECORD.—December 1912 to September 1920, October 1946 to current year.

REVISED RECORDS.—WSP 1285: 1952. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Concrete control since October 1946. Datum of gage is 1,294.44 ft above sea level. Prior to Oct. 1, 1946, at same site, at datum 1.78 ft lower.

REMARKS.—Records fair. No regulation upstream from station. Land application of treated sewage effluent upstream from the gage beginning December 1972 contributes to low flows.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,200 ft^3/s, Feb. 21, 1980, gage height, 14.39 ft, from rating curve extended above 166 ft^3/s on basis of slope-area measurements at gage heights 4.56 ft and 14.39 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft^3/s, or maximum, from rating curve extended above 955 ft^3/s on basis of slope-area measurement at gage height 14.39 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	0015	50	2.06				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.05	.24	1.0	.06	.00	.00	.00	.00
2	.00	.00	.00	.00	.04	.60	.96	.07	.00	.00	.00	.00
3	.00	.00	.00	.02	.06	.20	.09	.05	.00	.00	.00	.00
4	.00	.00	.00	.02	.06	.25	.08	.03	.00	.00	.00	.00
5	.00	.00	.00	.04	.08	4.1	.09	.03	.00	.00	.00	.00
6	.00	.00	.00	.05	.06	6.5	.13	.01	.00	.00	.00	.00
7	.00	.00	.00	.01	.04	1.4	.11	.01	.00	.00	.00	.00
8	.00	.00	.00	.01	.04	1.2	.11	.00	.00	.00	.00	.00
9	.00	.00	.00	.03	.04	1.4	.09	.00	.00	.00	.00	.00
10	.00	.00	.00	.03	.10	.66	.11	.00	.00	.00	.00	.00
11	.00	.00	.00	.07	.23	.41	.09	.00	.00	.00	.00	.00
12	.00	.00	.00	.03	.41	.34	.07	.00	.00	.00	.00	.00
13	.00	.00	.00	.04	.27	.30	.08	.00	.00	.00	.00	.00
14	.00	.00	.00	.06	.31	.26	.12	.00	.00	.00	.00	.00
15	.00	.00	.00	.05	.24	.22	.13	.00	.00	.00	.00	.00
16	.00	.00	.00	.04	.27	.21	.11	.00	.00	.00	.00	.00
17	.00	.00	.00	.04	.58	.17	.16	.00	.00	.00	.00	.00
18	.00	.00	.00	.04	.22	.15	1.6	.00	.00	.00	.00	.00
19	.00	.00	.00	.04	.15	.15	.93	.00	.00	.00	.00	.00
20	.00	.00	.00	.04	.41	.13	.28	.00	.00	.00	.00	.00
21	.00	.00	.00	.05	11	.28	.10	.00	.00	.00	.00	.00
22	.00	.00	.00	.07	9.7	.36	.10	.00	.00	.00	.00	.00
23	.00	.00	.00	.06	5.9	.26	.15	.00	.00	.00	.00	.00
24	.00	.00	.00	.03	17	.25	.09	.00	.00	.00	.00	.00
25	.00	.00	.00	.09	1.4	.17	.07	.00	.00	.00	.00	.00
26	.00	.00	.00	.12	.48	.14	.07	.00	.00	.00	.00	.00
27	.00	.00	.00	.14	.35	.20	.05	.00	.00	.00	.00	.00
28	.00	.00	.00	.05	.46	.54	.04	.00	.00	.00	.00	.00
29	.00	.00	.00	.07	.32	.21	.05	.00	.00	.00	.00	.00
30	.00	.00	.00	.06	---	.23	.05	.00	.00	.00	.00	.00
31	.00	---	.00	.07	---	.13	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1.47	50.27	21.66	7.11	0.26	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.047	1.73	.70	.24	.008	.000	.000	.000	.000
MAX	.00	.00	.00	.14	17	6.5	1.6	.07	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.04	.13	.04	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	2.9	100	43	14	.5	.00	.00	.00	.00

11028500 SANTA MARIA CREEK NEAR RAMONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.054	.44	1.35	23.4	25.2	26.0	6.59	2.28	.56	.072	.097	.033
MAX	.45	10.9	26.5	545	443	288	63.2	31.0	7.66	1.28	4.03	.22
(WY)	1987	1966	1967	1916	1980	1983	1998	1915	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1914	1916	1920	1920	1951	1951	1950	1949	1920	1913	1913	1913

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1913 - 2000	
ANNUAL TOTAL	155.12		80.77			
ANNUAL MEAN	.42		.22		7.21	
HIGHEST ANNUAL MEAN					78.2	1993
LOWEST ANNUAL MEAN					.000	1951
HIGHEST DAILY MEAN	8.4	Apr 12	17	Feb 24	4960	Jan 27 1916
LOWEST DAILY MEAN	.00	Jun 26	.00	Oct 1	.00	Dec 17 1912
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 26	.00	Oct 1	.00	Dec 17 1912
INSTANTANEOUS PEAK FLOW			50	Feb 24	15200	Feb 21 1980
INSTANTANEOUS PEAK STAGE			2.06	Feb 24	14.39	Feb 21 1980
ANNUAL RUNOFF (AC-FT)	308		160		5220	
10 PERCENT EXCEEDS	1.3		.25		3.0	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA

LOCATION.—Lat 33°13'05", long 117°21'34", in SE 1/4 SW 1/4 sec.13, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070303, on left bank, 1.9 mi upstream from bridge on Interstate Highway 5, 2.4 mi upstream from mouth, and 1.9 mi northeast of Oceanside.

DRAINAGE AREA.—557 mi^2.

PERIOD OF RECORD.—April 1912 to September 1914 (published as "near Oceanside"), January 1916, October 1929 to January 1942, October 1946 to current year. Discharge measurements only Oct. 1, 1992, to Aug. 16, 1993, and Nov. 10, 1997, to Apr. 28, 1998.
CHEMICAL DATA: Water years 1978–92.
SPECIFIC CONDUCTANCE: Water years 1978–81.
WATER TEMPERATURE: Water years 1971–81.
BIOLOGICAL DATA: Water years 1978–81.
SEDIMENT DATA: Water years 1969–93.

REVISED RECORDS.—WSP 2128: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 20 ft above sea level, from topographic map. April 1912 to September 1914, nonrecording gage at site 0.4 mi downstream at different datum. January 1916, nonrecording gage 1.4 mi downstream at different datum. October 1929 to Nov. 9, 1981, at site 0.8 mi downstream at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Gage out of operation for channel work from Nov. 10, 1997, to Apr. 28, 1998. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft, since 1923. Several diversions for irrigation and domestic use upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 95,600 ft^3/s, Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years. Since regulation by Lake Henshaw, maximum discharge, 25,700 ft^3/s, Jan. 16, 1993, gage height, 21.70 ft, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.06	.06	4.9	37	18	14	3.8	2.3	1.0	.00
2	.00	.00	.06	.06	5.1	33	17	13	4.1	2.7	1.2	.00
3	.00	.00	.06	.07	5.4	31	17	12	3.5	2.5	1.1	.00
4	.00	.00	.06	.06	5.4	30	16	12	3.4	1.7	1.2	.00
5	.00	.00	.06	.07	5.4	45	16	12	3.4	1.6	1.3	.00
6	.01	.00	.06	.06	5.4	71	16	12	3.5	1.5	1.2	.00
7	.00	.00	.06	.06	5.4	75	15	11	3.0	1.5	.85	.00
8	.00	.08	.06	.06	5.7	63	15	11	3.4	1.4	.69	.00
9	.00	.21	.06	.06	5.8	56	14	10	2.8	1.5	.59	.00
10	.00	.20	.06	.06	6.2	52	14	9.4	2.7	1.5	.54	.00
11	.00	.14	.06	.06	10	47	14	8.6	2.6	1.5	.41	.00
12	.00	.12	.06	.06	17	40	13	7.6	2.6	1.4	.30	.00
13	.00	.12	.06	.06	21	36	13	6.0	3.0	1.3	.27	.00
14	.00	.10	.06	.06	23	33	13	6.0	2.9	1.3	.22	.00
15	.00	.08	.06	.06	21	31	15	6.1	2.3	1.2	.15	.00
16	.00	.09	.06	.06	19	e29	14	7.2	2.6	1.2	.12	.00
17	.00	.11	.06	.06	18	e28	13	6.4	2.0	1.2	.07	.00
18	.00	.08	.06	.06	16	e27	22	5.6	1.8	1.2	.04	.00
19	.00	.03	.06	.06	17	e26	27	7.2	1.7	.94	.01	.00
20	.00	.05	.06	.06	24	e25	27	7.0	2.0	.81	.00	.00
21	.00	.06	.06	.06	53	24	24	6.6	1.8	.81	.00	.00
22	.00	.03	.06	.11	124	23	22	6.2	2.2	.79	.00	.00
23	.00	.00	.06	.29	123	23	20	4.8	1.6	.72	.00	.00
24	.00	.01	.06	.57	124	23	19	5.1	2.5	.69	.00	.00
25	.00	.03	.06	.96	83	22	18	6.5	2.8	.66	.00	.00
26	.00	.06	.06	2.0	60	21	17	5.6	2.9	.64	.00	.00
27	.00	.05	.06	2.7	48	20	16	4.8	2.1	.63	.00	.00
28	.00	.04	.06	2.7	44	21	15	4.6	1.5	.64	.00	.00
29	.00	.06	.06	3.0	39	22	15	4.5	1.8	.66	.00	.00
30	.00	.06	.06	3.4	---	19	14	4.5	1.4	.84	.00	.00
31	.00	---	.06	4.1	---	19	---	5.1	---	.96	.00	---
TOTAL	0.01	1.81	1.86	21.11	938.7	1052	509	242.4	77.7	38.29	11.26	0.00
MEAN	.000	.060	.060	.68	32.4	33.9	17.0	7.82	2.59	1.24	.36	.000
MAX	.01	.21	.06	4.1	124	75	27	14	4.1	2.7	1.3	.00
MIN	.00	.00	.06	.06	4.9	19	13	4.5	1.4	.63	.00	.00
AC-FT	.02	3.6	3.7	42	1860	2090	1010	481	154	76	22	.00

e Estimated.

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.69	8.78	20.3	46.0	99.6	136	54.5	28.7	14.3	7.32	5.52	3.28
MAX	54.6	144	196	451	1858	1211	432	346	293	207	213	85.9
(WY)	1984	1984	1979	1980	1980	1995	1980	1980	1980	1980	1980	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1930	1930	1930	1930	1931	1931	1930	1930	1930

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	4875.76		2894.14			
ANNUAL MEAN	13.4		7.91		35.0	
HIGHEST ANNUAL MEAN					415	1980
LOWEST ANNUAL MEAN					.000	1931
HIGHEST DAILY MEAN	180	Jan 27	124	Feb 22	11300	Mar 3 1938
LOWEST DAILY MEAN	.00	Sep 22	.00	Oct 1	.00	Oct 1 1929
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 29	.00	Oct 7	.00	Oct 1 1929
INSTANTANEOUS PEAK FLOW			156	Feb 22	25700	Jan 16 1993
INSTANTANEOUS PEAK STAGE			8.51	Feb 22	21.70	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	9670		5740		25360	
10 PERCENT EXCEEDS	34		23		56	
50 PERCENT EXCEEDS	3.0		.95		1.5	
90 PERCENT EXCEEDS	.00		.00		.00	

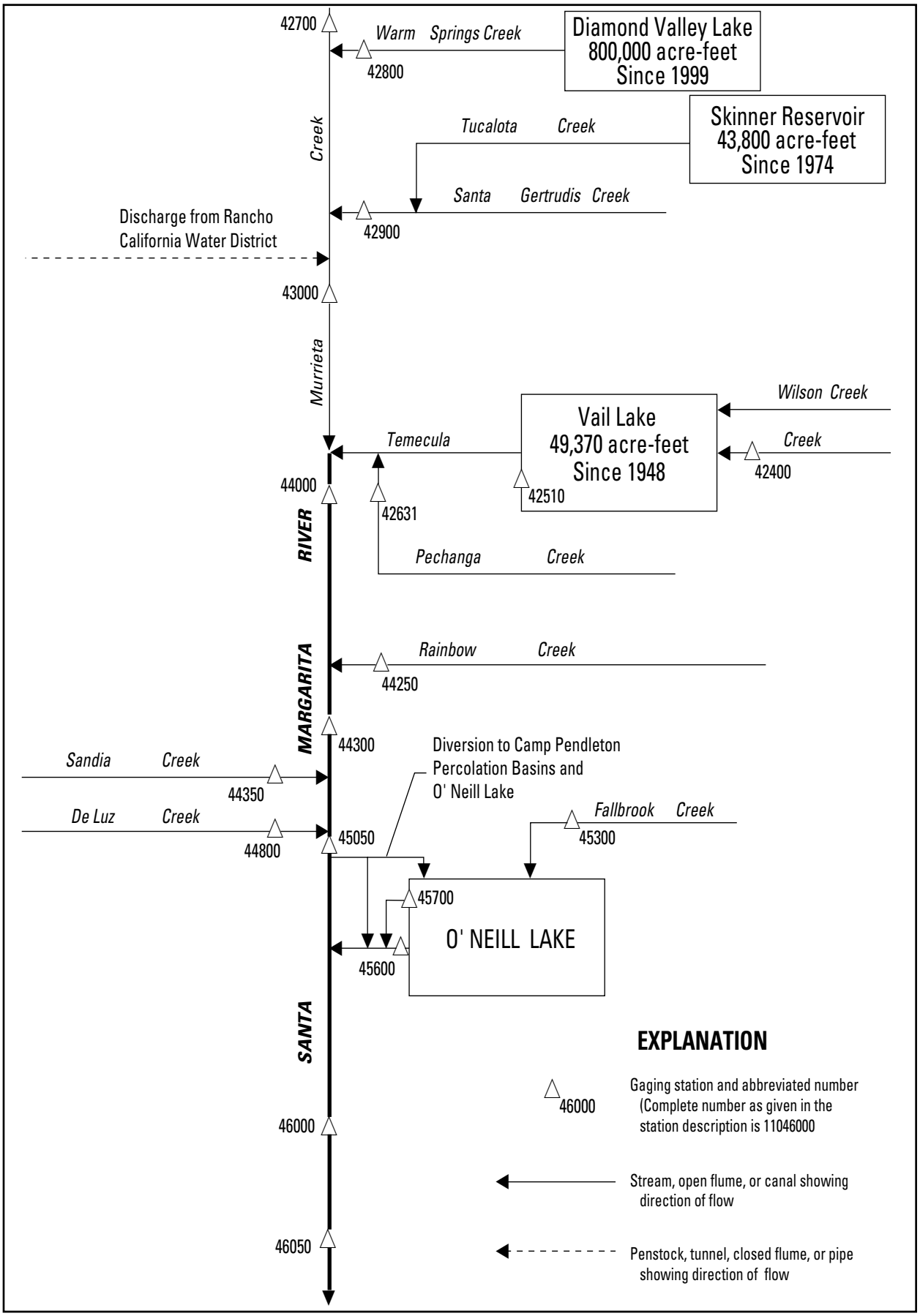

Figure 16. Diversions and storage in Santa Margarita River Basin.

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.—Lat 33°27'33", long 116°55'22", in SW 1/4 SW 1/4 sec.19, T.8 S., R.1 E., Riverside County, Hydrologic Unit 18070302, on right bank, 1.6 mi downstream from Long Canyon, and 3.5 mi northwest of Aguanga.

DRAINAGE AREA.—131 mi^2.

PERIOD OF RECORD.—August 1957 to current year.

REVISED RECORDS.—WDR CA-89-1: 1958(P), 1966(M), 1979(M), 1980(M), 1986(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,590 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation upstream from station. Pumping upstream from station for irrigation of less than 1,000 acres. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,100 ft^3/s, Jan. 16, 1993, gage height, 14.6 ft, from flood mark, from rating curve extended above 1,200 ft^3/s on basis of critical depth computation; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2245	136	3.20	Mar. 5	1730	119	3.12

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.4	2.5	3.2	3.1	6.8	4.3	2.4	1.3	.86	.80	.79
2	1.3	1.4	2.5	3.3	3.1	6.2	4.0	2.3	1.2	.86	.83	.73
3	1.3	1.5	2.6	3.2	3.1	5.7	4.1	2.3	1.1	.84	.85	.71
4	1.4	1.5	2.1	3.1	3.1	5.6	3.9	2.3	1.1	.85	.83	.70
5	1.4	1.7	2.3	3.2	3.1	31	3.8	2.4	1.1	.87	.80	.67
6	1.5	1.7	2.5	3.1	3.1	28	3.8	2.4	1.0	.87	.80	.65
7	1.5	1.9	2.6	3.0	3.1	15	3.8	2.3	1.0	.87	.85	1.1
8	1.4	1.9	2.7	3.0	3.1	16	3.7	2.3	1.0	.66	.83	1.8
9	1.4	2.0	2.7	3.0	3.1	18	3.6	2.4	1.1	.77	.79	1.5
10	1.4	2.0	3.1	2.9	3.4	13	3.6	2.3	1.1	.92	.78	1.4
11	1.4	1.9	3.2	2.9	4.5	11	3.5	2.2	1.2	.93	.76	1.3
12	1.4	1.8	3.0	2.9	5.8	10	3.4	2.1	1.1	.93	.78	1.3
13	1.3	1.8	3.0	2.9	5.4	9.2	3.3	2.0	1.0	.92	.79	1.1
14	1.3	1.8	3.0	2.9	4.5	8.3	3.5	1.9	.95	.93	.82	.56
15	1.4	1.8	2.9	2.8	4.2	7.6	3.8	1.8	.84	.88	.83	.56
16	1.6	1.8	2.8	2.8	5.2	7.1	3.7	1.9	.97	.84	.85	.58
17	1.5	2.0	2.8	3.1	7.8	6.8	4.0	2.0	.89	.83	.82	.58
18	1.5	2.0	2.8	3.2	5.4	6.2	9.8	2.0	.94	.80	.80	.63
19	1.5	2.1	2.7	3.1	4.5	5.8	7.4	1.8	.99	.75	.80	.67
20	1.4	2.2	2.7	3.0	5.2	5.5	5.5	1.6	.92	.74	.79	.73
21	1.4	2.2	2.7	3.1	37	5.3	4.9	1.5	.96	.75	.84	.88
22	1.4	2.1	2.5	3.0	33	5.0	4.3	1.4	1.0	.78	.87	1.0
23	1.8	2.3	2.7	2.9	20	4.7	3.7	1.4	.93	.77	.88	1.0
24	1.6	2.3	2.8	2.9	29	4.7	3.6	1.6	.97	.75	1.4	.96
25	1.4	2.4	2.7	3.2	12	4.7	3.5	1.9	1.0	.68	2.5	.89
26	1.3	2.5	2.9	3.3	9.0	4.9	3.3	2.1	.87	.72	1.7	.79
27	1.3	2.6	3.1	3.2	7.9	4.9	3.1	1.9	.83	.67	1.5	.80
28	1.4	2.5	3.0	3.1	8.6	4.9	3.1	1.6	.83	.69	1.7	.90
29	1.4	2.4	3.0	3.1	7.5	4.8	2.8	1.3	.79	.65	1.9	.89
30	1.3	2.4	3.0	2.9	---	4.7	2.6	1.3	.82	.80	1.8	.90
31	1.4	---	3.1	3.0	---	4.5	---	1.3	---	.82	.83	---
TOTAL	43.8	59.9	86.0	94.3	247.8	275.9	121.4	60.0	29.80	25.00	32.12	27.07
MEAN	1.41	2.00	2.77	3.04	8.54	8.90	4.05	1.94	.99	.81	1.04	.90
MAX	1.8	2.6	3.2	3.3	37	31	9.8	2.4	1.3	.93	2.5	1.8
MIN	1.2	1.4	2.1	2.8	3.1	4.5	2.6	1.3	.79	.65	.76	.56
AC-FT	87	119	171	187	492	547	241	119	59	50	64	54

11042400 TEMECULA CREEK NEAR AGUANGA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.55	3.44	5.71	17.4	27.1	21.6	11.4	5.20	2.77	1.58	1.35	1.33
MAX	7.94	47.9	66.0	361	266	105	87.3	25.5	13.1	8.19	9.40	6.93
(WY)	1984	1966	1967	1993	1980	1991	1958	1998	1980	1980	1983	1980
MIN	.000	.000	.000	.094	.70	.41	.34	.16	.067	.000	.000	.000
(WY)	1958	1963	1963	1963	1965	1965	1961	1961	1966	1964	1957	1957

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	1239.52		1103.09			
ANNUAL MEAN	3.40		3.01		8.27	
HIGHEST ANNUAL MEAN					56.1	1993
LOWEST ANNUAL MEAN					.28	1961
HIGHEST DAILY MEAN	21	Apr 12	37	Feb 21	3600	Jan 16 1993
LOWEST DAILY MEAN	.72	Aug 26	.56	Sep 14	.00	Aug 1 1957
ANNUAL SEVEN-DAY MINIMUM	.77	Aug 24	.62	Sep 14	.00	Aug 1 1957
INSTANTANEOUS PEAK FLOW			136	Feb 21	8100	Jan 16 1993
INSTANTANEOUS PEAK STAGE			3.20	Feb 21	14.60	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	2460		2190		5990	
10 PERCENT EXCEEDS	6.0		5.3		12	
50 PERCENT EXCEEDS	2.9		2.0		1.8	
90 PERCENT EXCEEDS	1.0		.80		.00	

11042510 VAIL LAKE NEAR TEMECULA, CA

LOCATION.—Lat 33°29'44", long 116°58'33", in Pauba Grant, Riverside County, Hydrologic Unit 18070302, near center of Vail Dam on Temecula Creek, 0.2 mi downstream from Arroyo Seco, and 10 mi east of Temecula.

DRAINAGE AREA.—320 mi^2.

PERIOD OF RECORD.—October 1960 to September 1985 (monthend contents only). Prior to October 1977, published with Temecula Creek at Vail Dam. October 1987 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by the U.S. Bureau of Reclamation). June 4, 1969, to September 1985, nonrecording gage.

REMARKS.—Reservoir is formed by concrete arch-type dam, completed in June 1949. Total capacity, 49,370 acre-ft, between elevations 1,352.5 ft, bottom of lowest outlet, and 1,470 ft, crest of spillway, all of which is available for release. There had been no spill from Nov. 13, 1948, date of closure, to Feb. 20, 1980, when a peak spill of about 8,000 ft^3/s occurred (from theoretical discharge curve). Water is released down Temecula Creek for diversion about 1 mi downstream. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents observed, 52,670 acre-ft, spilling, Feb. 21, 1980, elevation, 1,473.0 ft, from highwater mark; minimum observed, 1,038 acre-ft, Oct. 31, 1960, elevation, 1,379.44 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 23,270 acre-ft, Apr. 24–30, elevation, 1,440.69 ft; minimum observed, 21,160 acre-ft, Sept. 30, elevation, 1,437.65 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated Dec. 22, 1953)

1,390	2,400	1,420	11,400	1,450	30,420
1,400	4,530	1,430	16,390	1,460	39,280
1,410	7,560	1,440	22,780	1,475	54,940

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22120	21840	21760	21780	21970	22650	23160	23240	22970	22440	21960	21600
2	22110	21830	21760	21790	21960	22650	23160	23230	22940	22420	21960	21580
3	22100	21830	21760	21800	21960	22670	23160	23230	22930	22400	21940	21570
4	22090	21830	21740	21800	21970	22690	23170	23230	22910	22380	21940	21550
5	22090	21830	21740	21800	21980	22740	23170	23220	22890	22360	21900	21540
6	22080	21820	21740	21800	21980	22820	23170	23210	22860	22340	21880	21520
7	22070	21820	21730	21800	21980	22860	23170	23210	22850	22320	21870	21530
8	22060	21820	21740	21810	21990	22910	23170	23200	22840	22300	21850	21520
9	22050	21820	21730	21810	22000	22940	23170	23200	22820	22290	21850	21500
10	22050	21820	21750	21820	22020	22980	23170	23190	22800	22270	21840	21490
11	22030	21820	21760	21830	22030	22990	23170	23170	22780	22250	21830	21480
12	22030	21810	21750	21830	22050	23020	23170	23160	22760	22240	21820	21460
13	22020	21800	21760	21830	22070	23050	23170	23150	22740	22230	21800	21460
14	22000	21800	21760	21830	22070	23060	23170	23130	22730	22220	21790	21450
15	22000	21800	21760	21830	22080	23070	23170	23120	22720	22210	21780	21440
16	22000	21800	21760	21840	22120	23090	23170	23110	22700	22180	21760	21440
17	21980	21800	21760	21840	22130	23090	23190	23100	22680	22170	21740	21430
18	21960	21800	21760	21850	22160	23100	23240	23100	22660	22160	21730	21410
19	21960	21800	21760	21850	22150	23110	23240	23090	22650	22140	21720	21420
20	21940	21800	21770	21860	22200	23110	23240	23070	22620	22120	21720	21400
21	21930	21800	21770	21860	22310	23120	23250	23070	22610	22100	21710	21390
22	21910	21790	21760	21870	22390	23110	23260	23070	22600	22090	21690	21390
23	21900	21780	21760	21860	22460	23120	23250	23060	22580	22080	21660	21370
24	21880	21780	21750	21870	22530	23120	23250	23050	22550	22070	21670	21370
25	21870	21780	21750	21880	22550	23120	23250	23050	22540	22060	21650	21330
26	21870	21780	21760	21910	22580	23130	23260	23040	22530	22050	21640	21270
27	21870	21760	21760	21930	22610	23140	23270	23020	22510	22030	21630	21210
28	21860	21760	21760	21930	22620	23140	23250	23000	22500	22020	21630	21190
29	21850	21750	21770	21930	22630	23150	23240	23000	22490	22000	21630	21180
30	21850	21750	21770	21940	---	23170	23240	22990	22460	21990	21620	21170
31	21840	---	21780	21960	---	23170	---	22980	---	21970	21610	---
MAX	22120	21840	21780	21960	22630	23170	23270	23240	22970	22440	21960	21600
MIN	21840	21750	21730	21780	21960	22650	23160	22980	22460	21970	21610	21170
a	1438.65	1438.52	1438.56	1438.82	1439.79	1440.55	1440.65	1440.29	1439.55	1438.84	1438.31	1437.67
b	-290	-90	+30	+180	+670	+540	+70	-260	-520	-490	-360	-440

CAL YR 1999 MAX 24320 MIN 21730 b -1720
WTR YR 2000 MAX 23270 MIN 21170 b -960

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11042631 PECHANGA CREEK NEAR TEMECULA, CA

LOCATION.—Lat 33°28'06", long 117°07'40", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, on upstream side of Highway S-16 Bridge, 0.4 mi upstream from Temecula Creek, and 2.1 mi southeast of Temecula.

DRAINAGE AREA.—13.8 mi^2.

PERIOD OF RECORD.—October 1987 to current year. Discharge measurements only, October 1991 to September 1992.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,010 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation or diversion upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,120 ft^3/s, Jan. 16, 1993, gage height, 8.12 ft, from rating curve extended above 400 ft^3/s on basis of step-backwater analysis; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1900	21	3.05				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.38	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.068	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	3.9	.00	.00	.00	.00	.00	.00	.00

11042631 PECHANGA CREEK NEAR TEMECULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.006	.027	5.30	3.14	2.46	.39	.17	.044	.019	.014	.000
MAX	.003	.050	.15	63.4	24.4	16.5	2.63	.95	.51	.23	.18	.006
(WY)	1988	1997	1993	1993	1993	1995	1998	1993	1993	1993	1993	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1990	1991	1992	1989	1989	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL			1.98			
ANNUAL MEAN			.005		.96	
HIGHEST ANNUAL MEAN					8.27	1993
LOWEST ANNUAL MEAN					.000	1992
HIGHEST DAILY MEAN			1.6	Feb 21	900	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
INSTANTANEOUS PEAK FLOW			21	Feb 21	3120	Jan 16 1993
INSTANTANEOUS PEAK STAGE			3.05	Feb 21	8.12	Jan 16 1993
ANNUAL RUNOFF (AC-FT)			3.9		694	
10 PERCENT EXCEEDS	.00		.00		.25	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042700 MURRIETA CREEK AT TENAJA ROAD, NEAR MURRIETA, CA

LOCATION.—Lat 33°33'20", long 117°13'50", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, at Tenaja Road crossing, and 1.0 mi northwest of Murrieta.

DRAINAGE AREA.—30.0 mi^2.

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete road crossing. Elevation of gage is 1,105 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,390 ft^3/s, Feb. 23, 1998, gage height, 10.35 ft, from rating curve extended above 304 ft^3/s; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 130 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	unknown	198	6.66				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	21	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	2.4	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	24	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	7.4	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	4.5	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.67	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	e1.5	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	e85	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	e12	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	e25	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	e10	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	e.15	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	133.65	59.97	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	4.61	1.93	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	85	24	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	265	119	.00	.00	.00	.00	.00	.00

e Estimated.

11042700 MURRIETA CREEK AT TENAJA ROAD, NEAR MURRIETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	1.14	.96	33.7	5.10	2.98	3.13	.11	.000	.000	.000
MAX	.000	.000	3.42	2.87	97.5	13.4	8.95	9.40	.33	.000	.000	.000
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1999	1999	1999	1999	1999	1999	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL			193.62			
ANNUAL MEAN			.53		3.74	
HIGHEST ANNUAL MEAN					10.7	1998
LOWEST ANNUAL MEAN					.000	1999
HIGHEST DAILY MEAN			85	Feb 21	530	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1997
INSTANTANEOUS PEAK FLOW			198	Feb 21	3390	Feb 23 1998
INSTANTANEOUS PEAK STAGE			6.66	Feb 21	10.35	Feb 23 1998
ANNUAL RUNOFF (AC-FT)			384		2710	
10 PERCENT EXCEEDS	.00		.00		2.4	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042800 WARM SPRINGS CREEK NEAR MURRIETA, CA

LOCATION.—Lat 33°31'56", long 117°10'34", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, at upstream end of Jefferson Road Bridge, 0.6 mi upstream from mouth, and 2.8 mi southeast of Murrieta.

DRAINAGE AREA.—55.4 mi^2.

PERIOD OF RECORD.—October 1987 to Nov. 4, 1991, June 11, 1992, to current year.

GAGE.—Water-stage recorder. Elevation of gage is 1,040 ft above sea level, from topographic map.

REMARKS.—Records fair. Rancho California Water District can discharge into creek from automated pump, approximately 0.1 mi upstream from station. Beginning in water year 1999, flows partly regulated by Diamond Valley Lake, capacity, 800,000 acre-ft. Diamond Valley Lake is used to store imported water. Construction of Diamond Valley Lake, beginning in 1996, permanently rerouted 2.4 mi^2 of drainage area in Goodhart Canyon out of the Warm Springs Creek Basin and into the Santa Ana River Basin. Compensatory releases to Warm Springs Creek from Diamond Valley Lake may occur at times. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,570 ft^3/s, Jan. 17, 1993, gage height, 8.59 ft, from rating curve extended above 2,190 ft^3/s; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1730	441	5.16	Mar. 5	1315	91	4.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.24	.04	.57	.79	.00	.00	.00	.00	.10
2	.00	.00	.00	.28	.07	.45	.92	.32	.08	.00	.00	.17
3	.04	.00	.00	.26	.00	.68	.79	.96	.56	.00	.00	.16
4	.00	.00	.00	.04	.00	.51	.20	.06	.59	.00	.00	.10
5	.00	.00	.00	.00	.00	23	.00	.00	.27	.00	.00	.08
6	.00	.00	.00	.00	.06	5.0	.00	.08	.00	.00	.00	.07
7	.00	.00	.00	.00	.15	1.8	.00	.43	.00	.00	.00	.12
8	.00	.00	.05	.00	.01	8.7	.00	.31	.21	.00	.03	.20
9	.00	.00	.00	.00	.00	5.5	.00	.10	1.4	.00	.20	.18
10	.00	.00	.05	.00	.60	1.9	.16	.25	.46	.00	.33	.31
11	.00	.06	.00	.00	.00	.59	.20	.35	.00	.00	.13	.21
12	.00	.30	.00	.00	1.2	.05	.00	.00	.30	.00	.00	.00
13	.00	.16	.02	.00	.07	.00	.00	.00	.40	.00	.00	.00
14	.00	.24	.02	.00	.00	.26	.00	.00	.37	.00	.00	.07
15	.00	.20	.01	.00	.03	.00	.00	.00	.45	.06	.00	.09
16	.00	.21	.00	.00	.09	.21	.00	.00	.69	.00	.00	.17
17	.00	.19	.00	.00	.06	.37	.86	.00	.88	.00	.00	.10
18	.00	.08	.01	.00	.05	.00	3.9	.00	.35	.00	.01	.00
19	.00	.00	.00	.00	.05	.15	.91	.00	.00	.00	.10	.01
20	.00	.00	.02	.00	7.3	.35	.31	.00	.00	.00	.00	.15
21	.00	.00	.03	.00	93	.17	1.1	.00	.00	.00	.00	.17
22	.00	.00	.00	.00	12	.00	1.9	.00	.00	.00	.00	.38
23	.00	.00	.00	.00	24	.00	.57	.00	.00	.00	.00	.27
24	.04	.00	.00	.00	26	.00	.65	.00	.00	.00	.37	.20
25	.00	.00	.04	.00	10	.00	.57	.00	.00	.00	.19	.16
26	.00	.00	.00	.09	3.7	.00	.00	.15	.00	.00	.17	.00
27	.05	.00	.03	.01	1.1	.18	.00	.23	.00	.25	.31	.08
28	.06	.06	.05	.00	.62	.04	.00	.00	.00	1.7	.21	.15
29	.00	.00	.12	.00	1.2	.00	.00	.00	.00	.72	.38	.13
30	.00	.00	.00	.16	---	.00	.33	.00	.00	1.0	.21	.00
31	.05	---	.12	.08	---	.21	---	.00	---	1.8	.15	---
TOTAL	0.24	1.50	0.57	1.16	181.40	50.69	14.16	3.24	7.01	5.53	2.79	3.83
MEAN	.008	.050	.018	.037	6.26	1.64	.47	.10	.23	.18	.090	.13
MAX	.06	.30	.12	.28	93	23	3.9	.96	1.4	1.8	.38	.38
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.5	3.0	1.1	2.3	360	101	28	6.4	14	11	5.5	7.6

11042800 WARM SPRINGS CREEK NEAR MURRIETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.069	.14	.57	21.7	20.0	11.2	.94	.44	.27	.076	.039	.017
MAX	.46	.68	2.27	226	116	74.0	6.19	2.99	2.93	.71	.41	.13
(WY)	1993	1997	1993	1993	1998	1991	1998	1998	1998	1998	1999	2000
MIN	.000	.000	.000	.036	.004	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1990	1994	1989	1988	1989	1989	1988	1989	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	84.23		272.12			
ANNUAL MEAN	.23		.74		4.55	
HIGHEST ANNUAL MEAN					27.6	1993
LOWEST ANNUAL MEAN					.063	1989
HIGHEST DAILY MEAN	13	Apr 7	93	Feb 21	2070	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 16	.00	Oct 4	.00	Oct 1 1987
INSTANTANEOUS PEAK FLOW			441	Feb 21	5570	Jan 17 1993
INSTANTANEOUS PEAK STAGE			5.16	Feb 21	8.59	Jan 17 1993
ANNUAL RUNOFF (AC-FT)	167		540		3290	
10 PERCENT EXCEEDS	.14		.59		1.2	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042900 SANTA GERTRUDIS CREEK NEAR TEMECULA, CA

LOCATION.—Lat 33°31'28", long 117°09'50", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, 0.85 mi upstream from Murrieta Creek, 1.65 mi downstream from Tucalota Creek, and 2.2 mi northeast of Temecula.

DRAINAGE AREA.—90.2 mi^2.

PERIOD OF RECORD.—October 1987 to current year. Discharge measurements only, October 1991 to September 1992.

REVISED RECORDS.—WDR CA-94-1: Drainage area. WDR CA-96-1: 1993(M).

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1,045 ft above sea level, from topographic map. Prior to Oct. 11, 1994, at site 800 ft upstream at different datum.

REMARKS.—Records fair. Flow partly regulated by Skinner Reservoir, capacity, 43,800 acre-ft. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,200 ft^3/s, estimated, Jan. 16, 1993, gage height, 8.47 ft, site and datum then in use, based on critical depth computation; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	5.0	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.33	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.27	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	14	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	6.7	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	6.2	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	6.4	.00	.82	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	30	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	77	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	6.3	.00	.00	.00	.00	.00	.00	.10
23	.00	.00	.00	.00	24	.00	.00	.00	.00	.00	.00	.31
24	.00	.00	.00	.00	3.6	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.81	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.44	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.76	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.42	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	180.20	16.43	2.02	0.00	0.00	0.00	0.00	0.41
MEAN	.000	.000	.000	.000	6.21	.53	.067	.000	.000	.000	.000	.014
MAX	.00	.00	.00	.00	77	10	1.2	.00	.00	.00	.00	.31
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	357	33	4.0	.00	.00	.00	.00	.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	.018	.37	.80	14.4	14.6	12.0	6.58	3.12	.012	.039	.000	.059
MAX	.12	1.94	4.93	108	77.8	50.7	46.7	28.3	.077	.39	.000	.67
(WY)	1994	1997	1998	1993	1998	1995	1993	1993	1999	1999	1988	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1988	1990	1991	1988	1988	1989	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	269.94		199.06			
ANNUAL MEAN	.74		.54		4.28	
HIGHEST ANNUAL MEAN					23.2	1993
LOWEST ANNUAL MEAN					.006	1990
HIGHEST DAILY MEAN	68	Apr 12	77	Feb 21	1340	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
INSTANTANEOUS PEAK FLOW			275	Feb 21	e7200	Jan 16 1993
INSTANTANEOUS PEAK STAGE			2.61	Feb 21	8.47	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	535		395		3100	
10 PERCENT EXCEEDS	.00		.00		4.3	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11043000 MURRIETA CREEK AT TEMECULA, CA

LOCATION.—Lat 33°28'47", long 117°08'35", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on right bank, 0.4 mi upstream from confluence with Temecula Creek, 1.0 mi south of Temecula, and 12 mi downstream from Skinner Reservoir on Tucalota Creek.

DRAINAGE AREA.—222 mi^2.

PERIOD OF RECORD.—October 1924 to current year. Prior to September 1930 monthly discharges only, published in WSP 1315-B.

REVISED RECORDS.—WSP 1345: 1952. WSP 1635: 1932, 1937. WSP 1928: Drainage area. WDR CA-93-1: 1991 (P), 1992 (M).

GAGE.—Water-stage recorder. Concrete control since Aug. 30, 1981. Elevation of gage is 970 ft above sea level, from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.—Records poor. Flow partly regulated since 1974 by Skinner Reservoir, capacity, 43,800 acre-ft. Beginning in water year 1999, flows on Warm Springs Creek, a tributary to Murrieta Creek, are slightly regulated by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Pumping upstream from station for irrigation. Rancho California Water District can discharge into creek, approximately 0.1 mi upstream, to supplement low flow. Varying amounts of backwater caused by beaver dams during most of year. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,000 ft^3/s, Jan. 16, 1993, gage height, 17.24 ft, on basis of slope-area measurement of peak flow; no flow on Dec. 11, 1976, many days in 1989–93, and on Dec. 30, 1999.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum, from rating curve extended above 6,430 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1845	2,800	7.68	Mar. 8	1915	350	3.26
Mar. 5	1345	339	3.23	Apr. 18	1215	163	2.52

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	e.23	.02	.03	1.0	.55	.57	2.4	2.8	2.4	3.0	e2.2
2	3.0	.07	.02	.04	.96	.72	.79	2.6	3.1	2.5	3.4	e2.1
3	3.2	.04	.02	.03	.34	.43	.56	2.8	3.3	2.5	3.2	e2.0
4	3.2	.03	.02	.02	.27	1.7	.56	2.6	2.9	2.4	3.1	e1.8
5	3.2	e.03	.02	.02	.37	124	.63	2.6	2.7	2.4	3.0	e1.9
6	3.0	e.03	.02	.02	.36	33	.46	e2.4	2.9	2.4	e3.2	e2.1
7	3.0	e.03	.02	.02	.43	5.2	.69	e2.2	2.9	2.3	e3.2	e2.2
8	3.2	e.02	.02	.02	.42	104	.56	e2.2	2.9	2.6	e3.4	e2.2
9	3.2	e.02	.03	.02	.47	56	.56	e2.2	2.8	2.6	e3.0	e2.2
10	3.2	e.02	.03	.02	4.5	7.8	.56	e2.3	2.8	2.7	e2.7	e2.1
11	3.2	.02	.03	.02	7.5	2.2	.90	e2.5	2.8	2.9	e2.6	e2.1
12	3.2	.02	.02	.02	26	1.5	2.5	e2.3	2.6	2.9	e2.6	e2.1
13	e3.1	.02	.02	.02	9.2	.99	2.4	e2.4	2.5	2.9	e2.5	e2.1
14	3.0	.02	.02	.02	6.1	1.1	2.4	e2.3	2.6	3.2	e2.4	e2.1
15	3.2	.02	.02	.02	1.8	.94	2.4	e2.4	2.7	3.1	e2.4	e2.1
16	3.2	.02	.02	.03	5.5	.99	2.0	e2.4	2.5	3.2	e2.6	e2.1
17	3.3	.02	.02	.30	6.6	.62	14	e2.5	2.6	3.4	e2.6	e2.1
18	3.5	.02	.02	.04	1.6	.56	67	2.4	2.6	3.2	e2.4	e2.1
19	3.3	.02	.03	.03	1.5	.74	7.5	2.4	2.2	3.2	e2.4	e2.1
20	e3.2	.02	.03	.04	42	.74	3.2	2.4	2.3	3.4	e2.3	e2.1
21	3.2	.02	.03	.04	516	.64	2.2	2.3	2.5	3.4	e2.3	e2.2
22	3.2	.02	.02	.04	102	.70	2.6	2.9	2.7	3.5	e2.3	e2.2
23	3.4	.02	.02	.19	173	.74	2.4	3.2	2.8	3.7	e2.2	e4.0
24	3.4	.02	.02	.07	71	.74	2.2	3.3	2.4	3.6	e2.2	e2.3
25	3.2	.02	.02	.08	6.7	.74	2.2	3.1	2.2	2.5	e2.2	e2.3
26	3.3	.02	.02	.83	1.8	.69	2.1	3.3	2.2	2.7	e2.1	e2.2
27	e3.1	.02	.02	.08	1.1	.72	2.2	3.1	2.0	2.7	e2.1	e2.2
28	3.1	.02	.02	.19	3.8	.60	2.4	2.9	2.6	2.7	e.80	e2.2
29	3.2	.02	.01	.11	.49	.72	2.4	2.8	2.7	3.0	e.80	e2.2
30	3.3	.02	.00	.32	---	.67	2.4	2.8	2.6	3.0	e1.9	e2.3
31	2.9	---	.01	1.0	---	.56	---	3.0	---	2.9	e1.9	---
TOTAL	98.6	0.92	0.64	3.73	992.81	351.30	133.34	81.0	79.2	89.9	76.80	65.9
MEAN	3.18	.031	.021	.12	34.2	11.3	4.44	2.61	2.64	2.90	2.48	2.20
MAX	3.5	.23	.03	1.0	516	124	67	3.3	3.3	3.7	3.4	4.0
MIN	2.9	.02	.00	.02	.27	.43	.46	2.2	2.0	2.3	.80	1.8
AC-FT	196	1.8	1.3	7.4	1970	697	264	161	157	178	152	131

e Estimated.

11043000 MURRIETA CREEK AT TEMECULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1973, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.58	2.57	7.27	18.2	36.5	32.0	7.85	.92	.55	.41	.40	.65
MAX	1.87	47.3	63.2	289	604	479	167	9.65	1.73	1.20	1.23	9.40
(WY)	1969	1966	1941	1943	1969	1938	1958	1941	1941	1941	1941	1939
MIN	.10	.055	.11	.078	.20	.21	.18	.20	.13	.10	.092	.12
(WY)	1971	1970	1970	1970	1968	1965	1970	1968	1970	1970	1969	1970

SUMMARY STATISTICS	WATER YEARS 1931 - 1973	
ANNUAL TOTAL		
ANNUAL MEAN	8.86	
HIGHEST ANNUAL MEAN	56.9	1969
LOWEST ANNUAL MEAN	.39	1964
HIGHEST DAILY MEAN	7200	Mar 2 1938
LOWEST DAILY MEAN	.02	Jun 10 1969
ANNUAL SEVEN-DAY MINIMUM	.03	Nov 16 1969
INSTANTANEOUS PEAK FLOW	17500	Jan 23 1943
INSTANTANEOUS PEAK STAGE	13.80	Jan 23 1943
ANNUAL RUNOFF (AC-FT)	6420	
10 PERCENT EXCEEDS	2.9	
50 PERCENT EXCEEDS	.60	
90 PERCENT EXCEEDS	.20	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.51	1.71	3.83	64.1	96.0	65.9	10.8	5.45	1.58	1.31	1.35	2.02
MAX	3.28	11.1	28.6	818	838	420	85.4	44.2	4.96	2.90	3.05	10.6
(WY)	1988	1997	1998	1993	1980	1978	1980	1980	1978	2000	1985	1976
MIN	.18	.000	.000	.12	.55	.093	.073	.19	.13	.13	.15	.17
(WY)	1994	1990	1990	2000	1977	1990	1989	1988	1994	1994	1993	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	980.28		1974.14			
ANNUAL MEAN	2.69		5.39		20.9	
HIGHEST ANNUAL MEAN					121	1993
LOWEST ANNUAL MEAN					1.02	1977
HIGHEST DAILY MEAN	61	Apr 12	516	Feb 21	7790	Jan 16 1993
LOWEST DAILY MEAN	.00	Dec 30	.00	Dec 30	.00	Dec 11 1976
ANNUAL SEVEN-DAY MINIMUM	.01	Dec 25	.01	Dec 25	.00	Nov 28 1988
INSTANTANEOUS PEAK FLOW			2800	Feb 21	25000	Jan 16 1993
INSTANTANEOUS PEAK STAGE			7.68	Feb 21	17.24	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	1940		3920		15160	
10 PERCENT EXCEEDS	4.1		3.3		8.6	
50 PERCENT EXCEEDS	2.1		2.2		.99	
90 PERCENT EXCEEDS	.02		.02		.14	

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA

LOCATION.—Lat 33°28'26", long 117°08'29", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, at upper end of Temecula Canyon, 0.1 mi downstream from confluence of Murrieta and Temecula Creeks, 1.4 mi south of Temecula, 10 mi downstream from Vail Dam, and about 12 mi downstream from Skinner Reservoir.

DRAINAGE AREA.—588 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1923 to current year. Prior to October 1952, published as Temecula Creek at Railroad Canyon, near Temecula.

REVISED RECORDS.—WSP 981: 1927(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Concrete control since Nov. 3, 1966; buried by sand Nov. 19, 1985, uncovered by high flow in March 1991. Elevation of gage is 950 ft above sea level, from topographic map. Prior to Nov. 3, 1966, at site 100 ft downstream at same datum.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow partly regulated since November 1948 by Vail Lake (station 11042510) on Temecula Creek, and since 1974 by Skinner Reservoir. Rancho California Water District can discharge into Murrieta Creek, approximately 1.0 mi upstream, to supplement low flow. Beginning in water year 1999, flows on Warm Springs Creek, a tributary to Murrieta Creek, are slightly regulated by Diamond Valley Lake, capacity, 800,00 acre-ft (see station 11042800). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 31,000 ft^3/s, Jan. 16, 1993, gage height, 22.5 ft, from rating curve extended above 4,000 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.16 ft^3/s, Mar. 31, Apr. 1, 11, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	.40	.30	.39	1.5	2.1	.92	2.8	3.4	3.4	4.1	3.4
2	3.8	.28	.29	.73	1.5	1.5	1.4	3.4	3.9	3.4	4.3	3.0
3	3.8	.27	.29	.68	.53	1.0	.89	3.7	3.8	3.4	4.2	2.6
4	3.8	.27	.28	.43	.56	2.4	.72	3.5	3.8	3.3	4.1	2.6
5	3.8	.27	.29	.40	.60	159	.84	3.4	3.7	3.4	4.0	2.8
6	3.4	.27	.29	.38	.54	44	.94	3.5	3.7	3.3	4.2	3.1
7	3.1	.27	.30	.38	.66	8.7	1.3	4.0	3.7	3.2	4.1	3.2
8	3.4	.28	.30	.39	.64	122	1.3	3.5	3.7	3.2	4.3	3.1
9	3.3	.29	.29	.40	.68	68	1.2	3.4	3.6	3.3	3.8	3.1
10	3.4	.27	.36	.40	5.9	13	1.1	3.5	3.7	3.4	3.4	3.1
11	3.4	.26	.32	.41	20	4.3	1.6	3.1	4.0	3.4	3.0	3.1
12	3.3	.26	.31	.41	44	2.8	5.2	3.4	3.8	3.4	2.8	3.1
13	3.3	.27	.32	.41	16	1.7	4.2	4.4	3.5	3.4	2.9	3.1
14	3.1	.27	.32	.42	9.4	1.9	3.8	4.3	3.5	3.5	2.6	3.1
15	3.3	.28	.30	.42	4.0	1.5	3.7	3.3	3.6	3.4	2.8	3.1
16	3.4	.29	.34	.43	8.2	1.1	3.5	2.8	3.5	3.6	3.4	3.1
17	3.4	.30	.34	1.5	17	1.1	19	2.9	3.6	3.7	3.3	3.1
18	3.9	.27	.30	.53	3.7	.90	95	2.9	3.6	3.5	3.2	3.1
19	4.5	.26	.31	.44	2.3	1.0	14	2.9	3.0	3.4	3.2	3.1
20	3.8	.28	.32	.43	55	.98	6.4	2.8	3.1	3.3	3.2	3.1
21	3.5	.28	.32	.43	829	1.7	4.2	2.7	3.3	3.4	3.3	3.2
22	3.6	.26	.36	.43	127	.76	5.0	3.4	3.9	3.4	3.3	3.2
23	3.6	.27	.33	.83	233	1.2	4.3	3.9	3.8	3.5	3.3	5.9
24	3.7	.27	.34	.58	90	1.9	4.1	4.1	3.2	3.8	3.3	3.5
25	3.7	.28	.35	.57	15	1.6	2.9	3.9	3.0	3.9	3.5	3.2
26	3.7	.29	.35	1.9	6.8	1.6	2.5	4.2	3.0	3.8	3.5	3.1
27	3.8	.28	.35	.56	5.0	1.5	2.9	3.9	2.8	3.8	e3.3	3.1
28	3.6	.29	.37	.60	9.6	1.8	2.8	3.8	3.5	3.8	e1.3	3.1
29	3.7	.28	.58	.53	3.3	1.4	2.7	3.7	3.8	3.8	e1.3	3.0
30	3.7	.28	.36	.68	---	1.4	2.6	3.5	3.5	4.1	2.9	3.0
31	3.1	---	.38	1.3	---	1.2	---	3.4	---	4.2	3.0	---
TOTAL	110.2	8.39	10.26	18.39	1511.41	455.04	201.01	108.0	106.0	109.4	102.9	95.3
MEAN	3.55	.28	.33	.59	52.1	14.7	6.70	3.48	3.53	3.53	3.32	3.18
MAX	4.5	.40	.58	1.9	829	159	95	4.4	4.0	4.2	4.3	5.9
MIN	3.1	.26	.28	.38	.53	.76	.72	2.7	2.8	3.2	1.3	2.6
AC-FT	219	17	20	36	3000	903	399	214	210	217	204	189

e Estimated.

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1948, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.04	10.4	21.4	32.6	114	90.3	26.7	10.2	7.01	5.41	5.01	5.93
MAX	11.8	39.3	99.9	369	1205	1007	226	40.2	15.1	9.90	9.65	19.4
(WY)	1942	1945	1941	1943	1927	1938	1941	1941	1941	1941	1941	1939
MIN	3.77	3.11	4.97	8.03	7.59	5.90	4.19	3.62	3.12	1.55	1.90	2.31
(WY)	1925	1930	1930	1936	1925	1931	1928	1929	1929	1929	1926	1926

SUMMARY STATISTICS	WATER YEARS 1923 - 1948	
ANNUAL MEAN	28.2	
HIGHEST ANNUAL MEAN	101	1927
LOWEST ANNUAL MEAN	6.22	1925
HIGHEST DAILY MEAN	19900	Feb 16 1927
LOWEST DAILY MEAN	.90	Aug 9 1929
ANNUAL SEVEN-DAY MINIMUM	.99	Aug 8 1929
INSTANTANEOUS PEAK FLOW	25000	Feb 16 1927
INSTANTANEOUS PEAK STAGE	14.60	Feb 16 1927
ANNUAL RUNOFF (AC-FT)	20390	
10 PERCENT EXCEEDS	21	
50 PERCENT EXCEEDS	8.5	
90 PERCENT EXCEEDS	3.5	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1973, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.39	6.24	8.90	21.8	36.7	18.6	12.4	3.97	3.35	2.79	3.01	3.06
MAX	6.04	53.3	41.4	251	638	212	177	6.70	5.59	4.69	6.38	6.55
(WY)	1954	1966	1966	1952	1969	1952	1958	1949	1949	1949	1953	1953
MIN	2.05	2.22	2.69	2.73	2.54	2.57	2.35	2.39	2.19	1.51	1.28	1.45
(WY)	1967	1967	1965	1965	1965	1965	1972	1970	1973	1972	1972	1970

SUMMARY STATISTICS	WATER YEARS 1949 - 1973	
ANNUAL MEAN	10.2	
HIGHEST ANNUAL MEAN	62.5	1969
LOWEST ANNUAL MEAN	2.96	1964
HIGHEST DAILY MEAN	7730	Feb 25 1969
LOWEST DAILY MEAN	.30	Aug 18 1966
ANNUAL SEVEN-DAY MINIMUM	.67	Aug 17 1966
INSTANTANEOUS PEAK FLOW	14600	Feb 25 1969
INSTANTANEOUS PEAK STAGE	15.32	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	7390	
10 PERCENT EXCEEDS	7.3	
50 PERCENT EXCEEDS	3.7	
90 PERCENT EXCEEDS	2.2	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.08	4.44	6.42	88.0	124	84.7	14.7	8.42	3.28	2.59	2.71	3.33
MAX	10.8	32.8	32.4	1255	1105	438	85.6	46.6	6.87	4.55	9.99	13.9
(WY)	1994	1986	1998	1993	1980	1978	1980	1980	1978	1980	1993	1976
MIN	1.25	.27	.33	.59	1.84	.36	.32	.58	.72	.58	.91	1.33
(WY)	1982	1989	2000	2000	1989	1988	1989	1988	1984	1984	1984	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	1593.55		2836.30			
ANNUAL MEAN	4.37		7.75		28.4	
HIGHEST ANNUAL MEAN					183	1993
LOWEST ANNUAL MEAN					2.17	1987
HIGHEST DAILY MEAN	82	Apr 7	829	Feb 21	13000	Jan 16 1993
LOWEST DAILY MEAN	.26	Nov 11	.26	Nov 11	.16	Mar 31 1988
ANNUAL SEVEN-DAY MINIMUM	.27	Nov 18	.27	Nov 18	.18	Mar 31 1988
INSTANTANEOUS PEAK FLOW			3600	Feb 21	31000	Jan 16 1993
INSTANTANEOUS PEAK STAGE			7.24	Feb 21	22.50	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	3160		5630		20550	
10 PERCENT EXCEEDS	6.1		4.2		14	
50 PERCENT EXCEEDS	3.2		3.1		2.7	
90 PERCENT EXCEEDS	.30		.30		1.1	

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1999 to September 2000.
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
WATER TEMPERATURE: December 1999 to September 2000.

PERIOD OF DAILY RECORD.—December 1999 to September 2000.
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
WATER TEMPERATURE: December 1999 to September 2000.

INSTRUMENTATION.—Water-quality monitor since December 1999.

REMARKS.—Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 17.4 mg/L, Mar. 25, 2000; minimum recorded, 4.4 mg/L, Sept. 1, 2000.
pH: Maximum recorded, 8.8 standard units, Mar. 23, 2000; minimum recorded, 6.6 standard units, Apr. 3–4, 2000.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,330 microsiemens, Apr. 12, 2000; minimum recorded, 226 microsiemens, Apr. 18, 2000.
WATER TEMPERATURE: Maximum recorded, 27.5˚C, July 19, 27, and Aug. 1, 4, 10, 2000; minimum recorded, 4.5˚C, Jan. 8, 2000.

EXTREMES FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 17.4 mg/L, Mar. 25; minimum recorded, 4.4 mg/L, Sept. 1.
pH: Maximum recorded, 8.8 standard units, Mar. 23; minimum recorded, 6.6 standard units, Apr. 3–4.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,330 microsiemens, Apr. 12; minimum recorded, 226 microsiemens, Apr. 18.
WATER TEMPERATURE: Maximum recorded, 27.5˚C, July 19, 27, and Aug. 1, 4, 10; minimum recorded, 4.5˚C, Jan. 8.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	10.8	9.0	11.9	8.9	---	---
2	---	---	---	---	---	---	10.6	8.7	11.1	8.4	---	---
3	---	---	---	---	---	---	10.9	9.7	10.9	8.3	---	---
4	---	---	---	---	---	---	10.2	9.2	11.5	9.1	9.2	7.6
5	---	---	---	---	---	---	10.4	9.4	11.0	8.5	10.3	8.5
6	---	---	---	---	---	---	10.9	9.6	11.2	8.5	10.4	9.5
7	---	---	---	---	---	---	11.6	10.3	11.7	8.9	9.9	9.5
8	---	---	---	---	---	---	11.4	10.7	11.3	8.3	10.0	9.6
9	---	---	---	---	---	---	11.9	10.7	12.0	8.5	10.6	9.3
10	---	---	---	---	---	---	11.4	10.3	10.8	7.9	9.8	8.5
11	---	---	---	---	---	---	11.7	10.6	9.6	8.7	9.2	7.8
12	---	---	---	---	---	---	11.4	10.4	10.2	8.7	9.5	7.8
13	---	---	---	---	---	---	11.6	10.3	9.8	9.5	9.9	7.6
14	---	---	---	---	---	---	11.4	10.2	9.8	8.7	10.4	7.3
15	---	---	---	---	11.7	10.7	11.4	9.8	9.9	8.5	10.8	6.8
16	---	---	---	---	11.5	10.3	10.9	9.6	9.7	8.4	11.3	6.8
17	---	---	---	---	10.9	10.1	12.1	8.8	9.6	9.2	12.3	6.3
18	---	---	---	---	11.1	9.8	10.0	7.9	10.7	9.2	13.0	6.7
19	---	---	---	---	11.0	9.8	10.7	7.7	10.5	8.6	13.7	6.0
20	---	---	---	---	10.5	10.0	10.7	8.3	9.9	7.9	14.7	6.4
21	---	---	---	---	11.1	10.0	10.7	7.9	10.6	7.9	15.2	7.2
22	---	---	---	---	11.4	10.4	11.2	8.4	---	---	14.1	6.9
23	---	---	---	---	10.9	10.3	11.6	9.0	---	---	15.0	7.4
24	---	---	---	---	11.0	10.3	10.6	7.9	---	---	16.4	7.5
25	---	---	---	---	11.4	10.3	10.7	7.4	---	---	17.4	7.2
26	---	---	---	---	11.0	10.4	11.4	8.0	---	---	16.2	7.2
27	---	---	---	---	11.1	10.2	11.0	8.1	---	---	14.2	6.6
28	---	---	---	---	11.2	10.1	11.9	9.1	---	---	14.9	7.1
29	---	---	---	---	11.6	10.3	11.8	9.1	---	---	14.3	6.8
30	---	---	---	---	11.0	10.2	12.4	8.7	---	---	13.9	6.7
31	---	---	---	---	10.7	9.4	12.1	7.9	---	---	12.9	6.6
MONTH	---	---	---	---	---	---	12.4	7.4	---	---	---	---

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.7	6.4	10.8	5.2	11.1	6.0	9.4	6.0	10.4	5.6	8.0	4.4
2	11.9	6.6	11.1	5.8	9.6	6.1	8.6	5.8	10.8	7.6	8.8	5.3
3	11.5	6.0	11.5	5.8	10.4	6.8	8.0	5.4	10.1	6.8	9.0	5.6
4	11.1	5.4	12.0	5.7	9.4	6.4	9.6	6.3	10.1	7.3	9.2	5.8
5	10.6	4.9	12.1	5.5	9.1	6.4	9.2	6.3	9.9	7.2	9.1	6.0
6	11.0	5.0	12.9	5.8	9.7	6.8	9.5	5.9	9.9	7.1	9.0	6.2
7	10.6	5.1	12.5	6.3	9.2	6.5	8.0	5.7	9.5	7.1	8.1	6.3
8	10.9	5.5	13.2	5.8	8.2	6.5	8.2	5.3	---	---	8.9	6.3
9	11.2	5.6	13.8	5.8	8.7	6.8	7.7	5.3	---	---	9.2	6.6
10	11.4	5.4	13.3	5.5	8.9	6.5	8.7	6.0	---	---	9.2	6.8
11	11.4	5.3	13.5	6.2	9.0	6.9	7.4	5.5	---	---	9.2	6.9
12	9.9	6.3	14.1	6.4	9.3	6.9	7.8	5.1	---	---	8.9	6.8
13	10.6	6.2	14.6	6.6	8.7	6.5	7.9	6.3	---	---	8.6	6.0
14	10.3	6.0	14.7	6.5	8.9	6.7	9.0	5.8	---	---	8.5	6.2
15	10.8	6.8	14.9	6.6	8.9	6.7	9.9	6.6	---	---	8.5	6.2
16	10.9	6.6	14.6	6.5	9.4	6.4	9.5	6.6	---	---	7.4	5.7
17	10.1	6.4	15.3	6.7	9.1	6.4	9.0	6.3	---	---	7.1	4.9
18	9.2	7.3	15.1	6.4	9.5	6.7	7.8	6.2	---	---	6.5	4.7
19	8.0	7.1	14.6	6.1	9.9	7.1	8.4	6.2	---	---	7.3	4.7
20	8.1	6.6	14.8	5.8	9.4	6.9	8.2	6.0	---	---	7.8	5.8
21	8.3	6.6	14.5	5.7	8.8	6.3	8.3	6.3	---	---	6.6	5.3
22	9.1	7.1	13.9	5.7	8.7	6.6	9.3	6.2	---	---	8.0	6.1
23	9.6	6.9	13.3	5.8	9.6	6.7	9.2	6.5	---	---	9.1	6.5
24	9.9	6.4	11.1	5.7	9.4	6.7	8.2	6.2	---	---	7.5	6.0
25	10.1	6.1	10.8	6.0	9.2	6.2	7.2	5.1	---	---	8.2	6.1
26	10.3	5.6	12.6	6.4	8.5	6.0	8.6	5.6	---	---	8.9	7.4
27	10.6	5.8	12.4	6.4	7.9	5.3	8.4	6.5	---	---	8.2	7.1
28	10.5	5.7	12.3	6.0	8.7	5.5	8.7	6.2	---	---	8.4	7.1
29	10.9	6.0	12.2	6.0	9.3	6.2	8.6	6.2	---	---	10.3	7.2
30	10.2	5.4	11.3	6.0	8.9	6.0	8.1	6.1	---	---	10.0	7.3
31	---	---	11.7	6.0	---	---	8.0	5.9	---	---	---	---
MONTH	11.9	4.9	15.3	5.2	11.1	5.3	9.9	5.1	---	---	10.3	4.4

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	8.2	8.0	7.7	7.5	8.1	7.8
2	---	---	---	---	---	---	8.2	8.0	7.7	7.4	8.2	7.8
3	---	---	---	---	---	---	8.2	8.1	7.6	7.5	8.2	8.0
4	---	---	---	---	---	---	8.1	8.0	7.7	7.5	8.3	8.0
5	---	---	---	---	---	---	8.1	8.0	7.7	7.5	8.3	8.0
6	---	---	---	---	---	---	8.2	8.0	7.8	7.4	8.1	7.9
7	---	---	---	---	---	---	8.2	8.1	7.9	7.4	8.0	7.9
8	---	---	---	---	---	---	8.2	8.1	7.8	7.4	8.2	7.9
9	---	---	---	---	---	---	8.2	8.0	7.9	7.4	8.2	7.9
10	---	---	---	---	---	---	8.1	8.0	8.2	7.7	8.2	7.9
11	---	---	---	---	---	---	8.2	8.0	8.2	7.8	8.2	7.9
12	---	---	---	---	---	---	8.2	8.1	8.1	7.7	8.2	7.8
13	---	---	---	---	---	---	8.2	8.1	7.8	7.7	8.2	7.7
14	---	---	---	---	---	---	8.1	8.1	7.8	7.4	8.1	7.7
15	---	---	---	---	8.0	7.9	8.1	8.1	7.7	7.2	8.1	7.7
16	---	---	---	---	8.0	7.9	8.1	8.0	7.8	7.3	8.2	7.9
17	---	---	---	---	8.2	8.0	8.1	8.0	7.8	7.1	8.3	7.8
18	---	---	---	---	8.1	8.1	8.1	8.0	7.7	7.4	8.5	8.0
19	---	---	---	---	8.2	8.0	8.0	7.9	7.7	7.5	8.7	8.3
20	---	---	---	---	8.2	8.0	7.9	7.8	8.2	7.7	8.6	8.4
21	---	---	---	---	8.1	8.0	7.8	7.7	8.1	7.5	8.7	8.4
22	---	---	---	---	8.2	8.0	7.8	7.7	8.0	7.6	8.6	8.3
23	---	---	---	---	8.2	8.1	7.8	7.7	8.1	7.8	8.8	8.2
24	---	---	---	---	8.2	8.1	7.7	7.6	8.0	7.6	8.7	7.9
25	---	---	---	---	8.2	8.1	7.7	7.6	7.7	7.5	8.4	7.8
26	---	---	---	---	8.2	8.1	7.9	7.6	7.7	7.4	8.4	7.7
27	---	---	---	---	8.3	8.1	7.7	7.6	7.8	7.6	8.3	7.7
28	---	---	---	---	8.2	8.2	7.8	7.6	8.2	7.6	8.3	7.7
29	---	---	---	---	8.3	8.1	7.8	7.6	8.0	7.8	8.0	7.6
30	---	---	---	---	8.2	8.1	7.8	7.6	---	---	7.8	7.5
31	---	---	---	---	8.2	8.0	7.7	7.6	---	---	7.7	7.2
MONTH	---	---	---	---	---	---	8.2	7.6	8.2	7.1	8.8	7.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	7.0	7.7	7.2	7.8	7.6	8.3	7.8	8.2	7.8	8.2	7.6
2	7.4	6.9	8.1	7.3	7.8	7.6	8.1	7.6	8.2	7.8	7.8	7.5
3	7.0	6.6	8.2	7.5	8.0	7.7	8.0	7.7	8.0	7.7	7.7	7.3
4	7.2	6.6	8.1	7.4	7.9	7.5	8.0	7.8	8.1	7.8	7.5	7.3
5	7.2	6.7	8.2	7.5	7.9	7.5	8.0	7.6	8.2	7.8	7.5	7.2
6	7.3	6.9	8.3	7.5	7.8	7.5	8.4	7.9	8.1	7.8	7.3	7.2
7	7.4	7.0	8.2	7.5	7.7	7.4	8.3	8.0	8.2	7.8	7.4	7.2
8	7.3	6.7	8.3	7.3	7.9	7.5	8.2	7.8	8.2	7.8	7.4	7.3
9	7.5	7.0	7.8	7.4	7.9	7.5	8.1	7.6	8.1	7.7	7.5	7.3
10	7.8	7.2	8.2	7.5	8.0	7.7	8.3	7.9	8.0	7.7	7.7	7.4
11	7.9	7.2	8.1	7.3	7.9	7.4	8.4	7.5	8.0	7.7	7.6	7.4
12	7.9	7.4	7.9	7.2	8.0	7.6	8.1	7.6	8.0	7.6	7.9	7.4
13	7.8	7.3	8.3	7.2	8.3	7.8	8.0	7.5	8.1	7.7	8.0	7.5
14	7.5	7.3	8.4	7.3	8.0	7.8	8.0	7.6	7.7	7.5	7.9	7.6
15	7.7	7.4	8.1	7.3	8.0	7.6	8.3	7.6	7.9	7.4	8.0	7.6
16	7.7	7.3	8.0	7.3	8.2	7.6	8.3	7.8	8.1	7.6	7.9	7.6
17	8.0	7.5	8.3	7.4	7.8	7.5	8.3	7.8	8.0	7.6	8.0	7.5
18	7.7	7.2	8.1	7.4	8.1	7.6	8.2	7.9	7.9	7.5	8.2	7.6
19	7.6	7.3	8.1	7.4	8.3	7.8	8.0	7.6	8.1	7.6	8.4	7.6
20	7.8	7.6	8.2	7.3	8.3	7.9	8.4	8.0	8.3	7.7	7.9	7.6
21	7.9	7.8	8.4	7.4	8.3	7.8	8.4	7.9	8.2	7.5	8.0	7.7
22	8.0	7.8	8.5	7.5	8.2	7.9	8.3	7.9	8.2	7.5	8.3	7.7
23	8.0	7.8	8.6	7.6	8.0	7.1	8.4	8.0	7.9	7.5	8.3	7.8
24	8.1	7.8	8.4	7.8	7.9	7.5	8.3	7.8	8.0	7.5	8.0	7.7
25	8.2	7.8	8.3	8.1	8.2	7.8	8.6	8.0	8.2	7.7	8.0	7.6
26	8.1	7.7	8.3	7.7	8.0	7.8	8.6	8.1	8.1	7.6	8.0	7.7
27	8.1	7.5	8.2	7.6	8.2	7.8	8.6	8.1	8.3	7.8	8.0	7.8
28	8.0	7.5	8.3	7.6	8.2	7.7	8.6	8.1	8.3	8.0	8.1	7.9
29	7.9	7.4	8.3	7.6	8.3	7.8	8.3	8.0	8.1	7.7	8.3	8.0
30	7.8	7.2	8.1	7.6	8.3	7.9	8.2	7.8	8.1	7.7	8.4	8.0
31	---	---	8.1	7.5	---	---	8.1	7.6	8.2	7.8	---	---
MONTH	8.2	6.6	8.6	7.2	8.3	7.1	8.6	7.5	8.3	7.4	8.4	7.2

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	1220	1200	1240	1150	983	894
2	---	---	---	---	---	---	1220	1020	1260	1070	1070	970
3	---	---	---	---	---	---	1140	1020	1210	1140	1260	1060
4	---	---	---	---	---	---	1200	1130	1200	1170	1280	1150
5	---	---	---	---	---	---	1220	1200	1200	1170	1300	553
6	---	---	---	---	---	---	1240	1220	1230	1170	888	744
7	---	---	---	---	---	---	1260	1240	1220	1160	1040	888
8	---	---	---	---	---	---	1260	1240	1220	1200	1090	729
9	---	---	---	---	---	---	1260	1240	1240	1200	909	759
10	---	---	---	---	---	---	1260	1230	1260	844	1020	909
11	---	---	---	---	---	---	1260	1230	844	583	1070	1020
12	---	---	---	---	---	---	1250	1230	748	398	1100	1070
13	---	---	---	---	---	---	1250	1230	731	469	1120	1100
14	---	---	---	---	---	---	1250	1220	723	590	1150	1120
15	---	---	---	---	1240	1220	1240	1220	781	681	1160	1140
16	---	---	---	---	1280	1200	1250	1210	878	778	1190	1160
17	---	---	---	---	1260	1180	1220	1040	806	574	1210	1180
18	---	---	---	---	1240	1210	1230	1160	757	642	1240	1210
19	---	---	---	---	1230	1200	1250	1230	876	749	1250	1230
20	---	---	---	---	1230	1210	1260	1250	928	339	1260	1250
21	---	---	---	---	1240	1210	1260	1250	469	284	1260	1210
22	---	---	---	---	1240	1150	1270	1260	661	363	1220	1210
23	---	---	---	---	1250	1170	1280	1210	804	370	1220	1220
24	---	---	---	---	1240	1220	1250	1140	506	366	1240	1180
25	---	---	---	---	1230	1220	1250	1140	857	506	1290	1070
26	---	---	---	---	1240	1210	1210	1040	985	857	1260	1090
27	---	---	---	---	1230	1210	1250	1210	1020	948	1250	1210
28	---	---	---	---	1230	1210	1260	1200	978	880	1220	1150
29	---	---	---	---	1240	1060	1250	1230	926	868	1230	1160
30	---	---	---	---	1240	1160	1260	1200	---	---	1190	1150
31	---	---	---	---	1240	1200	1230	1160	---	---	1220	1180
MONTH	---	---	---	---	---	---	1280	1020	1260	284	1300	553

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1240	1190	1120	1050	793	742	999	893	891	861	900	874
2	1230	1190	1060	1010	950	754	918	890	1010	822	1030	877
3	1260	1210	1060	996	927	774	930	888	1020	883	1030	888
4	1250	1190	1040	994	872	775	1020	860	1030	866	1010	873
5	1240	1170	1060	978	957	775	1000	897	1030	884	1020	883
6	1220	1150	1040	975	1010	786	1060	871	1040	877	926	862
7	1200	1070	1070	972	909	784	990	886	1040	886	973	849
8	1200	1140	1030	972	997	793	984	885	1050	863	932	851
9	1240	1200	1030	947	898	807	1010	886	1050	891	966	880
10	1250	1210	1010	946	1000	806	1020	888	959	888	892	884
11	1250	1200	1020	935	951	812	998	892	1030	901	916	892
12	1330	1130	1020	923	970	814	1050	884	1020	885	914	888
13	1140	1120	1010	927	897	814	990	901	1060	921	927	890
14	1120	1090	1010	934	997	816	1050	884	929	884	927	886
15	1110	1080	1010	905	958	826	989	895	1010	890	981	886
16	1110	1080	981	898	964	829	1030	888	997	876	994	906
17	1110	508	998	898	957	830	1010	895	1020	874	940	906
18	569	226	971	904	983	821	1030	882	1010	879	928	903
19	801	341	973	886	922	855	986	878	1030	904	936	902
20	976	801	955	892	997	848	992	873	1030	885	928	909
21	1030	976	983	871	951	857	995	889	1030	898	942	908
22	1100	1030	929	830	1040	857	1020	867	1030	877	946	932
23	1130	1090	927	788	975	917	1000	884	1030	901	1130	943
24	1120	1060	922	785	1030	932	987	873	978	871	1160	1050
25	1120	1090	918	795	1010	914	980	867	999	910	1050	989
26	1120	1080	926	780	945	914	1020	860	1050	880	989	950
27	1120	1080	914	796	957	910	1010	872	1050	898	971	949
28	1120	1110	943	796	1050	895	1010	856	974	904	968	958
29	1130	1120	941	791	973	871	1010	876	1110	974	1040	886
30	1120	1110	932	782	1010	870	908	864	1100	906	911	862
31	---	---	952	792	---	---	964	871	1030	900	---	---
MONTH	1330	226	1120	780	1050	742	1060	856	1110	822	1160	849

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	11.0	9.0	15.0	9.5	17.5	13.5
2	---	---	---	---	---	---	11.0	8.0	15.0	10.0	18.0	12.5
3	---	---	---	---	---	---	10.5	6.5	13.5	8.5	15.0	13.5
4	---	---	---	---	---	---	11.0	7.0	13.5	8.5	14.0	12.0
5	---	---	---	---	---	---	10.5	6.0	14.0	11.0	12.0	10.5
6	---	---	---	---	---	---	10.0	6.0	15.0	10.5	12.5	8.5
7	---	---	---	---	---	---	9.0	5.0	15.0	10.0	13.0	9.5
8	---	---	---	---	---	---	9.0	4.5	14.0	11.5	13.0	11.0
9	---	---	---	---	---	---	9.5	5.0	15.0	11.0	14.5	9.0
10	---	---	---	---	---	---	9.5	6.0	14.5	12.5	18.0	11.0
11	---	---	---	---	---	---	10.5	6.0	14.5	12.0	19.0	12.0
12	---	---	---	---	---	---	11.0	6.5	14.0	11.5	19.0	13.5
13	---	---	---	---	---	---	11.0	6.5	13.5	12.5	20.5	14.5
14	---	---	---	---	---	---	11.5	7.0	16.0	13.0	21.0	14.0
15	---	---	---	---	10.5	6.5	12.0	8.5	17.0	13.5	21.0	14.5
16	---	---	---	---	11.0	6.5	10.5	9.0	16.0	14.0	21.0	15.5
17	---	---	---	---	11.0	7.0	13.0	9.5	15.5	12.0	22.0	16.0
18	---	---	---	---	11.0	7.0	14.5	11.0	14.5	10.5	21.5	15.0
19	---	---	---	---	11.0	7.0	14.5	11.0	16.0	11.5	20.5	14.5
20	---	---	---	---	11.5	7.5	15.0	11.5	13.5	12.5	19.5	15.0
21	---	---	---	---	11.0	6.5	15.0	12.0	13.5	10.5	19.0	12.5
22	---	---	---	---	11.0	7.0	14.5	11.5	13.5	10.0	19.0	12.0
23	---	---	---	---	10.5	6.5	13.5	9.5	13.0	10.5	20.0	12.5
24	---	---	---	---	11.0	7.0	15.5	12.0	13.0	9.0	20.0	13.0
25	---	---	---	---	11.0	6.5	14.5	13.0	14.5	11.0	20.0	14.0
26	---	---	---	---	10.5	6.5	16.5	12.0	17.0	10.5	21.0	14.0
27	---	---	---	---	11.0	6.5	14.0	9.5	15.5	12.0	17.0	15.0
28	---	---	---	---	11.0	7.5	13.0	8.5	16.5	11.5	18.0	14.5
29	---	---	---	---	10.0	6.5	12.5	8.5	16.5	12.0	18.0	14.5
30	---	---	---	---	10.0	6.0	14.0	11.0	---	---	21.0	15.0
31	---	---	---	---	10.5	8.0	14.5	12.0	---	---	20.0	14.0
MONTH	---	---	---	---	---	---	16.5	4.5	17.0	8.5	22.0	8.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.5	13.0	24.5	17.0	24.5	18.0	25.0	18.5	27.5	21.5	22.5	19.5
2	21.0	13.5	24.0	17.0	24.5	18.5	25.5	18.0	26.0	21.5	23.0	19.5
3	21.5	14.0	24.0	17.5	24.0	17.0	25.5	19.0	27.0	20.5	23.0	18.5
4	23.0	15.0	24.5	18.5	25.0	17.5	24.0	18.5	27.5	20.5	22.5	18.5
5	22.0	15.5	23.0	19.0	25.0	18.0	25.5	17.5	27.0	20.5	23.0	18.5
6	22.5	16.0	24.0	18.5	24.5	17.0	24.0	17.5	27.0	20.5	23.5	18.5
7	23.0	16.5	24.0	18.0	25.0	18.0	25.5	19.0	26.5	20.5	23.0	18.5
8	24.0	16.5	23.0	18.5	24.0	19.0	25.0	19.0	26.0	20.0	24.0	19.5
9	22.5	15.5	25.0	18.5	25.0	17.5	25.0	18.5	27.0	20.0	23.0	18.0
10	23.0	16.5	23.5	19.0	24.5	17.5	25.5	19.0	27.5	21.0	23.0	18.0
11	24.0	15.5	23.0	17.0	25.5	17.0	25.5	19.5	26.5	20.5	23.5	18.0
12	23.0	15.5	23.5	16.0	25.5	17.5	26.0	20.0	25.5	21.5	24.0	19.0
13	22.0	15.5	23.0	16.0	25.5	19.5	25.5	18.5	25.0	20.0	24.0	20.0
14	20.0	16.5	22.5	16.5	26.0	19.5	25.5	20.0	26.5	21.5	24.5	19.5
15	21.0	15.0	21.5	16.0	26.0	19.5	26.0	20.5	26.5	21.5	25.5	20.5
16	21.0	15.0	21.5	17.0	24.5	20.0	24.5	19.0	27.0	21.0	25.5	21.0
17	18.0	15.5	22.5	16.0	25.0	20.0	26.0	18.0	27.0	20.5	24.5	21.0
18	15.5	13.0	23.5	16.5	24.5	19.0	27.0	20.0	25.5	20.5	25.0	21.0
19	20.5	13.5	23.5	17.5	25.0	19.0	27.5	19.5	25.0	19.5	24.5	20.0
20	22.0	15.0	24.5	18.0	25.0	18.5	27.0	20.5	24.5	19.5	24.5	21.0
21	19.0	16.0	24.5	18.5	25.5	20.0	26.5	20.5	25.5	20.0	23.0	21.0
22	20.5	15.5	24.0	18.5	26.0	19.0	25.5	20.0	25.5	20.0	22.0	20.5
23	21.5	16.5	22.5	19.0	24.5	19.5	25.0	19.5	25.0	20.0	23.0	20.0
24	23.5	16.5	21.5	19.0	25.0	19.0	26.0	19.0	26.0	21.0	23.5	18.5
25	24.5	17.0	20.5	18.5	22.0	19.0	26.5	20.0	26.0	20.5	23.5	19.0
26	25.5	18.0	24.5	18.5	26.5	19.0	26.5	20.5	25.0	21.0	23.5	19.5
27	24.0	18.0	25.0	18.0	26.5	20.0	27.5	20.0	24.5	20.0	22.5	21.0
28	22.0	18.0	25.0	18.5	26.0	20.0	26.0	20.5	23.5	21.0	23.0	21.0
29	23.5	16.5	25.0	18.5	25.5	19.0	26.0	21.0	21.5	20.5	23.5	21.0
30	24.0	16.5	24.5	18.5	25.5	19.5	26.0	20.5	22.0	20.0	23.5	20.5
31	---	---	24.5	19.0	---	---	26.5	21.0	24.0	19.5	---	---
MONTH	25.5	13.0	25.0	16.0	26.5	17.0	27.5	17.5	27.5	19.5	25.5	18.0

11044250 RAINBOW CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°24'27", long 117°12'00", NW 1/4 SE 1/4 sec.9, T.9 S., R.3 W., San Diego County, Hydrologic Unit 18070302, on left bank, 1.0 mi upstream from the confluence with Santa Margarita River, and 3.4 mi northeast of Fallbrook.

DRAINAGE AREA.—10.3 mi^2.

PERIOD OF RECORD.—November 1989 to current year.

REVISED RECORDS.—WDR CA-91-1: 1990(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 540 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation upstream from station. Undetermined amount of water upstream from station used for irrigation by a local nursery. Natural flow affected by return flow from irrigated areas. Water is imported for domestic use and irrigation. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,000 ft^3/s (estimated), Jan. 16, 1993, gage height, unknown, on basis of slope-area measurement of peak flow; maximum recorded gage height, 8.35 ft, Feb. 23, 1998; minimum daily, 0.04 ft^3/s, July 23, 24, July 27 to Aug. 1, and Aug. 3, 1996.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 712 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1815	342	5.34	Apr. 18	0930	115	4.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.08	.18	.52	.53	.97	.34	.42	.27	.09	.08	.06
2	.12	.08	.19	.54	.41	1.2	.45	.41	.40	.12	.07	.06
3	.13	.09	.18	.41	.38	1.2	.43	.53	.48	.08	.07	.06
4	.13	.13	.17	.43	.39	3.3	.43	.43	.35	.08	.07	.06
5	.15	.14	.17	.31	.51	11	.56	.49	.28	.09	.07	.06
6	.17	.14	.17	.26	.44	2.6	.59	.42	.43	.12	.07	.05
7	.24	.14	.17	.25	.44	1.7	.49	.45	.35	.10	.07	.05
8	.14	.14	.17	.25	.40	5.7	.56	.45	.44	.08	.10	.05
9	.10	.15	.16	.29	.41	1.8	.58	.42	.36	.08	.09	.05
10	.09	.15	.18	.26	1.2	.97	.64	.34	.42	.10	.07	.05
11	.08	.14	.26	.26	1.1	.77	.52	.31	.44	.12	.06	.05
12	.08	.12	.27	.30	7.3	.92	.47	.28	.33	.14	.06	.05
13	.08	.13	.24	.27	2.4	.67	.47	.25	.17	.11	.06	.05
14	.09	.14	.21	.25	1.7	.72	.66	.34	.16	.08	.06	.05
15	.11	.14	.17	.24	.91	.70	.72	.31	.17	.08	.06	.05
16	.14	.15	.17	.26	3.5	.80	.57	.33	.14	.08	.06	.05
17	.13	.16	.16	.31	3.3	.63	6.4	.46	.18	.07	.06	.05
18	.10	.16	.19	.33	1.2	.70	12	.38	.14	.07	.06	.05
19	.09	.16	.17	.26	1.1	.73	1.1	.36	.14	.07	.07	.06
20	.08	.17	.15	.25	3.9	.59	.62	.38	.19	.07	.07	.06
21	.08	.17	.18	.26	49	.54	.44	.32	.15	.11	.07	.06
22	.27	.18	.19	.26	5.1	.63	.68	.32	.15	.11	.07	.07
23	.15	.17	.16	.26	13	.50	.59	.45	.16	.07	.06	.06
24	.17	.16	.15	.31	3.6	.57	.54	.40	.19	.10	.06	.06
25	.15	.15	.15	.72	1.9	.61	.46	.62	.18	.12	.06	.06
26	.13	.16	.15	.78	1.6	.63	.40	.54	.13	.10	.06	.06
27	.25	.16	.27	.50	2.3	.58	.41	.31	.11	.19	.06	.07
28	.17	.17	.26	.45	2.1	.46	.60	.53	.13	.29	.06	.07
29	.14	.16	.28	.40	1.1	.49	.41	.31	.11	.34	.06	.07
30	.11	.17	.28	.52	---	.49	.52	.29	.13	.16	.06	.07
31	.09	---	.28	1.6	---	.37	---	.25	---	.12	.06	---
TOTAL	4.04	4.36	6.08	12.31	111.22	43.54	33.65	12.10	7.28	3.54	2.06	1.72
MEAN	.13	.15	.20	.40	3.84	1.40	1.12	.39	.24	.11	.066	.057
MAX	.27	.18	.28	1.6	49	11	12	.62	.48	.34	.10	.07
MIN	.08	.08	.15	.24	.38	.37	.34	.25	.11	.07	.06	.05
AC-FT	8.0	8.6	12	24	221	86	67	24	14	7.0	4.1	3.4

11044250 RAINBOW CREEK NEAR FALLBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.50	.89	1.14	14.1	14.4	10.6	3.11	1.39	.74	.39	.33	.45
MAX	.95	3.40	2.72	97.3	58.9	55.4	9.20	5.73	2.07	.90	.75	1.25
(WY)	1998	1997	1997	1993	1998	1995	1998	1998	1998	1990	1995	1995
MIN	.13	.15	.20	.40	1.32	.71	.63	.24	.15	.066	.066	.057
(WY)	2000	2000	2000	2000	1999	1999	1997	1996	1997	1996	1997	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	246.49		241.90			
ANNUAL MEAN	.68		.66		4.23	
HIGHEST ANNUAL MEAN					14.4	1993
LOWEST ANNUAL MEAN					.66	2000
HIGHEST DAILY MEAN	17	Jan 26	49	Feb 21	800	Jan 16 1993
LOWEST DAILY MEAN	.08	Jul 14	.05	Sep 6	.04	Jul 23 1996
ANNUAL SEVEN-DAY MINIMUM	.09	Jul 22	.05	Sep 6	.04	Jul 26 1996
INSTANTANEOUS PEAK FLOW			342	Feb 21	e8000	Jan 16 1993
INSTANTANEOUS PEAK STAGE			5.34	Feb 21	8.35	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	489		480		3070	
10 PERCENT EXCEEDS	1.2		.79		5.3	
50 PERCENT EXCEEDS	.21		.19		.59	
90 PERCENT EXCEEDS	.10		.06		.14	

e Estimated.

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA

LOCATION.—Lat 33°24'49", long 117°14'25", in NW 1/4 NW 1/4 sec.7, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 0.3 mi upstream from confluence with Sandia Creek, and 2.9 mi north of Fallbrook.

DRAINAGE AREA.—620 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1989 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 330 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated since November 1948 by Vail Lake (station 11042510) and since 1974 by Skinner Reservoir. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 34,000 ft^3/s, estimated, based on regression equation and flood routing of upstream flows, Jan. 16, 1993, gage height, 15.89 ft; no flow several days in 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.5	1.3	3.0	5.5	13	3.2	5.3	4.5	3.1	2.9	3.1
2	2.8	3.4	1.7	3.8	4.6	11	3.2	6.0	4.4	3.5	2.7	3.1
3	4.0	2.3	1.9	3.4	3.7	9.0	3.1	5.4	5.6	3.3	2.8	3.1
4	3.5	2.0	1.8	3.1	4.8	12	3.5	6.8	5.2	3.4	3.1	3.1
5	3.4	1.9	2.1	3.2	1.9	151	3.8	6.7	4.4	3.2	3.2	3.2
6	3.6	2.3	2.2	2.3	3.1	120	4.0	6.9	4.2	3.4	3.2	3.5
7	4.0	1.9	1.9	1.9	2.5	31	4.6	7.6	4.1	3.2	4.0	2.8
8	3.0	2.2	1.9	1.9	3.1	87	4.8	10	4.9	2.8	4.5	3.7
9	2.7	1.9	2.1	1.9	2.9	164	6.0	9.7	4.9	3.4	4.6	2.9
10	3.1	1.7	2.5	1.9	3.5	34	4.4	8.5	4.8	3.2	4.6	2.5
11	3.2	1.3	2.5	2.4	29	14	4.3	8.0	5.3	3.4	4.2	2.8
12	2.7	1.1	3.2	2.4	48	7.9	4.3	7.6	4.6	2.9	4.3	2.5
13	2.7	.98	3.1	2.3	28	5.9	8.9	6.9	4.0	2.8	4.4	3.0
14	3.1	1.1	2.9	2.4	18	4.7	7.8	7.9	4.2	2.5	4.5	3.9
15	3.8	1.5	2.7	3.0	7.6	4.7	9.9	7.5	4.5	2.4	4.6	e3.3
16	4.4	1.4	2.6	3.1	5.0	4.5	8.6	6.0	4.5	2.6	4.6	e3.0
17	4.7	1.6	2.1	3.4	25	4.5	13	7.1	4.9	2.6	4.5	e2.8
18	4.2	1.7	2.1	3.1	17	3.9	153	6.4	5.5	2.4	4.6	e3.2
19	4.0	1.9	2.7	3.2	7.2	4.0	44	5.8	5.5	2.4	4.6	3.5
20	4.8	2.1	2.3	2.5	21	4.1	16	5.5	4.8	1.8	4.6	2.8
21	3.6	2.7	2.0	2.5	643	3.8	9.1	5.0	4.2	2.0	4.6	2.7
22	3.4	2.4	2.0	2.5	321	4.0	7.0	5.1	3.2	2.0	4.6	2.7
23	4.0	1.8	1.9	2.8	129	4.2	7.7	6.5	3.5	1.5	4.6	2.9
24	4.2	1.8	1.9	3.1	208	4.1	6.3	9.2	3.7	1.7	4.6	3.7
25	4.2	1.5	2.2	3.3	42	4.3	6.1	10	3.7	1.8	3.8	2.6
26	4.3	1.5	2.2	6.4	24	5.0	5.2	9.3	2.8	1.9	3.8	2.3
27	4.8	1.6	1.8	5.2	19	4.6	5.1	6.6	2.2	2.0	3.8	2.8
28	6.2	1.7	1.8	6.1	24	4.3	6.1	6.6	2.2	2.5	3.8	3.5
29	6.1	1.7	1.9	4.0	17	4.1	5.2	5.1	2.8	2.5	3.2	3.7
30	4.6	1.4	2.1	3.1	---	4.1	5.2	4.8	3.4	3.1	3.4	4.0
31	4.4	---	2.3	5.7	---	3.9	---	4.5	---	2.6	3.7	---
TOTAL	120.2	56.88	67.7	98.9	1668.4	736.6	373.4	214.3	126.5	81.9	124.4	92.7
MEAN	3.88	1.90	2.18	3.19	57.5	23.8	12.4	6.91	4.22	2.64	4.01	3.09
MAX	6.2	4.5	3.2	6.4	643	164	153	10	5.6	3.5	4.6	4.0
MIN	2.7	.98	1.3	1.9	1.9	3.8	3.1	4.5	2.2	1.5	2.7	2.3
AC-FT	238	113	134	196	3310	1460	741	425	251	162	247	184

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	6.52	7.20	12.8	183	200	114	25.8	17.9	8.65	5.39	4.79	5.07
MAX	15.7	24.4	37.1	1462	860	490	70.4	58.3	25.1	11.4	10.1	9.03
(WY)	1994	1997	1998	1993	1993	1991	1993	1998	1993	1993	1993	1993
MIN	3.88	1.48	1.66	3.19	10.8	2.50	4.51	6.12	2.43	2.11	1.00	1.22
(WY)	2000	1992	1990	2000	1999	1990	1990	1997	1997	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	2508.78		3761.88			
ANNUAL MEAN	6.87		10.3		48.5	
HIGHEST ANNUAL MEAN					220	1993
LOWEST ANNUAL MEAN					5.99	1990
HIGHEST DAILY MEAN	80	Jan 27	643	Feb 21	14300	Jan 16 1993
LOWEST DAILY MEAN	.98	Nov 13	.98	Nov 13	.00	Aug 1 1990
ANNUAL SEVEN-DAY MINIMUM	1.3	Nov 11	1.3	Nov 11	.05	Jul 31 1990
INSTANTANEOUS PEAK FLOW			3510	Feb 21	e34000	Jan 16 1993
INSTANTANEOUS PEAK STAGE			5.55	Feb 21	15.89	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	4980		7460		35160	
10 PERCENT EXCEEDS	11		9.1		44	
50 PERCENT EXCEEDS	5.2		3.7		6.2	
90 PERCENT EXCEEDS	2.1		1.9		2.4	

e Estimated.

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1999 to September 2000.
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
WATER TEMPERATURE: December 1999 to September 2000.

PERIOD OF DAILY RECORD.—December 1999 to September 2000.
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
WATER TEMPERATURE: December 1999 to September 2000.

INSTRUMENTATION.—Water-quality monitor since December 1999.

REMARKS.—Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 17.9 mg/L, Mar. 23, 2000; minimum recorded, 4.5 mg/L, May 12, 2000.
pH: Maximum recorded, 9.2 standard units, Mar. 22, 2000; minimum recorded, 7.2 standard units, Apr. 19–20, 2000.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,690 microsiemens, Apr. 11–12, 14, 2000; minimum recorded, 474 microsiemens, Feb. 21, 2000.
WATER TEMPERATURE: Maximum recorded, 27.5˚C, June 27, 29, and Aug. 5, 2000; minimum recorded, 4.5˚C, Jan. 8, 2000.

EXTREMES FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 17.9 mg/L, Mar. 23; minimum recorded, 4.5 mg/L, May 12.
pH: Maximum recorded, 9.2 standard units, Mar. 22; minimum recorded, 7.2 standard units, Apr. 19–20.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,690 microsiemens, Apr. 11–12, 14; minimum recorded, 474 microsiemens, Feb. 21.
WATER TEMPERATURE: Maximum recorded, 27.5˚C, June 27, 29, and Aug. 5; minimum recorded, 4.5˚C, Jan. 8.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	11.2	7.7	10.9	7.7	9.8	8.7
2	---	---	---	---	---	---	11.4	8.1	11.4	7.9	10.1	8.6
3	---	---	---	---	---	---	11.5	9.2	11.6	8.6	9.7	8.8
4	---	---	---	---	---	---	11.7	9.8	12.0	7.9	10.2	9.1
5	---	---	---	---	---	---	11.8	9.7	11.1	6.9	11.7	10.0
6	---	---	---	---	---	---	11.8	9.9	11.3	7.6	11.8	10.7
7	---	---	---	---	---	---	12.2	10.1	10.9	7.0	11.8	10.6
8	---	---	---	---	---	---	12.5	10.5	10.6	7.7	11.9	10.8
9	---	---	---	---	---	---	12.5	10.6	11.1	7.8	12.3	10.8
10	---	---	---	---	---	---	12.5	10.4	9.7	7.1	12.0	9.9
11	---	---	---	---	---	---	12.2	10.0	9.5	7.2	11.2	9.3
12	---	---	---	---	---	---	11.7	9.2	9.3	8.1	11.0	9.3
13	---	---	---	---	---	---	11.7	9.0	8.9	8.0	10.4	9.1
14	---	---	---	---	---	---	12.4	8.6	9.1	7.9	10.8	8.9
15	---	---	---	---	---	---	11.6	8.5	9.3	7.6	10.9	9.0
16	---	---	---	---	12.1	10.1	9.7	7.7	8.7	7.7	11.5	9.1
17	---	---	---	---	11.8	9.8	11.1	8.0	9.5	8.0	12.2	9.0
18	---	---	---	---	11.9	9.6	10.2	7.4	10.6	8.4	13.4	9.0
19	---	---	---	---	11.7	9.3	10.9	7.6	10.1	7.8	14.5	9.0
20	---	---	---	---	11.2	9.2	10.9	7.4	9.3	7.8	16.2	8.9
21	---	---	---	---	11.5	9.4	10.7	6.9	11.0	9.2	17.0	9.5
22	---	---	---	---	12.3	9.7	11.3	7.3	11.0	9.2	17.8	9.8
23	---	---	---	---	12.1	10.0	11.6	8.1	10.8	7.8	17.9	9.9
24	---	---	---	---	12.0	9.8	11.5	7.5	11.0	9.8	17.7	9.4
25	---	---	---	---	11.6	9.5	8.4	6.7	10.3	9.4	17.5	9.3
26	---	---	---	---	11.5	9.5	10.1	6.6	10.6	8.8	16.7	8.9
27	---	---	---	---	11.6	9.3	11.1	7.5	10.2	9.1	15.0	8.7
28	---	---	---	---	11.6	9.3	11.3	8.2	10.2	9.2	14.4	9.3
29	---	---	---	---	11.8	9.5	11.7	8.4	10.3	9.0	14.4	8.9
30	---	---	---	---	11.8	9.5	11.2	7.9	---	---	14.1	8.7
31	---	---	---	---	10.7	8.7	10.9	6.9	---	---	14.2	8.3
MONTH	---	---	---	---	---	---	12.5	6.6	12.0	6.9	17.9	8.3

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.9	8.3	8.9	6.0	8.3	5.7	8.9	5.9	9.1	5.9	7.5	5.5
2	13.5	8.1	8.9	5.8	8.6	5.7	9.0	6.2	9.3	5.8	8.0	5.9
3	13.2	7.6	8.9	5.7	8.9	6.2	9.2	6.2	9.2	5.7	8.0	6.3
4	12.8	7.6	8.9	5.8	8.6	6.4	9.1	6.2	8.9	5.6	8.1	6.3
5	12.0	7.1	8.9	6.0	8.7	6.1	9.4	6.5	8.6	5.4	8.1	6.4
6	11.9	6.8	9.0	6.2	9.1	6.2	9.7	6.7	8.4	5.5	8.0	6.2
7	11.8	6.9	9.0	6.0	8.9	6.3	9.8	6.4	8.3	5.4	7.7	6.3
8	11.4	6.8	8.6	5.9	8.8	6.2	9.6	6.3	8.2	5.6	8.0	6.5
9	11.6	6.8	9.1	6.1	9.1	6.9	9.5	6.6	8.4	5.5	8.2	6.4
10	11.2	6.7	8.9	5.7	9.2	6.7	9.5	6.5	8.7	5.6	8.4	6.8
11	11.3	6.9	9.5	6.1	8.9	6.6	9.5	6.4	8.6	5.5	8.5	6.9
12	11.1	6.8	9.7	4.5	9.2	6.5	9.8	6.6	8.2	5.4	8.2	6.7
13	10.8	6.9	9.6	6.6	9.0	6.5	9.8	6.6	8.1	5.2	7.9	6.3
14	10.6	6.8	9.6	6.6	8.8	6.3	9.8	6.5	8.3	5.4	7.4	5.9
15	10.5	7.0	10.0	6.7	8.8	6.3	9.7	6.3	8.5	5.3	7.3	5.5
16	10.5	7.3	9.9	6.6	8.6	6.0	9.7	6.2	8.3	5.3	7.0	5.3
17	10.3	7.1	9.8	6.8	8.5	5.9	9.7	6.4	8.1	5.0	7.3	5.4
18	9.6	8.7	9.8	6.6	8.5	6.0	9.8	6.4	8.0	5.3	7.5	5.6
19	9.6	7.5	9.9	6.4	8.5	6.0	9.6	6.2	8.0	5.4	7.3	5.7
20	8.8	6.9	9.6	6.3	8.5	6.1	9.8	6.0	7.9	6.0	7.6	5.7
21	8.3	7.1	9.5	6.0	8.6	6.0	9.7	5.8	7.8	5.6	6.8	5.8
22	8.6	7.2	9.5	5.8	8.2	5.6	9.8	6.1	7.9	5.5	7.5	6.3
23	8.5	6.9	9.2	5.6	8.5	5.8	9.7	6.0	7.9	5.6	7.8	6.6
24	8.5	6.2	8.6	6.7	8.0	5.6	9.8	6.0	7.8	5.4	8.2	6.9
25	8.6	6.0	8.8	7.0	8.1	6.0	9.7	6.0	7.8	5.3	8.0	6.9
26	8.5	5.6	9.3	6.8	8.3	6.2	9.6	5.9	7.3	5.2	8.0	6.4
27	8.6	5.4	9.0	6.5	8.3	5.7	9.7	6.0	7.7	5.4	8.1	6.1
28	8.7	5.9	8.5	6.1	8.4	5.5	9.7	6.1	7.2	5.8	8.3	6.7
29	9.2	6.5	8.5	5.8	8.5	5.4	9.2	6.0	7.1	5.9	8.4	6.5
30	9.1	6.1	8.4	5.6	8.6	5.7	9.2	6.2	7.9	6.0	8.1	6.4
31	---	---	8.4	5.7	---	---	9.5	6.0	7.1	5.6	---	---
MONTH	13.9	5.4	10.0	4.5	9.2	5.4	9.8	5.8	9.3	5.0	8.5	5.3

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	8.6	7.8	7.8	7.7	8.0	7.5
2	---	---	---	---	---	---	8.5	7.6	7.9	7.8	8.1	7.5
3	---	---	---	---	---	---	8.4	7.8	7.9	7.7	7.9	7.5
4	---	---	---	---	---	---	8.4	7.8	7.9	7.8	8.1	7.7
5	---	---	---	---	---	---	8.7	7.8	8.0	7.7	8.5	7.8
6	---	---	---	---	---	---	8.2	7.8	7.8	7.6	8.0	7.6
7	---	---	---	---	---	---	8.5	7.8	7.8	7.7	7.8	7.6
8	---	---	---	---	---	---	8.4	7.8	7.9	7.8	8.7	7.7
9	---	---	---	---	---	---	8.6	7.8	7.9	7.7	8.3	7.7
10	---	---	---	---	---	---	8.4	7.8	7.9	7.7	8.1	7.7
11	---	---	---	---	---	---	8.3	7.8	7.8	7.6	8.1	7.6
12	---	---	---	---	---	---	8.4	7.8	7.9	7.5	8.2	7.8
13	---	---	---	---	---	---	8.4	7.7	7.8	7.4	8.3	8.1
14	---	---	---	---	---	---	8.4	7.7	7.7	7.4	8.3	8.0
15	---	---	---	---	---	---	8.3	7.7	7.8	7.4	8.3	8.0
16	---	---	---	---	8.1	7.9	8.1	7.5	7.8	7.6	8.5	8.1
17	---	---	---	---	8.2	7.9	8.2	7.7	7.9	7.6	8.7	8.1
18	---	---	---	---	8.2	7.9	8.1	7.7	7.8	7.6	8.7	8.1
19	---	---	---	---	8.2	7.9	8.2	7.7	7.8	7.6	8.8	8.0
20	---	---	---	---	8.2	7.9	8.0	7.7	7.9	7.6	8.9	8.0
21	---	---	---	---	8.2	7.9	8.0	7.7	8.0	7.7	9.1	8.1
22	---	---	---	---	8.2	7.9	7.9	7.7	7.9	7.6	9.2	8.1
23	---	---	---	---	8.3	7.9	7.9	7.5	8.2	7.5	8.8	8.3
24	---	---	---	---	8.3	7.9	7.9	7.6	7.9	7.5	9.0	8.2
25	---	---	---	---	8.3	7.9	7.8	7.6	7.6	7.5	9.0	8.1
26	---	---	---	---	8.2	7.9	7.8	7.6	7.6	7.4	8.9	8.1
27	---	---	---	---	8.2	7.9	7.9	7.7	7.7	7.5	8.8	8.2
28	---	---	---	---	8.4	7.8	7.9	7.7	7.8	7.6	8.7	8.2
29	---	---	---	---	8.3	7.9	8.0	7.8	7.8	7.5	8.6	8.1
30	---	---	---	---	8.5	7.8	8.0	7.8	---	---	8.3	8.0
31	---	---	---	---	8.5	7.7	7.9	7.7	---	---	8.4	8.0
MONTH	---	---	---	---	---	---	8.7	7.5	8.2	7.4	9.2	7.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.0	8.0	7.7	---	---	---	---	---	---	---	---
2	8.4	7.9	8.0	7.7	---	---	---	---	---	---	---	---
3	8.3	8.0	8.0	7.7	---	---	---	---	---	---	---	---
4	8.2	7.9	7.9	7.6	---	---	---	---	---	---	---	---
5	8.2	8.0	8.0	7.7	---	---	---	---	---	---	---	---
6	8.1	7.8	8.0	7.7	---	---	---	---	---	---	---	---
7	7.9	7.7	8.0	7.7	---	---	---	---	---	---	---	---
8	7.8	7.6	7.9	7.7	---	---	---	---	---	---	---	---
9	7.8	7.5	8.2	7.5	---	---	---	---	---	---	---	---
10	7.7	7.5	8.2	7.7	---	---	---	---	---	---	---	---
11	7.7	7.5	8.1	7.6	---	---	---	---	---	---	---	---
12	7.8	7.6	8.0	7.6	---	---	---	---	---	---	---	---
13	7.7	7.5	8.1	7.7	---	---	---	---	---	---	---	---
14	7.6	7.4	8.0	7.7	---	---	---	---	---	---	---	---
15	7.7	7.5	8.1	7.8	---	---	---	---	---	---	---	---
16	7.7	7.5	8.1	7.8	---	---	---	---	---	---	---	---
17	7.7	7.6	8.2	7.8	---	---	---	---	---	---	---	---
18	7.8	7.3	8.2	7.8	---	---	---	---	---	---	---	---
19	7.9	7.2	8.1	7.6	---	---	---	---	---	---	---	---
20	7.4	7.2	8.2	7.5	---	---	---	---	---	---	---	---
21	7.5	7.3	8.2	7.4	---	---	---	---	---	---	---	---
22	7.8	7.4	8.1	7.4	---	---	---	---	---	---	---	---
23	7.9	7.6	8.1	7.6	---	---	---	---	---	---	---	---
24	7.9	7.5	8.3	8.1	---	---	---	---	---	---	---	---
25	8.3	7.8	8.4	8.1	---	---	---	---	---	---	---	---
26	8.1	7.7	---	---	---	---	---	---	---	---	---	---
27	8.2	7.9	---	---	---	---	---	---	---	---	---	---
28	8.1	7.7	---	---	---	---	---	---	---	---	7.9	7.7
29	8.0	7.6	---	---	---	---	---	---	---	---	7.8	7.7
30	8.0	7.6	---	---	---	---	---	---	---	---	7.8	7.6
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	8.5	7.2	---	---	---	---	---	---	---	---	---	---

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	1570	1560	1580	1540	1100	1070
2	---	---	---	---	---	---	1580	1560	1540	1530	1130	1100
3	---	---	---	---	---	---	1590	1570	1550	1530	1150	1130
4	---	---	---	---	---	---	1580	1560	1590	1530	1160	1150
5	---	---	---	---	---	---	1580	1560	1550	1530	1160	504
6	---	---	---	---	---	---	1580	1560	1540	1530	837	508
7	---	---	---	---	---	---	1590	1560	1540	1520	1080	837
8	---	---	---	---	---	---	1590	1560	1530	1520	1220	611
9	---	---	---	---	---	---	1590	1550	1530	1510	814	524
10	---	---	---	---	---	---	1580	1550	1520	1480	1050	814
11	---	---	---	---	---	---	1580	1550	1670	1500	1220	1050
12	---	---	---	---	---	---	1570	1550	1590	831	1320	1220
13	---	---	---	---	---	---	1570	1540	950	731	1400	1310
14	---	---	---	---	---	---	1570	1540	937	769	1440	1400
15	---	---	---	---	---	---	1550	1530	936	806	1490	1440
16	---	---	---	---	1590	1560	1550	1540	982	935	1510	1480
17	---	---	---	---	1590	1560	1550	1530	1020	880	1510	1490
18	---	---	---	---	1590	1570	1540	1530	969	911	1520	1500
19	---	---	---	---	1600	1570	1580	1520	1020	969	1550	1510
20	---	---	---	---	1590	1570	1540	1530	1030	672	1560	1530
21	---	---	---	---	1590	1570	1530	1520	672	474	1570	1530
22	---	---	---	---	1600	1570	1530	1520	628	476	1570	1530
23	---	---	---	---	1600	1570	1530	1520	703	553	1570	1540
24	---	---	---	---	1600	1570	1520	1510	553	523	1610	1490
25	---	---	---	---	1590	1570	1530	1500	792	546	1580	1470
26	---	---	---	---	1590	1560	1570	1530	948	792	1600	1510
27	---	---	---	---	1590	1560	1560	1550	1010	948	1600	1550
28	---	---	---	---	1590	1560	1560	1540	1050	1010	1610	1570
29	---	---	---	---	1590	1560	1550	1540	1070	1050	1610	1570
30	---	---	---	---	1590	1560	1550	1530	---	---	1610	1570
31	---	---	---	---	1580	1560	1560	1510	---	---	1610	1570
MONTH	---	---	---	---	---	---	1590	1500	1670	474	1610	504

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1600	1570	1440	1420	1320	1290	1340	1320	1290	1260	1300	1280
2	1630	1590	1450	1430	1320	1300	1330	1310	1290	1260	1290	1280
3	1640	1600	1440	1430	1320	1290	1330	1310	1290	1260	1300	1280
4	1640	1610	1440	1420	1330	1300	1330	1310	1280	1250	1290	1280
5	1650	1620	1430	1420	1320	1280	1320	1300	1280	1260	1300	1280
6	1660	1630	1430	1410	1330	1280	1310	1300	1280	1250	1310	1290
7	1670	1640	1420	1400	1330	1290	1310	1300	1280	1250	1310	1300
8	1670	1640	1410	1380	1330	1290	1310	1300	1270	1240	1310	1300
9	1670	1640	1400	1380	1330	1290	1310	1290	1270	1250	1310	1290
10	1680	1650	1400	1370	1320	1280	1320	1300	1280	1230	1300	1280
11	1690	1660	1400	1370	1330	1290	1330	1310	1270	1250	1290	1250
12	1690	1660	1390	1370	1330	1290	1330	1310	1280	1260	1290	1260
13	1680	1660	1390	1370	1320	1290	1330	1320	1290	1270	1290	1260
14	1690	1650	1380	1360	1300	1280	1320	1300	1290	1280	1290	1280
15	1660	1630	1400	1370	1300	1280	1300	1290	1300	1290	1290	1280
16	1650	1610	1390	1370	1300	1280	1290	1280	1310	1290	1280	1270
17	1620	1420	1390	1370	1290	1270	1290	1270	1310	1300	1280	1270
18	1420	559	1390	1370	1300	1280	1290	1270	1310	1290	1280	1270
19	878	578	1390	1360	1300	1270	1290	1270	1300	1290	1280	1260
20	1010	878	1380	1350	1300	1270	1290	1280	1300	1280	1280	1250
21	1080	1010	1380	1350	1310	1290	1290	1280	1300	1280	1270	1260
22	1200	1080	1380	1350	1320	1300	1290	1270	1300	1280	1280	1260
23	1250	1200	1370	1350	1320	1300	1290	1270	1290	1280	1270	1260
24	1300	1240	1360	1330	1330	1310	1290	1270	1290	1280	1270	1240
25	1330	1300	1340	1300	1320	1300	1290	1270	1280	1280	1290	1270
26	1370	1330	1340	1310	1350	1310	1290	1270	1290	1270	1290	1270
27	1390	1360	1340	1320	1350	1330	1290	1260	1280	1270	1290	1260
28	1400	1380	1330	1310	1350	1330	1270	1220	1290	1260	1280	1270
29	1420	1400	1350	1320	1340	1330	1320	1240	1270	1250	1290	1270
30	1420	1400	1350	1310	1340	1320	1330	1280	1270	1250	1300	1280
31	---	---	1340	1310	---	---	1300	1280	1300	1260	---	---
MONTH	1690	559	1450	1300	1350	1270	1340	1220	1310	1230	1310	1240

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	10.0	8.0	14.0	10.5	17.5	12.5
2	---	---	---	---	---	---	11.0	7.5	13.5	10.0	17.5	11.0
3	---	---	---	---	---	---	9.5	6.0	13.0	9.0	15.5	13.0
4	---	---	---	---	---	---	10.0	6.5	12.0	8.5	13.5	11.5
5	---	---	---	---	---	---	10.0	6.0	14.0	11.0	12.5	10.5
6	---	---	---	---	---	---	10.0	6.0	15.0	11.0	13.5	10.0
7	---	---	---	---	---	---	9.0	5.0	15.5	11.0	13.0	9.5
8	---	---	---	---	---	---	9.0	4.5	13.5	12.0	13.0	11.5
9	---	---	---	---	---	---	9.0	5.0	15.0	11.0	14.5	10.5
10	---	---	---	---	---	---	9.5	5.5	14.0	12.5	17.0	9.5
11	---	---	---	---	---	---	9.5	5.5	14.0	12.0	19.0	11.5
12	---	---	---	---	---	---	11.5	7.0	14.5	12.5	18.5	12.0
13	---	---	---	---	---	---	11.5	7.0	14.0	12.5	19.5	14.0
14	---	---	---	---	---	---	12.0	7.5	15.0	13.0	20.0	12.5
15	---	---	---	---	---	---	12.5	8.0	15.5	12.5	20.5	14.5
16	---	---	---	---	10.5	6.5	10.5	8.5	14.5	13.5	21.0	15.5
17	---	---	---	---	11.0	6.5	13.0	10.0	14.0	11.5	22.0	16.0
18	---	---	---	---	10.5	7.0	15.0	11.5	13.5	10.0	21.0	14.0
19	---	---	---	---	10.5	7.0	15.0	11.5	14.5	10.5	20.5	14.0
20	---	---	---	---	11.5	7.0	15.0	11.5	14.0	12.5	20.0	15.5
21	---	---	---	---	11.0	6.5	15.5	12.0	14.0	11.0	19.0	12.5
22	---	---	---	---	10.0	6.0	14.5	10.5	13.5	10.5	18.5	12.0
23	---	---	---	---	10.0	5.5	12.5	9.5	13.0	11.5	19.0	12.0
24	---	---	---	---	10.5	5.5	14.5	11.0	13.0	10.0	19.0	12.5
25	---	---	---	---	10.5	6.0	13.5	12.5	14.0	10.5	20.0	14.5
26	---	---	---	---	10.5	6.5	15.0	12.0	16.0	10.0	20.0	13.5
27	---	---	---	---	10.5	6.0	13.5	10.0	15.0	11.0	17.0	14.5
28	---	---	---	---	10.5	6.0	13.0	9.5	16.0	11.0	17.0	14.5
29	---	---	---	---	10.5	6.0	12.0	9.0	16.0	11.0	19.0	14.5
30	---	---	---	---	10.0	5.5	13.5	10.0	---	---	20.5	15.0
31	---	---	---	---	9.5	7.0	14.0	12.0	---	---	19.5	13.5
MONTH	---	---	---	---	---	---	15.5	4.5	16.0	8.5	22.0	9.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.0	12.5	24.5	17.0	25.5	19.5	26.5	21.0	26.0	21.5	23.5	20.0
2	20.5	13.5	24.5	17.0	26.0	19.5	25.5	20.0	26.5	21.5	23.5	18.5
3	21.5	14.0	24.5	18.5	25.0	18.0	26.0	20.5	27.0	21.5	23.0	18.0
4	22.5	14.5	24.0	19.0	25.0	17.5	25.5	20.5	27.0	21.5	23.0	17.5
5	20.0	16.0	23.0	19.5	25.5	19.5	25.0	19.5	27.5	21.5	22.5	17.5
6	22.0	16.5	25.0	19.0	25.0	17.5	24.5	18.0	27.0	21.5	23.0	17.5
7	22.5	17.0	25.0	19.0	25.5	19.0	25.5	20.0	27.0	22.5	20.0	17.5
8	23.5	17.0	22.5	19.5	22.5	19.5	25.5	20.5	26.5	21.5	23.0	17.5
9	22.5	16.5	25.5	19.0	24.0	17.5	24.0	19.5	26.5	21.0	21.5	16.5
10	23.5	18.0	24.5	20.0	24.0	18.0	25.0	20.0	26.5	20.5	21.0	16.0
11	23.5	16.0	23.5	18.0	24.5	18.5	24.5	20.0	26.5	20.5	21.5	16.0
12	24.0	16.5	23.5	16.0	25.0	18.0	25.0	19.5	26.5	20.5	22.0	17.0
13	22.5	16.0	23.5	16.0	25.5	19.0	25.0	19.5	26.5	20.5	22.0	18.0
14	23.0	17.5	23.0	17.0	25.5	19.5	25.0	19.5	27.0	21.0	23.0	19.0
15	21.0	15.5	22.0	16.5	25.5	19.0	26.5	21.0	26.5	21.0	24.0	20.5
16	21.5	15.0	23.0	17.5	26.0	21.0	26.0	21.0	27.0	21.5	23.0	20.0
17	18.5	15.0	23.0	16.0	26.0	21.0	26.0	20.5	26.5	21.5	23.0	19.5
18	18.5	14.5	24.0	16.5	26.0	21.0	26.5	20.0	26.5	21.0	23.0	19.5
19	20.5	13.5	24.0	17.5	26.5	21.0	26.5	20.0	26.5	20.0	22.5	18.5
20	22.5	15.0	25.0	18.0	26.0	20.0	26.5	20.0	25.5	20.0	23.5	20.0
21	20.5	16.5	25.5	18.5	25.0	21.0	26.0	21.5	26.5	21.0	21.0	19.5
22	19.5	16.5	25.0	20.0	26.5	20.5	26.0	20.5	26.0	21.0	19.5	18.5
23	21.0	16.5	22.0	20.0	25.5	21.0	27.0	21.0	26.5	21.5	21.5	18.5
24	23.5	17.0	20.0	19.0	26.5	21.0	26.5	20.5	27.0	22.0	20.0	16.5
25	24.5	17.0	19.0	18.5	24.0	20.5	27.0	20.5	27.0	22.5	21.5	17.5
26	25.0	17.5	24.0	18.0	26.5	20.5	26.5	21.5	27.0	22.5	21.5	18.0
27	24.5	18.0	25.0	18.0	27.5	21.0	26.0	20.0	24.0	22.0	19.5	19.0
28	21.5	19.0	26.0	19.0	27.0	21.5	26.0	20.0	22.5	22.0	20.5	18.5
29	23.5	16.0	25.5	19.0	27.5	22.0	25.0	21.5	22.0	21.0	22.0	19.0
30	24.0	16.0	25.5	20.0	27.0	22.0	25.5	21.5	23.0	20.5	21.5	19.0
31	---	---	26.0	20.5	---	---	26.0	21.5	24.5	20.5	---	---
MONTH	25.0	12.5	26.0	16.0	27.5	17.5	27.0	18.0	27.5	20.0	24.0	16.0

11044350 SANDIA CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°25'28", long 117°14'54", in SW 1/4 NE 1/4 sec.1, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 1.05 mi north of intersection of Sandia and Rock Mountain Roads, 0.8 mi upstream from mouth, and 3.8 mi north of Fallbrook.

DRAINAGE AREA.—21.1 mi^2.

PERIOD OF RECORD.—October 1989 to current year.

REVISED RECORDS.—WDR CA-91-1: 1990(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 380 ft above sea level, from topographic map. Prior to Sept. 30, 1993, at site 0.65 mi downstream at different datum.

REMARKS.—Records fair. No regulation or diversion upstream from station. Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,100 ft^3/s, Jan. 16, 1993, gage height, 17.60 ft, site and datum then in use, from floodmarks (may have been affected by backwater from the Santa Margarita River); no flow for many days in summer of 1996.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft^3/s, or maximum, from rating curve extended above 536 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1930	520	3.96	Mar. 8	1615	162	3.00
Mar. 5	1430	94	2.77				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.86	2.7	3.1	4.0	8.2	5.4	3.8	3.5	1.4	3.0	2.4
2	.62	1.3	2.7	3.1	4.0	8.3	4.4	4.6	3.1	1.4	2.3	1.0
3	.59	1.3	2.6	2.9	3.7	8.5	5.0	4.8	1.9	1.7	1.5	.78
4	1.3	2.0	1.7	2.1	3.1	8.8	5.9	4.6	1.3	3.1	.98	.82
5	2.0	1.6	.84	2.7	3.2	28	6.4	4.4	2.4	2.7	.45	1.6
6	2.1	1.1	1.3	2.6	3.1	15	6.2	3.0	2.8	3.0	.68	2.3
7	2.1	1.8	2.4	2.6	2.9	13	6.8	3.2	2.9	2.7	.84	2.3
8	1.5	1.7	2.4	2.0	3.0	40	5.9	5.2	3.3	1.7	1.6	2.5
9	1.2	2.5	2.4	1.0	2.9	20	5.2	5.4	2.9	1.6	1.4	1.3
10	.49	2.5	2.7	1.4	3.6	14	5.6	4.7	1.8	2.7	1.6	.60
11	.46	2.3	2.3	2.5	5.8	12	6.2	5.0	1.5	3.1	.99	.79
12	.81	1.7	2.3	2.9	8.2	11	6.0	4.3	2.3	2.5	.38	1.8
13	1.5	.88	2.9	2.8	6.3	11	5.7	2.8	3.3	3.0	.22	1.0
14	1.5	.72	2.6	2.5	6.3	10	5.5	2.0	2.9	2.4	.33	1.4
15	1.0	1.9	2.5	2.2	5.7	10	5.0	2.7	2.4	1.7	.99	1.4
16	.72	2.4	2.5	1.4	5.9	8.6	4.5	4.0	3.0	1.4	1.1	1.1
17	.61	2.6	2.6	2.2	6.6	9.0	7.5	4.3	2.2	1.7	.74	.51
18	.90	2.5	2.1	2.6	5.6	8.7	14	4.4	1.8	4.1	1.1	.67
19	1.4	2.6	1.8	3.0	5.2	8.6	10	3.9	2.5	2.3	.51	1.8
20	1.2	2.1	2.2	2.9	7.5	8.3	8.3	2.7	3.4	2.0	.21	1.9
21	1.6	1.4	2.3	2.5	85	7.9	7.2	1.8	2.8	2.9	.28	1.9
22	1.2	1.4	2.4	2.4	22	7.7	8.8	2.5	2.7	2.0	.87	2.8
23	.61	2.4	2.3	1.3	28	7.3	7.9	4.1	3.1	1.6	1.5	3.1
24	.55	2.3	2.3	1.8	16	7.1	6.7	5.0	1.8	2.0	1.9	1.7
25	1.0	2.4	2.5	3.7	11	6.7	5.8	6.0	1.6	1.6	1.4	2.5
26	1.4	2.3	2.5	3.8	10	5.6	5.8	5.5	1.9	1.9	.85	3.0
27	1.4	2.2	2.3	3.5	9.4	7.1	5.6	3.7	3.0	2.3	.54	3.4
28	1.8	2.7	2.0	3.3	9.3	7.8	5.5	2.4	2.6	2.4	1.3	3.8
29	1.5	2.7	2.4	2.9	8.4	7.5	3.8	1.9	2.1	2.1	2.9	3.5
30	.58	2.5	2.3	2.2	---	7.4	3.6	2.4	2.4	2.0	3.1	1.9
31	.61	---	2.6	3.5	---	6.7	---	3.6	---	1.9	2.7	---
TOTAL	35.22	58.66	71.44	79.4	295.7	339.8	190.2	118.7	75.2	68.9	38.26	55.57
MEAN	1.14	1.96	2.30	2.56	10.2	11.0	6.34	3.83	2.51	2.22	1.23	1.85
MAX	2.1	2.7	2.9	3.8	85	40	14	6.0	3.5	4.1	3.1	3.8
MIN	.46	.72	.84	1.0	2.9	5.6	3.6	1.8	1.3	1.4	.21	.51
AC-FT	70	116	142	157	587	674	377	235	149	137	76	110

11044350 SANDIA CREEK NEAR FALLBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.41	2.29	3.51	34.4	32.5	25.0	11.0	6.53	4.12	2.09	1.18	1.12
MAX	2.59	3.97	8.12	237	128	79.8	28.0	18.3	9.49	5.40	2.73	3.21
(WY)	1999	1999	1997	1993	1993	1995	1995	1998	1998	1998	1998	1998
MIN	.53	1.34	1.88	2.56	3.85	3.62	3.73	2.14	1.02	.31	.030	.062
(WY)	1997	1992	1990	2000	1999	1999	1996	1999	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	787.22		1427.05			
ANNUAL MEAN	2.16		3.90		10.3	
HIGHEST ANNUAL MEAN					36.8	1993
LOWEST ANNUAL MEAN					2.62	1999
HIGHEST DAILY MEAN	13	Apr 12	85	Feb 21	2000	Jan 16 1993
LOWEST DAILY MEAN	.07	Jul 18	.21	Aug 20	.00	Jul 26 1996
ANNUAL SEVEN-DAY MINIMUM	.25	Jul 30	.68	Aug 11	.00	Aug 14 1996
INSTANTANEOUS PEAK FLOW			520	Feb 21	5100	Jan 16 1993
INSTANTANEOUS PEAK STAGE			3.96	Feb 21	17.60	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	1560		2830		7480	
10 PERCENT EXCEEDS	3.7		7.8		17	
50 PERCENT EXCEEDS	2.0		2.5		2.7	
90 PERCENT EXCEEDS	.38		.98		.60	

11044800 DE LUZ CREEK NEAR DE LUZ, CA

LOCATION.—Lat 33°25'11", long 117°19'15", in SW 1/4 SE 1/4 sec.5, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 4.85 mi upstream from mouth, and 1.2 mi south of De Luz.

DRAINAGE AREA.—33.0 mi^2.

PERIOD OF RECORD.—October 1992 to current year.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 270 ft above sea level, from topographic map. February 1951 to September 1965 and October 1989 to September 1991, at site 4.2 mi downstream (published as 11044900, De Luz Creek near Fallbrook).

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,700 ft^3/s, Jan. 16, 1993, gage height, 15.13 ft, on basis of flow-over-road computation; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 385 ft^3/s on basis of flow-over-road computation:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1930	502	6.57	Mar. 8	1615	252	5.94
Mar. 5	1530	208	5.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.27	.70	4.9	3.0	1.1	e.20	.00	.00	.00
2	.00	.00	.00	.47	.57	6.7	2.3	1.0	e.17	.00	.00	.00
3	.00	.00	.00	.55	.46	11	2.1	1.2	e.15	.00	.00	.00
4	.00	.00	.00	.36	.45	15	1.6	1.8	e.09	.00	.00	.00
5	.00	.00	.00	.46	.41	74	2.6	1.8	e.05	.00	.00	.00
6	.00	.00	.00	.22	.36	36	2.9	1.6	e.02	.00	.00	.00
7	.00	.00	.00	.32	.29	21	2.7	1.1	e.01	.00	.00	.00
8	.00	.00	.00	.42	.41	88	2.3	1.7	.01	.00	.00	.00
9	.00	.00	.00	.35	.66	57	2.4	1.9	.05	.00	.00	.00
10	.00	.00	.00	.36	1.1	28	2.3	1.6	.03	.00	.00	.00
11	.00	.00	.00	.33	2.5	19	1.7	1.4	.01	.00	.00	.00
12	.00	.00	.00	.14	4.1	15	1.5	1.2	.01	.00	.00	.00
13	.00	.00	.00	.21	3.8	11	1.3	.79	.01	.00	.00	.00
14	.00	.00	.00	.16	2.6	12	1.4	.70	.00	.00	.00	.00
15	.00	.00	.00	.15	2.1	12	2.0	.80	.01	.00	.00	.00
16	.00	.00	.00	.19	2.3	8.2	2.0	1.0	.00	.00	.00	.00
17	.00	.00	.00	.23	3.5	5.8	3.0	.99	.00	.00	.00	.00
18	.00	.00	.00	.19	2.4	4.8	6.6	.60	.00	.00	.00	.00
19	.00	.00	.00	.20	1.4	4.3	6.9	.59	.00	.00	.00	.00
20	.00	.00	.00	.18	2.9	3.5	4.2	.43	.00	.00	.00	.00
21	.00	.00	.04	.15	76	2.9	4.3	.63	.00	.00	.00	.00
22	.00	.00	.00	.29	45	3.3	4.0	.51	.00	.00	.00	.00
23	.00	.00	.00	.33	68	3.3	3.8	.65	.00	.00	.00	.00
24	.00	.00	.00	.27	53	3.4	4.0	.93	.00	.00	.00	.00
25	.00	.00	.09	.31	23	3.6	2.8	1.2	.00	.00	.00	.00
26	.00	.00	.25	.47	11	3.3	2.2	1.5	.00	.00	.00	.00
27	.00	.00	.32	.51	14	3.3	1.6	.98	.00	.00	.00	.00
28	.00	.00	.17	.49	13	3.2	1.5	.51	.00	.00	.00	.00
29	.00	.00	.21	.52	6.8	2.8	2.0	e.42	.00	.00	.00	.00
30	.00	.00	.12	.42	---	3.0	1.5	e.30	.00	.00	.00	.00
31	.00	---	.21	.73	---	3.0	---	e.26	---	.00	.00	---
TOTAL	0.00	0.00	1.41	10.25	342.81	472.3	82.5	31.19	0.82	0.00	0.00	0.00
MEAN	.000	.000	.045	.33	11.8	15.2	2.75	1.01	.027	.000	.000	.000
MAX	.00	.00	.32	.73	76	88	6.9	1.9	.20	.00	.00	.00
MIN	.00	.00	.00	.14	.29	2.8	1.3	.26	.00	.00	.00	.00
AC-FT	.00	.00	2.8	20	680	937	164	62	1.6	.00	.00	.00

e Estimated.

11044800 DE LUZ CREEK NEAR DE LUZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.37	1.00	2.87	69.2	74.0	41.0	13.0	7.97	3.17	1.17	.47	.19
MAX	1.07	3.42	10.1	365	252	189	37.2	37.0	10.2	5.01	2.38	.84
(WY)	1993	1999	1997	1993	1998	1995	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.045	.33	3.30	2.71	2.31	.71	.027	.000	.000	.000
(WY)	1995	1995	2000	2000	1999	1999	1997	1997	2000	1996	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1993 - 2000	
ANNUAL TOTAL	471.23		941.28			
ANNUAL MEAN	1.29		2.57		17.6	
HIGHEST ANNUAL MEAN					53.9	1993
LOWEST ANNUAL MEAN					1.93	1999
HIGHEST DAILY MEAN	15	Jan 26	88	Mar 8	3220	Jan 16 1993
LOWEST DAILY MEAN	.00	Jun 26	.00	Oct 1	.00	Aug 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 26	.00	Oct 1	.00	Aug 1 1994
INSTANTANEOUS PEAK FLOW			502	Feb 21	9700	Jan 16 1993
INSTANTANEOUS PEAK STAGE			6.57	Feb 21	15.13	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	935		1870		12750	
10 PERCENT EXCEEDS	3.7		3.8		29	
50 PERCENT EXCEEDS	.04		.00		1.3	
90 PERCENT EXCEEDS	.00		.00		.00	

11045050 SANTA MARGARITA RIVER AT UNITED STATES MARINE CORPS DIVERSION DAM, NEAR YSIDORA, CA

LOCATION.—Lat 33°20'17", long 117°19'49", in SW 1/4 NW 1/4 sec.5, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank, at U.S. Marine Corps Diversion Dam, 2.3 mi upstream from Basilone Road Bridge, 10.2 mi upstream from mouth, and 7.5 mi upstream from Ysidora.

DRAINAGE AREA.—710 mi^2.

PERIOD OF RECORD.—February 1999 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and steel drop structure (diversion dam). Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Vail Lake (station 11042510) since November 1948 and by Skinner Reservoir since 1974. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Diversions to O'Neill Lake and to ground-water recharge basins are made immediately upstream by Camp Pendleton personnel. These diversions take a varying portion of the base flow. This station, normally an auxiliary (partial-record) gage for station 11046000 (Santa Margarita River at Ysidora), was temporarily installed as a continuous-record station on Feb. 26, 1999, due to removal of Basilone Road Bridge and construction of new bridge. New station name and number established, due to nonequivalence of low- and medium-flow records with station 11046000. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,520 ft^3/s, based on critical depth computations, Feb. 21, 2000, gage height, 42.44 ft; no flow for many days during 2000 water year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.9	e3.7	e4.8	e.70	e.98	.00	.00	.00	.00	e3.7	e2.8	e.35
2	e4.3	e3.8	e4.8	e.70	e.93	.00	.00	.00	.00	e4.1	e2.9	e.30
3	e4.4	e4.0	e4.9	e.69	e.88	.00	.00	.00	.00	e3.9	e3.1	e.26
4	e4.5	e4.3	e4.6	e.69	e.83	.00	.00	.00	.00	e4.0	e3.3	e.20
5	e4.6	e4.6	e4.4	e.68	e.78	74	.00	.00	.00	e3.8	e3.5	e.15
6	e4.6	e4.9	e4.2	e.68	e.73	130	.00	.00	.00	e4.0	e3.7	e.10
7	e4.7	e5.2	e3.9	e.73	e.71	26	.00	.00	.00	e3.8	e3.9	e.09
8	e4.6	e5.5	e3.6	e.78	e.69	66	.00	.00	.00	e3.6	e4.0	e.08
9	e4.6	e5.6	e3.4	e.83	e.68	189	.00	.00	.00	e3.4	e4.2	e.07
10	e4.2	e5.7	e3.2	e.87	e.65	45	.00	.00	.00	e3.2	e3.9	e.05
11	e4.0	e5.5	e2.9	e.91	e.63	15	.00	.00	.00	e3.0	e3.6	e.03
12	e3.8	e5.3	e2.6	e.94	e.70	5.3	.00	.00	.00	e2.8	e3.3	e.01
13	e3.6	e5.0	e2.4	e.95	e2.7	2.5	.00	.00	.00	e2.6	e3.0	e.00
14	e3.4	e4.9	e2.2	e.97	e1.2	e2.3	.00	.00	.00	e2.4	e2.7	e.15
15	e3.2	e4.8	e1.9	e.96	e1.0	e2.2	.00	.00	.00	e2.2	e2.4	e.30
16	e3.1	e4.6	e1.7	e.95	e1.0	e2.1	.00	.00	.00	e2.1	e2.1	e.45
17	e3.0	e4.4	e1.5	e.94	e1.0	.00	.00	.00	.00	e2.0	e1.8	e.75
18	e2.9	e4.2	e1.4	e.93	e1.0	.00	22	.00	.00	e1.9	e1.5	e.80
19	e2.8	e4.1	e1.4	e.92	e1.0	.00	26	.00	e2.3	e2.0	e1.2	e.80
20	e2.7	e4.0	e1.3	e.91	e1.0	.00	.49	.00	e4.5	e2.0	e.90	e.84
21	e2.6	e3.9	e1.2	e.90	432	.00	.00	.00	e4.8	e2.1	e.85	e1.2
22	e2.6	e3.8	e1.1	e.88	407	.00	.00	.00	e3.8	e2.2	e.80	e1.6
23	e2.7	e3.6	e1.1	e.87	52	.00	.00	.00	e4.1	e2.3	e.75	e2.0
24	e2.7	e3.8	e1.0	e.86	242	.00	.00	.00	e4.3	e2.4	e.70	e2.4
25	e2.8	e4.0	e1.0	e.85	25	.00	.00	.00	e4.3	e2.5	e.67	e2.7
26	e2.8	e4.2	e.90	e.87	5.0	.00	.00	.00	e3.4	e2.5	e.62	e3.1
27	e3.0	e4.3	e.80	e.89	1.6	.00	.00	.00	e2.8	e2.6	e.59	e3.5
28	e3.1	e4.5	e.75	e.91	.86	.00	.00	.00	e2.8	e2.6	e.55	e3.8
29	e3.2	e4.6	e.73	e.93	.51	.00	.00	.00	e3.4	e2.7	e.48	e4.3
30	e3.4	e4.7	e.72	e.95	---	.00	.00	.00	e4.0	e2.7	e.43	e4.6
31	e3.6	---	e.71	e.97	---	.00	---	.00	---	e2.8	e.38	---
TOTAL	109.4	135.5	71.11	26.61	1185.06	559.40	48.49	0.00	44.50	87.9	64.62	34.98
MEAN	3.53	4.52	2.29	.86	40.9	18.0	1.62	.000	1.48	2.84	2.08	1.17
MAX	4.7	5.7	4.9	.97	432	189	26	.00	4.8	4.1	4.2	4.6
MIN	2.6	3.6	.71	.68	.51	.00	.00	.00	.00	1.9	.38	.00
AC-FT	217	269	141	53	2350	1110	96	.00	88	174	128	69

e Estimated.

11045050 SANTA MARGARITA RIVER AT UNITED STATES MARINE CORPS DIVERSION DAM, NEAR YSIDORA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.53	4.52	2.29	.86	40.9	10.4	3.79	1.73	2.37	3.29	2.49	2.01
MAX	3.53	4.52	2.29	.86	40.9	18.0	5.96	3.45	3.25	3.75	2.90	2.86
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999	1999
MIN	3.53	4.52	2.29	.86	40.9	2.66	1.62	.000	1.48	2.84	2.08	1.17
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	2367.57			
ANNUAL MEAN	6.47		6.47	
HIGHEST ANNUAL MEAN			6.47	2000
LOWEST ANNUAL MEAN			6.47	2000
HIGHEST DAILY MEAN	432	Feb 21	432	Feb 21 2000
LOWEST DAILY MEAN	.00	Mar 1	.00	Mar 1 2000
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 17	.00	Mar 17 2000
INSTANTANEOUS PEAK FLOW	3520	Feb 21	3520	Feb 21 2000
INSTANTANEOUS PEAK STAGE	42.44	Feb 21	42.44	Feb 21 2000
ANNUAL RUNOFF (AC-FT)	4700		4690	
10 PERCENT EXCEEDS	4.6		4.6	
50 PERCENT EXCEEDS	1.0		2.5	
90 PERCENT EXCEEDS	.00		.00	

11045300 FALLBROOK CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°20'49", long 117°19'01", in SE 1/4 SE 1/4 sec.32, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, at culvert on DeLuz Road, 0.75 mi upstream from O'Neill Lake, and 4.5 mi southwest of Fallbrook.

DRAINAGE AREA.—6.97 mi^2.

PERIOD OF RECORD.—October 1993 to current year. Discharge records for October 1964 to September 1977 and October 1989 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control with low-water Parshall flume. Elevation of gage is 190 ft above sea level, from topographic map.

REMARKS.—Records good. Slight regulation by two small storage reservoirs upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 895 ft^3/s, Feb. 23, 1998, gage height, 9.73 ft, from rating curve extended above 140 ft^3/s on basis of culvert computation; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1615	78	2.04				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.04	.23	.59	.74	.52	.45	.19	.01	.00	.00
2	.00	.01	.05	.24	.58	.65	.53	.47	.17	.00	.00	.00
3	.01	.01	.03	.24	.47	.64	.51	.49	.15	.00	.00	.00
4	.02	.02	.03	.25	.47	5.9	.48	.48	.13	.00	.00	.00
5	.02	.04	.03	.25	.48	23	.48	.48	.11	.00	.00	.00
6	.03	.05	.04	.25	.52	4.6	.48	.51	.09	.00	.00	.00
7	.03	.04	.05	.26	.52	1.4	.48	.50	.06	.00	.00	.01
8	.02	.04	.05	.27	.52	6.9	.48	.52	.04	.00	.00	.00
9	.02	.04	.08	.29	.52	4.5	.47	.51	.02	.00	.00	.00
10	.01	.03	.11	.32	.52	1.2	.47	.51	.01	.00	.00	.00
11	.01	.03	.11	.31	.56	.90	.46	.50	.01	.00	.00	.00
12	.01	.03	.13	.32	9.4	.82	.45	.48	.01	.00	.00	.00
13	.01	.03	.14	.31	2.3	.78	.45	.47	.01	.00	.00	.00
14	.01	.03	.15	.28	2.9	.73	.45	.46	.01	.00	.00	.00
15	.01	.03	.23	.28	1.1	.70	.45	.45	.01	.00	.00	.00
16	.01	.03	.21	.33	.72	.65	.45	.44	.01	.00	.00	.00
17	.02	.03	.20	.32	5.0	.65	.50	.43	.01	.00	.00	.00
18	.01	.03	.24	.31	.99	.65	9.5	.42	.01	.00	.00	.00
19	.01	.03	.25	.36	.64	.65	2.0	.41	.01	.00	.00	.00
20	.01	.04	.29	.43	5.3	.64	.68	.41	.01	.00	.00	.00
21	.01	.04	.36	.46	22	.61	.58	.46	.01	.00	.00	.00
22	.01	.03	.34	.48	11	.56	.55	.32	.01	.00	.00	.00
23	.01	.03	.31	.48	4.1	.48	.51	.31	.01	.00	.00	.01
24	.01	.03	.28	.48	6.8	.48	.48	.32	.01	.00	.00	.00
25	.01	.03	.26	.50	1.1	.48	.47	.34	.01	.00	.00	.00
26	.01	.03	.25	.51	.82	.48	.45	.31	.01	.00	.00	.00
27	.01	.03	.25	.52	.73	.51	.48	.28	.01	.00	.00	.00
28	.01	.04	.26	.52	3.3	.52	.46	.27	.01	.00	.00	.00
29	.02	.03	.21	.53	.98	.52	.45	.29	.01	.00	.00	.00
30	.02	.04	.20	.56	---	.52	.46	.26	.01	.00	.00	.00
31	.01	---	.21	.60	---	.52	---	.28	---	.00	.00	---
TOTAL	0.40	0.93	5.39	11.49	84.93	62.38	25.18	12.83	1.17	0.01	0.00	0.02
MEAN	.013	.031	.17	.37	2.93	2.01	.84	.41	.039	.000	.000	.001
MAX	.03	.05	.36	.60	22	23	9.5	.52	.19	.01	.00	.01
MIN	.00	.01	.03	.23	.47	.48	.45	.26	.01	.00	.00	.00
AC-FT	.8	1.8	11	23	168	124	50	25	2.3	.02	.00	.04

11045300 FALLBROOK CREEK NEAR FALLBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.15	.93	1.19	5.06	7.79	5.64	2.15	1.18	.58	.27	.14	.10
MAX	.40	3.35	3.20	18.5	35.9	23.8	5.63	3.28	1.50	.82	.41	.41
(WY)	1999	1997	1997	1995	1998	1995	1998	1998	1995	1998	1995	1998
MIN	.013	.031	.17	.37	1.09	.71	.81	.39	.039	.000	.000	.001
(WY)	2000	2000	2000	2000	1999	1999	1997	1997	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	170.04		204.73			
ANNUAL MEAN	.47		.56		2.07	
HIGHEST ANNUAL MEAN					4.77	1998
LOWEST ANNUAL MEAN					.56	2000
HIGHEST DAILY MEAN	9.0	Apr 12	23	Mar 5	256	Mar 5 1995
LOWEST DAILY MEAN	.00	Oct 1	.00	Oct 1	.00	Sep 5 1994
ANNUAL SEVEN-DAY MINIMUM	.01	Aug 24	.00	Jul 2	.00	Sep 5 1994
INSTANTANEOUS PEAK FLOW			78	Mar 5	895	Feb 23 1998
INSTANTANEOUS PEAK STAGE			2.04	Mar 5	9.73	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	337		406		1500	
10 PERCENT EXCEEDS	.75		.65		2.7	
50 PERCENT EXCEEDS	.29		.05		.50	
90 PERCENT EXCEEDS	.01		.00		.01	

11045600 O'NEILL LAKE OUTLET CHANNEL NEAR FALLBROOK, CA

LOCATION.—Lat 33°19'30", long 117°19'29", in SE 1/4 NW 1/4 sec.8, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 300 ft downstream from O'Neill Lake, and 5.5 mi southwest of Fallbrook.

DRAINAGE AREA.—9.77 mi^2.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and concrete control with low-water V-notch weir. Elevation of gage is 100 ft above sea level, from topographic map.

REMARKS.—Records good. Records for this station represent regulated releases from O'Neill Lake. Water is sometimes diverted into O'Neill Lake from the Santa Margarita River via a diversion dam 0.9 mi above gage. Slight regulation by two small storage reservoirs upstream from gaging station on Fallbrook Creek near Fallbrook (station 11045300). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3.8 ft^3/s, Nov. 8, 1998, gage height, 1.37 ft; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.02	.01	.00	.00	.00	.00	.00	.00	.00
2	.02	.09	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
3	.02	.23	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
4	.01	.02	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
5	.01	.01	.00	.01	.01	.03	.00	.00	.00	.00	.00	.00
6	.01	.01	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
7	.01	.01	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
8	.01	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00
9	.00	.01	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
10	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.01	.00	.01	.00	.00	.00	.01	.00	.00	.00	.00
18	.00	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.09
19	.00	.01	.00	.01	.00	.00	.00	.01	.00	.00	.00	.00
20	.00	.01	.00	.01	.01	.00	.00	.01	.00	.00	.00	.00
21	.00	.01	.01	.01	.02	.00	.00	.01	.00	.00	.00	.00
22	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00	.00	.00
23	.00	.00	.00	.01	.01	.00	.00	.01	.00	.00	.00	.00
24	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00	.00	.00
25	.00	.00	.00	.08	.00	.00	.00	.01	.00	.00	.00	.00
26	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.01	.02	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.01	.02	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.01	.01	.02	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.01	.01	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.01	.07	---	.00	---	.00	---	.00	.00	---
TOTAL	0.09	0.52	0.13	0.50	0.13	0.04	0.00	0.08	0.00	0.00	0.00	0.09
MEAN	.003	.017	.004	.016	.004	.001	.000	.003	.000	.000	.000	.003
MAX	.02	.23	.01	.08	.02	.03	.00	.01	.00	.00	.00	.09
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.2	1.0	.3	1.0	.3	.08	.00	.2	.00	.00	.00	.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.18	.23	.24	.25	.24	.24	.25	.20	.16	.13	.080	.039
MAX	.35	.44	.47	.48	.48	.48	.50	.39	.33	.27	.16	.076
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.003	.017	.004	.016	.004	.001	.000	.003	.000	.000	.000	.003
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	96.39		1.58			
ANNUAL MEAN	.26		.004		.19	
HIGHEST ANNUAL MEAN					.37	1999
LOWEST ANNUAL MEAN					.004	2000
HIGHEST DAILY MEAN	2.0	Apr 12	.23	Nov 3	2.0	Apr 12 1999
LOWEST DAILY MEAN	.00	Sep 26	.00	Oct 1	.00	Sep 26 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 9	.00	Oct 9	.00	Oct 9 1999
INSTANTANEOUS PEAK FLOW			3.0	Sep 18	3.8	Nov 8 1998
INSTANTANEOUS PEAK STAGE			1.26	Sep 18	1.37	Nov 8 1998
ANNUAL RUNOFF (AC-FT)	191		3.1		135	
10 PERCENT EXCEEDS	.48		.01		.45	
50 PERCENT EXCEEDS	.27		.00		.02	
90 PERCENT EXCEEDS	.00		.00		.00	

11045700 O'NEILL LAKE SPILL CHANNEL NEAR FALLBROOK, CA

LOCATION.—Lat 33°19'44", long 117°19'35", in NW 1/4 NW 1/4 sec.8, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 100 ft upstream from spillway on O'Neill Lake, 1.3 mi upstream from confluence with Santa Margarita River, and 5.5 mi southwest of Fallbrook.

DRAINAGE AREA.—9.77 mi^2.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and sharp-crested weir (wooden flashboards in four weir boxes). Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records for this station represent spill from O'Neill Lake. Minor seepage through weir flashboards may occur at times and is not indicated in records for this station. Water is sometimes diverted into O'Neill Lake from the Santa Margarita River via a diversion dam 0.55 mi above gage. Slight regulation by two small storage reservoirs upstream from gaging station on Fallbrook Creek near Fallbrook (station 11045300). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—No flow since station established on Oct. 1, 1998.

EXTREMES FOR CURRENT YEAR.—No flow for entire water year.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000		
HIGHEST ANNUAL MEAN					.000		1999
LOWEST ANNUAL MEAN					.000		1999
HIGHEST DAILY MEAN					.00	Oct 1	1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1	1998
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1	1998
10 PERCENT EXCEEDS	.00		.00		.00		
50 PERCENT EXCEEDS	.00		.00		.00		
90 PERCENT EXCEEDS	.00		.00		.00		

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA

LOCATION.—Lat 33°18'40", long 117°20'47", in NW 1/4 NW 1/4 sec.18, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, at Basilone Road Bridge, 7.9 mi upstream from mouth, and 5.2 mi upstream from Ysidora.

DRAINAGE AREA.—723 mi^2.

PERIOD OF RECORD.—February 1923 to February 1999 (see GAGE paragraph). Low-flow records not equivalent prior to Dec. 10, 1980, due to installation of conservation ponds above downstream site.
CHEMICAL DATA: Water years 1980–81.
WATER TEMPERATURE: Water years 1969–81.
SEDIMENT DATA: Water years 1969–78, 1982–83.

REVISED RECORDS.—WDR CA-87-1: Drainage area.

GAGE.—Water-stage recorder. Auxiliary gage 2.3 mi upstream with crest-stage gage and steel drop structure (diversion dam). Primary gage temporarily out of operation since Feb. 26, 1999, due to channel work and replacement of Basilone Road Bridge. During this period, the auxiliary gage is operated as a temporary replacement (see station 11045050; new station name and number established, due to nonequivalence of low- and medium-flow records). Elevation of gage is 75 ft above sea level, from topographic map. February 1923 to Feb. 16, 1927, at site 4.4 mi downstream at different datum (destroyed by flood). Feb. 17, 1927, to Feb. 1, 1931, no gage in operation; records based on discharge measurements. Feb. 2, 1931, to Feb. 24, 1970, at site 5.4 mi downstream at different datum; Feb. 25, 1970, to Dec. 10, 1980, at site 6.2 mi downstream at different datum.

REMARKS.—Flow partly regulated by Vail Lake (station 11042510) since November 1948 and by Skinner Reservoir since 1974. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Diversions to O'Neill Lake and to ground-water recharge basins are made at point 2.3 mi upstream by Camp Pendleton personnel. Regulated return flows from O'Neill Lake can occur at times, as can unregulated spills. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 44,000 ft^3/s, estimated, based on regression equation and flood routing of upstream flows, Jan. 16, 1993, gage height, 20.47 ft; no flow for all or part of most years.

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA

LOCATION.—Lat 33°14'08", long 117°24'27", in SW 1/4 NE 1/4 sec.9, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 300 ft downstream from bridge on Interstate Highway 5, 0.5 mi upstream from mouth, and 3.5 mi northwest of Oceanside.

DRAINAGE AREA.—744 mi^2.

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.—October 1989 to current year. Unpublished records for water year 1989 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder. Datum of gage is 2.78 ft below sea level.

REMARKS.—Gage height generally affected by tide. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 15.10 ft, from floodmarks and hydrographers' notes, Jan. 16, 1993; minimum recorded gage height, 2.02 ft, Feb. 3, 1999.

EXTREMES FOR CURRENT YEAR.—Maximum recorded gage height, 10.30 ft, Feb. 22; minimum recorded gage height, 3.11 ft, Feb. 27.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.06	5.99	7.02	6.94	7.32	7.29	7.68	7.65	7.99	7.97	5.02	3.73
2	6.07	6.02	7.01	6.97	7.34	7.30	7.72	7.67	8.01	7.95	5.23	3.80
3	6.08	6.03	7.02	6.98	7.34	7.31	7.75	7.68	7.98	7.95	5.92	3.55
4	6.10	6.05	7.02	6.99	7.37	7.32	7.75	7.68	7.98	7.95	6.36	3.87
5	6.14	6.08	7.04	7.01	7.38	7.33	7.77	7.69	7.98	7.96	6.71	4.00
6	6.23	6.12	7.04	7.02	7.39	7.33	7.76	7.70	8.00	7.97	6.62	4.16
7	6.45	6.23	7.07	7.02	7.40	7.34	7.78	7.70	7.99	7.97	5.97	3.66
8	6.60	6.45	7.06	7.03	7.41	7.36	7.78	7.72	8.00	7.97	5.41	3.55
9	6.68	6.59	7.08	7.03	7.41	7.37	7.78	7.73	8.00	7.98	5.31	4.10
10	6.67	6.61	7.09	7.04	7.42	7.37	7.80	7.74	8.02	7.98	5.27	3.51
11	6.72	6.62	7.10	7.06	7.45	7.40	7.78	7.75	8.06	8.02	5.14	3.30
12	6.70	6.65	7.12	7.07	7.47	7.40	7.77	7.71	8.10	8.04	5.31	3.30
13	6.72	6.67	7.11	7.08	7.47	7.41	7.75	7.71	8.12	8.09	5.36	3.27
14	6.73	6.68	7.13	7.10	7.52	7.43	7.77	7.72	8.16	8.12	5.40	3.16
15	6.73	6.70	7.15	7.10	7.54	7.50	7.77	7.73	8.18	8.15	5.78	3.18
16	6.75	6.71	7.16	7.12	7.55	7.51	7.75	7.73	8.20	8.17	6.13	3.23
17	6.79	6.74	7.17	7.14	7.57	7.51	7.76	7.75	8.22	8.19	6.39	3.25
18	6.82	6.74	7.19	7.15	7.58	7.52	7.78	7.75	8.25	8.21	6.47	3.46
19	6.83	6.75	7.22	7.16	7.60	7.53	7.82	7.75	8.26	8.24	6.51	3.62
20	6.85	6.76	7.20	7.17	7.61	7.54	7.83	7.77	8.35	8.24	6.70	3.73
21	6.84	6.77	7.23	7.18	7.63	7.55	7.84	7.80	8.45	8.34	5.75	3.67
22	6.86	6.78	7.26	7.19	7.63	7.56	7.85	7.81	10.30	4.25	5.40	3.58
23	6.86	6.80	7.27	7.20	7.64	7.56	7.86	7.83	5.71	3.63	5.31	3.51
24	6.88	6.84	7.28	7.21	7.64	7.57	7.88	7.85	5.75	3.84	5.29	3.49
25	6.90	6.84	7.28	7.22	7.64	7.58	7.90	7.85	5.02	3.35	4.91	3.36
26	6.91	6.86	7.29	7.22	7.65	7.59	7.93	7.89	4.55	3.19	4.41	3.37
27	6.93	6.88	7.30	7.24	7.66	7.60	7.93	7.90	4.70	3.11	4.22	3.44
28	6.94	6.90	7.30	7.25	7.65	7.61	7.94	7.92	5.11	3.39	4.45	3.62
29	6.96	6.91	7.32	7.26	7.67	7.62	7.95	7.92	5.18	3.75	4.64	4.02
30	6.99	6.93	7.31	7.27	7.69	7.62	7.95	7.94	---	---	4.69	4.09
31	7.00	6.93	---	---	7.66	7.63	7.97	7.95	---	---	4.84	4.13
MONTH	7.00	5.99	7.32	6.94	7.69	7.29	7.97	7.65	10.30	3.11	6.71	3.16

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.08	4.00	5.53	4.02	6.83	6.71	6.95	6.91	7.26	7.19	7.23	7.17
2	5.12	3.86	6.15	3.93	6.88	6.78	6.96	6.92	7.32	7.21	7.23	7.17
3	5.10	3.88	6.66	3.89	6.92	6.84	6.96	6.93	7.32	7.23	7.23	7.17
4	5.82	3.88	6.81	3.80	6.96	6.88	6.97	6.93	7.37	7.21	7.23	7.17
5	5.99	3.81	6.88	3.79	6.95	6.88	6.98	6.93	7.28	7.22	7.23	7.17
6	6.04	3.69	6.68	3.94	6.95	6.88	6.99	6.93	7.29	7.24	7.23	7.18
7	5.94	3.57	6.63	4.06	6.92	6.88	6.99	6.94	7.33	7.25	7.23	7.19
8	5.82	3.48	6.29	4.01	6.94	6.89	6.98	6.94	7.34	7.29	7.24	7.21
9	5.70	3.53	5.66	4.26	6.95	6.89	6.97	6.94	7.31	7.21	7.25	7.21
10	5.50	3.59	5.58	4.52	6.96	6.88	6.98	6.94	7.31	7.20	7.25	7.21
11	5.02	3.59	5.03	4.65	6.94	6.88	6.98	6.95	7.28	7.21	7.28	7.22
12	4.82	3.57	5.26	4.76	6.94	6.89	6.98	6.95	7.30	7.13	7.28	7.22
13	4.93	3.71	5.78	5.26	6.95	6.89	6.99	6.95	7.16	7.11	7.28	7.22
14	5.25	3.84	5.99	5.78	6.94	6.90	6.99	6.95	7.14	7.11	7.27	7.22
15	5.41	3.90	6.06	5.90	6.97	6.91	7.00	6.96	7.15	7.11	7.25	7.23
16	5.52	3.85	6.12	6.04	6.96	6.91	7.00	6.96	7.15	7.11	7.28	7.25
17	6.19	3.87	6.15	6.07	6.95	6.91	7.01	6.97	7.17	7.11	7.28	7.26
18	6.11	3.90	6.19	6.10	6.96	6.90	7.02	6.97	7.17	7.12	7.29	7.27
19	5.76	4.21	6.22	6.15	6.96	6.90	7.02	6.97	7.17	7.12	7.32	7.28
20	5.80	3.83	6.34	6.22	6.97	6.90	7.03	6.98	7.18	7.13	7.31	7.24
21	5.59	3.79	6.41	6.34	6.95	6.90	7.04	7.00	7.17	7.14	7.27	7.24
22	5.49	3.65	6.46	6.41	6.98	6.89	7.07	7.02	7.18	7.13	7.30	7.27
23	5.08	3.63	6.51	6.46	6.95	6.89	7.08	7.02	7.17	7.13	7.31	7.28
24	4.83	3.69	6.54	6.49	6.96	6.89	7.09	7.03	7.17	7.13	7.34	7.29
25	4.45	3.68	6.57	6.52	6.96	6.89	7.11	7.04	7.16	7.13	7.37	7.30
26	4.30	3.79	6.61	6.54	6.93	6.90	7.11	7.05	7.17	7.14	7.35	7.31
27	4.22	3.82	6.63	6.55	6.93	6.90	7.11	7.07	7.17	7.14	7.33	7.33
28	4.33	3.82	6.64	6.57	6.93	6.90	7.11	7.08	7.19	7.16	7.33	7.33
29	4.60	3.97	6.66	6.60	6.94	6.90	7.12	7.09	7.19	7.19	7.37	7.33
30	4.85	4.05	6.70	6.62	6.93	6.90	7.15	7.11	7.21	7.19	7.37	7.36
31	---	---	6.72	6.64	---	---	7.21	7.14	7.21	7.17	---	---
MONTH	6.19	3.48	6.88	3.79	6.98	6.71	7.21	6.91	7.37	7.11	7.37	7.17
YEAR	10.30	3.11										

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1993 to current year.
DISSOLVED OXYGEN: October 1993 to current year.
pH: October 1993 to current year.
SPECIFIC CONDUCTANCE: October 1993 to current year.
WATER TEMPERATURE: October 1993 to current year.

PERIOD OF DAILY RECORD.—October 1993 to current year.
DISSOLVED OXYGEN: October 1993 to current year.
pH: October 1993 to current year.
SPECIFIC CONDUCTANCE: October 1993 to current year.
WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1993.

REMARKS.—Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 20.9 mg/L, May 1, 1996; minimum recorded, 0.0 mg/L, May 19, Aug. 29, 1994.
pH: Maximum recorded, 9.6 standard units, Dec. 21, 22, 1996, Dec. 30, 31, 1999; minimum recorded, 6.2 standard units, Nov. 26, 1993.
SPECIFIC CONDUCTANCE: Maximum recorded, 53,700 microsiemens, Oct. 5, 1995; minimum recorded, 119 microsiemens, Feb. 24, 1998.
WATER TEMPERATURE: Maximum recorded, 32.0˚ C, July 29, 1995, June 9, and Aug. 14, 16, 1996; minimum recorded, 5.0˚ C, Nov. 21, 1994.

EXTREMES FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 19.2 mg/L, Dec. 5, 23; minimum recorded, 0.3 mg/L, Jan. 21.
pH: Maximum recorded, 9.6 standard units, Dec. 30, 31; minimum recorded, 7.7 standard units, Feb. 23, 28.
SPECIFIC CONDUCTANCE: Maximum recorded, 50,200 microsiemens, Apr. 6, 9, 10; minimum recorded, 641 microsiemens, Feb. 24.
WATER TEMPERATURE: Maximum recorded, 29.5˚ C, Aug. 17, 18; minimum recorded, 9.5˚ C, Jan. 7–10, Mar. 9.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.2	4.2	5.5	4.0	---	---	15.0	8.0	8.6	1.8	---	---
2	6.7	4.2	5.8	3.8	---	---	14.4	8.4	5.0	1.5	---	---
3	6.7	4.2	5.9	4.9	---	---	14.4	8.4	2.3	1.3	---	---
4	6.4	4.1	5.9	4.9	---	---	15.8	8.2	2.2	1.4	---	---
5	6.9	4.1	6.5	4.8	19.2	12.6	13.1	7.6	2.9	1.4	---	---
6	6.3	3.9	6.3	5.3	16.5	9.7	14.9	8.6	6.0	1.6	10.9	7.5
7	6.2	3.7	6.4	4.4	15.4	9.1	14.0	8.6	9.0	1.8	10.4	8.0
8	5.6	3.7	---	---	12.7	7.9	17.4	10.9	5.3	1.8	10.0	7.6
9	7.0	4.1	---	---	13.4	6.8	15.6	8.1	6.3	1.6	12.3	8.0
10	6.4	4.3	---	---	16.1	7.8	13.7	7.2	10.8	1.5	11.8	8.8
11	6.1	4.4	---	---	17.9	11.4	13.1	6.6	10.0	4.1	11.2	7.7
12	6.3	4.2	---	---	16.3	10.8	15.0	6.6	19.1	5.6	10.2	7.5
13	7.8	3.2	---	---	16.6	10.7	12.1	6.3	15.4	8.7	10.2	7.6
14	7.4	4.2	---	---	17.2	11.6	10.3	5.5	11.8	5.6	11.2	7.7
15	8.0	4.3	---	---	18.2	12.3	10.6	3.4	10.3	4.0	10.1	7.9
16	7.3	4.4	---	---	17.6	9.5	9.8	5.1	13.2	4.2	11.0	7.9
17	6.7	4.7	---	---	14.2	8.1	9.6	3.4	11.9	5.9	10.2	7.8
18	6.6	4.3	---	---	16.3	11.1	13.7	2.0	10.5	5.3	10.8	7.6
19	6.5	4.4	---	---	16.8	11.0	14.7	2.5	6.4	3.1	10.6	7.4
20	5.7	4.2	---	---	17.7	10.7	10.1	1.1	8.1	2.4	11.0	7.3
21	5.5	4.3	---	---	17.6	10.8	14.6	.3	6.5	2.4	11.6	6.8
22	5.6	4.1	---	---	19.0	12.5	10.2	1.9	11.9	4.5	11.7	6.5
23	5.0	3.8	---	---	19.2	11.1	11.7	3.4	14.1	7.0	12.7	6.0
24	4.9	3.6	---	---	16.4	9.4	10.7	2.6	13.2	6.5	11.8	5.3
25	4.7	3.7	---	---	16.0	8.4	6.2	2.1	11.9	8.4	11.9	5.4
26	4.8	3.5	---	---	18.1	11.6	13.1	.7	11.0	5.3	10.7	4.9
27	5.0	3.4	---	---	17.1	9.2	11.8	3.8	11.1	5.9	6.4	4.4
28	5.3	3.9	---	---	14.8	7.9	12.9	4.6	10.4	6.2	9.7	3.6
29	5.3	4.1	---	---	13.6	7.1	10.1	3.4	---	---	6.4	3.1
30	5.5	4.1	---	---	15.5	7.1	9.4	2.5	---	---	6.8	3.1
31	5.5	4.4	---	---	17.2	6.9	11.5	3.2	---	---	9.9	3.4
MONTH	8.0	3.2	---	---	---	---	17.4	.3	---	---	---	---

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	3.6	3.8	2.9	7.8	.8	3.9	1.1	9.2	2.5	9.4	3.1
2	7.2	3.3	3.9	3.2	6.5	.9	3.9	1.0	7.6	2.5	9.1	3.9
3	7.7	3.8	4.0	3.5	4.9	.8	4.0	1.2	7.8	2.7	8.5	3.5
4	10.5	3.7	4.7	3.6	4.5	1.1	3.7	1.1	7.2	2.8	8.1	4.6
5	9.3	3.9	5.1	4.2	4.5	1.2	4.0	2.0	6.4	2.6	8.0	3.4
6	8.4	3.9	5.7	4.3	4.5	1.3	4.2	3.0	7.0	2.4	7.9	3.1
7	10.5	3.7	7.3	4.2	4.5	1.5	5.7	2.5	9.5	2.4	7.6	3.1
8	9.0	4.2	5.8	4.7	5.1	1.7	5.7	3.0	8.2	1.6	7.6	2.3
9	11.6	4.4	7.1	5.2	4.7	1.8	4.4	2.2	7.2	1.4	8.6	3.5
10	10.0	4.0	13.6	3.2	5.0	2.1	3.9	2.2	7.6	1.8	8.2	2.7
11	15.9	4.1	10.1	3.3	5.2	2.2	4.1	2.0	7.0	1.9	8.7	2.7
12	11.5	6.0	8.3	2.6	5.9	3.3	---	---	6.4	1.8	8.5	4.5
13	14.9	5.3	7.0	1.7	6.7	4.4	---	---	6.6	1.7	8.6	3.5
14	11.0	4.2	6.9	1.8	8.4	4.1	---	---	6.5	2.1	7.8	3.1
15	11.2	3.3	6.9	2.4	8.5	4.7	6.6	3.4	5.7	1.6	6.3	2.3
16	9.4	3.0	6.4	2.8	8.9	4.5	5.5	3.4	5.8	1.4	7.3	1.5
17	7.2	3.0	7.9	3.0	8.7	4.5	6.3	3.2	6.5	1.2	6.8	1.4
18	6.4	2.0	7.7	2.7	9.0	4.5	5.5	3.4	6.6	1.0	6.3	1.4
19	9.1	2.9	7.8	4.4	9.1	4.3	6.0	3.4	6.3	1.4	6.0	1.6
20	9.4	2.8	9.1	4.0	8.7	4.0	5.2	3.5	6.6	1.5	6.0	2.9
21	6.4	2.7	8.8	3.9	8.2	4.2	8.2	3.6	6.9	2.0	5.1	1.5
22	9.9	1.9	9.4	4.3	7.7	4.4	8.0	3.1	6.3	1.9	3.9	1.6
23	8.1	2.6	9.0	5.5	8.1	3.3	8.4	2.5	7.1	1.0	6.5	1.3
24	7.3	2.2	8.7	5.3	7.4	1.4	8.0	2.7	5.9	2.2	7.0	2.5
25	7.1	1.9	7.4	4.3	5.9	1.3	7.2	2.9	5.8	1.3	7.1	2.0
26	5.7	1.7	7.2	4.1	4.1	1.1	7.1	2.7	6.1	1.1	6.4	3.3
27	4.6	2.0	11.8	4.9	3.9	1.0	5.4	2.5	5.5	.9	6.3	2.3
28	3.4	2.0	10.6	6.1	3.6	1.1	6.3	2.6	4.3	1.5	5.4	1.7
29	3.5	2.5	9.6	5.7	3.8	1.0	6.0	2.7	4.8	1.7	8.9	2.2
30	3.6	3.0	9.8	5.8	4.0	1.0	6.6	2.8	7.1	2.2	8.5	2.3
31	---	---	8.6	1.4	---	---	8.2	2.5	9.3	1.9	---	---
MONTH	15.9	1.7	13.6	1.4	9.1	.8	---	---	9.5	.9	9.4	1.3

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	8.2	8.2	8.1	---	---	9.5	9.3	9.3	9.2	---	---
2	8.6	8.3	8.2	8.1	---	---	9.4	9.3	9.2	9.0	---	---
3	8.6	8.3	8.2	8.1	---	---	9.4	9.3	9.0	9.0	---	---
4	8.7	8.4	8.2	8.1	---	---	9.4	9.3	9.0	9.0	---	---
5	8.7	8.5	8.2	8.2	9.2	9.1	9.4	9.3	9.0	9.0	---	---
6	8.7	8.4	8.2	8.2	9.2	9.0	9.4	9.3	9.0	8.9	8.0	7.8
7	8.6	8.4	8.2	8.1	9.2	9.0	9.4	9.3	9.0	8.9	8.2	8.0
8	8.5	8.4	---	---	9.1	9.0	9.4	9.3	8.9	8.9	8.2	8.1
9	8.6	8.4	---	---	9.1	9.0	9.4	9.2	9.1	8.9	8.2	8.0
10	8.6	8.4	---	---	9.2	9.0	9.3	9.2	9.2	8.9	8.2	8.1
11	8.6	8.5	---	---	9.2	9.1	9.3	9.2	9.2	9.0	8.2	8.1
12	8.6	8.4	---	---	9.2	9.1	9.5	9.2	9.4	9.1	8.2	8.1
13	8.6	8.1	---	---	9.2	9.1	9.5	9.4	9.4	9.2	8.3	8.1
14	8.3	8.1	---	---	9.2	9.1	9.4	9.4	9.2	9.1	8.3	8.1
15	8.2	8.1	---	---	9.3	9.1	9.5	9.4	9.3	9.1	8.3	8.2
16	8.3	8.1	---	---	9.3	9.1	9.5	9.4	9.4	9.1	8.4	8.2
17	8.2	8.2	---	---	9.2	9.1	9.5	9.3	9.5	9.3	8.7	8.2
18	8.2	8.1	---	---	9.3	9.1	9.5	9.3	9.5	9.3	8.4	8.2
19	8.2	8.2	---	---	9.3	9.1	9.4	9.2	9.3	9.2	8.4	8.2
20	8.2	8.1	---	---	9.3	9.1	9.3	9.2	9.4	9.2	8.4	8.2
21	8.2	8.1	---	---	9.3	9.2	9.4	9.2	9.4	9.1	8.4	8.2
22	8.2	8.2	---	---	9.4	9.2	9.3	9.2	9.4	7.8	8.4	8.2
23	8.2	8.1	---	---	9.4	9.2	9.4	9.2	8.0	7.7	8.5	8.1
24	8.2	8.1	---	---	9.4	9.2	9.4	9.2	8.2	7.8	8.5	8.1
25	8.2	8.1	---	---	9.4	9.2	9.3	9.2	8.0	7.9	8.4	8.1
26	8.2	8.1	---	---	9.4	9.3	9.4	9.2	8.0	7.8	8.3	8.0
27	8.2	8.1	---	---	9.4	9.2	9.4	9.2	8.0	7.8	8.1	7.9
28	8.2	8.1	---	---	9.5	9.3	9.4	9.2	8.0	7.7	8.3	7.9
29	8.2	8.1	---	---	9.5	9.4	9.4	9.2	---	---	8.2	7.8
30	8.2	8.1	---	---	9.6	9.4	9.3	9.2	---	---	8.2	7.8
31	8.2	8.1	---	---	9.6	9.4	9.3	9.2	---	---	8.4	7.9
MONTH	8.7	8.1	---	---	---	---	9.5	9.2	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	7.9	8.1	7.9	8.3	8.0	8.3	8.1	8.3	7.9	8.5	8.2
2	8.3	7.9	8.1	8.0	8.3	8.0	8.2	8.1	8.2	7.8	8.5	8.2
3	8.3	7.9	8.1	8.0	8.3	8.0	8.2	8.1	8.2	7.9	8.5	8.2
4	8.4	7.9	8.1	8.0	8.3	8.1	8.2	8.1	8.2	8.0	8.5	8.3
5	8.4	8.0	8.1	8.0	8.3	8.1	8.2	8.1	8.2	8.0	8.5	8.3
6	8.4	8.1	8.2	8.1	8.2	8.1	8.2	8.0	8.2	7.9	8.5	8.3
7	8.4	8.1	8.2	8.1	8.2	8.0	8.3	8.1	8.5	7.9	8.5	8.3
8	8.4	8.0	8.2	8.1	8.3	8.1	8.4	8.1	8.4	8.1	8.5	8.2
9	8.4	7.9	8.2	8.2	8.2	8.1	8.1	7.8	8.4	8.1	8.6	8.4
10	8.3	7.8	8.3	8.0	8.2	8.1	8.0	7.8	8.4	8.1	8.6	8.3
11	8.6	7.8	8.3	8.1	8.3	8.1	8.0	7.9	8.4	8.2	8.6	8.4
12	8.5	8.2	8.4	8.2	8.2	8.2	---	---	8.4	8.1	8.6	8.4
13	8.7	8.2	8.4	8.2	8.3	8.1	---	---	8.4	8.1	8.6	8.4
14	8.6	8.1	8.3	8.0	8.4	8.2	---	---	8.4	8.2	8.6	8.5
15	8.7	8.1	8.3	8.1	8.5	8.2	8.1	7.8	8.4	8.2	8.5	8.4
16	8.7	8.0	8.3	8.1	8.4	8.2	8.1	7.8	8.4	8.1	8.5	8.3
17	8.7	8.1	8.3	8.2	8.4	8.2	8.1	7.9	8.4	8.2	8.5	8.3
18	8.5	7.9	8.5	8.1	8.4	8.2	8.1	7.8	8.4	8.1	8.5	8.3
19	8.8	8.1	8.5	8.2	8.4	8.2	8.2	7.9	8.4	8.1	8.5	8.3
20	8.8	7.9	8.6	8.2	8.5	8.2	8.2	7.9	8.4	8.1	8.7	8.4
21	8.3	7.8	8.7	8.4	8.5	8.2	8.1	7.8	8.4	8.1	8.7	8.5
22	8.7	7.8	8.6	8.4	8.5	8.2	8.1	7.8	8.4	8.1	8.6	8.4
23	8.7	7.8	8.5	8.1	8.4	8.1	8.2	7.8	8.5	8.2	8.7	8.3
24	8.6	7.8	8.5	8.1	8.3	8.0	8.2	7.8	8.4	8.2	8.7	8.4
25	8.7	7.8	8.5	8.1	8.3	8.0	8.2	7.9	8.4	8.2	8.7	8.4
26	8.6	8.2	8.4	7.9	8.3	8.0	8.2	7.9	8.4	8.2	8.6	8.4
27	8.5	8.1	8.4	7.9	8.3	8.1	8.1	7.9	8.4	8.2	8.6	8.4
28	8.2	8.0	8.6	8.3	8.3	8.1	8.1	7.9	8.3	8.2	8.6	8.4
29	8.2	7.9	8.6	8.4	8.2	8.1	8.1	7.9	8.2	8.1	8.6	8.3
30	8.1	7.9	8.5	8.1	8.2	8.0	8.2	7.9	8.3	8.1	8.6	8.4
31	---	---	8.4	8.0	---	---	8.3	7.9	8.4	8.1	---	---
MONTH	8.8	7.8	8.7	7.9	8.5	8.0	---	---	8.5	7.8	8.7	8.2

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	42800	41400	31700	31100	---	---	23900	22700	20200	19500	---	---
2	42200	40300	31400	30500	---	---	23300	22700	19900	19100	---	---
3	41900	40300	31100	30300	---	---	23300	22500	20000	19300	---	---
4	41500	39700	30900	30100	---	---	23300	22600	20000	19300	---	---
5	41000	39300	30700	30000	27400	26400	23300	22700	20200	19100	---	---
6	40500	39100	30700	30200	27300	26700	23000	22500	20000	19100	47300	19800
7	41700	39100	30400	29400	27300	26800	23200	22700	19600	19100	47400	42200
8	43000	40500	---	---	27400	26600	22900	22000	19700	19400	48100	42100
9	43000	41100	---	---	27200	26400	23000	22400	19700	18900	48000	782
10	42100	40000	---	---	27100	26300	23100	22400	19500	18500	42400	1040
11	41200	40000	---	---	26600	25500	23000	22200	19100	18700	45700	1450
12	40800	39600	---	---	26000	25500	23000	21700	19200	18100	47900	18100
13	40500	34400	---	---	26000	25500	22300	21600	19000	18000	48800	4250
14	35100	34200	---	---	26000	25100	22300	21600	18900	18100	49000	4550
15	35000	34100	---	---	25600	24900	22100	21600	18800	17900	49200	18500
16	34500	33600	---	---	25800	25300	21900	21400	18800	17500	49500	5350
17	34400	33400	---	---	25700	25000	21800	21100	17800	17600	49600	5230
18	34300	33500	---	---	25600	25100	21700	19000	18100	17500	49600	42700
19	34200	33100	---	---	25500	24900	21500	20900	18400	17700	49800	35100
20	33900	33000	---	---	25300	24800	21400	21000	18400	17400	49900	29600
21	33700	32700	---	---	25000	24100	21300	20800	17700	16000	49700	42800
22	33800	32900	---	---	24600	24200	21400	20800	16600	767	49800	42300
23	33500	32500	---	---	24700	24100	21300	20600	34300	1120	50000	34800
24	33200	32200	---	---	24800	24300	21200	20800	40500	641	49900	27200
25	33200	32100	---	---	24700	23700	21100	20900	2290	866	49700	20400
26	33200	32400	---	---	24400	21600	21000	20000	34000	2290	48600	21200
27	32900	32100	---	---	24300	23200	20700	20000	44000	3240	46600	28300
28	32600	31600	---	---	24600	23500	20400	19600	45700	3300	46600	32700
29	32700	31300	---	---	24200	23400	20300	20000	---	---	46400	43100
30	32200	31400	---	---	24100	23500	20300	19800	---	---	45700	32600
31	32300	30700	---	---	24300	23000	20200	19500	---	---	45500	26500
MONTH	43000	30700	---	---	---	---	23900	19000	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	48000	30300	---	---	38200	36200	35900	34400	31200	28400	28500	27200
2	48900	45000	---	---	38500	36100	35600	33200	30900	29000	28500	27100
3	49200	41900	---	---	38600	36400	35300	34100	30300	28500	28400	27200
4	49800	28600	---	---	37800	36100	35000	33600	30400	28400	28300	27500
5	50100	35100	---	---	37400	35600	34900	33200	30400	29400	28000	26800
6	50200	38300	---	---	36900	34900	34200	33100	30100	28600	27700	26500
7	50000	37400	---	---	36600	35200	34000	32300	30000	29200	27500	26400
8	50100	39400	---	---	36200	35000	33800	32300	30200	28300	27900	26700
9	50200	36700	---	---	36000	33800	32800	30500	30300	29300	27800	26900
10	50200	37500	---	---	35800	34600	32700	30800	30200	28800	27500	26600
11	49900	36500	47500	40500	35300	34000	32500	31400	30200	24900	27400	26500
12	49300	36000	44000	39700	35100	33600	---	---	29900	23000	27400	26500
13	49200	34400	46200	39500	33900	33400	---	---	29900	28700	27100	26200
14	49200	32800	48400	40300	33900	32500	---	---	29800	28700	27100	26200
15	49500	37200	45700	41700	34000	32400	32400	30600	29500	24900	27400	26400
16	49800	39200	43800	41500	32900	32000	32700	30800	29300	24400	27300	26100
17	49900	23300	44800	40800	32800	32100	32400	31300	29400	28200	26800	25700
18	49200	33200	42500	36500	34400	32100	32300	31000	29400	28000	26800	26000
19	49400	42900	39700	33800	35800	31400	32100	31000	29200	27800	26500	25400
20	49000	32900	46000	32400	32100	31400	31800	29900	29300	27500	26100	24900
21	49100	36200	36200	31900	33000	31300	31500	28800	29000	27400	26100	24600
22	49100	23200	36300	31200	32000	31100	31400	30100	28800	27800	25900	23600
23	49000	19000	35400	31200	35200	31400	31200	30200	29400	27800	25800	23900
24	48500	26600	36400	31100	37000	35000	30800	29900	29500	27700	26200	24200
25	45800	20300	35900	31000	37400	35000	30900	29800	29400	28100	25600	24500
26	---	---	33700	29100	37600	35300	30400	29200	29500	27700	25700	24600
27	---	---	39500	29500	36900	35100	30200	29200	29400	28100	25000	24200
28	---	---	31500	29700	36500	34800	30300	29400	29000	27600	25500	24200
29	---	---	39600	29500	36200	33600	30000	29200	28800	26900	25100	23800
30	---	---	35900	23200	36000	34500	30100	29100	28900	25400	25200	24000
31	---	---	39600	33000	---	---	30700	28700	28600	27200	---	---
MONTH	---	---	---	---	38600	31100	---	---	31200	23000	28500	23600

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.5	22.5	16.5	15.5	---	---	11.5	11.0	16.0	15.0	---	---
2	24.0	22.5	16.0	14.5	---	---	12.0	11.0	15.5	14.0	---	---
3	24.0	22.5	16.0	15.0	---	---	11.5	10.5	15.0	13.5	---	---
4	23.5	22.0	16.0	15.0	---	---	12.0	10.5	14.5	13.5	---	---
5	23.0	21.0	16.0	15.5	13.5	12.0	11.5	10.5	16.0	14.5	---	---
6	23.5	22.0	16.0	15.5	12.5	11.0	11.5	10.0	16.5	15.0	14.0	11.0
7	23.0	22.0	17.0	16.0	12.0	11.0	11.0	9.5	16.5	15.5	14.0	13.0
8	22.5	22.0	---	---	12.0	11.0	11.0	9.5	16.0	15.5	14.5	13.5
9	23.0	22.0	---	---	12.0	11.0	10.5	9.5	16.5	15.5	16.0	9.5
10	23.0	21.5	---	---	12.0	11.0	10.0	9.5	17.0	16.0	18.0	11.0
11	22.5	21.5	---	---	12.0	11.0	11.0	10.0	16.5	15.5	19.5	14.0
12	22.5	21.0	---	---	11.5	10.5	12.0	10.5	17.0	16.0	18.5	14.5
13	22.0	20.0	---	---	11.0	10.0	13.0	11.5	17.0	16.0	20.5	14.5
14	21.5	20.0	---	---	11.0	10.0	13.0	12.0	16.5	16.0	19.5	14.5
15	21.0	20.0	---	---	11.0	10.0	13.0	12.5	17.0	16.0	21.0	14.5
16	21.0	20.0	---	---	11.0	10.0	13.0	13.0	17.0	16.0	21.5	15.0
17	21.0	20.0	---	---	11.0	10.5	14.0	13.0	16.5	15.0	22.0	15.0
18	21.0	20.0	---	---	11.0	11.0	15.5	13.5	16.0	15.0	18.5	14.5
19	20.5	20.0	---	---	11.5	11.0	16.0	14.0	15.0	14.5	17.5	15.0
20	20.5	19.0	---	---	11.5	11.0	16.0	15.0	15.5	14.5	19.0	15.0
21	20.0	19.0	---	---	11.5	10.5	17.0	15.0	15.5	14.5	18.5	15.0
22	20.0	18.5	---	---	11.5	10.5	16.5	15.5	15.0	11.5	19.0	15.0
23	20.0	19.0	---	---	11.5	11.0	15.5	15.0	14.5	12.0	19.5	15.5
24	19.5	18.5	---	---	11.5	10.5	15.5	15.0	14.5	10.5	20.0	15.5
25	19.0	18.0	---	---	11.5	11.0	15.5	15.0	16.0	12.0	20.5	15.5
26	19.0	18.5	---	---	12.0	10.5	17.0	15.5	18.5	13.5	21.0	15.5
27	19.0	18.0	---	---	11.5	10.5	16.0	15.0	17.5	14.0	19.5	15.5
28	18.5	17.0	---	---	11.0	11.0	15.5	15.0	17.0	14.0	19.0	15.0
29	17.5	17.0	---	---	11.5	10.5	15.0	14.5	---	---	18.5	16.0
30	17.5	16.5	---	---	11.0	10.5	15.5	14.5	---	---	21.0	16.0
31	17.0	16.0	---	---	11.5	11.0	16.5	15.0	---	---	21.0	15.5
MONTH	24.0	16.0	---	---	---	---	17.0	9.5	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.0	15.0	25.0	18.5	25.5	23.5	26.0	24.0	28.5	26.0	25.5	23.5
2	19.5	14.5	25.0	18.5	26.0	23.5	25.0	23.5	28.5	27.0	25.5	23.5
3	19.0	15.5	24.5	19.0	26.0	23.5	25.5	23.5	29.0	26.5	25.0	23.0
4	20.0	15.5	21.5	19.0	26.0	23.5	26.0	24.0	29.0	27.0	25.0	23.5
5	20.0	16.0	22.5	19.0	26.5	24.5	25.5	24.0	28.0	27.0	25.5	23.0
6	20.5	16.0	24.0	18.0	26.5	24.0	27.0	23.0	27.5	26.5	25.5	23.5
7	20.5	16.0	24.5	18.0	27.0	24.5	26.0	23.5	27.0	25.0	25.0	23.5
8	20.0	15.5	24.0	18.5	26.0	24.0	27.0	22.5	27.5	26.0	24.5	23.0
9	21.5	15.0	24.0	18.5	25.5	23.5	27.5	25.0	27.0	26.0	25.0	23.0
10	22.5	15.0	24.5	18.5	25.5	23.5	28.0	25.5	27.0	24.5	25.0	23.0
11	23.0	15.0	24.0	20.0	26.0	24.0	27.5	25.5	27.5	24.5	25.0	23.0
12	21.5	15.5	23.5	19.5	25.5	24.0	---	---	28.0	25.5	25.5	23.0
13	23.0	15.5	23.5	19.0	27.0	23.0	---	---	28.0	26.0	26.5	23.5
14	21.0	15.5	23.5	19.5	26.0	23.5	---	---	28.5	26.5	26.5	25.0
15	20.5	15.0	22.5	20.0	27.0	22.5	27.5	25.0	28.5	26.5	26.0	25.5
16	20.5	14.0	22.5	19.5	27.0	24.0	28.0	25.5	29.0	27.0	26.5	24.5
17	17.5	14.5	23.0	20.0	26.5	23.5	27.5	25.5	29.5	27.5	26.5	25.0
18	18.0	15.0	24.5	21.0	27.0	23.5	28.0	25.0	29.5	27.0	26.5	25.5
19	18.5	16.0	25.5	22.0	27.5	24.5	28.0	25.5	29.0	27.0	26.5	25.0
20	21.5	16.5	24.5	22.5	28.0	24.0	27.5	26.5	29.0	27.0	26.0	24.5
21	18.5	16.0	23.5	22.0	26.5	25.0	27.5	25.5	28.5	26.5	25.0	23.5
22	19.5	16.0	22.5	21.0	28.0	24.5	28.0	25.5	28.5	26.5	24.0	22.5
23	22.5	16.5	22.5	20.5	26.5	23.0	29.0	26.5	28.5	27.0	24.0	22.0
24	23.0	17.0	22.5	21.0	26.0	23.5	28.5	27.0	28.5	26.5	24.0	22.5
25	24.0	18.0	22.0	21.0	26.0	23.5	29.0	27.0	28.0	27.0	24.5	22.5
26	26.0	21.0	24.5	21.5	26.0	23.5	29.0	27.0	28.0	26.5	25.0	23.5
27	25.0	22.5	26.0	22.0	26.0	23.5	28.0	27.0	27.5	26.5	24.5	24.0
28	23.5	20.5	25.5	23.5	26.5	24.5	28.0	27.0	27.0	25.5	24.0	23.0
29	24.0	19.0	24.5	23.0	26.5	24.0	27.5	27.0	25.5	23.5	24.0	23.0
30	25.0	19.5	24.5	23.0	27.0	24.5	27.0	26.5	24.5	23.0	24.0	23.5
31	---	---	25.5	22.0	---	---	27.0	25.5	25.5	23.5	---	---
MONTH	26.0	14.0	26.0	18.0	28.0	22.5	---	---	29.5	23.0	26.5	22.0

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA

LOCATION.—Lat 33°13'46", long 117°24'34", in SE 1/4 SW 1/4 sec.9, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on tidal flat of the Santa Margarita River, on Camp Joseph H. Pendleton Naval Reservation, 0.6 mi west of Interstate Highway 5, and 3.0 mi northwest of Oceanside.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—November 1993 to current year.
DISSOLVED OXYGEN: November 1993 to current year.
pH: November 1993 to current year.
SPECIFIC CONDUCTANCE: November 1993 to current year.
WATER TEMPERATURE: November 1993 to current year.

PERIOD OF DAILY RECORD.—November 1993 to current year.
DISSOLVED OXYGEN: November 1993 to current year.
pH: November 1993 to current year.
SPECIFIC CONDUCTANCE: November 1993 to current year.
WATER TEMPERATURE: November 1993 to current year.

INSTRUMENTATION.—Water-quality monitor since November 1993.

REMARKS.—Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 21.1 mg/L, Apr. 18, 1997; minimum recorded, 0.0 mg/L, many days during period of record.
pH: Maximum recorded, 9.9 standard units, Jan. 17, 2000; minimum recorded, 6.0 standard units, Nov. 23, 1994, Apr. 24, 1995.
SPECIFIC CONDUCTANCE: Maximum recorded, 58,700 microsiemens, July 2, 1998; minimum recorded, 236 microsiemens, Feb. 25, 1998.
WATER TEMPERATURE: Maximum recorded, 35.0°C, Aug. 14, 1996; minimum recorded, 2.0°C, Nov. 19, 21, 1994.

EXTREMES FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 16.3 mg/L, Feb. 11; minimum recorded, 0.5 mg/L, Sept. 19, 20.
pH: Maximum recorded, 9.9 standard units, Jan. 17; minimum recorded, 7.5 standard units, several days in October, November, and May.
SPECIFIC CONDUCTANCE: Maximum recorded, 56,200 microsiemens, Apr. 16; minimum recorded, 412 microsiemens, Feb. 24.
WATER TEMPERATURE: Maximum recorded, 30.0°C, Aug. 17; minimum recorded, 6.0°C, Nov. 23.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.4	3.0	---	---	4.6	.6	---	---	10.1	3.1	---	---
2	5.5	2.4	---	---	5.6	.7	---	---	12.1	3.7	11.4	6.0
3	4.8	2.5	---	---	3.3	.8	---	---	9.2	2.2	---	---
4	6.8	2.6	---	---	9.4	.9	---	---	5.5	1.9	12.4	6.7
5	7.4	2.8	---	---	5.2	3.2	---	---	2.7	1.8	11.8	7.0
6	6.3	3.1	---	---	11.8	3.6	---	---	2.6	1.8	12.8	9.7
7	7.2	3.2	---	---	6.0	2.8	---	---	3.2	1.8	13.3	7.6
8	8.1	3.5	---	---	7.8	4.7	---	---	6.2	1.8	9.7	6.0
9	7.7	3.8	5.1	1.1	9.7	4.1	---	---	9.2	2.1	8.8	6.0
10	8.9	3.8	5.9	1.3	7.8	3.2	---	---	12.4	2.0	10.2	5.5
11	8.7	4.0	6.8	1.5	8.8	1.6	---	---	16.3	2.5	9.8	5.5
12	8.4	4.2	3.4	1.7	8.1	3.1	---	---	7.1	.9	9.8	4.9
13	---	---	3.3	1.3	7.7	3.0	---	---	9.8	2.4	8.2	3.9
14	---	---	3.6	1.2	8.7	3.0	13.7	1.0	11.4	1.1	7.2	4.5
15	---	---	5.7	1.2	7.5	3.3	13.6	7.8	5.2	1.0	7.3	3.2
16	---	---	8.0	1.1	10.2	3.6	11.8	6.9	4.3	1.1	7.5	3.1
17	---	---	2.4	1.1	7.1	3.4	12.0	4.7	12.3	1.1	8.2	2.8
18	---	---	4.7	1.1	7.2	3.5	11.2	6.4	8.2	1.7	7.5	3.1
19	---	---	7.3	1.2	8.3	3.9	10.9	4.7	8.0	1.2	8.0	3.8
20	---	---	1.9	1.1	12.9	3.8	14.9	3.2	5.4	1.3	8.4	4.3
21	---	---	7.6	1.1	10.4	4.2	15.4	3.7	6.3	1.3	8.7	3.5
22	---	---	3.8	1.3	7.7	4.1	11.2	2.2	7.9	1.4	8.3	3.2
23	---	---	9.0	2.9	7.2	4.1	15.6	1.4	10.3	1.6	9.2	3.5
24	---	---	3.4	1.7	8.3	4.2	11.3	2.9	10.9	1.9	9.2	3.7
25	---	---	2.1	1.1	10.1	4.3	12.7	4.4	11.3	3.8	9.6	2.6
26	---	---	6.1	1.1	10.0	4.5	11.6	3.5	11.8	7.1	9.5	2.7
27	---	---	6.4	1.2	9.3	4.5	7.1	3.0	12.3	8.8	7.8	2.2
28	---	---	6.4	1.1	---	---	13.9	1.6	11.4	5.5	8.1	2.1
29	---	---	3.2	1.1	---	---	12.5	4.5	---	---	8.8	2.0
30	---	---	---	---	---	---	13.7	5.3	---	---	5.5	2.5
31	---	---	---	---	---	---	10.8	4.1	---	---	8.3	3.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	2.8	5.4	2.3	10.6	3.4	6.4	1.6	---	---	13.6	4.8
2	8.5	3.2	6.1	2.2	10.6	3.2	6.5	1.7	---	---	12.9	4.7
3	7.9	2.8	6.3	2.2	10.8	3.0	6.9	1.8	---	---	13.0	4.3
4	8.2	2.3	6.2	2.2	10.5	3.6	6.9	2.7	---	---	11.6	4.3
5	7.7	1.7	6.4	2.3	8.8	2.9	8.2	2.4	---	---	11.8	3.9
6	7.4	1.6	7.0	2.5	8.1	3.1	7.9	2.0	---	---	11.5	3.5
7	6.9	1.3	7.0	2.9	8.4	2.8	7.7	2.2	---	---	7.0	2.5
8	6.6	1.5	6.9	3.4	8.7	2.4	7.2	2.2	12.5	2.2	10.1	2.5
9	6.7	1.7	6.6	3.2	8.8	2.4	7.1	2.8	10.8	2.6	10.7	4.4
10	5.7	2.0	8.1	3.2	8.7	2.7	7.7	2.3	11.5	3.3	8.2	2.0
11	4.7	1.8	8.6	3.5	8.7	3.5	7.4	2.7	9.8	3.4	10.2	4.1
12	5.5	1.4	8.4	4.2	9.1	2.5	7.2	2.8	7.6	.8	10.8	4.0
13	6.5	1.1	9.4	4.5	9.6	3.5	7.1	3.5	9.7	3.0	9.5	3.9
14	6.2	2.0	8.4	4.0	10.2	3.1	---	---	9.5	2.7	6.8	1.5
15	6.6	1.8	8.6	4.2	11.3	4.0	---	---	7.8	1.6	6.5	1.2
16	6.5	1.9	7.9	4.4	8.9	3.2	---	---	8.4	1.5	10.0	1.1
17	6.1	1.9	8.1	3.9	9.3	3.1	---	---	8.6	1.8	8.1	3.1
18	6.6	2.8	8.0	4.6	10.1	3.0	---	---	7.8	1.0	7.0	.9
19	6.2	2.3	6.8	3.7	8.4	2.7	---	---	8.9	1.1	6.0	.5
20	6.9	1.9	8.4	3.2	8.6	2.3	---	---	9.4	2.1	6.9	.5
21	5.3	2.0	7.9	3.1	7.4	2.4	---	---	8.5	2.8	5.6	1.7
22	5.7	2.3	8.2	3.4	8.7	2.5	---	---	8.8	1.3	5.4	2.7
23	4.9	2.1	8.0	4.6	9.1	3.4	---	---	10.8	1.3	8.9	2.0
24	4.5	2.0	7.5	4.5	9.4	3.2	---	---	9.2	2.6	9.8	3.3
25	4.4	2.0	5.8	3.3	6.5	1.8	---	---	7.5	2.8	9.6	4.5
26	4.7	2.0	6.4	2.9	8.6	1.9	---	---	8.2	2.8	8.7	4.9
27	4.9	2.0	10.2	3.7	8.8	2.1	---	---	6.2	1.7	6.2	1.8
28	5.3	1.9	9.3	4.8	6.8	2.7	---	---	7.5	2.0	6.9	2.5
29	5.9	2.5	8.4	4.5	6.4	1.7	---	---	8.1	3.2	8.7	2.9
30	5.2	2.2	10.2	5.0	6.9	2.0	---	---	15.3	3.9	8.0	3.4
31	---	---	12.2	4.8	---	---	---	---	14.7	2.6	---	---
MONTH	8.5	1.1	12.2	2.2	11.3	1.7	---	---	---	---	13.6	.5

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.7	---	---	---	---	---	---	9.7	9.6	---	---
2	8.0	7.6	---	---	---	---	---	---	9.7	9.6	8.3	7.8
3	7.9	7.7	---	---	---	---	---	---	9.7	9.6	---	---
4	8.1	7.7	---	---	---	---	---	---	9.6	9.5	8.1	8.0
5	8.1	7.8	---	---	---	---	---	---	9.5	9.5	8.3	7.9
6	8.0	7.8	---	---	---	---	---	---	9.6	9.5	8.2	8.1
7	8.1	7.7	---	---	---	---	---	---	9.6	9.6	8.4	8.0
8	8.1	7.7	---	---	---	---	---	---	9.6	9.5	8.4	8.1
9	8.0	7.6	7.9	7.5	---	---	---	---	9.6	9.5	8.3	8.1
10	8.0	7.5	8.5	7.5	---	---	---	---	9.6	8.2	8.3	8.0
11	8.1	7.5	8.7	7.7	---	---	---	---	9.5	8.4	8.5	8.1
12	8.0	7.5	8.4	8.0	---	---	---	---	9.4	8.7	9.1	8.5
13	---	---	8.1	7.8	---	---	---	---	9.4	8.9	9.0	8.7
14	---	---	8.0	7.7	---	---	9.5	9.1	9.5	8.8	8.9	8.7
15	---	---	8.0	7.6	---	---	9.5	9.4	9.3	8.3	8.8	8.2
16	---	---	8.9	7.7	---	---	9.8	9.4	9.2	8.3	8.6	8.1
17	---	---	8.3	7.9	---	---	9.9	9.4	9.5	7.7	9.0	8.4
18	---	---	8.7	7.9	---	---	9.6	9.5	9.5	9.0	9.0	8.7
19	---	---	9.0	8.0	---	---	9.6	9.4	9.5	8.8	9.0	8.7
20	---	---	8.6	8.1	---	---	9.6	9.4	9.1	8.5	8.9	8.7
21	---	---	9.0	8.1	---	---	9.6	9.4	9.2	8.0	9.0	8.5
22	---	---	8.8	8.2	---	---	9.5	9.4	9.2	9.1	9.0	8.6
23	---	---	9.3	8.8	---	---	9.6	9.4	9.4	8.1	9.0	8.7
24	---	---	9.1	8.8	---	---	9.6	9.5	8.5	7.8	9.1	8.7
25	---	---	8.8	8.3	---	---	9.7	9.5	8.6	7.8	9.0	8.7
26	---	---	9.1	8.5	---	---	9.7	9.5	8.4	7.9	9.0	8.7
27	---	---	9.3	8.7	---	---	9.6	9.5	8.7	7.9	9.0	8.7
28	---	---	9.0	8.5	---	---	9.7	9.5	8.4	8.1	8.8	8.6
29	---	---	9.1	7.9	---	---	9.7	9.5	---	---	8.9	8.5
30	---	---	---	---	---	---	9.8	9.5	---	---	8.9	8.7
31	---	---	---	---	---	---	9.8	9.6	---	---	9.0	8.8
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.1	8.7	8.3	7.8	8.6	8.2	8.4	8.2	---	---	8.6	8.3
2	9.0	8.6	8.3	8.0	8.4	8.1	8.4	8.2	---	---	8.6	8.4
3	9.0	8.7	8.3	7.7	8.6	8.2	8.4	8.1	---	---	8.6	8.4
4	9.0	8.8	8.2	7.9	8.6	8.3	8.3	8.1	---	---	8.6	8.4
5	9.0	8.8	8.2	7.8	8.5	8.0	8.3	8.1	---	---	8.7	8.4
6	8.9	8.3	8.2	7.5	8.5	8.0	8.3	8.1	---	---	8.6	8.4
7	8.9	8.6	8.2	7.9	8.5	7.9	8.3	8.0	---	---	8.5	8.4
8	8.9	8.4	8.2	7.6	8.4	8.0	8.2	8.1	8.5	8.1	8.7	8.4
9	8.9	8.6	8.1	7.6	8.5	8.1	8.2	8.0	8.5	8.2	8.8	8.6
10	8.9	8.7	8.2	7.8	8.5	8.2	8.3	8.0	8.5	8.2	8.7	8.5
11	8.7	8.2	8.3	7.8	8.3	8.0	8.2	8.0	8.4	8.2	8.8	8.6
12	8.5	8.2	8.4	8.2	8.2	7.9	8.3	8.0	8.4	7.9	8.8	8.6
13	8.5	8.2	8.3	8.0	8.2	7.9	8.2	8.0	8.4	8.2	8.7	8.6
14	8.5	8.0	8.6	8.0	8.3	8.0	---	---	8.4	8.1	8.7	8.5
15	8.6	8.3	8.5	8.3	8.3	8.0	---	---	8.4	8.0	8.7	8.5
16	8.5	8.3	8.4	7.9	8.3	8.1	---	---	8.4	8.1	8.8	8.5
17	8.5	8.2	8.4	7.9	8.3	8.1	---	---	8.4	8.0	8.8	8.7
18	8.3	7.7	8.3	8.2	8.3	8.1	---	---	8.3	8.0	8.8	8.6
19	8.6	8.1	8.2	7.9	8.3	8.0	---	---	8.3	7.9	8.8	8.6
20	8.8	8.3	8.3	7.9	8.4	8.0	---	---	8.4	8.0	8.8	8.5
21	8.7	8.2	8.4	8.1	8.4	8.0	---	---	8.3	8.1	8.6	8.5
22	8.3	8.0	8.3	8.1	8.4	8.0	---	---	8.4	7.9	8.5	8.4
23	8.4	8.1	8.2	7.8	8.5	8.1	---	---	8.5	8.0	8.5	8.4
24	8.2	7.8	8.2	7.8	8.6	8.4	---	---	8.4	8.2	8.6	8.4
25	8.2	8.0	8.2	7.8	8.5	8.3	---	---	8.4	8.2	8.6	8.3
26	8.2	7.8	8.1	7.6	8.6	8.3	---	---	8.4	8.2	8.6	8.4
27	8.2	7.9	8.1	7.6	8.5	8.3	---	---	8.4	8.2	8.5	8.3
28	8.2	8.0	8.4	8.1	8.4	8.3	---	---	8.4	8.1	8.5	8.3
29	8.1	7.7	8.3	8.2	8.4	8.2	---	---	8.4	8.2	8.6	8.3
30	8.3	8.1	8.3	8.0	8.4	8.2	---	---	8.4	8.2	8.5	8.4
31	---	---	8.7	7.9	---	---	---	---	8.5	8.1	---	---
MONTH	9.1	7.7	8.7	7.5	8.6	7.9	---	---	---	---	8.8	8.3

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	45400	42000	---	---	31700	29700	---	---	30400	29900	---	---
2	45100	44300	---	---	31300	29700	---	---	30300	29600	---	---
3	45100	36500	---	---	31500	29900	---	---	30300	29500	---	---
4	44300	42700	---	---	34000	29100	---	---	30000	29200	---	---
5	43600	43100	---	---	33200	31000	---	---	30000	29300	---	---
6	43600	42500	---	---	33200	30800	---	---	30000	29400	---	---
7	43300	41400	---	---	32400	29800	---	---	30300	29100	---	---
8	42700	41700	---	---	31000	29400	---	---	30100	29100	48500	45600
9	42800	41900	36000	34700	32700	28000	---	---	29600	29100	48200	34600
10	43300	42500	36000	34700	33000	30700	---	---	29700	22200	40400	34900
11	43300	42400	36900	34800	32600	29400	---	---	24900	22100	46400	40300
12	43100	42200	36800	35600	32400	30400	---	---	24100	22100	48100	44900
13	---	---	36600	35000	32300	30300	---	---	23800	22100	47000	45100
14	---	---	36400	35600	30700	28700	32600	31800	24300	22200	48200	46200
15	---	---	36300	32700	31800	27600	33500	31800	25600	23600	50600	47400
16	---	---	35800	34000	32200	29400	32600	31900	25600	23400	51500	48300
17	---	---	35400	34800	32000	31300	32400	31900	26500	20700	51700	48000
18	---	---	35300	33000	31700	28300	32200	31700	23000	21200	51600	49500
19	---	---	35900	33600	31500	27000	32000	31300	24400	22600	51900	50300
20	---	---	35800	34800	30700	27500	31900	29200	25300	23600	51300	49800
21	---	---	35500	33600	29800	26600	31800	31100	25800	21600	51100	50300
22	---	---	34800	32000	30300	27100	31600	31200	21600	20700	51000	48600
23	---	---	35900	31900	30800	27700	31500	31000	21800	429	51000	49600
24	---	---	35800	34600	30800	29500	31600	31000	41400	412	51500	49600
25	---	---	35100	33900	30900	29100	31500	30800	43000	562	51800	50200
26	---	---	34200	32400	30600	28200	31300	31000	---	---	52200	50400
27	---	---	33700	32500	30500	29000	31300	31100	---	---	52400	49100
28	---	---	33200	32600	---	---	31200	30100	---	---	52300	48900
29	---	---	33000	31900	---	---	30900	30200	---	---	51400	49800
30	---	---	32200	30700	---	---	30500	29700	---	---	50400	47500
31	---	---	---	---	---	---	30500	30100	---	---	51100	46500
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	51000	46700	53000	50800	40600	38800	36400	36000	---	---	31900	30700
2	50900	47900	53300	50600	39800	39000	36500	36000	---	---	31600	30700
3	51700	48800	53200	50400	39800	39200	36600	35500	---	---	31600	31100
4	54300	44800	53200	49900	39900	39100	36100	35700	---	---	31700	31300
5	52900	42100	52000	49800	39500	38800	36500	35300	---	---	31700	31200
6	55000	46200	51700	49800	40000	39100	36400	35100	---	---	31600	31200
7	56100	45700	52500	49800	39700	37900	36200	34400	---	---	31600	31100
8	53300	42500	52200	49700	38700	37600	35600	34500	33500	31900	31200	30400
9	54500	42300	51600	50100	38200	37900	35200	34100	32600	31900	30900	30300
10	54000	44900	53600	49600	38300	37800	34800	33500	32500	32000	31000	30600
11	55100	47400	55000	53600	38400	37300	34300	32900	32600	32300	31100	30800
12	54800	44700	55500	54400	38100	36700	33600	32600	32700	32300	31100	30600
13	55800	43000	55400	53800	37400	36900	33100	32400	32600	32200	32200	30800
14	54500	43200	54100	49200	37400	36000	---	---	32700	32000	32500	30500
15	54000	45700	51600	48300	37400	35800	---	---	32900	32200	30900	30100
16	56200	44400	50500	46300	36300	35400	---	---	33000	32400	30500	30000
17	53800	45400	51100	45800	36100	35400	---	---	33100	32400	30700	30100
18	50200	41700	49100	45400	36600	34400	---	---	33800	32700	30800	29900
19	51700	41400	49900	44000	35000	33600	---	---	33100	32100	30100	29300
20	52100	42600	48100	42600	34200	33600	---	---	32700	32100	29700	28600
21	49300	41200	46400	42100	34100	33400	---	---	33100	32200	30200	29200
22	49500	41200	46500	41500	34100	33100	---	---	33800	31500	29600	28800
23	52700	42800	45600	41400	37200	33400	---	---	32600	31300	30600	29000
24	50700	49400	46700	41300	37700	36400	---	---	31700	30900	29900	28800
25	51100	50300	46200	41300	37600	36500	---	---	31700	31200	29300	28600
26	52000	51100	44000	39400	37100	36000	---	---	32000	31000	28700	27700
27	52200	51700	43300	39800	36800	35500	---	---	31900	30500	28700	27800
28	52300	51600	41900	40000	36400	35700	---	---	31900	30400	28700	27400
29	53000	51100	42800	39900	36400	35800	---	---	31300	30700	27900	27200
30	52900	51700	41800	36300	36500	35800	---	---	31500	30300	28500	27400
31	---	---	41600	39000	---	---	---	---	31900	30600	---	---
MONTH	56200	41200	55500	36300	40600	33100	---	---	---	---	32500	27200

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	20.5	---	---	14.0	13.0	---	---	15.5	14.5	---	---
2	23.0	21.5	---	---	14.0	11.0	---	---	16.5	15.0	21.0	11.0
3	23.5	22.0	---	---	14.0	13.5	---	---	16.0	15.0	---	---
4	23.0	21.0	---	---	14.5	9.0	---	---	16.0	14.5	15.0	9.5
5	22.0	20.5	---	---	13.5	9.5	---	---	15.5	14.0	14.0	9.5
6	23.0	21.5	---	---	12.0	7.0	---	---	14.5	14.0	18.0	6.5
7	23.0	21.0	---	---	12.0	9.5	---	---	16.0	14.5	16.5	7.0
8	22.5	21.0	---	---	12.0	11.5	---	---	16.5	15.0	14.5	13.5
9	22.0	20.0	16.5	14.0	12.0	8.0	---	---	16.5	15.5	15.0	12.0
10	21.5	19.5	16.5	12.5	12.0	10.5	---	---	16.5	14.5	20.0	13.5
11	21.0	20.0	15.5	11.5	12.0	9.5	---	---	18.5	16.0	21.0	14.5
12	21.0	19.0	15.0	13.5	11.5	8.5	---	---	16.5	14.0	19.0	15.0
13	---	---	15.5	14.5	11.0	8.0	---	---	17.5	15.0	21.0	16.0
14	---	---	16.0	15.5	11.0	9.5	16.0	10.5	17.5	15.5	20.0	15.0
15	---	---	18.0	16.0	11.5	9.0	12.5	11.0	17.0	15.0	21.0	15.5
16	---	---	17.0	14.0	10.5	8.5	13.0	12.0	17.5	14.5	21.0	15.0
17	---	---	16.5	16.0	11.0	9.5	13.0	12.5	18.5	16.0	22.5	15.0
18	---	---	16.5	12.5	12.5	9.5	13.0	12.5	17.5	13.0	21.0	15.0
19	---	---	15.5	12.0	12.5	9.5	14.0	13.0	16.5	10.5	20.5	14.0
20	---	---	14.5	13.5	12.5	10.5	15.5	13.5	15.5	12.0	22.5	15.0
21	---	---	17.5	13.0	12.5	9.0	16.0	14.0	17.5	14.0	21.5	13.0
22	---	---	16.0	12.5	11.5	10.0	16.0	15.0	16.0	14.0	21.5	12.5
23	---	---	12.5	6.0	11.5	8.5	17.0	15.0	19.5	12.0	23.0	13.0
24	---	---	10.5	9.0	11.0	9.5	16.5	15.5	15.0	10.5	22.5	13.5
25	---	---	11.0	10.0	11.0	8.5	15.5	15.0	17.0	9.0	22.5	15.5
26	---	---	11.0	8.5	11.5	9.0	15.5	15.0	19.5	9.0	23.0	14.5
27	---	---	11.5	9.0	11.0	8.5	15.5	15.0	21.5	7.0	19.0	16.0
28	---	---	11.5	10.0	---	---	17.0	15.5	17.5	10.0	21.5	16.5
29	---	---	13.0	11.5	---	---	16.5	15.0	---	---	23.5	17.0
30	---	---	13.5	11.5	---	---	16.0	15.0	---	---	22.0	18.0
31	---	---	---	---	---	---	15.0	14.5	---	---	23.5	17.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	24.5	15.5	28.0	20.0	27.0	23.5	28.5	25.0	---	---	26.0	23.0
2	22.5	14.0	28.5	19.5	27.5	24.0	28.5	25.0	---	---	25.5	23.0
3	23.0	16.5	29.0	19.5	27.0	23.0	28.0	25.5	---	---	25.0	22.0
4	23.0	17.0	24.0	19.5	27.0	22.5	28.0	25.0	---	---	24.5	22.0
5	25.0	16.5	24.5	19.0	28.0	23.5	28.0	24.0	---	---	25.0	22.0
6	24.5	17.5	26.0	18.5	27.5	22.0	27.0	22.5	---	---	25.0	22.5
7	23.0	17.0	26.5	18.5	28.5	24.0	28.0	24.0	---	---	24.5	22.5
8	22.0	17.0	26.0	19.0	27.0	23.5	27.5	25.0	28.0	24.5	24.5	22.0
9	23.0	15.5	26.0	20.5	26.0	22.0	26.0	23.0	26.5	25.0	25.0	22.5
10	24.5	17.0	26.0	21.0	26.5	22.0	26.5	23.5	26.5	23.0	24.0	21.0
11	24.5	17.5	25.5	20.5	27.0	23.0	26.0	23.5	27.0	23.5	24.5	21.5
12	22.5	18.0	25.5	18.5	26.0	22.0	26.5	23.0	27.0	24.5	25.0	22.0
13	25.5	18.0	26.5	19.0	27.0	23.0	26.5	23.5	27.5	25.0	27.0	23.0
14	23.0	17.0	24.5	21.5	26.0	23.5	---	---	29.0	25.5	27.0	25.5
15	23.5	16.0	24.0	20.0	27.0	22.5	---	---	29.0	26.0	26.0	25.0
16	25.0	15.5	24.0	19.5	27.0	24.0	---	---	29.0	26.0	26.5	23.5
17	19.0	15.0	24.5	20.0	26.5	23.5	---	---	30.0	26.5	26.5	25.0
18	20.5	14.0	26.0	20.5	26.5	23.0	---	---	29.5	26.5	26.0	25.0
19	23.0	15.0	25.5	22.0	27.5	24.5	---	---	29.0	25.5	26.0	24.0
20	24.5	16.5	24.5	23.0	28.0	24.0	---	---	29.0	26.0	26.0	23.5
21	19.5	16.0	24.0	22.0	26.0	24.5	---	---	29.0	26.5	24.5	22.5
22	21.5	15.5	22.5	21.5	28.0	24.5	---	---	28.5	25.5	23.0	21.5
23	25.0	17.5	23.0	21.0	27.0	24.0	---	---	28.5	26.0	24.0	21.0
24	25.0	18.0	23.0	21.0	28.0	24.5	---	---	28.0	26.0	24.0	21.0
25	26.0	18.5	22.5	21.0	26.0	24.5	---	---	28.5	26.0	24.5	21.5
26	27.5	20.5	24.5	21.5	27.5	23.5	---	---	28.0	26.0	26.0	23.5
27	24.5	22.0	26.5	22.0	28.5	25.5	---	---	27.0	25.5	25.0	23.5
28	25.0	20.0	26.0	24.0	29.0	26.0	---	---	26.5	25.0	24.0	23.0
29	26.0	19.0	25.0	23.5	28.5	26.0	---	---	25.0	23.0	25.0	22.5
30	26.5	18.5	25.0	22.5	28.5	25.5	---	---	25.0	22.5	24.5	23.5
31	---	---	27.0	22.5	---	---	---	---	26.0	23.5	---	---
MONTH	27.5	14.0	29.0	18.5	29.0	22.0	---	---	---	---	27.0	21.0

11046090 LAS FLORES CREEK AT LAS PULGAS CANYON, NEAR OCEANSIDE, CA

LOCATION.—Lat 33°19'07", long 117°26'13", in NE 1/4 SE 1/4 sec.7, T.10 S., R.5 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 2.7 mi upstream from mouth, and 9.7 mi northwest of Oceanside.

DRAINAGE AREA.—15.6 mi^2.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records fair. Some pumping upstream from station for irrigation. Camp Pendleton Water Treatment Plant No. 9 discharges to the channel at a point approximately 0.5 mi upstream from gage.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 29 ft^3/s, Mar. 8, 2000, gage height, 8.22 ft, from rating curve extended above 6.0 ft^3/s; no flow for many days in 2000.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	1600	29	8.22				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.07	.24	.52	.61	1.1	.68	.55	.04	.00	.00	.00
2	.14	.10	.27	.51	.55	.95	.66	.54	.02	.00	.00	.00
3	.19	.17	.27	.48	.53	.88	.68	.51	.01	.00	.00	.00
4	.20	.25	.21	.48	.52	1.3	.69	.56	.00	.00	.00	.00
5	.20	.27	.22	.50	.55	5.1	.71	.56	.00	.00	.00	.00
6	.22	.27	.25	.47	.55	2.7	.72	.50	.00	.00	.00	.00
7	.20	.28	.28	.47	.56	1.3	.73	.44	.00	.00	.00	.00
8	.13	.28	.27	.48	.52	6.3	.74	.46	.00	.00	.00	.00
9	.05	.33	.26	.49	.51	4.1	.72	.42	.00	.00	.00	.00
10	.03	.29	.29	.50	.62	1.6	.70	.37	.00	.00	.00	.00
11	.05	.24	.29	.50	1.3	1.2	.69	.31	.00	.00	.00	.00
12	.08	.21	.29	.50	2.3	1.1	.70	.26	.00	.00	.00	.00
13	.07	.22	.31	.48	1.5	.97	.72	.22	.00	.00	.00	.00
14	.13	.23	.33	.45	1.5	.91	.72	.21	.00	.00	.00	.00
15	.20	.24	.46	.44	.89	.84	.72	.22	.00	.00	.00	.00
16	.23	.22	.55	.47	.89	.80	.72	.23	.00	.00	.00	.00
17	.19	.24	.43	.49	1.3	.76	1.2	.21	.00	.00	.00	.00
18	.10	.24	.43	.46	.72	.82	2.6	.21	.00	.00	.00	.00
19	.08	.23	.43	.44	.64	1.0	.98	.20	.00	.00	.00	.00
20	.09	.24	.42	.45	2.3	.88	.82	.20	.00	.00	.00	.00
21	.06	.21	.42	.47	6.1	.78	.80	.19	.00	.00	.00	.00
22	.10	.16	.40	.49	6.5	.78	.83	.21	.00	.00	.00	.00
23	.16	.14	.41	.48	4.1	.77	.78	.23	.00	.00	.00	.00
24	.17	.18	.42	.47	2.9	.76	.75	.27	.00	.00	.00	.00
25	.16	.18	.43	.72	1.8	.76	.72	.29	.00	.00	.00	.00
26	.12	.17	.44	.65	1.5	.74	.68	.22	.00	.00	.00	.00
27	.18	.19	.45	.55	1.5	.77	.70	.15	.00	.00	.00	.00
28	.23	.19	.45	.53	1.5	.76	.73	.12	.00	.00	.00	.00
29	.23	.18	.45	.52	1.1	.78	.67	.10	.00	.00	.00	.00
30	.15	.18	.47	.51	---	.76	.59	.09	.00	.00	.00	.00
31	.08	---	.48	.98	---	.73	---	.06	---	.00	.00	---
TOTAL	4.29	6.40	11.32	15.95	45.86	43.00	24.15	9.11	0.07	0.00	0.00	0.00
MEAN	.14	.21	.37	.51	1.58	1.39	.81	.29	.002	.000	.000	.000
MAX	.23	.33	.55	.98	6.5	6.3	2.6	.56	.04	.00	.00	.00
MIN	.03	.07	.21	.44	.51	.73	.59	.06	.00	.00	.00	.00
AC-FT	8.5	13	22	32	91	85	48	18	.1	.00	.00	.00

11046090 LAS FLORES CREEK AT LAS PULGAS CANYON, NEAR OCEANSIDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.00	1.37	1.26	1.30	1.78	1.58	1.33	.79	.12	.097	.12	.11
MAX	1.86	2.52	2.15	2.09	1.98	1.77	1.85	1.29	.24	.19	.24	.23
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.14	.21	.37	.51	1.58	1.39	.81	.29	.002	.000	.000	.000
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	320.26		160.15			
ANNUAL MEAN	.88		.44		.90	
HIGHEST ANNUAL MEAN					1.36	1999
LOWEST ANNUAL MEAN					.44	2000
HIGHEST DAILY MEAN	3.4	Apr 12	6.5	Feb 22	6.5	Feb 22 2000
LOWEST DAILY MEAN	.03	Oct 10	.00	Jun 4	.00	Jun 4 2000
ANNUAL SEVEN-DAY MINIMUM	.08	Oct 8	.00	Jun 4	.00	Jun 4 2000
INSTANTANEOUS PEAK FLOW			29	Mar 8	29	Mar 8 2000
INSTANTANEOUS PEAK STAGE			8.22	Mar 8	8.22	Mar 8 2000
ANNUAL RUNOFF (AC-FT)	635		318		652	
10 PERCENT EXCEEDS	2.0		.88		2.2	
50 PERCENT EXCEEDS	.29		.22		.47	
90 PERCENT EXCEEDS	.16		.00		.00	

11046100 LAS FLORES CREEK NEAR OCEANSIDE, CA

LOCATION.—Lat 33°17'32", long 117°27'21", in NW 1/4 SE 1/4 sec.24, T.10 S., R.6 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on upstream side, at center of the Southern Pacific Railroad bridge, 0.5 mi upstream from mouth, and 8.5 mi northwest of Oceanside.

DRAINAGE AREA.—26.6 mi^2.

PERIOD OF RECORD.—May 1951 to September 1967, October 1969 to September 1979, and October 1993 to current year. Discharge records for October 1967 to September 1969 and October 1979 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

REVISED RECORDS.—WDR CA-72-1: 1971(M).

GAGE.—Water-stage recorder and multiple concrete culvert control. Elevation of gage is 35 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation upstream from station. Camp Pendleton Water Treatment Plant No. 9 discharges to the channel at a point approximately 2.7 mi upstream from gage. Some pumping upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,300 ft^3/s estimated, Mar. 4, 1978, gage height, 13.67 ft, from floodmarks, based on culvert computation of peak flow; no flow for several days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Feb. 25, 1969, reached a stage of 7.25 ft, from floodmarks, discharge, 4,200 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	.42	.51	.38	.56	.61	.55	.56	.43	.24	.31	.29
2	.43	.47	.52	.38	.55	.39	.49	.53	.44	.27	.19	.27
3	.42	.53	.56	.38	.51	.35	.49	.49	.46	.29	.24	.27
4	.48	.49	.56	.38	.55	.32	.49	.49	.43	.27	.31	.27
5	.39	.52	.56	.38	.56	5.0	.49	.49	.43	.28	.33	.26
6	.43	.71	.56	.38	.56	.58	.49	.45	.46	.29	.17	.27
7	.41	.66	.56	.45	.53	.45	.49	.46	.45	.28	.32	.27
8	.29	.64	.56	.43	.53	8.4	.49	.52	.38	.33	.30	.26
9	.45	.64	.57	.39	.51	3.6	.49	.56	.37	.27	.33	.26
10	.49	.64	.64	.38	.55	.29	.49	.56	.37	.28	.33	.25
11	.45	.64	.61	.38	.56	.31	.49	.56	.38	.25	.33	.09
12	.54	.64	.52	.38	.61	.46	.53	.56	.43	.23	.31	.13
13	.44	.63	.49	.38	.64	.47	.56	.56	.39	.24	.30	.16
14	.49	.63	.49	.36	.64	1.3	.57	.56	.38	.25	.30	.15
15	.54	.56	.49	.39	.57	1.8	.71	.56	.37	.28	.30	.15
16	.53	.61	.49	.43	.56	1.6	.66	.56	.39	.31	.29	.15
17	.43	.64	.44	.43	.56	1.6	.70	.55	.38	.23	.30	.13
18	.48	.56	.43	.38	.56	1.5	.83	.53	.38	.21	.30	.12
19	.44	.50	.43	.45	.56	1.4	.67	.53	.40	.25	.30	.10
20	.45	.41	.41	.47	.61	1.4	.89	.53	.33	.29	.11	.05
21	.43	.49	.34	.38	1.5	1.3	.84	.43	.34	.37	.15	.04
22	.38	.56	.42	.38	8.4	1.3	.84	.43	.44	.41	.08	.04
23	.42	.46	.56	.38	1.8	.91	.84	.47	.36	.38	.17	.10
24	.54	.67	.47	.38	.97	.68	.84	.49	.34	.37	.14	.14
25	.49	.64	.42	.40	.43	.57	.75	.45	.31	.35	.27	.20
26	.49	.58	.38	.43	.36	.56	.74	.43	.30	.34	.27	.15
27	.49	.56	.38	.37	.28	.56	.68	.45	.30	.35	.27	.12
28	.51	.49	.38	.43	.35	.56	.64	.47	.31	.32	.27	.22
29	.56	.49	.38	.49	.35	.50	.58	.49	.30	.33	.27	.16
30	.55	.49	.38	.49	---	.49	.56	.47	.23	.32	.27	.21
31	.48	---	.38	.55	---	.49	---	.43	---	.33	.33	---
TOTAL	14.35	16.97	14.89	12.66	25.72	39.75	18.88	15.62	11.28	9.21	8.16	5.28
MEAN	.46	.57	.48	.41	.89	1.28	.63	.50	.38	.30	.26	.18
MAX	.56	.71	.64	.55	8.4	8.4	.89	.56	.46	.41	.33	.29
MIN	.29	.41	.34	.36	.28	.29	.49	.43	.23	.21	.08	.04
AC-FT	28	34	30	25	51	79	37	31	22	18	16	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

MEAN	.077	.27	.77	4.06	6.73	9.13	2.09	.42	.15	.11	.10	.12
MAX	.94	4.81	12.9	35.6	146	143	29.3	8.95	2.32	1.27	1.17	1.15
(WY)	1999	1966	1967	1995	1998	1978	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1952	1954	1954	1963	1961	1955	1953	1953	1952	1952	1952	1952

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1952 - 2000	
ANNUAL TOTAL	256.57		192.77			
ANNUAL MEAN	.70		.53		1.98	
HIGHEST ANNUAL MEAN					17.9	1978
LOWEST ANNUAL MEAN					.006	1961
HIGHEST DAILY MEAN	2.0	Apr 12	8.4	Feb 22	1050	Feb 24 1998
LOWEST DAILY MEAN	.29	Oct 8	.04	Sep 21	.00	Oct 1 1951
ANNUAL SEVEN-DAY MINIMUM	.39	Dec 25	.08	Sep 17	.00	Oct 1 1951
INSTANTANEOUS PEAK FLOW			49	Mar 8	e7300	Mar 4 1978
INSTANTANEOUS PEAK STAGE			1.05	Mar 8	13.67	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	509		382		1440	
10 PERCENT EXCEEDS	1.0		.64		.74	
50 PERCENT EXCEEDS	.63		.44		.00	
90 PERCENT EXCEEDS	.45		.25		.00	

e Estimated.

11046250 SAN ONOFRE CREEK AT SAN ONOFRE, CA

LOCATION.—Lat 33°23'02", long 117°34'24", in SE 1/4 SE 1/4 sec.14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 0.2 mi north of San Onofre, 0.3 mi upstream from Interstate Highway 5, and 0.5 mi upstream from mouth.

DRAINAGE AREA.—42.2 mi^2.

PERIOD OF RECORD.—October 1946 to September 1967, January to September 1989, and October 1998 to current year. Previous periods of gage operation were at site 250 ft upstream and at different datum.
WATER TEMPERATURE: Water years 1982–83, 1988–89.
SEDIMENT DATA: Water years 1982–83, 1988–89.

GAGE.—Water-stage recorder, crest-stage gage, and concrete road crossing. Elevation of gage is 15 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation upstream from station. Detention basins upstream from station for ground-water recharge. Pumping upstream from station for irrigation and water supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,600 ft^3/s, Apr. 1, 1958, gage height, 6.90 ft, site and datum then in use; no flow for all or part of most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum, from rating curve extended above 8.8 ft^3/s on basis of critical-depth computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2030	296	3.76	Mar. 8	1815	265	3.72
Mar. 5	1700	236	3.68				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	50	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	42	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	35	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	28	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	6.5	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	7.5	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	77.00	114.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	2.66	3.68	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	35	50	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	153	226	.00	.00	.00	.00	.00	.00

11046250 SAN ONOFRE CREEK AT SAN ONOFRE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.53	3.20	3.17	2.51	3.33	2.96	.004	.000	.000	.000	.000
MAX	.000	12.3	63.6	37.1	32.2	41.9	62.6	.10	.000	.000	.000	.000
(WY)	1947	1966	1967	1952	1962	1952	1958	1958	1947	1947	1947	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL			191.00			
ANNUAL MEAN			.52		1.34	
HIGHEST ANNUAL MEAN					8.48	1958
LOWEST ANNUAL MEAN					.000	1947
HIGHEST DAILY MEAN			50	Mar 5	887	Dec 6 1966
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1946
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1946
INSTANTANEOUS PEAK FLOW			296	Feb 21	2600	Apr 1 1958
INSTANTANEOUS PEAK STAGE			3.76	Feb 21	6.90	Apr 1 1958
ANNUAL RUNOFF (AC-FT)			379		968	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11046300 SAN MATEO CREEK NEAR SAN CLEMENTE, CA

LOCATION.—Lat 33°28'15", long 117°28'20", in SE 1/4 NE 1/4 sec.23, T.8 S., R.6 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 0.4 mi downstream from mouth of Devil Canyon, and 8.6 miles northeast of San Clemente.

DRAINAGE AREA.—80.8 mi^2.

PERIOD OF RECORD.—October 1952 to September 1967, October 1993 to current year. Discharge records for October 1967 to September 1977 and October 1989 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 405 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,500 ft^3/s, Feb. 23, 1998, gage height, 12.83 ft, on basis of slope-area measurement of peak flow; no flow for several days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 9,240 ft^3/s, gage height, 11.12 ft, Jan. 25, 1969.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum, from rating curve extended above 167 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1930	351	4.64	Mar. 8	2315	212	4.19
Mar. 5	2145	260	4.36				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.10	.14	1.3	5.8	3.3	1.9	.21	.00	.00	.00
2	.00	.00	.10	.17	1.4	4.9	3.1	1.7	.18	.00	.00	.00
3	.00	.00	.10	.22	1.4	4.5	2.9	1.5	.16	.00	.00	.00
4	.00	.00	.10	.26	1.3	4.6	2.7	1.5	.14	.00	.00	.00
5	.00	.00	.10	.27	1.2	96	2.7	1.4	.11	.00	.00	.00
6	.00	.00	.10	.27	1.2	110	2.4	1.4	.07	.00	.00	.00
7	.00	.00	.10	.27	1.2	41	2.3	1.3	.03	.00	.00	.00
8	.00	.00	.12	.27	1.2	66	2.3	1.2	.00	.00	.00	.00
9	.00	.00	.13	.27	1.2	98	2.1	1.2	.00	.00	.00	.00
10	.00	.00	.13	.27	1.2	39	2.0	1.2	.00	.00	.00	.00
11	.00	.00	.13	.27	1.9	26	1.9	1.2	.00	.00	.00	.00
12	.00	.00	.13	.27	3.0	21	1.8	1.0	.00	.00	.00	.00
13	.00	.00	.13	.27	3.9	17	1.5	.79	.00	.00	.00	.00
14	.00	.00	.14	.29	4.3	14	1.4	.67	.00	.00	.00	.00
15	.00	.00	.17	.29	4.4	11	1.4	.64	.00	.00	.00	.00
16	.00	.00	.17	.30	4.4	9.8	1.5	.63	.00	.00	.00	.00
17	.00	.00	.17	.35	4.4	8.4	1.9	.65	.00	.00	.00	.00
18	.00	.00	.17	.39	4.4	7.3	8.2	.65	.00	.00	.00	.00
19	.00	.00	.17	.46	4.4	6.4	8.5	.65	.00	.00	.00	.00
20	.00	.00	.17	.48	4.1	5.7	6.3	.60	.00	.00	.00	.00
21	.00	.00	.17	.51	102	5.2	5.0	.50	.00	.00	.00	.00
22	.00	.00	.17	.52	75	4.7	4.6	.43	.00	.00	.00	.00
23	.00	.00	.15	.52	51	4.6	4.6	.36	.00	.00	.00	.00
24	.00	.03	.13	.57	75	4.4	4.1	.39	.00	.00	.00	.00
25	.00	.06	.13	.63	24	4.1	3.7	.49	.00	.00	.00	.00
26	.00	.06	.13	.92	16	4.1	3.2	.79	.00	.00	.00	.00
27	.00	.07	.13	1.2	11	3.8	2.7	.90	.00	.00	.00	.00
28	.00	.07	.13	1.2	9.0	3.8	2.5	.77	.00	.00	.00	.00
29	.00	.09	.13	1.2	7.2	3.8	2.5	.51	.00	.00	.00	.00
30	.00	.10	.13	1.2	---	3.8	2.3	.34	.00	.00	.00	.00
31	.00	---	.13	1.2	---	3.7	---	.25	---	.00	.00	---
TOTAL	0.00	0.48	4.16	15.45	422.0	642.4	95.4	27.51	0.90	0.00	0.00	0.00
MEAN	.000	.016	.13	.50	14.6	20.7	3.18	.89	.030	.000	.000	.000
MAX	.00	.10	.17	1.2	102	110	8.5	1.9	.21	.00	.00	.00
MIN	.00	.00	.10	.14	1.2	3.7	1.4	.25	.00	.00	.00	.00
AC-FT	.00	1.0	8.3	31	837	1270	189	55	1.8	.00	.00	.00

11046300 SAN MATEO CREEK NEAR SAN CLEMENTE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.14	3.57	10.9	17.9	39.1	35.6	24.9	6.11	2.19	.64	.15	.084
MAX	1.57	69.4	164	131	488	371	270	53.9	21.2	6.94	2.09	1.21
(WY)	1999	1966	1967	1995	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.089	.035	.007	.000	.000	.000	.000	.000
(WY)	1953	1954	1954	1963	1961	1961	1961	1961	1960	1953	1953	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	604.53		1208.30			
ANNUAL MEAN	1.66		3.30		11.6	
HIGHEST ANNUAL MEAN					65.7	1998
LOWEST ANNUAL MEAN					.019	1961
HIGHEST DAILY MEAN	8.1	Jan 28	110	Mar 6	3150	Feb 24 1998
LOWEST DAILY MEAN	.00	Jul 2	.00	Oct 1	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 2	.00	Oct 1	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			351	Feb 21	12500	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.64	Feb 21	12.83	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	1200		2400		8410	
10 PERCENT EXCEEDS	4.5		4.6		14	
50 PERCENT EXCEEDS	.15		.10		.20	
90 PERCENT EXCEEDS	.00		.00		.00	

11046360 CRISTIANITOS CREEK ABOVE SAN MATEO CREEK, NEAR SAN CLEMENTE, CA

LOCATION.—Lat 33∞25'35", long 117∞34'10", in SW 1/4 SW 1/4 sec.36, T.8 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, at San Mateo Creek Road crossing, 0.5 mi upstream from confluence with San Mateo Creek, and 2.3 mi east of San Clemente.

DRAINAGE AREA.—31.6 mi^2.

PERIOD OF RECORD.—October 1993 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Auxiliary gage 250 ft downstream with crest-stage gage and concrete road crossing. Elevation of gage is 90 ft above sea level, from topographic map. October 1993 to Feb. 23, 1998, two water-stage recorders (one on each of two main channels) at same site at different datums. Gage destroyed by flood of Feb. 23, 1998, and was out of operation until Sept. 30, 1999, when it was relocated at present site.

REMARKS.—Records fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,800 ft^3/s, estimated, Feb. 23, 1998, gage height, unknown, on basis of drainage area relation with the peak on San Mateo Creek near San Clemente (11046300) and slope-area measurement of peak flow; no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 16, 1952, reached a discharge of 1,800 ft^3/s, gage height, 8.86 ft, datum then in use, at site 1.8 mi upstream (station 11046350), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve extended above 162 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1600	268	5.19				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	13	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.18	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.32	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	31	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	17	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	49.09	22.97	0.69	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	1.69	.74	.023	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	31	13	.32	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	97	46	1.4	.00	.00	.00	.00	.00

11046360 CRISTIANITOS CREEK ABOVE SAN MATEO CREEK, NEAR SAN CLEMENTE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.004	.074	.42	6.17	39.5	22.9	6.07	1.57	.36	.024	.000	.000
MAX	.026	.51	1.58	24.6	249	128	31.2	7.36	1.92	.084	.000	.000
(WY)	1997	1997	1997	1995	1998	1995	1998	1998	1998	1997	1994	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1994	1994	1994	1994	1999	1999	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL			72.75			
ANNUAL MEAN			.20		6.23	
HIGHEST ANNUAL MEAN					25.2	1998
LOWEST ANNUAL MEAN					.000	1999
HIGHEST DAILY MEAN			31	Feb 21	1400	Feb 24 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1993
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1993
INSTANTANEOUS PEAK FLOW			268	Feb 21	e5800	Feb 23 1998
INSTANTANEOUS PEAK STAGE			5.19	Feb 21	a	Feb 23 1998
ANNUAL RUNOFF (AC-FT)			144		4520	
10 PERCENT EXCEEDS	.00		.00		3.8	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.
a Peak stage is unknown but is known to have occurred on Feb. 23, 1998.

11046370 SAN MATEO CREEK AT SAN ONOFRE, CA

LOCATION.—Lat 33°23'28", long 117°35'23", in SW 1/4 NW 1/4 sec.14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, at bridge on Interstate Highway 5, 0.5 mi upstream from mouth, and 2.6 mi downstream from Cristianitos Creek.

DRAINAGE AREA.—132 mi^2.

PERIOD OF RECORD.—October 1946 to September 1967 and October 1984 to September 1985. Discharge measurements only, October 1998 to current year.
SEDIMENT DATA: Water years 1982–85.

GAGE.—None. Elevation of station is 20 ft above sea level, from topographic map.

REMARKS.—Flow partly regulated by small detention reservoirs.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft^3/s, estimated, Dec. 5, 1966, gage height, 10.42 ft, datum then in use; maximum gage height, 12.9 ft, Mar. 1, 1983 (backwater from channel vegetation), datum then in use; no flow for all or several months each year.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Time	Discharge (ft^3/s)
Oct. 8	1140	0.56
Nov. 4	1300	.52
Dec. 1	1030	.47
Jan. 10	1235	.43
Feb. 2	1245	.41
Mar. 2	1245	.58
Apr. 4	1000	.58
May 2	1500	.52
June 8	1215	.50
July 7	0900	.42
Aug. 3	0915	.38
Sept. 7	1115	.34

11046530 SAN JUAN CREEK AT LA NOVIA STREET BRIDGE, AT SAN JUAN CAPISTRANO, CA

LOCATION.—Lat 33°30'09", long 117°38'50", in NW 1/4 SE 1/4 sec.6, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on right bank, 20 ft downstream from La Novia Street Bridge, 1.3 mi upstream from Arroyo Trabuco Creek, and 0.8 mi east of San Juan Capistrano.

DRAINAGE AREA.—109 mi^2.

PERIOD OF RECORD.—October 1985 to current year. October 1985 to September 1986, published as "San Juan Creek at San Juan Capistrano".
WATER TEMPERATURE: Water years 1986–88.
SEDIMENT DATA: Water years 1986–93.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 100 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Capistrano Water Co. diverts water 2.0 mi upstream. Various amounts of diverted water reach station as irrigation return flow. October 1928 to September 1969 and October 1969 to September 1985, data published as San Juan Creek near San Juan Capistrano (station 11046500) and San Juan Creek at San Juan Capistrano (station 11046550), which are located approximately 1.9 mi upstream and 1.0 mi downstream, respectively. Data for these sites are roughly equivalent.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,600 ft^3/s, estimated, Mar. 5, 1995, gage height, 20.66 ft, from rating curve extended above 3,420 ft^3/s; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, from rating curve extended above 3,510 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1845	1,030	12.80	Mar. 5	1130	315	11.97

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.07	3.6	20	1.6	1.3	.17	.00	.00	.00
2	.00	.00	.01	.12	2.0	19	1.7	.86	.17	.00	.00	.00
3	.00	.00	.00	.04	2.0	19	2.1	.66	.11	.00	.00	.00
4	.00	.00	.00	.01	2.0	30	1.6	.69	.02	.00	.00	.00
5	.00	.00	.00	.04	1.9	129	1.8	.89	.00	.00	.00	.00
6	.00	.00	.10	.03	1.9	53	2.4	1.5	.00	.00	.00	.00
7	.00	.00	.00	.04	1.9	24	2.0	2.0	.00	.00	.00	.00
8	.00	.00	.00	.03	1.7	41	1.6	2.5	.00	.00	.00	.00
9	.00	.00	.00	.01	1.6	34	2.0	1.4	.00	.00	.00	.00
10	.00	.00	.05	.01	6.3	22	2.2	.73	.00	.00	.00	.00
11	.00	.00	.00	.03	13	15	1.5	.58	.00	.00	.00	.00
12	.00	.00	.00	.05	19	12	1.0	.67	.00	.00	.00	.00
13	.00	.00	.00	.04	9.2	9.9	1.2	.75	.00	.00	.00	.00
14	.00	.00	.00	.06	7.0	10	1.1	.43	.00	.00	.00	.00
15	.00	.00	.08	.02	5.8	11	.85	.56	.00	.00	.00	.00
16	.00	.00	.11	.01	4.6	8.1	1.7	.77	.00	.00	.00	.00
17	.00	.00	.00	.03	7.2	6.8	18	.69	.00	.00	.00	.00
18	.00	.00	.02	.01	5.2	6.3	39	.64	.00	.00	.00	.00
19	.00	.00	.00	.03	4.1	5.3	7.7	.23	.00	.00	.00	.00
20	.00	.00	.00	.02	13	e4.7	4.6	.17	.00	.00	.00	.00
21	.00	.00	.00	.17	277	e4.2	3.7	.08	.00	.00	.00	.00
22	.00	.00	.00	.09	117	e3.8	4.2	.00	.00	.00	.00	.00
23	.00	.00	.00	.01	137	e3.5	3.0	.00	.00	.00	.00	.00
24	.00	.02	.00	.04	99	e3.2	2.4	.16	.00	.00	.00	.00
25	.00	.00	.00	.99	42	2.9	1.5	.17	.00	.02	.00	.00
26	.00	.00	.00	3.4	31	2.5	1.1	.20	.00	.00	.00	.00
27	.00	.00	.00	2.9	27	2.7	1.1	.72	.00	.00	.00	.00
28	.00	.00	.00	1.7	28	2.6	1.3	.57	.00	.00	.00	.00
29	.01	.00	.00	1.5	22	2.6	1.3	.60	.00	.00	.00	.00
30	.00	.00	.01	1.7	---	2.4	1.1	.57	.00	.00	.00	.00
31	.00	---	.02	2.2	---	1.9	---	.48	---	.00	.00	---
TOTAL	0.01	0.02	0.40	15.40	893.0	512.4	116.35	21.57	0.47	0.02	0.00	0.00
MEAN	.000	.001	.013	.50	30.8	16.5	3.88	.70	.016	.001	.000	.000
MAX	.01	.02	.11	3.4	277	129	39	2.5	.17	.02	.00	.00
MIN	.00	.00	.00	.01	1.6	1.9	.85	.00	.00	.00	.00	.00
AC-FT	.02	.04	.8	31	1770	1020	231	43	.9	.04	.00	.00

e Estimated.

11046530 SAN JUAN CREEK AT LA NOVIA STREET BRIDGE, AT SAN JUAN CAPISTRANO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.58	2.20	5.20	65.3	110	78.9	20.6	11.6	3.88	1.33	.59	.48
MAX	3.26	9.45	16.8	590	816	663	121	94.9	25.5	8.93	3.83	3.33
(WY)	1999	1997	1997	1993	1998	1995	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.50	1.17	.55	.037	.000	.000	.000	.000	.000
(WY)	1987	1987	1990	2000	1989	1990	1989	1987	1986	1986	1986	1986

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	734.95		1559.64			
ANNUAL MEAN	2.01		4.26		24.6	
HIGHEST ANNUAL MEAN					106	1993
LOWEST ANNUAL MEAN					.61	1989
HIGHEST DAILY MEAN	25	Jan 27	277	Feb 21	5700	Mar 5 1995
LOWEST DAILY MEAN	.00	May 29	.00	Oct 1	.00	May 20 1986
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 1	.00	Oct 1	.00	May 20 1986
INSTANTANEOUS PEAK FLOW			1030	Feb 21	e25600	Mar 5 1995
INSTANTANEOUS PEAK STAGE			12.80	Feb 21	20.66	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	1460		3090		17820	
10 PERCENT EXCEEDS	5.7		6.3		28	
50 PERCENT EXCEEDS	.08		.00		1.1	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CA

LOCATION.—Lat 33°29'54", long 117°39'54", on line between secs.1 and 12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank, 30 ft downstream from Del Obispo Street Bridge, in San Juan Capistrano.

DRAINAGE AREA.—54.1 mi^2.

PERIOD OF RECORD.—October 1972 to September 1977, October 1983 to September 1989, October 1995 to current year.
WATER TEMPERATURE: Water years 1971–78, 1984.
SEDIMENT DATA: Water years 1971–78, 1984.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft^3/s, Feb. 23, 1998, gage height, 19.81 ft, from rating curve extended above 1,600 ft^3/s; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 800 ft^3/s, from rating curve extended above 1,600 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1515	2,900	14.89	Mar. 8	1245	897	12.73
Mar. 5	1015	1,520	13.48	Apr. 17	1930	935	12.78

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	e1.9	1.5	e5.0	5.6	e22	4.3	3.8	2.1	1.8	1.3	.98
2	1.1	2.1	1.4	e4.7	3.9	e20	4.1	4.3	2.2	1.7	1.2	.88
3	1.1	2.0	1.4	e4.3	3.6	e52	4.1	3.6	2.3	1.5	1.5	.82
4	1.2	2.1	1.4	e3.6	3.4	86	5.1	3.3	2.0	1.4	1.7	.76
5	1.5	2.1	1.0	e3.3	3.6	475	5.0	3.6	1.6	1.6	1.4	.79
6	2.6	2.0	1.1	3.1	3.4	86	4.8	4.1	1.5	1.5	1.2	.64
7	2.2	2.1	1.2	3.2	3.4	35	4.9	3.7	1.8	1.6	1.2	.60
8	e2.0	2.2	1.5	3.1	3.3	246	4.1	4.7	1.4	1.7	1.3	.50
9	1.9	2.3	1.4	3.3	3.7	71	4.0	4.9	1.4	1.7	1.2	.55
10	1.4	2.1	e1.6	3.8	101	35	3.8	4.6	1.9	1.8	1.3	.64
11	1.5	2.1	e1.5	3.8	78	30	3.9	4.4	1.3	1.8	1.3	.70
12	1.6	2.1	e1.5	3.8	193	22	4.1	4.3	1.3	1.9	1.4	.54
13	1.5	2.3	e1.4	3.4	44	18	4.6	4.1	1.4	1.8	1.2	.51
14	1.7	2.4	e1.5	3.5	34	19	12	4.1	1.3	1.8	1.1	.51
15	1.7	2.2	e1.6	3.6	14	15	6.4	4.1	1.3	1.9	1.0	.62
16	1.8	2.1	e1.6	3.7	35	14	6.4	4.4	1.2	1.8	.94	.59
17	1.8	2.1	e1.5	3.8	62	12	243	4.0	1.2	1.8	.88	.58
18	1.9	1.9	e1.6	3.8	12	10	145	4.1	1.2	1.9	1.1	.67
19	1.9	1.9	e1.7	3.6	7.5	9.3	31	e4.0	1.3	2.0	1.2	.67
20	1.7	2.1	e1.7	3.6	239	8.9	11	e3.9	1.4	1.7	1.1	.75
21	1.5	2.0	e1.6	3.8	951	7.8	7.9	e3.7	1.8	1.6	1.2	.92
22	1.7	2.0	e1.6	3.6	76	8.2	6.9	e3.4	2.6	1.7	1.1	1.2
23	1.7	1.6	e1.6	3.5	362	7.3	5.5	e3.3	2.5	1.6	.84	3.3
24	1.7	1.4	e1.7	3.5	60	7.3	4.7	e3.5	2.5	1.7	.79	1.6
25	2.1	1.3	e1.6	54	e40	7.0	4.1	5.8	2.2	1.7	.88	1.4
26	2.1	1.8	e1.7	30	e42	6.6	3.8	6.6	2.3	1.7	.83	1.4
27	1.8	1.6	e1.7	4.8	e50	6.6	4.4	3.2	2.2	1.6	.96	1.2
28	1.9	1.4	e1.8	4.0	e30	6.8	5.1	3.0	2.4	1.4	.82	1.4
29	2.0	1.5	e1.8	3.9	e24	7.2	4.6	2.9	1.8	1.3	.97	1.4
30	2.1	1.5	e1.7	3.7	---	6.6	4.0	2.7	1.8	1.3	1.2	1.4
31	e2.0	---	e9.5	25	---	4.9	---	2.4	---	1.3	1.2	---
TOTAL	53.9	58.2	55.4	213.8	2488.4	1362.5	562.6	122.5	53.2	51.6	35.31	28.52
MEAN	1.74	1.94	1.79	6.90	85.8	44.0	18.8	3.95	1.77	1.66	1.14	.95
MAX	2.6	2.4	9.5	54	951	475	243	6.6	2.6	2.0	1.7	3.3
MIN	1.1	1.3	1.0	3.1	3.3	4.9	3.8	2.4	1.2	1.3	.79	.50
AC-FT	107	115	110	424	4940	2700	1120	243	106	102	70	57

e Estimated.

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.21	11.6	21.5	19.5	51.8	24.3	11.7	6.34	2.90	1.53	1.56	2.45
MAX	12.7	37.8	91.8	120	481	129	59.8	56.9	22.1	7.99	8.90	7.81
(WY)	1988	1997	1998	1997	1998	1998	1998	1998	1998	1998	1977	1986
MIN	.052	.81	1.73	.85	2.84	3.74	.92	.71	.007	.055	.019	.000
(WY)	1974	1975	1973	1976	1977	1988	1977	1988	1973	1973	1973	1973

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1973 - 2000	
ANNUAL TOTAL	2433.3		5085.93			
ANNUAL MEAN	6.67		13.9		13.0	
HIGHEST ANNUAL MEAN					74.1	1998
LOWEST ANNUAL MEAN					3.17	1976
HIGHEST DAILY MEAN	133	Apr 12	951	Feb 21	2560	Feb 23 1998
LOWEST DAILY MEAN	1.0	Dec 5	.50	Sep 8	.00	Oct 1 1972
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 27	.56	Sep 8	.00	Oct 1 1972
INSTANTANEOUS PEAK FLOW			2900	Feb 21	10000	Feb 23 1998
INSTANTANEOUS PEAK STAGE			14.89	Feb 21	19.81	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	4830		10090		9410	
10 PERCENT EXCEEDS	9.0		18		18	
50 PERCENT EXCEEDS	2.1		2.1		2.0	
90 PERCENT EXCEEDS	1.4		1.1		.30	

11047350 SAN JUAN CREEK AT STONEHILL DRIVE, NEAR DANA POINT, CA

LOCATION.—Lat 33°28'26", long 117°40'40", in NE 1/4 SE 1/4 sec.14, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, at Stonehill Drive crossing, 0.8 mi northwest of Capistrano Beach, and 1.2 mi northeast of Dana Point.

DRAINAGE AREA.—174 mi^2.

PERIOD OF RECORD.—October 1998 to current year (instantaneous values only, based on discharge measurements).

GAGE.—None. Elevation of station is 20 ft above sea level, from topographic map.

REMARKS.—No regulation upstream from station. Capistrano Water Co. diverts water 4.8 mi upstream. Various amounts of diverted water reach station as irrigation return flow.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge observed, 42 ft^3/s, Dec. 2, 1998; minimum discharge observed, 2.1 ft^3/s, Sept. 20, 2000.

EXTREMES FOR CURRENT YEAR.—Maximum discharge observed, 21 ft^3/s, Feb. 15; minimum discharge observed, 2.1 ft^3/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	2.4	---
3	---	---	---	---	8.6	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	4.9	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	4.4	---	---	2.5
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	4.2	---	---	---	---	---	8.4	---	---	---	---
10	---	---	3.9	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	4.0	---	---
12	---	---	---	---	---	---	6.2	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	2.4	---	---	---	---	---	---	---	---	---	---	---
15	---	---	3.6	---	21	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	3.4	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	5.0	---	---	---	---	---	---	---	2.1
21	---	---	---	---	---	14	16	---	3.5	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	15	---	---	---	---	3.2	---
24	---	---	---	---	---	---	---	---	---	3.3	---	---
25	---	---	---	---	---	---	---	6.5	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

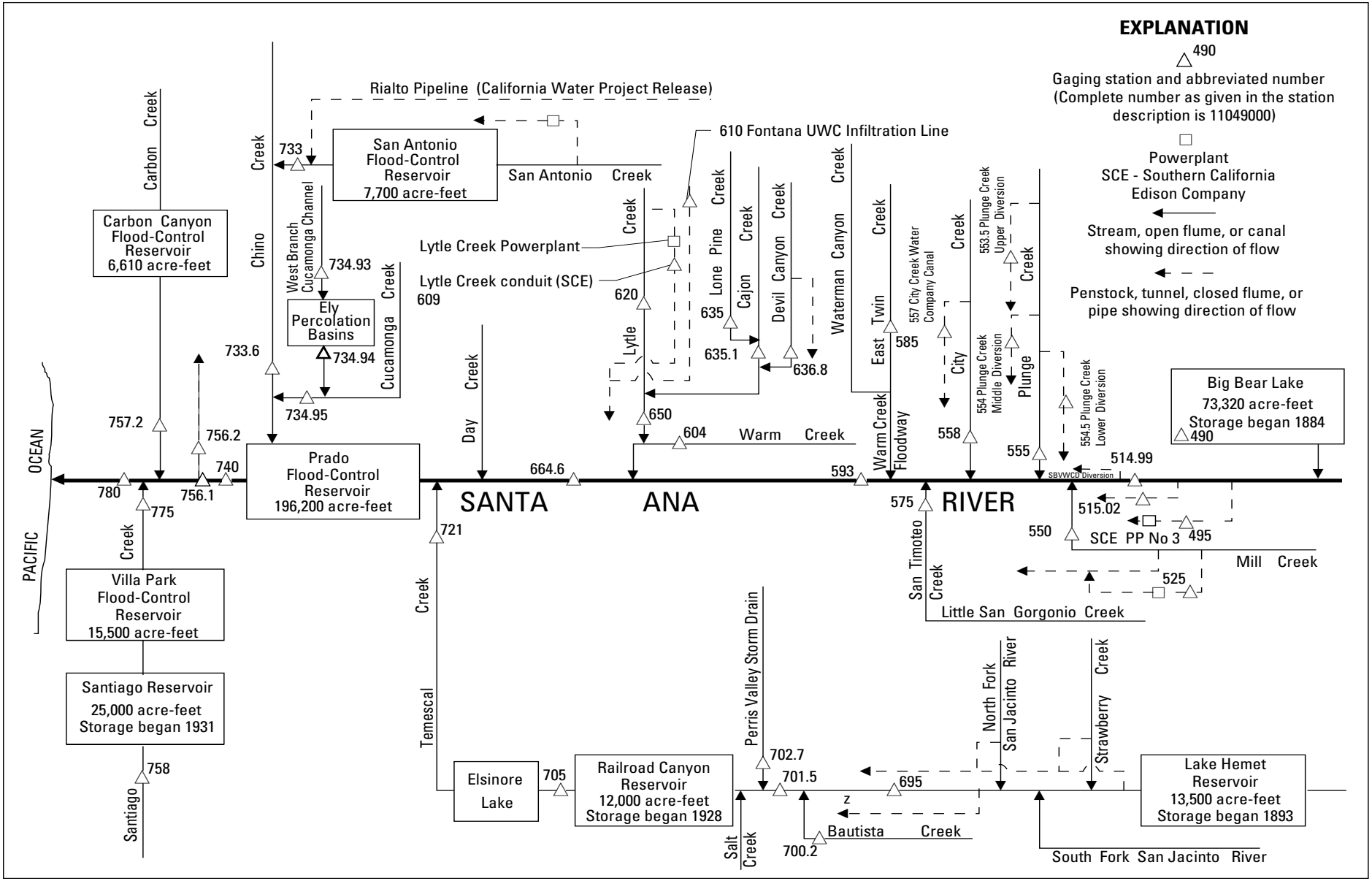

Figure 17. Diversions and storage in Santa Ana River Basin.

11049000 BIG BEAR LAKE NEAR BIG BEAR LAKE, CA

LOCATION.—Lat 34°14'33", long 116°58'33", in SW 1/4 sec.22, T.2 N., R.1 W., San Bernardino County, Hydrologic Unit 18070203, at Big Bear Lake Dam on Bear Creek, 4 mi west of town of Big Bear Lake, and 7.5 mi upstream from mouth.

DRAINAGE AREA.—38.9 mi^2, excludes Baldwin Lake drainage included in reports prior to 1983.

PERIOD OF RECORD.—October 1950 to current year. February 1884 to September 1950 in files of Bear Valley Mutual Water Co.

REVISED RECORDS.—WDR CA-83-1: Drainage area. WDR CA-99-1: Spillway (top of dam) elevation.

GAGE.—Nonrecording gage. Datum of gage is 6,670.9 ft above sea level (levels by Bear Valley Mutual Water Co.). Prior to 1912 at old dam 200 ft upstream at same datum; spill occurs at elevation 6,743.2 ft.

REMARKS.—Lake is formed by multiple-arch concrete dam, completed in 1912, replacing existing lower dam built in 1884; storage began in spring of 1884. Capacity (based on July 1977 resurvey; present capacity table put into use August 1977), 73,320 acre-ft at elevation 6,743.2 ft, top of dam. No dead storage. During the year, 406 acre-ft was released. Between November 1999 and March 2000, 867 acre-ft was pumped from the lake for snowmaking. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Record of contents provided by Big Bear Municipal Water District; not reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents unknown, lake spilled in 1969, 1970, 1980, 1983; minimum contents observed, 530 acre-ft, Nov. 24, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 62,450 acre-ft, Apr. 24 to May 1; minimum contents observed, 54,350 acre-ft, Sept. 30.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Contents (acre-ft)	Change in contents (acre-ft)
Sept.30	61,660	—
Oct. 31	60,290	−1,370
Nov. 30	59,370	−920
Dec. 31	58,310	−1,060
CAL YR 1999	—	-9,960
Jan. 31	58,170	−140
Feb. 29	60,150	+1,980
Mar. 31	61,550	+1,400
Apr. 30	62,450	+900
May 31	61,260	−1,190
June 30	59,510	−1,750
July 31	57,360	−2,150
Aug. 31	55,880	−1,480
Sept. 30	54,350	−1,530
WTR YR 2000	—	−7,310

11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.—Lat 34°06'30", long 117°05'59", in SW 1/4 SW 1/4 sec.4, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, near mouth of canyon, 0.35 mi downstream from Seven Oaks Dam, 1.6 mi upstream from Mill Creek, 3.2 mi northeast of Mentone, and 16 mi downstream from Big Bear Lake.

DRAINAGE AREA.—210 mi^2, including area tributary to Baldwin Lake at head of Bear Valley.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1896 to current year. Prior to October 1914, records for river only not equivalent owing to Greenspot pipeline diversion between sites and exclusion of discharge from Warm Springs Canyon. Monthly discharge only for January 1910, January and February 1916 published in WSP 1315-B.

REVISED RECORDS.—WSP 931: 1940. WSP 1635: 1918, 1920(M), 1922, 1937, 1943(M). WSP 1928: Drainage area. WSP 2128: 1910.

GAGE.—Three water-stage recorders. Main gage on right bank of river (station 11051499), canal gage on powerplant diversion (station 11049500), and since 1970, supplementary gage on left bank of river (station 11051502). Elevation of the main and supplementary gages is 1,950 ft above sea level, from topographic map. Prior to Sept. 2, 1917, nonrecording gages at several sites within 1.5 mi upstream at various datums. Sept. 3, 1917, to May 27, 1969, water-stage recorder at site 0.2 mi upstream at different datum. Canal gage at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. The supplementary gage (station 11051502) measures water that is occasionally diverted out of the main channel 250 ft upstream for water distribution. Flow measured by the supplementary gage is included with the river record to maintain equivalence with records prior to 1970. For records of combined discharge of Santa Ana River and Southern California Edison Co.'s Canal above Powerplant No. 3 (station 11049500), which diverts upstream from station, see station 11051501. Prior to water year 2000, station 11049500 was named Southern California Edison Co.'s Canal below Powerplant No. 2. Prior to Oct. 1, 1952, and since Apr. 26, 1976, Bear Valley Mutual Water Co. pumps water into channel above canal gage. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records for Southern California Edison Co.'s Canal near Mentone (station 11049500) are usually provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. No records were provided during water year 2000, due to construction of Seven Oaks Dam, removal of Powerplant No. 2, and reconstruction of Powerplant No. 3.

EXTREMES FOR PERIOD OF RECORD.—River only: Maximum discharge, 52,300 ft^3/s, Mar. 2, 1938, gage height, 14.3 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow at times in some years.
Combined river and canal: Maximum discharge, 52,300 ft^3/s, Mar. 2, 1938; no flow on Feb. 17, 2000.

EXTREMES OUTSIDE PERIOD OF RECORD.—Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft^3/s, from notes provided by F.C. Finkle, consulting engineer, Los Angeles.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.15	1.6	2.7	53	e.03	6.1	.00	.01	.32	.23
2	4.7	.11	.08	1.6	1.1	53	e.03	6.1	1.1	.01	.31	.31
3	2.3	.03	.00	1.0	1.0	46	e.03	6.2	3.8	.01	.13	.30
4	2.0	.01	.21	.80	1.2	47	e.27	2.5	2.9	.01	.06	.29
5	2.0	.00	.26	.15	.97	57	2.8	.04	1.8	.01	.17	.29
6	2.0	.00	4.1	.14	1.2	59	.07	.04	1.4	.07	.23	.29
7	1.9	.00	13	2.0	.76	58	4.6	.05	1.8	.01	.20	.30
8	1.9	.00	15	2.2	.96	60	7.5	.06	1.5	.01	.20	.30
9	1.8	.00	16	1.4	.78	62	8.8	2.4	1.4	.01	.19	.34
10	1.8	.00	18	1.5	1.1	75	7.8	1.4	1.3	.01	.18	.39
11	1.5	.00	19	1.4	1.8	81	4.0	.60	1.3	.01	.19	.39
12	1.0	.00	20	1.4	1.3	80	2.8	.61	1.2	.01	.19	.44
13	1.1	.00	21	1.3	e.04	68	3.1	.63	1.0	.01	.19	.22
14	1.1	.00	22	.95	e.02	62	3.2	.65	.88	.01	.20	.11
15	1.1	.03	12	1.3	e.00	62	3.2	.66	.38	.01	.10	.23
16	1.1	.07	6.0	1.3	e.00	72	3.2	4.9	.42	.01	.05	.29
17	1.2	.15	3.6	1.0	e.00	74	3.6	6.1	.69	2.0	.03	.26
18	1.3	.50	2.8	.97	9.9	70	8.3	4.9	.63	.02	.04	.25
19	1.3	.20	2.4	.77	19	69	35	4.2	.58	.06	.09	.26
20	.56	.51	2.2	1.2	30	58	27	4.1	.52	.02	.09	.13
21	.03	.45	1.4	.96	e175	51	38	4.7	.49	.02	.10	.10
22	.02	.21	1.2	1.1	e137	51	52	3.9	.48	.05	.11	.07
23	.02	.15	1.1	1.2	e87	50	50	4.4	.47	.02	.11	.29
24	.02	.27	1.3	.96	144	50	18	4.1	.46	.02	.11	.33
25	.02	.30	1.5	1.8	133	51	.03	4.6	.50	.05	.09	.33
26	.02	.31	1.5	3.4	100	51	.02	4.5	.24	.12	.10	.33
27	.02	.25	1.1	2.5	63	51	7.2	4.4	.02	.26	.11	.33
28	.02	.18	1.0	2.0	78	e25	6.3	4.3	.02	.31	.15	.35
29	.03	.17	1.2	1.4	61	e.04	6.2	4.3	.03	.34	.21	.49
30	.03	.20	1.0	1.7	---	e.04	6.1	4.2	.02	.34	.11	.64
31	.03	---	1.4	5.4	---	e.05	---	2.7	---	.34	.10	---
TOTAL	31.93	4.13	191.50	46.40	1051.83	1646.13	309.18	98.34	27.33	4.19	4.46	8.88
MEAN	1.03	.14	6.18	1.50	36.3	53.1	10.3	3.17	.91	.14	.14	.30
MAX	4.7	.51	22	5.4	175	81	52	6.2	3.8	2.0	.32	.64
MIN	.01	.00	.00	.14	.00	.04	.02	.04	.00	.01	.03	.07
AC-FT	63	8.2	380	92	2090	3270	613	195	54	8.3	8.8	18

e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.03	9.13	25.6	41.9	82.7	95.4	63.8	49.1	22.0	11.7	6.41	6.53
MAX	77.8	206	536	646	1052	1405	413	446	278	174	124	134
(WY)	1970	1966	1967	1993	1980	1938	1969	1998	1969	1969	1969	1969
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1934	1934	1949	1936	1961	1951	1959	1959	1959	1934	1934	1933

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1915 - 2000	
ANNUAL TOTAL	5956.61		3424.30			
ANNUAL MEAN	16.3		9.36		33.5	
HIGHEST ANNUAL MEAN					283	1969
LOWEST ANNUAL MEAN					.012	1961
HIGHEST DAILY MEAN	72	Feb 10	175	Feb 21	15500	Mar 2 1938
LOWEST DAILY MEAN	.00	Sep 28	.00	Nov 5	.00	Nov 21 1932
ANNUAL SEVEN-DAY MINIMUM	.00	Nov 5	.00	Nov 5	.00	Nov 21 1932
INSTANTANEOUS PEAK FLOW			246	Feb 21	52300	Mar 2 1938
INSTANTANEOUS PEAK STAGE					14.30	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	11810		6790		24290	
10 PERCENT EXCEEDS	48		48		75	
50 PERCENT EXCEEDS	9.9		.76		1.9	
90 PERCENT EXCEEDS	.16		.02		.00	

11051501 SANTA ANA RIVER NEAR MENTONE, CA—Continued

SANTA ANA RIVER AND SOUTHERN CALIFORNIA EDISON CO.'S CANAL NEAR MENTONE, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e19	e24	e25	e27	e28	e55	e44	e41	e27	e16	e13	e21
2	e24	e23	e25	e28	e25	e54	e43	e38	e25	e16	e13	e20
3	e21	e22	e23	e27	e26	e51	e43	e47	e27	e16	e14	e19
4	e21	e22	e22	e26	e27	e50	e45	e44	e26	e17	e14	e19
5	e21	e22	e21	e25	e26	e57	e53	e40	e24	e17	e13	e18
6	e21	e21	e25	e26	e25	e59	e47	e41	e23	e17	e13	e18
7	e22	e21	e13	e27	e25	e60	e44	e41	e23	e18	e13	e17
8	e22	e21	e15	e27	e25	e65	e48	e42	e24	e18	e14	e19
9	e22	e20	e16	e25	e24	e108	e50	e41	e24	e17	e13	e18
10	e21	e21	e18	e28	e25	e80	e50	e37	e24	e17	e13	e17
11	e20	e21	e19	e25	e21	e83	e44	e37	e23	e17	e13	e17
12	e19	e21	e20	e25	e11	e80	e47	e34	e23	e16	e14	e16
13	e17	e21	e21	e24	e5.0	e70	e43	e34	e23	e15	e13	e14
14	e17	e21	e22	e24	e.02	e67	e43	e34	e21	e14	e13	e17
15	e16	e21	e32	e25	e18	e67	e40	e34	e19	e14	e15	e16
16	e17	e22	e28	e26	e23	e77	e36	e38	e18	e15	e17	e16
17	e19	e24	e26	e26	e.00	e80	e35	e39	e19	e17	e21	e16
18	e20	e26	e25	e27	e39	e76	e8.3	e38	e20	e15	e16	e16
19	e26	e26	e25	e24	e34	e75	e35	e36	e20	e14	e15	e16
20	e25	e25	e25	e26	e35	e64	e51	e36	e21	e14	e15	e14
21	e25	e23	e24	e25	e175	e57	e65	e37	e20	e14	e15	e14
22	e24	e21	e25	e25	e137	e57	e83	e36	e20	e14	e14	e15
23	e25	e25	e25	e25	e87	e56	e90	e34	e20	e14	e14	e16
24	e25	e24	e24	e25	e144	e55	e63	e33	e19	e14	e14	e18
25	e25	e24	e24	e26	e133	e56	e43	e35	e18	e14	e21	e16
26	e25	e25	e24	e34	e100	e56	e42	e36	e18	e14	e20	e27
27	e25	e25	e24	e30	e63	e56	e45	e34	e19	e13	e19	e19
28	e24	e26	e25	e27	e78	e30	e42	e33	e20	e13	e17	e19
29	e14	e26	e25	e21	e61	e46	e42	e31	e18	e13	e26	e21
30	e17	e25	e25	e15	---	e46	e41	e28	e16	e14	e20	e20
31	e20	---	e26	e13	---	e44	---	e29	---	e14	e23	---
TOTAL	659	689	717	784	1420.02	1937	1405.3	1138	642	471	488	529
MEAN	21.3	23.0	23.1	25.3	49.0	62.5	46.8	36.7	21.4	15.2	15.7	17.6
MAX	26	26	32	34	175	108	90	47	27	18	26	27
MIN	14	20	13	13	.00	30	8.3	28	16	13	13	14
AC-FT	1310	1370	1420	1560	2820	3840	2790	2260	1270	934	968	1050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

MEAN	48.6	45.4	58.4	90.9	124	136	117	102	73.9	63.0	56.4	53.8
MAX	122	219	538	1439	1052	1402	413	477	277	175	124	137
(WY)	1984	1966	1967	1916	1980	1938	1969	1998	1969	1922	1969	1969
MIN	10.4	12.5	14.4	19.0	18.3	21.6	20.6	19.2	15.1	9.36	9.91	9.75
(WY)	1991	1991	1991	1991	1991	1965	1961	1961	1989	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1912 - 2000	
ANNUAL TOTAL	11977		10879.32			
ANNUAL MEAN	32.8		29.7		80.5	
HIGHEST ANNUAL MEAN					366	1916
LOWEST ANNUAL MEAN					18.6	1990
HIGHEST DAILY MEAN	73	Apr 12	175	Feb 21	16000	Jan 27 1916
LOWEST DAILY MEAN	13	Dec 7	.00	Feb 17	.00	Feb 17 2000
ANNUAL SEVEN-DAY MINIMUM	17	Sep 13	11	Feb 11	8.1	Jul 19 1990
INSTANTANEOUS PEAK FLOW			246	Feb 21	52300	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	23760		21580		58310	
10 PERCENT EXCEEDS	52		55		137	
50 PERCENT EXCEEDS	26		24		49	
90 PERCENT EXCEEDS	19		14		23	

e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1998 to current year.
CHEMICAL DATA: October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
TEMPERATURE DATA: October 1998 to current year.
SEDIMENT DATA: October 1998 to current year.

PERIOD OF DAILY RECORD.— October 1998 to September 1999 (discontinued).
SPECIFIC CONDUCTANCE: October 1998 to September 1999 (discontinued).
WATER TEMPERATURE: October 1998 to September 1999 (discontinued).

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature from October 1998 to September 1999.

REMARKS.—Interruptions in record were due to channel going dry. Chemical data, sediment, and continuous-monitor data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 455 microsiemens, Sept. 13, 1999; minimum recorded, 151 microsiemens, July 29, 1999.
WATER TEMPERATURE: Maximum recorded, 29.5°C, July 6, 1999; minimum recorded, 3.0°C, Dec. 23, 24, 1998.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT											
20...	1500	e57	718	104	9.6	8.2	227	27.0	16.5	79	24.4
NOV											
17...	1500	e59	720	102	10.3	8.4	229	17.0	12.5	82	25.2
DEC											
08...	0950	e55	728	101	12.1	8.2	227	9.0	5.5	83	25.5
JAN											
12...	0920	e46	725	112	12.8	8.3	230	11.5	7.5	85	25.8
FEB											
10...	0910	70	728	101	12.1	8.2	223	--	5.5	85	26.1
MAR											
09...	0930	34	--	--	--	8.2	250	13.5	9.0	91	27.5
APR											
07...	1420	20	722	101	10.5	8.4	262	9.0	11.0	93	28.4
11...	1950	15	719	103	10.5	8.4	281	8.0	12.0	95	29.3
12...	1250	38	722	101	10.9	8.5	233	9.5	9.5	83	25.2
14...	1000	28	712	100	10.1	8.3	263	23.5	12.0	96	29.4
MAY											
18...	0930	e11	707	100	9.1	8.4	292	23.0	16.0	99	30.4
JUN											
02...	1300	e18	709	96	9.3	8.2	278	--	13.5	94	28.6
16...	1000	e12	707	96	8.4	8.4	371	24.5	18.0	110	34.8
JUL											
13...	1010	43	707	91	7.4	8.0	256	30.0	21.5	89	27.3
AUG											
10...	0930	e4.4	708	94	8.2	8.2	329	19.5	18.5	110	34.3
SEP											
14...	0920	e5.2	706	99	8.4	8.2	339	25.0	19.5	110	35.2

e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT											
20...	4.46	1.6	.6	12.9	26	96	117	--	3.8	.4	19.3
NOV											
17...	4.63	1.6	.7	14.5	27	98	119	1	4.0	.4	19.8
DEC											
08...	4.78	1.5	.6	13.6	26	99	121	--	4.5	.4	19.7
JAN											
12...	4.95	1.5	.7	14.5	27	98	120	--	4.1	.4	19.4
FEB											
10...	4.83	1.6	.7	14.3	26	96	117	--	4.6	.3	19.2
MAR											
09...	5.37	1.7	.8	16.9	28	101	123	--	4.4	.4	19.4
APR											
07...	5.32	1.6	.9	19.4	31	107	131	--	6.0	.5	20.7
11...	5.26	1.8	1	22.5	34	108	132	--	5.7	.5	21.2
12...	4.77	1.5	.8	17.1	31	96	117	--	5.2	.4	18.6
14...	5.34	1.8	.8	18.1	29	108	130	1	5.7	.5	20.4
MAY											
18...	5.63	1.9	.9	21.3	31	113	133	2	5.7	.5	19.6
JUN											
02...	5.46	2.1	.9	19.1	30	105	128	--	5.3	.5	19.2
16...	6.00	2.7	1	31.3	37	120	144	1	5.8	.8	21.2
JUL											
13...	5.07	2.4	.7	16.2	28	105	128	--	5.1	.4	19.2
AUG											
10...	6.08	2.2	1	25.5	33	117	142	--	6.2	.6	22.3
SEP											
14...	6.04	2.3	1	27.9	34	116	142	--	5.4	.7	22.4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)
OCT											
20...	12.9	<.10	.13	<.020	.065	<.010	<.050	<.010	<.050	1.3	.6
NOV											
17...	12.6	<.10	<.10	.027	.060	<.010	<.050	.011	<.050	1.0	.2
DEC											
08...	13.9	<.10	<.10	<.020	.085	<.010	<.050	.016	<.050	.90	.3
JAN											
12...	15.3	<.10	<.10	<.020	.099	.014	.005	.010	.011	.90	.3
FEB											
10...	13.9	<.10	.33	<.020	.221	<.010	.010	<.010	.071	2.3	1.0
MAR											
09...	19.7	<.10	e.10	<.020	.173	<.010	.005	.027	.012	.80	<.2
APR											
07...	21.9	.10	.24	.021	.126	<.010	.007	.015	.155	1.6	1.4
11...	24.2	<.10	.14	<.020	.113	<.010	.007	.011	.099	1.2	.8
12...	14.5	.10	.43	<.020	.173	<.010	.011	.013	.171	2.4	3.3
14...	19.1	e.10	.19	<.020	.148	<.010	.007	<.010	.060	1.8	.7
MAY											
18...	28.6	<.10	.10	.020	.081	<.010	.004	.011	.013	1.1	.4
JUN											
02...	23.0	.12	.26	.032	.231	<.010	.005	.013	.044	3.0	1.4
16...	52.0	.13	.32	<.020	.124	<.010	.013	.033	.081	1.4	2.0
JUL											
13...	17.0	e.10	.54	<.020	.101	<.010	.019	.017	.132	2.4	2.9
AUG											
10...	39.3	.10	.22	<.020	.067	<.010	.014	<.010	.050	1.1	1.1
SEP											
14...	45.7	.10	.14	<.020	.078	<.010	.008	<.010	.023	.90	.3

< Actual value is known to be less than the value shown.
e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT											
20...	.19	140	138	--	--	--	--	--	--	--	--
NOV											
17...	.20	145	142	--	--	--	--	--	--	--	--
DEC											
08...	.20	148	144	--	--	--	--	--	--	--	--
JAN											
12...	.21	151	145	--	--	--	--	--	--	--	--
FEB											
10...	.20	150	143	--	--	--	--	--	--	--	--
MAR											
09...	.23	167	157	--	--	--	--	--	--	--	--
APR											
07...	.24	173	169	--	--	--	--	--	--	--	--
11...	.25	187	176	--	--	--	--	--	--	--	--
12...	.21	153	146	--	--	--	--	--	--	--	--
14...	.24	173	166	--	--	--	--	--	--	--	--
MAY											
18...	.25	187	182	--	--	--	--	--	--	--	--
JUN											
02...	.26	188	167	--	--	--	--	--	--	--	--
16...	.35	254	227	--	--	--	--	--	--	--	--
JUL											
13...	.24	180	156	--	--	--	--	--	--	--	--
AUG											
10...	.28	207	207	--	--	--	--	--	--	--	--
SEP											
14...	.29	214	216	2	<1	1.3	20	<1	<1.0	<1.0	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
OCT										
20...	--	10	--	10	--	--	--	--	--	--
NOV										
17...	--	10	--	<3	--	--	--	--	--	--
DEC										
08...	--	e10	--	5	--	--	--	--	--	--
JAN										
12...	--	e10	--	4	--	--	--	--	--	--
FEB										
10...	--	e10	--	4	--	--	--	--	--	--
MAR										
09...	--	e10	--	4	--	--	--	--	--	--
APR										
07...	--	<10	--	7	--	--	--	--	--	--
11...	--	<10	--	6	--	--	--	--	--	--
12...	--	10	--	6	--	--	--	--	--	--
14...	--	e10	--	5	--	--	--	--	--	--
MAY										
18...	--	e10	--	7	--	--	--	--	--	--
JUN										
02...	--	<10	--	5	--	--	--	--	--	--
16...	--	10	--	11	--	--	--	--	--	--
JUL										
13...	--	e10	--	10	--	--	--	--	--	--
AUG										
10...	--	e10	--	24	--	--	--	--	--	--
SEP										
14...	<1	e10	<1	13	3	<1	<1.0	<1	1	30

< Actual value is known to be less than the value shown.
e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
20...N	1500	e57	16.5	32	e4.9	69
NOV						
17...N	1500	e59	12.5	6	e.96	69
DEC						
08...N	0950	e55	5.5	2	e.30	89
JAN						
12...N	0920	e46	7.5	1	e.12	75
FEB						
10...N	0910	70	5.5	48	9.1	79
MAR						
09...N	0930	34	9.0	3	.28	43
APR						
07...N	1420	20	11.0	150	8.1	96
11...N	1950	15	12.0	89	3.6	97
12...N	1250	38	9.5	167	17	94
14...N	1000	28	12.0	30	2.3	88
MAY						
18...N	0930	e11	16.0	5	e.15	76
JUN						
02...N	1300	e18	13.5	28	e1.4	91
16...N	1000	e12	18.0	48	e1.6	71
JUL						
13...N	1010	43	21.5	142	16	97
AUG						
10...N	0930	e4.4	18.5	38	e.45	95
SEP						
14...N	0920	e5.2	19.5	11	e.15	88

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.
e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
(NOT PREVIOUSLY PUBLISHED)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	230	228	215	212	232	227	246	218	252	244
2	---	---	231	228	216	214	231	227	242	229	253	249
3	---	---	234	228	217	215	231	228	246	225	254	242
4	---	---	234	224	218	216	232	228	234	223	294	242
5	---	---	234	231	219	217	237	224	230	222	252	245
6	---	---	235	224	221	217	231	227	235	226	254	249
7	---	---	236	225	223	221	231	228	234	226	252	248
8	---	---	233	222	229	222	232	228	238	224	258	243
9	---	---	234	216	241	223	232	227	239	198	258	249
10	---	---	235	232	239	229	231	227	238	204	253	248
11	---	---	242	225	233	228	231	228	240	237	273	240
12	---	---	225	190	231	220	238	230	239	235	252	247
13	---	---	207	199	228	225	236	231	239	234	253	247
14	---	---	212	204	228	225	240	228	239	235	253	244
15	---	---	216	211	231	222	234	230	239	234	252	235
16	---	---	223	216	230	228	233	230	239	234	251	240
17	---	---	227	222	230	227	233	230	245	235	250	240
18	---	---	228	225	230	227	233	230	273	231	250	241
19	---	---	230	225	229	227	235	224	287	234	251	244
20	---	---	228	225	228	225	232	226	291	284	250	246
21	---	---	229	226	228	224	232	222	294	287	251	245
22	230	215	231	228	230	222	239	230	296	289	252	239
23	227	221	239	229	234	229	234	222	302	293	301	247
24	227	224	247	231	232	228	233	229	306	282	307	288
25	227	220	243	230	228	225	232	221	306	236	305	299
26	228	223	235	229	228	224	231	219	253	236	309	298
27	226	223	234	232	228	224	234	222	247	242	309	298
28	228	224	234	200	228	225	242	234	250	243	311	298
29	228	222	212	205	228	226	239	232	---	---	326	286
30	231	224	212	209	229	226	236	232	---	---	323	299
31	229	226	---	---	229	227	235	227	---	---	359	300
MONTH	---	---	247	190	241	212	242	219	306	198	359	235
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	391	284	249	239	348	332	257	252	217	180	---	---
2	305	294	244	236	345	295	263	253	---	---	---	---
3	306	296	347	239	338	258	267	262	---	---	---	---
4	301	283	363	249	283	248	275	262	---	---	417	406
5	300	287	346	251	299	283	299	275	---	---	422	411
6	301	245	382	258	336	298	317	299	---	---	421	410
7	284	237	386	280	386	336	324	316	---	---	---	---
8	292	280	282	273	444	383	327	307	---	---	424	390
9	302	263	284	271	399	296	307	191	---	---	420	387
10	298	279	285	268	367	322	227	216	---	---	420	347
11	303	256	364	274	397	336	245	220	---	---	418	379
12	256	221	331	224	409	372	246	194	---	---	447	402
13	265	246	363	255	416	366	254	159	---	---	455	378
14	272	234	---	---	402	367	179	157	---	---	396	348
15	250	230	---	---	389	310	195	179	---	---	414	390
16	264	233	---	---	318	260	192	178	---	---	447	359
17	267	245	---	---	270	249	189	169	---	---	---	---
18	271	246	---	---	311	259	182	171	---	---	---	---
19	313	241	---	---	352	311	187	169	---	---	---	---
20	320	255	---	---	370	349	186	164	---	---	---	---
21	323	286	---	---	374	320	183	168	---	---	---	---
22	346	254	---	---	320	286	183	161	---	---	---	---
23	371	244	---	---	286	269	199	174	---	---	---	---
24	247	243	---	---	293	273	202	198	---	---	---	---
25	253	246	---	---	289	248	201	199	---	---	---	---
26	266	250	---	---	248	214	201	197	---	---	---	---
27	361	244	310	293	223	215	199	171	---	---	---	---
28	378	294	322	294	230	217	186	172	---	---	---	---
29	306	238	330	304	248	228	187	151	---	---	---	---
30	252	232	334	309	254	237	238	153	---	---	---	---
31	---	---	347	312	---	---	231	178	---	---	---	---
MONTH	391	221	---	---	444	214	327	151	---	---	---	---

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	15.0	9.5	11.5	8.5	11.5	7.5	11.0	5.5	15.5	8.5
2	---	---	14.0	9.0	12.5	10.0	11.5	6.5	11.0	5.0	16.5	8.5
3	---	---	14.5	9.0	11.0	9.0	11.5	7.0	12.0	6.0	15.0	8.5
4	---	---	14.5	9.5	11.0	8.5	10.5	5.5	8.5	7.5	12.0	10.5
5	---	---	14.0	9.5	10.5	6.0	11.0	6.0	9.5	7.5	14.5	8.0
6	---	---	13.0	8.0	8.5	5.5	12.5	7.5	10.5	8.0	11.5	7.5
7	---	---	12.0	8.0	8.5	4.5	11.0	7.0	12.5	7.5	9.5	8.0
8	---	---	12.0	11.0	9.0	4.5	10.5	6.0	12.0	9.0	13.5	6.0
9	---	---	13.0	8.0	9.0	5.0	11.0	6.0	10.5	8.5	12.5	7.0
10	---	---	12.0	7.0	9.5	5.0	10.5	7.0	9.0	5.0	12.5	6.5
11	---	---	11.5	9.0	9.5	4.5	12.0	8.0	9.0	4.0	11.0	8.0
12	---	---	12.5	8.0	11.0	6.5	11.0	7.0	11.0	4.5	14.0	6.0
13	---	---	13.0	8.0	12.0	7.5	11.5	6.5	12.5	6.0	14.5	6.5
14	---	---	13.5	8.5	10.5	7.0	12.0	7.0	12.0	6.5	14.5	8.0
15	---	---	13.0	8.5	11.5	8.0	11.5	7.5	12.5	7.5	9.5	7.0
16	---	---	13.5	9.0	12.5	8.5	12.5	8.0	11.5	7.0	10.0	5.5
17	---	---	13.0	9.5	13.0	9.0	11.5	8.0	14.0	8.5	12.0	7.0
18	---	---	12.5	8.0	10.5	8.0	13.0	8.5	13.5	8.5	15.5	7.5
19	---	---	12.5	8.0	10.5	9.5	11.0	8.0	13.0	9.0	15.5	8.5
20	---	---	11.5	6.5	10.0	7.5	12.0	10.0	17.0	8.5	11.0	8.0
21	---	---	12.5	7.5	8.0	5.0	13.0	8.5	16.0	9.0	15.0	7.0
22	16.5	11.0	12.5	8.0	8.0	4.0	12.0	7.0	16.0	7.5	15.5	7.5
23	18.0	11.5	13.0	9.0	8.0	3.0	12.0	7.5	17.0	8.0	12.5	10.5
24	16.5	12.5	13.0	9.0	8.5	3.0	12.0	9.5	16.5	8.5	18.5	9.0
25	17.5	12.0	13.0	8.5	9.5	4.5	10.5	7.5	14.0	8.5	13.5	10.5
26	15.0	10.5	14.0	9.5	10.5	6.5	7.5	6.0	13.5	8.0	19.0	10.5
27	15.5	10.0	11.5	8.5	11.0	6.5	10.5	5.5	15.0	8.0	14.0	11.5
28	15.5	10.0	12.0	10.0	11.5	7.0	10.5	5.0	15.5	8.5	19.5	10.5
29	15.5	11.0	11.5	9.5	12.0	7.5	11.0	5.5	---	---	20.5	10.0
30	16.0	11.0	12.5	9.0	11.5	7.5	11.5	6.0	---	---	19.5	10.0
31	15.5	10.0	---	---	12.0	8.0	9.5	7.0	---	---	13.5	10.0
MONTH	---	---	15.0	6.5	13.0	3.0	13.0	5.0	17.0	4.0	20.5	5.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	7.5	15.5	8.0	18.0	13.0	29.0	17.0	28.5	17.0	---	---
2	15.0	7.0	16.5	10.0	14.5	12.5	29.0	17.5	---	---	---	---
3	11.5	8.5	13.0	11.0	16.5	11.5	28.0	17.5	---	---	---	---
4	15.5	7.0	18.5	11.5	13.0	11.0	28.5	17.0	---	---	27.0	16.5
5	17.0	7.5	23.0	10.5	20.5	10.0	29.0	16.5	---	---	28.0	17.5
6	12.5	9.5	22.0	11.5	23.5	13.0	29.5	17.5	---	---	28.0	17.0
7	12.5	8.5	24.0	13.0	23.5	13.5	27.5	18.5	---	---	---	---
8	15.5	9.0	21.0	12.5	22.5	12.5	24.0	20.5	---	---	26.5	16.5
9	15.5	7.0	15.0	13.0	23.0	12.5	25.5	18.5	---	---	23.0	18.0
10	18.0	6.5	20.5	12.5	23.0	14.0	26.5	17.5	---	---	26.5	18.0
11	13.0	8.5	22.0	12.5	25.0	13.5	27.5	19.0	---	---	27.0	17.5
12	10.0	8.5	22.5	13.0	26.0	14.0	26.5	18.5	---	---	28.5	18.5
13	15.5	9.0	21.5	14.0	26.5	15.0	27.5	19.5	---	---	28.0	19.0
14	19.5	9.5	---	---	27.0	16.0	27.0	19.0	---	---	26.5	18.5
15	18.0	10.0	---	---	27.5	16.5	27.0	18.5	---	---	25.5	16.0
16	17.5	9.5	---	---	25.5	15.5	27.0	17.5	---	---	25.0	17.0
17	20.0	10.5	---	---	25.0	15.0	26.5	17.0	---	---	---	---
18	20.5	10.5	---	---	25.5	15.0	26.5	16.5	---	---	---	---
19	22.0	11.5	---	---	25.0	15.0	26.0	16.0	---	---	---	---
20	22.5	12.0	---	---	25.0	15.5	26.5	16.0	---	---	---	---
21	16.0	14.0	---	---	26.0	15.5	27.5	15.5	---	---	---	---
22	16.0	12.5	---	---	22.5	15.5	27.0	15.5	---	---	---	---
23	14.0	10.0	---	---	26.5	15.5	28.0	16.0	---	---	---	---
24	11.0	10.0	---	---	27.5	16.0	28.5	16.5	---	---	---	---
25	16.0	10.5	---	---	28.5	16.0	28.5	15.5	---	---	---	---
26	19.0	10.5	23.5	16.5	25.5	15.5	29.0	16.5	---	---	---	---
27	20.5	11.5	23.5	14.5	25.0	15.5	27.0	17.0	---	---	---	---
28	15.0	10.5	24.0	15.0	25.5	16.0	27.0	18.5	---	---	---	---
29	11.5	9.5	23.5	15.0	27.5	16.0	28.0	18.5	---	---	---	---
30	11.0	9.0	23.0	14.5	28.5	16.0	29.0	17.0	---	---	---	---
31	---	---	23.0	13.5	---	---	27.0	16.5	---	---	---	---
MONTH	22.5	6.5	---	---	28.5	10.0	29.5	15.5	---	---	---	---

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
13...	0930	1.1	711	96	8.7	8.4	513	27.5	16.5	150
NOV										
16...	1100	.06	709	109	10.0	8.1	518	21.0	16.0	170
DEC										
14...	1000	21	715	97	10.8	8.4	279	13.0	8.0	94
JAN										
10...	1300	.36	710	103	10.4	8.2	501	18.5	11.5	150
25...	1600	1.9	710	93	8.7	8.4	479	14.0	15.0	150
31...	1400	7.4	--	--	--	8.1	411	15.0	14.5	120
FEB										
21...	1430	e175	708	96	10.2	8.1	229	11.0	9.5	77
MAR										
15...	1500	62	707	103	9.8	8.3	232	25.5	14.0	86
APR										
11...	0920	6.4	711	99	8.9	8.5	358	17.5	17.0	110
MAY										
10...	0910	1.9	708	98	8.5	8.4	350	17.0	18.5	110
JUN										
13...	0930	1.1	709	116	9.5	8.7	502	26.5	21.5	140
AUG										
15...	0830	.09	711	90	7.5	8.4	375	29.0	20.5	120
SEP										
11...	1400	.37	709	111	8.2	8.7	511	30.0	27.0	120

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
13...	9	47.7	8.52	3.3	2	47.8	40	145	171	3
NOV										
16...	28	51.7	8.82	2.8	2	48.0	38	137	167	--
DEC										
14...	--	29.2	5.15	1.7	.9	20.6	32	105	122	2
JAN										
10...	20	45.1	8.06	2.7	2	43.5	39	125	151	1
25...	29	45.5	8.04	3.3	2	45.8	40	120	140	2
31...	4	37.9	6.73	2.6	1	36.5	39	118	144	--
FEB										
21...	--	23.8	4.36	2.1	.8	16.5	31	86	104	--
MAR										
15...	--	26.7	4.76	1.7	.7	15.6	28	100	117	2
APR										
11...	--	34.4	6.09	2.5	1	29.3	36	115	137	2
MAY										
10...	--	34.4	6.10	2.3	1	29.2	36	112	133	2
JUN										
13...	10	42.8	8.66	3.3	2	44.9	40	132	149	6
AUG										
15...	--	35.8	7.27	2.2	1	28.1	33	135	163	1
SEP										
11...	8	35.4	8.04	3.9	2	57.7	50	114	130	4

e Estimated.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT										
13...	8.4	1.2	24.6	103	e.10	.11	<.020	.144	<.010	.007
NOV										
16...	8.3	1.2	25.8	109	<.10	e.10	<.020	.140	<.010	.008
DEC										
14...	5.2	.5	20.4	28.5	<.10	e.10	<.020	<.050	<.010	e.005
JAN										
10...	7.8	1.0	21.9	109	<.10	e.10	<.020	.135	<.010	.006
25...	9.7	1.0	22.0	105	.10	.11	.027	.170	<.010	<.050
31...	6.8	.9	21.2	76.0	e.10	.25	.022	.091	<.010	<.050
FEB										
21...	5.7	.4	16.9	17.4	.22	.76	<.020	.767	<.010	.017
MAR										
15...	5.7	.5	19.1	15.8	.12	.16	<.020	.415	<.010	e.004
APR										
11...	6.0	.7	19.9	53.6	.13	.21	<.020	.121	<.010	.006
MAY										
10...	6.1	.6	19.6	52.2	e.10	.24	<.020	<.050	<.010	<.006
JUN										
13...	8.1	1.1	19.0	105	.14	.17	<.020	<.050	<.010	e.004
AUG										
15...	6.8	.7	22.2	42.4	.11	.20	<.020	<.050	<.010	e.005
SEP										
11...	8.6	1.4	23.8	117	.12	.13	<.020	.056	<.010	e.003

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT									
13...	.011	.025	1.0	.3	.46	336	332	10	31
NOV									
16...	.018	.018	.84	<.2	.46	336	338	e10	16
DEC									
14...	<.010	.102	.93	.4	.24	173	173	e10	6
JAN									
10...	<.010	.010	2.1	.2	.46	337	315	<10	8
25...	<.010	<.050	1.2	.2	.44	324	311	e10	6
31...	<.010	<.050	1.1	.2	.36	263	260	<10	4
FEB									
21...	.013	.436	5.8	3.2	.21	158	142	30	e1
MAR									
15...	<.010	.011	3.1	.2	.22	163	151	e10	8
APR									
11...	<.010	.017	1.8	.3	.31	226	222	10	14
MAY									
10...	<.010	.023	1.8	.2	.31	227	218	<10	e1
JUN									
13...	<.010	.009	1.9	<.2	.44	327	312	e10	6
AUG									
15...	<.010	.032	1.7	.2	.32	234	227	<10	3
SEP									
11...	<.010	e.006	1.9	<.2	.45	331	324	<10	<2

e Estimated.
< Actual value is known to be less than the value shown.

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
13...N	0930	1.1	16.5	14	.04	95
NOV						
16...N	1100	.06	16.0	1	<.01	90
DEC						
14...N	1000	21	8.0	57	3.2	61
JAN						
10...N	1300	.36	11.5	1	<.01	100
25...N	1600	1.9	15.0	6	.03	95
31...N	1400	7.4	14.5	5	.10	77
FEB						
21...N	1430	e175	9.5	483	e228	71
MAR						
15...N	1500	62	14.0	3	.50	62
APR						
11...N	0920	6.4	17.0	5	.09	98
MAY						
10...N	0910	1.9	18.5	12	.06	31
JUN						
13...N	0930	1.1	21.5	3	.01	66
AUG						
15...N	0830	.09	20.5	21	.01	13
SEP						
11...N	1400	.37	27.0	2	<.01	60

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.
< Actual value is known to be less than the value shown.
e Estimated.

11052500 MILL CREEK POWER CANALS NOS. 2 AND 3 NEAR YUCAIPA, CA

LOCATION.—Lat 34°05'23", long 117°00'49", in NW 1/4 NW 1/4 sec.17, T.1 S., R.1 W., San Bernardino County, Hydrologic Unit 18070203, on penstock, 100 ft downstream from Mill Creek Nos. 2 and 3 forebay, and 4.2 mi northeast of Yucaipa.

PERIOD OF RECORD.—October 1973 to September 1986, October 1993 to current year. Records for January 1919 to September 1973 available in files of the U.S. Geological Survey.

GAGE.—Acoustic-velocity meter and water-stage recorder. Elevation of gage is 4,840 ft above sea level, from topographic map.

REMARKS.—Mill Creek Power Canals Nos. 2 and 3 divert from points 3 mi and 6 mi upstream from station, respectively. Canal No. 2, damaged during earthquake in 1992, was not used during water year 2000. Prior to October 1993, records collected at powerplant at terminus of penstock. October 1993 to September 1995, records collected at auxiliary gage at Canal No. 3 intake. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 41 ft^3/s, May 6, 1995; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	7.7	7.3	7.5	7.1	8.0	.00	12	12	9.2	7.7	3.1
2	6.9	7.6	7.7	7.5	7.2	8.2	.00	19	12	9.2	7.8	5.5
3	6.9	7.8	7.7	7.5	7.1	8.3	.00	20	12	9.2	7.8	5.5
4	6.8	7.8	7.7	7.4	7.0	8.2	9.3	20	12	9.3	7.8	5.5
5	6.8	7.9	7.8	7.4	7.0	8.3	6.4	20	12	9.2	7.8	6.2
6	7.0	7.9	7.8	7.3	7.0	8.2	.00	19	12	9.2	7.8	6.6
7	6.9	7.8	7.7	7.3	6.9	8.2	.00	20	12	9.2	7.8	6.6
8	6.9	8.1	7.2	7.4	6.8	9.2	.00	20	11	9.2	7.8	6.8
9	6.9	7.9	7.6	7.4	6.9	9.3	.00	19	12	9.2	7.8	7.0
10	6.7	7.9	7.6	7.1	6.0	9.2	.00	19	12	9.3	7.8	7.0
11	6.8	7.8	7.6	7.2	.00	10	7.7	18	12	9.2	7.8	7.3
12	6.8	7.7	7.7	7.2	.00	10	16	17	12	9.3	7.8	7.8
13	6.7	7.8	7.7	7.2	.04	10	17	16	12	9.3	7.8	8.5
14	6.8	7.8	7.6	7.2	3.4	11	17	16	12	9.2	7.7	8.8
15	6.8	7.7	7.7	7.1	7.1	13	16	16	11	9.2	7.5	8.8
16	7.0	7.7	7.5	7.4	6.0	13	15	16	8.7	9.2	7.6	8.8
17	7.3	7.7	7.5	7.6	.00	.00	11	16	9.3	6.8	7.5	8.9
18	7.4	7.8	7.5	7.2	3.6	.00	.00	16	9.3	7.8	7.5	8.8
19	7.4	7.6	7.4	7.1	7.3	.00	.00	16	9.2	7.7	7.5	8.8
20	7.5	7.7	7.3	7.1	3.8	.00	.00	16	9.1	7.8	7.5	7.7
21	7.5	7.8	7.4	7.0	.00	.00	.00	16	9.3	7.8	7.5	7.7
22	7.6	7.8	7.4	7.0	.00	.80	.00	16	9.2	7.8	7.5	7.7
23	7.6	8.0	7.5	7.0	.00	e4.1	.00	15	9.2	7.8	7.5	7.7
24	7.6	8.1	7.5	6.9	.00	e.00	.00	15	9.3	7.8	6.3	7.7
25	7.6	7.9	7.4	5.1	4.5	e.00	12	15	9.2	7.8	.77	7.7
26	7.5	7.9	7.3	.04	8.1	e.00	7.7	14	9.2	7.8	.00	7.7
27	7.6	7.8	7.3	3.4	6.8	e.00	.00	14	9.2	7.8	.00	7.7
28	7.7	7.7	7.3	6.8	4.3	e.00	.00	14	9.2	7.8	.00	7.8
29	7.6	8.0	7.4	7.0	8.1	e.00	.00	13	9.3	7.7	.00	8.0
30	7.6	8.1	7.4	7.0	---	8.3	.00	13	9.3	7.8	.00	8.0
31	7.6	---	7.4	7.2	---	.00	---	13	---	7.8	.00	---
TOTAL	222.8	234.8	232.9	210.54	132.04	165.30	135.10	509	316.0	263.4	183.67	221.7
MEAN	7.19	7.83	7.51	6.79	4.55	5.33	4.50	16.4	10.5	8.50	5.92	7.39
MAX	7.7	8.1	7.8	7.6	8.1	13	17	20	12	9.3	7.8	8.9
MIN	6.7	7.6	7.2	.04	.00	.00	.00	12	8.7	6.8	.00	3.1
AC-FT	442	466	462	418	262	328	268	1010	627	522	364	440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

MEAN	16.5	15.6	15.3	15.4	15.8	18.2	20.6	21.4	20.4	17.8	16.5	15.9
MAX	26.8	23.5	23.9	26.6	27.8	30.1	33.3	31.8	28.7	29.2	30.2	27.9
(WY)	1981	1979	1979	1979	1979	1979	1995	1995	1979	1980	1980	1978
MIN	7.19	7.40	7.51	6.79	4.55	5.33	4.50	11.3	10.5	2.74	5.92	3.01
(WY)	2000	1998	2000	2000	2000	2000	2000	1998	1999	1999	2000	1997

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	3455.14		2827.25			
ANNUAL MEAN	9.47		7.72		17.5	
HIGHEST ANNUAL MEAN					26.2	1979
LOWEST ANNUAL MEAN					7.72	2000
HIGHEST DAILY MEAN	15	Jan 9	20	May 3	41	May 6 1995
LOWEST DAILY MEAN	.14	Sep 23	.00	Feb 11	.00	Mar 3 1974
ANNUAL SEVEN-DAY MINIMUM	.27	Jul 16	.00	Apr 18	.00	Sep 5 1997
ANNUAL RUNOFF (AC-FT)	6850		5610		12660	
10 PERCENT EXCEEDS	14		13		27	
50 PERCENT EXCEEDS	9.0		7.7		17	
90 PERCENT EXCEEDS	6.5		.00		9.5	

e Estimated.

11055000 MILL CREEK NEAR MENTONE, CA

LOCATION.—Lat 34°04'40", long 117°05'54", in SE 1/4 SW 1/4 sec.16, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, at Garnet Street Bridge, 1.55 mi upstream from mouth, and 1.5 mi northeast of Mentone.

DRAINAGE AREA.—49.1 mi^2.

PERIOD OF RECORD.—February 1939 to September 1965, October 1997 to current year. Monthly discharge only for February 1939, published in WSP 1315-B. Instantaneous values only, based on discharge measurements, since October 1997.

GAGE.—None. Elevation of station is 2,010 ft above sea level, from topographic map. February 1939 to September 1965, water-stage recorder and broad-crested weir at site 1.2 mi downstream.

REMARKS.—No regulation above station. Mill Creek power canals Nos. 1, 2, and 3 divert from points 3.8 mi, 6.8 mi, and 9.8 mi above station, respectively, and a varying portion of the remaining flow is sometimes diverted at a point 0.7 mi upstream for ground-water recharge. Canal No. 2, damaged during an earthquake in 1992, was not used during water year 2000. Pumping of wells along stream above station for irrigation. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Discharge measurements are provided by San Bernardino Valley Water Conservation District during most years; no measurements were provided during water year 2000.

EXTREMES FOR PERIOD OF RECORD (1939–65).—Maximum discharge, 1,500 ft^3/s, Dec. 23, 1945, gage height, 6.5 ft, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow for parts of each year.

EXTREMES FOR CURRENT YEAR.—Maximum discharge observed, 5.0 ft^3/s, Apr. 6; no flow observed several times during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.00	---	.00	---	---	---	---	---	.00	---
2	---	---	---	---	---	---	---	---	.23	---	---	---
3	---	---	---	---	.02	.00	---	.28	---	---	.00	---
4	4.7	---	---	.08	---	---	---	---	---	---	---	---
5	---	.13	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	5.0	---	---	.04	---	.00
7	---	---	---	---	---	---	---	---	---	---	---	.00
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	.00
14	---	---	---	---	---	.64	---	---	---	---	---	.00
15	---	---	---	---	---	---	---	---	.12	---	---	---
16	---	---	---	---	.04	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	.00	---	---
18	---	---	---	---	---	---	---	.31	---	.00	---	---
19	.25	---	---	---	---	---	---	---	---	.00	---	---
20	---	---	.77	.07	---	---	.96	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	.00	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.—Lat 34°07'06", long 117°08'27", in NE 1/4 NE 1/4 sec.1, T.1 S., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, at mouth of canyon, at crossing of North Fork Ditch siphon, and 1.8 mi northeast of East Highlands.

DRAINAGE AREA.—16.9 mi^2.

PERIOD OF RECORD.—January 1919 to current year; combined records of creek and diversions, March 1951 to current year.

REVISED RECORDS.—WSP 1635: 1924, 1926, 1935–36(M), 1943, 1944(M), 1945, 1946(M), 1947, 1950(M). WSP 1715: 1956–58(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder on creek. Since March 1951, water-stage recorder and weir on upper diversion, discontinued Sept. 30, 1991, reactivated July 27, 1993; water-stage recorder and concrete-lined canal on middle diversion; crest-stage gage and sharp-crested weir on lower diversion. Elevation of creek gage is 1,590 ft above sea level, from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft higher. Diversions all at different datums.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation upstream from station. Diversion from Alder Creek to Upper Plunge Creek area was active 1904–67. Diversions for irrigation are made at sites 0.5 mi (station 11055450), 1.0 mi (station 11055400), and 2.5 mi (station 11055350) upstream from streamflow station. Water has been diverted upstream from station for irrigation during entire period of record. For combined discharge of Plunge Creek and diversions, see station 11055501. No flow in lower diversion since May 29, 1966. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 5,340 ft^3/s, Mar. 2, 1938, on basis of slope-area measurement of peak flow; maximum recorded gage height, 7.41 ft, Nov. 29, 1970; no flow at times in some years.
Combined creek and diversions: Maximum discharge, 4,770 ft^3/s, Dec. 6, 1966; no flow, Nov. 12, 1964, Sept. 29, 1965, Aug. 4, 1987, several days in November 1988, September 1991, many days in 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum, from rating curve extended above 356 ft^3/s on basis of slope-conveyance measurement at gage height 7.41 ft:

		Creek only		Combined creek and diversions
Date	Time	Discharge (ft^3/s)	Gage height (ft)	Discharge (ft^3/s)
Feb. 23	1900	190	4.15	190

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.21	.96	1.0	e9.5	5.4	2.2	.15	.00	.00	.43
2	.00	e.00	.69	.83	.74	e7.0	5.1	2.0	.12	.00	.00	.63
3	.00	e.00	.68	.74	.65	6.7	4.9	2.0	.07	.00	.00	.60
4	.00	e.00	.70	.79	.60	7.6	4.4	1.9	.07	.00	.00	.55
5	.00	.00	.77	.72	.61	26	3.4	1.9	.06	.00	.00	.49
6	.00	.00	.67	.42	.64	29	2.8	1.8	.05	.00	.00	.39
7	.00	.01	1.1	.41	.56	17	2.7	1.8	.06	.00	.00	.31
8	.00	.24	.35	.44	.54	68	2.6	1.7	.11	.00	.00	.45
9	.00	.40	.35	.44	.56	51	2.5	1.6	.15	.00	.00	.41
10	.00	.30	.35	.45	.95	31	2.5	1.5	.12	.00	.00	.39
11	.00	.23	.49	.46	5.9	27	2.3	1.4	.11	.00	.00	.37
12	.00	.17	.88	.48	11	26	2.2	1.3	.09	.00	.00	.36
13	.00	.14	.87	.55	5.4	21	2.1	1.2	.05	.00	.00	.35
14	.00	.14	.34	.51	4.2	19	2.6	1.1	.05	.00	.00	.36
15	.00	.17	.34	.51	3.9	17	2.7	1.0	.05	.00	.00	.38
16	.00	.25	.35	.51	4.6	19	2.3	1.1	.05	.00	.00	.33
17	.00	.23	.46	.65	8.8	18	15	1.1	.08	.00	.00	.30
18	.00	.33	.56	.65	4.7	17	25	.71	.07	.00	.00	.32
19	.00	.45	.57	.64	4.0	13	9.3	.46	.02	.00	.00	.32
20	.00	.53	.73	.66	5.0	12	6.4	.35	.01	.00	.00	.35
21	.00	.64	.28	.72	44	11	5.3	.33	.00	.00	.00	.49
22	.00	.50	.51	.76	22	8.7	6.1	.29	.00	.00	.00	.72
23	.00	.66	.33	.88	42	8.1	5.4	.31	.00	.00	.00	.90
24	.00	.49	.41	.91	30	8.0	4.7	.46	.00	.00	.00	.76
25	.00	.23	.56	1.5	16	7.6	3.4	.87	.00	.00	.00	.53
26	.00	.24	.76	2.8	12	6.9	3.1	.92	.00	.00	.00	.44
27	.00	.28	.89	1.9	11	6.6	3.0	.49	.00	.00	.00	.53
28	.00	.31	.37	.77	e12	6.8	2.9	.31	.00	.00	.00	.65
29	.00	.31	.35	.73	e11	6.6	2.8	.28	.00	.00	.00	.63
30	.00	.34	.37	.68	---	6.4	2.5	.22	.00	.00	.00	.61
31	e.00	---	.51	1.3	---	6.1	---	.16	---	.00	.00	---
TOTAL	0.00	7.59	16.80	24.77	264.35	524.6	145.4	32.76	1.54	0.00	0.00	14.35
MEAN	.000	.25	.54	.80	9.12	16.9	4.85	1.06	.051	.000	.000	.48
MAX	.00	.66	1.1	2.8	44	68	25	2.2	.15	.00	.00	.90
MIN	.00	.00	.21	.41	.54	6.1	2.1	.16	.00	.00	.00	.30
AC-FT	.00	15	33	49	524	1040	288	65	3.1	.00	.00	28

e Estimated.

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.28	1.92	6.47	12.6	22.0	22.7	12.8	4.19	1.09	.32	.16	.34
MAX	3.47	44.7	106	170	224	176	74.2	51.7	15.1	5.52	4.87	10.9
(WY)	1984	1966	1967	1993	1969	1938	1958	1998	1998	1998	1983	1978
MIN	.000	.000	.000	.003	.000	.029	.000	.000	.000	.000	.000	.000
(WY)	1920	1921	1930	1963	1961	1961	1961	1919	1919	1919	1919	1919

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1919 - 2000	
ANNUAL TOTAL	457.99		1032.16			
ANNUAL MEAN	1.25		2.82		7.03	
HIGHEST ANNUAL MEAN					42.5	1969
LOWEST ANNUAL MEAN					.050	1961
HIGHEST DAILY MEAN	11	Feb 10	68	Mar 8	1840	Jan 25 1969
LOWEST DAILY MEAN	.00	Jul 3	.00	Oct 1	.00	May 1 1919
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 17	.00	Oct 1	.00	May 1 1919
INSTANTANEOUS PEAK FLOW			190	Feb 23	5340	Mar 2 1938
INSTANTANEOUS PEAK STAGE			4.15	Feb 23	7.41	Nov 29 1970
ANNUAL RUNOFF (AC-FT)	908		2050		5100	
10 PERCENT EXCEEDS	3.4		7.6		14	
50 PERCENT EXCEEDS	.51		.41		.20	
90 PERCENT EXCEEDS	.00		.00		.00	

11055501 PLUNGE CREEK NEAR EAST HIGHLANDS, CA—Continued

PLUNGE CREEK AND DIVERSIONS NEAR EAST HIGHLANDS, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	e.86	e.84	2.1	1.9	e9.6	5.4	4.0	1.5	.88	.65	.43
2	.67	e.84	e1.0	1.8	1.6	e7.0	5.1	3.7	1.4	.89	.68	.63
3	.69	e.86	e1.1	1.7	1.5	6.7	4.9	3.7	1.3	.91	.59	.60
4	.68	e.87	e.99	1.7	1.5	7.6	5.0	3.6	1.3	.94	.53	.55
5	.67	.86	e1.2	1.7	1.5	26	5.1	3.6	1.2	.97	.48	.49
6	.78	.83	e1.2	1.4	1.6	29	4.9	3.4	1.2	.96	.46	.39
7	.74	.85	e1.5	1.4	1.5	17	4.8	3.4	1.2	.94	.46	.31
8	.70	1.2	e1.2	1.4	1.5	68	4.7	3.4	1.4	.99	.45	.45
9	.70	1.3	1.2	1.4	1.5	51	4.5	3.2	1.4	1.0	.44	.41
10	.70	1.2	1.2	1.5	1.8	31	4.5	3.1	1.4	1.0	.42	.39
11	.72	1.1	1.0	1.5	6.0	27	4.2	3.0	1.2	1.0	.40	.37
12	.75	1.0	1.2	1.5	11	26	4.1	2.8	1.1	1.0	.40	.36
13	.75	.96	1.5	1.5	5.4	21	4.0	2.6	.98	.95	.40	.35
14	.73	.94	1.3	1.5	4.2	19	4.7	2.5	.97	.91	.40	.36
15	.81	.97	1.4	1.5	3.9	17	4.8	2.6	1.0	.91	.33	.38
16	.85	1.1	1.4	1.5	4.6	19	4.3	2.8	1.1	.91	.30	.33
17	.76	1.1	1.4	1.6	8.8	18	17	2.9	1.2	.87	.30	.30
18	.57	1.2	1.4	1.5	4.7	17	25	2.5	1.1	.81	.31	.32
19	.65	1.3	1.2	1.5	4.0	13	9.8	2.2	1.1	.77	.29	.32
20	.78	1.4	1.5	1.5	5.0	12	7.7	2.0	1.0	.75	.28	.35
21	.77	1.4	1.2	1.6	44	11	6.4	1.8	.97	.74	.27	.49
22	.75	1.3	1.2	1.6	22	8.7	7.3	1.7	.96	.73	.25	.72
23	.79	1.2	1.2	1.7	42	8.1	6.5	1.8	.99	.70	.20	.90
24	.80	1.2	1.3	1.7	30	8.0	6.0	2.2	.99	.61	.35	.76
25	.81	1.1	1.2	2.1	16	7.6	5.5	2.8	.98	.71	.73	.53
26	.83	1.0	1.2	2.8	12	6.9	5.0	2.8	.96	.69	.70	.44
27	.86	1.0	1.7	2.3	11	6.6	4.8	2.1	.91	.65	.67	.53
28	.90	e1.0	1.5	1.7	e12	6.8	4.7	1.7	.89	.63	.79	.65
29	.88	e.96	1.5	1.6	e11	6.6	4.6	1.7	.88	.59	.75	.63
30	.87	e1.1	1.5	1.6	---	6.4	4.3	1.6	.87	.59	.68	.61
31	e.87	---	1.6	2.2	---	6.1	---	1.7	---	.60	.41	---
TOTAL	23.46	32.00	39.83	52.1	273.5	524.7	189.6	82.9	33.45	25.60	14.37	14.35
MEAN	.76	1.07	1.28	1.68	9.43	16.9	6.32	2.67	1.12	.83	.46	.48
MAX	.90	1.4	1.7	2.8	44	68	25	4.0	1.5	1.0	.79	.90
MIN	.57	.83	.84	1.4	1.5	6.1	4.0	1.6	.87	.59	.20	.30
AC-FT	47	63	79	103	542	1040	376	164	66	51	29	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

MEAN	1.43	3.45	7.52	17.2	23.7	24.5	14.2	7.54	3.64	1.86	1.32	1.45
MAX	7.23	45.2	106	170	224	126	79.0	52.5	17.1	7.44	7.43	14.1
(WY)	1984	1966	1967	1993	1969	1978	1958	1998	1998	1980	1983	1978
MIN	.033	.003	.77	1.00	1.50	1.62	1.33	.97	.63	.26	.028	.011
(WY)	1992	1992	1963	1963	1961	1961	1961	1961	1961	1992	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	878.74		1305.86			
ANNUAL MEAN	2.41		3.57		8.95	
HIGHEST ANNUAL MEAN					44.4	1969
LOWEST ANNUAL MEAN					1.00	1961
HIGHEST DAILY MEAN	11	Feb 10	68	Mar 8	1840	Jan 25 1969
LOWEST DAILY MEAN	.57	Oct 18	.20	Aug 23	.00	Nov 12 1964
ANNUAL SEVEN-DAY MINIMUM	.63	Aug 23	.27	Aug 17	.00	Nov 15 1988
INSTANTANEOUS PEAK FLOW			190	Feb 23	4770	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	1740		2590		6480	
10 PERCENT EXCEEDS	4.8		7.6		16	
50 PERCENT EXCEEDS	1.4		1.2		2.4	
90 PERCENT EXCEEDS	.71		.46		.60	

e Estimated.

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.—Lat 34°08'38", long 117°11'16", in SW 1/4 NW 1/4 sec.27, T.1 N., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 0.6 mi upstream from Highland Avenue, and 1.5 mi northeast of Highland.

DRAINAGE AREA.—19.6 mi^2.

PERIOD OF RECORD.—October 1919 to current year; combined records of creek and City Creek Water Co.'s canal, June 1924 to September 1986, October 1988 to current year.

REVISED RECORDS.—WSP 1635: 1920(M), 1923(M), 1937(M), 1939(M), 1946. WSP 1928: Drainage area.

GAGE.—Water-stage recorder on creek; water-stage recorder on canal. Elevation of creek gage is 1,580 ft above sea level, from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi downstream at different datum. Canal gage at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. City Creek Water Co.'s canal (station 11055700) diverted from a site 0.5 mi upstream from station for irrigation throughout period of record until Sept. 30, 1986, and resumed diversion on Mar. 31, 1989. Diversion canal damaged by storms of January 1993, with no flow in canal from Jan. 14, 1993, to Apr. 5, 1995. For combined discharge of City Creek and canal see station 11055801. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 7,000 ft^3/s, Feb. 25, 1969, gage height, 9.39 ft, from rating curve extended above 580 ft^3/s on basis of slope-area measurement at gage height 8.82 ft; no flow for many days in some years.
Combined creek and canal: Maximum discharge, 7,000 ft^3/s, Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 110 ft^3/s, or maximum:

		Creek only		Combined creek and canal
Date	Time	Discharge (ft^3/s)	Gage height (ft)	Discharge (ft^3/s)
Feb. 23	1830	162	4.84	162
Mar. 8	1515	113	4.57	113

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	.82	2.0	3.0	3.0	9.1	5.2	3.8	e1.2	.39	.08	.13
2	.30	.84	2.1	2.8	2.8	8.2	5.1	3.5	e1.2	.36	.09	.13
3	.30	.88	2.1	2.6	2.8	7.9	5.0	3.4	e1.1	.37	.10	.13
4	.28	.91	2.3	2.6	2.8	8.3	4.9	3.4	e1.1	.37	.11	.14
5	.27	.97	2.4	2.4	2.8	22	4.7	3.3	e.99	.36	.10	.13
6	.31	1.0	2.4	2.4	2.8	20	4.8	3.3	e.94	.36	.09	.12
7	.34	1.1	2.5	2.4	2.7	15	4.7	3.2	e.89	.36	.10	.12
8	.39	1.3	2.7	2.4	2.7	53	4.5	3.2	e.82	.34	.11	.12
9	.36	1.4	2.7	2.4	2.7	31	4.3	3.2	e.85	.35	.10	.12
10	.37	1.3	2.7	2.3	4.0	18	4.3	2.9	e.86	.36	.09	.11
11	.37	1.3	2.7	2.3	7.2	15	4.1	2.9	e.81	.35	.06	.11
12	.36	1.2	2.7	2.3	8.6	14	3.9	2.7	e.79	.34	.05	.11
13	.37	1.2	2.7	2.3	5.7	13	3.8	2.4	e.74	.31	.05	.13
14	.38	1.2	2.8	2.3	4.5	12	4.4	2.2	e.71	.28	.05	.13
15	.42	1.3	2.8	2.2	3.8	11	4.7	2.2	.72	.26	.05	.12
16	.47	1.3	2.7	2.3	4.5	9.8	4.4	2.4	.74	.25	.05	.12
17	.53	1.5	2.7	2.4	7.1	9.0	13	2.5	.80	.24	.05	.13
18	.58	1.6	2.6	2.4	4.5	8.2	23	2.1	.80	.21	.06	.13
19	.62	1.6	2.6	2.4	3.7	7.8	13	e1.9	.77	.16	.06	.11
20	.63	1.6	2.6	2.4	4.6	7.4	9.5	e1.8	.72	.16	.06	.11
21	.64	1.7	2.6	2.4	49	7.0	8.3	e1.8	.66	.16	.07	.15
22	.68	1.6	2.7	2.4	22	6.9	8.8	e1.7	.60	.15	.08	.16
23	.68	1.7	2.8	2.5	47	6.6	7.9	e1.6	.59	.13	.08	.19
24	.70	1.7	2.9	2.5	29	6.4	7.0	e1.7	.58	.13	.09	.16
25	.73	1.8	2.9	3.0	14	6.3	6.3	e1.8	.55	.13	.10	.15
26	.78	1.8	2.8	3.5	11	6.1	5.7	e1.8	.52	.12	.09	.17
27	.86	1.8	2.8	2.8	11	6.1	5.1	e1.7	.50	.11	.10	.19
28	.91	1.8	2.8	2.6	12	6.2	5.1	e1.5	.44	.10	.13	.18
29	.89	1.8	2.8	2.6	9.9	6.0	4.8	e1.4	.41	.10	.14	.16
30	.82	1.9	2.8	2.7	---	5.9	4.0	e1.4	.40	.09	.14	.16
31	.81	---	3.0	3.3	---	5.3	---	e1.3	---	.08	.13	---
TOTAL	16.44	41.92	81.7	78.9	288.2	368.5	194.3	74.0	22.80	7.48	2.66	4.12
MEAN	.53	1.40	2.64	2.55	9.94	11.9	6.48	2.39	.76	.24	.086	.14
MAX	.91	1.9	3.0	3.5	49	53	23	3.8	1.2	.39	.14	.19
MIN	.27	.82	2.0	2.2	2.7	5.3	3.8	1.3	.40	.08	.05	.11
AC-FT	33	83	162	156	572	731	385	147	45	15	5.3	8.2

e Estimated.

11055800 CITY CREEK NEAR HIGHLAND, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.10	3.39	8.59	16.8	30.9	29.4	18.0	7.57	2.91	1.11	.61	.64
MAX	8.48	43.4	89.5	199	451	219	148	52.3	26.1	11.7	9.56	5.70
(WY)	1984	1966	1967	1993	1969	1938	1926	1998	1998	1980	1983	1976
MIN	.000	.000	.000	.13	.35	.18	.033	.000	.000	.000	.000	.000
(WY)	1927	1922	1930	1936	1924	1926	1934	1934	1924	1924	1920	1920

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1920 - 2000	
ANNUAL TOTAL	1296.59		1181.02			
ANNUAL MEAN	3.55		3.23		9.97	
HIGHEST ANNUAL MEAN					75.3	1969
LOWEST ANNUAL MEAN					.46	1961
HIGHEST DAILY MEAN	19	Feb 10	53	Mar 8	3360	Feb 25 1969
LOWEST DAILY MEAN	.25	Aug 23	.05	Aug 12	.00	Jul 18 1920
ANNUAL SEVEN-DAY MINIMUM	.25	Aug 23	.05	Aug 11	.00	Jul 18 1920
INSTANTANEOUS PEAK FLOW			162	Feb 23	7000	Feb 25 1969
INSTANTANEOUS PEAK STAGE			4.84	Feb 23	9.39	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	2570		2340		7220	
10 PERCENT EXCEEDS	7.3		7.5		20	
50 PERCENT EXCEEDS	2.7		1.7		1.4	
90 PERCENT EXCEEDS	.36		.11		.00	

11055801 CITY CREEK NEAR HIGHLAND, CA—Continued

CITY CREEK AND CITY CREEK WATER CO.'S CANAL NEAR HIGHLAND, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	.82	2.0	3.0	3.0	9.1	5.2	3.8	e1.2	.39	e.13	e.27
2	.30	.84	2.1	2.8	2.8	8.2	5.1	3.5	e1.2	.36	e.14	e.28
3	.30	.88	2.1	2.6	2.8	7.9	5.0	3.4	e1.1	.37	e.15	e.28
4	.28	.91	2.3	2.6	2.8	8.3	4.9	3.4	e1.1	.37	e.16	e.30
5	.27	.97	2.4	2.4	2.8	22	e4.7	3.3	e.99	.36	e.15	e.29
6	.31	1.0	2.4	2.4	2.8	20	e4.8	3.3	e.94	.36	e.14	e.29
7	.34	1.1	2.5	2.4	2.7	15	e4.7	3.2	e.89	.36	e.15	e.29
8	.39	1.3	2.7	2.4	2.7	53	e4.5	3.2	e.82	.34	e.16	.30
9	.36	1.4	2.7	2.4	2.7	31	e4.3	3.2	e.85	.35	e.15	.28
10	.37	1.3	2.7	2.3	4.0	18	e4.3	2.9	e.86	.36	e.14	.24
11	.37	1.3	2.7	2.3	7.2	15	e4.1	2.9	e.81	.35	e.11	.25
12	.36	1.2	2.7	2.3	8.6	14	e3.9	2.7	e.79	.34	e.10	.21
13	.37	1.2	2.7	2.3	5.7	13	e3.8	2.4	e.74	.31	e.11	.23
14	.38	1.2	2.8	2.3	4.5	12	e4.4	2.2	e.71	.28	e.11	.23
15	.42	1.3	2.8	2.2	3.8	11	e4.7	2.2	.72	.26	e.11	.23
16	.47	1.3	2.7	2.3	4.5	9.8	e4.4	2.4	.74	.25	e.12	.19
17	.53	1.5	2.7	2.4	7.1	9.0	13	2.5	.80	.24	e.12	.19
18	.58	1.6	2.6	2.4	4.5	8.2	23	2.1	.80	.21	e.13	.20
19	.62	1.6	2.6	2.4	3.7	7.8	13	e1.9	.77	.21	e.14	.17
20	.63	1.6	2.6	2.4	4.6	7.4	9.5	e1.8	.72	.23	e.14	.22
21	.64	1.7	2.6	2.4	49	7.0	8.3	e1.8	.66	.23	e.16	.37
22	.68	1.6	2.7	2.4	22	6.9	8.8	e1.7	.60	.21	e.17	.53
23	.68	1.7	2.8	2.5	47	6.6	7.9	e1.6	.59	.20	e.18	.64
24	.70	1.7	2.9	2.5	29	6.4	7.0	e1.7	.58	.20	e.19	.46
25	.73	1.8	2.9	3.0	14	6.3	6.3	e1.8	.55	.20	e.21	.38
26	.78	1.8	2.8	3.5	11	6.1	5.7	e1.8	.52	.19	e.20	.32
27	.86	1.8	2.8	2.8	11	6.1	5.1	e1.7	.50	.17	e.22	.45
28	.91	1.8	2.8	2.6	12	6.2	5.1	e1.5	.44	.16	e.25	.54
29	.89	1.8	2.8	2.6	9.9	6.0	4.8	e1.4	.41	.16	e.27	.51
30	.82	1.9	2.8	2.7	---	5.9	4.0	e1.4	.40	.16	e.27	.50
31	.81	---	3.0	3.3	---	5.3	---	e1.3	---	.15	e.27	---
TOTAL	16.44	41.92	81.7	78.9	288.2	368.5	194.3	74.0	22.80	8.33	5.05	9.64
MEAN	.53	1.40	2.64	2.55	9.94	11.9	6.48	2.39	.76	.27	.16	.32
MAX	.91	1.9	3.0	3.5	49	53	23	3.8	1.2	.39	.27	.64
MIN	.27	.82	2.0	2.2	2.7	5.3	3.8	1.3	.40	.15	.10	.17
AC-FT	33	83	162	156	572	731	385	147	45	17	10	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	2.20	4.69	9.03	17.7	32.0	30.7	19.6	10.2	5.47	2.64	1.64	1.58
MAX	10.2	44.1	89.9	199	451	221	148	54.2	26.9	13.3	11.0	7.05
(WY)	1984	1966	1967	1993	1969	1938	1926	1998	1998	1998	1983	1983
MIN	.13	.36	.69	2.07	2.55	2.89	2.14	.72	.72	.11	.051	.066
(WY)	1991	1991	1991	1936	1964	1961	1961	1934	1989	1990	1989	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	1296.59		1189.78			
ANNUAL MEAN	3.55		3.25		11.3	
HIGHEST ANNUAL MEAN					77.8	1969
LOWEST ANNUAL MEAN					2.04	1961
HIGHEST DAILY MEAN	19	Feb 10	53	Mar 8	3360	Feb 25 1969
LOWEST DAILY MEAN	.25	Aug 23	.10	Aug 12	.00	Nov 8 1924
ANNUAL SEVEN-DAY MINIMUM	.25	Aug 23	.11	Aug 11	.00	Aug 12 1951
INSTANTANEOUS PEAK FLOW			162	Feb 23	7000	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	2570		2360		8210	
10 PERCENT EXCEEDS	7.3		7.5		20	
50 PERCENT EXCEEDS	2.7		1.7		3.8	
90 PERCENT EXCEEDS	.36		.20		.40	

e Estimated.

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA

LOCATION.—Lat 34°03'41", long 117°16'00", in NW 1/4 NE 1/4 sec.26, T.1 S., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, 1,500 ft upstream from Redlands Boulevard Bridge, and 0.6 mi northwest of Loma Linda.

DRAINAGE AREA.—125 mi^2.

PERIOD OF RECORD.—October 1954 to September 1965, February 1968 to September 1975, April 1979 to current year. Discharge measurements only, October 1997 to September 1998.
WATER TEMPERATURE: April 1979 to December 1981.
SEDIMENT DATA: April 1979 to December 1981, December 1991 to March 1994.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 1,040 ft above sea level, from topographic map. Prior to April 1979, water-stage recorder at site 0.45 mi downstream at different datum. Prior to Dec. 7, 1997, at site 0.25 mi downstream at different datum.

REMARKS.—Records poor. Since Dec. 7, 1997, channel is a trapezoidal concrete floodway. No regulation upstream from station. Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,000 ft^3/s, Feb. 25, 1969, gage height, 8.2 ft, from floodmark, from rating curve extended above 2,100 ft^3/s on basis of slope-conveyance study of peak flow, at site and datum then in use; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum, from rating curve extended above 79 ft^3/s on basis of step-backwater analysis:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2015	667	2.46	Mar. 8	1215	215	1.72
Mar. 5	1745	258	1.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	.78	.83	.58	1.6	.53	.00	.08	.06	.10	.32	.95
2	.73	.74	.91	.60	1.2	.12	.00	.06	.00	.08	.27	.83
3	.71	.73	.89	.60	1.4	6.2	.05	.05	.00	.06	.28	1.2
4	.71	.73	.89	.60	.79	14	.07	.00	.00	.05	.25	.38
5	.70	.73	.88	.63	.51	e90	.18	.00	.01	.04	.21	.17
6	.80	.72	.88	.55	.48	e15	.09	.02	.02	.05	.18	.14
7	.93	.73	.87	.58	.99	e4.0	.05	.00	.00	.05	.15	.10
8	1.1	.71	.87	.62	.75	62	.00	.00	.00	.04	.14	.68
9	1.1	.70	.87	.61	.73	e6.0	.00	.00	.00	.03	.13	.27
10	1.0	.70	.85	.51	5.4	e3.0	.00	.00	.00	.03	.12	.04
11	1.1	.74	.85	.45	.94	e1.0	.08	.07	.00	.01	.09	.01
12	.97	.77	.86	.49	7.5	e.50	.20	.13	.00	.02	.14	.03
13	1.1	.79	.87	.47	1.0	e.20	.26	.05	.01	.03	.33	.03
14	1.1	.78	.78	.59	1.5	.00	6.7	.02	.01	.03	.26	.02
15	1.0	.76	.64	.53	1.3	.32	7.2	.00	.00	.02	.25	.01
16	1.0	.77	.72	.43	6.4	.20	3.6	.00	.00	.02	.19	.01
17	.91	.76	.74	.48	7.0	.20	16	.04	.00	.03	.12	.00
18	.82	.74	.74	.55	4.4	e.16	32	1.4	.00	.03	.00	.00
19	.64	.71	.75	.52	4.3	.14	.63	.21	.00	.02	.00	.00
20	.67	.72	.65	.38	12	.13	.32	1.6	.00	.02	.00	.05
21	.80	.71	.65	.33	e100	.08	.31	2.3	.01	.01	.03	.58
22	.85	.70	.77	.62	e20	.08	.42	1.2	.05	.01	.07	.55
23	.86	.68	.78	.61	e90	.09	.49	.71	.07	.08	.08	1.3
24	.87	.69	.76	.23	e6.0	.06	.65	.78	.25	.08	.43	.60
25	.87	.69	.76	14	e4.0	.02	.64	.42	.20	.47	.75	.04
26	.83	.72	.76	4.4	e2.0	.22	.46	.27	.26	.56	.40	.02
27	.80	.76	.76	1.4	e5.0	.35	.32	.29	.26	.66	.02	1.5
28	.78	.76	.76	1.3	e1.0	.15	.22	.20	.21	.58	.01	.89
29	.80	.78	.75	.98	1.2	.08	.14	.15	.15	.46	.13	.17
30	.80	.75	.63	1.4	---	.01	.10	.13	.13	.38	.14	.07
31	.79	---	.54	3.6	---	.00	---	.11	---	.33	.82	---
TOTAL	26.93	22.05	24.26	39.64	289.39	204.84	71.18	10.29	1.70	4.38	6.31	10.64
MEAN	.87	.73	.78	1.28	9.98	6.61	2.37	.33	.057	.14	.20	.35
MAX	1.1	.79	.91	14	100	90	32	2.3	.26	.66	.82	1.5
MIN	.64	.68	.54	.23	.48	.00	.00	.00	.00	.01	.00	.00
AC-FT	53	44	48	79	574	406	141	20	3.4	8.7	13	21

e Estimated.

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.88	1.50	2.02	9.39	12.0	6.96	1.52	.85	.77	.65	.61	.75
MAX	2.27	11.6	11.6	113	186	53.7	16.8	3.65	2.20	3.65	1.76	3.03
(WY)	1988	1983	1985	1993	1969	1991	1958	1969	1989	1968	1965	1965
MIN	.000	.000	.16	.079	.17	.000	.000	.000	.000	.000	.000	.000
(WY)	1996	1996	1996	1972	1968	1997	1979	1996	1996	1995	1995	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	554.79		711.61			
ANNUAL MEAN	1.52		1.94		3.14	
HIGHEST ANNUAL MEAN					21.7	1969
LOWEST ANNUAL MEAN					.74	1987
HIGHEST DAILY MEAN	33	Jul 12	100	Feb 21	3500	Feb 25 1969
LOWEST DAILY MEAN	.03	May 18	.00	Mar 14	.00	Feb 4 1968
ANNUAL SEVEN-DAY MINIMUM	.12	Jul 23	.00	Jun 7	.00	Apr 15 1969
INSTANTANEOUS PEAK FLOW			667	Feb 21	15000	Feb 25 1969
INSTANTANEOUS PEAK STAGE			2.46	Feb 21	8.20	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	1100		1410		2270	
10 PERCENT EXCEEDS	2.8		1.4		1.9	
50 PERCENT EXCEEDS	.72		.50		.60	
90 PERCENT EXCEEDS	.23		.01		.00	

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.—Lat 34°10'45", long 117°15'53", in NE 1/4 NE 1/4 sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 1,000 ft upstream from Del Rosa Water Co.'s Diversion, 0.5 mi south of Arrowhead Springs, and 1.0 mi downstream from Strawberry Creek.

DRAINAGE AREA.—8.80 mi^2.

PERIOD OF RECORD.—December 1919 to current year. Prior to October 1952, published as Strawberry Creek near Arrowhead Springs.

REVISED RECORDS.—WSP 1635: 1924(M), 1927, 1928(M), 1929, 1932(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 1,590 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. One small diversion dam for domestic use upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,710 ft^3/s, Jan. 29, 1980, gage height, 8.35 ft, on basis of slope-area measurement of peak flow; no flow at times in 1929, 1931–35.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40 ft^3/s, or maximum, from rating curve extended above 120 ft^3/s on basis of slope-area measurement at gage height 8.35 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1800	69	2.98	Mar. 8	1645	67	2.96
Mar. 5	1445	48	2.78	Apr. 17	1945	47	2.77

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.75	1.1	1.5	1.9	3.2	2.5	2.1	1.3	.71	.42	e.57
2	.53	.64	1.0	1.4	1.8	3.1	2.4	2.0	1.1	.70	.39	e.59
3	.66	.65	.99	1.4	1.8	3.2	2.2	2.0	1.1	.71	.43	e.58
4	.58	.76	1.2	1.4	1.7	3.7	2.3	2.0	1.1	.72	.40	e.54
5	.56	.83	1.2	1.3	1.6	22	2.2	2.1	1.1	.71	.40	e.51
6	.75	.94	.98	1.2	1.7	15	2.4	2.1	.96	.67	.41	e.48
7	.67	1.1	1.1	1.2	1.5	8.3	2.2	2.1	.96	.69	.42	e.46
8	.55	1.7	1.2	1.2	1.6	30	2.2	2.4	1.3	.70	.39	e.49
9	.53	1.7	1.3	1.3	1.6	22	2.2	2.3	1.2	.70	e.38	e.47
10	.53	1.4	1.1	1.2	5.2	13	2.0	1.9	1.3	.71	e.37	e.47
11	.52	1.2	1.2	1.3	4.5	8.6	2.0	2.0	1.2	.70	e.37	e.48
12	.51	1.1	1.2	1.3	5.9	6.1	1.8	1.7	1.0	.68	e.36	e.48
13	.48	.97	1.1	1.2	3.8	4.9	1.8	1.7	.91	.66	e.36	e.45
14	.48	.96	1.3	1.2	3.2	4.2	2.1	1.6	.85	.58	e.35	e.45
15	.63	.90	1.2	1.3	2.7	3.9	2.2	1.6	.81	.60	e.36	e.46
16	.70	1.1	1.1	1.3	5.6	3.7	2.2	2.0	.87	.59	e.37	e.48
17	e.70	1.2	1.1	1.4	4.3	3.3	11	1.9	.92	.57	e.38	e.48
18	e.69	1.3	1.2	1.6	3.0	3.2	15	1.7	1.1	.55	.38	e.47
19	e.70	1.3	1.2	1.4	2.6	3.1	5.1	1.4	.87	.52	.38	e.48
20	e.68	1.4	1.0	1.2	3.5	2.9	3.4	1.4	.84	.49	.37	e.48
21	e.68	1.4	1.1	1.4	27	3.0	3.1	1.3	.79	.47	e.40	e.50
22	e.67	1.2	1.1	1.6	13	2.8	3.5	1.3	.83	.47	e.40	e.56
23	e.66	1.1	1.1	1.7	22	2.9	3.2	1.3	.76	.46	e.43	e.80
24	e.64	1.1	1.2	1.5	16	2.7	3.0	1.7	.81	.46	e.45	e.75
25	e.65	1.1	1.2	2.4	6.9	2.8	2.9	2.3	.95	.46	e.45	e.70
26	.66	1.1	1.2	3.1	4.6	2.7	2.6	2.1	.73	.46	e.43	e.68
27	.68	1.1	1.1	1.8	4.7	2.7	2.4	1.6	.64	.45	e.45	e.67
28	.76	1.1	1.1	1.6	4.1	2.8	2.6	1.4	.67	.45	e.50	e.65
29	.74	1.0	1.2	1.7	3.5	2.8	2.4	1.3	.72	.44	e.72	e.61
30	.60	.98	1.1	1.7	---	2.7	2.2	1.3	.73	.45	e.70	e.59
31	.69	---	1.3	3.2	---	2.5	---	1.4	---	.43	e.62	---
TOTAL	19.37	33.08	35.47	48.0	161.3	197.8	97.1	55.0	28.42	17.96	13.24	16.38
MEAN	.62	1.10	1.14	1.55	5.56	6.38	3.24	1.77	.95	.58	.43	.55
MAX	.76	1.7	1.3	3.2	27	30	15	2.4	1.3	.72	.72	.80
MIN	.48	.64	.98	1.2	1.5	2.5	1.8	1.3	.64	.43	.35	.45
AC-FT	38	66	70	95	320	392	193	109	56	36	26	32

e Estimated.

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.51	2.53	4.84	7.88	12.4	13.6	8.20	4.99	2.93	1.69	1.27	1.16
MAX	11.4	20.3	43.6	95.7	102	101	38.3	30.6	15.9	9.40	11.9	4.94
(WY)	1984	1966	1967	1993	1993	1991	1978	1998	1998	1983	1983	1983
MIN	.20	.47	.51	.91	1.14	1.27	.56	.66	.56	.18	.20	.20
(WY)	1965	1965	1990	1963	1964	1972	1977	1934	1961	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1921 - 2000	
ANNUAL TOTAL	874.15		723.12			
ANNUAL MEAN	2.39		1.98		5.21	
HIGHEST ANNUAL MEAN					23.1	1993
LOWEST ANNUAL MEAN					.85	1961
HIGHEST DAILY MEAN	12	Apr 7	30	Mar 8	795	Feb 25 1969
LOWEST DAILY MEAN	.35	Sep 14	.35	Aug 14	.10	Aug 23 1929
ANNUAL SEVEN-DAY MINIMUM	.48	Aug 25	.36	Aug 10	.11	Jul 11 1964
INSTANTANEOUS PEAK FLOW			69	Feb 23	3710	Jan 29 1980
INSTANTANEOUS PEAK STAGE			2.98	Feb 23	8.35	Jan 29 1980
ANNUAL RUNOFF (AC-FT)	1730		1430		3780	
10 PERCENT EXCEEDS	4.7		3.2		9.5	
50 PERCENT EXCEEDS	1.2		1.1		2.0	
90 PERCENT EXCEEDS	.62		.46		.51	

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°03'54", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.4 mi downstream from E Street Bridge, 0.4 mi upstream from Warm Creek, 1.2 mi downstream from San Timoteo Creek, 26 mi downstream from Big Bear Lake, and 2.8 mi south of San Bernardino.

DRAINAGE AREA.—541 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March 1939 to September 1954, October 1966 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 940 ft above sea level, from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 0.4 mi upstream at datum 964.50 ft above sea level. Nov. 11, 1950, to September 1954, water-stage recorder on both banks 0.4 mi upstream at datum 964.50 ft above sea level. October 1966 to September 1976, water-stage recorder on right bank 0.4 mi upstream at datum 954.50 ft above sea level. October 1976 to September 1977, gage was removed for channel construction. October 1977 to Jan. 28, 1981, water-stage recorder on right bank, 0.5 mi upstream at elevation 950 ft above sea level, from topographic map.

REMARKS.—Records poor. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. Natural flow of stream affected by ground-water withdrawals and diversion for domestic use and irrigation upstream from station. Effluent from sewage reclamation plant 1.0 mi upstream caused sustained flow past gage from 1967 to Mar. 21, 1996. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,000 ft^3/s, Feb. 25, 1969, gage height, 11.9 ft, site and datum then in use; no flow for many days many years prior to 1967 and since Mar. 21, 1996.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,000 ft^3/s, from rating curve extended above 5,930 ft^3/s on basis of critical-depth computations, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0615	2,060	5.02	Mar. 8	1345	2,180	5.06
Feb. 21	1715	4,140	5.56	Apr. 17	1900	1,460	4.78
Mar. 4	2115	2,740	5.23				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.2	16	18	8.5	40	.34	e3.5	e2.2	.17	e.90	e.80
2	7.0	6.8	e15	16	8.0	35	1.2	e4.0	e1.5	.48	.57	.12
3	7.0	7.0	e15	12	7.7	72	1.3	e4.5	e1.1	e.50	1.4	.29
4	7.0	7.3	e15	15	7.7	281	2.4	e4.2	e1.6	e.45	1.4	.00
5	7.2	7.5	e15	14	8.1	397	1.1	e5.0	e1.5	e.46	.92	.08
6	7.1	8.1	e16	13	7.7	61	1.4	4.6	e2.0	e.50	.87	.16
7	6.7	7.4	e15	12	7.6	46	1.6	4.6	e1.9	e.47	.41	.38
8	8.3	8.7	e14	13	7.6	309	1.3	4.9	e2.0	e.45	.31	.90
9	6.1	9.3	e14	12	7.0	50	1.4	2.3	e2.1	e.46	1.1	.37
10	5.8	8.2	e15	12	37	29	2.5	1.3	e2.0	e.50	1.3	.10
11	6.3	8.3	e14	12	23	24	2.2	1.3	e1.9	e.48	.73	.00
12	6.5	8.8	e13	12	295	21	1.7	2.7	e1.9	.52	1.5	.00
13	7.2	8.5	e13	11	17	19	1.4	1.6	e1.8	.54	1.3	.00
14	6.3	9.1	e15	10	10	22	16	.00	e1.8	.53	.92	.00
15	7.0	9.8	e16	11	8.0	15	8.8	.00	e1.8	e.67	1.0	.00
16	8.0	8.5	e16	10	15	8.5	5.2	2.3	e1.7	e1.0	1.6	.00
17	8.8	9.3	e14	11	19	13	234	6.0	e1.7	e.95	1.3	.00
18	11	9.8	e15	12	10	5.4	355	4.5	e1.8	e.72	.94	.00
19	6.4	9.1	e14	12	7.7	4.3	42	2.6	e1.6	e.67	.84	.00
20	6.8	10	e12	12	59	5.6	23	.00	e1.7	e.95	e.80	.49
21	6.0	8.7	e13	14	1230	6.4	13	.48	e1.8	e1.0	e.75	1.3
22	5.7	8.3	e14	16	146	6.6	13	.94	e1.8	e1.1	e.78	1.6
23	5.5	8.1	e15	11	450	3.9	7.8	1.7	e1.7	e1.2	.00	1.5
24	6.2	8.3	e14	11	145	.99	8.2	1.8	1.6	e1.1	.00	.07
25	6.3	9.6	e14	32	24	1.1	4.8	e2.5	1.5	e2.0	11	.01
26	6.0	10	e13	45	e20	1.5	4.6	e2.2	1.8	e1.4	1.4	.00
27	6.5	9.8	e13	10	e57	3.9	3.5	e1.7	1.2	e1.3	.63	.00
28	10	9.4	e12	10	e40	8.2	4.0	e2.0	.38	e1.2	e1.5	.00
29	9.3	12	e13	11	37	1.8	3.6	e2.6	.45	e1.3	e1.7	.00
30	8.4	16	e16	10	---	1.7	e3.8	e2.1	.18	e1.2	e1.4	.00
31	7.2	---	24	16	---	.27	---	e2.5	---	e1.0	e1.5	---
TOTAL	220.4	268.9	453	436	2719.6	1494.16	770.14	80.42	48.01	25.27	40.77	8.17
MEAN	7.11	8.96	14.6	14.1	93.8	48.2	25.7	2.59	1.60	.82	1.32	.27
MAX	11	16	24	45	1230	397	355	6.0	2.2	2.0	11	1.6
MIN	5.5	6.8	12	10	7.0	.27	.34	.00	.18	.17	.00	.00
AC-FT	437	533	899	865	5390	2960	1530	160	95	50	81	16

e Estimated.

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.88	3.47	20.9	23.7	20.6	37.4	27.2	11.3	2.39	.93	.87	.63
MAX	3.35	21.3	117	109	72.2	183	237	145	31.2	9.87	8.37	6.32
(WY)	1942	1945	1946	1943	1945	1943	1941	1941	1941	1940	1940	1939
MIN	.000	.007	.000	1.90	2.41	1.70	1.14	.14	.000	.000	.000	.000
(WY)	1951	1952	1951	1948	1942	1951	1951	1942	1950	1950	1942	1948

SUMMARY STATISTICS	WATER YEARS 1939 - 1954	
ANNUAL MEAN	12.7	
HIGHEST ANNUAL MEAN	56.6	1941
LOWEST ANNUAL MEAN	.78	1951
HIGHEST DAILY MEAN	2350	Jan 23 1943
LOWEST DAILY MEAN	.00	Jun 19 1940
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 10 1940
ANNUAL RUNOFF (AC-FT)	9190	
10 PERCENT EXCEEDS	16	
50 PERCENT EXCEEDS	1.0	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.9	43.3	77.4	158	232	253	132	103	63.9	40.8	36.8	34.6
MAX	117	191	469	1327	2096	1279	742	707	339	162	160	75.0
(WY)	1984	1984	1967	1993	1980	1980	1980	1983	1983	1969	1983	1983
MIN	12.4	13.2	14.8	13.2	11.6	10.6	12.5	9.35	13.0	9.08	9.97	9.93
(WY)	1968	1972	1970	1972	1968	1972	1972	1967	1971	1967	1967	1967

SUMMARY STATISTICS	WATER YEARS 1967 - 1995	
ANNUAL MEAN	100	
HIGHEST ANNUAL MEAN	441	1980
LOWEST ANNUAL MEAN	17.2	1968
HIGHEST DAILY MEAN	14800	Feb 25 1969
LOWEST DAILY MEAN	6.4	Jul 13 1967
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 16 1967
INSTANTANEOUS PEAK FLOW	28000	Feb 25 1969
INSTANTANEOUS PEAK STAGE	11.90	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	72490	
10 PERCENT EXCEEDS	165	
50 PERCENT EXCEEDS	35	
90 PERCENT EXCEEDS	14	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.4	26.8	26.8	83.4	220	48.0	49.4	88.4	25.3	7.46	14.9	18.2
MAX	38.1	56.2	42.6	230	729	114	190	430	116	20.9	66.1	75.8
(WY)	1996	1997	1998	1997	1998	1998	1998	1998	1998	1999	1998	1998
MIN	4.97	8.96	14.6	14.1	7.57	.10	.000	.000	.000	.000	.000	.000
(WY)	1998	2000	2000	2000	1997	1997	1997	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	5082.95		6564.84			
ANNUAL MEAN	13.9		17.9		51.1	
HIGHEST ANNUAL MEAN					152	1998
LOWEST ANNUAL MEAN					15.9	1999
HIGHEST DAILY MEAN	154	Apr 7	1230	Feb 21	5050	Feb 24 1998
LOWEST DAILY MEAN	.53	May 30	.00	May 14	.00	Mar 22 1996
ANNUAL SEVEN-DAY MINIMUM	1.5	May 26	.00	Sep 11	.00	Mar 22 1996
INSTANTANEOUS PEAK FLOW			4140	Feb 21	21100	Feb 23 1998
INSTANTANEOUS PEAK STAGE			5.56	Feb 21	7.70	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	10080		13020		37000	
10 PERCENT EXCEEDS	23		17		100	
50 PERCENT EXCEEDS	8.5		5.6		7.0	
90 PERCENT EXCEEDS	4.0		.44		.00	

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1983–86, 1988 to current year.
WATER TEMPERATURE: November 1982 to September 1983.
SEDIMENT DATA: Water years 1983–86, 1988 to current year.

PERIOD OF DAILY RECORD.—October 1982 to September 1983.
WATER TEMPERATURE: November 1982 to September 1983.
SUSPENDED-SEDIMENT DISCHARGE: October 1982 to September 1983.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
OCT								
07...	1115	7.0	24.0	139	2.6	--	--	--
NOV								
03...	1705	6.7	19.0	30	.54	--	--	--
DEC								
07...	1435	16	18.5	38	1.6	--	--	--
JAN								
11...	1635	12	18.5	6	.19	--	--	--
25...	1445	58	15.0	1260	197	18	27	38
FEB								
03...	1215	8.0	19.0	22	.48	--	--	--
12...	1210	110	15.0	1580	469	16	25	34
21...	1350	278	14.5	3180	2390	20	23	31
24...	1440	60	16.0	542	88	--	--	--
MAR								
06...	1345	47	14.5	409	52	--	--	--
APR								
12...	1525	1.3	30.0	31	.11	--	--	--
26...	0855	4.8	19.0	52	.67	--	--	--
JUN								
15...	0955	1.8	25.0	56	.27	--	--	--
AUG								
02...	0805	1.5	22.0	12	.05	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
OCT								
07...	--	--	36	--	--	--	--	--
NOV								
03...	--	--	52	--	--	--	--	--
DEC								
07...	--	--	44	--	--	--	--	--
JAN								
11...	--	--	68	--	--	--	--	--
25...	50	62	78	89	98	100	--	--
FEB								
03...	--	--	73	--	--	--	--	--
12...	40	47	54	59	70	92	98	100
21...	42	52	64	70	89	98	100	--
24...	--	--	54	64	87	98	100	--
MAR								
06...	--	--	66	76	94	100	--	--
APR								
12...	--	--	76	--	--	--	--	--
26...	--	--	92	--	--	--	--	--
JUN								
15...	--	--	78	--	--	--	--	--
AUG								
02...	--	--	78	--	--	--	--	--

11060400 WARM CREEK NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°04'42", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.2 mi downstream from Interstate Highway 215 Bridge, and 2.0 mi southwest of San Bernardino.

DRAINAGE AREA.—11.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—February 1964 to September 1972, October 1974 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area. WDR CA-92-1: 1978(M), 1980–81(M), 1983–86(M).

GAGE.—Water-stage recorder. Elevation of gage is 960 ft above sea level, from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi upstream at different datum.

REMARKS.—Records fair. Natural channel prior to October 1972; concrete-lined channel since October 1974. Possible diversion during high flows into Warm Creek from Lytle Creek flood detention basin 3.4 mi upstream. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,500 ft^3/s, Mar. 4, 1978, gage height, 4.88 ft, from rating curve extended above 420 ft^3/s on basis of step-backwater analysis; maximum gage height, 6.33 ft, Nov. 22, 1965, site and datum then in use; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.6	1.3	2.0	2.3	2.7	2.6	2.6	2.3	1.5	1.0	1.1
2	.98	1.5	1.3	1.7	2.1	2.4	3.1	2.5	2.2	1.4	1.0	1.0
3	.92	1.6	1.3	1.9	1.9	14	3.9	2.6	2.4	1.6	.96	1.0
4	.86	1.6	1.5	2.1	1.9	60	3.6	2.6	2.5	1.9	.86	1.0
5	.98	1.6	1.3	2.0	2.0	126	3.3	2.3	2.4	1.7	.94	1.0
6	1.2	1.6	1.3	2.1	2.1	28	3.6	2.3	2.4	1.4	.90	1.0
7	1.1	1.6	1.3	2.1	2.3	8.2	3.5	2.4	2.3	1.6	.87	1.0
8	1.2	5.4	1.9	2.1	3.3	129	3.2	2.8	2.3	1.4	.86	1.0
9	1.1	2.2	1.4	2.1	3.2	12	3.2	2.8	2.3	1.3	1.0	1.1
10	1.0	2.1	1.2	2.1	49	4.9	3.3	2.6	2.3	1.5	1.0	.91
11	1.1	2.0	1.3	1.8	4.9	3.4	3.0	2.5	2.0	1.4	1.0	.88
12	1.2	1.9	1.3	1.6	112	2.6	3.3	2.4	2.1	1.4	.83	.84
13	1.2	1.9	1.4	1.6	4.7	2.2	3.4	2.4	2.3	1.6	.77	.84
14	1.5	1.8	1.5	1.6	7.7	2.1	16	2.5	2.1	2.1	1.0	.78
15	1.5	2.0	1.6	2.2	1.6	2.1	6.2	2.5	2.1	1.5	1.5	.78
16	1.8	1.9	1.6	1.6	51	2.3	5.8	2.5	2.1	1.4	1.6	.77
17	1.7	1.8	1.6	1.6	12	2.6	85	3.2	2.0	1.4	2.1	.84
18	1.7	1.3	1.6	1.6	2.2	2.6	61	2.2	2.0	1.3	1.0	.82
19	1.6	1.3	1.6	1.6	2.1	2.6	4.4	1.9	2.0	1.4	1.0	.63
20	1.7	1.3	1.7	1.6	41	2.6	4.3	2.1	2.0	1.3	1.0	.58
21	1.7	1.3	2.0	2.0	142	2.8	4.6	2.0	1.8	1.1	1.0	.58
22	1.7	1.2	1.7	2.1	11	2.4	8.6	2.3	1.9	1.0	1.1	1.8
23	1.6	1.6	1.9	1.9	109	2.0	2.8	2.0	1.8	1.0	1.2	5.1
24	1.6	1.3	1.5	1.6	15	2.1	2.5	2.1	1.7	1.0	1.3	.36
25	1.6	1.3	1.4	48	6.3	2.1	2.8	2.4	1.6	1.0	1.3	.36
26	1.6	1.3	1.6	9.5	2.7	2.1	2.9	2.2	1.7	1.0	1.3	.36
27	1.6	1.3	2.1	2.4	12	3.2	2.6	2.4	1.5	1.1	1.3	.38
28	1.6	1.3	1.6	2.2	3.4	3.0	2.6	2.3	1.7	1.0	1.3	.38
29	1.6	1.4	1.7	2.0	2.6	3.3	2.8	2.3	1.7	1.1	1.5	.40
30	1.6	1.3	1.7	2.5	---	3.4	2.8	3.0	1.5	1.0	1.1	.44
31	1.6	---	11	41	---	3.0	---	2.2	---	1.0	1.1	---
TOTAL	43.24	51.3	57.2	152.2	613.3	441.7	260.7	74.9	61.0	41.4	34.69	28.03
MEAN	1.39	1.71	1.85	4.91	21.1	14.2	8.69	2.42	2.03	1.34	1.12	.93
MAX	1.8	5.4	11	48	142	129	85	3.2	2.5	2.1	2.1	5.1
MIN	.86	1.2	1.2	1.6	1.6	2.0	2.5	1.9	1.5	1.0	.77	.36
AC-FT	86	102	113	302	1220	876	517	149	121	82	69	56

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1972, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.11	2.77	4.73	4.68	4.19	1.15	1.82	.033	.000	.000	.003	.006
MAX	.49	13.1	14.0	32.7	29.6	4.35	11.5	.24	.000	.003	.026	.050
(WY)	1970	1966	1972	1969	1969	1970	1965	1969	1965	1968	1967	1965
MIN	.000	.000	.41	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1969	1969	1972	1967	1972	1966	1965	1965	1965	1965	1966

SUMMARY STATISTICS	WATER YEARS 1965 - 1972	
ANNUAL MEAN	1.61	
HIGHEST ANNUAL MEAN	5.16	1969
LOWEST ANNUAL MEAN	.33	1968
HIGHEST DAILY MEAN	488	Jan 25 1969
LOWEST DAILY MEAN	.00	Oct 1 1964
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1964
INSTANTANEOUS PEAK FLOW	8500	Mar 4 1978
INSTANTANEOUS PEAK STAGE	4.88	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	1170	
10 PERCENT EXCEEDS	.00	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.49	9.46	11.6	18.0	37.8	34.7	14.4	12.3	9.13	7.99	7.76	7.23
MAX	32.4	33.1	41.6	41.2	418	376	44.2	86.7	43.6	34.5	50.6	30.3
(WY)	1984	1986	1985	1993	1978	1978	1986	1980	1980	1980	1983	1983
MIN	.12	.087	.40	.11	.85	2.51	.17	.37	.067	.11	.061	.023
(WY)	1978	1996	1980	1976	1977	1977	1977	1978	1978	1979	1979	1979

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	1718.50		1859.66			
ANNUAL MEAN	4.71		5.08		14.7	
HIGHEST ANNUAL MEAN					70.5	1978
LOWEST ANNUAL MEAN					1.91	1977
HIGHEST DAILY MEAN	77	Apr 12	142	Feb 21	3400	Mar 1 1978
LOWEST DAILY MEAN	.86	Oct 4	.36	Sep 24	.00	Nov 29 1974
ANNUAL SEVEN-DAY MINIMUM	.99	Sep 29	.38	Sep 24	.00	Dec 7 1974
INSTANTANEOUS PEAK FLOW			1180	Feb 12	8500	Mar 4 1978
INSTANTANEOUS PEAK STAGE			2.51	Feb 12	4.88	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	3410		3690		10650	
10 PERCENT EXCEEDS	6.9		4.3		27	
50 PERCENT EXCEEDS	2.9		1.8		5.0	
90 PERCENT EXCEEDS	1.2		1.0		.10	

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1998 to current year.
CHEMICAL DATA: October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.
SEDIMENT DATA: October 1998 to current year.

PERIOD OF DAILY RECORD.—October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature. Auto sampler used to collect water-quality samples during storm events.

REMARKS.—Interruptions in record were due to malfunction of recording equipment. Specific-conductance and water-temperature values are affected by ground-water discharge. Chemical, cross-sectional, sediment, and continuous-monitor data presented below is collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,140 microsiemens, Mar. 3, 2000; minimum recorded, 48 microsiemens, Feb. 21, 2000.
WATER TEMPERATURE: Maximum recorded, 36.5°C, July 12, 1999; minimum recorded, 8.5°C, Mar. 6, 2000.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,140 microsiemens, Mar. 3; minimum recorded, 48 microsiemens, Feb. 21.
WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 5; minimum recorded, 8.5°C, Mar. 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
13...	1530	1.0	734	131	9.8	8.3	803	37.5	28.0	270
28...	1800	1.6	736	92	7.8	8.4	629	23.0	21.5	140
NOV										
15...	1430	2.1	737	120	9.9	8.5	671	26.0	23.0	180
29...	1530	2.1	740	108	9.6	8.3	649	27.0	19.5	230
DEC										
13...	1530	1.3	737	91	8.7	8.3	651	17.5	16.0	180
27...	1500	5.8	743	70	6.2	8.3	705	22.0	20.0	240
JAN										
11...	0930	2.1	739	109	10.4	8.1	620	14.5	16.0	160
25...†	0800	60	--	--	--	7.4	331	--	17.0	88
FEB										
01...	0900	2.1	743	114	10.6	8.1	594	16.0	17.5	150
12...†	0730	110	737	94	9.6	7.9	102	16.0	13.0	34
15...	1320	1.6	739	122	10.5	8.4	720	21.0	21.0	240
21...†	1540	711	735	95	10.0	7.6	52	10.5	11.5	17
28...	1310	3.2	739	111	9.2	8.4	663	16.0	23.0	210
MAR										
14...	1530	2.1	734	168	13.2	8.6	764	28.5	25.5	260
30...	1230	3.2	736	159	12.3	8.7	715	22.0	26.5	230
APR										
10...	1250	2.1	735	160	12.5	8.4	780	26.5	26.0	280
MAY										
09...	1250	3.2	735	113	8.3	8.5	637	25.5	29.5	210
JUN										
12...	1350	2.1	736	111	8.0	8.0	826	32.0	30.5	290
JUL										
11...	1630	1.3	734	108	8.2	7.9	990	31.5	27.5	460
AUG										
14...	1630	1.3	732	110	8.0	7.9	993	37.0	29.5	440
SEP										
11...	1650	.77	732	78	5.9	7.8	992	38.0	27.5	460

† Sample collected by automatic sampler.

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
13...	77	82.1	15.6	4.2	2	56.8	31	192	234	--
28...	--	42.9	7.44	2.3	3	81.0	56	144	175	3
NOV										
15...	21	56.1	9.42	3.0	2	71.3	46	158	182	5
29...	49	69.5	14.6	4.7	1	44.6	29	185	221	2
DEC										
13...	17	56.7	10.3	2.7	2	63.3	42	167	200	2
27...	110	80.1	9.85	3.4	1	50.8	31	129	157	--
JAN										
11...	--	50.4	8.83	2.6	2	63.1	45	168	204	--
25...	13	27.7	4.54	7.0	1	28.6	39	76	92	--
FEB										
01...	--	47.1	8.27	2.4	2	64.0	47	159	194	--
12...	4	11.3	1.41	2.2	.3	3.9	19	31	37	--
15...	60	74.8	13.6	3.3	1	53.2	32	183	215	4
21...	--	5.70	.58	1.2	.2	2.3	22	18	22	--
28...	42	66.3	11.5	3.2	2	51.5	34	171	206	1
MAR										
14...	73	79.4	14.8	3.6	1	54.6	31	187	211	8
30...	44	69.4	13.2	3.3	2	54.4	34	183	201	11
APR										
10...	77	85.6	16.1	4.3	1	48.1	27	204	246	1
MAY										
09...	44	65.9	12.1	3.5	1	47.7	32	170	197	5
JUN										
12...	76	89.8	16.0	4.5	1	46.6	26	214	261	--
JUL										
11...	190	145	24.8	5.7	.7	36.9	15	274	334	--
AUG										
14...	180	135	24.0	5.4	.8	37.5	16	260	317	--
SEP										
11...	190	142	26.2	5.9	.7	36.5	14	270	329	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
OCT										
13...	49.9	2.0	25.7	139	.32	.48	.048	.241	<.010	.017
28...	57.1	3.1	29.4	70.1	.16	.35	.031	.384	<.010	.027
NOV										
15...	52.7	2.8	28.5	91.6	.22	.40	.022	.351	<.010	.031
29...	34.8	1.6	25.6	92.6	.33	.54	<.020	1.03	<.010	.020
DEC										
13...	46.8	2.3	26.2	89.4	.51	.22	<.020	.646	<.010	.033
27...	43.6	1.3	26.6	157	.12	.25	.023	1.25	<.010	.025
JAN										
11...	46.6	2.5	25.6	71.7	.22	.38	<.020	.708	.012	.015
25...	22.6	1.0	10.1	29.5	4.9	8.4	1.54	2.61	.338	.284
FEB										
01...	43.5	2.6	25.8	68.2	.12	.15	.025	.942	.012	.032
12...	2.9	.2	2.3	6.8	.86	2.3	.486	.977	.029	.144
15...	42.4	1.8	23.7	118	.18	.22	.023	.621	<.010	.024
21...	2.0	.1	1.3	2.2	.37	3.7	.189	.274	.014	.076
28...	39.4	1.8	23.0	102	.13	.23	<.020	.604	<.010	.020
MAR										
14...	45.4	1.8	22.9	133	e.10	.18	<.020	.356	<.010	.006
30...	39.8	2.0	22.0	116	.12	.21	<.020	.418	<.010	.009
APR										
10...	39.9	1.6	22.6	136	.16	.26	<.020	.190	<.010	.007
MAY										
09...	33.2	1.5	23.4	96.3	.21	.37	<.020	.261	<.010	.018
JUN										
12...	40.3	1.5	22.1	139	.23	.45	.032	.337	<.010	.010
JUL										
11...	41.2	.7	22.5	202	.15	.25	.031	.405	<.010	.007
AUG										
14...	40.8	.7	21.6	206	.26	.38	.028	.246	<.010	.007
SEP										
11...	38.8	.7	22.6	209	.26	.34	.042	.250	<.010	.007

< Actual value known to be less than value shown.
e Estimated.

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT									
13...	.014	.032	3.7	.7	.70	517	492	e10	28
28...	.032	.055	1.8	--	.52	383	384	e10	16
NOV									
15...	.024	.045	2.2	.4	.57	419	411	<10	26
29...	<.010	.040	3.1	.4	.56	414	403	10	15
DEC									
13...	.030	.034	1.2	--	.56	412	401	e10	12
27...	.023	.069	1.2	1.0	.65	475	455	<10	11
JAN									
11...	<.010	.044	1.2	.4	.53	393	375	<10	12
25...	.194	1.09	39	>10	.35	259	191	130	50
FEB									
01...	.026	.043	1.3	.2	.50	371	362	e10	13
12...	.124	.977	5.8	>8.8	.09	67	55	20	2
15...	.021	.035	2.0	<.2	.64	472	444	e10	16
21...	.057	3.17	3.2	76.4	.04	31	28	30	2
28...	.020	.031	1.7	.2	.60	442	403	e10	11
MAR									
14...	<.010	.014	1.1	.3	.68	500	469	e10	12
30...	.010	.014	1.7	.4	.62	454	432	<10	6
APR									
10...	<.010	.022	1.9	.2	.68	501	477	<10	7
MAY									
09...	.010	.036	2.2	.4	.54	399	386	10	7
JUN									
12...	<.010	.031	2.5	.8	.71	521	490	e10	16
JUL									
11...	<.010	.017	2.2	.3	.91	672	645	e10	29
AUG									
14...	<.010	.022	2.9	--	.92	674	628	e10	36
SEP									
11...	<.010	.015	3.1	.5	.91	670	645	<10	40

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR								
30...	1241	736	140	11.4	8.7	685	26.0	1.80
30...	1242	736	148	12.0	8.7	706	26.5	5.40
30...	1243	736	154	12.3	8.7	741	26.5	9.00
30...	1244	736	170	13.6	8.6	760	26.5	12.6
30...	1245	736	176	14.1	8.5	526	26.5	16.2

Instantaneous discharge at the time of cross-sectional measurements: 3.2 ft^3/s.

e Estimated.
< Actual value known to be less than value shown.
> Actual value known to be greater than value shown.

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
13...N	1530	1.0	28.0	11	.03	68
28...N	1800	1.6	21.5	13	.06	74
NOV						
15...N	1430	2.1	23.0	4	.02	81
29...N	1530	2.1	19.5	8	.05	84
DEC						
13...N	1530	1.3	16.0	6	.02	66
27...N	1500	5.8	20.0	23	.36	77
JAN						
11...N	0930	2.1	16.0	6	.03	80
25...N†	0800	60	17.0	289	47	89
FEB						
01...N	0900	2.1	17.5	3	.02	96
12...N†	0730	110	13.0	834	248	55
15...N	1320	1.6	21.0	2	.01	65
21...N†	1540	711	11.5	6380	12300	9
28...N	1310	3.2	23.0	1	.01	60
MAR						
14...N	1530	2.1	25.5	6	.03	52
30...N	1230	3.2	26.5	5	.04	55
APR						
10...N	1250	2.1	26.0	0	.00	100
MAY						
09...N	1250	3.2	29.5	10	.09	50
JUN						
12...N	1350	2.1	30.5	18	.10	52
JUL						
11...N	1630	1.3	27.5	11	.04	67
AUG						
14...N	1630	1.3	29.5	24	.08	23
SEP						
11...N	1650	.77	27.5	10	.02	71

N Suspended-sediment data determined by sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

† Sample collected by automatic sampler.

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	950	907	724	637	781	690	621	417	650	465	988	832
2	927	907	822	635	781	670	638	567	653	575	1100	988
3	918	897	717	637	774	734	652	564	722	609	1140	460
4	940	904	762	578	792	712	629	566	657	569	738	293
5	941	902	704	628	800	728	638	560	729	562	357	280
6	902	865	686	632	789	721	642	561	672	484	499	356
7	880	858	691	642	792	732	616	557	657	488	535	497
8	885	851	816	600	790	594	614	554	537	434	552	284
9	867	835	685	604	729	666	627	559	578	454	500	386
10	841	811	689	606	842	687	616	544	574	60	587	500
11	820	783	704	572	719	662	---	---	585	168	658	587
12	783	757	711	627	709	646	---	---	630	85	724	658
13	884	738	741	629	706	648	---	---	526	350	759	724
14	893	744	711	641	689	623	626	546	522	387	770	607
15	786	685	735	639	---	627	617	531	752	507	721	638
16	777	696	746	630	---	632	617	558	756	102	727	578
17	749	667	739	660	679	614	620	560	461	143	726	573
18	739	676	746	647	681	633	616	542	562	461	720	649
19	751	675	739	657	682	630	612	546	632	562	720	649
20	736	645	745	682	708	624	608	539	902	165	733	616
21	709	631	744	674	688	605	603	482	165	48	786	596
22	717	626	763	695	690	550	548	473	416	132	759	680
23	704	615	749	566	693	592	601	481	535	114	770	705
24	697	615	766	688	719	616	611	542	410	195	774	705
25	695	610	762	685	677	614	626	181	502	410	778	709
26	689	613	769	695	672	603	578	200	675	502	787	704
27	703	596	765	701	702	589	826	568	772	383	785	596
28	705	591	767	697	668	589	930	644	766	580	783	675
29	673	601	772	623	679	582	922	831	872	766	746	678
30	684	610	838	684	686	602	857	634	---	---	755	667
31	686	604	---	---	693	372	634	154	---	---	848	708
MONTH	950	591	838	566	---	372	---	---	902	48	1140	280
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	769	710	755	694	670	589	907	822	981	894	1110	923
2	777	677	795	689	680	645	982	843	988	910	1000	917
3	774	562	806	690	686	597	928	834	977	889	998	893
4	776	589	777	690	675	610	893	726	980	911	1010	902
5	778	670	779	709	695	633	922	785	1050	899	1000	908
6	762	631	790	699	697	615	979	818	964	877	996	910
7	728	524	778	637	810	631	933	794	966	846	1000	935
8	734	604	729	576	700	598	969	842	967	851	1020	903
9	740	633	767	583	704	602	977	880	968	854	1020	876
10	883	634	768	694	699	612	947	861	996	874	1040	932
11	890	780	773	681	706	601	1010	829	985	874	1030	938
12	887	674	758	683	832	644	974	856	1010	975	1020	925
13	884	768	757	684	815	753	968	705	1000	953	1020	911
14	862	348	749	668	808	739	936	698	1030	927	1010	872
15	812	631	733	662	915	727	973	846	1040	910	1010	906
16	817	732	724	613	865	758	981	858	1040	963	1020	939
17	797	282	725	585	901	854	962	834	1030	681	1050	932
18	518	288	713	653	888	842	971	871	1040	902	1010	925
19	666	518	712	666	855	815	990	889	1030	975	1010	931
20	672	494	839	631	848	823	964	838	1030	990	1020	932
21	655	497	710	638	862	806	969	844	1060	963	1000	946
22	679	412	717	594	929	789	969	878	1050	949	1080	675
23	738	594	723	652	866	813	954	895	1000	936	1030	597
24	773	667	714	647	883	828	942	897	1010	931	1050	1010
25	774	695	698	612	926	882	941	891	998	913	1060	1020
26	773	710	693	628	931	892	970	914	1010	945	1050	995
27	782	724	699	645	923	865	973	945	1030	934	1050	998
28	893	756	704	662	874	819	973	881	1060	959	1090	948
29	765	678	708	654	924	799	959	914	1000	889	1030	997
30	763	670	708	553	891	837	960	902	1000	915	1020	973
31	---	---	694	636	---	---	967	887	1000	910	---	---
MONTH	893	282	839	553	931	589	1010	698	1060	681	1110	597

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	29.0	19.5	25.0	16.5	19.0	14.5	18.5	14.5	24.5	16.5	23.0	16.0
2	29.0	19.5	24.0	17.5	19.5	13.0	19.0	14.5	24.5	16.0	24.5	15.5
3	29.0	18.0	23.5	17.0	16.0	10.5	19.5	13.5	22.5	15.0	23.0	14.5
4	28.5	18.5	24.0	17.0	17.5	10.5	20.5	13.5	21.5	15.5	20.0	10.5
5	28.0	19.0	23.5	18.0	18.5	11.0	19.5	11.5	23.5	16.0	12.0	9.5
6	27.0	19.0	22.5	17.0	18.5	11.5	18.0	11.5	25.0	15.5	19.5	8.5
7	25.5	17.5	24.0	19.0	18.0	12.0	20.0	13.0	24.5	16.0	18.5	11.5
8	29.5	18.0	21.5	18.0	16.5	10.5	19.5	13.0	20.5	17.0	18.0	11.0
9	30.5	19.0	24.5	17.5	17.0	12.0	19.5	13.0	23.0	16.0	22.0	10.5
10	29.5	19.5	24.0	16.5	16.0	12.0	20.0	14.0	20.0	15.5	25.5	13.5
11	29.5	19.5	25.0	16.0	16.0	10.0	---	---	22.5	15.0	26.0	16.0
12	28.5	19.5	24.0	16.0	19.5	12.0	---	---	18.0	11.5	26.5	17.0
13	29.0	19.0	25.5	17.0	18.5	13.0	---	---	18.5	15.0	26.5	17.5
14	28.0	19.5	25.0	17.5	17.0	13.0	22.5	16.0	25.5	16.0	27.0	17.5
15	27.5	19.5	24.0	18.0	19.0	11.5	22.0	15.0	24.0	17.5	27.5	18.5
16	26.5	18.5	24.0	17.5	21.0	13.5	20.0	18.0	21.5	13.0	27.0	18.5
17	23.0	16.5	23.0	17.5	21.5	14.0	23.5	19.0	21.5	12.0	29.0	19.0
18	27.0	15.5	22.5	16.5	20.5	14.5	24.0	19.5	22.5	14.5	29.5	17.5
19	27.5	16.5	21.5	15.5	18.0	14.5	24.0	18.5	23.0	14.5	27.5	19.0
20	28.0	17.5	21.0	17.0	20.0	15.0	23.5	19.5	18.0	14.5	22.5	13.0
21	28.0	17.5	21.0	14.5	20.0	14.0	23.5	19.0	16.0	11.0	23.5	11.5
22	27.5	17.5	17.0	11.0	15.5	13.0	22.0	18.5	19.0	13.0	26.0	15.5
23	26.5	18.0	18.5	11.5	20.0	13.0	21.0	17.0	17.0	11.5	26.5	16.5
24	25.5	18.0	19.5	12.0	20.0	13.5	24.0	18.5	20.0	11.5	27.0	16.5
25	27.5	18.5	21.0	12.5	20.5	13.5	21.0	16.5	23.0	14.0	26.5	17.5
26	26.5	19.0	22.0	14.0	20.5	14.0	22.0	17.0	24.0	15.5	29.0	17.0
27	26.0	18.0	21.0	14.5	21.5	14.5	22.5	16.0	21.5	15.0	23.5	18.5
28	24.5	18.0	21.0	14.0	21.0	14.0	21.5	16.0	23.5	15.5	22.5	18.0
29	24.5	18.0	23.0	15.0	20.5	13.0	23.0	15.0	22.5	16.5	25.0	18.0
30	26.0	16.0	20.5	15.0	20.0	14.0	22.0	17.5	---	---	27.0	18.0
31	25.5	16.0	---	---	18.0	13.0	20.0	15.0	---	---	24.0	16.5
MONTH	30.5	15.5	25.5	11.0	21.5	10.0	---	---	25.5	11.0	29.5	8.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	26.0	15.0	31.0	20.0	33.0	21.0	33.5	22.0	35.0	24.0	29.0	20.5
2	27.5	17.5	31.0	20.5	31.5	21.0	33.0	21.5	33.5	24.0	31.0	20.0
3	29.0	18.0	32.0	21.0	32.5	20.0	32.5	22.0	35.0	23.5	32.0	19.5
4	30.0	19.0	31.5	21.0	32.5	21.0	33.0	21.5	35.0	23.0	31.5	19.5
5	29.5	19.0	29.5	21.0	32.5	21.5	32.5	21.5	35.5	23.5	31.0	20.0
6	28.5	19.5	30.5	20.5	32.5	20.5	32.5	21.0	35.0	23.5	32.0	19.5
7	29.0	19.5	30.0	20.5	31.5	21.0	32.5	21.0	35.0	23.5	27.5	20.0
8	30.0	20.0	27.5	20.5	28.0	20.0	32.5	21.0	34.0	22.5	32.0	21.0
9	29.0	18.0	31.5	20.5	31.0	19.5	32.0	21.5	34.0	22.5	31.5	19.0
10	27.5	18.0	29.0	20.0	31.5	20.0	32.5	21.5	34.0	22.5	31.0	19.5
11	29.0	18.5	28.0	19.0	32.0	20.5	32.0	21.0	34.0	23.0	32.5	19.5
12	30.0	19.0	30.5	17.5	32.0	21.0	33.0	20.5	34.0	22.5	33.0	21.0
13	28.5	19.0	30.0	18.0	32.5	22.0	33.0	20.5	34.5	22.5	32.0	22.5
14	23.0	17.0	29.5	18.5	32.5	22.0	32.5	21.5	33.5	23.5	33.0	22.0
15	28.5	18.0	29.0	19.0	33.0	22.5	33.0	21.5	33.5	24.0	34.0	23.0
16	29.0	18.5	24.5	18.0	32.5	22.0	32.5	21.0	34.0	24.0	32.5	23.0
17	22.5	15.0	29.0	18.0	32.5	22.0	33.0	20.5	33.0	24.0	33.0	23.5
18	19.5	12.0	30.5	19.0	33.0	22.0	33.0	21.5	33.0	23.5	32.0	23.0
19	27.5	16.5	30.5	20.0	33.0	21.5	34.0	22.0	33.0	22.0	32.5	23.0
20	29.5	18.0	31.0	21.0	33.0	21.5	34.5	22.0	33.0	21.5	32.0	22.5
21	23.0	18.0	33.0	21.5	32.5	22.0	33.5	22.0	33.0	22.0	24.5	22.0
22	24.5	17.0	32.5	22.0	32.5	22.0	33.5	23.0	32.5	22.5	24.0	20.0
23	25.5	19.0	31.0	21.5	32.5	22.0	33.5	23.5	34.0	22.5	30.0	20.5
24	29.5	19.0	27.0	21.0	33.5	22.0	33.0	22.5	32.0	23.0	32.0	19.0
25	30.5	20.5	23.0	20.5	29.0	22.5	34.0	23.0	31.0	23.5	31.5	19.0
26	31.5	20.5	32.0	20.0	34.0	23.0	34.0	22.5	33.0	23.0	30.0	19.5
27	30.5	21.0	34.0	21.5	34.0	23.0	34.0	22.5	31.0	22.5	28.5	21.0
28	28.5	20.5	33.5	22.5	34.0	23.0	34.0	23.0	28.5	22.5	30.0	21.0
29	28.5	19.5	33.0	22.0	33.5	22.5	32.5	23.0	26.5	22.5	29.5	21.5
30	31.5	19.5	31.5	21.5	33.5	22.0	34.0	23.0	31.5	22.0	29.5	20.0
31	---	---	32.0	21.5	---	---	34.5	23.0	31.0	21.5	---	---
MONTH	31.5	12.0	34.0	17.5	34.0	19.5	34.5	20.5	35.5	21.5	34.0	19.0

11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.—Lat 34°12'44", long 117°27'26", in NW 1/4 SE 1/4 sec.36, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 25 ft upstream from highway culvert crossing, 0.7 mi upstream from right tributary, 2.3 mi downstream from Lytle Creek Conduit, and 8 mi north of Fontana.

DRAINAGE AREA.—46.6 mi^2.

PERIOD OF RECORD.—October 1918 to current year. Combined records of Lytle Creek and diversions, October 1898 to December 1899, October 1904 to current year (published as "at mouth of canyon near Rialto" 1898–99, as "near San Bernardino" 1904–18, and as Lytle Creek and Fontana pipeline near Fontana 1919–31). Monthly discharge only for some periods published in WSP 1315-B.

REVISED RECORDS.—WSP 1011: 1943. WDR CA-83-1: Drainage area. WDR CA-98-1: 1969(M).

GAGE.—Water-stage recorder and crest-stage gage on creek. Elevation of gage is 2,380 ft above sea level, from topographic map. October 1918 to Mar. 21, 1938, at site 1 mi downstream at different datum. Mar. 22, 1938, to Nov. 20, 1963, at site 75 ft downstream at datum 4.58 ft lower. Water-stage recorder and sharp-crested weir on conduit since June 3, 1949. Water-stage recorder and sharp-crested weir on infiltration line from Oct. 1, 1971, to Sept. 30, 1992; nonrecording flow meter on diversion pipe since Oct. 1, 1992.

REMARKS.—Records fair. No regulation upstream from station. Southern California Edison Co.'s Lytle Creek Conduit (station 11060900) diverts 2.3 mi upstream for power development and Fontana Water Co. collects water from an infiltration line (station 11061000) upstream for irrigation and domestic use. Spill can occur from Southern California Edison Co.'s Lytle Creek forebay during unusually high flows. Water can be pumped from channel by two pumps at Miller Narrows at a point approximately 2 mi upstream. No water has been pumped out of channel since 1971. For records of combined discharge of Lytle Creek and diversions, see station 11062001. Records pertaining to distribution of flows diverted from Lytle Creek are available in the files of the U.S. Geological Survey. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records for Lytle Creek Conduit were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Records for Fontana Water Co.'s infiltration line were provided by Fontana Water Co.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 25,200 ft^3/s, Mar. 2, 1938, gage height, unknown, on basis of slope-area measurement of peak flow; maximum gage height, 15.0 ft, Jan. 25, 1969; no flow at times most years.

Combined creek and diversions: Maximum discharge, 25,200 ft^3/s, Mar. 2, 1938; minimum daily, 2.6 ft^3/s, Nov. 28, 1989.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft^3/s, or maximum:

Date	Time	Creek only Discharge (ft^3/s)	Creek only Gage height (ft)	Combined creek and diversions Discharge (ft^3/s)
Feb. 20	2145	521	4.04	528

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.00	.00	.01	1.2	2.0	.09	.00	.00	.00	.00
2	.00	.00	e.00	.00	.02	.47	1.4	.01	.00	.00	.00	.00
3	.00	.00	e.00	.03	.04	.08	1.4	.00	.00	.00	.00	.00
4	.00	.00	e.00	.01	.02	.00	.79	.00	.00	.00	.00	.00
5	.00	.00	e.00	.02	.01	39	.78	.00	.00	.00	.00	.00
6	.00	.00	e.00	.06	.03	27	.69	.00	.00	.00	.00	.00
7	.00	.00	e.00	.03	.03	22	.42	.00	.00	.00	.00	.00
8	.00	.01	e.00	.03	.03	34	.23	.00	.00	.00	.00	.00
9	.00	.00	e.00	.02	.03	18	.18	.00	.00	.00	.00	.00
10	.00	.00	.00	.01	.44	6.8	.14	.00	.00	.00	.00	.00
11	.00	.00	.00	.02	.18	4.0	.09	.00	.00	.00	.00	.00
12	.00	.00	.00	.01	7.4	3.2	.08	.00	.00	.00	.00	.00
13	.00	.00	.00	.01	8.2	2.9	.05	.00	.00	.00	.00	.00
14	.00	.00	.00	.02	4.8	3.3	.00	.00	.00	.00	.00	.00
15	.00	.00	.01	.00	.81	4.0	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	12	4.7	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	20	4.6	17	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	5.9	6.5	52	.00	.00	.00	.00	.00
19	.00	.00	.00	.01	3.4	5.6	22	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	67	4.4	6.1	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	86	5.3	5.3	.00	.00	.00	.00	.00
22	.00	.02	.02	.00	41	4.4	3.7	.00	.00	.00	.00	.00
23	.00	.00	.02	.01	85	4.4	2.5	.00	.00	.00	.00	.00
24	.00	e.00	.01	.00	46	4.5	1.4	.00	.00	.00	.00	.00
25	.00	e.00	.01	.09	31	4.1	.74	.00	.00	.00	.00	.00
26	.00	e.00	.00	.00	28	4.0	.81	.00	.00	.00	.00	.00
27	.00	e.00	.00	.03	29	4.7	.75	.00	.00	.00	.00	.00
28	.00	e.00	.00	.03	26	3.6	1.2	.00	.00	.00	.00	.00
29	.00	e.00	.01	.03	12	3.2	.71	.00	.00	.00	.00	.00
30	.00	e.00	.01	.02	---	2.7	.21	.00	.00	.00	.00	.00
31	.00	---	.00	.03	---	2.5	---	.00	---	.00	.00	---
TOTAL	0.00	0.03	0.09	0.52	514.35	235.15	122.67	0.10	0.00	0.00	0.00	0.00
MEAN	.000	.001	.003	.017	17.7	7.59	4.09	.003	.000	.000	.000	.000
MAX	.00	.02	.02	.09	86	39	52	.09	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.06	.2	1.0	1020	466	243	.2	.00	.00	.00	.00

e Estimated.

11062000 LYTLE CREEK NEAR FONTANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.23	7.71	10.1	26.3	42.5	52.7	29.6	20.3	15.1	11.2	7.59	5.91
MAX	48.2	275	151	552	633	752	254	189	157	131	80.5	65.7
(WY)	1984	1966	1967	1969	1980	1938	1978	1993	1983	1983	1969	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1919 - 2000	
ANNUAL TOTAL	1097.26		872.91			
ANNUAL MEAN	3.01		2.38		19.5	
HIGHEST ANNUAL MEAN					177	1969
LOWEST ANNUAL MEAN					.000	1919
HIGHEST DAILY MEAN	19	Feb 10	86	Feb 21	8950	Mar 2 1938
LOWEST DAILY MEAN	.00	Jun 13	.00	Oct 1	.00	Oct 1 1918
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 13	.00	Oct 1	.00	Oct 1 1918
INSTANTANEOUS PEAK FLOW			521	Feb 20	25200	Mar 2 1938
INSTANTANEOUS PEAK STAGE			4.04	Feb 20	15.00	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	2180		1730		14140	
10 PERCENT EXCEEDS	10		4.4		45	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11062001 LYTLE CREEK NEAR FONTANA, CA—Continued

LYTLE CREEK, SOUTHERN CALIFORNIA EDISON CO.'S LYTLE CREEK CONDUIT, AND FONTANA WATER CO.'S INFILTRATION LINE DIVERSION

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	e13	14	14	29	27	25	16	12	10	10
2	12	12	e14	14	13	28	26	23	15	12	10	10
3	12	12	e14	14	13	29	25	23	16	12	10	10
4	11	13	e14	14	13	29	29	23	15	12	9.9	9.9
5	12	12	e13	14	13	64	24	23	14	12	9.8	9.9
6	12	13	e14	13	13	41	27	23	14	12	9.7	9.9
7	12	13	e14	14	13	37	26	24	14	12	9.8	9.8
8	11	14	e14	14	13	50	25	24	14	12	10	9.8
9	11	14	e14	13	14	42	25	22	14	12	9.8	9.8
10	11	13	14	13	15	38	24	22	14	12	9.5	9.8
11	11	13	14	13	15	34	24	22	14	12	9.6	9.7
12	12	13	14	13	16	35	24	21	14	12	9.3	9.5
13	11	13	14	13	14	34	24	21	14	11	9.0	9.4
14	11	14	14	13	16	35	24	21	13	12	9.3	9.3
15	12	13	14	13	19	33	24	19	13	11	9.2	9.2
16	12	13	14	13	31	35	23	21	14	11	9.1	9.1
17	12	13	14	13	34	36	37	20	13	12	9.0	9.2
18	12	14	14	13	30	38	61	19	13	9.6	9.3	9.0
19	12	14	14	13	27	36	36	18	13	11	9.1	9.0
20	12	14	14	13	83	32	29	18	13	10	9.3	9.3
21	12	14	14	13	95	33	29	18	13	11	9.2	9.6
22	12	14	14	13	52	33	29	18	13	11	9.1	10
23	12	14	13	13	98	31	28	18	13	11	9.1	11
24	12	e14	14	13	59	32	27	18	13	11	9.0	11
25	12	e14	14	15	45	30	27	18	12	11	8.7	10
26	12	e14	14	14	41	30	26	18	12	11	9.0	10
27	12	e14	14	14	42	29	26	17	12	11	9.3	10
28	12	e14	14	13	39	30	25	16	12	10	9.3	11
29	12	e14	14	14	31	29	25	15	12	10	9.6	11
30	12	e14	13	14	---	29	24	14	12	10	9.9	11
31	12	---	13	14	---	28	---	16	---	10	9.8	---
TOTAL	364	402	429	417	921	1069	830	618	404	348.6	292.7	296.2
MEAN	11.7	13.4	13.8	13.5	31.8	34.5	27.7	19.9	13.5	11.2	9.44	9.87
MAX	12	14	14	15	98	64	61	25	16	12	10	11
MIN	11	12	13	13	13	28	23	14	12	9.6	8.7	9.0
AC-FT	722	797	851	827	1830	2120	1650	1230	801	691	581	588

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2000, BY WATER YEAR (WY)

MEAN	26.6	28.6	31.0	56.2	68.4	78.6	56.6	47.1	39.3	33.3	30.1	27.7
MAX	71.9	285	168	650	653	785	264	225	164	131	107	81.5
(WY)	1984	1966	1967	1916	1980	1938	1978	1978	1978	1969	1969	1978
MIN	7.54	8.05	7.65	11.0	11.7	12.1	10.8	10.9	9.41	7.05	6.98	6.43
(WY)	1962	1991	1951	1951	1899	1965	1899	1961	1990	1899	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1899 - 2000	
ANNUAL TOTAL	7033		6391.5			
ANNUAL MEAN	19.3		17.5		43.8	
HIGHEST ANNUAL MEAN					194	1969
LOWEST ANNUAL MEAN					10.7	1951
HIGHEST DAILY MEAN	39	Feb 10	98	Feb 23	8960	Mar 2 1938
LOWEST DAILY MEAN	11	Sep 16	8.7	Aug 25	2.6	Nov 28 1989
ANNUAL SEVEN-DAY MINIMUM	11	Oct 8	9.1	Aug 20	4.0	Nov 28 1989
INSTANTANEOUS PEAK FLOW			528	Feb 20	25200	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	13950		12680		31720	
10 PERCENT EXCEEDS	30		30		78	
50 PERCENT EXCEEDS	15		14		26	
90 PERCENT EXCEEDS	12		9.8		13	

e Estimated.

11063500 LONE PINE CREEK NEAR KEENBROOK, CA

LOCATION.—Lat 34°15'59", long 117°27'47", in SE 1/4 SW 1/4 sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 50 ft upstream from the Burlington Northern & Santa Fe Railway Co. bridge, 150 ft upstream from confluence with Cajon Creek, and 1.1 mi north of Keenbrook.

DRAINAGE AREA.—15.1 mi^2.

PERIOD OF RECORD.—December 1919 to September 1938, June 1949 to current year.

REVISED RECORDS.—WSP 1635: 1920–22(M), 1924–25(M), 1926–27, 1928(M), 1930, 1931(M), 1932–33, 1934–36(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 2,605.92 ft above sea level. Prior to Mar. 2, 1938, water-stage recorder (destroyed by flood), and Mar. 2 to Sept. 30, 1938, nonrecording gage at same site at datum 0.98 ft higher.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,180 ft^3/s, Mar. 2, 1938, gage height, unknown, on basis of slope-area measurement of peak flow; maximum recorded gage height, 10.70 ft, Jan. 25, 1969; no flow Aug. 6–8, Sept. 29, 30, 1965.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 80 ft^3/s, or maximum, from rating curve extended above 322 ft^3/s on basis of slope-conveyance measurement at gage height 9.07 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2200	174	3.38				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.80	.68	.68	.80	.80	.92	.91	.74	.71	.46	.52
2	.52	.80	.62	.68	.80	.80	.92	.92	.74	.68	.47	.55
3	.56	.80	.65	.68	.80	.81	.92	.90	.74	.68	.47	.53
4	.58	.80	.68	.68	.80	.92	.92	.92	.70	.68	.46	.52
5	.58	.80	.68	.68	.80	11	.92	.92	.70	.68	.45	.47
6	.58	.80	.68	.68	.80	1.9	.92	.92	.78	.67	.45	.54
7	.58	.80	.68	.68	.80	1.1	.92	.92	.80	.66	.45	.58
8	.58	.80	.68	.68	.80	4.6	.92	.92	.80	.68	.45	.58
9	.58	.80	.68	.68	.80	1.2	.92	.92	.90	.68	.47	.58
10	.57	.80	.68	.68	.85	1.1	.92	.92	.86	.68	.47	.58
11	.58	.74	.68	.68	.80	1.1	.92	.92	.82	.68	.46	.58
12	.60	.76	.68	.68	1.0	1.0	.92	.92	.89	.68	.45	.53
13	.68	.76	.67	.68	.80	1.1	.92	.86	.92	e.67	.44	.47
14	.68	.73	.68	.68	.81	.99	.92	.80	.89	e.67	.44	.47
15	.68	.68	.68	.68	.80	.92	.92	.85	.89	e.66	.44	.47
16	.68	.68	.68	.68	1.2	.93	.92	.92	.88	e.65	.44	.47
17	.68	.67	.68	.68	.83	.94	1.0	.92	.88	e.64	.45	.46
18	.68	.58	.68	.68	.80	.98	1.7	.89	.85	e.62	.47	.44
19	.68	.58	.74	.68	.80	1.0	1.0	.87	.85	e.59	.45	.45
20	.68	.65	.69	.68	14	.95	1.3	.88	.74	.57	.45	.47
21	.68	.68	.68	.68	14	.97	1.0	.86	.72	.58	.46	.47
22	.68	.63	.68	.66	2.7	1.1	.98	.78	.68	.60	.49	.47
23	.68	.62	.68	.58	6.2	1.1	.98	.87	.72	.55	.55	.49
24	.68	.67	.68	.58	1.4	1.0	.94	.93	.69	.61	.50	.47
25	.68	.66	.68	.89	.78	.92	.92	.93	.77	.68	.46	.38
26	.68	.64	.68	.80	.84	.92	.92	.92	.75	.66	.45	.38
27	.77	.63	.68	.80	.89	.92	.92	.87	.74	.62	.45	.40
28	.80	.68	.68	.80	.94	.92	.92	.89	.75	.58	.46	.41
29	.80	.68	.68	.80	.80	.92	.92	.86	.74	e.54	.47	.43
30	.80	.68	.68	.80	---	.92	.92	.74	.74	.51	.47	.42
31	.80	---	.68	.80	---	.92	---	.73	---	.46	.46	---
TOTAL	20.27	21.40	21.05	21.79	58.44	44.75	29.14	27.38	23.67	19.62	14.31	14.58
MEAN	.65	.71	.68	.70	2.02	1.44	.97	.88	.79	.63	.46	.49
MAX	.80	.80	.74	.89	14	11	1.7	.93	.92	.71	.55	.58
MIN	.47	.58	.62	.58	.78	.80	.92	.73	.68	.46	.44	.38
AC-FT	40	42	42	43	116	89	58	54	47	39	28	29

e Estimated.

11063500 LONE PINE CREEK NEAR KEENBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.99	1.19	1.88	2.33	4.13	4.51	2.06	1.65	1.34	1.12	1.08	1.04
MAX	5.35	6.51	15.0	24.1	40.6	98.1	11.0	8.91	7.41	5.95	6.61	6.09
(WY)	1984	1966	1923	1969	1969	1938	1980	1980	1980	1993	1993	1993
MIN	.079	.091	.095	.094	.10	.10	.10	.10	.10	.10	.090	.093
(WY)	1991	1991	1991	1991	1964	1964	1961	1928	1928	1928	1965	1965

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1920 - 2000	
ANNUAL TOTAL	361.28		316.40			
ANNUAL MEAN	.99		.86		1.95	
HIGHEST ANNUAL MEAN					11.4	1938
LOWEST ANNUAL MEAN					.11	1964
HIGHEST DAILY MEAN	2.3	Apr 12	14	Feb 20	1480	Mar 2 1938
LOWEST DAILY MEAN	.44	Sep 29	.38	Sep 25	.00	Aug 6 1965
ANNUAL SEVEN-DAY MINIMUM	.46	Sep 24	.41	Sep 24	.06	Aug 2 1965
INSTANTANEOUS PEAK FLOW			174	Feb 20	6180	Mar 2 1938
INSTANTANEOUS PEAK STAGE			3.38	Feb 20	10.70	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	717		628		1410	
10 PERCENT EXCEEDS	1.3		.93		4.0	
50 PERCENT EXCEEDS	1.0		.68		.60	
90 PERCENT EXCEEDS	.68		.47		.10	

11063510 CAJON CREEK BELOW LONE PINE CREEK, NEAR KEENBROOK, CA

LOCATION.—Lat 34°16'04", long 117°27'58", in NW 1/4 NW 1/4 sec.13, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.25 mi downstream from Lone Pine Creek, and 0.95 mi north of Keenbrook.

DRAINAGE AREA.—56.5 mi^2.

PERIOD OF RECORD.—October 1971 to September 1977, October 1983 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,600 ft above sea level, from topographic map. Oct. 1, 1971, to Sept. 30, 1977, at site 0.25 mi upstream at abandoned diversion dam at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Concrete control installed Oct. 1, 1987. No regulation or diversion upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,700 ft^3/s, Feb. 8, 1993, gage height, 8.48 ft, from rating curve extended above 180 ft^3/s on basis of slope-area measurement at gage height 8.48 ft; minimum daily, 1.7 ft^3/s, Sept. 5, 6, 1989.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft^3/s, or maximum, from rating curve extended above 373 ft^3/s on basis of slope-area measurement at gage height 8.48 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2230	1,400	6.64	Mar. 5	1300	483	5.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.8	4.0	4.1	4.4	10	10	7.3	4.5	4.0	3.6	3.1
2	3.9	3.8	4.0	4.1	4.4	11	9.0	7.3	4.4	4.0	3.7	3.0
3	4.0	4.0	4.1	4.1	4.4	11	8.7	7.3	4.4	4.0	3.7	3.0
4	3.9	4.0	4.1	4.1	4.4	11	8.2	7.2	4.4	4.1	3.5	3.0
5	4.0	4.1	3.9	4.1	4.4	95	9.0	7.4	4.4	4.1	3.3	3.0
6	4.3	4.1	3.8	4.1	4.4	29	8.4	7.3	4.5	4.2	3.2	2.9
7	4.2	4.4	3.8	4.4	4.4	18	8.3	7.3	4.5	4.2	3.2	2.9
8	4.0	4.3	3.9	4.4	4.4	77	8.1	7.1	4.7	4.2	3.4	2.8
9	4.0	4.0	3.9	4.4	4.4	39	7.6	6.8	4.8	4.2	3.5	2.7
10	4.0	3.9	4.1	4.4	5.3	26	7.9	6.9	4.8	4.2	3.5	2.7
11	4.0	3.7	4.0	4.4	5.7	e21	7.9	6.7	4.6	4.2	3.5	2.7
12	4.0	3.7	4.0	4.4	8.5	e18	7.4	6.6	4.5	4.1	3.5	2.8
13	3.9	3.6	3.8	4.3	6.1	e16	7.3	6.5	4.4	3.8	3.3	2.9
14	3.9	3.7	4.0	4.3	6.3	e16	7.6	6.5	4.3	3.8	3.3	2.9
15	4.1	3.7	4.0	4.3	6.0	e15	7.6	6.5	4.4	3.8	3.3	2.9
16	4.1	3.8	4.0	4.4	10	e15	7.8	6.6	4.5	3.8	3.3	2.9
17	4.1	4.1	4.0	4.4	7.7	e15	13	6.5	4.4	3.8	3.3	2.9
18	4.1	4.0	4.0	4.4	6.6	e14	32	6.3	4.4	3.7	3.3	3.0
19	4.1	4.0	4.1	4.4	6.2	e14	15	6.1	4.3	3.7	3.3	3.0
20	3.8	4.1	4.0	4.4	106	e14	13	5.7	4.3	3.6	3.2	3.1
21	3.7	4.0	4.1	4.4	162	e13	12	5.6	4.3	3.6	3.2	3.3
22	3.8	4.0	4.1	4.4	31	e13	11	5.6	4.3	3.7	3.2	3.3
23	3.8	4.0	4.1	4.4	103	e12	11	5.7	4.2	3.7	3.0	3.3
24	3.9	4.0	4.1	4.4	36	e11	10	6.0	4.2	3.7	2.9	3.1
25	3.9	4.0	4.1	4.9	18	e11	9.6	5.9	4.2	3.7	2.9	3.2
26	3.9	4.0	4.1	4.4	14	e11	9.1	5.4	4.2	3.7	2.9	3.1
27	4.0	3.9	4.1	4.4	13	e11	8.6	5.0	4.1	3.5	3.0	3.3
28	4.0	4.0	4.0	4.4	11	11	8.5	4.9	4.1	3.5	3.1	3.4
29	3.9	3.9	3.8	4.4	11	12	7.6	4.8	4.0	3.5	3.2	3.4
30	3.9	3.9	3.8	4.4	---	12	7.4	4.8	4.0	3.5	3.2	3.3
31	3.8	---	4.0	4.4	---	11	---	4.8	---	3.6	3.2	---
TOTAL	122.9	118.5	123.8	134.8	613.0	613	298.6	194.4	131.1	119.2	101.7	90.9
MEAN	3.96	3.95	3.99	4.35	21.1	19.8	9.95	6.27	4.37	3.85	3.28	3.03
MAX	4.3	4.4	4.1	4.9	162	95	32	7.4	4.8	4.2	3.7	3.4
MIN	3.7	3.6	3.8	4.1	4.4	10	7.3	4.8	4.0	3.5	2.9	2.7
AC-FT	244	235	246	267	1220	1220	592	386	260	236	202	180

e Estimated.

11063510 CAJON CREEK BELOW LONE PINE CREEK, NEAR KEENBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.39	5.88	9.24	19.5	24.5	16.8	10.5	8.25	6.20	5.16	4.82	5.65
MAX	14.8	13.2	26.5	134	121	51.5	27.7	18.1	15.8	16.0	15.1	24.5
(WY)	1984	1984	1972	1993	1993	1995	1993	1998	1993	1993	1993	1976
MIN	2.00	1.97	2.05	2.33	5.06	4.31	2.93	3.39	1.98	2.05	2.12	1.99
(WY)	1991	1992	1991	1991	1977	1990	1977	1976	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	1971.9		2661.9			
ANNUAL MEAN	5.40		7.27		10.1	
HIGHEST ANNUAL MEAN					35.5	1993
LOWEST ANNUAL MEAN					3.80	1990
HIGHEST DAILY MEAN	27	Apr 12	162	Feb 21	1100	Feb 23 1998
LOWEST DAILY MEAN	3.6	Nov 13	2.7	Sep 9	1.7	Sep 5 1989
ANNUAL SEVEN-DAY MINIMUM	3.7	Nov 10	2.8	Sep 6	1.8	Sep 2 1989
INSTANTANEOUS PEAK FLOW			1400	Feb 20	6700	Feb 8 1993
INSTANTANEOUS PEAK STAGE			6.64	Feb 20	8.48	Feb 8 1993
ANNUAL RUNOFF (AC-FT)	3910		5280		7310	
10 PERCENT EXCEEDS	7.1		11		15	
50 PERCENT EXCEEDS	4.6		4.1		5.8	
90 PERCENT EXCEEDS	3.9		3.2		2.9	

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°12'30", long 117°19'50", in Muscupiabe Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.6 mi downstream from confluence of East and West Forks, and 7.5 mi northwest of San Bernardino.

DRAINAGE AREA.—5.49 mi^2.

PERIOD OF RECORD.—November 1911 to September 1912, October 1913 to September 1914, December 1919 to current year. Monthly figures only for January 1914, published in WSP 1315-B.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,080 ft above sea level, from topographic map. Prior to December 1919, nonrecording gage at site 0.5 mi downstream at different datum. December 1919 to July 1969, at site 0.4 mi downstream at different datum. July 1969 to September 1972, present gage used as supplementary gage. Oct. 1, 1973, to Feb. 25, 1974, supplementary gage at site 0.5 mi downstream at different datum.

REMARKS.—Records good above 1 ft^3/s and fair below. No regulation upstream from station. City of San Bernardino diverts upstream from station at times, with diverted flows routed to recharge basins down stream from station. Natural flow affected by pumping along creek. Records given below are for creek only unless otherwise indicated. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD (1913–14 and since 1919).—Maximum discharge, 3,720 ft^3/s, Jan. 25, 1969, gage height, 5.40 ft, site and datum then in use, on basis of slope-area measurement of peak flow; maximum gage height, 8.40 ft, Mar. 4, 1978; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum, from rating curve extended above 158 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2315	78	5.80	Feb. 23	1630	69	5.71

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.00	1.0	.81	1.5	4.7	2.8	1.6	.47	.28	.27	.00
2	.10	.01	.61	.77	1.3	4.5	2.8	1.5	.45	.28	.30	.00
3	.09	.01	.22	.63	1.3	4.3	2.8	1.5	.46	.29	.29	.00
4	.09	.01	.24	.51	1.3	4.7	2.7	1.5	.47	.30	.22	.00
5	.09	.00	.21	.47	1.3	14	2.0	1.5	.42	.30	.04	.00
6	.09	.00	.20	.60	1.3	9.2	1.7	1.5	.46	.30	.02	.00
7	.09	.00	.19	.56	1.2	7.4	1.6	1.5	.48	.28	.01	.00
8	.09	.01	.44	.54	1.2	16	1.5	1.6	.58	.28	.01	.00
9	.09	.00	.64	.53	1.3	11	1.5	1.5	.55	.28	.00	.00
10	.09	.00	.64	.56	2.3	8.4	1.5	1.6	.56	.28	.00	.00
11	.10	.00	.30	.64	2.4	7.2	1.5	1.5	.60	.27	.00	.00
12	.09	.00	.20	.64	4.4	6.4	1.5	1.4	.52	.27	.00	.00
13	.08	.00	.19	.55	4.4	5.4	1.4	1.1	.50	.25	.00	.00
14	.07	.02	.19	.52	4.7	5.0	1.4	.89	.40	.25	.00	.00
15	.07	.03	.19	.48	3.8	4.6	1.5	.86	.37	.25	.00	.00
16	.06	.05	.19	.63	7.4	4.3	1.5	.81	.37	.24	.00	.00
17	.06	.19	.18	.64	5.9	4.2	4.9	.76	.32	.24	.00	.00
18	.05	.27	.17	.64	4.4	3.9	10	.66	.32	.23	.00	.00
19	.05	.34	.17	.71	3.7	3.4	4.9	.58	.34	.23	.00	.00
20	.04	.57	.17	.77	7.5	3.4	3.2	.46	.32	.24	.00	.00
21	.04	.73	.18	.81	19	3.6	3.1	.54	.26	.25	.00	.00
22	.03	.69	.19	.55	9.9	3.9	3.2	.32	.27	.25	.00	.00
23	.02	.68	.21	.34	16	3.6	3.1	.32	.27	.24	.00	.00
24	.04	.69	.27	.29	11	3.2	2.9	.35	.28	.25	.00	.00
25	.08	.67	.31	.78	7.7	3.1	2.4	.67	.28	.25	.00	.00
26	.10	.67	.31	1.2	6.3	3.0	1.7	.51	.28	.24	.00	.00
27	.11	.73	.33	.39	6.3	3.1	1.6	.35	.28	.25	.00	.00
28	.13	.80	.46	.39	5.8	3.1	1.7	.31	.28	.25	.00	.00
29	.09	.75	.50	.34	5.1	3.0	1.7	.30	.28	.26	.00	.00
30	.03	.85	.64	.40	---	2.9	1.6	.40	.28	.26	.00	.00
31	.01	---	.77	2.0	---	2.8	---	.47	---	.26	.00	---
TOTAL	2.28	8.77	10.51	19.69	149.7	167.3	75.7	28.86	11.72	8.10	1.16	0.00
MEAN	.074	.29	.34	.64	5.16	5.40	2.52	.93	.39	.26	.037	.000
MAX	.13	.85	1.0	2.0	19	16	10	1.6	.60	.30	.30	.00
MIN	.01	.00	.17	.29	1.2	2.8	1.4	.30	.26	.23	.00	.00
AC-FT	4.5	17	21	39	297	332	150	57	23	16	2.3	.00

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.37	.98	1.78	3.71	6.91	7.49	4.45	2.26	1.03	.55	.35	.34
MAX	3.36	12.9	14.0	44.4	108	72.9	28.3	15.2	9.49	5.09	3.83	3.33
(WY)	1984	1966	1967	1993	1980	1938	1978	1983	1998	1998	1993	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1926	1926	1926	1926	1948	1951	1951	1951	1947	1926	1925	1924

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1920 - 2000	
ANNUAL TOTAL	510.89		483.79			
ANNUAL MEAN	1.40		1.32		2.47	
HIGHEST ANNUAL MEAN					16.1	1980
LOWEST ANNUAL MEAN					.000	1951
HIGHEST DAILY MEAN	8.4	Apr 12	19	Feb 21	556	Jan 25 1969
LOWEST DAILY MEAN	.00	Jul 2	.00	Nov 1	.00	Sep 23 1921
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 11	.00	Aug 9	.00	Sep 23 1921
INSTANTANEOUS PEAK FLOW			78	Feb 20	3720	Jan 25 1969
INSTANTANEOUS PEAK STAGE			5.80	Feb 20	8.40	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	1010		960		1790	
10 PERCENT EXCEEDS	3.2		4.0		5.5	
50 PERCENT EXCEEDS	.64		.34		.20	
90 PERCENT EXCEEDS	.01		.00		.00	

11063682 EAST BRANCH CALIFORNIA AQUEDUCT AT DEVIL CANYON POWERPLANT, NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°12'20", long 117°20'01", in San Bernardino Corporate Grant, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, in powerplant 5 mi northwest of San Bernardino.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995, in files of California Department of Water Resources. Published as "Devil Canyon Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meters on 5 pipes. Elevation of gage is 1,939 ft above sea level (levels by California Department of Water Resources).

REMARKS.—This record is the total flow of the East Branch California Aqueduct, including flow through the powerplant and bypass flow, if any. See schematic diagram of the Mojave River Basin.

COOPERATION.—Records were computed by the California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge 1,450 ft^3/s, May 10, Aug. 20, 2000; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	655	780	1000	1240	1060	1260	1340	1120	1130	1240	1260
2	1060	555	701	834	1150	1230	1180	1130	954	1140	1410	1090
3	1160	428	924	847	1210	1170	1340	1170	1060	1070	1120	1120
4	1090	413	1000	798	1150	1190	1140	1030	986	1080	1210	1120
5	1130	465	815	921	1060	1320	1380	1110	1140	1140	1180	1270
6	1200	390	828	1080	1130	1280	1230	1310	984	1050	1160	1070
7	1230	375	1030	1070	1220	1200	1170	980	1180	1170	1230	1120
8	1250	470	869	1050	1300	1170	1160	1160	1160	1060	1160	1180
9	1020	524	1050	1100	1220	1140	1060	1210	1270	1040	1240	1150
10	1100	359	862	1110	1280	1240	1210	1450	1050	1150	1150	1200
11	1180	252	660	1090	1070	977	1090	1260	1150	1160	1260	1160
12	1240	553	717	1050	939	1060	1060	1100	1220	1080	1090	1270
13	1270	618	861	1110	938	1090	1060	1090	1260	1140	1150	1060
14	1130	543	867	1130	961	1140	1280	1030	1180	1040	1190	1160
15	1220	750	738	1200	1020	1010	1260	1400	1090	905	1380	1060
16	1230	651	788	1210	884	1000	1230	1170	1080	1060	1130	1220
17	1320	704	734	1220	845	1220	1340	1250	1130	1130	1210	1070
18	1290	628	776	1280	1060	1160	1230	1170	1060	991	1350	1290
19	1360	778	718	1200	1030	1310	1080	1180	1220	1040	1290	1110
20	1090	607	739	1280	1030	1390	1060	1340	1170	1160	1450	1200
21	1180	638	782	1240	1020	1360	1100	1120	1120	1110	1140	1160
22	1120	710	760	1350	1050	1330	971	1190	1260	1320	1370	1210
23	1080	490	996	1170	1110	1340	967	1200	1210	1300	1410	1310
24	994	482	972	1220	1040	1330	1170	1290	1220	1370	1160	928
25	1310	429	1010	969	948	1260	1040	1070	1180	1240	1220	1140
26	1310	693	995	934	1030	1230	993	873	1350	1270	1230	1180
27	1220	664	971	1070	930	1360	993	899	1330	1270	1240	984
28	1200	653	1100	1120	1080	1130	1290	959	1250	1250	1260	1160
29	981	879	1070	1030	1060	1420	1290	838	1140	1180	1150	1090
30	554	770	1100	1140	---	1170	1250	999	1290	1280	1160	847
31	605	---	1090	1160	---	1150	---	915	---	1230	1310	---
TOTAL	35184	17126	27303	33983	31005	37437	34884	35233	34814	35556	38250	34189
MEAN	1135	571	881	1096	1069	1208	1163	1137	1160	1147	1234	1140
MAX	1360	879	1100	1350	1300	1420	1380	1450	1350	1370	1450	1310
MIN	554	252	660	798	845	977	967	838	954	905	1090	847
AC-FT	69790	33970	54160	67410	61500	74260	69190	69880	69050	70530	75870	67810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	508	275	332	352	325	455	895	899	910	1019	1033	942
MAX	1135	571	881	1096	1069	1208	1163	1138	1160	1147	1234	1140
(WY)	2000	2000	2000	2000	2000	2000	2000	1997	2000	2000	2000	2000
MIN	189	145	119	82.6	3.23	102	577	585	712	749	825	631
(WY)	1996	1996	1999	1997	1997	1997	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	253964.50		394964			
ANNUAL MEAN	696		1079		664	
HIGHEST ANNUAL MEAN					1079	2000
LOWEST ANNUAL MEAN					515	1998
HIGHEST DAILY MEAN	1360	Oct 19	1450	May 10	1450	May 10 2000
LOWEST DAILY MEAN	.00	Jan 10	252	Nov 11	.00	Dec 12 1996
ANNUAL SEVEN-DAY MINIMUM	65	Feb 8	405	Nov 5	.00	Jan 21 1997
ANNUAL RUNOFF (AC-FT)	503700		783400		480700	
10 PERCENT EXCEEDS	1110		1290		1210	
50 PERCENT EXCEEDS	738		1130		729	
90 PERCENT EXCEEDS	130		757		102	

11065000 LYTLE CREEK AT COLTON, CA

LOCATION.—Lat 34°04'44", long 117°18'17", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank, 400 ft downstream from Colton Avenue, 1,930 ft upstream from outlet end of channel, and 1.3 mi northeast of Colton.

DRAINAGE AREA.—186 mi^2.

PERIOD OF RECORD.—October 1957 to September 1983, October 1984 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 974.67 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.—Records fair except for discharges below 10 ft^3/s, which are poor. Flow partly regulated by Lytle Creek spreading grounds 3.2 mi upstream. Diversions upstream from station for irrigation, power development, domestic use, and ground-water replenishment. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,500 ft^3/s, Mar. 4, 1978, gage height, 14.8 ft, from rating curve extended above 4,200 ft^3/s on basis of discharge for design flood at gage height 21.4 ft; no flow for many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	6.8	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	40	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	29	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	4.1	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	43	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.09	.00	.01	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	7.7	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	13	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	14	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	12	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	134	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.58	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	63	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.64	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	2.2	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.01	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.88	.37	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.88	2.60	265.11	77.80	27.01	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.028	.084	9.14	2.51	.90	.000	.000	.000	.000	.000
MAX	.00	.00	.88	2.2	134	40	14	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	1.7	5.2	526	154	54	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	.76	4.55	7.63	19.7	30.7	19.8	4.26	4.17	2.33	1.31	.84	.77
MAX	15.8	79.1	104	318	363	326	57.3	87.6	61.3	35.4	17.1	9.58
(WY)	1981	1966	1966	1969	1980	1978	1969	1969	1978	1978	1969	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1958	1958	1959	1963	1961	1959	1961	1959	1958	1958	1958	1958

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1958 - 2000
ANNUAL TOTAL	95.93	373.40	
ANNUAL MEAN	.26	1.02	7.97
HIGHEST ANNUAL MEAN			65.4 1969
LOWEST ANNUAL MEAN			.008 1977
HIGHEST DAILY MEAN	18 Feb 8	134 Feb 21	5040 Jan 25 1969
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1957
INSTANTANEOUS PEAK FLOW		591 Feb 12	17500 Mar 4 1978
INSTANTANEOUS PEAK STAGE		2.49 Feb 12	14.80 Mar 4 1978
ANNUAL RUNOFF (AC-FT)	190	741	5770
10 PERCENT EXCEEDS	.00	.00	3.8
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION.—Lat 33°58'07", long 117°26'51", in NE 1/4 SW 1/4 sec.30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on left bank, at MWD pipeline crossing, 0.8 mi downstream from Union Pacific Railroad Bridge, 1.1 mi upstream from bridge on Van Buren Boulevard, and 3.3 mi north of Arlington.

DRAINAGE AREA.—852 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March 1970 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 685 ft above sea level, from topographic map. Prior to Apr. 15, 1985, water-stage recorder at site 300 ft upstream on left bank at different datum. From Apr. 15 to Sept. 30, 1985, water-stage recorder near right bank (atop pier 9 of MWD pipeline crossing), at same site and datum. From Oct. 1, 1985, to June 16, 1993, water-stage recorder and crest-stage gage on right bank at same site and datum.

REMARKS.—Records fair below 500 ft^3/s and poor above. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. Natural streamflow affected by ground-water withdrawals, diversions for irrigation, return flows from irrigated areas, and discharges of treated effluent. The records at this station are equivalent to those collected at Santa Ana River at Riverside Narrows, near Arlington minus the flow at Riverside Water-Quality Control Plant at Riverside Narrows, near Arlington. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 31,300 ft^3/s, Feb. 24, 1998, gage height, 14.69 ft, on basis of area-velocity study; maximum gage height, 20.23 ft, site and datum then in use, Mar. 4, 1978; minimum daily, 15 ft^3/s, Sept. 7, 8, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge since at least 1927, 100,000 ft^3/s, Mar. 2, 1938, on basis of slope-area measurement at site 1.1 mi downstream. Flood of Jan. 22, 1862, 320,000 ft^3/s, on basis of slope-conveyance study at site 8.2 mi upstream. Stage at that site was 5 ft higher than that of Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	1000	2,030	9.38	Mar. 8	1630	2,410	8.84
Feb. 21	2000	5,310	10.38	Apr. 17	2200	1,730	8.50
Mar. 5	0015	2,050	8.84				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	78	87	121	103	105	107	88	92	74	85	88
2	87	81	86	111	98	111	113	91	91	74	80	90
3	89	81	85	98	92	107	101	95	86	69	74	82
4	85	83	84	103	90	220	103	92	85	60	72	89
5	89	80	85	98	87	962	106	103	84	73	68	72
6	81	82	86	90	93	300	106	91	84	69	73	81
7	77	82	84	86	88	152	119	92	91	73	76	85
8	74	85	79	87	87	666	119	90	92	70	70	83
9	77	85	89	89	88	203	111	88	90	73	66	72
10	71	84	90	89	108	e153	107	75	88	77	67	72
11	73	82	87	88	152	e123	113	88	90	75	67	76
12	80	84	87	92	377	e91	115	82	85	70	64	69
13	80	84	84	91	119	e87	115	80	83	74	68	68
14	77	84	81	89	106	e85	121	80	80	80	70	69
15	87	80	85	89	92	88	128	81	78	77	65	67
16	84	75	90	89	204	103	129	83	78	77	72	68
17	85	81	90	89	254	87	337	78	81	81	63	67
18	88	81	89	86	111	83	593	77	86	78	67	64
19	87	73	88	81	97	100	145	84	83	72	62	69
20	81	81	84	84	240	94	100	69	86	73	68	72
21	93	82	84	87	1920	88	108	74	78	66	64	77
22	82	76	83	89	355	102	120	76	77	74	56	80
23	83	85	78	87	595	108	108	78	73	84	57	96
24	82	82	89	88	270	105	106	82	71	71	64	81
25	83	83	90	153	134	99	120	83	68	72	72	80
26	83	77	84	146	e117	106	97	92	72	73	76	79
27	79	83	86	103	e111	109	98	86	75	70	76	81
28	79	83	86	99	e120	112	106	92	79	66	77	86
29	77	83	87	93	116	117	97	85	72	67	91	83
30	79	84	84	93	---	118	94	86	76	69	81	80
31	81	---	93	130	---	109	---	88	---	83	90	---
TOTAL	2542	2444	2664	3018	6424	5093	4042	2629	2454	2264	2201	2326
MEAN	82.0	81.5	85.9	97.4	222	164	135	84.8	81.8	73.0	71.0	77.5
MAX	93	85	93	153	1920	962	593	103	92	84	91	96
MIN	71	73	78	81	87	83	94	69	68	60	56	64
AC-FT	5040	4850	5280	5990	12740	10100	8020	5210	4870	4490	4370	4610

e Estimated.

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	60.3	78.4	103	234	290	321	147	120	79.3	53.6	53.1	54.5
MAX	194	259	292	1839	1411	1806	604	666	351	145	233	129
(WY)	1988	1984	1984	1993	1980	1995	1983	1983	1983	1983	1983	1976
MIN	20.5	21.2	23.3	24.7	23.1	23.7	23.1	22.3	20.2	16.8	17.9	18.0
(WY)	1974	1975	1974	1972	1972	1972	1971	1972	1981	1981	1981	1974

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	36887		38101			
ANNUAL MEAN	101		104		133	
HIGHEST ANNUAL MEAN					416	1983
LOWEST ANNUAL MEAN					29.0	1975
HIGHEST DAILY MEAN	392	Apr 12	1920	Feb 21	11500	Mar 2 1983
LOWEST DAILY MEAN	71	Oct 10	56	Aug 22	15	Sep 7 1980
ANNUAL SEVEN-DAY MINIMUM	76	Oct 7	62	Aug 17	16	Jul 1 1981
INSTANTANEOUS PEAK FLOW			5310	Feb 21	31300	Feb 24 1998
INSTANTANEOUS PEAK STAGE			10.38	Feb 21	20.23	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	73170		75570		96410	
10 PERCENT EXCEEDS	115		117		200	
50 PERCENT EXCEEDS	96		85		64	
90 PERCENT EXCEEDS	81		70		22	

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1970 to current year.
CHEMICAL DATA: Water years 1970 to current year.
SPECIFIC CONDUCTANCE: November 1998 to September 2000 (discontinued).
WATER TEMPERATURE: November 1998 to September 2000 (discontinued).
SEDIMENT DATA: October 1998 to September 2000 (discontinued).

PERIOD OF DAILY RECORD.—Water years 1970–78, November 1998 to September 2000 (discontinued).
SPECIFIC CONDUCTANCE: Water years 1970–78, November 1998 to September 2000 (discontinued).
WATER TEMPERATURE: November 1998 to September 2000 (discontinued).

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature from November 1998 to September 2000.

REMARKS.—Interruptions in record were due to malfunction of recording equipment. Continuous specific-conductance and water-temperature data represent conditions on left bank. Sediment, cross-sectional, and continuous-monitor data, as well as most of the chemical data presented below, collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,320 microsiemens, Nov. 24, 1969; minimum recorded, 95 microsiemens, Nov. 27, 1970.
WATER TEMPERATURE: Maximum recorded, 30.5°C, July 11, 1999, June 13, 2000; minimum recorded, 6.0°C, Jan. 29, 1999.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,130 microsiemens, June 25; minimum recorded, 177 microsiemens, Feb. 21.
WATER TEMPERATURE: Maximum recorded, 30.5°C, June 13; minimum recorded, 9.0°C, January 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
06...	0845	85	745	--	--	--	1020	15.5	17.5	--
14...	1130	77	742	107	8.8	8.2	911	24.5	23.5	290
19...	0955	90	745	--	--	--	899	23.0	18.0	--
NOV										
01...	0940	84	740	--	--	--	913	24.5	19.0	--
12...	0855	87	745	--	--	--	900	17.5	16.0	--
16...	1630	77	743	95	8.3	8.2	930	21.0	20.5	310
DEC										
03...	0835	85	--	--	--	--	890	14.5	12.0	--
14...	1450	85	748	101	10.0	8.4	891	17.0	15.0	270
21...	0930	85	745	--	--	--	992	15.0	13.0	--
JAN										
06...	0945	90	750	--	--	--	1020	16.5	11.0	--
12...	1110	93	749	99	9.3	8.3	872	11.5	17.5	270
18...	0940	88	--	--	--	--	931	18.0	17.0	--
25...	1130	156	--	--	--	--	675	15.5	17.0	--
25...	1220	155	744	69	6.4	8.0	676	15.5	17.5	210
26...	0955	197	--	--	--	--	637	15.0	16.5	--
31...	0920	161	--	--	--	7.9	669	15.0	16.5	210
FEB										
03...	0835	93	750	--	--	--	893	10.5	12.5	--
12...	0950	1630	745	--	--	--	310	14.5	13.5	--
15...	0955	97	--	--	--	--	875	--	18.0	--
16...	1630	119	742	73	6.6	8.2	823	15.0	18.5	240
21...	0950	2380	744	86	9.1	8.1	287	9.5	11.5	92
MAR										
01...	1015	101	745	--	--	--	891	14.0	17.5	--
10...	1215	154	750	--	--	--	828	23.0	21.0	--
16...	1000	101	744	99	9.0	8.3	902	17.0	18.5	270
APR										
04...	1030	101	745	--	--	--	914	22.5	20.0	--
11...	1330	110	745	92	7.2	8.3	925	30.5	26.5	280
18...	0940	630	750	--	--	--	383	13.5	14.5	--
MAY										
01...	0930	93	745	--	--	--	876	21.5	20.0	--
10...	1300	62	742	97	7.8	8.3	941	23.0	25.0	290
18...	1325	75	740	--	--	--	904	30.5	28.0	--
JUN										
01...	1005	90	740	--	--	--	895	21.0	22.0	--
13...	1530	82	740	109	7.8	8.3	962	33.5	31.0	280
19...	0915	85	745	--	--	--	907	21.5	21.5	--
JUL										
03...	0920	70	745	--	--	--	905	22.0	22.0	--
12...	1400	70	746	96	7.1	8.3	925	27.5	30.0	290
18...	0835	82	745	--	--	--	920	23.5	20.5	--
AUG										
02...	0835	85	740	--	--	--	904	24.0	22.5	--
15...	1500	65	741	94	6.7	8.3	927	35.0	31.5	270
16...	0845	80	740	--	--	--	935	25.5	22.5	--
SEP										
01...	1105	93	745	--	--	--	891	21.5	23.5	--
12...	1220	71	739	98	7.7	8.3	914	38.0	26.0	280
13...	1205	67	740	--	--	--	933	30.5	27.0	--

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
14...	59	87.2	16.7	8.7	2	76.2	36	228	278	--
19...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
16...	76	94.4	17.6	8.9	2	77.1	34	233	281	1
DEC										
03...	--	--	--	--	--	--	--	--	--	--
14...	52	81.0	16.1	7.9	2	75.0	37	217	258	3
21...	--	--	--	--	--	--	--	--	--	--
JAN										
06...	--	--	--	--	--	--	--	--	--	--
12...	47	82.3	15.4	7.9	2	71.1	36	222	264	3
18...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
25...	45	63.2	12.3	11.1	2	54.6	35	163	199	--
26...	--	--	--	--	--	--	--	--	--	--
31...	35	62.6	12.1	7.7	2	56.2	36	171	209	--
FEB										
03...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
16...	42	73.8	14.7	7.9	2	67.1	36	202	247	--
21...	15	27.9	5.29	3.7	.8	16.6	27	76	93	--
MAR										
01...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
16...	56	81.2	15.7	8.2	2	72.1	36	211	254	2
APR										
04...	--	--	--	--	--	--	--	--	--	--
11...	63	85.8	15.4	10.5	2	70.5	35	218	262	--
18...	--	--	--	--	--	--	--	--	--	--
MAY										
01...	--	--	--	--	--	--	--	--	--	--
10...	56	88.9	16.7	8.9	2	75.5	35	235	286	--
18...	--	--	--	--	--	--	--	--	--	--
JUN										
01...	--	--	--	--	--	--	--	--	--	--
13...	51	86.3	16.0	9.6	2	77.7	37	231	269	6
19...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	--	--	--	--	--	--	--	--	--	--
12...	57	89.4	16.3	9.2	2	77.4	36	233	274	5
18...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	--	--	--	--	--	--	--	--	--	--
15...	36	82.3	15.3	9.1	2	77.3	38	233	280	2
16...	--	--	--	--	--	--	--	--	--	--
SEP										
01...	--	--	--	--	--	--	--	--	--	--
12...	52	84.0	16.3	9.9	2	80.0	38	225	270	2
13...	--	--	--	--	--	--	--	--	--	--

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
14...	80.5	.6	25.9	96.3	.31	.25	<.020	5.81	.015	.787
19...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
16...	82.2	.6	27.0	94.8	.28	.40	<.020	6.24	<.010	.666
DEC										
03...	--	--	--	--	--	--	--	--	--	--
14...	78.8	.5	23.8	94.2	.30	.27	<.020	6.44	.010	.770
21...	--	--	--	--	--	--	--	--	--	--
JAN										
06...	--	--	--	--	--	--	--	--	--	--
12...	75.9	.5	22.9	91.2	.30	.42	<.020	6.55	.011	.739
18...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
25...	59.5	.5	17.0	67.7	1.7	2.4	.101	4.75	.072	.747
26...	--	--	--	--	--	--	--	--	--	--
31...	57.2	.6	18.6	67.2	.62	1.2	.219	5.34	.082	.662
FEB										
03...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
16...	70.5	.5	20.9	83.3	.41	.60	.062	6.51	.042	.691
21...	16.9	.4	6.6	33.0	.46	10	.077	1.89	.024	.192
MAR										
01...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
16...	78.6	.6	22.5	92.9	.27	.28	<.020	7.39	.018	.698
APR										
04...	--	--	--	--	--	--	--	--	--	--
11...	81.2	.6	23.6	92.4	.37	.45	.028	6.73	.016	.858
18...	--	--	--	--	--	--	--	--	--	--
MAY										
01...	--	--	--	--	--	--	--	--	--	--
10...	79.8	.5	24.2	94.2	.26	.36	<.020	6.59	.015	.702
18...	--	--	--	--	--	--	--	--	--	--
JUN										
01...	--	--	--	--	--	--	--	--	--	--
13...	85.7	.6	23.9	94.6	.33	.37	.020	6.69	.012	.799
19...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	--	--	--	--	--	--	--	--	--	--
12...	84.8	.5	25.8	91.8	.27	.38	.020	5.57	.012	.787
18...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	--	--	--	--	--	--	--	--	--	--
15...	83.0	.6	24.3	91.5	.31	.34	<.020	5.71	.011	.944
16...	--	--	--	--	--	--	--	--	--	--
SEP										
01...	--	--	--	--	--	--	--	--	--	--
12...	80.8	.6	25.5	88.7	.28	.34	<.020	6.00	.010	.861
13...	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT									
06...	--	--	--	--	--	624	--	--	--
14...	.742	.752	2.1	.4	.76	561	557	<10	3
19...	--	--	--	--	--	533	--	--	--
NOV									
01...	--	--	--	--	--	560	--	--	--
12...	--	--	--	--	--	544	--	--	--
16...	.592	.687	2.3	.3	.77	563	571	<10	e2
DEC									
03...	--	--	--	--	--	--	--	--	--
14...	.733	.825	2.1	.2	.74	546	538	<10	e2
21...	--	--	--	--	--	603	--	--	--
JAN									
06...	--	--	--	--	--	634	--	--	--
12...	.701	.792	1.9	.3	.74	545	531	<10	<2
18...	--	--	--	--	--	550	--	--	--
25...	--	--	--	--	--	412	--	--	--
25...	.594	.972	19	3.0	.60	443	407	40	13
26...	--	--	--	--	--	379	--	--	--
31...	.557	.966	5.7	.9	.56	415	411	e10	6
FEB									
03...	--	--	--	--	--	544	--	--	--
12...	--	--	--	--	--	211	--	--	--
15...	--	--	--	--	--	541	--	--	--
16...	.600	.704	3.6	.6	.70	515	491	<10	6
21...	.170	7.94	5.3	<23	.24	177	165	10	e2
MAR									
01...	--	--	--	--	--	545	--	--	--
10...	--	--	--	--	--	508	--	--	--
16...	.695	.709	2.0	.4	.76	559	534	<10	8
APR									
04...	--	--	--	--	--	552	--	--	--
11...	.806	.876	2.1	.5	.76	558	541	<10	4
18...	--	--	--	--	--	252	--	--	--
MAY									
01...	--	--	--	--	--	537	--	--	--
10...	.667	.734	1.9	<.2	.78	577	561	<10	2
18...	--	--	--	--	--	555	--	--	--
JUN									
01...	--	--	--	--	--	544	--	--	--
13...	.756	.827	2.2	.3	.80	585	565	<10	e2
19...	--	--	--	--	--	557	--	--	--
JUL									
03...	--	--	--	--	--	547	--	--	--
12...	.853	.868	2.1	.3	.78	570	562	<10	2
18...	--	--	--	--	--	565	--	--	--
AUG									
02...	--	--	--	--	--	551	--	--	--
15...	.907	.951	2.3	.2	.78	570	551	<10	e2
16...	--	--	--	--	--	570	--	--	--
SEP									
01...	--	--	--	--	--	549	--	--	--
12...	.807	.856	2.0	.3	.75	551	549	<10	3
13...	--	--	--	--	--	570	--	--	--

< Actual value is known to be less than value shown.
e Estimated.

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR								
16...	1001	744	98	8.9	8.0	973	18.5	12.0
16...	1002	744	99	9.0	8.1	974	18.5	36.0
16...	1003	744	99	9.0	8.1	941	18.5	60.0
16...	1004	744	102	9.3	8.1	873	18.5	84.0
16...	1005	744	102	9.3	8.1	828	18.5	108

Instantaneous discharge at the time of cross-sectional measurements: 101 ft^3/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
14...N	1130	77	23.5	25	5.2	85
NOV						
16...N	1630	77	20.5	22	4.6	82
DEC						
14...N	1450	85	15.0	11	2.5	37
JAN						
12...N	1110	93	17.5	56	14	11
25...N	1220	155	17.5	104	44	72
31...N	0920	161	16.5	488	212	8
FEB						
16...N	1630	119	18.5	98	31	35
21...N	0950	2380	11.5	6780	43600	91
MAR						
16...N	1000	101	18.5	55	15	37
APR						
11...N	1330	110	26.5	19	5.6	31
MAY						
10...N	1300	62	25.0	48	8.0	14
JUN						
13...N	1530	82	31.0	11	2.4	68
JUL						
12...N	1400	70	30.0	13	2.5	55
AUG						
15...N	1500	65	31.5	5	.88	12
SEP						
12...N	1220	71	26.0	6	1.2	67

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) program protocol.

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1030	1010	1110	1070	1050	1030	1070	991	1020	976	705	657
2	1020	1000	1120	1060	1050	1030	1030	963	1020	995	748	704
3	1040	1020	1080	1060	1050	1040	1080	1020	1040	1010	777	748
4	1030	1020	1080	1060	1040	1030	1040	1020	1040	1020	795	776
5	1040	1020	1100	1060	1040	1030	1040	1020	1090	1020	795	789
6	1020	1000	1080	1050	1040	1020	1030	1020	1040	1010	799	790
7	1030	1020	1080	1060	1120	1020	1040	1020	1040	1020	819	794
8	1060	1030	1090	1060	1120	1050	1030	1010	1040	1020	844	819
9	1060	1030	1070	1050	1080	1040	1020	1000	1040	1020	862	843
10	1070	1040	1080	1050	1050	1020	1020	1000	1040	663	887	861
11	1070	1040	1070	1050	---	---	1030	1000	978	568	911	886
12	1060	1020	1070	1050	---	---	1010	985	984	272	945	911
13	1060	1020	1070	1050	---	---	1000	991	872	766	1000	939
14	1070	1040	1060	1040	---	---	1020	991	881	767	998	985
15	1060	1050	1110	1040	1080	1040	1030	1010	970	874	1010	988
16	1080	1060	1110	1060	1050	1020	1030	1010	957	482	1030	1000
17	1070	1050	1080	1060	1050	1030	1030	1000	905	482	1050	582
18	1060	1040	1070	1060	1060	1040	1040	1020	936	905	1030	546
19	1060	1050	1100	1060	1060	1030	1080	1030	996	934	1040	902
20	1100	1050	1080	1060	1060	1040	1030	1020	957	522	1020	---
21	1080	1050	1080	1060	1060	1030	1040	1020	661	177	1040	---
22	1080	1050	1070	1040	1060	1040	1020	998	281	201	1040	992
23	1080	1050	1070	1060	1120	1040	1030	1010	305	220	1040	991
24	1070	1050	1070	1040	1060	1030	1030	1010	396	229	1030	1010
25	1080	1050	1050	1040	1070	1030	1010	750	472	396	1040	1020
26	1080	1060	1090	1040	1060	1030	964	735	532	472	1040	1000
27	1100	1060	1050	1030	1050	1040	1020	964	566	532	1040	995
28	1110	1060	1060	1030	1050	1030	1010	985	603	566	1030	1020
29	1110	1060	1050	1030	1060	1040	1010	998	657	602	1030	1000
30	1100	1070	1060	1040	1050	1030	1020	998	---	---	1040	1010
31	1090	1060	---	---	1080	1000	999	791	---	---	1040	1010
MONTH	1110	1000	1120	1030	---	---	1080	735	1090	177	1050	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1050	1020	987	965	1030	1010	1070	1020	1070	1010	1040	999
2	1040	1020	1030	955	1030	1020	1080	1060	1060	1050	1010	986
3	1080	562	1050	1020	1050	1020	1080	1040	1070	1040	1060	989
4	1040	1020	1030	1010	1050	1020	1080	1050	1070	1030	1050	1000
5	1030	1010	1030	1010	1060	1040	1080	1040	1070	1040	1100	1010
6	1030	1010	1020	987	1050	1020	1080	1040	1070	1030	1030	1000
7	1020	1010	1030	998	1050	1010	1070	1020	1070	1030	1030	1000
8	1020	1010	1020	1000	1040	1010	1080	1040	1070	1040	1040	1000
9	1040	1010	1020	999	1030	994	1070	1020	1080	1070	1100	1000
10	1060	1020	1050	996	1050	1020	1070	1010	1090	1070	1050	1020
11	1040	1020	1030	1010	1080	1030	1090	1050	1100	1060	1030	1010
12	1020	992	1030	1000	1060	1030	1100	1030	1100	1050	1050	1020
13	1020	988	1070	1010	1050	1020	1090	1050	1080	1060	1050	1030
14	1020	981	1030	1000	1040	1020	1090	1050	1070	1050	1060	1030
15	1030	971	1040	1020	1040	1020	1090	1030	1080	1040	1060	1020
16	1040	1000	1040	1020	1050	1020	1070	1020	1090	1050	1050	1030
17	1090	316	1030	1000	1050	1030	1080	1030	1080	1060	1040	1030
18	557	316	1070	1010	1050	1020	1080	1050	1080	1060	1060	1030
19	911	557	1040	1020	1060	1020	1080	1050	1070	1060	1040	1020
20	955	910	1080	1030	1050	1030	1080	1030	1060	1040	1040	1010
21	949	933	1040	1010	1060	1030	1120	1060	1080	1050	1020	994
22	938	835	1060	1020	1070	1050	1080	1040	1080	1040	1030	986
23	945	919	1050	1010	1070	1060	1070	1010	1080	1030	1020	935
24	967	942	1030	1000	1080	1050	1070	1020	1080	1020	1010	984
25	967	943	1040	991	1130	1050	1070	1030	1030	988	1010	998
26	977	958	1030	993	1090	1040	1070	1020	1030	1010	1010	990
27	974	953	1040	1020	1070	1020	1060	1040	1040	1000	1000	989
28	965	951	1050	1020	1060	1020	1070	1060	1060	1000	1010	991
29	973	951	1070	1020	1060	1010	1080	1060	1040	970	1010	992
30	986	961	1040	1020	1060	1010	1090	1060	1010	913	1010	996
31	---	---	1040	1000	---	---	1080	1050	1010	992	---	---
MONTH	1090	316	1080	955	1130	994	1120	1010	1100	913	1100	935

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.0	16.5	20.5	13.5	17.0	13.0	15.5	13.0	18.5	13.0	21.0	11.0
2	23.5	16.5	19.5	13.5	16.5	12.0	15.0	11.5	18.5	12.5	21.5	10.0
3	23.5	17.0	19.5	13.5	13.5	10.5	15.0	10.0	18.0	11.5	17.0	13.0
4	23.0	16.0	19.0	13.0	14.5	10.5	16.0	10.5	18.5	12.0	14.5	12.5
5	23.0	17.0	19.5	15.5	16.0	10.0	14.5	10.0	19.0	13.5	13.5	11.0
6	21.5	16.5	19.5	14.0	16.0	10.0	14.0	10.0	19.5	12.5	17.0	10.0
7	21.0	16.5	19.5	16.0	15.0	10.5	15.0	9.5	20.0	12.5	13.5	9.5
8	24.0	16.0	19.0	15.5	13.0	10.0	15.0	9.0	18.0	14.0	15.0	11.0
9	23.5	16.0	19.0	14.5	15.0	10.5	15.5	9.5	19.0	13.5	19.0	10.5
10	23.0	16.5	19.0	13.5	14.0	11.5	16.0	10.5	18.5	15.0	23.0	9.5
11	23.0	16.0	19.5	13.5	---	---	16.0	10.5	18.5	14.5	24.0	12.5
12	23.0	16.0	19.5	13.5	---	---	16.5	12.5	15.5	13.5	22.0	12.0
13	23.0	16.5	20.0	14.0	---	---	17.5	11.0	17.0	15.0	23.5	13.5
14	22.5	16.0	19.5	14.5	---	---	17.5	12.0	19.5	16.0	25.0	12.0
15	22.0	17.0	20.0	16.0	14.0	10.0	18.0	13.0	21.5	16.0	24.5	13.5
16	21.5	16.0	19.5	14.0	17.0	11.0	16.5	14.0	18.0	14.5	24.0	15.0
17	18.5	15.0	19.0	15.0	17.0	10.5	19.0	15.5	18.5	13.0	24.5	15.0
18	21.0	13.5	18.0	13.0	16.5	10.5	19.5	15.0	19.0	12.5	25.5	12.0
19	22.0	13.0	17.5	12.5	16.0	11.0	19.5	14.0	21.0	13.0	23.5	13.5
20	22.0	14.0	18.5	15.0	15.5	13.0	19.5	15.0	18.0	15.0	18.0	---
21	22.0	14.0	18.0	14.0	16.0	11.0	19.0	15.0	15.0	11.5	21.0	---
22	21.5	14.0	14.0	11.0	13.5	10.5	18.5	14.5	13.0	11.5	23.0	11.5
23	21.0	14.5	16.0	10.0	15.5	10.5	17.5	12.5	13.5	12.0	23.0	12.5
24	21.0	14.5	15.0	10.5	15.5	10.5	19.5	14.5	15.5	11.5	23.5	12.5
25	21.5	15.0	17.0	11.5	15.0	10.0	17.5	16.5	17.5	11.0	22.5	12.5
26	21.0	15.0	17.5	12.0	16.0	10.0	18.5	14.0	18.5	9.5	25.0	12.5
27	19.5	14.0	17.5	12.0	15.5	11.5	18.0	12.5	13.5	10.0	20.5	14.5
28	19.5	15.5	18.0	12.5	16.5	11.0	17.5	12.0	19.0	10.0	20.5	15.0
29	19.0	15.5	18.0	13.0	16.0	10.5	17.5	12.0	18.0	10.0	22.5	15.0
30	19.5	13.5	17.5	13.0	15.0	10.0	18.0	15.0	---	---	24.0	14.5
31	19.5	13.0	---	---	15.5	12.0	18.0	14.5	---	---	22.5	12.5
MONTH	24.0	13.0	20.5	10.0	---	---	19.5	9.0	21.5	9.5	25.5	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	24.0	12.5	27.5	15.5	28.5	18.5	28.5	19.5	28.0	21.0	23.0	19.0
2	24.5	12.5	27.0	16.0	28.0	18.0	28.5	18.5	27.0	21.0	25.5	18.0
3	26.5	13.0	28.0	16.5	28.5	17.0	28.5	19.5	28.5	20.5	26.0	17.5
4	26.5	14.0	27.5	18.0	28.5	17.0	28.0	18.0	28.5	20.0	26.0	18.0
5	26.0	14.0	26.0	18.5	29.0	18.0	27.5	17.5	29.0	20.0	26.0	16.5
6	24.5	15.5	27.0	18.0	28.0	17.0	27.5	17.5	28.5	20.0	27.0	17.5
7	25.5	16.0	26.5	17.0	28.0	17.0	28.0	18.0	28.5	21.0	25.0	18.0
8	26.5	15.5	25.0	18.0	23.5	18.0	27.5	18.0	27.0	19.5	26.5	18.0
9	25.5	13.5	27.5	17.5	26.0	16.0	27.5	19.0	28.0	20.0	26.0	17.0
10	25.5	14.0	26.0	18.0	27.5	17.0	27.5	19.0	27.5	19.0	25.5	16.5
11	26.5	14.5	25.5	17.0	29.0	17.0	27.0	18.5	28.5	19.0	26.5	17.0
12	27.0	15.0	27.5	14.5	28.0	17.5	27.5	18.0	27.5	19.0	27.5	18.0
13	25.5	14.5	26.0	14.5	30.5	18.0	28.0	17.5	29.0	19.5	26.0	18.5
14	20.5	15.5	26.0	15.0	29.5	18.5	27.5	18.0	28.0	20.0	27.0	20.0
15	23.5	15.0	26.0	15.5	30.0	18.5	27.0	19.5	28.0	20.5	26.5	19.5
16	25.0	15.0	22.5	16.0	28.0	19.5	26.0	19.0	28.5	20.5	27.0	19.5
17	19.0	14.5	26.5	15.0	29.0	20.0	26.0	18.0	27.5	20.5	26.5	19.5
18	19.0	14.0	27.0	15.5	28.5	19.5	28.5	18.5	27.5	20.0	26.0	19.5
19	25.0	13.5	28.0	16.5	28.5	19.5	28.5	18.5	28.0	18.5	25.5	19.0
20	24.5	14.0	29.0	17.5	29.0	18.0	28.5	18.5	26.5	18.0	25.0	20.0
21	20.5	15.0	29.5	18.0	29.0	19.0	27.0	19.0	27.0	18.5	22.5	20.0
22	22.0	16.0	28.5	18.0	29.0	19.5	28.0	19.5	27.0	20.0	22.0	19.5
23	23.5	16.0	26.0	18.5	28.5	19.5	28.5	20.5	28.0	19.5	24.5	19.0
24	26.0	14.5	25.0	18.5	29.5	19.0	27.0	19.5	28.0	20.0	24.5	17.0
25	27.0	16.0	22.0	18.5	28.5	19.0	28.0	20.0	27.5	21.0	25.0	17.0
26	28.5	16.0	27.5	18.0	30.0	20.0	28.0	19.5	27.0	20.5	24.0	17.5
27	27.0	16.5	29.5	18.0	29.0	19.5	29.0	19.5	25.5	20.0	22.0	19.5
28	24.5	18.0	30.0	18.5	29.0	19.5	29.0	20.0	25.5	20.5	23.5	19.5
29	26.0	15.5	29.5	18.5	29.0	20.0	27.0	20.0	23.0	20.5	24.5	19.5
30	26.0	14.5	28.0	19.0	29.0	20.0	28.5	19.5	26.0	21.0	23.0	18.0
31	---	---	28.0	19.0	---	---	28.5	20.5	26.0	20.0	---	---
MONTH	28.5	12.5	30.0	14.5	30.5	16.0	29.0	17.5	29.0	18.0	27.5	16.5

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.—Lat 33°44'17", long 116°49'59", in SE 1/4 NE 1/4 sec.13, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on left bank, 0.6 mi downstream from bridge on State Highway 74, 1.5 mi downstream from North Fork San Jacinto River, 7.8 mi southeast of San Jacinto, and 9.5 mi downstream from Lake Hemet.

DRAINAGE AREA.—142 mi^2.

PERIOD OF RECORD.—October 1920 to February 1927, March 1927 to September 1991, October 1996 to current year. River only records for October 1969 to September 1980 and October 1981 to September 1991 are at site upstream of Lake Hemet Municipal Water District's lower canal and are equivalent to other records if lower canal diversion is deducted from flow past station. Records of lower canal diversion are available at Lake Hemet Municipal Water District. Combined records of river and diversions are equivalent for October 1948 to September 1981. Combined records of river and diversion for October 1981 to September 1990, published in WDR CA-82-1 to WDR CA-90-1, are not equivalent due to diversion for municipal supply upstream of gages beginning in 1982. Monthly discharge only for October 1920 and July to September 1926 are published in WSP 1315-B.

REVISED RECORDS.—WSP 881: 1938. WSP 1635: 1950. WSP 1928: Drainage area. WDR CA-97-1: Date of peak discharge for Water Year 1991.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 1,910 ft above sea level, from topographic map. From 1927 to 1991 gage operated at various locations and datums approximately 0.6 mi upstream. See WDR CA-91-1 for further description.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts 4.5 mi upstream from station. Several other small diversions in the basin. Diversions upstream from station began prior to 1920. See schematic of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—(River only) Maximum discharge, 45,000 ft^3/s, Feb. 16, 1927, gage height, unknown, on basis of slope-area measurement of peak flow; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum, from rating curve extended above 275 ft^3/s on basis of critical depth computations:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2015	60	3.36				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	9.3	.41	.91	.03	.00	.00	.00
2	.00	.00	.00	.00	.00	8.5	.34	.62	.02	.00	.00	.00
3	.00	.00	.00	.00	.00	7.7	.31	.39	.01	.00	.00	.00
4	.00	.00	.00	.00	.00	7.6	.26	.33	.01	.00	.00	.00
5	.00	.00	.00	.00	.00	14	.23	.28	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	16	.21	.24	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	12	.17	.20	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	17	.14	.16	.00	.00	.00	.00
9	.00	.00	.00	.00	.04	23	.12	.15	.01	.00	.00	.00
10	.00	.00	.00	.00	.09	16	.11	.15	.01	.00	.00	.00
11	.00	.00	.00	.00	.14	e16	.07	.15	.00	.00	.00	.00
12	.00	.00	.00	.00	.19	e18	.05	.14	.00	.00	.00	.00
13	.00	.00	.00	.00	.44	e18	.03	.11	.00	.00	.00	.00
14	.00	.00	.00	.00	1.0	e20	.02	.05	.00	.00	.00	.00
15	.00	.00	.00	.00	1.3	e18	.00	.08	.00	.00	.00	.00
16	.00	.00	.00	.00	.82	16	.00	.10	.00	.00	.00	.00
17	.00	.00	.00	.00	4.7	18	.00	.11	.00	.00	.00	.00
18	.00	.00	.00	.00	8.2	15	7.4	.08	.00	.00	.00	.00
19	.00	.00	.00	.00	6.5	14	19	.06	.00	.00	.00	.00
20	.00	.00	.00	.00	6.9	9.6	15	.04	.00	.00	.00	.00
21	.00	.00	.00	.00	33	3.2	18	.02	.00	.00	.00	.00
22	.00	.00	.00	.00	24	2.8	16	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	17	2.2	14	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	27	2.0	9.9	.03	.00	.00	.00	.00
25	.00	.00	.00	.00	13	1.1	7.3	.08	.00	.00	.00	.00
26	.00	.00	.00	.00	11	.55	6.5	.07	.00	.00	.00	.00
27	.00	.00	.00	.28	10	.52	5.4	.04	.00	.00	.00	.00
28	.00	.00	.00	.31	19	.52	4.2	.02	.00	.00	.00	.00
29	.00	.00	.00	.33	10	.52	2.0	.00	.00	.00	.00	.00
30	.00	.00	.00	.39	---	.45	1.6	.01	.00	.00	.00	.00
31	.00	---	.00	.25	---	.43	---	.02	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1.56	194.32	307.99	128.77	4.64	0.09	0.00	0.00	0.00
MEAN	.000	.000	.000	.050	6.70	9.94	4.29	.15	.003	.000	.000	.000
MAX	.00	.00	.00	.39	33	23	19	.91	.03	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.43	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	3.1	385	611	255	9.2	.2	.00	.00	.00

e Estimated.

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.71	4.12	15.1	19.4	55.5	67.1	48.8	22.7	6.42	1.26	1.12	1.19
MAX	14.2	164	283	230	1039	743	312	224	81.8	13.0	13.6	23.1
(WY)	1980	1966	1967	1969	1980	1938	1941	1983	1998	1979	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1923	1924	1930	1936	1951	1947	1934	1934	1931	1924	1923	1922

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1921 - 2000	
ANNUAL TOTAL	522.09		637.37			
ANNUAL MEAN	1.43		1.74		19.9	
HIGHEST ANNUAL MEAN					156	1980
LOWEST ANNUAL MEAN					.075	1951
HIGHEST DAILY MEAN	20	Apr 16	33	Feb 21	7590	Feb 21 1980
LOWEST DAILY MEAN	.00	Jul 4	.00	Oct 1	.00	Oct 1 1920
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 8	.00	Oct 1	.00	Oct 1 1920
INSTANTANEOUS PEAK FLOW			60	Feb 21	45000	Feb 16 1927
INSTANTANEOUS PEAK STAGE			3.36	Feb 21	a	Feb 16 1927
ANNUAL RUNOFF (AC-FT)	1040		1260		14390	
10 PERCENT EXCEEDS	4.3		7.5		41	
50 PERCENT EXCEEDS	.09		.00		.15	
90 PERCENT EXCEEDS	.00		.00		.00	

a Instantaneous peak stage for period of record is unknown, but probably occurred on Feb. 16, 1927.

11070020 BAUTISTA CREEK AT HEAD OF FLOOD CONTROL CHANNEL, NEAR HEMET, CA

LOCATION.—Lat 33°42'42", long 116°52'04", in NW 1/4 NE 1/4 sec.27, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on right bank, at the head of the concrete-lined flood channel, 3.7 mi upstream from the mouth, and 3.0 mi southeast of Valle Vista.

DRAINAGE AREA.—47.6 mi^2.

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 2,080 ft above sea level, from topographic map. Prior to October 1988 at datum 10.00 ft lower.

REMARKS.—Records poor. No regulation upstream from station. Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Minor diversion upstream from station for irrigation. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,310 ft^3/s, Jan. 16, 1993, gage height, 3.53 ft, from rating curve developed on basis of critical-depth computations at concrete control; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum, from rating curve developed on basis of critical-depth computations at concrete control:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	0630	22	1.24				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	2.1	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.30	.00	.00	.00	.00	.00	.00	.06
24	.00	.00	.00	.00	.89	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.06	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.06	0.00	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.13
MEAN	.000	.000	.002	.000	.12	.000	.000	.000	.000	.000	.000	.004
MAX	.00	.00	.06	.00	2.1	.00	.00	.00	.00	.00	.00	.07
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.1	.00	6.9	.00	.00	.00	.00	.00	.00	.3

11070020 BAUTISTA CREEK AT HEAD OF FLOOD CONTROL CHANNEL, NEAR HEMET, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.005	.016	.016	3.19	3.29	3.64	.45	.062	.001	.086	.057	.039
MAX	.061	.21	.12	31.1	22.3	26.4	3.39	.58	.011	1.11	.55	.50
(WY)	1997	1997	1988	1993	1993	1995	1998	1998	1995	1999	1994	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1988	1989	1989	1989	1989	1989	1988	1988	1988	1989	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	34.46		3.68			
ANNUAL MEAN	.094		.010		.89	
HIGHEST ANNUAL MEAN					4.35	1993
LOWEST ANNUAL MEAN					.000	1989
HIGHEST DAILY MEAN	19	Jul 11	2.1	Feb 21	298	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
INSTANTANEOUS PEAK FLOW			22	Feb 21	1310	Jan 16 1993
INSTANTANEOUS PEAK STAGE			1.24	Feb 21	3.53	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	68		7.3		648	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11070150 SAN JACINTO RIVER ABOVE STATE STREET, NEAR SAN JACINTO, CA

LOCATION.—Lat 33°49'17", long 116°58'21", in NE 1/4 SW 1/4 sec.15, T.4 S., R.1 W., Riverside County, Hydrologic Unit 18070202, on left bank, 400 ft upstream from State Street Bridge, 5.5 mi downstream from confluence with Bautista Creek, and 2.5 mi northwest of San Jacinto.

DRAINAGE AREA.—252 mi^2.

PERIOD OF RECORD.—October 1996 to current year.

REVISED RECORDS.—WDR CA-00-1: 1998.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,500 ft above sea level, from topographic map.

REMARKS.—Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts 4.0 mi upstream from station on San Jacinto River near San Jacinto (station 11069500). See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,570 ft^3/s, Feb. 23, 1998, gage height, 4.53 ft, from rating curve extended above 880 ft^3/s; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.—No flow for entire water year.

REVISIONS.—The peak discharge for Apr. 3, 1998 (0715 hours), has been revised to unknown, gage height, 3.65 ft. Revised figures of discharge for water year 1998, superseding those published in the report for 1998, are given on the following page.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	.000	.020	24.8	9.73	33.8	20.0	.000	.000	.000	.000
MAX	.000	.000	.000	.081	99.9	38.9	135	79.9	.000	.000	.000	.000
(WY)	1997	1997	1997	1997	1998	1998	1998	1998	1997	1997	1997	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1997	1997	1998	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1997 - 2000		
ANNUAL MEAN							7.21		
HIGHEST ANNUAL MEAN							28.9		1998
LOWEST ANNUAL MEAN							.000		1999
HIGHEST DAILY MEAN							600	Feb 24	1998
LOWEST DAILY MEAN	.00	Jan 1		.00	Oct 1		.00	Oct 1	1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1		.00	Oct 1		.00	Oct 1	1996
INSTANTANEOUS PEAK FLOW							1570	Feb 23	1998
INSTANTANEOUS PEAK STAGE							4.53	Feb 23	1998
ANNUAL RUNOFF (AC-FT)							5220		
10 PERCENT EXCEEDS	.00			.00			.00		
50 PERCENT EXCEEDS	.00			.00			.00		
90 PERCENT EXCEEDS	.00			.00			.00		

11070150 SAN JACINTO RIVER ABOVE STATE STREET, NEAR SAN JACINTO, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

(REVISED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	49	e240	23	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	37	e235	23	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	21	e260	11	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	21	e220	1.9	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	17	e210	75	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	30	e220	211	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	20	193	163	.00	.00	.00	.00
8	.00	.00	.00	.00	e211	3.1	197	42	.00	.00	.00	.00
9	.00	.00	.00	.00	e60	.00	157	50	.00	.00	.00	.00
10	.00	.00	.00	.00	e22	.00	173	61	.00	.00	.00	.00
11	.00	.00	.00	.00	e5.0	.00	178	40	.00	.00	.00	.00
12	.00	.00	.00	.00	e.00	.00	180	92	.00	.00	.00	.00
13	.00	.00	.00	.00	e.00	.00	127	396	.00	.00	.00	.00
14	.00	.00	.00	.00	e110	.00	183	271	.00	.00	.00	.00
15	.00	.00	.00	.00	219	.00	128	220	.00	.00	.00	.00
16	.00	.00	.00	.00	e75	.00	94	243	.00	.00	.00	.00
17	.00	.00	.00	.00	e67	.00	81	220	.00	.00	.00	.00
18	.00	.00	.00	.00	e80	.00	84	136	.00	.00	.00	.00
19	.00	.00	.00	.00	e45	.00	86	82	.00	.00	.00	.00
20	.00	.00	.00	.00	e30	.00	171	60	.00	.00	.00	.00
21	.00	.00	.00	.00	e20	.00	179	28	.00	.00	.00	.00
22	.00	.00	.00	.00	e200	.00	124	8.3	.00	.00	.00	.00
23	.00	.00	.00	.00	e390	.00	116	3.3	.00	.00	.00	.00
24	.00	.00	.00	.00	e600	.00	26	.06	.00	.00	.00	.00
25	.00	.00	.00	.00	e375	.00	40	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	156	.00	41	12	.00	.00	.00	.00
27	.00	.00	.00	.00	66	.00	33	2.8	.00	.00	.00	.00
28	.00	.00	.00	.00	67	274	29	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	269	28	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	e235	18	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	e230	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	2798.00	1206.10	4051	2475.36	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	99.9	38.9	135	79.9	.000	.000	.000	.000
MAX	.00	.00	.00	.00	600	274	260	396	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	18	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	5550	2390	8040	4910	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	.000	.040	50.0	19.5	67.5	39.9	.000	.000	.000	.000
MAX	.000	.000	.000	.081	99.9	38.9	135	79.9	.000	.000	.000	.000
(WY)	1997	1997	1997	1997	1998	1998	1998	1998	1997	1997	1997	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1997	1997	1998	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	2.50		10530.46			
ANNUAL MEAN	.007		28.9		14.4	
HIGHEST ANNUAL MEAN					28.9	1998
LOWEST ANNUAL MEAN					.007	1997
HIGHEST DAILY MEAN	2.5	Jan 26	600	Feb 24	600	Feb 24 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1996
INSTANTANEOUS PEAK FLOW			1570	Feb 23	1570	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.53	Feb 23	4.53	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	5.0		20890		10450	
10 PERCENT EXCEEDS	.00		125		21	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11070270 PERRIS VALLEY STORM DRAIN AT NUEVO ROAD, NEAR PERRIS, CA

LOCATION.—Lat 33°48'04", long 117°12'19", in SW 1/4 SW 1/4 sec.21, T.4 S., R.3 W., Riverside County, Hydrologic Unit 18070202, on right bank, 1.9 mi northeast of Perris, and 2.0 mi upstream from San Jacinto River.

DRAINAGE AREA.—93.3 mi^2.

PERIOD OF RECORD.—October 1969 to September 1975, October 1989 to September 1997, and October 1998 to current year. PRECIPITATION DATA: October 1989 to September 1997.

REVISED RECORDS.—WDR CA-92-1: 1991(M).

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1,410 ft above sea level, from topographic map. October 1969 to September 1975, at same site at different datum.

REMARKS.—Some regulation by percolation basins upstream from station. Some pumping for irrigation upstream from station. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records were provided by Riverside County Flood Control and Water Conservation District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,400 ft^3/s, Feb. 12, 1992, gage height, 7.81 ft, from rating curve extended above 2,120 ft^3/s on basis of slope area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,100 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1810	1,340	4.80				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.22	.00
2	.00	.11	.00	.00	.00	e.00	.00	.00	.00	.00	.51	.00
3	.00	.04	.00	.00	.00	e.50	.03	.00	.00	.00	.27	.00
4	.14	.00	.00	.00	.00	e30	.04	.00	.00	.00	.24	.00
5	.29	.00	.00	.00	.00	e150	.01	.00	.00	.00	.16	.00
6	.00	.00	.00	.00	.00	e20	.00	.00	.00	.00	.19	.00
7	.00	.00	.00	.00	.36	1.5	.02	.00	.00	.00	.14	.00
8	.00	.11	.00	.00	.39	50	.03	.20	.00	.00	.17	.00
9	.00	.10	.00	.00	.01	9.0	.02	.12	.02	.00	.15	.00
10	.00	.00	.00	.00	.84	.71	.04	.00	.08	.00	.13	.00
11	.00	.00	.00	.00	9.6	.08	.04	.00	.12	.00	.13	.00
12	.00	.00	.00	.00	26	.00	.05	.00	.04	.00	.16	.00
13	.00	.00	.00	.00	1.8	.00	.49	.01	.03	.00	.15	.00
14	.00	.00	.00	.00	.86	.00	.13	.03	.16	.00	.11	.00
15	.00	.05	.00	.00	1.2	.00	.06	.05	.10	.00	.14	.00
16	.00	.19	.00	.00	.43	.00	.01	.00	.13	.00	.23	.00
17	.00	.00	.00	.00	24	.00	1.5	.04	.04	.00	.21	.00
18	.00	.00	.00	.00	1.3	.00	67	.00	.18	.00	.17	e.00
19	.00	.00	.00	.00	.39	.00	5.3	.00	.02	.00	.15	e.00
20	.00	.00	.00	.39	27	.00	.07	.00	.00	.00	.13	e.00
21	.00	.00	.00	.59	383	.00	.00	.00	.00	.00	.20	e.00
22	.00	.00	.00	.22	56	.00	.02	.00	.01	.00	.23	e.10
23	.00	.03	.00	.00	84	.00	.02	.14	.01	.00	.26	e.10
24	.00	.53	.00	.26	35	.00	.00	.02	.00	.00	.20	e.00
25	.00	.25	.00	7.1	.71	.00	.02	.65	.00	.00	.30	e.00
26	.00	.20	.00	5.2	.02	.00	.12	.15	.00	.04	.20	e.00
27	.00	.17	.00	.25	.16	.17	.02	.00	.00	.02	.18	e.00
28	.00	.07	.00	.21	e4.4	.00	.00	.00	.00	.09	.15	e.00
29	.00	.00	.00	.12	e.00	.00	.00	.00	.00	.14	.10	e.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.08	.06	e.00
31	.00	---	.00	.00	---	.00	---	.00	---	.07	.00	---
TOTAL	0.43	1.85	0.00	14.34	657.47	261.96	75.04	1.41	0.94	0.44	5.64	0.20
MEAN	.014	.062	.000	.46	22.7	8.45	2.50	.045	.031	.014	.18	.007
MAX	.29	.53	.00	7.1	383	150	67	.65	.18	.14	.51	.10
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.9	3.7	.00	28	1300	520	149	2.8	1.9	.9	11	.4

e Estimated.

11070270 PERRIS VALLEY STORM DRAIN AT NUEVO ROAD, NEAR PERRIS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.19	1.20	3.59	21.4	19.4	12.5	.94	.16	.18	.13	.018	.27
MAX	1.68	9.87	35.1	167	87.5	70.7	4.87	1.06	1.73	1.85	.18	4.21
(WY)	1997	1997	1993	1993	1993	1991	1994	1990	1995	1999	2000	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1970	1972	1970	1975	1971	1972	1970	1970	1970	1970	1970	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	366.36		1019.72			
ANNUAL MEAN	1.00		2.79		4.94	
HIGHEST ANNUAL MEAN					24.4	1993
LOWEST ANNUAL MEAN					.30	1971
HIGHEST DAILY MEAN	53	Jul 8	383	Feb 21	1270	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1969
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 20	.00	Oct 6	.00	Oct 1 1969
INSTANTANEOUS PEAK FLOW			1340	Feb 21	4400	Feb 12 1992
INSTANTANEOUS PEAK STAGE			4.80	Feb 21	7.81	Feb 12 1992
ANNUAL RUNOFF (AC-FT)	727		2020		3580	
10 PERCENT EXCEEDS	.48		.39		.21	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.—Lat 33°39'51", long 117°17'35", in SE 1/4 NE 1/4 sec.9, T.6 S., R.4 W., Riverside County, Hydrologic Unit 18070203, on right bank, 2.0 mi east of Elsinore, 2.1 mi downstream from Railroad Canyon Dam, and 36 mi downstream from Lake Hemet.

DRAINAGE AREA.—723 mi^2.

PERIOD OF RECORD.—January 1916 to current year. Monthly figures 1927–50, adjusted for diversion, published in WSP 1315-B.

REVISED RECORDS.—WDR CA-72-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,270 ft above sea level, from topographic map. Prior to Feb. 13, 1916, nonrecording gage at site 0.7 mi downstream at different datum. Feb. 13, 1916, to Oct. 27, 1921, nonrecording gage at present site, at different datum.

REMARKS.—Records fair. Flow partly regulated by Lake Hemet, capacity, 13,500 acre-ft, and since 1928 by Railroad Canyon Reservoir, capacity, 12,000 acre-ft, 2.1 mi upstream from station. Diversions for irrigation and domestic use upstream from Railroad Canyon Reservoir took place in some years prior to water year 1994. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,000 ft^3/s, Feb. 17, 1927, gage height, 11.8 ft, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.24	.72	.85	.87	1.5	.65	.46	.10	.00	.00	.00
2	.12	.25	.71	.81	.88	1.3	.69	.43	.08	.00	.00	.01
3	.13	.27	.72	.83	.87	1.1	.70	.42	.07	.00	.00	.00
4	.14	.31	.68	.91	.81	1.2	.74	.42	.06	.00	.00	.00
5	.14	.33	.67	.83	.77	4.3	.78	.40	.05	.01	.00	.00
6	.15	.35	.69	.83	.75	2.4	.80	.39	.04	.00	.00	.00
7	.17	.36	.69	.79	.78	1.7	.73	.38	.04	.00	.00	.00
8	.15	.40	.67	.75	.78	3.5	.63	.40	.05	.00	.00	.00
9	.14	.43	.64	.75	.78	2.7	.57	.40	.09	.00	.00	.00
10	.14	.42	.65	.80	.88	1.7	.57	.38	.09	.02	.00	.04
11	.13	.40	.63	.85	.90	1.5	.56	.37	.08	.05	.00	.06
12	.14	.37	.65	.88	1.1	1.4	.50	.33	.07	.04	.00	.12
13	.13	.36	.68	.87	.84	1.4	.48	.30	.05	.03	.00	.08
14	.14	.39	.71	.86	.85	1.4	.50	.28	.03	.02	.00	.10
15	.16	.42	.78	.78	.92	1.3	.55	.28	.02	.01	.00	.12
16	.18	.43	.80	.76	.99	1.1	.55	.31	.02	.01	.00	.14
17	.16	.46	.75	.76	1.0	.95	.67	.31	.03	.01	.00	.14
18	.17	.48	.72	.74	.90	.85	1.2	.29	.04	.01	.00	.16
19	.18	.52	.68	.75	.81	.81	.97	.24	.04	.00	.00	.15
20	.18	.54	.68	.78	1.5	.81	.79	.19	.03	.00	.00	.16
21	.18	.54	.72	.74	6.7	.94	.71	.18	.03	.00	.00	.20
22	.18	.49	.75	.70	3.6	.97	.71	.13	.02	.00	.00	.28
23	.19	.51	.80	.69	3.3	.90	.67	.17	.01	.00	.00	.32
24	.19	.58	.77	.74	4.9	.81	.62	.20	.01	.00	.00	.33
25	.20	.61	.79	.86	1.8	.77	.63	.21	.01	.00	.00	.33
26	.20	.63	.80	.93	1.6	.75	.62	.23	.01	.00	.00	.30
27	.22	.60	.83	.89	1.5	.77	.52	.20	.00	.00	.00	.35
28	.23	.58	.75	.88	1.5	.78	.52	.13	.00	.00	.00	.37
29	.24	.60	.80	.81	1.5	.78	.50	.09	.00	.00	.00	.38
30	.21	.64	.84	.76	---	.74	.48	.09	.00	.00	.00	.38
31	.22	---	.82	.84	---	.65	---	.10	---	.00	.00	---
TOTAL	5.22	13.51	22.59	25.02	44.38	41.78	19.61	8.71	1.17	0.21	0.00	4.52
MEAN	.17	.45	.73	.81	1.53	1.35	.65	.28	.039	.007	.000	.15
MAX	.24	.64	.84	.93	6.7	4.3	1.2	.46	.10	.05	.00	.38
MIN	.11	.24	.63	.69	.75	.65	.48	.09	.00	.00	.00	.00
AC-FT	10	27	45	50	88	83	39	17	2.3	.4	.00	9.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

MEAN	.58	.76	5.00	35.3	88.3	71.6	23.1	5.52	.78	.59	.39	.50
MAX	22.0	28.1	268	1303	2116	802	333	132	13.8	19.7	14.6	15.4
(WY)	1938	1938	1922	1916	1980	1983	1941	1983	1937	1938	1937	1938
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1917	1917	1917	1921	1921	1921	1921	1921	1919	1918	1918	1917

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1916 - 2000	
ANNUAL TOTAL	194.94		186.72			
ANNUAL MEAN	.53		.51		17.1	
HIGHEST ANNUAL MEAN					232	1980
LOWEST ANNUAL MEAN					.000	1921
HIGHEST DAILY MEAN	1.8	Jan 26	6.7	Feb 21	14000	Jan 28 1916
LOWEST DAILY MEAN	.00	Jun 29	.00	Jun 27	.00	Jul 28 1916
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 29	.00	Jun 27	.00	Jul 28 1916
INSTANTANEOUS PEAK FLOW			19	Feb 21	16000	Feb 17 1927
INSTANTANEOUS PEAK STAGE			3.56	Feb 21	11.80	Feb 17 1927
ANNUAL RUNOFF (AC-FT)	387		370		12370	
10 PERCENT EXCEEDS	1.1		.91		3.7	
50 PERCENT EXCEEDS	.55		.38		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA

LOCATION.—Lat 33°53'21", long 117°33'43", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on right bank, 500 ft upstream from Main Street Bridge in Corona, and 1.5 mi upstream from topographic boundary of Prado Flood-Control Basin.

DRAINAGE AREA.—224 mi^2, excludes 768 mi^2 above Lake Elsinore.

PERIOD OF RECORD.—October 1980 to July 1983, February 1984 to current year. December 1967 to September 1974, water-stage recorder at site 1.2 mi downstream at different datum (published as station 11072200, Temescal Creek at Corona).

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 600 ft above sea level, from topographic map. October 1980 to July 1983 at site 500 ft downstream at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated by several small storage reservoirs. Many diversions upstream from station for irrigation. Water discharged to channel from Arlington Desalter at times since September 1990; records for water years 1981 to 1990 and 1991 to current year are not equivalent. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,720 ft^3/s, Mar. 1, 1983, gage height, 11.67 ft, site and datum then in use, on basis of slope-conveyance study; minimum daily, 0.27 ft^3/s, Sept. 25, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 8,850 ft^3/s, Feb. 25, 1969, gage height, 8.17 ft, from floodmark, at old site (station 11072200) 1.2 mi downstream on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	13	11	15	12	12	11	12	15	14	12	9.1
2	11	17	11	16	9.3	10	12	12	14	13	14	12
3	11	16	14	14	6.2	21	12	13	15	14	13	12
4	11	16	14	13	8.4	31	12	14	15	13	14	12
5	11	14	13	12	15	118	14	13	14	13	13	12
6	13	15	15	12	15	17	7.7	13	15	15	13	13
7	8.4	16	15	13	14	4.6	e14	13	16	15	13	12
8	7.5	17	14	14	15	104	e14	14	15	15	13	6.3
9	12	14	13	13	15	5.3	e13	15	15	14	13	14
10	12	15	13	6.0	28	3.8	e14	8.6	16	15	13	14
11	12	17	8.0	9.6	15	3.7	e13	4.6	15	15	13	14
12	12	15	8.3	14	55	2.9	e13	4.6	14	14	8.1	13
13	11	13	12	15	29	2.9	e12	e14	14	12	14	13
14	11	12	11	16	27	2.8	e12	e13	14	14	14	13
15	13	7.9	11	17	13	3.2	e13	e13	13	14	15	13
16	14	7.1	13	10	46	3.4	e13	e12	14	15	16	14
17	12	7.5	14	14	29	2.6	92	e10	14	16	14	14
18	11	6.3	13	21	17	2.3	109	e9.0	14	17	14	14
19	10	5.4	12	12	16	2.2	20	e12	12	15	14	14
20	11	5.5	12	17	95	5.4	18	e12	9.4	19	14	15
21	9.3	6.2	13	27	222	13	21	e12	14	16	14	17
22	3.4	5.5	26	26	19	12	20	e11	14	8.3	13	17
23	13	3.7	13	25	108	13	18	e10	12	e6.0	13	18
24	12	7.7	21	20	4.7	13	16	e12	11	e15	13	16
25	13	14	13	109	3.1	13	11	e14	12	e15	13	15
26	14	13	14	37	2.4	15	13	e13	12	e16	14	16
27	15	12	14	19	6.2	14	13	e13	11	e16	13	15
28	12	11	13	16	2.7	13	13	e14	13	17	12	14
29	13	10	13	15	5.6	13	13	e14	13	14	13	14
30	15	11	15	16	---	14	13	e15	13	15	12	12
31	12	---	38	16	---	12	---	e8.5	---	14	10	---
TOTAL	355.6	343.8	440.3	599.6	853.6	503.1	589.7	368.3	408.4	444.3	407.1	407.4
MEAN	11.5	11.5	14.2	19.3	29.4	16.2	19.7	11.9	13.6	14.3	13.1	13.6
MAX	15	17	38	109	222	118	109	15	16	19	16	18
MIN	3.4	3.7	8.0	6.0	2.4	2.2	7.7	4.6	9.4	6.0	8.1	6.3
AC-FT	705	682	873	1190	1690	998	1170	731	810	881	807	808

e Estimated.

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1990, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.62	15.1	23.8	23.0	14.5	40.9	13.1	12.0	9.35	7.15	6.45	6.99
MAX	16.1	55.9	126	116	25.5	237	39.3	43.7	30.0	10.9	13.4	11.3
(WY)	1986	1981	1981	1981	1981	1983	1983	1983	1983	1985	1990	1985
MIN	2.36	4.67	2.53	7.01	7.42	6.26	4.02	3.77	1.12	1.20	1.79	1.09
(WY)	1985	1987	1982	1989	1982	1990	1989	1982	1982	1982	1982	1981

SUMMARY STATISTICS	WATER YEARS 1981 - 1990	
ANNUAL MEAN	12.4	
HIGHEST ANNUAL MEAN	33.7	1981
LOWEST ANNUAL MEAN	6.10	1987
HIGHEST DAILY MEAN	1720	Mar 1 1983
LOWEST DAILY MEAN	.27	Sep 25 1981
ANNUAL SEVEN-DAY MINIMUM	.56	Sep 23 1981
INSTANTANEOUS PEAK FLOW	4720	Mar 1 1983
INSTANTANEOUS PEAK STAGE	11.67	Mar 1 1983
ANNUAL RUNOFF (AC-FT)	8990	
10 PERCENT EXCEEDS	27	
50 PERCENT EXCEEDS	6.1	
90 PERCENT EXCEEDS	2.7	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.0	14.1	16.7	47.4	99.4	74.2	40.3	24.5	15.6	13.6	12.2	12.5
MAX	16.3	24.3	26.4	161	351	349	190	100	34.3	24.9	20.1	15.1
(WY)	1997	1994	1993	1995	1993	1995	1995	1995	1995	1993	1993	1994
MIN	6.22	5.55	9.35	12.4	15.4	11.2	2.89	3.24	7.33	3.56	6.98	7.08
(WY)	1996	1996	1999	1998	1997	1997	1991	1992	1992	1994	1994	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	5040.2		5721.2			
ANNUAL MEAN	13.8		15.6		31.5	
HIGHEST ANNUAL MEAN					81.8	1995
LOWEST ANNUAL MEAN					12.8	1999
HIGHEST DAILY MEAN	170	Apr 7	222	Feb 21	2090	Feb 24 1998
LOWEST DAILY MEAN	3.2	Jun 14	2.2	Mar 19	.34	Jul 3 1992
ANNUAL SEVEN-DAY MINIMUM	3.8	Jun 9	2.8	Mar 13	.89	Jan 13 1992
INSTANTANEOUS PEAK FLOW			811	Feb 21	3660	Feb 24 1998
INSTANTANEOUS PEAK STAGE			4.44	Feb 21	6.54	Feb 24 1998
ANNUAL RUNOFF (AC-FT)	10000		11350		22820	
10 PERCENT EXCEEDS	17		17		48	
50 PERCENT EXCEEDS	13		13		13	
90 PERCENT EXCEEDS	5.5		7.7		4.5	

11073300 SAN ANTONIO CREEK AT RIVERSIDE DRIVE, NEAR CHINO, CA

LOCATION.—Lat 34°01'07", long 117°43'47", in Santa Ana del Chino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank, at south end of Riverside Drive Bridge, 0.4 mi upstream from confluence with Chino Creek, 10.2 mi downstream from San Antonio Dam, and 2.4 mi northwest of Chino.

DRAINAGE AREA.—36.6 mi^2.

PERIOD OF RECORD.—December 1998 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 735 ft above sea level, from topographic map.

REMARKS.—Records poor. Flow mostly regulated by San Antonio Flood-Control Reservoir, capacity, 7,700 acre-ft. Natural streamflow affected by ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. Flow at gage is primarily urban runoff, except when releases are made from San Antonio Dam. Releases of imported water are made to San Antonio Creek by the California Water Project at times in some years, from Rialto Pipeline below San Antonio Dam, at a site 10 mi upstream. During the current year, the California Water Project reported releases of 15,720 acre-ft. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, unknown, Apr. 18, 2000, gage height, unknown; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	15	e50	e78	.66	.00	e.00	.15	.28	.19	.18
2	.00	.00	46	e50	e79	.00	.00	e.00	.19	.52	.15	.22
3	.00	.00	42	e51	e84	4.7	.00	e.00	.10	.63	.16	.19
4	.00	.00	41	e53	e79	12	2.0	.00	1.5	.74	.21	.18
5	.00	.00	41	e51	e80	e100	1.2	.00	.01	.67	.22	.21
6	.00	.00	41	e48	e82	9.3	.00	.00	.07	.76	.13	.19
7	.00	.00	41	44	84	5.2	.00	.00	.29	.47	.21	.22
8	.00	7.6	43	42	84	e75	.00	.13	.04	1.0	.17	.23
9	.00	4.6	44	42	85	.51	.00	.20	.04	1.1	.13	.17
10	.00	1.1	48	45	98	.06	.00	.16	.17	.98	.15	.14
11	11	.00	43	44	41	.04	.00	.09	.20	.34	.21	.25
12	e66	.00	44	53	e92	.00	.00	.17	.31	.32	.14	.20
13	e131	.00	46	e68	e21	.13	.00	.20	.22	.39	.17	.24
14	e208	.00	50	e69	e14	.22	.00	.01	.26	.50	.23	.21
15	e193	.00	49	e69	e2.0	.00	.00	.12	.25	.48	.23	.21
16	e177	.00	50	e70	e75	.00	.00	.15	.70	.48	.17	.16
17	e169	.00	45	e70	e3.5	.00	e115	.06	.60	.57	.15	.40
18	e166	.00	47	e71	e1.8	.00	e90	.15	.71	.60	.16	.16
19	e165	.00	54	e71	e1.0	.00	1.2	.29	.04	.22	.21	.17
20	e168	4.1	50	e78	e100	.00	.52	.10	.17	.06	.15	.21
21	e184	.19	e51	e83	e210	.00	.12	.12	.25	.17	.19	.23
22	e186	.00	e51	e90	e6.1	.00	1.9	.31	.17	.21	.23	.74
23	e197	.00	e51	e93	e180	.00	.12	.22	.36	.22	.17	5.8
24	e195	.00	e50	e100	1.7	.00	.35	.29	.17	.14	.28	.08
25	e213	.00	e50	e120	.38	.00	.22	2.1	.12	.19	.26	.07
26	e224	.00	e50	e5.0	1.1	.00	1.3	.35	.41	.17	.20	.03
27	e229	.00	e50	e2.0	e20	.00	.47	.06	.32	.19	.29	.10
28	e154	.09	e50	e2.0	.44	.00	.04	.01	.52	.34	.29	.10
29	2.7	.00	e50	e2.5	.52	.00	.17	.17	.28	.28	.24	.07
30	3.7	.00	e52	e4.9	---	.00	.00	.29	.29	.22	.23	.00
31	.00	---	e70	e30	---	.15	---	.04	---	.22	.21	---
TOTAL	3042.40	17.68	1455	1671.4	1604.54	207.97	214.61	5.79	8.91	13.46	6.13	11.36
MEAN	98.1	.59	46.9	53.9	55.3	6.71	7.15	.19	.30	.43	.20	.38
MAX	229	7.6	70	120	210	100	115	2.1	1.5	1.1	.29	5.8
MIN	.00	.00	15	2.0	.38	.00	.00	.00	.01	.06	.13	.00
AC-FT	6030	35	2890	3320	3180	413	426	11	18	27	12	23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	98.1	.59	46.9	29.5	29.3	5.03	6.05	.097	.55	.95	.45	.21
MAX	98.1	.59	46.9	53.9	55.3	6.71	7.15	.19	.81	1.47	.70	.38
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	2000
MIN	98.1	.59	46.9	5.07	2.42	3.36	4.95	.006	.30	.43	.20	.040
(WY)	2000	2000	2000	1999	1999	1999	1999	1999	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	5085.93		8259.25			
ANNUAL MEAN	13.9		22.6		22.6	
HIGHEST ANNUAL MEAN					22.6	2000
LOWEST ANNUAL MEAN					22.6	2000
HIGHEST DAILY MEAN	229	Oct 27	229	Oct 27	229	Oct 27 1999
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Dec 21 1998
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 6	.00	Oct 1	.00	Dec 26 1998
INSTANTANEOUS PEAK FLOW			a	Apr 18	a	Apr 18 2000
INSTANTANEOUS PEAK STAGE			a	Apr 18	a	Apr 18 2000
ANNUAL RUNOFF (AC-FT)	10090		16380		16350	
10 PERCENT EXCEEDS	46		79		50	
50 PERCENT EXCEEDS	.00		.24		.19	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

a Instantaneous peak discharge and stage are unknown but are known to have occurred on Apr. 18, 2000.

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA

LOCATION.—Lat 34°00'14", long 117°43'34", in Santa Ana del Chino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank, 300 ft downstream from Schaefer Avenue, 0.8 mi downstream from San Antonio Creek, and 1.5 mi southwest of Chino.

DRAINAGE AREA.—48.9 mi^2.

PERIOD OF RECORD.—October 1969 to current year.
CHEMICAL DATA: Water year 1998.
SEDIMENT DATA: Water year 1998.

REVISED RECORDS.—WDR CA-84-1: 1983(M). WDR CA-95-1: 1992, 1993.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Concrete dikes formed low-water control from October 1975 to Apr. 16, 1991. Elevation of gage is 685 ft above sea level, from topographic map.

REMARKS.—Records fair above 10 ft^3/s and poor below. Since 1997, due to construction in area of gage, Schaefer Avenue no longer extends to the Chino Creek crossing. The Schaefer Avenue Bridge, however, remains. Flow mostly regulated by San Antonio Flood-Control Reservoir, capacity, 7,700 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. Releases of imported water are made to the basin by the California Water Project at times in some years, via San Antonio Creek from Rialto Pipeline below San Antonio Dam, at a site approximately 11 mi upstream. During the current year, 15,720 acre-ft was released. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,700 ft^3/s, Feb. 27, 1983, gage height, 10.32 ft, from rating curve extended above 560 ft^3/s on basis of slope-conveyance study; no flow May 21, June 30, July 1, Oct. 30, Nov. 3, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 9.23 ft, present datum, discharge, 9,200 ft^3/s, on basis of contracted-opening measurement at site 6.1 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.4	14	51	79	2.7	3.8	2.7	1.8	1.5	1.7	1.3
2	1.9	3.5	49	53	80	2.6	3.5	2.8	1.8	1.4	2.0	1.2
3	2.0	3.0	49	54	85	9.2	3.7	2.6	1.7	1.4	1.8	1.1
4	1.9	2.1	49	57	80	26	4.1	2.8	2.4	3.0	2.0	1.2
5	1.9	2.3	47	54	81	151	3.4	2.7	2.3	1.5	1.7	1.5
6	2.0	2.4	47	50	83	16	3.9	2.8	2.0	1.5	1.5	1.1
7	2.0	2.0	48	47	86	8.4	3.7	2.6	1.6	1.5	2.2	1.1
8	1.9	14	48	44	90	105	4.1	2.9	1.9	1.5	2.2	1.2
9	1.9	3.1	49	47	93	4.7	4.0	2.8	1.9	1.7	2.0	1.2
10	1.8	2.2	48	50	148	3.3	4.5	2.8	1.7	1.7	1.8	1.1
11	16	2.3	47	48	44	2.8	4.0	2.6	1.7	1.7	1.8	1.2
12	70	2.0	49	54	128	2.8	3.8	2.6	1.8	1.7	2.2	1.1
13	133	1.9	50	70	22	2.8	4.1	2.5	1.8	1.6	1.9	1.1
14	210	2.0	51	71	16	2.8	4.3	2.5	1.5	1.5	2.1	1.2
15	200	2.2	52	71	2.9	2.9	4.6	2.5	2.2	1.5	2.1	1.3
16	178	2.2	51	72	104	3.3	4.5	2.6	1.9	1.5	2.2	1.2
17	170	2.2	51	73	5.9	3.3	157	2.4	1.8	1.7	1.2	1.7
18	170	2.1	52	74	2.8	3.3	139	2.3	2.0	1.7	1.1	1.3
19	168	2.3	52	75	2.7	3.5	3.4	2.1	1.4	1.7	1.1	1.3
20	173	2.9	51	81	182	4.1	2.8	2.5	1.5	1.6	1.1	1.4
21	187	1.9	52	88	300	3.8	2.8	2.5	1.4	1.7	1.3	1.5
22	190	1.8	52	93	6.5	4.0	4.0	2.1	1.7	1.8	1.1	2.0
23	200	1.8	52	96	277	3.9	2.8	2.2	1.7	1.7	1.1	12
24	196	1.7	51	103	5.7	4.1	3.2	2.3	1.6	1.8	1.4	1.9
25	215	1.8	51	153	3.2	3.8	2.8	2.6	1.4	1.7	1.2	1.9
26	230	2.0	51	7.3	2.8	3.9	3.0	2.4	1.4	1.7	1.1	1.9
27	236	1.6	51	2.3	33	3.8	2.9	1.9	1.3	1.6	1.3	2.2
28	162	2.1	51	2.5	3.3	4.1	3.0	1.6	1.4	1.6	1.3	2.4
29	3.7	2.2	52	3.1	2.7	5.1	3.0	1.8	1.4	1.6	1.6	2.6
30	4.7	1.9	54	5.3	---	4.0	2.8	1.9	1.6	1.8	1.3	2.2
31	4.3	---	100	39	---	3.6	---	1.7	---	1.9	1.3	---
TOTAL	3135.9	78.9	1571	1788.5	2049.5	404.6	396.5	75.1	51.6	51.8	49.7	55.4
MEAN	101	2.63	50.7	57.7	70.7	13.1	13.2	2.42	1.72	1.67	1.60	1.85
MAX	236	14	100	153	300	151	157	2.9	2.4	3.0	2.2	12
MIN	1.8	1.6	14	2.3	2.7	2.6	2.8	1.6	1.3	1.4	1.1	1.1
AC-FT	6220	156	3120	3550	4070	803	786	149	102	103	99	110

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.1	15.5	27.9	35.0	38.9	30.0	10.2	13.7	19.9	20.2	16.5	14.7
MAX	126	113	189	186	193	257	68.6	104	184	176	191	198
(WY)	1979	1976	1976	1976	1980	1978	1974	1997	1976	1974	1974	1997
MIN	.061	.23	.53	.55	.33	.30	.14	.22	.062	.069	.14	.13
(WY)	1978	1978	1970	1972	1972	1972	1977	1973	1977	1977	1976	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	6134.5		9708.5			
ANNUAL MEAN	16.8		26.5		21.5	
HIGHEST ANNUAL MEAN					92.4	1974
LOWEST ANNUAL MEAN					3.24	1970
HIGHEST DAILY MEAN	236	Oct 27	300	Feb 21	2060	Mar 1 1978
LOWEST DAILY MEAN	1.6	Aug 21	1.1	Aug 18	.00	May 21 1977
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 20	1.1	Aug 17	.02	Oct 28 1977
INSTANTANEOUS PEAK FLOW			2580	Apr 18	12700	Feb 27 1983
INSTANTANEOUS PEAK STAGE			6.61	Apr 18	10.32	Feb 27 1983
ANNUAL RUNOFF (AC-FT)	12170		19260		15580	
10 PERCENT EXCEEDS	51		84		80	
50 PERCENT EXCEEDS	2.6		2.7		1.1	
90 PERCENT EXCEEDS	1.9		1.4		.32	

11073493 WEST BRANCH CUCAMONGA CHANNEL ABOVE ELY PERCOLATION BASINS, AT ONTARIO, CA

LOCATION.—Lat 34°02'15", long 117°37'09", in SE 1/4 SW 1/4 sec.33, T.1 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 700 ft upstream from northwest corner of westernmost of Ely Percolation Basins, in Ontario.

DRAINAGE AREA.—6.01 mi^2.

PERIOD OF RECORD.—October 1996 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 850 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station. Flow at gage is primarily urban runoff. Irrigation return flow and various industrial releases represent most of the base flow at this site. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,330 ft^3/s, Feb. 7, 1998, gage height, 4.09 ft, from rating curve extended above 415 ft^3/s on basis of step-backwater computations; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft^3/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0430	322	2.38	Mar. 5	unknown	unknown	unknown
Feb. 20	unknown	unknown	unknown	Apr. 18	0615	343	2.43
Feb. 23	1445	763	3.25				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.06	.00	2.5	.62	e.45	1.8	2.3	2.0	2.3	.03	.01
2	1.9	.08	.02	1.1	.70	e.40	2.1	1.9	2.2	2.3	.07	.02
3	1.9	.09	.02	.74	.99	e.50	2.0	2.4	2.2	2.1	.06	.01
4	1.8	.09	.02	.42	.98	e3.0	2.0	2.4	2.4	2.1	.13	.02
5	2.0	.07	.02	.11	.83	e80	2.2	2.1	1.6	2.8	.28	.04
6	2.0	.04	.02	.18	.50	e4.5	1.7	1.9	1.9	2.3	.05	.05
7	2.0	.01	.01	.19	.09	e.50	2.0	1.9	2.3	2.2	.05	.05
8	1.8	.86	.16	.22	.06	e40	1.5	2.0	2.4	1.9	.06	.05
9	2.0	.07	.16	.22	.15	e2.0	1.2	2.2	2.2	1.7	.05	.08
10	2.0	.07	.18	.25	15	e.30	1.8	2.8	2.1	2.1	.06	.06
11	1.7	.07	.12	.22	6.4	e.20	2.1	2.3	1.8	1.9	.12	.44
12	1.7	.07	.04	.24	39	e.16	2.1	1.9	1.8	2.0	.12	.12
13	1.8	.10	.04	.19	6.0	e.20	2.5	2.0	1.1	2.2	.13	.14
14	1.9	.10	.04	.24	2.4	e.80	2.7	2.0	.77	.98	.05	.04
15	2.2	.09	.20	.37	.27	.99	2.5	2.8	2.1	.01	.07	.06
16	2.1	.09	.65	.40	e30	2.1	2.6	2.4	2.2	.02	.17	.06
17	.34	.10	.84	.28	e7.0	2.1	45	2.0	2.2	.04	.18	.06
18	.08	.08	.74	.35	e2.0	2.4	49	2.0	2.2	.01	.11	.06
19	.05	.07	.64	.36	e1.0	2.4	3.8	2.3	1.8	.01	.06	.09
20	.07	.08	.84	.34	e95	1.3	1.9	2.4	1.5	.04	.19	.11
21	.09	.06	.83	.37	e135	1.6	1.7	2.6	1.4	.03	.18	.12
22	.08	.04	.79	.28	16	1.8	3.5	2.3	1.5	.02	.09	.62
23	.08	.06	.62	.21	117	1.3	1.8	2.4	1.9	.06	.10	1.9
24	.10	.04	.69	.51	13	1.3	1.8	1.2	2.5	.05	.07	.05
25	.11	.04	.68	31	e1.5	1.3	2.1	1.3	1.8	.02	.11	.06
26	.06	.06	.70	5.8	e1.2	1.3	2.2	2.0	2.1	.02	.16	.06
27	.10	.07	.74	.98	30	1.6	2.2	1.9	2.0	.02	.20	.10
28	.08	.04	.75	.67	e4.0	1.6	2.0	2.2	2.1	.03	.19	.08
29	.07	.05	.90	.99	e.50	1.5	2.0	2.3	2.1	.04	.23	.07
30	.06	.04	.76	2.0	---	1.8	2.1	2.1	2.5	.04	.00	.10
31	.05	---	6.7	8.3	---	1.7	---	1.9	---	.03	.00	---
TOTAL	32.02	2.79	18.92	60.03	527.19	161.10	153.9	66.2	58.67	29.37	3.37	4.73
MEAN	1.03	.093	.61	1.94	18.2	5.20	5.13	2.14	1.96	.95	.11	.16
MAX	2.2	.86	6.7	31	135	80	49	2.8	2.5	2.8	.28	1.9
MIN	.05	.01	.00	.11	.06	.16	1.2	1.2	.77	.01	.00	.01
AC-FT	64	5.5	38	119	1050	320	305	131	116	58	6.7	9.4

e Estimated.

11073493 WEST BRANCH CUCAMONGA CHANNEL ABOVE ELY PERCOLATION BASINS, AT ONTARIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.70	3.81	4.54	8.94	15.3	4.50	4.24	3.32	1.41	.94	.82	1.44
MAX	3.02	8.22	10.0	20.3	38.6	8.82	5.29	8.92	2.71	2.45	1.77	2.19
(WY)	1997	1997	1997	1997	1998	1998	1999	1998	1998	1998	1998	1997
MIN	1.00	.093	.61	1.94	1.59	1.33	1.56	.62	.34	.16	.11	.16
(WY)	1999	2000	2000	2000	1997	1997	1997	1997	1997	1997	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1997 - 2000	
ANNUAL TOTAL	630.45		1118.29			
ANNUAL MEAN	1.73		3.06		4.18	
HIGHEST ANNUAL MEAN					7.57	1998
LOWEST ANNUAL MEAN					1.94	1999
HIGHEST DAILY MEAN	39	Jan 26	135	Feb 21	234	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 29	.00	Dec 1	.00	Jun 11 1997
ANNUAL SEVEN-DAY MINIMUM	.02	Dec 1	.01	Aug 30	.01	Jul 15 1997
INSTANTANEOUS PEAK FLOW			a	Feb 20	1330	Feb 7 1998
INSTANTANEOUS PEAK STAGE			a	Feb 20	4.09	Feb 7 1998
ANNUAL RUNOFF (AC-FT)	1250		2220		3030	
10 PERCENT EXCEEDS	2.8		2.4		4.3	
50 PERCENT EXCEEDS	1.0		.75		1.7	
90 PERCENT EXCEEDS	.06		.04		.07	

a Instantaneous peak discharge and stage for water year 2000 are unknown, but probably occurred on Feb. 20.

11073494 ELY PERCOLATION BASIN NO. 3 AT ONTARIO, CA

LOCATION.—Lat 34°02'08", long 117°36'36", in SW 1/4 SW 1/4 sec.34, T.1 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on north wingwall, near west end of Ely Percolation Basin No. 3, on West Branch Cucamonga Channel, in Ontario.

DRAINAGE AREA.—Indeterminate.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Geological Survey).

REMARKS.—Basins became operational in 1950 and are formed by earthen perimeter levees, with concrete spillway. Elevation of spillway crest is 841.43 ft. Ely Percolation Basins are connected via interbasin transfer culverts, with Basin No. 3 being the final basin in the system. Flows into the Ely Percolation Basins result from storm runoff, irrigation return flows, and discharges from commercial sources. Data is collected for water conservation and flood-control purposes only. Figures given represent only those days when the gage height was above 828.97 ft. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum recorded gage height, 841.10 ft, Feb. 23, 2000; many days at or below gage height of 828.97 ft during most years.

EXTREMES FOR CURRENT YEAR.—Maximum recorded gage height, 841.10 ft, Feb. 23; many days at or below gage height of 828.97 ft during year.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	833.29	832.52
2	---	---	---	---	---	---	---	---	---	---	832.52	831.77
3	---	---	---	---	---	---	---	---	---	---	831.77	831.11
4	---	---	---	---	---	---	---	---	---	---	831.57	831.16
5	---	---	---	---	---	---	---	---	---	---	836.39	831.57
6	---	---	---	---	---	---	---	---	---	---	836.57	835.57
7	---	---	---	---	---	---	---	---	---	---	835.57	834.62
8	---	---	---	---	---	---	---	---	---	---	836.47	834.48
9	---	---	---	---	---	---	---	---	---	---	836.42	835.57
10	---	---	---	---	---	---	---	---	---	---	835.57	834.74
11	---	---	---	---	---	---	---	---	---	---	834.74	833.95
12	---	---	---	---	---	---	---	---	---	---	833.95	833.18
13	---	---	---	---	---	---	---	---	830.38	829.99	833.18	832.43
14	---	---	---	---	---	---	---	---	830.31	829.77	832.43	831.73
15	---	---	---	---	---	---	---	---	829.77	828.98	831.73	831.08
16	---	---	---	---	---	---	---	---	832.05	829.00	831.08	830.50
17	---	---	---	---	---	---	---	---	832.37	831.65	830.50	829.93
18	---	---	---	---	---	---	---	---	831.65	830.72	829.93	829.38
19	---	---	---	---	---	---	---	---	830.72	829.86	---	---
20	---	---	---	---	---	---	---	---	834.51	829.64	---	---
21	---	---	---	---	---	---	---	---	841.04	834.51	---	---
22	---	---	---	---	---	---	---	---	840.31	836.51	---	---
23	---	---	---	---	---	---	---	---	841.10	835.91	---	---
24	---	---	---	---	---	---	---	---	840.37	836.84	---	---
25	---	---	---	---	---	---	---	---	836.84	835.26	---	---
26	---	---	---	---	---	---	---	---	835.26	834.38	---	---
27	---	---	---	---	---	---	---	---	834.91	833.91	---	---
28	---	---	---	---	---	---	---	---	834.90	834.10	---	---
29	---	---	---	---	---	---	---	---	834.10	833.29	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11073494 ELY PERCOLATION BASIN NO. 3 AT ONTARIO, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	833.89	828.99	---	---	---	---	---	---	---	---	---	---
19	833.91	833.36	---	---	---	---	---	---	---	---	---	---
20	833.36	832.66	---	---	---	---	---	---	---	---	---	---
21	832.66	832.02	---	---	---	---	---	---	---	---	---	---
22	832.09	831.78	---	---	---	---	---	---	---	---	---	---
23	831.78	831.23	---	---	---	---	---	---	---	---	---	---
24	831.23	830.69	---	---	---	---	---	---	---	---	---	---
25	830.69	830.18	---	---	---	---	---	---	---	---	---	---
26	830.18	829.70	---	---	---	---	---	---	---	---	---	---
27	829.70	829.23	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.—Lat 33°58'58", long 117°35'55", in SW 1/4 NE 1/4 sec.22, T.2 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 300 ft upstream from Merrill Avenue Bridge, and 4.6 mi west of Mira Loma.

DRAINAGE AREA.—75.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1968 to July 1977, January 1979 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 660 ft above sea level, from topographic map. Prior to July 1977 at site 100 ft downstream at different datum.

REMARKS.—Records poor. Channel is a trapezoidal concrete floodway; records for low and medium flows prior to July 31, 1977, are not equivalent (channel concrete lined since July 31, 1977). Inland Empire Utilities Agency Tertiary Plant No. 1 began discharging effluent 3.3 mi upstream from station on May 8, 1985. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,100 ft^3/s, Feb. 27, 1983, gage height, 7.85 ft, from floodmark, on basis of slope-conveyance study of peak flow; prior to operation of Plant No. 1, no flow for most of some years; minimum daily, since 1985, 2.5 ft^3/s, June 6, 1987.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	34	38	35	41	40	44	44	38	60	33
2	36	30	33	31	42	e40	38	40	42	39	50	35
3	35	31	33	37	37	38	34	39	43	37	34	32
4	36	31	37	44	37	53	33	45	44	42	32	38
5	36	32	40	38	34	257	37	43	45	35	35	38
6	31	34	42	36	35	64	37	38	40	38	35	34
7	34	42	32	39	37	36	36	38	38	36	34	34
8	35	56	36	39	37	131	35	39	38	44	33	35
9	37	38	42	39	36	33	42	34	37	43	35	34
10	36	33	31	40	180	31	39	37	39	40	34	37
11	37	37	28	33	116	32	41	37	37	40	35	36
12	35	33	27	30	276	32	35	36	39	39	36	37
13	32	34	37	29	114	36	38	39	39	37	38	34
14	30	36	37	37	79	41	44	41	38	38	34	32
15	27	35	31	29	48	16	36	40	35	41	32	35
16	35	32	30	35	170	43	42	40	36	40	34	36
17	31	31	35	34	51	37	152	42	40	42	29	37
18	32	33	33	25	38	34	190	41	40	40	33	38
19	30	29	32	36	47	30	39	41	39	33	35	37
20	30	38	33	38	346	34	e40	39	41	35	34	34
21	27	34	35	33	475	39	e41	38	37	37	36	34
22	29	38	29	36	72	20	53	39	40	37	35	38
23	31	30	35	31	378	40	37	37	38	41	36	55
24	31	29	38	34	81	32	39	37	37	36	39	37
25	30	33	35	199	e40	35	41	36	41	35	35	36
26	31	27	29	61	e41	37	40	39	37	35	39	32
27	28	33	40	39	58	39	43	39	36	30	40	33
28	28	35	36	35	e42	38	40	40	34	31	38	34
29	28	38	36	36	e41	39	42	41	34	40	33	37
30	31	35	36	35	---	39	42	45	35	47	37	36
31	34	---	126	97	---	38	---	46	---	43	34	---
TOTAL	992	1027	1158	1343	3023	1455	1446	1230	1163	1189	1124	1078
MEAN	32.0	34.2	37.4	43.3	104	46.9	48.2	39.7	38.8	38.4	36.3	35.9
MAX	37	56	126	199	475	257	190	46	45	47	60	55
MIN	27	27	27	25	34	16	33	34	34	30	29	32
AC-FT	1970	2040	2300	2660	6000	2890	2870	2440	2310	2360	2230	2140

e Estimated.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1977, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.021	1.15	1.55	18.2	4.65	1.91	1.35	.065	.001	.000	.000	.11
MAX	.19	6.07	7.91	149	30.7	7.94	13.1	.54	.007	.000	.000	1.03
(WY)	1972	1971	1972	1969	1969	1969	1969	1977	1969	1968	1968	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1969	1969	1970	1975	1972	1972	1968	1968	1968	1968	1968	1968

SUMMARY STATISTICS	WATER YEARS 1968 - 1977	
ANNUAL TOTAL		
ANNUAL MEAN	2.73	
HIGHEST ANNUAL MEAN	16.8	1969
LOWEST ANNUAL MEAN	.16	1976
HIGHEST DAILY MEAN	2600	Jan 25 1969
LOWEST DAILY MEAN	.00	Feb 1 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 1 1968
INSTANTANEOUS PEAK FLOW	9100	Jan 25 1969
INSTANTANEOUS PEAK STAGE	7.08	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	1980	
10 PERCENT EXCEEDS	.10	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1984, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.49	11.3	7.69	34.1	65.0	46.3	12.1	3.43	.48	.37	1.47	1.08
MAX	11.1	27.9	24.7	149	216	205	63.4	19.8	2.30	1.22	6.99	3.45
(WY)	1984	1983	1984	1983	1980	1983	1983	1983	1983	1983	1983	1983
MIN	.091	.002	.006	1.67	1.29	2.44	.056	.063	.008	.019	.009	.011
(WY)	1981	1980	1980	1984	1984	1984	1981	1979	1979	1981	1979	1979

SUMMARY STATISTICS	WATER YEARS 1979 - 1984	
ANNUAL TOTAL		
ANNUAL MEAN	17.5	
HIGHEST ANNUAL MEAN	53.4	1983
LOWEST ANNUAL MEAN	1.51	1981
HIGHEST DAILY MEAN	2530	Mar 1 1983
LOWEST DAILY MEAN	.00	Feb 6 1979
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 6 1979
INSTANTANEOUS PEAK FLOW	16100	Feb 27 1983
INSTANTANEOUS PEAK STAGE	7.85	Feb 27 1983
ANNUAL RUNOFF (AC-FT)	12700	
10 PERCENT EXCEEDS	10	
50 PERCENT EXCEEDS	.13	
90 PERCENT EXCEEDS	.01	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	35.2	37.5	43.6	78.0	93.4	63.3	38.5	31.7	32.1	30.2	30.5	35.2
MAX	52.9	65.7	83.0	265	304	198	64.2	63.0	57.1	46.2	51.8	52.0
(WY)	1988	1997	1993	1993	1998	1995	1999	1998	1992	1992	1992	1986
MIN	20.4	23.4	21.0	26.1	34.9	25.3	20.5	18.5	18.1	19.3	18.5	16.4
(WY)	1987	1989	1987	1989	1989	1988	1987	1988	1988	1987	1987	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	14400		16228			
ANNUAL MEAN	39.5		44.3		45.5	
HIGHEST ANNUAL MEAN					71.4	1993
LOWEST ANNUAL MEAN					26.6	1987
HIGHEST DAILY MEAN	282	Jan 26	475	Feb 21	2490	Feb 20 1996
LOWEST DAILY MEAN	21	Jan 19	16	Mar 15	2.5	Jun 6 1987
ANNUAL SEVEN-DAY MINIMUM	29	Jan 18	30	Oct 21	12	Aug 25 1988
INSTANTANEOUS PEAK FLOW			3330	Feb 20	10400	Jan 7 1993
INSTANTANEOUS PEAK STAGE			3.74	Feb 20	5.40	Jan 7 1993
ANNUAL RUNOFF (AC-FT)	28560		32190		32970	
10 PERCENT EXCEEDS	43		44		53	
50 PERCENT EXCEEDS	35		37		32	
90 PERCENT EXCEEDS	29		31		20	

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1998 to September 2000 (discontinued).
CHEMICAL DATA: October 1998 to September 2000 (discontinued).
SPECIFIC CONDUCTANCE: October 1998 to September 2000 (discontinued).
WATER TEMPERATURE: October 1998 to September 2000 (discontinued).
SEDIMENT DATA: October 1998 to September 2000 (discontinued).

PERIOD OF DAILY RECORD.—October 1998 to September 2000 (discontinued).
SPECIFIC CONDUCTANCE: October 1998 to September 2000 (discontinued).
WATER TEMPERATURE: October 1998 to September 2000 (discontinued).

INSTRUMENTATION.—Water-quality monitor for specific conductance and water temperature since Oct. 20, 1998. Auto sampler used to collect water-quality samples during storm events.

REMARKS.—Interruption of record in February and March due to bad data. Loss of specific-conductance record May 15, 28–30, Jun. 2, 5, 6–8, 12–14, Aug. 22–25, and Sept. 1–6 due to poor communication. Chemical, sediment, cross-sectional, and continuous-monitor data collected for the National Water-Quality Assessment (NAWQA) program.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 973 microsiemens, Jul. 28, 2000; minimum recorded, 43 microsiemens, Apr. 18, 2000.
WATER TEMPERATURE: Maximum recorded, 36.5°C, July 28, 2000; minimum recorded, 5.5°C, Dec 10, 1999.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 973 microsiemens, Jul. 28; minimum recorded, 43 microsiemens, Apr. 18.
WATER TEMPERATURE: Maximum recorded, 36.5°C, July 28; minimum recorded, 8.0°C, Mar. 6 and 22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
14...	1610	19	740	177	14.0	9.2	659	29.0	25.5	130
NOV										
17...	1150	35	744	236	19.0	9.2	655	20.5	25.0	130
DEC										
15...	1040	64	752	169	14.7	8.6	696	19.0	21.5	120
31...†	1630	155	--	--	--	8.0	567	--	13.5	110
JAN										
12...	1620	25	748	106	9.5	8.6	703	18.5	19.5	130
25...†	1000	1090	--	--	--	7.5	105	--	14.0	24
FEB										
12...†	0330	238	--	--	--	7.6	112	--	16.0	23
17...	1110	55	748	151	13.2	7.8	489	12.0	21.0	92
MAR										
16...	1610	34	743	150	12.5	8.2	707	21.5	23.0	130
APR										
12...	1620	29	746	198	15.1	9.1	703	28.0	28.0	130
MAY										
11...	1000	27	745	196	15.8	9.2	678	17.5	25.0	130
JUN										
14...	1050	56	743	248	18.2	9.3	708	27.5	30.0	120
JUL										
13...	1200	29	747	--	>20.0	9.9	684	28.0	32.0	--
AUG										
16...	1940	35	741	74	5.7	7.8	730	29.5	27.0	130
SEP										
12...	1640	28	739	227	16.7	9.6	693	35.5	29.5	120

† Sample collected by automatic sampler.
> Actual value is known to be greater than the value shown.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
14...	26	37.6	8.16	12.3	3	75.1	53	101	83	20
NOV										
17...	8	36.9	8.65	10.8	3	75.5	54	120	114	16
DEC										
15...	--	35.9	8.50	10.3	3	85.8	58	125	141	6
31...	--	30.6	8.57	14.8	2	59.2	50	115	141	--
JAN										
12...	15	37.9	8.49	10.9	3	83.5	56	115	135	2
25...	--	7.33	1.32	7.3	.4	4.8	24	25	30	--
FEB										
12...	--	7.15	1.27	6.7	.7	7.5	34	26	31	--
17...	10	26.2	6.38	8.4	2	54.3	54	82	100	--
MAR										
16...	40	37.6	8.86	11.2	3	77.4	54	90	110	--
APR										
12...	17	37.8	7.63	11.4	3	78.7	55	108	98	17
MAY										
11...	20	36.5	8.41	12.4	3	75.0	54	106	100	14
JUN										
14...	4	34.9	8.57	13.6	3	86.1	57	119	97	23
JUL										
13...	--	--	--	--	--	--	--	115	28	55
AUG										
16...	20	38.5	9.37	11.4	3	81.6	54	115	140	--
SEP										
12...	19	36.2	8.27	11.0	3	84.8	57	106	62	33

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT										
14...	89.3	.3	25.2	55.9	.77	.81	.032	5.19	.022	.374
NOV										
17...	81.8	.3	24.9	53.7	.82	1.2	.021	4.30	.208	.832
DEC										
15...	93.6	.2	24.0	55.2	1.0	1.5	.034	4.13	.018	.574
31...	65.9	.2	15.3	41.5	7.5	44	3.13	3.93	.349	2.00
JAN										
12...	96.2	.2	23.7	56.0	.83	1.3	.028	5.54	.013	.415
25...	5.5	.1	1.8	5.2	--	5.4	1.21	1.04	.086	--
FEB										
12...	7.3	.2	2.3	6.3	1.8	4.3	.986	1.02	.082	.337
17...	61.2	.3	16.4	42.6	.78	.91	.142	3.46	.096	.386
MAR										
16...	96.3	.3	23.1	61.3	.96	1.1	.072	7.96	.036	.714
APR										
12...	96.3	.3	22.1	64.2	.83	1.4	.030	4.34	.017	.463
MAY										
11...	89.1	.3	23.0	64.1	.85	1.2	<.020	4.40	.017	.790
JUN										
14...	98.3	.3	23.3	61.2	.96	1.6	.036	2.96	.014	.660
JUL										
13...	92.5	.2	--	60.6	.86	2.0	.029	3.18	.022	.373
AUG										
16...	92.6	.3	23.1	55.1	1.1	1.6	.104	7.82	.045	1.09
SEP										
12...	94.8	.3	23.8	56.1	.92	1.6	.027	5.84	.062	.238

< Actual value is known to be less than the value shown.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
14...	.356	.395	5.4	1.5	.54	396	389	30	3	30
NOV										
17...	.827	.952	5.8	.8	.53	388	386	30	e1	--
DEC										
15...	.454	.630	6.0	1.0	.58	423	409	30	e2	--
31...	2.15	25.1	22	>23	.49	357	334	130	93	--
JAN										
12...	.352	.473	6.0	.6	.58	430	411	40	4	--
25...	.439	1.79	12	17	.11	80	56	100	20	--
FEB										
12...	.291	1.11	12	>10	.12	87	61	40	3	--
17...	.342	.480	6.1	.8	.40	291	282	20	4	--
MAR										
16...	.651	.743	6.2	.8	.59	435	407	20	3	--
APR										
12...	.403	.576	6.5	1.6	.57	421	404	20	<2	--
MAY										
11...	.713	.904	6.0	.9	.56	409	394	30	<2	--
JUN										
14...	.584	.798	7.1	2.6	.59	432	412	30	3	--
JUL										
13...	.323	.605	7.2	2.3	--	412	--	--	--	--
AUG										
16...	1.04	1.24	6.1	1.8	.59	437	419	30	3	--
SEP										
12...	.180	.377	5.8	1.7	.57	417	405	20	e2	--

e Estimated.
> Actual value is known to be greater than the value shown.
< Actual value is known to be less than the value shown.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR								
16...	1631	743	117	10.0	8.1	715	23.5	6.00
16...	1632	743	140	12.0	8.2	712	23.0	18.0
16...	1633	743	146	12.5	8.0	713	23.0	30.0
16...	1634	743	136	11.7	7.9	710	23.0	42.0
16...	1635	743	114	9.8	7.9	710	22.5	54.0

Instantaneous discharge at the time of cross-sectional measurements: 41 ft^3/s

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
14...N	1610	19	25.5	11	.56	95
NOV						
17...N	1150	35	25.0	4	.38	66
DEC						
15...N	1040	64	21.5	25	4.3	41
31...N†	1630	155	13.5	7490	3130	46
JAN						
12...N	1620	25	19.5	2	.14	52
25...N†	1000	1090	14.0	498	1470	55
FEB						
12...N†	0330	238	16.0	353	227	70
17...N	1110	55	21.0	13	1.9	97
MAR						
16...N	1610	34	23.0	3	.28	78
APR						
12...N	1620	29	28.0	8	.63	92
MAY						
11...N	1000	27	25.0	7	.51	63
JUN						
14...N	1050	56	30.0	3	.45	79
JUL						
13...N	1200	29	32.0	9	.70	73
AUG						
16...N	1940	35	27.0	7	.66	96
SEP						
12...N	1640	28	29.5	6	.45	92

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

† Sample collected by automatic sampler.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	659	579	758	648	744	571	582	529	697	390	---	---
2	655	586	746	671	739	671	599	560	509	359	---	---
3	659	563	757	675	843	691	615	558	389	215	---	---
4	669	588	758	666	790	754	626	585	404	322	---	---
5	664	568	756	684	766	705	652	607	427	352	---	---
6	663	557	757	688	745	622	654	617	468	369	461	156
7	663	582	740	650	703	630	658	633	497	429	618	461
8	654	443	732	459	663	605	680	637	538	478	623	---
9	630	493	666	626	638	603	688	661	593	534	638	572
10	584	474	652	617	684	600	703	672	594	66	654	633
11	617	479	650	596	642	545	710	684	620	216	654	640
12	647	456	632	576	636	568	718	687	613	46	664	652
13	657	512	638	581	636	586	709	650	627	180	683	662
14	686	547	642	608	648	604	703	638	596	327	703	675
15	690	599	719	628	721	622	698	639	760	596	739	662
16	719	614	682	615	726	668	732	661	766	349	707	668
17	703	597	687	623	741	680	728	683	699	452	719	665
18	706	598	684	629	753	699	726	222	737	682	718	639
19	703	603	674	625	808	705	817	428	747	639	738	659
20	723	596	679	469	809	739	875	714	737	---	726	568
21	718	601	681	620	805	734	792	724	---	---	713	508
22	699	593	689	640	837	769	781	683	---	---	661	269
23	713	583	692	650	841	784	754	719	---	---	472	437
24	702	577	689	619	842	779	736	694	---	---	485	452
25	725	614	679	610	824	750	729	76	---	---	494	452
26	726	625	684	587	810	742	640	174	---	---	487	398
27	722	628	680	590	836	770	480	440	658	---	520	442
28	725	648	676	569	840	792	488	416	684	---	527	438
29	741	643	669	545	946	810	453	402	---	---	549	482
30	737	653	747	612	913	798	431	209	---	---	562	516
31	739	642	---	---	898	294	678	114	---	---	572	514
MONTH	741	443	758	459	946	294	875	76	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	584	494	714	646	762	403	703	638	548	514	738	---
2	574	500	731	609	761	---	714	622	590	500	719	---
3	619	562	731	657	765	443	726	641	652	526	723	---
4	636	542	730	548	778	420	743	654	752	577	752	---
5	622	568	736	684	782	---	741	649	759	572	676	---
6	625	554	753	688	782	535	756	661	685	553	755	---
7	642	597	779	719	768	---	746	664	750	605	751	543
8	665	633	792	741	573	---	747	672	757	653	713	474
9	689	616	812	711	763	---	773	552	750	643	691	545
10	691	647	829	742	783	681	762	684	740	634	723	591
11	708	673	810	564	800	546	761	691	738	626	733	506
12	728	684	733	657	786	---	777	618	758	618	750	653
13	745	671	728	677	---	---	772	627	747	636	776	470
14	747	667	730	624	---	---	670	516	742	596	720	494
15	772	724	735	---	691	619	768	455	756	614	735	643
16	800	744	734	673	704	578	592	514	750	617	714	591
17	793	50	724	446	704	597	619	512	727	465	743	660
18	665	43	715	620	726	610	610	549	716	523	749	675
19	622	305	707	457	723	510	600	484	759	558	738	584
20	651	596	715	468	718	377	579	482	740	489	737	575
21	670	629	743	585	733	370	589	510	756	528	738	542
22	663	171	721	563	721	444	572	497	741	---	825	452
23	648	581	732	570	735	650	661	479	748	---	684	---
24	640	475	728	569	765	662	785	635	737	---	690	496
25	730	496	710	575	743	667	829	694	724	---	741	629
26	740	586	751	597	754	669	817	711	755	519	731	624
27	682	581	758	502	730	672	809	673	738	517	721	636
28	687	584	755	---	733	652	973	593	752	565	704	530
29	708	620	760	---	726	644	606	498	785	669	629	482
30	715	623	757	---	734	658	554	508	745	431	736	530
31	---	---	762	543	---	---	552	497	740	482	---	---
MONTH	800	43	829	---	---	---	973	455	785	---	825	---

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	33.0	21.5	30.0	18.5	24.0	18.5	20.5	17.5	24.5	17.0	---	---
2	32.0	22.0	28.5	19.0	24.0	17.5	22.5	15.0	23.5	17.5	---	---
3	32.0	23.0	28.5	17.5	23.0	9.5	23.0	15.5	24.5	16.5	---	---
4	32.5	22.0	28.0	18.0	22.5	16.5	23.5	16.0	22.5	18.0	---	---
5	32.5	22.0	27.0	21.0	23.5	15.5	23.5	12.5	24.0	18.0	---	---
6	30.5	19.5	27.0	19.5	24.0	16.5	22.5	11.0	24.5	17.0	23.0	8.0
7	30.5	17.5	27.5	21.5	23.5	17.5	21.0	13.0	25.5	18.0	21.5	12.5
8	33.5	19.0	24.0	19.0	20.5	16.0	22.0	11.0	21.5	18.5	17.0	11.0
9	32.5	20.5	27.5	20.0	22.5	15.5	22.0	14.0	24.0	17.0	25.5	14.5
10	31.5	20.0	28.0	20.0	22.0	15.5	22.5	15.0	22.5	12.5	27.5	14.5
11	32.5	20.5	28.0	17.5	23.0	12.0	22.0	15.0	23.0	13.5	28.0	15.0
12	32.5	19.5	28.0	19.0	23.5	15.5	22.0	16.0	19.0	11.0	28.5	16.0
13	33.0	19.0	28.0	17.5	23.0	16.5	24.0	15.0	18.5	12.0	27.5	17.5
14	31.5	19.5	27.5	19.5	22.5	15.5	24.0	15.0	20.5	14.5	28.0	16.5
15	31.0	19.5	27.0	21.0	24.0	14.0	23.0	16.0	25.5	17.0	34.0	10.0
16	31.0	20.0	27.0	19.0	25.0	16.5	19.0	17.0	19.0	11.0	28.0	19.5
17	28.5	15.5	25.5	20.5	25.0	16.5	22.0	17.5	24.0	12.5	27.5	20.0
18	31.0	19.0	26.5	19.0	23.5	16.0	25.5	18.0	24.0	17.5	27.5	18.0
19	30.5	18.0	25.0	18.0	19.5	14.0	25.0	17.5	24.5	16.5	26.5	18.5
20	30.0	19.5	24.0	15.5	25.0	14.0	24.5	18.0	20.0	13.0	23.0	14.0
21	32.0	19.0	25.0	17.5	24.0	13.5	23.5	17.5	---	---	26.5	12.5
22	31.5	19.5	24.5	13.5	18.0	11.0	22.0	16.5	---	---	31.5	8.0
23	30.0	20.5	24.5	15.0	22.5	11.5	22.0	16.5	---	---	27.0	19.0
24	31.0	19.5	25.0	14.5	20.5	13.0	23.5	17.5	---	---	28.0	19.0
25	31.0	20.5	25.0	13.5	22.0	12.5	19.5	14.0	---	---	27.5	17.5
26	30.0	21.0	26.0	14.5	23.5	13.5	23.5	15.0	---	---	28.5	18.0
27	30.0	20.0	24.5	15.0	22.0	14.5	23.5	15.0	---	---	25.0	19.5
28	28.5	20.5	24.0	15.5	24.0	15.0	23.0	16.0	---	---	23.0	19.0
29	29.5	20.5	25.5	17.5	24.0	14.0	23.5	13.5	---	---	24.5	18.5
30	27.0	16.0	24.0	17.0	23.5	14.5	22.0	15.0	---	---	27.5	19.0
31	30.0	17.0	---	---	20.0	11.5	20.5	14.0	---	---	26.0	15.0
MONTH	33.5	15.5	30.0	13.5	25.0	9.5	25.5	11.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	26.5	16.5	31.0	18.5	33.0	21.5	33.5	23.0	34.0	25.0	31.5	21.5
2	27.0	18.0	30.0	18.5	32.5	21.5	33.0	22.5	34.5	26.0	32.5	20.5
3	28.5	19.0	31.5	19.5	32.5	21.0	33.0	22.5	36.0	24.0	33.0	19.5
4	28.5	19.5	30.5	20.5	32.0	21.5	33.0	22.0	35.5	22.0	33.0	18.5
5	28.5	20.0	29.5	20.5	32.5	22.0	33.5	21.5	35.0	22.0	33.0	19.0
6	27.5	20.5	30.5	19.5	33.0	20.5	33.0	21.5	34.0	23.0	34.5	19.0
7	28.0	20.5	30.0	19.5	33.0	21.0	33.0	22.0	34.5	23.5	34.0	21.5
8	28.0	20.0	28.0	20.5	28.0	21.0	32.5	22.0	35.0	22.5	33.5	22.5
9	28.0	19.5	32.0	20.0	32.0	19.5	32.0	22.0	34.0	23.5	32.5	21.5
10	28.5	19.0	31.0	19.5	32.0	20.5	33.0	22.5	35.0	22.0	32.5	20.0
11	29.0	19.5	29.5	19.0	32.0	18.5	33.0	22.0	35.5	21.5	34.0	21.5
12	30.0	20.0	32.0	18.5	33.0	20.5	33.5	21.0	35.0	21.0	35.5	23.0
13	28.0	19.5	30.5	18.5	---	---	33.5	21.0	34.5	22.0	35.0	21.5
14	24.0	18.5	30.5	19.5	---	---	33.0	21.5	35.0	23.5	35.0	24.0
15	25.0	18.5	30.5	20.0	34.0	22.5	33.0	22.5	36.0	24.5	35.0	24.0
16	25.5	17.5	28.0	19.5	33.5	23.0	33.0	21.5	35.5	23.5	34.5	24.0
17	21.0	12.5	31.0	19.5	33.0	23.0	34.0	21.5	34.0	24.5	35.0	23.5
18	20.0	9.0	32.0	20.0	33.0	22.0	34.0	22.5	34.5	24.0	35.0	24.5
19	26.5	14.0	32.0	21.5	34.0	22.5	35.0	22.5	34.5	23.0	34.5	24.0
20	29.0	16.5	33.0	21.5	33.5	21.5	35.5	22.0	34.0	22.0	34.5	24.0
21	26.0	17.0	34.0	22.0	34.0	21.5	34.5	22.5	34.5	22.5	30.0	25.0
22	24.5	13.5	32.5	22.5	34.0	22.5	34.5	22.0	35.0	24.5	28.0	22.5
23	26.5	17.5	31.5	21.5	33.5	22.0	34.5	23.5	35.0	23.5	32.0	21.5
24	28.0	17.5	27.5	22.0	33.5	22.0	34.5	22.5	35.0	24.0	34.5	21.0
25	29.0	18.0	27.5	22.0	33.5	23.5	36.0	23.0	34.5	24.5	35.5	22.5
26	30.5	18.5	32.0	22.0	34.0	24.0	35.5	23.0	34.5	24.0	35.0	22.0
27	30.5	18.0	34.0	21.5	34.0	23.5	36.0	22.5	32.5	22.5	33.0	24.5
28	28.0	18.5	33.0	22.5	34.5	23.5	36.5	23.5	32.5	23.5	33.5	24.5
29	29.0	16.5	32.5	21.0	34.0	24.0	34.0	24.0	27.5	24.0	34.5	25.0
30	30.0	17.0	32.0	22.5	34.0	24.0	34.5	24.0	32.0	23.0	34.0	23.0
31	---	---	32.5	22.5	---	---	35.0	24.0	33.5	23.0	---	---
MONTH	30.5	9.0	34.0	18.5	---	---	36.5	21.0	36.0	21.0	35.5	18.5

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA

LOCATION.—Lat 33°53'00", long 117°38'40", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on left bank of outlet channel, 2,500 ft downstream from axis of Prado Dam, and 4.5 mi west of Corona.

DRAINAGE AREA.—1,490 mi^2, excludes 768 mi^2 above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1930 to November 1939 (irrigation seasons only), March 1940 to current year. Published as "at Santa Fe Railroad Bridge, near Prado" May 1930 to November 1931, as "at Atchison, Topeka, and Santa Fe Railroad Bridge, near Prado" May 1932 to November 1939, and as "below Prado Dam, near Prado" March 1940 to September 1950.

GAGE.—Water-stage recorder and concrete control since August 1944. Datum of gage is approximately 449 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Mar. 18, 1940, at about same site at various datums.

REMARKS.—Records excellent. Flow regulated since 1940 by Prado Flood-Control Reservoir, capacity, 196,200 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversion for irrigation, discharges of treated effluent, and return flow from irrigated areas. Releases of imported water are made to the basin by the California Water Project at times in some years, via San Antonio Creek from Rialto Pipeline below San Antonio Dam. During the current year, the California Water Project released 15,720 acre-ft to the basin. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,440 ft^3/s, Feb. 21, 1980, gage height, 6.88 ft; maximum gage height, 7.29 ft, Jan. 19, 1993; minimum daily, 2.4 ft^3/s, July 29 to Aug. 3, Sept. 20, 1978 (result of gate closure).

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938 reached a discharge of 100,000 ft^3/s, on basis of slope-area measurement of peak flow at site 2.5 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	191	237	307	372	505	416	361	203	198	204	197
2	199	193	275	308	359	500	415	382	213	192	201	198
3	204	197	291	351	301	506	413	322	208	187	185	199
4	213	201	278	361	309	500	401	221	208	186	171	194
5	211	201	270	336	315	325	390	235	209	187	182	194
6	205	204	269	304	322	475	396	242	204	190	184	169
7	202	211	271	289	325	483	382	223	199	193	186	185
8	197	237	268	287	337	496	311	225	204	196	188	186
9	198	230	265	288	341	510	279	218	213	195	185	182
10	200	225	265	292	340	503	291	216	223	195	181	180
11	200	217	262	294	320	502	256	217	218	188	174	190
12	225	217	264	293	296	501	246	215	212	190	175	182
13	258	214	266	326	299	498	236	202	206	190	172	164
14	319	218	266	337	298	449	247	211	210	193	177	169
15	355	221	273	335	288	386	250	220	212	195	179	171
16	351	182	276	334	289	385	250	230	207	194	176	177
17	340	174	272	333	406	383	222	234	205	190	170	180
18	346	163	272	334	464	381	206	223	201	190	172	185
19	333	155	272	334	360	381	300	216	210	182	175	183
20	329	158	277	333	301	385	378	206	210	176	176	181
21	347	161	280	332	1480	388	393	205	203	183	181	189
22	365	161	273	330	3780	416	389	214	196	177	181	204
23	367	162	268	331	1950	427	384	207	195	178	185	253
24	373	209	266	334	1400	376	387	206	195	181	183	228
25	372	230	265	357	630	324	396	216	199	176	177	214
26	375	229	265	401	572	324	395	230	197	182	179	159
27	376	227	266	405	484	384	397	220	193	182	185	136
28	377	224	267	390	462	420	348	201	196	179	182	132
29	232	237	278	350	513	420	309	199	203	181	180	123
30	195	241	284	274	---	419	304	211	198	192	204	126
31	195	---	286	323	---	418	---	213	---	194	202	---
TOTAL	8656	6090	8387	10203	17913	13370	9987	7141	6150	5812	5652	5430
MEAN	279	203	271	329	618	431	333	230	205	187	182	181
MAX	377	241	291	405	3780	510	416	382	223	198	204	253
MIN	195	155	237	274	288	324	206	199	193	176	170	123
AC-FT	17170	12080	16640	20240	35530	26520	19810	14160	12200	11530	11210	10770

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	106	134	202	318	406	393	246	177	145	119	95.9	91.5
MAX	344	322	709	3543	2733	2556	1101	915	736	446	352	372
(WY)	1984	1997	1967	1993	1998	1980	1980	1998	1983	1998	1983	1997
MIN	22.4	33.5	39.5	49.2	49.8	54.3	43.3	35.2	29.0	17.7	14.8	16.2
(WY)	1962	1963	1963	1963	1961	1961	1961	1961	1961	1960	1960	1960

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	93498		104791			
ANNUAL MEAN	256		286		202	
HIGHEST ANNUAL MEAN					789	1993
LOWEST ANNUAL MEAN					36.4	1961
HIGHEST DAILY MEAN	1710	Jan 28	3780	Feb 22	6440	Feb 23 1980
LOWEST DAILY MEAN	146	Jun 8	123	Sep 29	2.4	Jul 29 1978
ANNUAL SEVEN-DAY MINIMUM	162	Nov 17	160	Sep 24	3.0	Sep 24 1973
INSTANTANEOUS PEAK FLOW			3960	Feb 21	7440	Feb 21 1980
INSTANTANEOUS PEAK STAGE			6.09	Feb 21	7.29	Jan 19 1993
ANNUAL RUNOFF (AC-FT)	185500		207900		146100	
10 PERCENT EXCEEDS	351		398		348	
50 PERCENT EXCEEDS	248		228		120	
90 PERCENT EXCEEDS	195		180		38	

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1967 to current year.
CHEMICAL DATA: Water years 1967 to current year.
SPECIFIC CONDUCTANCE: Water years 1970 to current year.
WATER TEMPERATURE: Water years 1970 to current year.
BIOLOGICAL DATA: Water years 1975–81.
SEDIMENT DATA: Water years 1974–94, 1999 to current year.
CHLORIDE: October 1970 to September 1971.
SUSPENDED-SEDIMENT DISCHARGE: October 1973 to June 1982.

PERIOD OF DAILY RECORD.—Water years 1970 to current year.
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURE: October 1969 to current year.
CHLORIDE: October 1970 to September 1971.
SUSPENDED-SEDIMENT DISCHARGE: October 1973 to June 1982.

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature since October 1969. Auto sampler used to collect water-quality samples throughout water year.

REMARKS.—Specific-conductance and water-temperature values are affected by releases from Prado Dam. Interruptions in record at times due to malfunction of recording or sensing equipment. Sediment data and a portion of chemical data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Apr. 30, 1971; minimum recorded, 220 microsiemens, Feb. 20, 1978.
WATER TEMPERATURE: Maximum recorded, 36.0°C, Sept. 4, 1972, Sept. 8, 1984; minimum recorded, 2.5°C, Dec. 30, 1969.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,870 mg/L, Mar. 5, 1978; minimum daily mean, 3 mg/L, Apr. 2, 1980, and several days during 1982.
SEDIMENT LOAD: Maximum daily, 18,900 tons, Mar. 5, 1978; minimum daily, 0.58 ton, Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,070 microsiemens, Apr. 14, May 20; minimum recorded, 392 microsiemens, Feb. 24.
WATER TEMPERATURE: Maximum recorded, 29.0°C, June 26–27, Aug. 1; minimum recorded, 10.0°C, Jan. 8.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
01...	1200	194	--	--	--	--	964	--	21.5	--
15...†	1230	355	746	87	7.8	8.0	753	23.5	19.5	200
18...	1200	349	--	--	--	--	759	--	18.0	--
NOV										
05...	1150	197	--	--	--	--	996	--	19.0	--
17...†	1000	174	750	98	9.0	8.2	952	18.5	18.5	260
18...	1245	170	--	--	--	--	959	--	16.5	--
DEC										
06...	1430	266	--	--	--	--	918	--	12.0	--
15...†	1010	282	756	95	10.4	8.3	888	19.0	11.0	240
15...	1145	282	--	--	--	--	897	--	11.0	--
JAN										
12...	1240	290	--	--	--	--	935	--	13.0	--
13...†	1120	345	755	95	10.0	7.8	866	18.0	12.5	220
20...	1130	333	--	--	--	--	873	--	15.0	--
25...†	1850	382	749	85	8.3	7.7	512	20.0	15.5	140
31...†	1330	336	753	90	8.9	7.9	718	17.0	15.5	200
FEB										
04...	1230	310	--	--	--	--	881	--	14.0	--
12...†	1300	307	750	87	8.6	8.1	719	17.5	15.0	200
17...†	1210	471	752	92	9.0	7.8	858	16.0	15.5	230
18...	1300	461	--	--	--	--	740	--	15.5	--
MAR										
09...	1325	505	--	--	--	--	644	--	14.0	--
17...†	1300	379	758	96	9.3	8.1	790	26.0	16.5	210
21...	1330	387	--	--	--	--	942	--	18.0	--
APR										
11...	1210	244	--	--	--	--	1010	--	19.5	--
13...†	1530	231	751	102	8.5	8.2	1020	25.5	23.5	280
21...	1325	394	--	--	--	--	600	19.0	17.5	--
MAY										
02...	1245	383	--	--	--	--	981	--	22.0	--
11...†	1430	210	750	103	8.6	8.2	1010	24.5	23.5	260
24...	1210	195	--	--	--	--	988	--	20.5	--
JUN										
09...	1320	211	--	--	--	--	1000	--	22.0	--
14...†	1030	204	747	93	7.9	8.2	960	24.5	22.0	250
20...	1245	206	--	--	--	--	1010	--	24.0	--
JUL										
06...	1140	187	--	--	--	--	992	--	22.5	--
13...	1530	190	750	101	8.1	8.2	975	30.0	25.5	250
21...	1110	181	--	--	--	--	1010	--	23.5	--
AUG										
04...	1200	168	--	--	--	--	1000	--	25.0	--
17...	1050	169	749	95	7.9	8.2	965	30.0	23.5	250
18...	1220	166	--	--	--	--	988	--	24.5	--
SEP										
01...	1130	194	--	--	--	--	972	--	22.0	--
13...	1010	159	746	88	7.6	8.2	963	30.0	21.5	250
14...	1120	161	--	--	--	--	[1]970	28.5	22.5	--

† Sample collected by automatic sampler.
[1] Lab Value.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
01...	--	--	--	--	--	--	--	--	--	--
15...	52	56.4	15.4	8.3	2	70.1	42	151	185	--
18...	--	--	--	--	--	--	--	--	--	--
NOV										
05...	--	--	--	--	--	--	--	--	--	--
17...	64	75.2	17.3	11.2	2	88.7	41	195	238	--
18...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	--	--
15...	53	65.8	17.2	8.0	2	85.5	43	183	218	2
15...	--	--	--	--	--	--	--	--	--	--
JAN										
12...	--	--	--	--	--	--	--	--	--	--
13...	52	62.2	16.8	8.0	2	83.0	44	172	210	--
20...	--	--	--	--	--	--	--	--	--	--
25...	38	37.9	10.0	10.3	2	45.4	40	98	119	--
31...	41	56.8	13.9	8.3	2	66.8	41	159	193	--
FEB										
04...	--	--	--	--	--	--	--	--	--	--
12...	48	57.0	14.2	9.0	2	64.5	40	153	187	--
17...	63	64.6	16.0	8.6	2	68.9	39	164	200	--
18...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
17...	42	61.8	14.6	11.2	2	63.9	38	172	210	--
21...	--	--	--	--	--	--	--	--	--	--
APR										
11...	--	--	--	--	--	--	--	--	--	--
13...	69	82.1	18.1	10.4	2	93.2	41	210	256	--
21...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	--	--	--	--	--
11...	54	75.9	17.8	10.4	2	91.0	42	208	254	--
24...	--	--	--	--	--	--	--	--	--	--
JUN										
09...	--	--	--	--	--	--	--	--	--	--
14...	46	71.3	17.5	10.1	3	94.4	44	204	249	--
20...	--	--	--	--	--	--	--	--	--	--
JUL										
06...	--	--	--	--	--	--	--	--	--	--
13...	50	71.8	17.5	7.9	3	94.2	44	201	245	--
21...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
17...	56	70.9	18.0	10.3	3	94.5	44	195	238	--
18...	--	--	--	--	--	--	--	--	--	--
SEP										
01...	--	--	--	--	--	--	--	--	--	--
13...	46	69.0	17.7	11.0	3	95.7	45	199	243	--
14...	--	--	--	--	--	--	--	--	--	--

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT										
01...	--	--	--	--	--	--	--	--	--	--
15...	83.2	.3	18.3	81.4	.71	.75	.184	2.88	.065	.655
18...	--	--	--	--	--	--	--	--	--	--
NOV										
05...	--	--	--	--	--	--	--	--	--	--
17...	106	.4	21.2	103	.68	1.3	.118	5.92	.060	.822
18...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	--	--
15...	101	.4	19.4	91.3	.54	1.1	.046	5.57	.037	.850
15...	--	--	--	--	--	--	--	--	--	--
JAN										
12...	--	--	--	--	--	--	--	--	--	--
13...	101	.4	18.2	87.1	.66	1.8	.139	5.57	.046	.696
20...	--	--	--	--	--	--	--	--	--	--
25...	56.5	.3	9.7	52.6	2.3	3.3	1.04	4.04	.105	.730
31...	72.7	.5	15.1	74.6	1.1	1.9	.400	4.59	.090	.647
FEB										
04...	--	--	--	--	--	--	--	--	--	--
12...	73.2	.4	16.0	76.5	.79	1.5	.324	4.95	.079	.673
17...	84.0	.4	17.5	101	1.1	1.4	.594	5.08	.146	.621
18...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
17...	75.8	.4	16.0	84.2	1.2	1.9	.393	4.02	.144	.883
21...	--	--	--	--	--	--	--	--	--	--
APR										
11...	--	--	--	--	--	--	--	--	--	--
13...	108	.5	19.8	111	.65	1.4	.108	5.63	.068	.682
21...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	--	--	--	--	--
11...	109	.5	20.3	109	.61	1.5	.058	5.55	.055	.900
24...	--	--	--	--	--	--	--	--	--	--
JUN										
09...	--	--	--	--	--	--	--	--	--	--
14...	111	.5	20.9	103	.61	1.1	.099	5.12	.070	.943
20...	--	--	--	--	--	--	--	--	--	--
JUL										
06...	--	--	--	--	--	--	--	--	--	--
13...	111	.4	22.0	104	.52	1.1	.027	4.94	.043	.752
21...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
17...	104	.4	21.5	102	.71	1.0	.091	5.65	.075	.966
18...	--	--	--	--	--	--	--	--	--	--
SEP										
01...	--	--	--	--	--	--	--	--	--	--
13...	106	.4	20.5	101	.75	1.3	.116	5.47	.096	.853
14...	--	--	--	--	--	--	--	--	--	--

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
01...	--	--	--	--	--	582	--	--	--	--
15...	.628	.664	5.9	1.9	.61	450	439	20	63	e16
18...	--	--	--	--	--	453	--	--	--	--
NOV										
05...	--	--	--	--	--	613	--	--	--	--
17...	.850	1.21	4.4	1.0	.78	574	569	10	52	e11
18...	--	--	--	--	--	592	--	--	--	--
DEC										
06...	--	--	--	--	--	550	--	--	--	--
15...	.738	.980	3.9	.7	.74	546	525	e10	52	e19
15...	--	--	--	--	--	546	--	--	--	--
JAN										
12...	--	--	--	--	--	559	--	--	--	--
13...	.651	1.57	3.8	1.0	.72	528	507	10	82	92
20...	--	--	--	--	--	524	--	--	--	--
25...	.584	1.16	14	4.2	.44	327	302	70	84	48
31...	.551	1.01	8.4	.7	.60	444	426	20	74	22
FEB										
04...	--	--	--	--	--	521	--	--	--	--
12...	.608	.955	6.9	1.0	.62	457	427	20	20	91
17...	.550	.780	5.4	.9	.72	526	484	10	20	36
18...	--	--	--	--	--	450	--	--	--	--
MAR										
09...	--	--	--	--	--	388	--	--	--	--
17...	.829	1.34	6.2	.8	.66	482	452	10	148	139
21...	--	--	--	--	--	579	--	--	--	--
APR										
11...	--	--	--	--	--	620	--	--	--	--
13...	.677	1.42	4.7	4.9	.82	606	596	10	147	e14
21...	--	--	--	--	--	365	--	--	--	--
MAY										
02...	--	--	--	--	--	604	--	--	--	--
11...	.819	1.92	4.4	3.3	.82	604	587	e10	135	23
24...	--	--	--	--	--	609	--	--	--	--
JUN										
09...	--	--	--	--	--	601	--	--	--	--
14...	.916	1.21	4.7	1.8	.81	597	577	e10	73	e11
20...	--	--	--	--	--	607	--	--	--	--
JUL										
06...	--	--	--	--	--	600	--	--	--	--
13...	.751	1.03	4.7	2.6	.81	595	573	<10	42	<20
21...	--	--	--	--	--	599	--	--	--	--
AUG										
04...	--	--	--	--	--	598	--	--	--	--
17...	.964	1.17	4.4	1.2	.79	582	567	e10	48	e15
18...	--	--	--	--	--	596	--	--	--	--
SEP										
01...	--	--	--	--	--	584	--	--	--	--
13...	.785	1.06	4.8	2.7	.78	575	568	10	55	<20
14...	--	--	--	--	--	598	--	--	--	--

e Estimated.
< Actual value is known to be less than the value shown.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
APR								
13...	1541	751	102	8.5	8.1	1010	23.5	4.00
13...	1542	751	102	8.5	8.1	1010	23.5	11.0
13...	1543	751	102	8.5	8.1	1010	23.5	18.0
13...	1544	751	102	8.5	8.1	1010	23.5	25.0
13...	1545	751	101	8.4	8.1	1010	23.5	32.0

Instantaneous discharge at the time of cross-sectional measurements: 233 ft^3/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
15...N†	1230	355	19.5	230	220	67
NOV						
17...N†	1000	174	18.5	177	83	52
DEC						
15...N†	1010	282	11.0	105	80	64
JAN						
13...N†	1120	345	12.5	553	515	71
25...N†	1850	382	15.5	260	268	70
31...N†	1330	336	15.5	241	219	59
FEB						
12...N†	1300	307	15.0	216	179	67
17...N†	1210	471	15.5	68	86	50
MAR						
17...N†	1300	379	16.5	239	245	51
APR						
13...N†	1530	231	23.5	427	266	77
MAY						
11...N†	1430	210	23.5	604	342	73
JUN						
14...N†	1030	204	22.0	119	66	93
JUL						
13...N	1530	190	25.5	120	62	82
AUG						
17...N	1050	169	23.5	80	37	92
SEP						
13...N	1010	159	21.5	65	28	93

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

† Sample collected by automatic sampler.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	971	939	984	964	971	953	921	770	827	791	694	615
2	962	920	989	977	960	905	927	852	856	821	794	608
3	967	925	991	977	937	881	923	828	866	849	785	662
4	965	923	994	974	945	935	887	824	888	863	856	697
5	966	932	992	960	940	912	962	869	915	879	1050	763
6	982	947	988	956	922	897	913	873	941	897	1030	606
7	972	938	958	908	921	860	896	872	944	904	660	631
8	957	935	939	883	925	862	951	891	955	880	698	632
9	951	924	942	927	897	869	931	904	888	830	702	618
10	948	915	933	923	923	872	915	899	862	641	675	569
11	1000	934	957	929	923	873	928	891	739	585	680	617
12	1000	934	946	933	924	871	942	915	751	697	681	651
13	976	898	952	932	905	865	930	848	697	631	697	658
14	918	780	965	935	954	876	860	836	785	673	714	660
15	781	741	968	954	914	885	851	825	763	704	794	682
16	758	744	969	949	916	886	869	830	795	718	820	732
17	782	750	969	952	941	902	880	862	873	733	826	764
18	762	748	974	950	910	871	880	869	806	737	867	815
19	764	733	978	928	916	873	877	864	932	768	908	820
20	771	758	967	930	898	866	897	869	882	805	900	846
21	758	717	986	923	881	858	913	881	908	436	1000	869
22	720	708	982	924	899	872	932	900	575	436	954	858
23	721	713	983	925	890	862	925	880	537	408	964	901
24	736	721	965	926	888	856	897	866	543	392	996	925
25	746	733	972	927	892	873	878	512	511	422	977	933
26	756	742	981	927	882	854	607	551	543	455	981	942
27	776	754	978	926	869	842	693	597	656	502	988	962
28	811	775	971	926	969	809	804	693	702	541	996	967
29	953	811	965	931	978	919	857	796	708	581	1000	975
30	965	950	969	937	946	912	877	836	---	---	1020	976
31	967	949	---	---	948	894	844	711	---	---	1020	972
MONTH	1000	708	994	883	978	809	962	512	955	392	1050	569
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1030	974	1010	951	1010	974	1000	943	982	962	987	959
2	1050	979	1000	947	985	964	994	950	989	966	982	930
3	1050	994	1040	996	984	950	999	947	1010	988	970	904
4	1050	1010	1040	997	999	957	1020	951	1010	966	955	883
5	1060	1020	1020	991	1020	985	1010	956	1010	937	948	887
6	1050	1020	1020	993	1030	977	997	947	950	883	937	886
7	1060	1030	1020	982	1040	990	949	920	898	851	945	890
8	1050	1010	1020	979	1020	977	962	921	872	845	941	899
9	1030	987	1020	984	1010	975	972	919	862	838	960	904
10	1040	999	1010	974	999	944	967	925	866	838	980	908
11	1030	1000	1020	988	974	907	954	941	896	855	960	914
12	1030	997	1030	973	985	885	964	944	920	868	980	920
13	1020	988	1030	968	987	884	971	956	928	871	987	924
14	1070	989	1060	1000	977	901	983	958	929	875	988	926
15	1050	1020	1050	1000	967	883	980	952	949	901	971	927
16	1040	1010	1040	1010	989	891	981	952	966	910	953	881
17	1030	573	1050	996	954	900	979	956	963	927	934	866
18	779	490	1020	990	1030	907	986	964	992	891	922	881
19	603	557	1020	1000	1020	967	997	971	966	907	935	834
20	642	553	1070	991	1010	934	1010	978	941	890	969	845
21	714	570	1020	984	983	933	1010	976	914	866	937	907
22	784	629	1010	966	957	917	1020	963	916	885	922	878
23	829	724	1030	986	981	909	1010	951	907	861	884	749
24	886	797	992	961	1000	938	1000	948	912	877	902	836
25	925	835	1000	963	985	948	970	942	980	880	882	840
26	946	886	987	954	974	944	983	927	989	936	938	844
27	955	915	977	940	976	930	996	945	977	927	948	924
28	963	922	980	936	967	922	1000	963	968	921	1010	936
29	1000	945	980	896	964	926	1000	971	969	937	1030	993
30	1010	969	1020	927	988	934	987	971	976	949	1040	1010
31	---	---	1010	984	---	---	988	970	973	949	---	---
MONTH	1070	490	1070	896	1040	883	1020	919	1010	838	1040	749

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.0	20.5	20.5	17.0	15.5	14.5	13.5	12.0	16.5	14.0	14.5	13.5
2	24.0	20.5	20.0	16.5	15.5	14.0	13.0	12.0	17.0	14.0	14.5	14.0
3	23.5	20.5	20.0	16.5	15.0	13.0	12.0	11.5	16.0	12.5	15.0	14.5
4	23.5	19.5	19.5	17.0	13.5	12.0	13.0	11.5	16.0	13.0	15.5	15.0
5	23.5	20.0	19.5	18.0	14.0	12.0	13.5	11.5	16.5	14.0	15.5	13.0
6	22.5	20.0	19.5	17.0	14.0	12.0	13.0	11.0	17.0	14.0	13.5	12.5
7	22.0	19.0	20.0	18.0	14.0	12.5	13.0	10.5	17.0	14.0	13.0	12.5
8	23.5	19.5	20.0	17.5	14.0	12.5	13.0	10.0	17.0	14.5	13.5	13.0
9	24.0	19.5	19.5	16.5	13.0	11.5	13.0	10.5	17.0	14.5	14.0	13.5
10	23.5	20.0	19.5	16.5	13.0	12.5	13.5	11.0	16.5	15.0	14.0	13.5
11	23.5	20.0	19.5	16.0	13.5	12.0	14.0	11.5	15.5	14.5	14.0	13.5
12	23.5	19.5	19.5	16.0	13.0	11.5	14.0	13.0	15.0	14.5	14.0	13.5
13	23.5	19.5	20.0	16.0	13.0	11.5	14.5	12.0	15.0	15.0	14.5	14.0
14	23.0	19.5	19.5	17.0	13.0	11.5	15.0	12.0	15.5	15.0	15.0	14.0
15	22.0	19.5	20.0	17.5	12.5	11.0	15.5	12.5	15.5	15.0	15.5	14.5
16	22.5	19.5	19.5	16.5	13.5	12.0	15.0	13.5	15.5	15.0	16.0	15.0
17	22.0	18.5	19.5	18.5	13.5	12.0	15.5	14.0	16.0	15.0	17.0	15.5
18	20.5	17.5	18.5	16.5	14.0	12.5	16.5	14.5	15.5	15.0	17.0	16.5
19	21.0	16.5	17.5	16.0	14.0	12.5	16.5	14.0	16.0	15.0	17.5	17.0
20	21.5	17.5	17.5	17.0	14.0	12.5	17.0	15.0	16.0	15.0	18.5	17.5
21	21.0	17.5	17.5	16.5	14.5	12.5	17.0	15.0	16.0	14.0	18.0	17.0
22	21.0	17.5	16.5	15.0	14.0	12.0	16.0	14.0	14.0	13.5	17.5	17.0
23	21.0	18.0	15.0	13.5	13.0	11.5	15.5	13.5	13.5	13.0	18.0	17.0
24	21.0	18.0	14.0	13.0	13.5	12.0	17.0	14.5	13.5	12.5	18.0	17.0
25	21.5	18.0	14.0	13.0	13.5	11.5	17.0	15.0	13.0	12.5	17.5	17.0
26	21.0	18.0	14.5	13.5	13.5	11.5	16.0	15.0	13.5	13.0	18.0	17.0
27	20.5	17.5	14.5	14.0	14.0	12.5	15.5	15.0	14.5	13.0	18.0	17.0
28	20.0	18.0	15.0	14.5	14.0	12.5	15.5	14.5	14.0	13.0	17.5	17.5
29	21.0	18.5	15.5	14.5	14.0	12.0	16.5	14.0	14.5	13.5	17.5	17.5
30	20.5	17.5	15.5	15.0	13.5	11.5	17.0	15.0	---	---	18.0	17.5
31	21.0	16.5	---	---	13.5	12.5	16.5	15.5	---	---	18.5	17.5
MONTH	24.0	16.5	20.5	13.0	15.5	11.0	17.0	10.0	17.0	12.5	18.5	12.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.5	17.5	24.0	21.5	26.5	20.5	28.0	22.5	29.0	24.0	24.0	21.0
2	18.5	17.5	24.0	22.0	26.5	21.0	27.5	22.0	28.5	24.5	24.5	20.5
3	19.5	18.5	25.5	21.0	27.0	20.5	27.0	22.5	28.0	23.5	24.5	20.0
4	20.5	19.0	25.5	20.5	27.0	20.5	26.5	21.5	28.0	23.0	25.0	20.0
5	21.0	19.5	24.5	21.0	27.0	21.0	26.5	21.0	28.5	23.0	25.0	20.0
6	21.0	20.0	25.0	20.5	27.0	20.5	26.5	21.0	28.0	23.5	25.0	20.0
7	21.5	19.0	24.5	20.0	26.5	20.5	26.5	21.5	27.5	23.5	25.0	20.5
8	23.5	18.5	25.0	20.5	24.0	20.5	26.5	21.5	27.5	22.5	25.0	21.0
9	23.0	18.0	25.5	20.0	25.0	18.5	26.5	21.5	27.0	23.0	24.5	20.0
10	22.5	18.0	25.0	21.0	25.5	19.5	26.0	21.5	27.0	22.0	25.0	19.5
11	24.0	18.0	24.0	19.0	26.5	20.0	26.0	21.0	27.5	22.5	25.5	20.0
12	24.5	18.5	24.5	18.0	26.5	20.5	26.0	21.0	27.5	22.5	25.0	20.5
13	24.0	19.0	24.0	18.0	27.0	21.0	27.0	21.0	27.5	22.5	25.0	21.0
14	21.5	18.5	24.0	18.5	27.5	21.5	27.0	21.5	27.5	23.0	26.0	22.0
15	21.0	17.5	24.0	18.5	27.5	22.0	27.5	22.5	27.5	23.5	26.5	22.5
16	22.5	17.5	22.5	18.5	26.5	22.0	27.0	22.0	28.0	23.5	27.5	22.5
17	20.5	17.5	23.5	17.5	26.5	22.0	27.0	21.5	27.5	23.5	27.0	23.0
18	17.5	16.0	25.0	18.0	26.5	22.0	28.5	22.0	27.0	23.0	26.5	23.0
19	17.0	16.0	25.5	19.0	27.0	22.0	28.5	22.5	27.5	22.0	26.0	22.5
20	17.5	16.5	26.5	20.0	27.0	21.5	28.0	22.5	26.5	21.5	25.0	22.5
21	17.5	17.0	27.0	20.5	27.0	22.0	27.5	22.5	27.0	22.0	24.0	22.5
22	18.5	17.5	26.5	20.5	27.5	22.0	28.0	22.5	26.5	22.5	22.5	21.0
23	19.0	18.5	24.0	20.5	27.0	22.0	28.5	23.5	27.0	22.0	23.5	21.0
24	20.0	19.0	22.5	20.0	27.5	22.0	28.0	23.0	27.0	23.0	24.5	20.0
25	21.0	19.5	21.0	19.0	28.0	22.5	28.5	23.0	27.0	24.0	24.5	20.5
26	22.0	21.0	25.0	19.0	29.0	23.5	28.5	23.0	27.0	23.0	24.5	21.0
27	23.0	22.0	27.0	20.0	29.0	23.0	28.0	23.0	25.5	22.5	23.5	22.0
28	23.0	22.5	27.5	21.0	28.5	23.0	28.5	23.0	25.5	22.5	22.5	22.0
29	22.5	21.5	27.0	21.5	28.5	23.0	27.0	23.0	24.5	22.5	22.5	21.5
30	22.5	20.5	26.0	21.5	28.0	23.0	27.5	23.0	24.5	21.5	22.0	21.0
31	---	---	25.5	21.0	---	---	28.0	23.0	24.5	21.5	---	---
MONTH	24.5	16.0	27.5	17.5	29.0	18.5	28.5	21.0	29.0	21.5	27.5	19.5

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION, BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.—Lat 33°51'23", long 117°47'48", in NW 1/4 NE 1/4 sec.2, T.4 S., R.9 W., in Canon de Santa Ana, Orange County, Hydrologic Unit 18070203, 1,000 ft upstream from diversion point, 0.1 mi south of La Palma Avenue, 0.3 mi west of Imperial Highway, and 7.9 mi east of Anaheim.

DRAINAGE AREA.—1,545 mi^2, excludes 768 mi^2 above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and collapsible rubber dam control on main channel of river; water-stage recorder and acoustic-velocity meter on each of two box culverts; water-stage recorder and Parshall flume control on diversion (see station 11075620). Elevation of gage is 280 ft above sea level, from topographic map. River and diversion gages at different datums.

REMARKS.—Daily values for this station represent total flow in river immediately below Imperial Highway and are derived by combining flows in river at rubber dam, 40 ft downstream from diversion point, with flows in diversion and gaged culverts. Culverts reroute a portion of the total flow around rubber dam and back into the channel for downstream recharge. Diversion flows (see station 11075620) are routed to various off-river recharge basins. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records were provided by Orange County Water District, in connection with the National Water-Quality Assessment (NAWQA) Program. Data not reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,470 ft^3/s, estimated, Feb. 22, 2000; minimum daily discharge, 123 ft^3/s, estimated, Sept. 29, 1999.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 2,470 ft^3/s, estimated, Feb. 22; minimum daily discharge, 123 ft^3/s, estimated, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e194	224	263	323	379	547	387	340	220	e200	e204	e197
2	e195	216	281	328	406	527	382	395	217	e196	e201	e198
3	e200	216	316	359	338	554	375	355	212	e190	e185	e199
4	e208	226	306	392	325	590	359	264	214	e189	e171	e194
5	e207	227	299	368	330	e609	346	279	216	e189	e182	e194
6	e201	223	295	335	338	e430	343	284	210	e192	e184	e169
7	e217	228	296	313	342	507	353	267	204	e195	e186	e185
8	202	244	299	307	349	588	299	273	207	e198	e188	e186
9	205	262	294	306	362	533	260	259	216	e197	e185	e182
10	208	250	292	308	384	523	268	236	221	e197	e181	e180
11	221	244	291	312	383	521	255	236	e358	e188	e174	e190
12	234	242	290	313	390	519	245	233	e347	e190	e175	e182
13	259	237	287	334	340	515	238	224	e213	e190	e172	e164
14	316	238	e286	e358	349	484	246	219	e217	e193	e177	e169
15	370	243	288	355	314	407	252	234	e219	e195	e179	e171
16	371	220	293	352	348	401	254	238	e214	e194	e176	e177
17	362	192	291	354	402	397	354	245	e212	e190	e170	e180
18	364	193	290	354	490	392	265	244	e208	e190	e172	e185
19	356	182	290	352	432	390	278	239	e217	e182	e175	e183
20	348	180	293	352	379	389	368	230	217	e176	e176	e181
21	365	182	297	352	e1310	394	399	233	e208	e183	e181	e189
22	389	184	292	349	e2470	411	396	236	e197	e177	e181	e204
23	393	185	287	350	e1640	429	391	222	e196	e178	e185	e253
24	400	214	284	352	e1160	407	384	220	e196	e181	e183	e228
25	402	254	282	428	e664	321	403	235	e201	e176	e177	e214
26	404	253	283	431	617	318	405	249	e198	e182	e179	e159
27	408	251	285	432	586	347	403	250	e194	e182	e185	e136
28	414	249	287	424	479	409	377	230	e197	e179	e182	e132
29	290	256	290	393	552	407	314	225	e204	e181	e180	e123
30	224	267	300	314	---	403	307	231	e199	e192	e204	e126
31	219	---	302	336	---	397	---	235	---	e194	e202	---
TOTAL	9146	6782	9029	10936	16858	14066	9906	7860	6549	5836	5652	5430
MEAN	295	226	291	353	581	454	330	254	218	188	182	181
MAX	414	267	316	432	2470	609	405	395	358	200	204	253
MIN	194	180	263	306	314	318	238	219	194	176	170	123
AC-FT	18140	13450	17910	21690	33440	27900	19650	15590	12990	11580	11210	10770

e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION, BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	242	256	297	346	453	362	302	282	224	207	191	194
MAX	295	287	302	353	581	454	330	310	229	225	200	208
(WY)	2000	1999	1999	2000	2000	2000	2000	1999	1999	1999	1999	1999
MIN	189	226	291	339	320	270	274	254	218	188	182	181
(WY)	1999	2000	2000	1999	1999	1999	1999	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	96932		108050			
ANNUAL MEAN	266		295		279	
HIGHEST ANNUAL MEAN					295	2000
LOWEST ANNUAL MEAN					262	1999
HIGHEST DAILY MEAN	1900	Jan 28	e2470	Feb 22	e2470	Feb 22 2000
LOWEST DAILY MEAN	151	Jun 8	e123	Sep 29	e123	Sep 29 2000
ANNUAL SEVEN-DAY MINIMUM	185	Nov 17	160	Sep 24	160	Sep 24 2000
ANNUAL RUNOFF (AC-FT)	192300		214300		202000	
10 PERCENT EXCEEDS	355		407		396	
50 PERCENT EXCEEDS	253		252		250	
90 PERCENT EXCEEDS	202		181		184	

e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1998 to current year.
CHEMICAL DATA: October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.
SEDIMENT DATA: October 1998 to current year.

PERIOD OF DAILY RECORD.—July 1999 to September 1999 (discontinued).
SPECIFIC CONDUCTANCE: July 1999 to September 1999 (discontinued).
WATER TEMPERATURE: July 1999 to September 1999 (discontinued).

INSTRUMENTATION.—Water-quality monitor for specific conductance and water temperature from July 1999 to September 1999.

REMARKS.—Water-quality monitor relocated from diversion channel, due to deflation of rubber dam and lack of flow in diversion. Missing specific-conductance data due to malfunction of recording equipment. Water-quality data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD DAILY OF RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,070 microsiemens, Sept. 8, 1999; minimum recorded, 746 microsiemens, Sept. 2, 1999.
WATER TEMPERATURE: Maximum recorded, 26.5°C, several days in August 1999; minimum recorded, 20.0°C, Sept. 20, 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT											
23...	1100	e200	769	115	10.8	8.4	1010	23.5	18.5	300	83
NOV											
20...	1030	399	770	106	10.7	8.3	1000	23.5	15.5	300	95
DEC											
10...	0940	299	777	106	12.0	8.2	1100	17.5	10.5	320	83
JAN											
14...	1100	257	772	108	11.2	8.4	1040	23.5	14.0	310	91
25...	1140	361	--	--	--	8.0	873	12.5	14.0	250	79
FEB											
09...	2000	384	--	--	--	8.2	797	10.5	14.0	240	84
12...	1100	500	771	107	11.8	8.2	857	25.5	11.5	250	78
MAR											
11...	1120	265	766	107	11.1	8.5	1040	12.5	14.0	290	85
15...	1350	391	764	104	10.4	8.4	789	13.5	15.5	230	75
APR											
16...	1030	198	757	118	11.5	8.4	861	29.0	16.0	250	81
MAY											
20...	1200	355	755	126	10.8	8.4	1040	23.0	22.5	290	57
JUN											
18...	0930	e215	755	110	9.2	8.4	1000	22.0	23.5	290	86
JUL											
15...	1200	e168	753	98	7.8	8.4	1040	32.0	26.0	290	83
26...	1630	e229	752	111	8.9	8.4	989	30.0	25.5	280	76
AUG											
12...	1040	e220	756	105	8.9	8.3	1020	26.0	23.0	280	75
25...	0950	e195	749	106	8.7	8.3	1060	32.5	24.0	300	87
SEP											
16...	1150	e205	752	97	8.4	8.3	1040	22.5	21.5	300	88
29...	1000	e218	754	107	9.1	8.4	1040	34.0	22.5	290	81

e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT											
23...	83.6	21.2	10.5	2	89.3	39	208	254	3	98.2	.6
NOV											
20...	86.6	20.9	11.5	2	90.7	38	207	253	--	104	.4
DEC											
10...	92.4	22.9	11.6	2	88.4	36	242	295	--	110	.6
JAN											
14...	87.6	21.7	11.4	2	91.8	38	216	262	1	104	.4
25...	70.2	18.9	1.2	2	79.4	40	174	212	--	85.4	.4
FEB											
09...	68.6	16.9	7.4	2	64.4	36	157	191	--	73.3	.4
12...	71.2	16.8	9.6	2	73.9	38	169	206	--	84.9	.4
MAR											
11...	82.9	21.0	9.6	2	87.8	38	209	244	5	97.2	.5
15...	63.6	17.2	7.6	2	67.8	38	155	187	1	77.8	.4
APR											
16...	70.3	17.9	8.9	2	71.3	37	169	201	2	81.8	.4
MAY											
20...	82.4	20.9	9.8	2	92.0	40	234	278	4	106	.5
JUN											
18...	82.0	20.7	9.5	2	90.8	40	205	245	2	106	.5
JUL											
15...	80.3	20.8	10.7	2	96.5	41	202	241	3	113	.5
26...	79.6	19.8	10.3	2	94.4	41	204	239	5	107	.4
AUG											
12...	78.4	20.3	9.7	2	95.5	42	204	245	2	111	.5
25...	82.0	22.0	10.1	2	98.7	41	208	248	3	112	.5
SEP											
16...	83.3	21.7	10.6	2	94.6	40	211	252	2	108	.5
29...	80.3	21.3	10.8	2	92.8	40	208	251	1	107	.5

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT											
23...	21.5	134	.92	1.1	.036	5.16	.085	.786	.678	.855	4.8
NOV											
20...	22.7	128	.80	1.1	.116	6.43	.134	.826	.740	.913	5.1
DEC											
10...	23.3	137	.89	1.6	.439	7.29	.092	.961	.771	.973	5.1
JAN											
14...	21.5	130	.68	1.0	.096	8.35	.109	.932	.915	1.08	4.1
25...	18.0	112	.98	1.3	.404	6.72	.148	.810	.798	.917	4.8
FEB											
09...	17.0	104	.58	.99	.150	6.81	.072	.596	.680	.736	4.4
12...	19.1	101	.78	1.1	.198	7.87	.103	.828	.815	.936	5.2
MAR											
11...	18.8	126	.55	.97	<.020	8.05	.041	1.01	1.02	1.18	4.7
15...	14.8	104	.81	1.1	.161	5.59	.046	.718	.710	.846	5.8
APR											
16...	17.0	119	.55	.87	<.020	5.34	.081	.660	.587	.707	5.6
MAY											
20...	20.7	123	.64	1.1	.022	5.13	.051	.977	.953	1.16	5.2
JUN											
18...	21.0	133	.55	1.1	<.020	2.25	.051	.897	.810	1.13	4.8
JUL											
15...	22.9	136	.63	1.3	.030	4.28	.054	.897	.833	1.40	4.8
26...	22.7	127	.48	1.3	<.020	4.85	.032	1.04	1.02	1.96	4.2
AUG											
12...	21.2	130	.42	.86	<.020	4.76	.033	.855	.905	1.20	4.5
25...	21.6	142	.44	1.0	<.020	4.10	.031	.817	.830	1.08	4.3
SEP											
16...	21.3	136	.50	.90	<.020	4.51	.032	.763	.916	1.20	4.3
29...	21.0	133	.41	.90	<.020	4.35	.028	.776	.832	1.08	4.1

< Actual value is known to be less than the value shown.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT											
23...	1.4	.87	643	612	--	--	--	--	--	--	--
NOV											
20...	.9	.87	640	621	--	--	--	--	--	--	--
DEC											
10...	2.1	.96	705	667	--	--	--	--	--	--	--
JAN											
14...	1.1	.90	662	638	--	--	--	--	--	--	--
25...	1.4	.74	547	522	--	--	--	--	--	--	--
FEB											
09...	2.3	.68	503	478	--	--	--	--	--	--	--
12...	.8	.74	544	516	--	--	--	--	--	--	--
MAR											
11...	1.4	.91	666	607	--	--	--	--	--	--	--
15...	1.8	.69	504	473	--	--	--	--	--	--	--
APR											
16...	.9	.74	545	513	--	--	--	--	--	--	--
MAY											
20...	1.4	.89	654	622	--	--	--	--	--	--	--
JUN											
18...	3.2	.87	643	598	--	--	--	--	--	--	--
JUL											
15...	5.7	.86	636	623	--	--	--	--	--	--	--
26...	3.5	.84	620	609	--	--	--	--	--	--	--
AUG											
12...	>6.2	.86	636	613	--	--	--	--	--	--	--
25...	2.9	.87	640	634	--	--	--	--	--	--	--
SEP											
16...	3.6	.87	637	625	4	<1	4.1	46	<1	<1.0	<1.0
29...	2.7	.84	620	613	--	--	--	--	--	--	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
OCT											
23...	--	--	e10	--	23	--	--	--	--	--	--
NOV											
20...	--	--	e10	--	22	--	--	--	--	--	--
DEC											
10...	--	--	e10	--	257	--	--	--	--	--	--
JAN											
14...	--	--	10	--	60	--	--	--	--	--	--
25...	--	--	10	--	42	--	--	--	--	--	--
FEB											
09...	--	--	<10	--	21	--	--	--	--	--	--
12...	--	--	<10	--	13	--	--	--	--	--	--
MAR											
11...	--	--	<10	--	42	--	--	--	--	--	--
15...	--	--	e10	--	30	--	--	--	--	--	--
APR											
16...	--	--	<10	--	17	--	--	--	--	--	--
MAY											
20...	--	--	<10	--	26	--	--	--	--	--	--
JUN											
18...	--	--	<10	--	24	--	--	--	--	--	--
JUL											
15...	--	--	<10	--	29	--	--	--	--	--	--
26...	--	--	<10	--	15	--	--	--	--	--	--
AUG											
12...	--	--	<10	--	15	--	--	--	--	--	--
25...	--	--	<10	--	12	--	--	--	--	--	--
SEP											
16...	<1	3	<10	<1	15	11	4	1.3	<1	9	10
29...	--	--	<10	--	11	--	--	--	--	--	--

> Actual value is known to be greater than the value shown.
< Actual value is known to be less than the value shown.
e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
APR								
16...	1012	757	119	11.6	8.4	853	16.0	17.0
16...	1013	757	118	11.5	8.3	853	16.0	51.0
16...	1014	757	118	11.5	8.4	854	16.0	85.0
16...	1015	757	116	11.3	8.4	854	16.0	119
16...	1016	757	124	12.0	8.4	874	16.5	153
AUG								
12...	1053	756	106	9.0	8.2	1040	23.0	8.00
12...	1054	756	104	8.8	8.2	1030	23.0	25.0
12...	1055	756	105	8.9	8.3	1030	23.0	42.0
12...	1056	756	107	9.0	8.3	1030	23.5	59.0
12...	1057	756	112	9.3	8.4	1030	24.0	76.0

Instantaneous discharge at the time of cross-sectional measurements: Apr. 16, 200 ft^3/s; Aug. 12, 220 ft^3/s, estimated.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
23...N	1100	e200	18.5	32	e17	74
NOV						
20...N	1030	399	15.5	44	47	85
DEC						
10...N	0940	299	10.5	90	73	100
JAN						
14...N	1100	257	14.0	58	40	100
25...N	1140	361	14.0	75	73	98
FEB						
09...N	2000	384	14.0	73	76	94
12...N	1100	500	11.5	41	55	85
MAR						
11...N	1120	265	14.0	57	41	86
15...N	1350	391	15.5	84	89	98
APR						
16...N	1030	198	16.0	20	11	75
MAY						
20...N	1200	355	22.5	42	40	88
JUN						
18...N	0930	e215	23.5	133	e77	86
JUL						
15...N	1200	e168	26.0	448	e203	97
26...N	1630	e229	25.5	200	e124	89
AUG						
12...N	1040	e220	23.0	142	e84	95
25...N	0950	e195	24.0	135	e71	94
SEP						
16...N	1150	e205	21.5	220	e122	96
29...N	1000	e218	22.5	155	e91	95

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality (NAWQA) Program protocols.
e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
15...	1030	378	752	99	8.8	8.2	803	22.5	20.5	220
29...	1000	260	756	95	8.8	8.2	813	20.5	18.5	260
NOV										
18...	0940	193	763	100	9.6	8.3	995	16.5	17.0	290
30...	1220	268	761	102	10.1	8.3	986	--	15.5	290
DEC										
16...	0950	296	760	111	11.6	8.3	930	22.5	13.0	250
28...	0950	288	762	104	10.8	8.4	942	22.5	13.5	260
JAN										
13...	0930	315	761	101	10.6	8.3	932	16.0	13.0	240
25...	1410	461	756	92	9.0	8.2	834	16.5	16.0	230
FEB										
01...	1520	381	759	98	9.6	8.0	914	--	16.0	250
12...	0430	620	--	--	--	7.9	371	--	13.5	100
18...	0940	489	759	95	9.6	8.2	765	14.5	14.5	220
23...	0950	e2520	755	94	9.8	7.9	423	12.5	13.0	120
29...	1030	554	759	80	8.1	8.1	685	17.5	14.5	190
MAR										
17...	1040	397	758	101	9.7	8.2	834	19.5	17.0	230
31...	0930	399	756	96	9.2	8.3	1020	24.0	17.0	280
APR										
13...	0900	242	757	97	8.7	8.3	1070	26.0	20.0	--
MAY										
12...	1000	236	757	113	10.2	8.4	1050	24.5	20.0	300
JUN										
15...	1000	e221	754	100	8.3	8.4	1040	26.0	24.0	280
JUL										
14...	1030	e198	756	109	9.1	8.4	1050	26.0	24.0	280
AUG										
17...	1600	e170	752	109	8.5	8.4	1010	31.5	27.0	270
SEP										
13...	1620	e153	749	94	7.7	8.4	1010	32.5	24.5	260

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
15...	64	60.5	16.8	9.0	2	74.0	41	156	190	--
29...	76	70.4	20.4	7.7	2	87.2	41	184	224	--
NOV										
18...	82	81.6	20.2	11.3	2	92.4	40	205	247	1
30...	81	83.7	19.8	9.4	2	90.1	39	208	255	--
DEC										
16...	66	68.8	18.7	7.6	2	88.3	43	183	217	3
28...	65	72.2	18.7	7.5	2	86.5	41	192	228	3
JAN										
13...	57	67.8	17.8	8.3	2	85.9	42	185	218	4
25...	74	62.3	18.0	8.5	2	80.8	42	156	190	--
FEB										
01...	65	71.1	18.5	9.0	2	84.7	41	189	230	--
12...	30	28.4	7.36	4.5	1	29.7	38	72	87	--
18...	61	60.7	15.7	9.7	2	65.7	39	156	189	--
23...	27	33.8	8.28	7.5	1	32.2	35	92	112	--
29...	43	54.6	13.2	11.1	2	53.2	36	148	180	--
MAR										
17...	70	65.5	16.4	11.0	2	67.1	37	162	197	--
31...	69	79.5	19.8	11.0	2	91.6	40	210	249	4
APR										
13...	--	--	--	--	--	--	--	219	255	6
MAY										
12...	89	84.2	21.1	9.9	2	95.4	40	209	252	1
JUN										
15...	71	79.0	19.7	10.3	3	97.6	42	206	247	3
JUL										
14...	75	77.9	20.2	10.2	3	98.5	42	204	239	4
AUG										
17...	74	75.9	20.6	10.5	3	95.8	42	200	236	4
SEP										
13...	65	72.8	20.0	10.8	3	97.5	43	199	237	3

e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
OCT										
15...	87.6	.3	18.8	95.7	.68	1.4	.104	3.14	.073	.671
29...	99.5	.4	19.8	113	.41	.83	.037	3.28	.037	.702
NOV										
18...	108	.5	21.2	129	.53	.92	<.020	4.98	.038	.795
30...	106	.4	21.2	121	.46	1.1	.047	5.47	.061	.880
DEC										
16...	102	.4	18.9	96.8	.51	1.1	.025	5.07	.033	.760
28...	102	.4	19.7	105	.45	.71	.044	4.90	.037	.674
JAN										
13...	105	.4	18.1	107	.48	1.0	.089	5.25	.052	.751
25...	95.4	.4	16.1	95.3	.85	1.2	.229	4.19	.062	.668
FEB										
01...	94.6	.5	19.5	106	.50	1.2	.080	5.62	.049	.729
12...	31.9	.3	7.2	46.0	.71	1.5	.283	2.20	.050	.386
18...	74.3	.4	16.1	90.1	.86	1.3	.218	4.61	.170	.696
23...	38.8	.3	8.4	48.8	.99	2.1	.378	1.99	.072	.443
29...	66.1	.3	13.3	80.9	1.1	1.4	.372	3.44	.120	.762
MAR										
17...	78.7	.4	15.6	98.8	.86	1.2	.173	3.96	.167	.837
31...	108	.5	15.3	120	.74	1.1	.065	5.36	.092	.972
APR										
13...	111	.5	--	136	.54	1.1	.031	4.78	.075	.697
MAY										
12...	113	.5	20.8	134	.53	.99	<.020	5.03	.055	.821
JUN										
15...	114	.5	20.3	132	.50	.93	<.020	4.44	.044	.761
JUL										
14...	114	.4	21.2	134	.43	1.1	<.020	4.38	.042	.704
AUG										
17...	108	.4	21.2	126	.56	.93	<.020	5.27	.047	1.05
SEP										
13...	111	.4	19.9	121	.60	1.2	<.020	5.38	.050	.840

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT									
15...	.657	1.02	6.4	3.8	.66	485	472	10	15
29...	.655	.886	4.0	1.7	.75	552	545	e10	34
NOV									
18...	.792	1.00	4.0	1.2	.85	622	612	e10	22
30...	.776	1.01	4.6	.9	.84	616	604	e10	20
DEC									
16...	.670	.822	3.9	.8	.78	570	536	e10	27
28...	.605	.700	4.1	.5	.78	572	551	e10	31
JAN									
13...	.686	.932	3.6	1.1	.78	570	547	10	39
25...	.534	.820	6.5	1.6	.69	511	491	20	36
FEB									
01...	.605	.992	5.2	1.9	.76	556	544	e10	43
12...	.334	.631	7.0	3.5	.31	229	209	30	20
18...	.614	.884	7.0	1.4	.64	470	448	10	20
23...	.389	1.04	6.4	4.0	.35	261	244	20	14
29...	.716	.844	6.2	1.3	.58	425	399	10	42
MAR									
17...	.783	.886	6.2	.8	.68	500	471	10	66
31...	.902	1.03	5.7	1.0	.85	623	599	20	47
APR									
13...	.661	1.07	4.5	5.5	--	654	--	--	--
MAY									
12...	.738	1.08	4.0	5.1	.88	644	629	<10	27
JUN									
15...	.734	1.16	4.3	5.2	.86	632	620	<10	28
JUL									
14...	.702	1.02	4.5	2.7	.85	626	620	<10	14
AUG									
17...	1.02	1.22	4.4	1.5	.84	620	605	<10	19
SEP									
13...	.761	1.03	4.4	3.3	.84	618	599	e10	14

< Actual value is known to be less than the value shown.
e Estimated.

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR								
17...	1101	758	108	10.1	8.2	835	18.0	19.0
17...	1102	758	98	9.4	8.0	802	17.0	57.0
17...	1103	758	101	9.7	8.0	803	17.0	95.0
17...	1104	758	100	9.6	8.0	801	17.0	133
17...	1105	758	99	9.5	8.0	796	17.0	171

Instantaneous discharge at the time of cross-sectional measurements: 396 ft^3/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
15...N	1030	378	20.5	185	189	83
29...N	1000	260	18.5	85	60	95
NOV						
18...N	0940	193	17.0	48	25	93
30...N	1220	268	15.5	38	27	93
DEC						
16...N	0950	296	13.0	25	20	74
28...N	0950	288	13.5	31	24	83
JAN						
13...N	0930	315	13.0	52	44	91
25...N	1410	461	16.0	67	83	99
FEB						
01...N	1520	381	16.0	100	103	89
12...N	0430	620	13.5	168	281	94
18...N	0940	489	14.5	213	281	29
23...N	0950	e2520	13.0	458	e3120	84
29...N	1030	554	14.5	52	78	82
MAR						
17...N	1040	397	17.0	19	20	73
31...N	0930	399	17.0	19	20	80
APR						
13...N	0900	242	20.0	158	103	95
MAY						
12...N	1000	236	20.0	138	88	84
JUN						
15...N	1000	e221	24.0	245	e146	84
JUL						
14...N	1030	e198	24.0	149	e80	85
AUG						
17...N	1600	e170	27.0	79	e36	93
SEP						
13...N	1620	e153	24.5	65	e27	52

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality (NAWQA) Program protocol.
e Estimated.

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.—Lat 33°51'23", long 117°48'00", in NW 1/4 NW 1/4 sec.2, T.2 S., R.9 W., in Canon De Santa Ana, Orange County, Hydrologic Unit 18070203, on diversion channel, 100 ft downstream from diversion point, 0.1 mi south of La Palma Avenue, 0.6 mi west of Imperial Highway, and 7.8 mi east of Anaheim.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1974 to December 1985, October 1998 to current year.

GAGE.—Water-stage recorder and Parshall flume control. Elevation of gage is 262 ft above sea level, from topographic map.

REMARKS.—Water is diverted from Santa Ana River, at diversion point 100 ft upstream, for recharge in off-river spreading basins.

COOPERATION.—Records were provided by Orange County Water District, in connection with National Water-Quality Assessment (NAWQA) Program. Data not reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 456 ft^3/s, Feb. 25, 2000; no flow for some periods in most years.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 456 ft^3/s, Feb. 25; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	126	131	185	245	394	264	239	121	.00	.00	.00
2	.00	130	110	187	224	378	258	286	126	.00	.00	.00
3	.00	135	103	187	181	398	251	250	122	.00	.00	.00
4	.00	138	99	212	205	420	237	150	123	.00	.00	.00
5	.00	136	97	231	228	319	226	152	121	.00	.00	.00
6	10	134	94	232	235	216	222	158	114	.00	.00	.00
7	81	137	94	226	247	199	230	142	115	.00	.00	.00
8	110	153	92	221	262	211	186	145	120	.00	.00	.00
9	95	169	87	219	273	212	158	141	128	.00	.00	.00
10	98	156	86	222	294	242	166	135	132	.00	.00	.00
11	114	153	85	225	297	258	157	133	134	.00	.00	.00
12	132	152	85	227	287	257	149	132	81	.00	.00	.00
13	156	148	136	247	253	255	145	124	1.00	.00	.00	.00
14	213	149	167	272	264	254	151	127	.00	.00	.00	.00
15	269	152	170	268	240	252	156	139	.00	.00	.00	.00
16	271	129	176	266	274	247	158	144	.00	.00	.00	.00
17	263	90	174	267	308	244	225	150	.00	.00	.00	.00
18	269	88	172	267	361	240	165	146	.00	.00	.00	.00
19	275	76	173	265	303	238	182	136	.00	.00	.00	.00
20	273	73	174	265	266	237	266	128	.00	.00	.00	.00
21	279	75	178	265	80	241	296	124	.00	.00	.00	.00
22	268	75	175	263	53	255	292	126	.00	.00	.00	.00
23	246	74	171	264	59	264	288	112	.00	.00	.00	.00
24	251	103	169	266	183	253	282	111	.00	.00	.00	.00
25	284	141	168	336	456	214	298	127	.00	.00	.00	.00
26	292	141	168	345	452	218	301	138	.00	.00	.00	.00
27	258	140	169	350	426	239	299	139	.00	.00	.00	.00
28	245	138	170	342	346	284	273	119	.00	.00	.00	.00
29	169	136	173	314	402	281	215	113	.00	.00	.00	.00
30	119	143	181	241	---	278	208	125	.00	.00	.00	.00
31	113	---	181	262	---	272	---	129	---	.00	.00	---
TOTAL	5062.00	3792	4407	7940	7704	8269	6702	4520	1356.00	0.00	0.00	0.00
MEAN	163	126	142	256	266	267	223	146	45.2	.000	.000	.000
MAX	292	169	181	350	456	419	301	286	134	.00	.00	.00
MIN	.00	73	85	185	54	199	145	111	.00	.00	.00	.00
AC-FT	10040	7520	8740	15750	15280	16400	13290	8970	2690	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

MEAN	50.1	69.2	138	190	167	141	145	132	119	86.4	52.2	35.0
MAX	203	187	287	321	266	267	241	258	318	294	168	156
(WY)	1979	1986	1983	1978	2000	2000	1982	1982	1978	1980	1978	1978
MIN	.000	.000	5.81	2.31	8.75	4.45	27.0	.000	.000	.000	.000	.000
(WY)	1978	1978	1977	1975	1975	1975	1975	1977	1977	1981	1981	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	44350.10		49925.00			
ANNUAL MEAN	122		136		106	
HIGHEST ANNUAL MEAN					164	1978
LOWEST ANNUAL MEAN					40.0	1975
HIGHEST DAILY MEAN	395	Feb 12	456	Feb 25	456	Feb 25 2000
LOWEST DAILY MEAN	.00	Jun 8	.00	Oct 1	.00	Sep 18 1974
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 8	.00	Jun 14	.00	Sep 18 1974
ANNUAL RUNOFF (AC-FT)	87970		99030		76500	
10 PERCENT EXCEEDS	246		274		257	
50 PERCENT EXCEEDS	148		136		100	
90 PERCENT EXCEEDS	.00		.00		.00	

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to current year.
CHEMICAL DATA: Water years 1975–79, 1981–85.
pH: November 1996 to March 1998.
SPECIFIC CONDUCTANCE: July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to current year.
WATER TEMPERATURE: November 1996 to March 1998, November 1998 to current year.

PERIOD OF DAILY RECORD.—July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to current year.
pH: November 1996 to March 1998.
SPECIFIC CONDUCTANCE: July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to current year.
WATER TEMPERATURE: November 1996 to March 1998, November 1998 to current year.

INSTRUMENTATION.—Water-quality monitor present during water years 1974–82, 1984–85, 1997–98, and since November 1998.

REMARKS.—Interruptions in record were due to deflation of diversion dam, poor communication, or malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
pH: Maximum recorded, 8.9 standard units, Feb. 22, 23, Mar. 26, Oct. 27–Nov. 1, 1997; minimum recorded, 6.9 standard units, Jul. 25, 26, 29, Aug. 4, 5, 1997.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 microsiemens, Sept. 21, 1978; minimum recorded, 143 microsiemens, Mar. 10, 1980.
WATER TEMPERATURE: Maximum recorded, 28.5°C, May 30, Aug. 4–6, Sept. 5, 1997; minimum recorded, 9.0°C, Dec. 9, 22–25, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,080 microsiemens, Apr. 5, 10; minimum recorded, 368 microsiemens, Feb. 12.
WATER TEMPERATURE: Maximum recorded, 26.0°C, May 21, 22; minimum recorded, 11.5°C, Mar. 7.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1000	985	---	---	---	---	908	823	697	639
2	---	---	1010	997	---	---	---	---	908	855	801	653
3	---	---	1010	995	---	---	---	---	907	890	771	632
4	---	---	1000	995	---	---	---	---	898	882	813	587
5	---	---	1000	996	---	---	---	---	910	876	966	---
6	---	---	996	984	---	---	---	---	910	876	841	476
7	---	---	996	947	---	---	---	---	908	874	599	519
8	---	---	972	949	---	---	---	---	904	874	671	492
9	---	---	968	892	---	---	---	---	895	839	734	653
10	---	---	958	946	---	---	---	---	885	646	---	---
11	---	---	1020	948	---	---	---	---	831	541	---	---
12	---	---	1020	995	---	---	---	---	754	368	---	---
13	---	---	1010	990	---	---	---	---	720	600	---	---
14	903	861	1000	968	---	---	---	---	755	626	---	---
15	861	779	997	961	---	---	---	---	765	664	---	---
16	795	774	1020	953	---	---	---	---	736	552	---	---
17	813	778	1010	964	---	---	891	870	---	---	---	---
18	817	770	---	---	---	---	899	874	---	---	838	784
19	801	766	---	---	---	---	901	872	---	---	846	819
20	801	782	---	---	---	---	897	876	---	---	884	833
21	793	750	---	---	---	---	905	882	---	---	973	861
22	753	733	---	---	---	---	906	890	---	---	990	842
23	741	727	---	---	---	---	905	883	---	---	949	887
24	743	726	---	---	---	---	905	885	---	---	987	912
25	751	734	---	---	---	---	896	494	530	463	1000	942
26	753	738	---	---	---	---	804	494	561	517	993	957
27	755	749	---	---	---	---	892	774	727	558	1000	960
28	755	750	---	---	---	---	953	892	726	613	997	971
29	991	753	---	---	---	---	1020	953	737	652	1000	977
30	1020	991	---	---	---	---	1020	997	---	---	1030	985
31	1010	993	---	---	---	---	999	715	---	---	1020	995
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1040	989	1050	987	---	---	---	---	---	---	---	---
2	1070	1000	1010	978	---	---	---	---	---	---	---	---
3	1060	1020	1040	1000	---	---	---	---	---	---	---	---
4	1060	1030	---	---	---	---	---	---	---	---	---	---
5	1080	1030	---	---	---	---	---	---	---	---	---	---
6	1070	1040	---	---	---	---	---	---	---	---	---	---
7	1060	1030	---	---	---	---	---	---	---	---	---	---
8	1070	1050	---	---	---	---	---	---	---	---	---	---
9	1070	958	---	---	---	---	---	---	---	---	---	---
10	1080	938	---	---	---	---	---	---	---	---	---	---
11	1070	1050	---	---	---	---	---	---	---	---	---	---
12	1070	996	---	---	---	---	---	---	---	---	---	---
13	---	---	1050	1030	---	---	---	---	---	---	---	---
14	1050	1040	1060	1040	---	---	---	---	---	---	---	---
15	1040	1000	1060	1040	---	---	---	---	---	---	---	---
16	1040	980	1050	1020	---	---	---	---	---	---	---	---
17	1030	479	1040	1020	---	---	---	---	---	---	---	---
18	---	---	1040	1010	---	---	---	---	---	---	---	---
19	---	---	1050	1020	---	---	---	---	---	---	---	---
20	---	---	1050	1020	---	---	---	---	---	---	---	---
21	600	547	1050	1030	---	---	---	---	---	---	---	---
22	712	589	1040	1010	---	---	---	---	---	---	---	---
23	787	698	1040	1020	---	---	---	---	---	---	---	---
24	869	770	---	---	---	---	---	---	---	---	---	---
25	924	836	---	---	---	---	---	---	---	---	---	---
26	952	890	---	---	---	---	---	---	---	---	---	---
27	964	926	---	---	---	---	---	---	---	---	---	---
28	1000	943	---	---	---	---	---	---	---	---	---	---
29	1020	1000	---	---	---	---	---	---	---	---	---	---
30	1040	1020	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	19.5	18.0	---	---	---	---	16.5	14.0	16.0	13.0
2	---	---	19.0	17.0	---	---	---	---	16.5	14.0	17.0	13.0
3	---	---	19.0	17.0	---	---	---	---	15.0	13.5	15.0	12.5
4	---	---	18.5	17.5	---	---	---	---	14.5	13.5	15.5	13.5
5	---	---	19.5	18.0	---	---	---	---	16.0	14.0	14.5	---
6	---	---	18.5	17.5	---	---	---	---	16.5	14.5	14.5	12.0
7	---	---	20.0	18.0	---	---	---	---	17.0	14.5	14.0	11.5
8	---	---	18.5	17.5	---	---	---	---	16.0	14.5	14.0	12.5
9	---	---	18.5	17.0	---	---	---	---	16.5	14.5	16.0	12.5
10	---	---	18.5	17.0	---	---	---	---	16.5	14.5	---	---
11	---	---	18.5	17.0	---	---	---	---	16.0	14.5	---	---
12	---	---	18.5	17.0	---	---	---	---	16.0	13.5	---	---
13	---	---	18.5	17.0	---	---	---	---	15.5	14.5	---	---
14	21.5	20.5	18.5	17.5	---	---	---	---	16.5	14.5	---	---
15	21.0	20.0	19.5	17.5	---	---	---	---	16.5	14.0	---	---
16	21.0	20.0	19.0	17.5	---	---	---	---	16.0	14.0	---	---
17	20.5	18.5	20.0	17.5	---	---	15.0	14.0	---	---	---	---
18	19.0	18.0	---	---	---	---	16.5	14.5	---	---	19.5	15.0
19	19.0	18.0	---	---	---	---	16.5	15.0	---	---	19.5	15.5
20	20.0	18.5	---	---	---	---	17.0	15.5	---	---	19.5	16.0
21	19.5	19.0	---	---	---	---	17.0	15.5	---	---	19.5	15.5
22	19.5	18.5	---	---	---	---	16.0	14.5	---	---	19.5	15.0
23	20.0	19.0	---	---	---	---	15.0	14.5	---	---	19.5	15.5
24	19.5	18.5	---	---	---	---	16.0	14.5	---	---	19.5	15.5
25	20.0	19.0	---	---	---	---	16.5	15.5	14.5	12.0	19.5	15.5
26	20.0	19.0	---	---	---	---	16.5	15.0	15.5	12.0	20.0	15.0
27	19.0	18.5	---	---	---	---	16.5	14.5	14.5	12.5	18.5	16.0
28	19.5	18.5	---	---	---	---	16.0	14.0	15.0	12.5	18.5	16.0
29	20.5	18.5	---	---	---	---	16.0	14.0	15.5	13.0	18.5	16.0
30	19.5	17.5	---	---	---	---	16.5	15.0	---	---	20.0	16.0
31	19.5	17.5	---	---	---	---	17.0	15.5	---	---	20.0	15.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.5	15.5	24.5	19.0	---	---	---	---	---	---	---	---
2	21.0	16.0	24.5	20.5	---	---	---	---	---	---	---	---
3	21.5	17.0	24.5	21.0	---	---	---	---	---	---	---	---
4	22.5	17.5	23.5	21.0	---	---	---	---	---	---	---	---
5	22.5	18.0	22.0	21.0	---	---	---	---	---	---	---	---
6	22.0	19.0	23.0	20.5	---	---	---	---	---	---	---	---
7	22.0	18.5	23.0	20.5	---	---	---	---	---	---	---	---
8	22.5	18.5	22.5	21.0	---	---	---	---	---	---	---	---
9	22.0	19.0	23.0	20.5	---	---	---	---	---	---	---	---
10	22.0	19.0	23.5	21.0	---	---	---	---	---	---	---	---
11	22.5	18.5	22.5	20.0	---	---	---	---	---	---	---	---
12	23.0	19.5	22.5	18.5	---	---	---	---	---	---	---	---
13	---	---	23.0	19.0	---	---	---	---	---	---	---	---
14	20.5	18.0	22.5	19.5	---	---	---	---	---	---	---	---
15	20.0	17.5	23.0	19.5	---	---	---	---	---	---	---	---
16	21.0	17.5	21.0	19.0	---	---	---	---	---	---	---	---
17	19.0	16.0	22.0	18.5	---	---	---	---	---	---	---	---
18	---	---	23.5	19.5	---	---	---	---	---	---	---	---
19	---	---	24.0	21.0	---	---	---	---	---	---	---	---
20	---	---	25.5	22.0	---	---	---	---	---	---	---	---
21	18.0	15.0	26.0	22.5	---	---	---	---	---	---	---	---
22	18.5	16.0	26.0	23.0	---	---	---	---	---	---	---	---
23	21.0	16.5	23.5	21.5	---	---	---	---	---	---	---	---
24	22.0	17.0	---	---	---	---	---	---	---	---	---	---
25	23.0	18.0	---	---	---	---	---	---	---	---	---	---
26	24.0	19.0	---	---	---	---	---	---	---	---	---	---
27	24.5	19.5	---	---	---	---	---	---	---	---	---	---
28	23.5	20.5	---	---	---	---	---	---	---	---	---	---
29	24.0	19.5	---	---	---	---	---	---	---	---	---	---
30	24.5	18.5	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11075720 CARBON CREEK BELOW CARBON CANYON DAM, CA

LOCATION.—Lat 33°54'48", long 117°50'30", in SW 1/4 NE 1/4 sec.17, T.3 S., R.9 W., Orange County, Hydrologic Unit 18070106, on right wall of outlet channel, 250 ft downstream from toe of Carbon Canyon Dam, and 2.4 mi northwest of Yorba Linda.

DRAINAGE AREA.—19.5 mi^2.

PERIOD OF RECORD.—October 1961 to current year.

REVISED RECORDS.—WDR CA-88-1: 1983(M).

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Datum of gage is 396.35 ft above sea level, U.S. Army Corps of Engineers datum. Prior to Dec. 3, 1971, at datum 2.00 ft higher.

REMARKS.—Records fair except for discharges below 10 ft^3/s, which are poor. Flow regulated by Carbon Canyon Flood-Control Reservoir, capacity, 6,610 acre-ft. No diversion upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 796 ft^3/s, Mar. 1, 1983, gage height, 5.11 ft, present datum, from rating curve extended above 110 ft^3/s on basis of optical current-meter measurement at 241 ft^3/s and normal depth solution for discharge computation at gage height 4.27 ft; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.17	1.8	.83	.90	.00	.00	.00	.00
2	.00	.00	.00	.00	.03	2.2	.71	1.0	.00	.00	.00	.00
3	.00	.00	.00	.00	.02	2.1	.74	1.1	.00	.00	.00	.00
4	.00	.00	.00	.00	.02	3.6	.85	1.1	.00	.00	.00	.00
5	.00	.00	.00	.00	.02	27	.79	1.0	.00	.00	.00	.00
6	.00	.00	.00	.00	.02	8.6	.71	.90	.00	.00	.00	.00
7	.00	.00	.00	.00	.02	5.0	.71	1.5	.00	.00	.00	.00
8	.00	.00	.00	.00	.02	11	.67	.91	.00	.00	.00	.00
9	.00	.00	.00	.00	.02	4.6	.48	.72	.00	.00	.00	.00
10	.00	.00	.00	.00	.30	2.8	.74	.52	.00	.00	.00	.00
11	.00	.00	.00	.00	3.0	2.0	.73	.48	.00	.00	.00	.00
12	.00	.00	.00	.00	10	2.0	.72	.44	.00	.00	.00	.00
13	.00	.00	.00	.00	3.8	2.4	.80	.19	.00	.00	.00	.00
14	.00	.00	.00	.00	3.6	3.1	.82	.18	.00	.00	.00	.00
15	.00	.00	.00	.00	2.6	2.4	.99	.24	.00	.00	.00	.00
16	.00	.00	.00	.00	4.4	1.8	1.1	.28	.00	.00	.00	.00
17	.00	.00	.00	.00	4.4	1.6	6.2	.28	.00	.00	.00	.00
18	.00	.00	.00	.00	1.9	.84	8.2	.28	.00	.00	.00	.00
19	.00	.00	.00	.00	1.2	.95	2.8	.14	.00	.00	.00	.00
20	.00	.00	.00	.00	4.3	1.1	2.0	.06	.00	.00	.00	.00
21	.00	.00	.00	.00	38	1.1	2.0	.05	.00	.00	.00	.00
22	.00	.00	.00	.00	14	2.0	2.4	.04	.00	.00	.00	.00
23	.00	.00	.00	.00	28	2.1	1.9	.04	.00	.00	.00	.02
24	.00	.00	.00	.00	12	1.2	2.2	.14	.00	.00	.00	.02
25	.00	.00	.00	1.3	4.6	1.0	2.0	.41	.00	.00	.00	.02
26	.00	.00	.00	1.5	2.9	.84	1.6	.40	.00	.00	.00	.02
27	.00	.00	.00	.33	3.2	.95	1.6	.01	.00	.00	.00	.02
28	.00	.00	.00	.20	4.1	.84	1.4	.00	.00	.00	.00	.02
29	.00	.00	.00	.10	1.8	.90	1.2	.00	.00	.00	.00	.02
30	.00	.00	.00	.09	---	.95	.96	.00	.00	.00	.00	.02
31	.00	---	.00	.46	---	.78	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	3.98	148.44	99.55	48.85	13.31	0.00	0.00	0.00	0.16
MEAN	.000	.000	.000	.13	5.12	3.21	1.63	.43	.000	.000	.000	.005
MAX	.00	.00	.00	1.5	38	27	8.2	1.5	.00	.00	.00	.02
MIN	.00	.00	.00	.00	.02	.78	.48	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	7.9	294	197	97	26	.00	.00	.00	.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

MEAN	.070	.23	.54	2.74	5.75	4.86	.89	.46	.17	.069	.026	.021
MAX	.73	1.94	6.36	32.4	46.9	36.2	6.08	7.40	1.99	.95	.36	.37
(WY)	1996	1997	1967	1993	1980	1983	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1962	1962	1963	1963	1964	1962	1962	1962	1962	1962	1962	1962

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	493.92		314.29			
ANNUAL MEAN	1.35		.86		1.29	
HIGHEST ANNUAL MEAN					7.27	1980
LOWEST ANNUAL MEAN					.004	1972
HIGHEST DAILY MEAN	28	Jan 26	38	Feb 21	362	Feb 24 1998
LOWEST DAILY MEAN	.00	Jul 23	.00	Oct 1	.00	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 23	.00	Oct 1	.00	Oct 1 1961
INSTANTANEOUS PEAK FLOW			70	Feb 21	796	Mar 1 1983
INSTANTANEOUS PEAK STAGE			2.79	Feb 21	5.11	Mar 1 1983
ANNUAL RUNOFF (AC-FT)	980		623		938	
10 PERCENT EXCEEDS	3.6		2.0		1.0	
50 PERCENT EXCEEDS	.11		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.—Lat 33°42'46", long 117°38'39", in NE 1/4 NE 1/4 sec.30, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank, at Santiago Canyon Road Bridge, 0.9 mi northwest of Modjeska, 1.0 mi downstream from Harding Creek, and 1.5 mi downstream from Modjeska Reservoir.

DRAINAGE AREA.—13.0 mi^2.

PERIOD OF RECORD.—October 1961 to current year.

REVISED RECORDS.—WDR CA-73-1: 1969. WDR CA-86-1: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,210 ft above sea level, from topographic map. Prior to Sept. 10, 1969, at site 0.6 mi upstream at datum approximately 48 ft higher. Sept. 10, 1969, to Feb. 6, 1985, at site 0.6 mi upstream at datum approximately 44 ft higher.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Slight regulation by Modjeska Reservoir on Harding Creek. Santiago County Water District diverts water at Modjeska Reservoir on Harding Creek. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,520 ft^3/s, Feb. 25, 1969, gage height, 6.18 ft, site and datum then in use, from rating curve extended above 840 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 12.03 ft, Feb. 23, 1998; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, from rating curve extended above 444 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1815	97	5.34				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	3.7	e.70	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	3.5	e.60	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	3.9	e.40	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	4.0	e.30	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	17	e.20	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	20	e.15	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	12	e.10	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	23	e.05	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	24	e.02	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	15	e.02	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	10	e.01	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.01	7.7	e.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	6.4	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.24	5.7	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.62	4.4	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.83	3.4	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	1.6	3.0	.92	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	1.0	2.7	2.6	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.51	2.7	1.6	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	2.5	2.2	1.1	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	33	1.7	1.3	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	15	1.5	.94	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	16	1.3	1.0	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	18	1.9	.84	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	9.5	e1.6	.52	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	7.1	e1.4	.23	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	6.4	e1.3	.12	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	5.7	e1.2	.09	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	4.7	1.1	.06	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.74	.02	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.87	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	122.71	188.91	13.89	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	4.23	6.09	.46	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	33	24	2.6	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.74	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	243	375	28	.00	.00	.00	.00	.00

e Estimated.

11075800 SANTIAGO CREEK AT MODJESKA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.19	1.73	5.48	16.9	39.0	23.1	6.56	3.57	1.50	.40	.13	.070
MAX	5.00	33.5	97.4	179	404	137	33.7	27.0	8.76	2.84	1.68	1.07
(WY)	1984	1966	1967	1993	1998	1978	1983	1983	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.050	.13	.017	.000	.000	.000	.000	.000
(WY)	1962	1962	1963	1963	1965	1999	1992	1992	1987	1963	1962	1962

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	65.46		325.51			
ANNUAL MEAN	.18		.89		8.05	
HIGHEST ANNUAL MEAN					47.2	1969
LOWEST ANNUAL MEAN					.21	1963
HIGHEST DAILY MEAN	2.8	Jan 27	33	Feb 21	3590	Feb 24 1969
LOWEST DAILY MEAN	.00	May 20	.00	Oct 1	.00	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	.00	May 26	.00	Oct 1	.00	Oct 1 1961
INSTANTANEOUS PEAK FLOW			97	Feb 21	6520	Feb 25 1969
INSTANTANEOUS PEAK STAGE			5.34	Feb 21	12.03	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	130		646		5830	
10 PERCENT EXCEEDS	.69		1.5		11	
50 PERCENT EXCEEDS	.00		.00		.22	
90 PERCENT EXCEEDS	.00		.00		.00	

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.—Lat 33°46'13", long 117°53'01", in SW 1/4 NW 1/4 sec.1, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on left bank, 50 ft upstream from Bristol Street Bridge at Santa Ana, and 1,625 ft upstream from mouth at Santa Ana River.

DRAINAGE AREA.—98.6 mi^2.

PERIOD OF RECORD.—October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1315-B.

REVISED RECORDS.—WSP 1635: 1934, 1935(M), 1936. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 120 ft above sea level, from topographic map. Prior to Sept. 8, 1969, at site 0.1 mi upstream at different datum; from Sept. 9, 1969, to July 21, 1976, at site 50 ft downstream at different datum; from July 22, 1976, to Sept. 30, 1993, at site 77 ft upstream at datum 5.25 ft lower.

REMARKS.—Records fair. Flow regulated since December 1931 by Santiago Reservoir, capacity, 25,000 acre-ft; since January 1963 by Villa Park Flood-Control Reservoir, capacity, 15,500 acre-ft, and affected by intervening gravel pits. Diversions upstream from station by Irvine Company and Serrano and Carpenter Irrigation Districts. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,600 ft^3/s, Feb. 25, 1969, gage height, 9.10 ft, site and datum then in use; maximum gage height, 11.57 ft, Jan. 4, 1995; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	5.7	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	3.6	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	24	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
8	.00	.00	.00	.00	.00	1.2	.00	.00	e.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
10	.00	.00	.00	.00	.80	.00	.00	.00	e.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
12	.00	.00	.00	.00	23	.00	.00	.00	e.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
14	.00	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
15	.00	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
16	.00	.00	e.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
17	.00	.00	e.00	.00	.00	.00	11	.00	e.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
20	.00	.00	.00	.00	18	.00	.00	.00	e.00	.00	.00	.00
21	.00	.00	.00	.00	53	.00	.00	.00	e.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
23	.00	.00	.00	.00	25	.00	.00	.00	e.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	119.80	34.50	11.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	4.13	1.11	.37	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	53	24	11	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	238	68	22	.00	.00	.00	.00	.00

e Estimated.

11077500 SANTIAGO CREEK AT SANTA ANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1963, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.079	.37	2.20	5.64	9.28	29.7	7.56	.32	.002	.000	.000	.053
MAX	2.61	3.03	9.71	62.3	94.6	329	159	3.85	.050	.000	.000	1.20
(WY)	1935	1945	1937	1952	1937	1938	1941	1941	1941	1931	1931	1939
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1931	1931	1936	1952	1931	1932	1931	1931	1931	1931	1931

SUMMARY STATISTICS	WATER YEARS 1931 - 1963		
ANNUAL MEAN	4.60		
HIGHEST ANNUAL MEAN	40.0		1941
LOWEST ANNUAL MEAN	.067		1961
HIGHEST DAILY MEAN	2320	Mar 3	1938
LOWEST DAILY MEAN	.00	Oct 1	1930
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	1930
INSTANTANEOUS PEAK FLOW	4400	Mar 2	1938
INSTANTANEOUS PEAK STAGE	9.85	Jan 16	1952
ANNUAL RUNOFF (AC-FT)	3330		
10 PERCENT EXCEEDS	.40		
50 PERCENT EXCEEDS	.00		
90 PERCENT EXCEEDS	.00		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.18	1.78	2.11	11.6	41.3	23.2	.66	.15	.010	.016	.055	.098
MAX	4.29	7.80	10.4	259	616	253	4.52	3.87	.24	.58	1.60	1.59
(WY)	1984	1983	1998	1993	1969	1978	1965	1998	1993	1984	1977	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1969	1964	1972	1964	1966	1966	1964	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	135.49		165.30			
ANNUAL MEAN	.37		.45		6.58	
HIGHEST ANNUAL MEAN					71.7	1969
LOWEST ANNUAL MEAN					.18	1987
HIGHEST DAILY MEAN	14	Jan 31	53	Feb 21	4270	Feb 25 1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
INSTANTANEOUS PEAK FLOW			269	Feb 21	6600	Feb 25 1969
INSTANTANEOUS PEAK STAGE			7.90	Feb 21	11.57	Jan 4 1995
ANNUAL RUNOFF (AC-FT)	269		328		4770	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.—Lat 33°45'04", long 117°54'27", in NW 1/4 SE 1/4 sec.10, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on right bank, 850 ft upstream from Fifth Street Bridge in Santa Ana, and 1.6 mi downstream from Santiago Creek.

DRAINAGE AREA.—1,700 mi^2, excludes 768 mi^2 above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1923 to September 1989, October 1990 to current year. Discharge measurements only, October 1989 to September 1990.

REVISED RECORDS.—WSP 1635: 1940(M), 1944. WDR CA-74-1: Drainage area. WDR CA-79-1: 1978(M).

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 70 ft above sea level, from topographic map. October 1990 to Feb. 12, 1991, at site 900 ft downstream at different datum. Feb. 13, 1991, to Apr. 4, 1994, at datum 3 ft lower. See WDR CA-90-1 for complete history of location and datum changes.

REMARKS.—Records poor. Natural flow affected by ground-water withdrawals, diversions, importation by Metropolitan Water District, municipal use, and return flow from irrigation. Since 1940, flow partially regulated by Prado Flood-Control Reservoir, capacity, 196,200 acre-ft. Natural flow affected by three small flood-control reservoirs, combined capacity, 31,900 acre-ft; Big Bear Lake (station 11049000); Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft; and Santiago Reservoir, capacity, 25,000 acre-ft. Discharge up to 100 ft^3/s can be diverted from Carbon Creek to Coyote Creek 1.5 mi upstream from mouth of Carbon Creek. Gage out of operation from Apr. 5 through Nov. 14, 1994, due to channel work (lining). See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,300 ft^3/s, Mar. 3, 1938, gage height, 10.20 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.05
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
3	.00	.00	.00	.00	.00	55	.00	.00	.00	e.00	.00	.53
4	.00	.00	.00	.00	.00	174	.00	.00	.00	e.00	.00	.58
5	.00	.00	.00	.00	.00	988	.00	.00	.00	e.00	.00	.38
6	.00	.00	.00	.00	.00	48	.00	.00	.00	e.00	.00	1.2
7	.00	.00	.00	.00	.00	90	.00	.00	.00	e.00	.00	.60
8	.00	.00	.00	.00	.00	255	.00	.00	.00	.00	.00	1.8
9	.00	.00	.00	.00	.00	79	.00	.00	.00	.00	.13	.00
10	.00	.00	.00	.00	6.4	57	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	18	52	.00	.00	.00	.00	.00	.51
12	.00	.00	.00	.00	134	41	.00	.00	2.5	.00	.00	2.2
13	.00	.00	.00	.00	7.9	44	.00	.00	.00	.00	.00	1.6
14	.00	.00	.00	.00	18	54	.00	.00	.00	.00	.00	1.8
15	.00	.00	.00	.00	.00	6.8	.00	.00	.00	.00	1.1	.00
16	.00	.00	.00	.00	19	.00	.00	.00	e.00	.00	.00	.00
17	.00	.00	.00	.00	8.7	.00	117	.00	e.00	.00	.00	.00
18	.00	.00	.00	.00	.25	.00	147	.00	e.00	.00	.00	.00
19	.00	.00	.00	.00	.13	.00	4.0	.00	e.00	.00	.00	1.0
20	.00	.00	.00	.00	234	.00	.00	.00	e.00	.00	.00	1.4
21	.00	.00	.00	.00	1820	.00	.00	.00	e.00	.00	.67	1.3
22	.00	.00	.00	.00	2660	.00	.00	.00	e.00	.00	.00	3.3
23	.00	.00	.00	.00	2370	.00	.00	.00	e.00	.00	.34	2.9
24	.00	.00	.00	.00	1150	.00	.00	.00	e.00	.00	.19	.00
25	.00	.00	.00	4.3	4.3	.00	.00	.00	e.00	.00	.00	.00
26	.00	.00	.00	8.3	.25	.00	.00	.00	e.00	.00	.00	e.90
27	.00	.00	.00	.00	7.8	.00	.00	.00	e.00	.00	.10	e1.1
28	.00	.00	.00	.00	5.4	.00	.00	.00	e.00	.00	1.4	e1.2
29	.00	.00	.00	.00	.25	.00	.00	.00	e.00	.00	2.0	e1.5
30	.00	.00	.00	.00	---	.00	.00	.00	e.00	.00	.10	e.95
31	.00	---	.00	2.0	---	.00	---	.00	---	.00	.24	---
TOTAL	0.00	0.00	0.00	14.60	8464.38	1943.80	268.00	0.00	2.50	0.00	6.27	26.80
MEAN	.000	.000	.000	.47	292	62.7	8.93	.000	.083	.000	.20	.89
MAX	.00	.00	.00	8.3	2660	988	147	.00	2.5	.00	2.0	3.3
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	29	16790	3860	532	.00	5.0	.00	12	53

e Estimated.

11078000 SANTA ANA RIVER AT SANTA ANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1939, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.50	.46	5.97	5.50	106	137	29.0	.63	.000	.000	.000	.097
MAX	7.94	2.43	29.3	34.2	1028	2029	358	4.65	.000	.000	.000	1.65
(WY)	1935	1924	1939	1934	1927	1938	1926	1938	1923	1923	1923	1939
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1924	1925	1926	1926	1925	1929	1930	1925	1923	1923	1923	1923

SUMMARY STATISTICS	WATER YEARS 1923 - 1939	
ANNUAL MEAN	23.7	
HIGHEST ANNUAL MEAN	178	1938
LOWEST ANNUAL MEAN	.000	1931
HIGHEST DAILY MEAN	20300	Mar 3 1938
LOWEST DAILY MEAN	.00	Mar 16 1923
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 21 1923
INSTANTANEOUS PEAK FLOW	46300	Mar 3 1938
INSTANTANEOUS PEAK STAGE	10.20	Mar 3 1938
ANNUAL RUNOFF (AC-FT)	17190	
10 PERCENT EXCEEDS	3.6	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.35	12.0	36.6	172	277	250	62.5	27.7	8.59	.93	1.91	1.43
MAX	179	154	428	3962	3014	2342	889	686	433	31.0	102	40.6
(WY)	1984	1984	1985	1993	1980	1969	1980	1998	1983	1998	1983	1986
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1940	1940	1940	1976	1949	1949	1949	1940	1940	1940	1940	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	1761.25		10726.35			
ANNUAL MEAN	4.83		29.3		70.2	
HIGHEST ANNUAL MEAN					612	1993
LOWEST ANNUAL MEAN					.006	1949
HIGHEST DAILY MEAN	982	Jan 28	2660	Feb 22	11400	Feb 25 1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1939
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1939
INSTANTANEOUS PEAK FLOW			4570	Mar 5	31700	Jan 4 1995
INSTANTANEOUS PEAK STAGE			4.08	Mar 5	9.09	Jan 4 1995
ANNUAL RUNOFF (AC-FT)	3490		21280		50840	
10 PERCENT EXCEEDS	.00		2.3		14	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11078000 SANTA ANA RIVER AT SANTA ANA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1968–71, 1973 to current year.
CHEMICAL DATA: Water year 1998.
WATER TEMPERATURE: Water years 1968–69, 1971, 1973–80, 1982–87.
SEDIMENT DATA: Water years 1968–71, 1973 to current year.

PERIOD OF DAILY RECORD.—October 1967 to September 1971, October 1972 to September 1980, October 1981 to September 1987.
WATER TEMPERATURE: October 1967 to September 1969, October 1970 to September 1971, October 1972 to September 1980, October 1981 to September 1987.
SUSPENDED-SEDIMENT DISCHARGE: October 1967 to September 1971, October 1972 to September 1980, October 1981 to September 1987.

REMARKS.—Chemical data collected for the National Water-Quality Assessment (NAWQA) Program during water year 1998.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
FEB								
16...	1030	27	15.0	30	2.2	--	--	--
21...	1315	2060	12.5	2120	11800	22	32	40
21...	1335	2240	12.5	1110	6710	28	41	55
23...	1300	2880	12.0	1210	9410	24	30	36
APR								
18...	1135	239	--	147	95	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
FEB							
16...	--	--	90	96	100	--	--
21...	56	73	91	96	99	100	--
21...	69	83	94	98	99	100	--
23...	43	52	65	75	94	99	100
APR							
18...	--	--	97	--	--	--	--

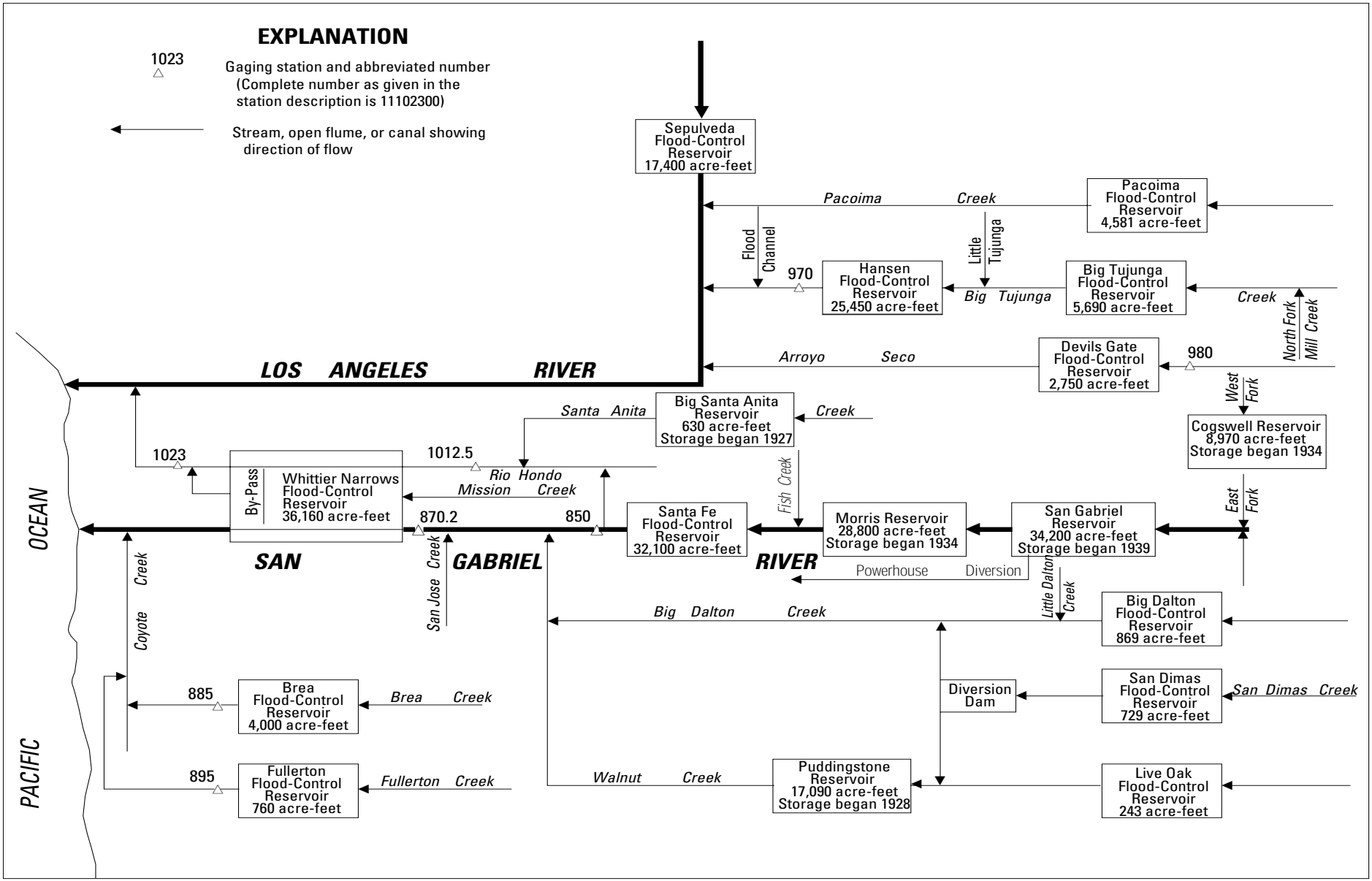

Figure 18. Diversions and storage in San Gabriel and Los Angeles River Basins.

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA

LOCATION.—Lat 34°06'44", long 117°58'07", in NE 1/4 SW 1/4 sec.6, T.1 S., R.10 W., Los Angeles County, Hydrologic Unit 18070106, on left bank, at stilling basin of outlet of Santa Fe Flood-Control Dam, 500 ft downstream from axis of dam, and 1.7 mi north of Baldwin Park.

DRAINAGE AREA.—236 mi^2.

PERIOD OF RECORD.—October 1942 to current year.

REVISED RECORDS.—WSP 1315-B and 1635: 1943(M). WSP 1928: Drainage area. WDR CA-99-1: 1998.

GAGE.—Water-stage recorder. Auxiliary gage 500 ft downstream with crest-stage gage and concrete control. Datum of gage is 400.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.—Records poor. Flow regulated by Cogswell and San Gabriel Flood-Control Reservoirs, combined capacity, 43,170 acre-ft; Morris Reservoir, capacity, 28,800 acre-ft; and Santa Fe Flood-Control Reservoir, capacity, 32,100 acre-ft. Diversions upstream from station for irrigation, power development, and ground-water replenishment. At times water is diverted from side of stilling basin to headwaters of Rio Hondo; no diversions were made during the current year. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion to Rio Hondo provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,900 ft^3/s, Jan. 26, 1969, gage height, 22.20 ft; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.00	.00	.05	11	49	.00	.00	.00	.00	.00	2.5
2	.43	.00	.00	.03	9.2	47	.00	.00	.00	.00	.00	.05
3	.38	.00	.00	35	10	22	.00	.00	.00	.00	.00	.00
4	.36	.00	.00	9.4	10	15	.22	.00	.00	.00	.00	.00
5	.31	.00	.00	.03	8.7	16	6.4	.00	.00	.00	2.1	.00
6	.28	.00	.00	.03	8.7	18	8.9	.00	.00	.00	.21	5.1
7	.22	.00	.00	.03	8.1	18	13	.00	.00	.00	.00	.01
8	.22	.00	.00	.03	8.5	17	17	.00	.00	.00	.00	.00
9	.16	.00	.00	.03	16	17	9.6	.00	.00	.00	.00	.00
10	.14	.00	.00	.03	34	17	4.0	.00	.00	.00	.00	.00
11	.10	.00	.00	.03	17	15	9.2	.00	.00	.00	.00	.00
12	.08	.00	.00	.03	20	7.9	.01	.00	.00	.00	.00	.00
13	.04	.00	.00	.03	12	7.8	.18	.00	.00	.00	.00	.00
14	.04	.00	.00	.03	.34	6.2	.15	.00	.00	.00	.00	.00
15	.20	.00	.00	.03	.25	5.4	.02	.00	.00	.00	.00	.00
16	1.6	.00	.00	.03	6.2	7.6	.01	.00	.00	.00	.00	.00
17	.51	.00	.00	.03	12	32	.28	.00	.00	.00	.00	.00
18	.09	.00	.00	.03	12	1.4	.17	.00	.00	5.3	.00	.00
19	.04	.00	.00	.03	8.5	.42	.00	.00	.00	4.2	.04	.00
20	.03	.00	.00	.03	9.7	.03	.00	.00	.00	.31	.07	.00
21	.02	.00	.00	.03	16	.01	.00	.00	.00	.63	.00	.00
22	.01	.00	.00	.03	16	.00	.00	.00	.00	.00	.00	.00
23	.01	.00	.00	.03	67	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.03	77	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.29	50	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.03	3.2	.00	.00	.00	.00	.00	.02	.00
27	.00	.00	.00	8.1	8.3	.00	.00	.00	.00	.00	.01	.00
28	.00	.00	.00	15	6.6	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	16	45	.00	.00	.00	.00	.29	.00	.00
30	.00	.00	45	16	---	.00	.00	.00	.00	.32	.00	.00
31	.00	---	6.4	17	---	.00	---	.00	---	.00	3.5	---
TOTAL	5.74	0.00	51.40	117.50	511.29	319.76	69.14	0.00	0.00	11.05	5.95	7.66
MEAN	.19	.000	1.66	3.79	17.6	10.3	2.30	.000	.000	.36	.19	.26
MAX	1.6	.00	45	35	77	49	17	.00	.00	5.3	3.5	5.1
MIN	.00	.00	.00	.03	.25	.00	.00	.00	.00	.00	.00	.00
AC-FT	11	.00	102	233	1010	634	137	.00	.00	22	12	15

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.72	16.7	29.4	129	235	202	59.4	68.0	24.9	9.12	5.83	9.76
MAX	74.6	577	514	2151	3259	2465	616	768	414	170	121	206
(WY)	1993	1966	1947	1969	1969	1978	1978	1998	1958	1962	1962	1946
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1943	1943	1943	1945	1947	1947	1945	1945	1945	1943	1943	1943

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	1040.12		1099.49			
ANNUAL MEAN	2.85		3.00		65.2	
HIGHEST ANNUAL MEAN					540	1969
LOWEST ANNUAL MEAN					.000	1948
HIGHEST DAILY MEAN	74	Jul 7	77	Feb 24	26000	Jan 26 1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 24	.00	Oct 1 1942
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 24	.00	Oct 1 1942
INSTANTANEOUS PEAK FLOW			146	Feb 23	30900	Jan 26 1969
INSTANTANEOUS PEAK STAGE			12.07	Sep 6	22.20	Jan 26 1969
ANNUAL RUNOFF (AC-FT)	2060		2180		47200	
10 PERCENT EXCEEDS	8.3		9.8		70	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA

LOCATION.—Lat 34°02'03", long 118°02'14", in La Puente Grant, Los Angeles County, Hydrologic Unit 18070106, at Peck Road, 0.8 mi downstream from San Jose Flood Channel, 1.2 mi upstream from axis of Whittier Narrows Dam, and 1.8 mi south of El Monte.

DRAINAGE AREA.—442 mi^2.

PERIOD OF RECORD.—October 1955 to September 1957, October 1963 to current year.

REVISED RECORDS.—WDR CA-86-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 220 ft above sea level, from topographic map.

REMARKS.—Records fair. Flow regulated by several reservoirs, combined capacity, 123,000 acre-ft. Many diversions upstream from station for irrigation, power development, and ground-water replenishment. Colorado River water released to the San Gabriel River at site 14.9 mi upstream from gage, at Metropolitan Water District aqueduct crossing on San Dimas Creek for ground-water replenishment. Los Angeles County Department of Public Works reported no diversions from San Gabriel River below Santa Fe Dam to Rio Hondo during the current year. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion to Rio Hondo provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,600 ft^3/s, Jan. 25, 1969, gage height, 10.90 ft, from rating curve extended above 29,000 ft^3/s; no flow for part of some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	43	204	157	192	38	56	7.3	155	31	55	81
2	21	22	206	147	319	39	43	5.9	157	34	58	84
3	31	23	203	129	301	114	41	6.9	155	34	58	80
4	24	28	209	142	343	149	45	41	158	33	62	85
5	19	35	210	189	345	1560	39	141	159	35	65	87
6	23	36	176	233	337	172	39	153	159	37	67	84
7	20	38	129	255	332	140	41	153	157	33	68	86
8	23	63	135	215	214	1380	41	119	149	26	66	82
9	19	44	99	228	155	72	45	151	153	33	65	84
10	18	43	25	300	403	60	46	161	151	40	64	83
11	20	43	22	294	181	53	42	290	150	31	63	87
12	18	40	24	173	691	50	39	294	157	35	66	84
13	17	80	27	169	168	74	50	300	154	38	62	85
14	19	87	27	208	395	163	36	295	151	38	64	82
15	20	86	26	295	58	165	40	254	154	35	67	84
16	22	85	26	290	770	169	42	153	156	34	62	85
17	17	83	57	293	209	180	1370	156	154	38	61	84
18	18	85	133	283	64	179	1290	203	155	37	61	84
19	17	86	133	288	58	174	81	294	155	38	62	80
20	21	90	135	288	1200	170	81	299	152	38	65	58
21	26	93	135	288	1940	169	70	295	150	47	66	28
22	25	89	139	289	211	174	104	301	156	49	62	29
23	26	78	137	288	2160	199	47	244	147	47	64	101
24	23	85	264	275	386	201	50	164	152	54	67	45
25	23	88	265	577	215	202	43	189	157	55	84	47
26	23	79	288	153	58	192	42	56	161	57	80	36
27	23	82	296	148	195	201	45	47	151	62	64	41
28	22	89	365	142	47	208	40	46	76	63	82	39
29	67	139	413	139	41	203	44	44	35	58	71	34
30	80	202	255	142	---	180	39	58	26	57	85	41
31	72	---	327	291	---	131	---	269	---	52	67	---
TOTAL	819	2164	5090	7308	11988	7161	4031	5190.1	4302	1299	2053	2090
MEAN	26.4	72.1	164	236	413	231	134	167	143	41.9	66.2	69.7
MAX	80	202	413	577	2160	1560	1370	301	161	63	85	101
MIN	17	22	22	129	41	38	36	5.9	26	26	55	28
AC-FT	1620	4290	10100	14500	23780	14200	8000	10290	8530	2580	4070	4150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	87.7	145	157	377	584	397	119	117	71.0	57.2	55.1	74.1
MAX	208	782	426	4150	4497	3796	590	1001	254	230	208	205
(WY)	1979	1966	1993	1993	1980	1978	1978	1998	1976	1973	1973	1978
MIN	.000	.000	9.84	19.0	.000	.000	.47	.14	.000	.000	.000	.000
(WY)	1956	1978	1977	1968	1956	1956	1956	1957	1956	1956	1956	1957

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	24829		53495.1			
ANNUAL MEAN	68.0		146		185	
HIGHEST ANNUAL MEAN					810	1993
LOWEST ANNUAL MEAN					24.4	1977
HIGHEST DAILY MEAN	555	Jan 26	2160	Feb 23	24800	Jan 26 1969
LOWEST DAILY MEAN	13	Aug 29	5.9	May 2	.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	16	Aug 29	19	Oct 13	.00	Oct 1 1955
INSTANTANEOUS PEAK FLOW			15000	Feb 23	46600	Jan 25 1969
INSTANTANEOUS PEAK STAGE			8.57	Feb 23	10.90	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	49250		106100		133800	
10 PERCENT EXCEEDS	135		290		214	
50 PERCENT EXCEEDS	40		83		68	
90 PERCENT EXCEEDS	18		26		1.0	

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.—Lat 33°53'16", long 117°55'32", in NE 1/4 NE 1/4 sec.28, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank, 0.2 mi downstream from Brea Dam, and 1 mi north of Fullerton.

DRAINAGE AREA.—21.6 mi^2.

PERIOD OF RECORD.—January 1942 to current year.

REVISED RECORDS.—WSP 1041: 1944(M). WSP 1635: 1956, 1958. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map. Prior to Dec. 4, 1964, at datum 1.03 ft higher.

REMARKS.—Records poor below 50 ft^3/s and fair above. Flow regulated by Brea Flood-Control Reservoir, capacity, 4,000 acre-ft. No diversion upstream from station. Since August 1966, low flow mostly the result of irrigation wastewater from golf course 0.8 mi upstream. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,700 ft^3/s, Feb. 18, 1980; no flow for parts of some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.86	e.62	e1.8	2.2	8.0	6.2	5.1	3.5	2.9	3.1	3.0
2	.52	.85	e.63	e1.2	e1.3	7.8	6.0	4.6	3.4	3.0	3.0	3.2
3	.50	.88	e.61	e1.0	e1.2	7.6	5.2	4.5	3.5	3.9	3.1	3.0
4	.50	.84	e.59	e.75	e1.2	14	5.4	4.4	3.2	3.1	2.9	3.1
5	.49	.70	e.58	e.72	e1.1	36	5.8	4.4	3.2	3.9	2.9	2.8
6	.64	.58	e.58	e.80	e1.2	17	5.3	4.4	3.0	3.1	3.2	2.7
7	.55	.58	e.59	e.78	e1.2	13	5.0	4.4	3.1	2.9	3.0	2.8
8	.54	.97	e.59	e.76	e1.1	17	4.9	4.7	3.2	3.1	2.8	3.0
9	.46	.56	e.60	e.75	e1.0	20	4.7	5.1	3.3	3.1	2.9	3.1
10	.45	e.57	e.60	e.76	e42	12	5.0	5.0	3.3	3.4	2.8	3.0
11	.53	e.60	e.63	e.78	e15	10	4.8	4.7	3.4	3.3	2.7	2.9
12	.49	e.58	e.62	e.80	149	8.9	4.6	4.6	3.4	3.3	2.7	2.6
13	.52	e.56	e.62	e.77	58	8.3	4.5	4.9	3.6	3.1	2.9	2.6
14	.52	e.57	e.64	e.82	65	8.1	4.4	5.2	3.4	3.1	3.1	2.7
15	.52	e.60	e.62	e.84	35	7.7	4.8	4.5	3.3	3.8	2.9	2.7
16	.57	e.61	e.60	e.83	111	7.4	4.8	4.4	3.2	3.4	2.9	3.2
17	.51	e.60	e.60	e.87	53	7.3	27	4.6	3.2	3.3	2.6	2.7
18	.55	e.63	e.61	e.90	32	7.2	19	4.7	3.6	3.1	2.6	2.7
19	.55	e.62	e.62	e.94	30	7.3	17	4.4	3.4	3.0	2.8	2.7
20	.51	e.60	e.62	e1.0	128	7.9	9.9	4.6	3.2	3.1	2.9	2.8
21	.52	e.65	e.63	1.1	210	7.1	8.1	4.1	3.2	3.1	3.2	3.1
22	.52	e.64	e.63	1.3	17	7.0	7.6	3.8	3.1	3.3	3.4	4.1
23	.52	e.65	e.64	1.2	52	7.0	6.8	4.1	3.1	3.1	3.9	11
24	.53	e.64	e.65	1.2	17	7.6	6.4	4.3	3.1	3.1	3.4	3.4
25	.55	e.62	e.64	38	14	6.6	5.9	13	3.2	2.8	3.2	3.1
26	.61	e.62	e.63	8.9	11	6.8	5.2	5.2	3.7	3.0	3.4	2.9
27	.62	e.64	e.66	3.1	12	6.8	5.0	4.3	3.0	3.0	3.3	3.1
28	.79	e.61	e.65	2.2	11	6.9	5.0	3.7	3.3	2.9	3.3	4.3
29	1.0	e.60	e.64	1.9	9.0	7.3	5.1	3.5	2.9	3.0	3.4	3.1
30	.87	e.60	e.65	2.2	---	6.4	4.8	3.9	3.2	3.1	3.9	3.2
31	.85	---	e7.1	11	---	6.0	---	3.8	---	3.1	3.3	---
TOTAL	17.95	19.63	25.69	89.97	1082.5	308.0	214.2	146.9	98.2	98.4	95.5	98.6
MEAN	.58	.65	.83	2.90	37.3	9.94	7.14	4.74	3.27	3.17	3.08	3.29
MAX	1.0	.97	7.1	38	210	36	27	13	3.7	3.9	3.9	11
MIN	.45	.56	.58	.72	1.0	6.0	4.4	3.5	2.9	2.8	2.6	2.6
AC-FT	36	39	51	178	2150	611	425	291	195	195	189	196

e Estimated.

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.06	3.22	4.77	10.2	15.0	10.1	3.46	1.44	.81	.58	.65	.90
MAX	15.3	31.6	26.6	95.8	165	79.9	50.3	31.9	7.83	3.92	4.68	7.02
(WY)	1984	1984	1989	1993	1980	1978	1983	1998	1998	1998	1983	1986
MIN	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1943	1943	1951	1951	1951	1951	1950	1942	1942	1942	1942	1942

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	844.89		2295.54			
ANNUAL MEAN	2.31		6.27		4.30	
HIGHEST ANNUAL MEAN					23.9	1998
LOWEST ANNUAL MEAN					.001	1951
HIGHEST DAILY MEAN	63	Jan 26	210	Feb 21	1700	Feb 18 1980
LOWEST DAILY MEAN	.37	Jul 31	.45	Oct 10	.00	Mar 24 1942
ANNUAL SEVEN-DAY MINIMUM	.40	Sep 20	.50	Oct 9	.00	Apr 29 1942
INSTANTANEOUS PEAK FLOW			880	Feb 21	a	Feb 18 1980
INSTANTANEOUS PEAK STAGE			4.50	Feb 21	a	Feb 18 1980
ANNUAL RUNOFF (AC-FT)	1680		4550		3110	
10 PERCENT EXCEEDS	2.6		8.9		3.8	
50 PERCENT EXCEEDS	1.2		3.1		.22	
90 PERCENT EXCEEDS	.46		.60		.00	

a Instantaneous peak discharge and stage for period of record are unknown, but probably occurred on Feb. 18, 1980.

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.—Lat 33°53'45", long 117°53'07", in NW 1/4 SW 1/4 sec.24, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on left bank of outlet channel of Fullerton Dam, and 1.6 mi southeast of Brea.

DRAINAGE AREA.—4.94 mi^2.

PERIOD OF RECORD.—October 1941 to current year.

REVISED RECORDS.—WSP 1245: 1950(M). WSP 1928: Drainage area. WDR CA-82-1: 1981.

GAGE.—Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. V-notch sharp-crested weir used Oct. 25, 1946, to Feb. 2, 1956. Prior to Dec. 3, 1971, at datum 3.00 ft higher.

REMARKS.—Records fair. Flow regulated by Fullerton Flood-Control Reservoir, capacity, 760 acre-ft (resurvey of 1970). Small tributary formerly entering below station diverted into reservoir since December 1954. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 392 ft^3/s, Mar. 1, 1983, gage height, 8.25 ft, present datum; no flow at times some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.34	.37	.60	.34	.34	.73	.94	.27	.32	.40	.36
2	.35	.32	.41	.35	.29	.33	.71	.28	.27	.30	.34	.35
3	.29	.37	.36	.36	.30	8.3	.64	.29	.28	.31	.36	.33
4	.32	.41	.34	.32	.30	11	.41	.37	.29	.31	.39	.34
5	.34	.40	.40	.34	.35	51	.32	.37	.30	.31	.37	.34
6	.34	.40	.33	.33	.28	2.0	.34	.33	.30	.31	.36	.33
7	.33	.36	.38	.33	.29	.48	.33	.30	.29	.32	.27	.37
8	.32	.60	.43	.37	.32	18	.35	.35	.30	.31	.61	.47
9	.37	.39	.36	.31	.30	.78	.31	.37	.32	.31	.25	.37
10	.36	.34	.33	.34	8.7	.40	.34	.36	.31	.33	.21	.38
11	.36	.35	.36	.36	1.0	.39	.36	.33	.32	.33	.26	.37
12	.39	.31	.33	.34	38	.37	.38	.34	.30	.32	.34	.34
13	.38	.35	.36	.37	1.9	.31	.37	.39	.30	.32	.27	.33
14	.38	.34	.32	.33	8.2	.31	.37	.31	.30	.33	.27	.35
15	.40	.35	.34	.36	.53	.31	.32	.31	.31	.37	.29	.38
16	.38	.42	.36	.33	26	.31	.32	.73	.34	.33	.29	.40
17	.35	.38	.32	.34	2.6	.32	31	8.1	.32	.35	.29	.38
18	.35	.36	.37	.34	.35	.34	18	2.1	.34	.36	.36	.39
19	.33	.35	.30	.37	.33	.32	.63	.66	.33	.29	.33	.40
20	.33	.39	.29	.33	26	.31	.40	.57	.33	.20	.29	.38
21	.29	.31	.37	.33	90	.31	.45	.32	.29	.21	.27	.37
22	.28	.34	.23	.39	8.8	.30	.41	.37	.26	.22	.32	.59
23	.31	.36	.18	.34	52	.30	.40	.41	.22	.23	.32	3.6
24	.31	.40	.22	.36	11	.30	.41	.55	.16	1.1	.33	.35
25	.34	.34	.21	15	2.3	.32	.36	4.0	.10	.32	.35	.36
26	.42	.34	.25	1.5	1.6	.30	.32	.52	.24	.33	.35	.36
27	.38	.37	.27	.44	5.0	.29	.39	.40	.31	.34	.34	.35
28	.39	.34	.27	.39	.57	.32	.37	.30	.32	.38	.36	.55
29	.37	.42	.26	.39	.37	.32	.42	.30	.32	.38	.45	.41
30	.31	.38	.28	.38	---	.54	.37	.29	.32	.37	.35	.38
31	.30	---	.87	6.3	---	.70	---	.27	---	.42	.36	---
TOTAL	10.73	11.13	10.47	32.94	288.02	99.92	60.53	25.53	8.66	10.63	10.35	14.68
MEAN	.35	.37	.34	1.06	9.93	3.22	2.02	.82	.29	.34	.33	.49
MAX	.42	.60	.87	15	90	51	31	8.1	.34	1.1	.61	3.6
MIN	.28	.31	.18	.31	.28	.29	.31	.27	.10	.20	.21	.33
AC-FT	21	22	21	65	571	198	120	51	17	21	21	29

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.030	.034	.99	.41	.75	.058	.000	.002	.001	.000	.000
MAX	.000	.31	.19	6.62	3.34	4.60	.36	.003	.020	.016	.000	.000
(WY)	1942	1945	1946	1952	1944	1943	1952	1945	1942	1942	1942	1942
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1942	1942	1942	1942	1942	1942	1943	1943	1942	1942

SUMMARY STATISTICS	WATER YEARS 1942 - 1954	
ANNUAL MEAN	.19	
HIGHEST ANNUAL MEAN	.92	1952
LOWEST ANNUAL MEAN	.000	1948
HIGHEST DAILY MEAN	79	Jan 19 1952
LOWEST DAILY MEAN	.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1941
INSTANTANEOUS PEAK FLOW	298	Mar 16 1943
INSTANTANEOUS PEAK STAGE	3.80	Mar 16 1943
ANNUAL RUNOFF (AC-FT)	137	
10 PERCENT EXCEEDS	.00	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.54	1.19	2.00	4.20	5.18	3.34	1.01	.51	.35	.31	.36	.45
MAX	5.31	5.76	9.96	28.0	32.1	18.6	6.28	5.87	1.66	1.01	1.72	2.53
(WY)	1984	1986	1993	1993	1998	1983	1958	1998	1995	1991	1977	1986
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1963	1964	1966	1955	1961	1955	1955	1955	1955

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	342.34		583.59			
ANNUAL MEAN	.94		1.59		1.60	
HIGHEST ANNUAL MEAN					5.16	1993
LOWEST ANNUAL MEAN					.028	1964
HIGHEST DAILY MEAN	26	Apr 12	90	Feb 21	221	Mar 1 1983
LOWEST DAILY MEAN	.18	Dec 23	.10	Jun 25	.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.23	Dec 22	.23	Jun 21	.00	Oct 1 1954
INSTANTANEOUS PEAK FLOW			274	Feb 21	392	Mar 1 1983
INSTANTANEOUS PEAK STAGE			7.34	Feb 21	8.25	Mar 1 1983
ANNUAL RUNOFF (AC-FT)	679		1160		1160	
10 PERCENT EXCEEDS	.66		.70		1.0	
50 PERCENT EXCEEDS	.43		.34		.31	
90 PERCENT EXCEEDS	.34		.29		.00	

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA

LOCATION.—Lat 34°15'13", long 118°23'17", in Mission San Fernando Grant, Los Angeles County, Hydrologic Unit 18070105, in city of Los Angeles, on left bank of outlet channel, 0.5 mi downstream from Hansen Dam, 0.1 mi upstream from Glen Oaks Boulevard, and 3 mi southeast of San Fernando.

DRAINAGE AREA.—153 mi^2.

PERIOD OF RECORD.—May 1932 to February 1938, August 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1975, published as Tujunga Creek below Hansen Dam.

REVISED RECORDS.—WDR CA-84-1: 1978(M).

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Datum of gage is 943.32 ft above sea level (U.S. Army Corps of Engineers benchmark). See WSP 1735 for history of changes prior to Oct. 1, 1953.

REMARKS.—Records fair except for discharges below 100 ft^3/s, which are poor. Flow regulated since July 1931 by Big Tujunga Flood-Control Reservoir, capacity, 5,690 acre-ft, and since September 1940 by Hansen Flood-Control Reservoir, capacity, 25,450 acre-ft. Several small diversions for domestic use and irrigation. Since about 1948, Los Angeles County Department of Public Works has diverted water 0.3 mi upstream from gage to spreading grounds, as shown in footnote below table. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,200 ft^3/s, Feb. 10, 1978, Mar. 2, 1983; maximum gage height, 7.64 ft, Mar. 2, 1983; no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 54,000 ft^3/s, estimated, Mar. 2, 1938.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	18	.00	.00	.00	.01	.50
2	.00	.00	.00	.00	.00	.00	21	.00	.00	.00	.00	.50
3	.00	.00	.00	.00	.00	.00	23	.00	.00	.00	.00	.65
4	.00	.00	.00	.00	.00	.00	24	.00	.00	.00	.00	.39
5	.00	.00	.00	.00	.00	24	24	.00	.00	.00	.00	.01
6	.00	.00	.00	.00	.00	53	24	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	48	22	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	43	13	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	48	9.7	.00	.00	.00	.00	.01
10	.00	.00	.00	.00	.00	47	8.1	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	48	7.5	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.20	49	6.0	.00	.00	.00	.00	.01
13	.00	.00	.00	.00	.00	48	2.7	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	49	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	39	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.02	13	.00	9.0	.00	.00	.00	.00
17	.00	.00	.00	.00	21	.00	.01	19	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	21	13	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	64	9.8	.00	.00	.00	.00
20	.00	.00	.00	.00	.04	.00	42	7.4	.00	.00	.00	.00
21	.00	.00	.00	.00	43	.00	.00	6.1	.00	.00	.00	.05
22	.00	.00	.00	.00	53	.00	.25	6.1	.00	.00	.00	.11
23	.00	.00	.00	.00	38	.00	.00	6.2	.00	.00	.00	.53
24	.00	.00	.00	.00	65	.00	.00	2.0	.00	.00	.00	.56
25	.00	.00	.00	.00	55	.00	.52	.00	.00	.00	.00	.46
26	.00	.00	.00	.00	51	.00	.00	.00	.00	.00	.00	.47
27	.00	.00	.00	.00	31	7.8	.00	.00	.00	.00	.00	.36
28	.00	.00	.00	.00	.00	9.9	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	9.7	.00	.00	.00	.00	.40	.00
30	.00	.00	.00	.00	---	9.7	.00	.00	.00	.00	.53	.00
31	.00	---	.00	.00	---	11	---	.00	---	.00	.52	---
TOTAL	0.00	0.00	0.00	0.00	357.26	557.10	330.78	78.60	0.00	0.00	1.46	4.61
MEAN	.000	.000	.000	.000	12.3	18.0	11.0	2.54	.000	.000	.047	.15
MAX	.00	.00	.00	.00	65	53	64	19	.00	.00	.53	.65
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	709	1110	656	156	.00	.00	2.9	9.1
a	204	235	188	365	2030	1620	1180	385	204	184	226	209

a Combined discharge, in acre-feet, of creek and diversion.

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.49	7.69	3.85	39.6	95.5	81.1	28.5	24.6	7.21	2.64	2.12	3.15
MAX	32.2	153	65.3	742	1218	1387	252	446	81.1	52.4	33.1	41.4
(WY)	1984	1984	1984	1993	1993	1983	1983	1998	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1948	1948	1950	1949	1949	1950	1950	1949	1948	1948	1948	1948

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	2428.04		1329.81			
ANNUAL MEAN	6.65		3.63		24.5	
HIGHEST ANNUAL MEAN					224	1993
LOWEST ANNUAL MEAN					.000	1950
HIGHEST DAILY MEAN	136	Apr 7	65	Feb 24	11400	Mar 2 1983
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1947
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 9	.00	Oct 1	.00	Oct 1 1947
INSTANTANEOUS PEAK FLOW			864	Feb 17	15200	Mar 2 1983
INSTANTANEOUS PEAK STAGE			2.20	Feb 17	7.64	Mar 2 1983
ANNUAL RUNOFF (AC-FT)	4820		2640		17740	
10 PERCENT EXCEEDS	15		9.7		20	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11098000 ARROYO SECO NEAR PASADENA, CA

LOCATION.—Lat 34°13'20", long 118°10'36", in NW 1/4 NE 1/4 sec.31, T.2 N., R.12 W., Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.7 mi east of Angeles Crest Highway, 1.5 mi upstream from Millard Canyon, and 5.5 mi northwest of Pasadena.

DRAINAGE AREA.—16.0 mi^2.

PERIOD OF RECORD.—December 1910 to January 1913 (fragmentary), April 1913 to November 1915, April 1916 to current year.

REVISED RECORDS.—WSP 1315-B: 1914(M), 1918(M), 1920–21(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Broad-crested weir since November 1938. Datum of gage is 1,397.88 ft above sea level. Prior to Oct. 1, 1916, nonrecording gage at different datum. Oct. 1, 1916, to Oct. 19, 1945, water-stage recorder at datum 4.00 ft lower.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,620 ft^3/s, Mar. 2, 1938, gage height, 9.42 ft, present datum, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum, from rating curve extended above 1,170 ft^3/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2200	509	3.66	Mar. 5	1400	227	3.07
Feb. 23	1630	244	3.17				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.33	.50	e.87	1.5	10	4.3	4.8	1.7	.63	.34	.20
2	.37	.35	.55	e.82	1.4	9.2	4.1	4.4	1.6	.62	.31	.19
3	.38	.38	.61	e.82	1.3	8.9	3.9	4.3	1.5	.64	.30	.18
4	.38	.39	.70	e.80	1.3	10	3.7	4.2	1.4	.62	.29	.15
5	.33	.42	.74	.77	1.3	68	3.6	4.4	1.3	.58	.28	.16
6	.31	.43	.77	.77	1.3	41	3.7	4.5	1.3	.55	.27	.17
7	.31	.45	.77	.94	1.2	24	3.7	4.3	1.2	.56	.31	.19
8	.30	.65	.77	.93	1.2	35	3.4	4.1	1.4	.56	.30	.21
9	.23	.54	.77	.92	1.2	28	3.2	4.2	1.4	.56	.26	.13
10	.21	.48	.78	.97	6.5	22	3.2	4.1	1.4	.55	.21	.16
11	.22	.44	.78	.97	8.1	19	3.1	4.0	1.4	.55	.18	.16
12	.22	.40	.85	.97	18	17	3.0	3.8	1.4	.55	.18	.15
13	.22	.39	.86	.97	7.9	15	3.0	3.6	1.3	.50	.19	.15
14	.23	.42	.88	.94	7.5	13	3.5	3.0	1.2	.46	.20	.18
15	.27	.43	.86	.96	6.1	12	4.6	3.1	1.2	.46	.18	.18
16	.32	.45	.91	.97	24	11	3.7	3.7	1.5	.47	.18	.16
17	.28	.50	.93	1.0	18	9.9	32	3.8	1.6	.44	.17	.11
18	.30	.52	.97	1.1	8.2	9.0	55	3.3	1.2	.38	.19	.13
19	.30	.53	e.85	1.1	5.6	8.3	19	2.9	1.0	.36	.18	.14
20	.29	.58	e.84	1.1	57	7.8	10	2.5	.98	.36	.17	.17
21	.29	.64	e.84	1.1	144	7.2	7.9	2.1	.96	.37	.26	.29
22	.29	.67	e.84	1.1	38	7.0	7.3	1.7	.95	.37	.21	.30
23	.31	.75	e.83	1.2	78	6.7	6.9	1.8	.94	.36	.20	.46
24	.34	.76	e.83	1.2	51	6.5	6.3	2.0	.88	.35	.18	.21
25	.35	.63	e.83	2.1	23	6.2	5.7	2.5	.81	.36	.19	.14
26	.36	.45	e.82	1.7	16	5.9	5.2	2.5	.74	.37	.20	.16
27	.39	.47	e.82	1.4	17	5.7	5.0	2.1	.71	.36	.17	.19
28	.44	.46	e.82	1.5	15	5.7	5.1	1.9	.67	.35	.19	.23
29	.44	.45	e.82	1.4	12	5.6	4.9	1.7	.64	.35	.26	.26
30	.37	.45	e.82	1.4	---	5.4	5.1	1.7	.63	.35	.27	.22
31	.34	---	e.95	1.8	---	4.6	---	1.7	---	.37	.22	---
TOTAL	9.69	14.81	24.91	34.59	572.6	444.6	233.1	98.7	34.91	14.36	7.04	5.73
MEAN	.31	.49	.80	1.12	19.7	14.3	7.77	3.18	1.16	.46	.23	.19
MAX	.44	.76	.97	2.1	144	68	55	4.8	1.7	.64	.34	.46
MIN	.21	.33	.50	.77	1.2	4.6	3.0	1.7	.63	.35	.17	.11
AC-FT	19	29	49	69	1140	882	462	196	69	28	14	11

e Estimated.

11098000 ARROYO SECO NEAR PASADENA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.17	3.85	8.73	18.5	33.5	28.2	14.2	7.24	3.53	1.70	1.02	1.05
MAX	8.54	97.4	132	251	344	235	91.5	77.1	22.9	10.7	7.70	8.26
(WY)	1984	1966	1922	1969	1914	1938	1941	1998	1998	1969	1983	1976
MIN	.000	.060	.12	.58	.93	1.16	.69	.50	.35	.042	.000	.000
(WY)	1927	1934	1991	1991	1924	1961	1961	1961	1961	1960	1925	1925

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1911 - 2000	
ANNUAL TOTAL	790.56		1495.04			
ANNUAL MEAN	2.17		4.08		10.1	
HIGHEST ANNUAL MEAN					57.8	1969
LOWEST ANNUAL MEAN					.75	1951
HIGHEST DAILY MEAN	18	Feb 9	144	Feb 21	3690	Feb 20 1914
LOWEST DAILY MEAN	.21	Oct 10	.11	Sep 17	.00	Aug 18 1920
ANNUAL SEVEN-DAY MINIMUM	.23	Oct 9	.15	Sep 13	.00	Aug 18 1920
INSTANTANEOUS PEAK FLOW			509	Feb 20	8620	Mar 2 1938
INSTANTANEOUS PEAK STAGE			3.66	Feb 20	9.42	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	1570		2970		7330	
10 PERCENT EXCEEDS	4.7		8.2		16	
50 PERCENT EXCEEDS	.97		.83		1.9	
90 PERCENT EXCEEDS	.30		.20		.20	

11101250 RIO HONDO ABOVE WHITTIER NARROWS DAM, CA

LOCATION.—Lat 34°03'30", long 118°04'15", in Potrero Grande Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.3 mi downstream from Garvey Avenue, 0.4 mi downstream from Rubio Wash, 2.8 mi upstream from axis of Whittier Narrows Dam, and 2.2 mi west of El Monte.

DRAINAGE AREA.—91.2 mi^2.

PERIOD OF RECORD.—February 1956 to current year.

GAGE.—Water-stage recorder. Concrete trapezoidal channel. Datum of gage is 217.8 ft above sea level.

REMARKS.—Records fair. Flow regulated by Big Santa Anita, Sawpit, and Eaton Flood-Control Reservoirs, and Sierra Madre, Las Flores, and Rubio debris basins, combined capacity, 2,195 acre-ft. Many diversions upstream from station for domestic use and irrigation. Los Angeles County Department of Public Works reported no diversions from San Gabriel River below Santa Fe Dam to Rio Hondo during current year. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion provided by the Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,200 ft^3/s, Feb. 16, 1980, gage height, 7.35 ft; no flow for some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	1.5	5.0	2.7	2.0	.96	1.1	1.0	.79	.97	1.1	.80
2	1.1	1.9	5.2	1.1	.98	1.2	1.1	1.3	.86	.81	.96	.80
3	1.1	1.6	2.8	1.2	1.6	213	1.3	1.3	.75	.80	.94	.81
4	1.1	2.1	2.8	1.1	1.2	45	2.0	1.6	.75	.77	.79	.83
5	1.9	1.8	3.5	.83	1.5	1090	1.7	1.8	.96	.78	.82	1.6
6	4.6	1.5	5.3	.80	1.2	4.3	1.5	1.3	2.2	.93	.88	.99
7	2.4	1.5	4.2	.85	1.3	1.4	1.5	1.5	2.2	.83	.95	1.4
8	1.8	19	2.4	1.1	1.6	493	1.5	1.6	.75	.79	1.0	1.4
9	1.3	2.3	2.3	.97	1.6	1.3	1.3	1.5	.76	.61	1.0	.83
10	1.1	1.9	2.5	1.2	310	.91	1.4	1.2	.75	1.3	.95	.77
11	2.0	1.9	2.1	1.5	9.8	.92	1.9	1.1	.76	.92	.80	1.6
12	3.3	3.2	2.2	1.9	483	.84	1.2	1.0	.71	.97	.80	3.1
13	1.4	2.2	4.7	2.3	68	2.0	1.3	1.3	.73	1.1	.68	.95
14	1.4	2.4	6.7	1.9	56	2.8	1.4	1.2	.97	1.0	.78	1.2
15	1.4	3.4	7.8	1.3	1.4	1.1	1.7	1.2	.97	1.1	.77	1.2
16	1.6	3.0	5.3	1.4	567	1.2	1.5	1.7	1.2	1.1	1.2	.94
17	1.3	2.1	4.4	2.1	5.3	.78	858	1.5	2.0	.99	1.5	.88
18	1.4	1.5	3.4	1.9	.97	.82	409	1.7	3.0	.93	.93	.92
19	1.4	1.6	4.1	3.2	.72	.98	1.7	1.3	2.3	1.1	1.1	1.1
20	1.5	7.0	4.8	2.0	847	.85	1.2	1.2	1.0	1.1	.82	1.2
21	1.6	2.6	3.0	1.8	945	.84	1.4	1.2	1.2	1.1	1.0	3.9
22	1.4	2.5	1.5	.99	7.2	.75	1.4	1.1	1.2	.99	1.0	6.3
23	1.5	1.9	1.4	1.1	1210	1.0	1.3	1.6	1.0	.89	1.2	69
24	1.2	2.5	1.6	1.5	4.5	1.2	1.3	2.6	.86	.86	1.4	.99
25	1.1	2.7	1.6	254	1.3	1.3	1.4	9.5	1.9	1.0	1.2	1.3
26	1.3	3.0	1.6	5.5	1.0	1.4	2.9	1.2	2.2	.92	.88	1.1
27	2.0	3.5	1.7	1.1	343	1.6	1.2	.92	2.4	.89	.97	1.3
28	2.0	3.4	1.7	.87	3.4	1.9	1.3	.87	1.6	1.3	1.1	1.3
29	1.7	3.9	1.8	.76	1.2	1.6	1.2	.77	1.1	1.1	1.9	1.4
30	1.5	3.9	1.7	29	---	1.2	1.1	.84	.78	.77	1.4	2.5
31	1.5	---	123	48	---	.99	---	.84	---	.94	1.2	---
TOTAL	50.88	93.3	222.1	375.97	4878.77	1877.14	1307.8	48.74	38.65	29.66	32.02	112.41
MEAN	1.64	3.11	7.16	12.1	168	60.6	43.6	1.57	1.29	.96	1.03	3.75
MAX	4.6	19	123	254	1210	1090	858	9.5	3.0	1.3	1.9	69
MIN	.98	1.5	1.4	.76	.72	.75	1.1	.77	.71	.61	.68	.77
AC-FT	101	185	441	746	9680	3720	2590	97	77	59	64	223

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	17.2	38.0	44.7	92.7	152	99.6	40.2	27.0	25.5	17.0	9.26	11.2
MAX	253	284	178	834	860	796	236	260	166	187	112	109
(WY)	1984	1966	1978	1993	1969	1983	1983	1998	1996	1983	1991	1982
MIN	.59	.087	.49	.95	.34	.31	.47	.41	.13	.26	.035	.097
(WY)	1978	1957	1959	1976	1961	1956	1977	1959	1956	1956	1956	1956

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	5281.49		9067.44			
ANNUAL MEAN	14.5		24.8		47.7	
HIGHEST ANNUAL MEAN					187	1983
LOWEST ANNUAL MEAN					6.01	1961
HIGHEST DAILY MEAN	609	Apr 6	1210	Feb 23	7700	Jan 25 1969
LOWEST DAILY MEAN	.79	Apr 4	.61	Jul 9	.00	Mar 3 1956
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 4	.78	Jun 8	.00	Apr 5 1956
INSTANTANEOUS PEAK FLOW			7940	Feb 21	18200	Feb 16 1980
INSTANTANEOUS PEAK STAGE			5.01	Feb 21	7.35	Feb 16 1980
ANNUAL RUNOFF (AC-FT)	10480		17990		34550	
10 PERCENT EXCEEDS	20		4.6		92	
50 PERCENT EXCEEDS	1.8		1.3		1.9	
90 PERCENT EXCEEDS	1.1		.83		.50	

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.—Lat 34°01'00", long 118°05'15", in Paso de Bartolo Grant, Los Angeles County, Hydrologic Unit 18070105, on right levee, 0.2 mi upstream from Beverly Boulevard, 0.4 mi downstream from axis of Whittier Narrows Dam, and 1.0 mi northeast of Montebello.

DRAINAGE AREA.—124 mi^2.

PERIOD OF RECORD.—October 1966 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 175 ft above sea level, from topographic map.

REMARKS.—Records good except for discharges below 500 ft^3/s, which are poor. Flow regulated by Whittier Narrows Flood-Control Reservoir, capacity, 36,160 acre-ft. There are several small flood-control reservoirs (combined capacities, 1,700 acre-ft) and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Discharge records for current year provided by Los Angeles County Department of Public Works for the following dates: Oct. 1 to Jan. 24, Jan. 26 to Feb. 9, Feb. 11, 13–15, 17–19, 22, Feb. 24 to Mar. 4, Mar. 6–7, Mar. 9 to Apr. 16, and Apr. 19 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 38,800 ft^3/s, Jan. 25, 1969, gage height, 13.82 ft, from rating curve extended above 15,000 ft^3/s on basis of gate openings at dam at gage heights 12.32 and 13.82 ft; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	15	120	145	124	20	65	4.8	183	6.7	.00	.00
2	35	2.0	118	123	155	17	58	4.9	122	4.7	.00	.00
3	35	2.0	117	119	131	78	44	14	123	3.9	.00	.00
4	35	2.0	111	117	140	245	56	29	123	3.9	.00	.00
5	35	2.0	111	125	152	1880	50	64	95	4.9	.00	.00
6	35	2.0	111	138	149	214	47	82	89	5.1	.00	.00
7	35	2.0	105	138	147	46	47	85	72	4.9	.00	.00
8	35	4.0	104	138	141	829	48	86	32	4.0	.00	20
9	35	2.0	84	138	93	6.6	49	81	30	3.5	.00	20
10	35	2.0	15	139	770	27	66	83	30	1.3	.00	25
11	35	2.0	13	138	136	20	54	116	31	.00	.00	25
12	35	2.0	11	131	977	15	50	174	29	.00	.00	25
13	35	40	9.2	130	167	51	41	164	27	.00	.00	20
14	35	86	2.0	127	282	56	9.7	160	28	.00	.00	20
15	35	150	.76	131	65	113	6.7	143	37	.00	.00	20
16	35	130	3.3	130	812	93	.00	97	33	.00	.00	20
17	35	130	33	131	256	105	1100	57	32	.00	.00	20
18	35	130	97	159	23	103	1190	97	32	.00	.00	20
19	35	110	97	165	19	103	135	138	27	.00	.00	25
20	35	90	109	131	863	96	107	120	31	.00	.00	30
21	35	70	134	132	2990	111	16	105	27	.00	.00	30
22	35	65	127	137	57	141	9.0	124	31	.00	.00	30
23	35	75	120	135	2580	111	8.0	140	29	.00	.00	30
24	35	78	119	135	238	119	8.0	130	27	.00	.00	30
25	35	78	123	605	173	115	14	118	27	10	.00	25
26	35	79	123	93	32	118	2.6	47	23	.00	.00	20
27	35	78	127	113	214	120	6.4	38	29	.00	.00	20
28	35	79	134	124	83	78	5.7	31	32	.00	.00	20
29	35	112	260	124	23	31	5.5	33	21	.00	.00	20
30	50	124	225	126	---	126	5.2	49	5.0	.00	.00	20
31	45	---	282	201	---	110	---	173	---	.00	.00	---
TOTAL	1110	1743.0	3145.26	4618	11992	5297.6	3303.80	2787.7	1457.0	52.90	0.00	535.00
MEAN	35.8	58.1	101	149	414	171	110	89.9	48.6	1.71	.000	17.8
MAX	50	150	282	605	2990	1880	1190	174	183	10	.00	30
MIN	35	2.0	.76	93	19	6.6	.00	4.8	5.0	.00	.00	.00
AC-FT	2200	3460	6240	9160	23790	10510	6550	5530	2890	105	.00	1060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

MEAN	101	136	158	346	523	343	120	113	102	69.8	52.9	72.0
MAX	302	362	522	2378	3459	2265	371	323	355	205	244	413
(WY)	1984	1992	1992	1993	1969	1983	1983	1998	1992	1993	1991	1991
MIN	.001	7.08	10.3	29.2	22.1	15.6	4.25	.000	.093	1.10	.000	.13
(WY)	1978	1978	1977	1976	1984	1972	1977	1999	1977	1972	2000	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1967 - 2000	
ANNUAL TOTAL	19972.07		36042.26			
ANNUAL MEAN	54.7		98.5		176	
HIGHEST ANNUAL MEAN					638	1993
LOWEST ANNUAL MEAN					40.9	1972
HIGHEST DAILY MEAN	804	Apr 6	2990	Feb 21	21200	Mar 2 1983
LOWEST DAILY MEAN	.00	May 1	.00	Apr 16	.00	Oct 29 1966
ANNUAL SEVEN-DAY MINIMUM	.00	May 1	.00	Jul 11	.00	Sep 10 1969
INSTANTANEOUS PEAK FLOW			13800	Feb 23	38800	Jan 25 1969
INSTANTANEOUS PEAK STAGE			7.99	Feb 23	13.82	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	39610		71490		127700	
10 PERCENT EXCEEDS	117		144		250	
50 PERCENT EXCEEDS	35		35		78	
90 PERCENT EXCEEDS	.00		.00		2.8	

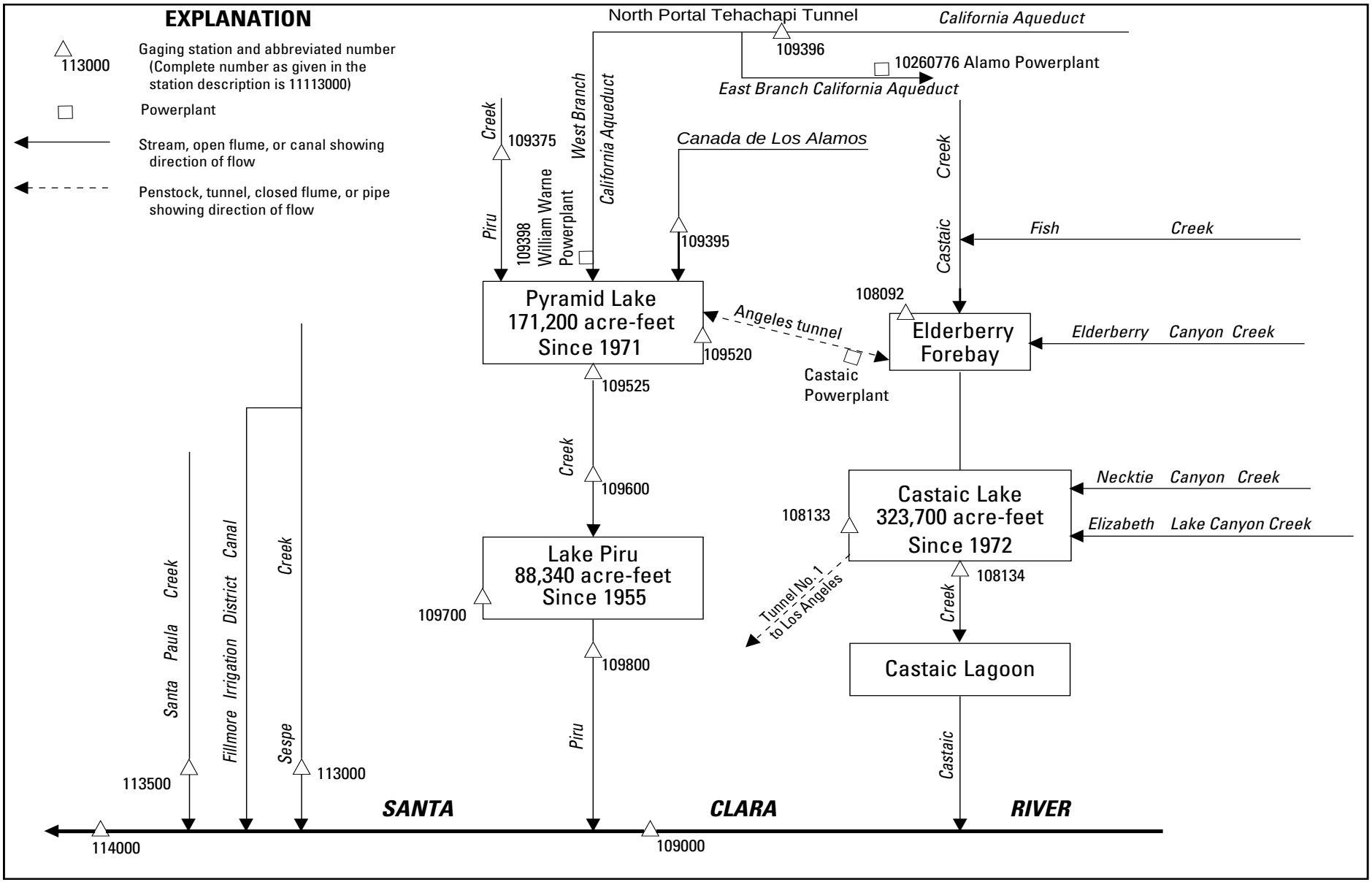

Figure 19. Diversions and storage in Santa Clara River Basin.

11108092 ELDERBERRY FOREBAY NEAR CASTAIC, CA

LOCATION.—Lat 34°33'46", long 118°37'58", in SW 1/4 SE 1/4 sec.36, T.6 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, Angeles National Forest, in outlet tower in Elderberry Forebay, and 5 mi north of Castaic.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Los Angeles Department of Water and Power).

REMARKS.—Forebay is formed by a concrete dam on Castaic Creek completed in 1974. Capacity, 32,476 acre-ft, at spillway crest on dam, at elevation 1,540 ft. Storage at normal minimum pool, 12,228 acre-ft, at elevation 1,490 ft. Forebay receives water from Pyramid Lake (station 11109520) via Castaic Powerplant. Water is pumped at times to Pyramid Lake during off-peak periods to be re-released through the powerplant. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were provided by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 31,537 acre-ft, Oct. 5, 2000, elevation, 1,538.09 ft; minimum, 15,716 acre-ft, Feb. 9, 1996, elevation, 1,500.54 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 31,537 acre-ft, Oct. 5, elevation, 1,538.09 ft; minimum, 16,283 acre-ft, Mar. 3, elevation, 1,502.15 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
Based on table provided by California Department of Water Resources dated Jan. 27, 1995)

1,490	12,228	1,520	23,240
1,500	15,527	1,530	27,680
1,510	19,183	1,540	32,476

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29062	23028	24078	22660	19852	18775	18950	26049	24671	23875	26085	23428
2	26781	22530	26328	21922	20365	17869	19350	27275	24767	22188	21372	19848
3	21786	24505	23733	21769	21120	16283	19346	28048	27252	18449	20076	18498
4	26950	24947	23647	23109	20421	17471	18190	25727	25923	18306	24701	20131
5	31537	23733	22715	24938	20317	18748	19864	26895	26040	20560	26827	21852
6	28408	18141	23767	28380	16870	21939	23445	23386	26663	22146	21063	22543
7	27755	19520	26013	24518	20305	19567	20250	21156	24605	22346	22947	22543
8	24960	19180	25406	24261	21035	20159	18239	21831	21466	21225	23668	24846
9	25986	21400	27677	21860	22926	17197	20813	25119	19962	20696	22042	21683
10	24894	19750	24815	21511	26139	17806	23673	26640	18718	22113	24925	19408
11	27969	19412	24243	18246	22513	18011	23583	22673	16297	23334	30434	23377
12	27083	22530	20480	19552	22867	17062	24031	21662	18687	21462	26454	28267
13	24745	22050	20361	21794	20088	18332	24640	18536	21914	24943	19342	27064
14	26184	20060	20294	18912	22055	17973	23936	18242	24065	27598	21811	27788
15	25504	20544	20865	19180	19188	17456	19404	20496	25888	23699	28925	28202
16	26152	20861	21018	18141	21148	19813	18442	21441	27294	20849	27960	24326
17	22480	19257	20692	18985	22442	17157	21724	21992	26260	20013	26822	17405
18	20853	21515	19966	17681	20123	17577	22317	23075	24317	25159	24531	19813
19	23270	23351	18299	19100	20175	18216	22354	25780	23024	25416	22175	20210
20	27978	23390	20025	20704	19207	20163	23484	25203	25322	22221	17925	20313
21	28595	21593	25402	21679	19594	22321	24009	25256	25558	22589	18992	22606
22	24282	26332	25820	20052	17302	20183	21621	20588	25451	21992	22258	24736
23	25305	25526	25967	18487	18566	21290	18134	22096	24925	19342	23759	22952
24	23733	29043	24100	21794	17955	20468	23647	24666	23849	22960	25438	17892
25	23296	26586	21356	21250	16679	19622	25079	24413	23164	21063	26622	21646
26	22854	25442	22013	21380	16429	19470	29233	24326	26618	24235	25847	23377
27	24057	19778	22229	22977	17077	23270	26681	23776	25977	24631	19633	27797
28	22618	18430	21229	24474	18680	21955	26170	24022	28803	24339	19711	26396
29	23668	20568	24448	24135	17729	19993	21736	23045	22816	22317	19188	26202
30	22213	24339	25874	22208	---	18483	22117	27298	25318	17929	16899	22977
31	21968	---	23617	19015	---	18619	---	24771	---	21165	21589	---
MAX	31537	29043	27677	28380	26139	23270	29233	28048	28803	27598	30434	28267
MIN	20853	18141	18299	17681	16429	16283	18134	18242	16297	17929	16899	17405
a	1516.97	1522.55	1520.88	1509.79	1506.14	1508.52	1517.33	1523.54	1524.78	1515.01	1516.05	1519.38
b	-5064	+2371	-722	-4602	-1286	+890	+3498	+2654	+547	-4153	+424	+1388

CAL YR 1999 b +547
WTR YR 2000 b -4055

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11108133 CASTAIC LAKE NEAR CASTAIC, CA

LOCATION.—Lat 34°31'22", long 118°36'43", in NW 1/4 NE 1/4 sec.13, T.5 N., R.16 W., Los Angeles County, Hydrologic Unit 18070102, in intake tower in Castaic Lake and 2.3 mi north of Castaic.

DRAINAGE AREA.—137 mi^2, excludes 18.1 mi^2 noncontributing area in Elizabeth Canyon Creek Basin.

PERIOD OF RECORD.—October 1988 to current year. Prior to October 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Lake is formed by earthfill dam. Storage began April 1972. Dead storage below outlet tower to downstream distribution system, 1,799 acre-ft, elevation, 1,213 ft. Capacity below spillway level, 323,700 acre-ft, elevation, 1,515 ft. Lake receives West Branch California Aqueduct water diverted from Pyramid Lake (station 11109520) via Castaic Powerplant to Elderberry Forebay (station 11108092). Water is released downstream through Castaic Tunnel No. 1 and to Castaic Lagoon. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 322,962 acre-ft, Mar. 25, 1998, elevation, 1,514.67 ft; minimum, 142,325 acre-ft, Jan. 7, 1995, elevation, 1,415.48 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 322,203 acre-ft, May 6, elevation, 1,514.33 ft; minimum, 269,706 acre-ft, Oct. 24, elevation, 1,489.54 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
(Based on table provided by California Department of Water Resources in 1978)

1,450	196,414	1,490	270,629
1,460	213,807	1,500	291,186
1,470	231,964	1,510	310,451
1,480	250,894	1,520	334,985

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287004	273272	285486	278152	288484	290326	297463	311827	312111	305891	300907	299723
2	285569	274082	286920	277233	289070	291880	295616	313381	312965	304078	298958	297804
3	284263	273829	289007	279852	289237	293017	297846	315425	311062	305739	301356	295892
4	282960	274913	287775	281681	289781	292132	300150	318139	309231	303862	303225	293987
5	281599	275482	286525	282836	288819	291480	300535	319735	307406	305286	301356	295701
6	282960	275909	285278	281784	287879	290661	298293	322203	308448	306710	299564	297612
7	281517	273798	283683	284097	286879	292806	300086	320934	310538	304974	297712	301349
8	282962	275035	285159	283146	287004	292174	300214	319535	312768	307038	295987	303238
9	280961	275706	283311	282093	285880	294431	298997	318139	313557	305156	299095	301242
10	279360	277989	283311	282857	284946	295701	296698	316725	311717	306778	302625	299381
11	277641	280037	281743	283683	287942	294812	298528	318361	309819	305027	300735	297591
12	278377	278438	280201	284387	287149	293861	300065	318737	307797	307038	298877	295553
13	279790	279647	278500	283146	286255	292911	301164	317343	305653	305286	297028	295129
14	277887	279831	278275	285652	285382	294156	304229	316064	306626	307298	295848	292764
15	277948	281126	276764	284408	286858	295998	305545	314809	307992	305480	296645	290473
16	275828	281929	274852	283290	287291	294812	303346	313469	309035	303862	294654	292616
17	273636	282692	275218	282176	289049	296507	301542	311956	307211	304768	298208	290389
18	272807	285756	273434	283994	290829	295172	304013	312549	305523	303002	299872	291733
19	272483	288568	271696	284684	289991	293818	306345	310975	307016	305005	297676	289404
20	273049	287254	272665	285507	289195	292216	309013	312549	305221	307081	295638	291102
21	272807	285943	270810	287024	288777	290724	311324	311040	307038	308513	295892	292764
22	274345	284491	272201	285901	290473	292027	313031	312352	308774	306691	293734	293966
23	272039	286359	272685	286733	289928	290326	311127	313338	310146	304940	294960	291817
24	269706	286858	273535	285548	291249	291964	310800	311564	308253	303195	296741	289676
25	272181	285652	273171	286858	292048	293354	313601	312746	306410	305480	298144	287254
26	273454	284283	271495	287837	291670	291775	312352	314193	307862	303583	295786	288129
27	273332	285403	272483	288756	290787	290263	314831	312417	310255	304466	293417	285694
28	275055	284159	274021	289237	289844	292701	315403	310582	308361	306735	294114	286879
29	276540	285133	274649	288276	291228	294664	315447	308687	309666	304789	294558	287420
30	274163	285258	275462	287399	---	297144	313403	306800	307710	302851	296019	284926
31	271737	---	276235	287775	---	298997	---	310734	---	300985	295329	---
MAX	287004	288568	289007	289237	292048	298997	315447	322203	313557	308513	303225	303238
MIN	269706	273272	270810	277233	284946	290263	295616	306800	305221	300985	293417	284926
a	1490.55	1497.16	1492.77	1498.37	1500.02	1503.69	1510.35	1509.13	1507.74	1504.62	1501.96	1497.00
b	-16643	+13521	-9023	+11540	+3453	+7769	+14406	-2669	-3024	-6725	-5656	-10403

CAL YR 1999 b +5525
WTR YR 2000 b -3454

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11108134 CASTAIC CREEK BELOW METROPOLITAN WATER DISTRICT DIVERSION BELOW CASTAIC LAKE, NEAR CASTAIC, CA

(Formerly published as Castaic Creek Release Flow below Castaic Lake, near Castaic, CA)

LOCATION.—Lat 34°31'10", long 118°36'34", in NE 1/4 SE 1/4 sec.13, T.5 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, in outlet structure below Castaic Dam and 1.9 mi north of Castaic.

DRAINAGE AREA.—138 mi^2, excludes 18.1 mi^2 noncontributing area in Elizabeth Canyon Creek Basin.

PERIOD OF RECORD.—October 1994 to current year. Records for 1995 water year published as station 11108135. Records for station 11108135 for October 1976 to September 1978 and October 1988 to September 1994 are not equivalent at low flows due to evaporation and seepage.

GAGE.—Flow meters on outlet pipes. Elevation of gage is 1,200 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Castaic Lake (station 11108133). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3080 ft^3/s, Feb. 23, 1998; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 7,670 ft^3/s, Mar. 2, 1983, at station 11108135; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	37	.00	.00	120	.00	.00	.00
2	.00	.00	.00	.00	.00	14	.00	.00	120	.00	.00	.00
3	.00	.00	.00	.00	.00	14	.00	.00	120	.00	.00	.00
4	.00	.00	.00	.00	.00	14	.00	.00	120	.00	.00	.00
5	.00	.00	.00	.00	.00	14	.00	.00	120	.00	.00	.00
6	.00	.00	.00	.00	.00	14	.00	.00	120	.00	.00	.00
7	.00	.00	.00	.00	.00	39	.00	.00	120	.00	.00	.00
8	.00	.00	.00	.00	.00	39	.00	.00	120	.00	.00	.00
9	.00	.00	.00	.00	.00	39	.00	.00	120	.00	.00	.00
10	.00	.00	.00	.00	.00	39	.00	.00	120	.00	.00	.00
11	.00	.00	.00	.00	.00	8.0	.00	.00	120	.00	.00	.00
12	.00	.00	.00	.00	.00	8.0	.00	.00	120	.00	.00	.00
13	.00	.00	.00	.00	.00	8.0	.00	.00	120	.00	.00	.00
14	.00	.00	.00	.00	.00	8.0	.00	.00	120	.00	.00	.00
15	.00	.00	.00	.00	.00	8.0	.00	.00	40	.00	.00	.00
16	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	8.0	.00	200	.00	.00	.00	.00
24	.00	.00	.00	.00	43	8.0	.00	140	.00	.00	.00	.00
25	.00	.00	.00	.00	100	8.0	.00	110	.00	.00	.00	.00
26	.00	.00	.00	.00	50	8.0	.00	100	.00	.00	.00	.00
27	.00	.00	.00	.00	50	8.0	.00	100	.00	.00	.00	.00
28	.00	.00	.00	.00	50	8.0	.00	100	.00	.00	.00	.00
29	.00	.00	.00	.00	40	8.0	.00	100	.00	.00	.00	.00
30	.00	.00	.00	.00	---	8.0	.00	100	.00	.00	.00	.00
31	.00	---	.00	.00	---	8.0	---	100	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	333.00	431.0	0.00	1050.00	1720.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	11.5	13.9	.000	33.9	57.3	.000	.000	.000
MAX	.00	.00	.00	.00	100	39	.00	200	120	.00	.00	.00
MIN	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	661	855	.00	2080	3410	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

MEAN	.82	1.83	3.35	4.88	62.0	55.1	37.7	31.2	15.0	9.42	6.17	1.30
MAX	4.94	11.0	15.1	19.3	352	175	81.4	123	58.6	34.2	29.9	7.80
(WY)	1999	1999	1999	1998	1998	1998	1996	1998	2000	1995	1995	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	2941.00		3534.00			
ANNUAL MEAN	8.06		9.66		18.8	
HIGHEST ANNUAL MEAN					63.9	1998
LOWEST ANNUAL MEAN					7.60	1996
HIGHEST DAILY MEAN	100	Apr 4	200	May 23	3080	Feb 23 1998
LOWEST DAILY MEAN	.00	Feb 18	.00	Oct 1	.00	Oct 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 18	.00	Oct 1	.00	Oct 1 1994
ANNUAL RUNOFF (AC-FT)	5830		7010		13630	
10 PERCENT EXCEEDS	22		14		35	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11109000 SANTA CLARA RIVER NEAR PIRU, CA

LOCATION.—Lat 34°24'13", long 118°44'18", in San Francisco Grant, Ventura County, Hydrologic Unit 18070102, on right downstream bank, on private property owned by Newhall Farms, 0.1 mi south of Highway 126, 3 mi east of Piru, and 8 mi west of intersection of Highway 126 and Interstate Highway 5.

DRAINAGE AREA.—645 mi^2.

PERIOD OF RECORD.—October 1927 to September 1932, October 1996 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 750 ft above sea level, from topographic map.

REMARKS.—Records poor. Base flow affected by pumping from wells along stream for irrigation. Flow partly regulated since January 1972 by Castaic Lake (station 11108133), capacity, 323,700 acre-ft. Imported water from California Water Project stored and released at Castaic Dam. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft^3/s, Feb. 23, 1998, from rating curve extended above 3,100 ft^3/s, gage height, 10.85 ft, from floodmark; minimum daily, no flow for many days during the summers of 1929–32.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	35	36	42	50	127	55	38	111	54	22	27
2	22	37	34	41	49	116	53	39	114	57	20	29
3	21	14	35	46	48	110	54	38	117	41	21	30
4	23	11	37	46	48	113	49	37	119	33	19	30
5	24	9.7	40	50	47	201	e48	36	118	32	28	28
6	29	40	34	51	49	170	e47	37	111	33	25	27
7	33	34	35	49	49	160	46	38	115	30	23	25
8	34	20	35	43	50	175	44	39	116	33	24	26
9	35	15	42	42	44	139	43	36	118	33	21	30
10	20	46	49	37	60	137	41	34	117	27	23	30
11	19	74	45	31	74	117	41	37	119	27	25	26
12	36	84	42	29	117	110	41	37	111	29	26	21
13	34	49	45	30	31	103	42	37	111	28	28	19
14	27	24	40	28	27	97	43	37	107	31	25	19
15	19	68	39	26	25	98	43	36	96	34	26	22
16	5.0	67	38	24	35	93	44	37	72	34	23	24
17	3.5	36	38	25	41	91	105	35	64	33	22	27
18	3.7	34	40	29	44	92	106	35	62	30	20	22
19	3.8	36	40	29	48	91	56	37	61	27	25	21
20	4.0	40	37	30	359	90	48	36	62	27	27	21
21	27	40	39	28	1390	86	44	37	61	29	21	23
22	44	35	42	24	1110	84	43	37	61	31	21	25
23	46	26	44	23	1310	87	45	52	65	32	24	30
24	27	31	46	23	301	83	41	110	64	28	28	32
25	34	30	41	78	161	78	41	126	67	27	23	28
26	48	38	40	54	141	72	40	121	68	22	22	26
27	48	38	36	51	167	69	41	121	62	24	25	29
28	43	39	36	55	146	64	43	121	59	20	28	29
29	38	40	39	60	135	61	42	122	58	20	29	28
30	40	40	39	61	---	58	40	119	62	23	28	29
31	31	---	44	59	---	57	---	117	---	21	27	---
TOTAL	844.0	1130.7	1227	1244	6156	3229	1469	1819	2648	950	749	783
MEAN	27.2	37.7	39.6	40.1	212	104	49.0	58.7	88.3	30.6	24.2	26.1
MAX	48	84	49	78	1390	201	106	126	119	57	29	32
MIN	3.5	9.7	34	23	25	57	40	34	58	20	19	19
AC-FT	1670	2240	2430	2470	12210	6400	2910	3610	5250	1880	1490	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	19.6	28.6	45.8	45.2	280	97.3	49.2	85.0	30.4	16.3	14.9	14.8
MAX	61.0	62.2	92.7	95.5	1880	413	158	569	89.3	64.0	57.5	43.3
(WY)	1997	1928	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	4.03	7.32	20.4	16.6	15.5	2.93	3.00	.000	.000	.000	.000
(WY)	1931	1931	1930	1929	1930	1931	1931	1930	1930	1930	1929	1930

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	19527.8		22248.7			
ANNUAL MEAN	53.5		60.8		59.3	
HIGHEST ANNUAL MEAN					282	1998
LOWEST ANNUAL MEAN					8.04	1930
HIGHEST DAILY MEAN	187	Apr 12	1390	Feb 21	10000	Feb 3 1998
LOWEST DAILY MEAN	3.5	Oct 17	3.5	Oct 17	.00	Jun 14 1929
ANNUAL SEVEN-DAY MINIMUM	6.6	Jul 27	9.4	Oct 14	.00	Jun 14 1929
INSTANTANEOUS PEAK FLOW			2440	Feb 23	10000	Feb 23 1998
INSTANTANEOUS PEAK STAGE			8.28	Feb 23	10.85	Feb 23 1998
INSTANTANEOUS LOW FLOW			2.7	Oct 11		
ANNUAL RUNOFF (AC-FT)	38730		44130		42950	
10 PERCENT EXCEEDS	90		113		85	
50 PERCENT EXCEEDS	48		38		22	
90 PERCENT EXCEEDS	15		22		.00	

e Estimated.

11109375 PIRU CREEK BELOW BUCK CREEK, NEAR PYRAMID LAKE, CA

LOCATION.—Lat 34°39'58", long 118°49'24", in SE 1/4 SE 1/4 sec.30, T.7 N., R.18 W., Ventura County, Hydrologic Unit 18070102, Los Padres National Forest, on left bank, 300 ft downstream from the confluence of Piru Creek and Buck Creek, 2.3 mi southeast of U.S. Forest Service Hardluck Campground, and 3.7 mi northwest of Pyramid Dam.

DRAINAGE AREA.—198 mi^2.

PERIOD OF RECORD.—October 1976 to September 1978, October 1988 to current year. February 1975 to September 1976, October 1978 to September 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,700 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,700 ft^3/s, Feb. 23, 1998; maximum gage height, 16.45 ft, Feb. 23, 1998; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	6.6	8.1	8.5	11	89	27	30	8.7	4.5	2.2	2.9
2	4.6	6.5	8.1	8.5	11	79	25	29	8.5	4.5	2.1	2.9
3	4.6	6.6	8.1	7.8	10	72	24	27	8.3	4.7	2.1	2.9
4	4.7	6.7	8.1	8.4	10	81	23	25	8.0	4.7	2.1	2.9
5	4.9	6.8	8.1	8.8	10	95	22	25	7.7	3.8	2.2	2.9
6	5.3	6.8	8.4	8.4	10	92	22	23	7.5	3.1	2.2	2.9
7	5.5	7.0	8.2	8.3	10	84	21	22	7.4	3.1	2.2	2.8
8	5.1	8.6	8.1	8.4	10	90	20	21	7.8	3.1	2.2	2.8
9	5.0	8.1	8.2	9.0	10	92	19	20	8.3	3.1	2.0	2.8
10	5.2	7.7	8.4	9.0	13	87	18	20	8.1	3.1	2.0	2.8
11	5.3	7.6	8.3	8.9	19	93	17	19	7.7	3.1	2.0	2.8
12	5.5	7.4	8.4	9.0	41	94	16	18	7.2	3.1	2.1	2.8
13	5.9	7.3	8.6	9.1	28	92	15	17	6.7	3.1	2.1	2.8
14	6.1	7.3	8.6	9.0	22	93	15	16	6.1	3.1	2.0	2.8
15	6.1	7.3	8.4	9.3	22	93	16	16	5.7	3.1	2.1	2.8
16	6.4	7.5	8.6	9.3	21	88	15	16	5.6	3.1	2.1	2.8
17	6.4	7.7	8.4	11	21	80	106	16	5.6	3.1	2.3	2.8
18	6.1	7.7	8.4	12	20	71	137	16	5.5	3.1	2.2	2.7
19	5.9	7.7	8.4	12	19	66	105	15	5.5	3.1	2.3	2.8
20	5.9	7.8	8.3	11	99	73	80	14	5.6	3.0	2.3	2.8
21	6.0	7.8	8.3	11	222	60	68	13	5.2	3.0	2.4	2.8
22	6.0	7.8	8.4	10	79	50	57	13	5.0	2.9	2.4	2.9
23	6.1	7.9	8.4	10	98	44	49	12	5.6	2.9	2.4	3.0
24	6.2	8.1	8.4	10	85	41	42	12	5.8	2.8	2.5	3.0
25	6.3	8.1	8.4	14	67	39	37	12	5.5	2.8	2.5	2.9
26	6.4	8.2	8.4	18	89	37	34	11	5.4	2.7	2.6	2.9
27	6.6	8.3	8.3	14	107	35	32	10	5.2	2.7	2.6	2.9
28	6.5	8.3	8.3	12	102	34	31	9.7	5.0	2.6	2.6	2.9
29	6.6	8.2	8.0	11	78	32	30	9.4	4.9	2.6	2.7	3.0
30	6.4	8.1	8.1	11	---	30	29	9.1	4.7	2.6	2.9	3.0
31	6.5	---	8.4	11	---	28	---	8.9	---	2.5	2.9	---
TOTAL	178.7	227.5	257.6	317.7	1344	2134	1152	525.1	193.8	98.7	71.3	85.8
MEAN	5.76	7.58	8.31	10.2	46.3	68.8	38.4	16.9	6.46	3.18	2.30	2.86
MAX	6.6	8.6	8.6	18	222	95	137	30	8.7	4.7	2.9	3.0
MIN	4.6	6.5	8.0	7.8	10	28	15	8.9	4.7	2.5	2.0	2.7
AC-FT	354	451	511	630	2670	4230	2280	1040	384	196	141	170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

MEAN	6.15	7.68	19.9	83.0	240	170	93.6	50.1	21.2	9.99	5.88	5.95
MAX	18.2	21.3	63.3	501	1062	674	235	237	93.7	37.3	19.1	19.7
(WY)	1999	1999	1998	1995	1998	1978	1978	1998	1998	1998	1998	1998
MIN	.099	1.16	1.62	2.28	5.36	5.31	2.67	1.21	.46	.001	.000	.000
(WY)	1978	1978	1991	1991	1990	1990	1990	1990	1990	1990	1989	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1977 - 2000	
ANNUAL TOTAL	6254.6		6586.2			
ANNUAL MEAN	17.1		18.0		58.4	
HIGHEST ANNUAL MEAN					163	1998
LOWEST ANNUAL MEAN					2.45	1990
HIGHEST DAILY MEAN	134	Apr 14	222	Feb 21	11700	Feb 23 1998
LOWEST DAILY MEAN	4.0	Aug 21	2.0	Aug 9	.00	Sep 6 1977
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 20	2.0	Aug 9	.00	Sep 6 1977
INSTANTANEOUS PEAK FLOW			509	Feb 21	11700	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.28	Feb 21	16.45	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	12410		13060		42300	
10 PERCENT EXCEEDS	32		58		140	
50 PERCENT EXCEEDS	8.8		8.1		10	
90 PERCENT EXCEEDS	4.7		2.8		1.1	

11109395 CANADA DE LOS ALAMOS ABOVE PYRAMID LAKE, CA

LOCATION.—Lat 34°41'31", long 118°47'25", in SW 1/4 SE 1/4 sec.16, T.7 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, on right bank, 1.1 mi south of Hungry Valley Road off-ramp from Interstate Highway 5, and 0.4 mi above Pyramid Landing on Pyramid Lake.

DRAINAGE AREA.—61.9 mi^2.

PERIOD OF RECORD.—October 1976 to September 1978, October 1988 to current year. March 1965 to September 1976, October 1978 to September 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,800 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,640 ft^3/s, Dec. 6, 1997, gage height, 5.73 ft; minimum daily, 0.30 ft^3/s, May 10, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.0	3.7	3.8	3.5	3.8	4.2	3.4	2.3	1.9	2.0	2.6
2	3.0	3.1	3.6	3.8	3.2	3.6	4.7	3.5	2.2	1.7	2.0	2.5
3	2.9	3.2	3.6	3.9	3.2	4.4	4.6	3.6	2.3	1.8	2.0	2.5
4	2.8	3.1	3.7	4.1	3.6	5.1	4.6	3.7	2.4	1.9	2.0	2.4
5	2.8	3.1	3.7	4.1	4.1	7.8	4.5	3.8	2.5	2.1	1.9	2.3
6	2.9	3.3	3.8	4.1	4.2	8.2	4.3	4.0	2.6	2.3	1.6	2.3
7	2.9	3.4	3.8	4.1	4.9	4.5	4.3	4.1	2.7	2.6	1.8	2.2
8	2.7	3.8	3.8	4.1	4.5	7.3	4.2	4.1	3.1	2.7	1.9	2.2
9	2.7	3.6	3.9	4.1	4.3	3.8	4.1	3.8	3.3	2.8	1.9	2.2
10	2.7	3.6	4.0	4.1	4.3	3.3	4.1	3.8	3.1	2.9	1.7	2.2
11	2.5	3.6	4.0	4.1	4.0	3.3	3.6	3.8	3.0	2.5	1.6	2.2
12	2.5	3.5	4.0	4.1	3.7	3.5	3.2	3.8	3.0	2.5	1.6	2.2
13	2.5	3.4	4.0	4.1	3.6	3.7	3.4	3.8	2.9	2.4	1.6	2.1
14	2.5	3.4	3.8	4.3	3.7	3.9	3.4	3.8	2.8	2.3	1.6	2.1
15	2.5	3.4	3.8	4.3	3.6	4.0	3.0	3.8	2.7	2.3	1.6	2.2
16	2.6	3.4	3.9	4.3	3.7	3.9	2.7	3.6	3.0	2.4	1.6	2.1
17	2.5	3.4	3.8	4.6	4.0	4.1	16	3.6	3.0	2.4	1.6	1.9
18	2.7	3.5	3.9	5.1	4.3	4.1	5.7	3.5	3.1	2.2	1.7	1.9
19	2.9	3.5	4.0	4.9	4.5	4.0	4.0	3.4	3.0	2.1	1.7	2.0
20	2.9	3.6	4.1	4.6	13	4.0	3.4	3.3	3.0	2.0	1.8	2.0
21	2.8	3.5	3.8	4.6	9.3	3.9	3.5	3.2	2.9	2.0	1.9	2.4
22	2.9	3.4	3.8	4.6	6.1	4.3	3.6	3.2	2.7	1.9	1.9	2.5
23	3.0	3.4	3.8	4.6	12	4.4	4.0	3.2	2.6	1.9	1.9	2.5
24	3.0	3.4	3.8	4.1	5.8	4.4	4.2	3.2	2.5	1.8	1.9	2.4
25	3.1	3.4	3.8	4.1	4.4	4.3	4.3	3.4	2.8	1.7	2.0	2.2
26	3.2	3.6	3.9	4.1	4.1	4.2	4.2	3.0	2.9	1.8	1.9	2.3
27	3.3	3.7	4.1	4.2	4.1	4.1	4.2	2.9	2.6	1.7	2.0	2.4
28	3.1	3.8	4.1	4.1	4.1	4.1	4.2	2.6	2.5	1.9	2.0	2.5
29	3.1	3.8	4.1	4.0	4.1	4.0	4.1	2.6	2.5	2.1	2.4	2.5
30	3.0	3.8	4.1	4.2	---	3.9	3.9	2.6	2.5	2.0	2.4	2.3
31	2.9	---	4.1	4.1	---	4.1	---	2.6	---	2.0	2.4	---
TOTAL	87.8	103.7	120.3	131.3	141.9	136.0	132.2	106.7	82.5	66.6	57.9	68.1
MEAN	2.83	3.46	3.88	4.24	4.89	4.39	4.41	3.44	2.75	2.15	1.87	2.27
MAX	3.3	3.8	4.1	5.1	13	8.2	16	4.1	3.3	2.9	2.4	2.6
MIN	2.5	3.0	3.6	3.8	3.2	3.3	2.7	2.6	2.2	1.7	1.6	1.9
AC-FT	174	206	239	260	281	270	262	212	164	132	115	135

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

MEAN	2.26	2.69	5.85	5.06	13.5	7.43	3.24	2.64	2.15	1.91	1.79	1.96
MAX	3.34	3.53	42.0	22.0	64.3	40.5	6.28	5.15	3.15	3.80	2.97	2.95
(WY)	1997	1998	1998	1995	1978	1978	1998	1998	1998	1999	1999	1999
MIN	1.40	1.56	1.93	2.38	1.80	1.80	1.50	.83	1.18	.97	1.32	1.27
(WY)	1977	1978	1977	1978	1977	1977	1977	1977	1978	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1977 - 2000	
ANNUAL TOTAL	1282.8		1235.0			
ANNUAL MEAN	3.51		3.37		4.16	
HIGHEST ANNUAL MEAN					10.1	1998
LOWEST ANNUAL MEAN					1.54	1977
HIGHEST DAILY MEAN	12	Mar 15	16	Apr 17	1220	Feb 10 1978
LOWEST DAILY MEAN	2.5	Oct 11	1.6	Aug 6	.30	May 10 1977
ANNUAL SEVEN-DAY MINIMUM	2.5	Oct 11	1.6	Aug 11	.36	May 10 1977
INSTANTANEOUS PEAK FLOW			56	Apr 17	3640	Dec 6 1997
INSTANTANEOUS PEAK STAGE			3.23	Apr 17	5.73	Dec 6 1997
ANNUAL RUNOFF (AC-FT)	2540		2450		3010	
10 PERCENT EXCEEDS	4.1		4.3		4.0	
50 PERCENT EXCEEDS	3.5		3.4		2.6	
90 PERCENT EXCEEDS	2.8		2.0		1.5	

11109396 CALIFORNIA AQUEDUCT AT NORTH PORTAL TEHACHAPI TUNNEL NEAR, GORMAN, CA

(Formerly published as North Portal Tehachapi Tunnel near Gorman, CA)

LOCATION.—Lat 34°55'46", long 118°48'17", unsurveyed, in Los Alamos Y Caliente Grant, T.10 N., R.18 E., Kern County, Hydrologic Unit 18030003, at entrance to Tehachapi Tunnel, 1.5 mi southeast of A.D. Edmonston Pumping Plant, and 10 mi north of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources.

GAGE.—Acoustic-velocity meter. Elevation of gage is 3,220 ft above sea level, from topographic map.

REMARKS.—Records represent flow pumped from the California Aqueduct through the A.D. Edmonston Pumping Plant to southern California. Downstream, the flow splits as it leaves Tehachapi Afterbay. The East Branch California Aqueduct continues through Alamo Powerplant (station 10260776), and the West Branch California Aqueduct flows through William Warne Powerplant (station 11109398). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were computed by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3,570 ft^3/s, Aug. 27, 1999; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	1440	1680	1390	1790	1380	2330	2120	2050	2830	853	3070
2	1600	1350	1460	2520	1900	1470	2180	2230	2030	2250	2160	2900
3	2600	1420	1680	2460	1530	1800	2690	2370	2120	2150	1970	2940
4	1570	1280	1860	2490	1500	1980	2630	2640	2000	2580	1950	2800
5	1840	1450	1880	2550	1570	3100	3030	2650	2140	2450	3020	2410
6	2000	1430	1780	1650	1500	1920	3020	2920	2210	2230	3070	2680
7	1970	1490	1540	1840	1590	1980	2540	3250	2300	2530	2270	2570
8	1980	1040	2600	1940	1590	2030	3170	1610	2560	2490	2380	2480
9	1780	1400	2440	2070	2170	1610	3010	1610	2650	2530	2420	2760
10	2110	1150	2480	1620	2040	1150	2520	2110	2600	2690	2830	2510
11	2040	1360	2550	1900	1950	1170	2870	2040	2310	2490	2530	1180
12	2070	1290	2530	1870	1580	1790	2710	2100	2120	1870	2830	1060
13	2000	1310	2560	1870	1950	1130	2460	1900	2020	1740	2480	1240
14	1860	1490	2530	1870	1470	1240	2670	1980	2120	1940	2010	2620
15	1960	1490	2150	2100	1660	1600	2790	1570	1680	1740	2070	2410
16	1870	1490	1770	2270	1360	1450	3250	1870	2210	2340	2300	3040
17	2600	825	1190	2060	1330	1800	2900	1450	2720	1710	2050	3300
18	1990	825	1300	2060	1540	1760	2900	1890	2600	1820	2070	2290
19	2250	742	1520	1920	1800	2600	2630	1730	2010	2120	3010	2220
20	2280	823	1000	1760	2270	1870	2510	1470	2240	2170	3310	2280
21	2580	1440	1000	1790	1500	1830	2470	2070	2560	2610	2470	2050
22	2570	763	1850	2450	1200	2180	2540	1900	2400	2910	2080	2210
23	2980	760	1730	2520	1130	2380	2690	1960	2280	2810	2290	2830
24	3100	1870	2420	1450	728	2380	2340	1980	2530	2650	2240	2990
25	2340	1900	2490	983	1020	2150	2650	2090	2630	2380	2390	2230
26	2570	1810	2510	1260	1880	2600	1960	1990	2220	2090	3250	2340
27	2770	1300	2180	1840	1670	2500	2260	1980	2400	2210	3570	2390
28	2590	1260	2190	1790	1370	2410	2230	3030	2870	2270	2520	2380
29	2540	1520	2360	1860	1390	2490	2550	2630	2830	2770	2690	2620
30	2320	1520	2480	1870	---	2490	3250	1200	2940	2530	3170	2310
31	2200	---	2010	1810	---	2380	---	2120	---	1490	2130	---
TOTAL	68470	39238	61720	59833	45978	60620	79750	64460	70350	71390	76383	73110
MEAN	2209	1308	1991	1930	1585	1955	2658	2079	2345	2303	2464	2437
MAX	3100	1900	2600	2550	2270	3100	3250	3250	2940	2910	3570	3300
MIN	1540	742	1000	983	728	1130	1960	1200	1680	1490	853	1060
AC-FT	135800	77830	122400	118700	91200	120200	158200	127900	139500	141600	151500	145000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	1056	777	835	717	591	1204	1874	1515	1489	1675	1772	1724
MAX	2209	1308	1991	1930	1585	1955	2658	2079	2345	2303	2464	2437
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	104	349	213	62.5	48.1	219	970	859	1008	1220	1489	1160
(WY)	1996	1996	1999	1999	1999	1998	1998	1998	1998	1998	1997	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	504439.00		771302			
ANNUAL MEAN	1382		2107		1272	
HIGHEST ANNUAL MEAN					2107	2000
LOWEST ANNUAL MEAN					941	1998
HIGHEST DAILY MEAN	3140	Mar 14	3570	Aug 27	3570	Aug 27 2000
LOWEST DAILY MEAN	.00	Jan 4	728	Feb 24	.00	Oct 9 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 7	883	Nov 17	.00	Oct 17 1995
ANNUAL RUNOFF (AC-FT)	1001000		1530000		921400	
10 PERCENT EXCEEDS	2120		2820		2310	
50 PERCENT EXCEEDS	1490		2120		1240	
90 PERCENT EXCEEDS	.00		1370		207	

11109398 WEST BRANCH CALIFORNIA AQUEDUCT AT WILLIAM WARNE POWERPLANT, NEAR GORMAN, CA

LOCATION.—Lat 34°41'07", long 118°47'16", SW 1/4 NE 1/4 sec.21, T.7 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, in powerplant at upper end of Pyramid Lake, on Canado de Los Alamos arm, and 8.5 mi southeast of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources. Published as "William Warne Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meters in both penstocks.

REMARKS.—Upstream the flow splits as it leaves the Tehachapi Tunnel. Flow at this site represents West Branch California Aqueduct water flowing southwest to Pyramid Lake (station 11109520). The East Branch California Aqueduct flows through Alamo Powerplant (station 10260776). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were computed by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,830 ft^3/s, Sept. 6, 2000; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	1430	751	833	585	624	1190	1130	955	959	286	1270
2	563	1280	752	899	597	766	1.5	1120	1010	1000	831	1210
3	96	1230	715	1150	616	611	1460	1510	1030	1050	830	1350
4	562	1460	769	1070	652	386	1500	1140	861	1110	727	1280
5	572	1160	210	1530	827	298	1510	1560	1010	1090	829	1390
6	564	1520	757	889	.00	522	1520	1660	1050	1000	817	2830
7	583	950	694	966	472	527	1510	1360	996	1230	1020	1120
8	574	1550	467	1030	497	573	1520	454	941	1220	1020	1460
9	556	1520	447	.00	475	367	896	449	957	1150	1030	1270
10	292	1170	464	982	477	348	1330	430	911	1160	972	.00
11	638	1250	497	887	502	485	1510	448	836	1290	1050	.00
12	666	1130	227	872	553	104	1500	499	874	682	1050	.00
13	752	1140	475	900	458	525	1440	441	677	659	859	.00
14	657	1150	433	882	379	561	1560	.00	850	695	1050	1390
15	667	1550	385	526	550	581	1520	461	926	724	1030	1370
16	642	1590	493	243	672	585	1180	452	959	689	1070	1280
17	102	1400	491	779	630	563	1490	453	961	689	1050	1410
18	795	1010	452	804	623	630	1510	711	970	857	1070	1170
19	852	624	.00	782	727	2.0	1480	453	930	859	1020	1190
20	1280	722	181	790	728	355	1500	666	1010	856	936	1210
21	1390	124	252	793	727	508	1540	70	1020	906	1030	1220
22	1420	789	544	1270	39	533	1490	839	1030	858	917	1150
23	1380	1110	732	625	.00	1080	1290	832	917	854	1060	1180
24	205	850	1510	750	.00	1110	1500	830	604	918	1030	.00
25	1570	475	1470	465	482	1070	1530	832	835	881	1010	967
26	1560	882	1310	491	1200	4.0	1330	709	967	831	1080	1150
27	1520	908	1150	648	186	1390	1220	829	1110	844	1070	1410
28	1420	366	1160	652	666	1380	1100	783	1070	841	1090	1500
29	1450	844	1390	757	667	1340	1090	1040	1070	881	1130	1510
30	1350	773	1410	.00	---	1340	1290	957	922	859	1340	1490
31	492	---	892	575	---	1410	---	958	---	674	1290	---
TOTAL	25681	31957	21480.00	23840.00	14987.00	20578.0	40507.5	24076.00	28259	28316	30594	33777.00
MEAN	828	1065	693	769	517	664	1350	777	942	913	987	1126
MAX	1570	1590	1510	1530	1200	1410	1560	1660	1110	1290	1340	2830
MIN	96	124	.00	.00	.00	2.0	1.5	.00	604	659	286	.00
AC-FT	50940	63390	42610	47290	29730	40820	80350	47750	56050	56160	60680	67000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

MEAN	489	555	374	352	298	566	769	443	343	409	487	572
MAX	828	1065	773	769	530	1061	1350	777	942	913	987	1126
(WY)	2000	2000	1998	2000	1996	1999	2000	2000	2000	2000	2000	2000
MIN	71.4	131	.000	.000	.000	.000	.000	.000	68.7	32.8	113	316
(WY)	1996	1999	1999	1999	1999	1998	1998	1998	1998	1997	1997	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	197335.00		324052.50			
ANNUAL MEAN	541		885		472	
HIGHEST ANNUAL MEAN					885	2000
LOWEST ANNUAL MEAN					318	1998
HIGHEST DAILY MEAN	1610	Mar 7	2830	Sep 6	2830	Sep 6 2000
LOWEST DAILY MEAN	.00	Jan 1	.00	Dec 19	.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	322	Dec 15	.00	Oct 21 1995
ANNUAL RUNOFF (AC-FT)	391400		642800		341700	
10 PERCENT EXCEEDS	1370		1460		1070	
50 PERCENT EXCEEDS	449		882		425	
90 PERCENT EXCEEDS	.00		383		.00	

11109520 PYRAMID LAKE NEAR GORMAN, CA

LOCATION.—Lat 34°38'41", long 118°45'47", in NE 1/4 NW 1/4 sec.2, T.6 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, Angeles National Forest, in control structure near left abutment of Pyramid Dam on Piru Creek, and 11.7 mi southeast of Gorman.

DRAINAGE AREA.—295 mi^2.

PERIOD OF RECORD.—October 1988 to current year. Prior to October 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Reservoir is formed by earthfill dam. Storage began 1971. Dead storage below outlet to Angeles Tunnel, 5,720 acre-ft, elevation, 2,345 ft, included in contents. Capacity below invert of radial gate, 133,600 acre-ft, elevation, 2,547.72 ft; below top of radial gate, 169,901 acre-ft, elevation, 2,578 ft; below spillway level, 171,200 acre-ft, elevation, 2,579 ft. Lake receives imported water from West Branch California Aqueduct via William Warne Powerplant (station 11109398). Water is released through the Angeles Tunnel to Castaic Powerplant and during periods of low electricity demand, water from Elderberry Forebay (station 11108092) is pumped back to Pyramid Lake. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (at 2400 hours) FOR PERIOD OF RECORD.—Maximum contents, 170,457 acre-ft, Feb. 9, 1996, elevation, 2,578.43 ft; minimum, 137,883 acre-ft, Nov. 26, 1991, elevation, 2,551.53 ft.

EXTREMES (at 2400 hours) FOR CURRENT YEAR.—Maximum contents, 169,630 acre-ft, Mar. 12, elevation, 2,577.79 ft; minimum, 152,593 acre-ft, Sept. 13, elevation, 2,564.12 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
(Based on table provided by California Department of Water Resources in 1978)

2,545	130,601	2,565	153,364
2,550	136,154	2,570	159,778
2,555	141,850	2,575	166,057
2,560	147,680	2,580	172,497

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153800	162183	160685	159320	164270	169038	165981	160735	158665	161046	159642	156734
2	157151	162045	157089	161808	163526	168729	165726	158702	157667	164725	161508	162584
3	162383	160362	157396	160486	162496	169308	164283	157347	157114	167064	160461	166515
4	158171	159320	159072	158603	163124	168973	163728	157913	160237	169257	157028	167230
5	154466	159852	160349	157814	164801	168498	162296	156673	161870	165726	156489	164321
6	155903	165930	160772	155890	168241	166490	161770	159481	160610	162183	163791	161508
7	157667	166362	159753	158171	165777	166808	163929	164434	159914	160747	163790	158566
8	158825	166260	158282	160424	164422	168254	166350	164649	160598	164220	160039	155050
9	158837	165206	156710	163011	163375	169141	164346	162246	160872	166949	158233	160623
10	160424	165156	159382	163551	161158	167370	164005	161420	163866	164207	157090	162986
11	158455	164194	160797	166579	161920	168318	162847	163048	167831	165447	153256	158813
12	158060	163224	165143	164852	162684	169630	161345	163350	166936	164725	159258	153510
13	158430	163187	166057	164283	166019	169372	159122	167383	165511	162446	168023	152593
14	158245	165625	164839	165295	164814	168922	158442	167575	161595	156967	168022	154563
15	157950	165232	165016	165968	166375	167664	162271	166184	158036	162321	159097	156599
16	158529	165650	165726	167383	163690	166477	165574	166095	155439	166464	157568	158356
17	162383	167383	164624	168151	161533	167230	165866	166311	158442	165981	157163	168023
18	164056	162885	166070	168023	162308	168023	164548	164434	162246	162408	157568	164232
19	161221	158011	167856	166070	163728	167345	163577	162571	162008	159543	161945	165993
20	155927	159431	163892	164258	166783	166286	161009	161383	161533	160175	167921	163829
21	155854	161358	158936	162020	168832	165067	159233	161358	159468	158097	166159	159679
22	159233	158048	156452	166133	168652	165219	161034	164788	157962	160312	164548	156074
23	160847	157581	155415	166885	168023	166362	167012	161770	156857	164637	161583	159952
24	152822	153751	157224	165016	166350	165892	162709	160610	159097	162709	157974	164763
25	161620	157212	161445	164308	166796	165930	159134	159419	161458	162145	154977	162772
26	161520	160076	163350	163061	169257	166222	156306	157753	156428	160498	157839	159654
27	160946	165067	162822	160797	169231	165054	156489	159964	154746	158825	166057	157704
28	161283	167038	162246	158825	168806	164839	156122	161146	154054	156355	165054	158258
29	159010	164308	159196	160710	168883	165815	160424	164119	158677	160200	165118	158171
30	163161	160573	157876	162647	---	165663	162471	161645	157876	166235	166490	164359
31	164308	---	159592	165650	---	164523	---	160250	---	164144	160859	---
MAX	164308	167383	167856	168151	169257	169630	167012	167575	167831	169257	168023	168023
MIN	152822	153751	155415	155890	161158	164523	156122	156673	154054	156355	153256	152593
a	2573.62	2570.64	2569.85	2574.68	2577.21	2573.79	2572.10	2570.38	2568.46	2573.49	2570.87	2573.66
b	+9429	-3735	-981	+6058	+3233	-4360	-2052	-2221	-2374	+6268	-3285	+3500

CAL YR 1999 b +309
WTR YR 2000 b +9480

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11109525 PIRU CREEK BELOW PYRAMID LAKE, NEAR GORMAN, CA

LOCATION.—Lat 34°38'30", long 118°45'49", in SW 1/4 NW 1/4 sec.2, T.6 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, Los Padres National Forest, at downstream base of dam, and 11.7 mi southeast of Gorman.

DRAINAGE AREA.—295 mi^2.

PERIOD OF RECORD.—October 1988 to current year. Prior to October 1988 in files of California Department of Water Resources.

GAGE.—Flow meters with totalizer and rated radial gate on top of dam. Elevation of gage is 2,200 ft above sea level, from topographic map.

REMARKS.—Flow regulated beginning 1971 by Pyramid Lake (station 11109520). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 6,000 ft^3/s, Feb. 23 1998; minimum daily, 4.0 ft^3/s, Nov. 1–5, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	10	10	10	10	100	25	25	25	26	26	25
2	25	10	10	10	10	100	25	25	25	26	26	25
3	25	10	10	10	10	85	25	25	25	26	26	25
4	25	10	10	10	10	75	25	25	25	26	26	25
5	25	10	10	10	10	200	25	25	25	27	26	25
6	25	10	10	10	10	85	25	25	25	27	26	35
7	25	10	10	10	10	50	25	25	25	27	26	45
8	25	9	10	10	10	50	25	25	25	27	26	62
9	25	10	10	10	10	50	25	25	25	27	26	62
10	25	9	10	10	10	50	25	25	25	27	26	62
11	25	10	10	10	10	50	25	25	25	27	26	62
12	25	9	10	10	10	50	25	25	25	27	26	62
13	25	10	10	10	10	50	25	25	25	27	26	62
14	25	9	10	10	10	50	25	25	25	27	26	63
15	25	10	10	10	10	50	25	25	25	27	26	62
16	25	9	10	10	10	50	25	25	25	27	26	63
17	22	10	10	10	10	75	25	25	26	27	26	62
18	19	9	10	10	10	75	130	25	26	27	26	63
19	11	10	10	10	10	75	150	25	26	27	26	62
20	10	9	10	10	55	50	130	25	26	27	27	63
21	5	10	10	10	100	50	75	25	26	27	27	62
22	5	9	10	10	100	50	75	25	26	27	27	63
23	5	10	10	10	100	50	75	25	26	27	27	62
24	5	9	10	10	100	50	52	26	26	27	27	63
25	5	10	10	10	100	50	50	26	26	27	27	62
26	5	9	10	9	100	50	50	26	26	27	27	63
27	5	10	10	9	100	50	30	26	26	27	27	62
28	5	9	10	9	100	35	30	26	26	27	27	63
29	5	10	10	9	100	33	30	26	26	27	27	62
30	5	9	11	9	---	25	30	26	26	27	27	63
31	5	---	11	9	---	25	---	26	---	27	27	---
TOTAL	517	288	312	304	1145	1888	1332	783	764	833	818	1640
MEAN	16.7	9.60	10.1	9.81	39.5	60.9	44.4	25.3	25.5	26.9	26.4	54.7
MAX	25	10	11	10	100	200	150	26	26	27	27	63
MIN	5.0	9.0	10	9.0	10	25	25	25	25	26	26	25
AC-FT	1030	571	619	603	2270	3740	2640	1550	1520	1650	1620	3250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

MEAN	22.7	28.0	28.2	87.0	168	80.0	40.8	30.0	24.5	23.9	22.5	24.2
MAX	75.6	90.2	64.0	422	780	242	132	97.3	41.0	32.9	26.4	54.7
(WY)	1999	1999	1996	1995	1998	1992	1993	1991	1993	1993	2000	2000
MIN	5.00	4.80	5.03	5.00	5.00	5.10	5.57	10.6	12.5	13.6	12.9	13.0
(WY)	1997	1998	1995	1991	1991	1995	1992	1990	1990	1989	1989	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	9092		10624			
ANNUAL MEAN	24.9		29.0		47.6	
HIGHEST ANNUAL MEAN					119	1993
LOWEST ANNUAL MEAN					10.8	1990
HIGHEST DAILY MEAN	100	Apr 13	200	Mar 5	6000	Feb 23 1998
LOWEST DAILY MEAN	5.0	Oct 21	5.0	Oct 21	4.0	Nov 1 1996
ANNUAL SEVEN-DAY MINIMUM	5.0	Oct 21	5.0	Oct 21	4.1	Nov 24 1997
ANNUAL RUNOFF (AC-FT)	18030		21070		34490	
10 PERCENT EXCEEDS	30		62		74	
50 PERCENT EXCEEDS	25		25		25	
90 PERCENT EXCEEDS	10		10		5.0	

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.—Lat 34°31'23", long 118°45'22", in NE 1/4 NW 1/4 sec.15, T.5 N., R.18 W., Ventura County, Hydrologic Unit 18070102, on left bank near Blue Point, 1.3 mi downstream from Agua Blanca Creek, 4.3 mi upstream from Santa Felicia Dam, 8.0 mi northeast of Piru, and 15 mi downstream from Pyramid Dam.

DRAINAGE AREA.—372 mi^2.

PERIOD OF RECORD.—October 1955 to current year.
CHEMICAL DATA: Water years 1972–80.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,058.55 ft above sea level (levels by U.S. Forest Service). Prior to Dec. 15, 1972, at site 0.3 mi upstream at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated beginning December 1971 by Pyramid Lake (station 11109520). Imported water from the California Water Project stored and released at Pyramid Dam. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 38,000 ft^3/s, Feb. 23, 1998, gage height, 13.38 ft, from floodmark, from rating curve extended above 20,000 ft^3/s on basis of slope-area measurement at gage height 11.36 ft; maximum gage height, 18.6 ft, Feb. 25, 1969, site and datum then in use; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938, reached a discharge of 35,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	7.4	8.7	11	e14	123	30	41	27	24	26	25
2	24	7.4	8.8	11	e14	119	30	39	27	25	27	24
3	24	7.4	9.5	11	e14	95	31	37	27	25	26	24
4	25	7.4	9.7	10	e12	96	33	37	26	25	26	24
5	24	8.4	10	10	e12	180	36	37	26	25	26	24
6	24	11	9.7	10	e13	243	37	37	25	25	26	30
7	25	13	9.9	10	e12	126	37	37	26	24	26	39
8	25	9.5	10	10	e11	332	37	38	28	24	26	51
9	24	4.0	10	9.9	e11	188	37	36	28	24	26	58
10	25	3.3	10	9.7	e22	136	37	34	27	25	25	58
11	24	3.2	10	9.9	22	117	37	35	27	24	25	60
12	25	2.9	10	10	45	106	36	35	27	24	25	60
13	25	3.1	10	10	15	96	34	33	27	24	25	60
14	25	3.4	10	10	13	89	37	34	27	24	24	60
15	26	3.9	10	9.9	10	83	38	33	27	25	24	60
16	19	4.8	10	10	11	79	36	34	27	26	24	61
17	9.6	5.3	11	12	12	103	234	34	27	26	24	63
18	11	5.2	10	13	8.3	101	236	33	27	26	24	64
19	7.5	5.4	10	e13	6.7	98	239	32	27	26	24	64
20	6.7	5.9	10	e13	119	93	208	31	26	25	24	65
21	6.7	6.2	10	e12	355	65	161	30	26	25	24	66
22	6.7	7.8	10	e11	190	64	130	29	26	26	24	66
23	7.0	8.4	11	e10	456	62	124	29	26	26	24	65
24	7.0	8.6	11	e10	243	61	113	29	26	26	24	65
25	7.0	8.4	11	e18	182	60	82	30	25	26	24	65
26	7.0	8.0	11	e18	119	59	77	29	24	27	24	65
27	7.0	8.1	9.8	e18	124	58	73	28	24	26	24	64
28	7.1	8.1	10	e16	132	39	51	29	24	25	24	63
29	7.1	8.3	11	e12	127	37	49	28	24	26	25	62
30	7.0	8.6	11	e13	---	28	47	28	24	26	25	63
31	7.1	---	11	e15	---	29	---	28	---	26	24	---
TOTAL	499.5	202.4	314.1	366.4	2325.0	3165	2387	1024	785	781	769	1618
MEAN	16.1	6.75	10.1	11.8	80.2	102	79.6	33.0	26.2	25.2	24.8	53.9
MAX	26	13	11	18	456	332	239	41	28	27	27	66
MIN	6.7	2.9	8.7	9.7	6.7	28	30	28	24	24	24	24
AC-FT	991	401	623	727	4610	6280	4730	2030	1560	1550	1530	3210

e Estimated.

11109600 PIRU CREEK ABOVE LAKE PIRU, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1971, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.14	54.7	52.8	106	229	100	102	33.7	12.6	4.22	2.00	1.86
MAX	11.9	503	291	992	1657	569	741	165	53.4	22.4	11.3	9.63
(WY)	1970	1966	1966	1969	1969	1969	1958	1967	1969	1969	1969	1969
MIN	.000	.34	2.91	9.24	7.50	7.26	3.96	1.34	.12	.000	.000	.000
(WY)	1956	1965	1957	1965	1965	1961	1961	1961	1961	1960	1957	1956

SUMMARY STATISTICS	WATER YEARS 1956 - 1971	
ANNUAL MEAN	57.2	
HIGHEST ANNUAL MEAN	294	1969
LOWEST ANNUAL MEAN	5.66	1961
HIGHEST DAILY MEAN	15600	Feb 25 1969
LOWEST DAILY MEAN	.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1955
INSTANTANEOUS PEAK FLOW	31200	Feb 25 1969
INSTANTANEOUS PEAK STAGE	18.6	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	41470	
10 PERCENT EXCEEDS	84	
50 PERCENT EXCEEDS	8.2	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.2	20.5	38.9	114	266	189	84.1	50.8	30.6	21.3	17.7	17.2
MAX	85.0	97.3	180	1154	2110	1126	289	204	93.7	47.3	40.0	56.4
(WY)	1999	1999	1984	1995	1998	1983	1983	1983	1978	1998	1998	1998
MIN	2.17	4.09	4.05	5.64	13.9	11.2	6.11	5.46	3.84	6.32	.80	.16
(WY)	1973	1978	1990	1991	1987	1977	1977	1972	1976	1972	1972	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	11027.0		14236.4			
ANNUAL MEAN	30.2		38.9		71.0	
HIGHEST ANNUAL MEAN					240	1998
LOWEST ANNUAL MEAN					9.52	1990
HIGHEST DAILY MEAN	111	Apr 12	456	Feb 23	15000	Feb 23 1998
LOWEST DAILY MEAN	2.9	Nov 12	2.9	Nov 12	.07	Jun 9 1972
ANNUAL SEVEN-DAY MINIMUM	3.4	Nov 9	3.4	Nov 9	.09	Sep 3 1972
INSTANTANEOUS PEAK FLOW			1170	Feb 23	38000	Feb 23 1998
INSTANTANEOUS PEAK STAGE			5.18	Feb 23	18.60	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	21870		28240		51440	
10 PERCENT EXCEEDS	50		85		117	
50 PERCENT EXCEEDS	27		25		22	
90 PERCENT EXCEEDS	8.4		8.3		6.2	

11109700 LAKE PIRU NEAR PIRU, CA

LOCATION.—Lat 34°27'41", long 118°45'02", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, near center of Santa Felicia Dam on Piru Creek, 0.5 mi downstream from Santa Felicia Canyon, 4.2 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.—425 mi^2.

PERIOD OF RECORD.—May 1955 to current year. Prior to October 1985, monthend elevation and contents only.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by United Water Conservation District). Prior to Jan. 27, 1956, reference point at intake tower at same datum. Jan. 27, 1956, to Dec. 1, 1980, nonrecording gage at same site and datum.

REMARKS.—Lake is formed by earthfill dam. Storage began May 20, 1955. Capacity below spillway level at elevation 1,055.0 ft, 88,340 acre-ft. Water is released from outlet to Piru Creek for ground-water recharge, domestic use, and irrigation on the Oxnard Plain. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents observed, 109,400 acre-ft, Feb. 25, 1969, elevation, 1,061.45 ft; lake dry, Oct. 25 to Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 74,100 acre-ft, Aug. 31, Sept. 1–4; maximum elevation, 1,042.89 ft, Sept. 4; minimum contents, 54,300 acre-ft, several days in November and December; minimum elevation, 1,023.67 ft, Nov. 7.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by United Water Conservation District in October 1985)

970	14,800	1,000	33,900	1,040	70,900
980	20,300	1,010	42,000	1,050	82,300
990	26,700	1,020	50,800	1,060	94,600
1,030	60,500				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62900	54500	54400	54600	55200	e61200	67900	71800	e73000	73500	73900	74100
2	62300	54400	54400	54600	55200	e61400	68000	71900	73000	73500	73900	74100
3	62000	54400	54400	54600	55200	e61600	68100	71900	73100	73600	73900	74100
4	61600	54400	54400	54600	55200	61800	68100	72000	73100	73600	73900	74100
5	61200	54300	54400	54600	55200	62300	68200	72100	73100	73600	73900	74000
6	60600	54300	54400	54600	55300	62900	68200	72100	73100	73600	73900	73200
7	60000	54300	54300	54700	55300	63200	68300	72100	73100	73600	73900	72200
8	59400	54300	54400	54700	55300	64000	68400	72200	73100	73600	73900	71500
9	58800	54300	54400	54700	55300	64400	68400	72300	73200	73600	73900	70800
10	58200	54400	54400	54700	55400	64700	68500	72300	73200	73700	73900	70100
11	57600	54400	54400	54700	55500	65000	68500	72300	73200	73700	74000	69500
12	57100	54400	54400	54700	55700	65200	68600	72400	73200	73700	74000	68800
13	56800	54400	54400	54700	55700	65400	68600	72400	73200	73700	74000	68100
14	56500	54400	54500	54700	55800	65600	68700	72400	73200	73700	74000	67500
15	56100	54400	54500	54700	55900	65700	68700	72500	73300	73700	74000	66800
16	55800	54400	54500	54800	55900	65900	68800	72500	73300	73700	74000	66200
17	55500	54400	54500	54800	56000	66100	69300	72500	73300	73700	74000	65500
18	55100	54400	54500	54800	56000	66300	69700	72600	73300	73800	74000	64900
19	55000	54400	54500	54800	56000	66500	70100	72600	73400	73800	74000	64200
20	54900	54400	54500	54900	56400	66700	70500	72600	73400	73800	74000	63600
21	54900	54300	54500	54900	57300	66800	70700	72700	73400	73800	74000	62900
22	54900	54400	54500	54900	57800	67000	70900	72700	73400	73800	74000	62200
23	54800	54400	54500	54900	59000	67100	71100	72800	73400	73800	74000	61600
24	54800	54400	54500	54900	59500	67200	71200	72800	73400	73800	74000	60900
25	54800	54400	54500	55000	59900	67300	71300	72800	73500	73800	74000	60200
26	54700	54400	54500	55000	e60300	67500	71500	72900	73500	73800	74000	59600
27	54700	54400	54500	55100	e60600	67600	71600	72900	73500	73800	74000	58900
28	54600	54400	54500	55100	e60800	67700	71700	72900	73500	73800	74000	58200
29	54600	54400	54600	55100	e61000	67800	71700	72900	73500	73800	74000	57600
30	54600	54400	54600	55200	---	67800	71800	73000	73500	73800	74000	56900
31	54500	---	54600	55200	---	67900	---	e73000	---	73900	74100	---
MAX	62900	54500	54600	55200	61000	67900	71800	73000	73500	73900	74100	74100
MIN	54500	54300	54300	54600	55200	61200	67900	71800	73000	73500	73900	56900
a	1023.92	1023.84	1024.01	1024.62	1030.53	1037.19	1040.77	1041.91	1042.36	1042.66	1042.85	1026.42
b	-9100	-100	+200	+600	+5800	+6900	+3900	+1200	+500	+400	+200	-17200

CAL YR 1999 b -7400
WTR YR 2000 b -6700

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA

LOCATION.—Lat 34°27'37", long 118°45'04", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, on right bank, 750 ft downstream from Santa Felicia Dam, 1 mi upstream from Lime Canyon, 4 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.—425 mi^2.

PERIOD OF RECORD.—October 1955 to September 1968, October 1973 to current year.
CHEMICAL DATA: Water years 1969, 1974–80.
WATER TEMPERATURE: Water year 1969.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 858.8 ft above sea level (levels by United Water Conservation District).

REMARKS.—Records good. Since May 1955, flow regulated by Lake Piru (station 11109700), and since 1971, by Pyramid Lake (station 11109520). Imported water from the California Water Project stored by Pyramid Lake. Spill from Lake Piru bypasses gage. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 920 ft^3/s, Sept. 6, 2000, gage height, 4.47 ft; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	20	5.2	4.8	4.8	4.8	5.1	4.2	5.8	4.3	7.3	5.7
2	275	20	5.1	4.8	4.8	4.8	5.0	4.1	5.7	4.3	7.3	5.5
3	191	19	5.1	4.8	4.8	4.8	5.0	4.3	5.7	4.3	7.1	5.5
4	227	20	5.0	5.4	4.8	4.8	5.0	4.3	5.7	4.3	6.8	5.5
5	243	20	5.0	4.5	4.8	5.0	3.1	4.3	5.7	4.4	6.6	69
6	323	20	5.0	4.6	4.8	5.0	4.4	4.3	5.8	4.3	6.4	525
7	350	20	4.8	4.5	4.8	5.0	4.5	4.3	5.6	4.3	6.5	560
8	351	11	4.8	4.5	4.8	14	4.3	4.3	5.5	4.3	6.5	392
9	350	6.0	4.8	4.5	4.8	5.1	4.3	4.3	5.3	4.3	6.5	374
10	350	6.0	4.8	4.5	4.8	4.9	4.3	4.3	5.2	4.2	6.4	374
11	350	6.0	4.8	4.5	4.8	4.8	2.9	4.4	5.2	4.2	6.5	377
12	269	6.0	4.8	4.5	4.8	5.3	3.9	4.4	5.2	5.0	6.4	380
13	180	5.8	4.8	4.5	4.8	5.2	3.9	4.3	5.2	7.6	6.3	383
14	182	5.7	4.8	4.5	4.8	5.0	3.9	4.2	5.3	8.0	6.3	382
15	181	5.7	4.8	4.5	4.8	5.0	3.9	4.1	5.5	8.1	6.3	381
16	183	5.7	4.8	4.5	4.8	5.0	3.9	4.1	5.3	8.0	6.4	384
17	182	5.7	4.8	4.5	4.8	5.4	18	4.1	5.2	8.1	6.3	384
18	182	5.7	4.8	4.5	5.0	5.4	4.5	4.1	5.2	7.9	6.3	385
19	74	5.7	4.8	4.5	4.8	5.5	4.2	4.1	5.2	6.9	6.4	385
20	20	5.7	4.8	4.5	4.8	5.8	4.1	4.1	5.2	7.0	6.6	386
21	20	5.7	4.8	4.5	4.8	5.6	4.1	4.1	5.2	7.0	6.6	394
22	20	5.7	4.8	4.5	4.8	5.6	3.9	4.1	5.2	7.0	6.6	399
23	20	5.4	4.8	4.5	4.9	5.7	3.9	4.1	5.2	7.1	6.6	399
24	20	5.5	4.8	4.5	4.8	5.6	5.9	4.1	5.2	7.2	6.6	398
25	20	5.5	4.8	4.5	4.8	5.5	4.1	4.0	5.2	7.1	5.6	398
26	20	5.5	4.8	2.8	4.8	5.5	4.1	3.9	5.2	7.0	4.8	401
27	20	5.5	4.8	4.3	4.8	5.5	4.1	4.0	5.2	7.0	4.8	402
28	20	5.5	4.8	4.8	4.8	5.5	4.1	3.9	3.9	7.0	5.0	403
29	20	5.5	4.8	4.8	4.8	5.2	4.1	3.9	4.3	7.0	5.6	403
30	20	5.4	4.8	4.8	---	5.0	4.3	5.2	4.3	7.2	5.7	406
31	20	---	4.8	4.8	---	5.0	---	6.0	---	7.3	5.7	---
TOTAL	4947	274.9	150.4	140.7	139.5	170.3	140.8	131.9	157.4	191.7	194.8	10146.2
MEAN	160	9.16	4.85	4.54	4.81	5.49	4.69	4.25	5.25	6.18	6.28	338
MAX	351	20	5.2	5.4	5.0	14	18	6.0	5.8	8.1	7.3	560
MIN	20	5.4	4.8	2.8	4.8	4.8	2.9	3.9	3.9	4.2	4.8	5.5
AC-FT	9810	545	298	279	277	338	279	262	312	380	386	20120

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1968, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	11.0	13.9	33.1	10.4	14.2	25.3	49.7	46.0	56.8	94.4	88.0	44.3
MAX	29.8	97.7	235	34.6	35.7	115	136	194	245	465	396	248
(WY)	1961	1967	1959	1966	1966	1963	1964	1966	1962	1958	1958	1967
MIN	.000	.86	.003	.15	.018	.006	5.59	6.76	6.76	6.82	6.93	5.94
(WY)	1956	1956	1956	1968	1957	1957	1957	1964	1964	1959	1959	1968

SUMMARY STATISTICS	WATER YEARS 1956 - 1968	
ANNUAL MEAN	40.8	
HIGHEST ANNUAL MEAN	102	1958
LOWEST ANNUAL MEAN	10.0	1961
HIGHEST DAILY MEAN	526	Sep 26 1959
LOWEST DAILY MEAN	.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1955
INSTANTANEOUS PEAK FLOW	544	Aug 18 1958
INSTANTANEOUS PEAK STAGE	3.66	Aug 18 1958
ANNUAL RUNOFF (AC-FT)	29540	
10 PERCENT EXCEEDS	101	
50 PERCENT EXCEEDS	8.6	
90 PERCENT EXCEEDS	1.4	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	52.7	21.7	14.0	22.9	29.3	25.0	42.7	47.9	66.4	79.8	120
MAX	446	323	137	86.6	139	139	109	224	241	271	322	338
(WY)	1993	1993	1999	1994	1998	1998	1980	1988	1987	1986	1982	2000
MIN	4.17	4.68	3.91	.000	.049	.16	.088	.004	1.49	4.09	3.94	4.32
(WY)	1987	1987	1978	1978	1983	1983	1983	1983	1983	1983	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	12952.6		16785.6			
ANNUAL MEAN	35.5		45.9		53.2	
HIGHEST ANNUAL MEAN					138	1993
LOWEST ANNUAL MEAN					7.03	1983
HIGHEST DAILY MEAN	351	Oct 8	560	Sep 7	560	Sep 7 2000
LOWEST DAILY MEAN	2.4	Sep 3	2.8	Jan 26	.00	Feb 10 1976
ANNUAL SEVEN-DAY MINIMUM	4.5	May 11	3.8	Apr 10	.00	Feb 10 1976
INSTANTANEOUS PEAK FLOW			920	Sep 6	920	Sep 6 2000
INSTANTANEOUS PEAK STAGE			4.47	Sep 6	4.47	Sep 6 2000
ANNUAL RUNOFF (AC-FT)	25690		33290		38580	
10 PERCENT EXCEEDS	182		202		194	
50 PERCENT EXCEEDS	5.2		5.2		6.9	
90 PERCENT EXCEEDS	4.8		4.2		3.8	

11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION.—Lat 34°26'32", long 118°55'35", in SE 1/4 NW 1/4 SE 1/4 sec.12, T.4 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank, 0.6 mi downstream from Little Sespe Creek, and 2.9 mi north of Fillmore.

DRAINAGE AREA.—251 mi^2.

PERIOD OF RECORD.—September 1911 to September 1913, October 1927 to September 1985, October 1990 to January 1993, October 1993 to current year; combined records of creek and canal, October 1927 to September 1939 monthly only, October 1939 to September 1985, October 1990 to January 1993. Prior to 1935, published as "at Sespe."

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 580 ft above sea level, from topographic map. See WSP 1315-B for history of changes prior to Jan. 17, 1946. Oct. 1, 1990, to Jan. 15, 1993, at site 0.5 mi upstream at same elevation. Gage on diversion canal discontinued Jan. 15, 1993.

REMARKS.—Records fair. No regulation upstream from station. Fillmore Irrigation Co. has diverted water 1 mi upstream since September 1911. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 73,000 ft^3/s, Feb. 10, 1978, gage height, 22.40 ft, from rating curve extended above 17,000 ft^3/s on basis of slope-area measurement at gage height 22.40 ft; maximum gage height, 24.95 ft, Feb. 25, 1969, from debris wave; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,300 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2000	3,600	9.38	Mar. 8	1,045	2340	8.73
Feb. 23	1230	4,900	9.90	Apr. 17	1,515	2270	8.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.64	2.2	3.8	14	146	73	88	28	15	2.2	.54
2	.43	.63	2.2	4.8	14	136	73	83	26	13	2.3	.61
3	.50	.69	2.3	4.7	13	126	71	78	25	14	2.4	.57
4	.57	.65	2.9	3.9	12	137	69	73	22	9.7	2.5	.54
5	.48	.66	3.6	3.4	13	287	66	70	21	5.1	2.5	.47
6	.52	.69	3.6	3.3	13	309	63	67	21	4.5	2.3	.44
7	.54	.71	2.9	3.3	12	248	62	64	19	3.9	2.3	.46
8	.50	1.1	2.4	3.5	11	1100	62	58	19	3.2	2.4	.47
9	.46	1.1	3.2	3.5	12	508	60	58	19	2.7	2.6	.47
10	.45	1.1	4.2	5.4	55	307	59	55	17	2.9	2.5	.47
11	.50	.77	4.1	6.8	38	255	57	53	15	2.9	2.4	.46
12	.59	.71	4.1	6.7	174	237	55	51	14	2.9	2.3	.45
13	.56	.66	4.1	6.9	82	211	52	49	13	3.1	2.5	.43
14	.54	.73	3.9	5.9	73	183	49	49	12	2.8	2.4	.43
15	.54	.71	3.5	7.2	74	181	51	48	11	2.9	2.2	.46
16	.56	.73	2.3	11	61	161	51	48	10	3.1	1.2	.43
17	.54	.75	2.3	12	56	146	910	48	10	2.6	.70	.43
18	.51	.79	2.4	13	54	140	1130	47	12	2.5	.59	.41
19	.56	.83	2.6	11	51	128	591	46	17	2.4	.57	.43
20	.59	.95	3.0	11	757	132	355	44	19	2.5	.51	.47
21	.58	1.5	2.9	11	2410	117	252	43	19	2.6	.51	.51
22	.60	2.8	3.3	9.4	510	103	201	42	19	2.5	.54	.59
23	.61	3.1	3.4	7.2	1890	95	166	40	20	2.5	.59	2.7
24	.62	3.2	3.8	7.3	694	92	143	39	20	2.4	.59	1.3
25	.61	3.1	3.8	18	276	89	126	39	20	2.2	.61	1.1
26	.56	2.6	4.0	18	205	86	111	41	16	2.2	.50	.89
27	.57	2.0	3.8	18	204	84	102	41	17	2.1	.45	.59
28	.60	2.1	3.0	15	195	81	94	49	17	2.2	.51	.43
29	.61	2.2	2.6	12	164	80	90	41	16	2.4	.55	.45
30	.64	2.1	2.7	13	---	83	87	32	17	2.6	.49	.45
31	.64	---	2.9	15	---	78	---	29	---	2.5	.52	---
TOTAL	16.97	40.30	98.0	275.0	8137	6066	5331	1613	531	127.9	45.23	18.45
MEAN	.55	1.34	3.16	8.87	281	196	178	52.0	17.7	4.13	1.46	.62
MAX	.64	3.2	4.2	18	2410	1100	1130	88	28	15	2.6	2.7
MIN	.39	.63	2.2	3.3	11	78	49	29	10	2.1	.45	.41
AC-FT	34	80	194	545	16140	12030	10570	3200	1050	254	90	37

11113000 SESPE CREEK NEAR FILLMORE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.36	40.3	98.5	242	496	360	167	55.0	19.9	7.94	4.10	3.92
MAX	55.4	1285	698	3378	4333	2301	1632	426	203	90.9	49.3	45.6
(WY)	1984	1966	1966	1969	1998	1978	1958	1998	1998	1998	1998	1939
MIN	.000	.000	.000	1.35	4.74	2.82	.67	.25	.000	.000	.000	.000
(WY)	1913	1930	1930	1948	1951	1961	1961	1961	1928	1928	1912	1912

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1911 - 2000	
ANNUAL TOTAL	8986.03		22299.85			
ANNUAL MEAN	24.6		60.9		123	
HIGHEST ANNUAL MEAN					641	1969
LOWEST ANNUAL MEAN					1.78	1951
HIGHEST DAILY MEAN	263	Apr 12	2410	Feb 21	29100	Jan 25 1969
LOWEST DAILY MEAN	.39	Oct 1	.39	Oct 1	.00	Jul 11 1912
ANNUAL SEVEN-DAY MINIMUM	.48	Sep 29	.43	Sep 13	.00	Jul 11 1912
INSTANTANEOUS PEAK FLOW			4900	Feb 23	73000	Feb 10 1978
INSTANTANEOUS PEAK STAGE			9.90	Feb 23	24.95	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	17820		44230		89040	
10 PERCENT EXCEEDS	57		133		177	
50 PERCENT EXCEEDS	4.9		4.1		10	
90 PERCENT EXCEEDS	.64		.52		.20	

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION.—Lat 34°24'48", long 119°04'53", in NW 1/4 SE 1/4 sec.21, T.4 N., R.21 W., Mission San Buenaventura Grant, Ventura County, Hydrologic Unit 18070102, on right bank, 1.3 mi downstream from Sisar Creek, and 4.8 mi north of Santa Paula.

DRAINAGE AREA.—38.4 mi^2.

PERIOD OF RECORD.—October 1927 to current year. October 1995 to current year, operated by Ventura County Public Works Agency. March 1912 to September 1913, at site 1.2 mi upstream; records not equivalent.
CHEMICAL DATA: 1969–80.
WATER TEMPERATURE: 1969–71, 1974–75.

REVISED RECORDS.—WSP 1635: 1933(M), 1934, 1936(M), 1941(M). WDR CA-95-1: 1994. WSP 1715: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage, and ultrasonic sensor. Elevation of gage is 785 ft above sea level, from topographic map. Prior to Oct. 22, 1980, at various sites and datums 1.3 mi downstream. See WDR CA-79-1 for history of changes prior to Oct. 22, 1980. Prior to Feb. 12, 1992, at datum 5.0 ft higher at same site. High-flow data for 1996 recorded by sonic-sensor gage set to sea level datum.

REMARKS.—Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records of discharge collected and provided by Ventura County Public Works Agency.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21,000 ft^3/s, Feb. 25, 1969, gage height, 15.18 ft, from floodmark, site and datum then in use, from rating curve extended above 2,300 ft^3/s on basis of critical-depth measurement at gage height 12.2 ft; maximum gage height, 771.61 ft, Feb. 23, 2000, at present datum; no flow at times in 1927, 1949, 1951–52, 1965.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	2300	1,030	771.13	Mar. 8	0900	215	770.03
Feb. 23	1230	1,410	771.61				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.4	3.2	2.5	3.8	27	16	17	9.4	5.0	3.6	2.6
2	2.1	2.4	3.1	2.5	3.5	24	15	15	9.1	5.1	3.4	2.6
3	2.3	2.5	3.2	2.6	3.5	21	14	14	9.0	5.3	3.4	2.7
4	2.5	2.5	3.2	2.4	3.3	25	15	13	8.7	5.4	3.4	2.7
5	2.4	2.3	3.1	2.5	3.3	43	13	15	8.1	5.3	3.4	2.6
6	2.4	2.3	3.3	2.6	3.7	72	14	15	7.9	5.3	3.2	2.5
7	2.6	2.4	3.2	2.7	3.7	44	13	17	7.9	5.3	3.1	2.4
8	2.4	2.6	3.1	2.7	3.1	113	12	16	7.3	5.2	2.9	2.4
9	2.0	2.5	3.0	2.7	3.1	82	14	14	7.8	5.3	3.3	2.4
10	2.1	2.5	3.1	2.7	6.0	64	15	13	7.7	4.8	3.1	2.3
11	2.2	2.7	2.9	2.7	4.6	61	14	13	7.8	4.8	3.2	2.4
12	2.4	2.6	2.7	2.9	33	55	13	14	7.9	4.7	2.9	2.4
13	2.4	2.4	2.8	3.1	7.6	46	13	14	6.9	5.1	2.8	2.1
14	2.2	2.5	2.8	3.1	11	43	13	14	7.0	4.9	2.8	2.2
15	2.2	2.7	2.9	3.0	9.2	38	13	15	6.7	4.6	2.7	2.4
16	2.3	2.8	2.9	2.9	5.7	34	13	e15	6.5	4.5	2.6	2.3
17	2.5	2.6	3.0	3.5	6.5	32	62	e14	6.3	4.7	2.4	2.1
18	2.5	2.7	2.8	3.3	5.3	30	75	e14	6.3	5.0	2.5	2.2
19	2.6	2.8	2.8	3.2	4.4	26	47	e13	5.8	4.8	2.6	2.1
20	2.4	4.0	2.9	3.2	181	26	40	e13	6.0	4.3	2.7	2.2
21	2.3	3.2	2.8	3.2	329	25	33	e12	6.1	4.0	2.7	2.4
22	2.4	2.8	2.6	3.3	97	23	27	e12	6.1	4.4	2.7	2.5
23	2.3	2.9	2.9	3.4	289	21	25	e11	5.7	4.2	2.9	2.8
24	2.5	3.0	2.6	3.6	98	20	24	e11	5.7	3.9	2.7	2.6
25	2.5	3.0	2.8	4.1	44	18	23	e10	6.4	3.8	2.5	2.4
26	2.4	2.9	2.8	3.5	39	19	21	e10	6.0	3.8	2.5	2.3
27	2.3	2.9	2.7	3.6	37	17	19	e10	5.7	4.0	2.6	2.3
28	2.4	3.0	2.5	3.6	35	18	18	e9.0	5.5	3.9	2.4	2.2
29	2.6	3.2	2.5	3.5	29	17	19	e9.0	5.1	3.8	2.4	2.2
30	2.4	2.9	2.5	3.5	---	17	18	e9.0	5.1	3.7	2.5	2.3
31	2.6	---	2.2	3.5	---	17	---	8.8	---	3.8	2.6	---
TOTAL	73.4	82.0	88.9	95.6	1302.3	1118	671	399.8	207.5	142.7	88.5	71.6
MEAN	2.37	2.73	2.87	3.08	44.9	36.1	22.4	12.9	6.92	4.60	2.85	2.39
MAX	2.6	4.0	3.3	4.1	329	113	75	17	9.4	5.4	3.6	2.8
MIN	2.0	2.3	2.2	2.4	3.1	17	12	8.8	5.1	3.7	2.4	2.1
AC-FT	146	163	176	190	2580	2220	1330	793	412	283	176	142

e Estimated.

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.13	8.08	15.7	45.5	85.0	68.5	34.3	14.1	8.08	4.95	3.21	3.09
MAX	18.8	183	128	718	841	454	375	78.7	46.4	26.9	16.5	24.5
(WY)	1984	1966	1967	1969	1969	1978	1958	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.76	.97	1.69	.000	.081	.000	.000	.000	.000
(WY)	1929	1930	1930	1928	1930	1961	1928	1928	1928	1928	1928	1928

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	2157.6		4341.3			
ANNUAL MEAN	5.91		11.9		24.1	
HIGHEST ANNUAL MEAN					156	1969
LOWEST ANNUAL MEAN					1.37	1951
HIGHEST DAILY MEAN	39	Feb 9	329	Feb 21	8900	Feb 25 1969
LOWEST DAILY MEAN	1.7	Sep 8	2.0	Oct 9	.00	Oct 1 1927
ANNUAL SEVEN-DAY MINIMUM	1.9	Sep 5	2.2	Sep 13	.00	Oct 1 1927
INSTANTANEOUS PEAK FLOW			1410	Feb 23	21000	Feb 25 1969
INSTANTANEOUS PEAK STAGE			771.61	Feb 23	771.61	Feb 23 2000
ANNUAL RUNOFF (AC-FT)	4280		8610		17480	
10 PERCENT EXCEEDS	11		25		36	
50 PERCENT EXCEEDS	3.3		3.5		4.9	
90 PERCENT EXCEEDS	2.2		2.4		.90	

11114000 SANTA CLARA RIVER AT MONTALVO, CA

LOCATION.—Lat 34°16'44", long 119°08'28" in Santa Clara Del Norte Grant, Ventura County, Hydrologic Unit 18070102, on right bank, downstream side of State Highway 118 bridge, and 0.8 mi southeast of Saticoy.

DRAINAGE AREA.—1,577 mi^2.

PERIOD OF RECORD.—October 1927 to September 1932, October 1949 to September 1988, October 1989 to September 1993, October 1995 to September 1996. Discharge measurements only October 1993 to September 1994 at site 3.9 mi downstream, October 1994 to November 1998 at present site. November 1998 to June 1999 at site upstream of Freeman Diversion, June 1999 to current year at present site. Monthly discharge only for 1950–65, published in WSP 2128 (daily discharge available in the files of the U.S. Geological Survey).
WATER TEMPERATURE: Water years 1969–85, 1989–1993.
SEDIMENT DATA: Water years 1969–85, 1989–93.

REVISED RECORDS.—WSP 2128: Drainage area. WDR CA-00-1: 1999.

GAGE.—Water-stage recorder. Datum of gage is 120 ft above sea level, from topographic map. Oct. 1, 1927, to Sept. 30, 1932, Oct. 1, 1949, to Sept. 30, 1967, and Feb. 3, 1970, to Sept. 30, 1993, at site 3.9 mi downstream at different datums. Oct. 1, 1967, to Feb. 2, 1970, at present site at different datum. Feb. 9, 1984, to Jan. 27, 1993, supplementary gage 3.2 mi downstream at different datum. Oct. 1, 1995, to Nov. 23, 1998, at present site. Nov. 23, 1998, to June 25, 1999, at site 1.8 mi upstream at different datum. June 25, 1999, to current year at present site.

REMARKS.—Records fair. Flow partly regulated by Lake Piru (station 11109700), capacity, 88,340 acre-ft, 33 mi upstream since May 1955; by Pyramid Lake (station 11109520), capacity, 171,200 acre-ft, 42 mi upstream since 1971; by Castaic Lake (station 11108133), capacity, 323,699 acre-ft, 43 mi upstream since 1972. Natural flow affected by ground-water withdrawals, diversions, municipal use, and ground-water replenishment. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam. Diversion to spreading grounds and for irrigation in Pleasant Valley, at site 6.0 mi upstream. Discharge represents flow to the ocean regardless of upstream development. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 165,000 ft^3/s, Jan. 25, 1969, gage height, 17.41 ft, at datum 5.0 ft higher; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938, reached a discharge of 120,000 ft^3/s, estimated by Ventura County Flood Control District.

REVISIONS.—Revised daily discharges, in cubic feet per second, for period in September 1999 are given below. These figures supersede those published in the report for 1999.

Sept. 13.... 0.56	Sept. 16....20	Sept. 19....6.5	Sept. 22....4.0	Sept. 25....4.7	Sept. 28....6.8
14.....1.0	17.....3.8	20....5.0	23....3.9	26....4.6	29....5.1
15.....1.1	18.....2.0	21....5.2	24....4.2	27....5.2	30....5.9

	TOTAL	MEAN	MAX	MIN
September 1999	71.56	2.39	6.8	0.00
Water Year 1999	5948.22			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	.00	.00	.00	.00	252	14	12	10	4.4	.00	.00
2	.00	.00	.00	.00	.00	130	13	12	6.1	1.9	.00	.00
3	2.3	.00	.00	.00	.00	18	13	12	5.0	3.9	.00	.00
4	.00	.00	.00	.00	.00	256	13	40	4.6	2.1	.00	.00
5	3.3	.00	.00	.00	.00	692	15	15	5.0	2.0	.00	.00
6	.00	.00	.00	.00	.00	1160	30	14	2.8	6.3	.00	.00
7	.00	.00	.00	.00	.00	453	21	13	2.2	4.9	.00	.00
8	1.9	.30	.00	.00	.00	1530	13	13	1.9	16	.00	.00
9	.00	.00	.00	.00	.00	1060	12	12	2.1	14	.00	.00
10	.00	.00	.00	.00	8.1	434	12	11	1.5	6.5	.00	.00
11	.00	.00	.00	.00	41	260	11	16	1.4	9.0	.00	.00
12	2.0	.00	.00	.00	441	195	9.5	11	1.7	18	.00	.00
13	.00	.00	.00	.00	183	159	18	11	1.4	4.3	.00	.00
14	.00	.00	.00	.00	82	138	11	11	1.4	4.4	.00	.00
15	.85	.16	.00	.00	90	97	11	11	1.4	3.3	.00	.00
16	.00	.07	.00	.00	11	74	11	11	1.4	4.1	.00	.00
17	.00	.00	.00	.00	16	77	889	11	1.8	8.1	.00	.00
18	.00	.00	.00	.00	.00	37	1690	9.8	2.0	2.8	.00	.00
19	.00	.00	.00	.00	.00	47	647	9.3	2.0	2.4	.00	.00
20	.00	.00	.00	.00	282	29	237	9.0	1.5	2.2	.00	.00
21	.00	.00	.00	.00	4340	11	143	8.8	1.7	1.4	.00	3.0
22	.06	.00	.00	.00	1580	15	60	8.3	1.6	.00	.00	.00
23	.00	.00	.00	.00	3010	20	56	8.0	2.2	.00	.00	.00
24	.00	.00	.00	.00	1700	8.9	33	8.2	1.9	.00	.00	.00
25	.00	.00	.00	2.6	440	9.3	55	7.4	1.5	.00	.00	.00
26	.00	.00	.00	1.4	206	9.3	10	7.8	1.6	.00	.00	.00
27	.00	.00	.00	.00	325	9.9	24	7.0	1.6	.00	.00	.00
28	.00	.00	.00	.00	399	10	11	6.1	1.6	.00	.00	.00
29	.00	.00	.00	.00	301	10	31	6.1	2.0	.00	.00	.00
30	.00	.00	.00	.50	---	24	12	6.3	4.6	.00	.00	.00
31	.00	---	.00	.17	---	15	---	5.8	---	.00	.00	---
TOTAL	14.21	0.53	0.00	4.67	13455.10	7240.4	4125.5	343.9	77.5	122.00	0.00	3.00
MEAN	.46	.018	.000	.15	464	234	138	11.1	2.58	3.94	.000	.10
MAX	3.8	.30	.00	2.6	4340	1530	1690	40	10	18	.00	3.0
MIN	.00	.00	.00	.00	.00	8.9	9.5	5.8	1.4	.00	.00	.00
AC-FT	28	1.1	.00	9.3	26690	14360	8180	682	154	242	.00	6.0

11114000 SANTA CLARA RIVER AT MONTALVO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.18	51.4	103	313	885	533	204	45.3	10.7	4.16	.65	1.42
MAX	72.0	1603	917	5477	7314	5985	2668	1102	268	97.4	23.9	31.7
(WY)	1997	1966	1966	1969	1969	1983	1958	1998	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1928	1928	1930	1951	1951	1931	1950	1932	1928	1928	1928	1928

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	4803.52		25386.81			
ANNUAL MEAN	13.2		69.4		176	
HIGHEST ANNUAL MEAN					1229	1969
LOWEST ANNUAL MEAN					.000	1951
HIGHEST DAILY MEAN	668	Apr 12	4340	Feb 21	92300	Feb 25 1969
LOWEST DAILY MEAN	.00	Jan 4	.00	Oct 2	.00	Oct 1 1927
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 21	.00	Oct 23	.00	Oct 1 1927
INSTANTANEOUS PEAK FLOW			6370	Feb 23	165000	Jan 25 1969
INSTANTANEOUS PEAK STAGE			12.67	Feb 23	17.41	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	9530		50350		127200	
10 PERCENT EXCEEDS	36		57		95	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11118500 VENTURA RIVER NEAR VENTURA, CA

LOCATION.—Lat 34°21'05", long 119°18'23", in southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank, 420 ft downstream from bridge on Casitas Pass Road, at Foster Memorial Park, 0.2 mi downstream from Coyote Creek, and 5 mi north of Ventura.

DRAINAGE AREA.—188 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—September 1911 to January 1914, October 1929 to current year; combined records of river and diversion, October 1932 to current year.

REVISED RECORDS.—WSP 1565: 1957. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage on river; water-stage recorder and Parshall flume on diversion. Datum of gage is 205.23 ft above sea level, Ventura County Flood Control datum. See WSP 1315-B for history of changes prior to Nov. 2, 1949. Nov. 2, 1949, to June 12, 1969, at site 80 ft downstream, at datum 9.00 ft lower. June 13, 1969, to Dec. 22, 1986, at site 370 ft upstream, at datum 5.00 ft lower.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated since March 1948 by Matilija Reservoir (station 11115000), usable capacity, 1,480 acre-ft, and since October 1959 by Lake Casitas (station 11119700), capacity, 267,000 acre-ft. Water diverted to Lake Casitas on Coyote Creek since January 1959. Diversion by city of Ventura for municipal supply began prior to 1911. For records of combined discharge of river and Ventura City Diversion (station 11118400), see station 11118501.

EXTREMES FOR PERIOD OF RECORD.—River only: Maximum discharge, 63,600 ft^3/s, Feb. 10, 1978, gage height, 24.14 ft, from rating curve extended above 34,000 ft^3/s; maximum gage height, 29.3 ft, Jan. 25, 1969, present datum, from floodmarks; no flow at times in many years. Combined river and diversion: Maximum discharge, 63,600 ft^3/s, Feb. 10, 1978; no flow, Nov. 28, 29, 1977, Oct. 23–26, 1989, July 9–11, 1990, and many days during 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.68	1.2	.50	.76	.55	33	43	35	e31	16	8.5	3.6
2	e.72	1.1	.59	.97	.46	25	38	34	e29	16	7.9	4.0
3	e.86	1.0	.52	.81	.42	27	38	33	e28	14	9.3	5.3
4	e1.1	1.0	.54	.71	.33	43	38	34	e25	12	7.7	5.5
5	e1.2	.93	.62	.64	.24	99	37	36	e25	11	7.0	6.1
6	e1.6	1.0	.53	.59	.22	304	30	38	e25	11	6.8	5.7
7	e1.7	1.2	.49	.55	.53	117	29	37	e25	11	6.7	5.4
8	1.5	1.7	.63	.49	.41	310	27	38	26	12	6.7	4.7
9	1.5	1.5	.64	.45	.27	153	26	30	20	12	6.5	4.4
10	1.4	1.4	.60	.39	1.5	112	24	28	18	11	6.5	4.4
11	1.4	1.4	.60	.34	2.2	99	22	27	17	11	6.3	4.1
12	1.2	1.3	.57	.28	29	89	20	27	16	11	6.1	3.8
13	.93	1.4	.55	.23	6.7	74	20	28	16	9.9	5.9	3.5
14	.95	1.2	.54	.23	6.2	75	19	28	15	9.8	5.8	3.6
15	.93	1.3	.54	.20	5.0	67	20	27	16	9.6	4.5	3.9
16	1.1	1.3	.51	e.20	4.7	60	20	27	16	9.9	4.1	3.8
17	1.6	1.0	.48	e.38	4.9	56	215	28	16	10	4.5	3.4
18	1.3	.92	.46	e.45	3.7	53	250	27	17	10	3.7	3.5
19	1.0	.81	.41	e.30	3.0	51	80	26	16	10	3.9	3.3
20	.85	.76	.39	e.26	172	50	64	26	17	9.7	4.1	3.6
21	1.2	.71	.39	e.26	1020	57	54	26	17	10	3.6	3.6
22	1.1	.76	.44	e.19	263	37	48	26	16	11	3.1	3.6
23	1.2	.79	.51	e.09	1010	54	46	25	17	12	4.8	3.3
24	1.5	.76	.50	e.10	129	57	42	e25	18	9.6	3.4	3.1
25	1.3	.73	.53	e.96	49	57	44	e25	17	9.4	4.9	3.6
26	1.1	.72	.52	e1.4	56	57	31	e28	17	9.2	3.2	3.0
27	1.1	.66	.45	.99	90	55	28	e28	17	8.7	2.6	2.5
28	1.2	.57	.44	.72	68	44	37	e40	17	8.2	2.2	2.8
29	1.3	.55	.45	.59	44	47	40	e36	17	7.9	2.2	2.7
30	1.2	.59	.45	.59	---	48	38	e35	17	8.1	2.3	2.6
31	1.2	---	.45	.70	---	46	---	e32	---	8.8	2.3	---
TOTAL	36.92	30.26	15.84	15.82	2971.33	2456	1468	940	584	329.8	157.1	116.4
MEAN	1.19	1.01	.51	.51	102	79.2	48.9	30.3	19.5	10.6	5.07	3.88
MAX	1.7	1.7	.64	1.4	1020	310	250	40	31	16	9.3	6.1
MIN	.68	.55	.39	.09	.22	25	19	25	15	7.9	2.2	2.5
AC-FT	73	60	31	31	5890	4870	2910	1860	1160	654	312	231

e Estimated.

11118500 VENTURA RIVER NEAR VENTURA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1957, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.29	5.15	36.5	121	192	237	78.0	26.1	12.1	6.15	3.59	2.51
MAX	21.4	38.8	174	1103	1058	1951	874	226	103	56.1	35.8	21.2
(WY)	1942	1947	1932	1952	1941	1938	1941	1941	1941	1941	1941	1941
MIN	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1931	1930	1951	1949	1934	1934	1931	1930	1930

SUMMARY STATISTICS	WATER YEARS 1930 - 1957		
ANNUAL MEAN	59.7		
HIGHEST ANNUAL MEAN	354		1941
LOWEST ANNUAL MEAN	.000		1951
HIGHEST DAILY MEAN	17900	Mar 2	1938
LOWEST DAILY MEAN	.00	Oct 1	1929
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	1929
INSTANTANEOUS PEAK FLOW	39200	Mar 2	1938
INSTANTANEOUS PEAK STAGE	19.20	Mar 2	1938
ANNUAL RUNOFF (AC-FT)	43230		
10 PERCENT EXCEEDS	71		
50 PERCENT EXCEEDS	1.9		
90 PERCENT EXCEEDS	.00		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.89	14.2	25.1	141	325	204	75.2	36.0	16.0	8.20	4.21	3.44
MAX	40.9	278	234	1880	2919	1797	758	408	158	63.7	32.2	29.0
(WY)	1984	1966	1966	1969	1998	1983	1983	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1962	1965	1969	1976	1961	1990	1961	1961	1961	1961	1961	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	4235.72		9121.47			
ANNUAL MEAN	11.6		24.9		69.9	
HIGHEST ANNUAL MEAN					383	1995
LOWEST ANNUAL MEAN					.29	1961
HIGHEST DAILY MEAN	53	Jan 25	1020	Feb 21	22000	Feb 9 1978
LOWEST DAILY MEAN	.39	Dec 20	.09	Jan 23	.00	Sep 12 1960
ANNUAL SEVEN-DAY MINIMUM	.44	Dec 16	.24	Jan 18	.00	Dec 15 1960
INSTANTANEOUS PEAK FLOW			3280	Feb 23	63600	Feb 10 1978
INSTANTANEOUS PEAK STAGE			6.24	Feb 23	29.30	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	8400		18090		50660	
10 PERCENT EXCEEDS	27		48		53	
50 PERCENT EXCEEDS	7.1		5.4		3.5	
90 PERCENT EXCEEDS	.70		.50		.00	

11118501 VENTURA RIVER NEAR VENTURA, CA—Continued

VENTURA RIVER AND VENTURA CITY DIVERSION NEAR VENTURA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.68	1.2	.50	.76	.55	33	43	36	e31	16	8.5	3.6
2	e.72	1.1	.59	.97	.46	25	38	35	e29	16	7.9	4.0
3	e.86	1.0	.52	.81	.42	27	38	34	e28	14	9.3	5.3
4	e1.1	1.0	.54	.71	.33	43	38	35	e25	12	7.7	5.5
5	e1.2	.93	.62	.64	.24	99	37	36	e25	11	7.0	6.1
6	e1.6	1.0	.53	.59	.22	304	30	38	e25	11	6.8	5.7
7	e1.7	1.2	.49	.55	.53	117	29	37	e25	11	6.7	5.5
8	1.5	1.7	.63	.49	.41	310	27	38	26	12	6.7	4.7
9	1.5	1.5	.64	.45	.27	153	26	30	20	12	6.5	4.4
10	1.4	1.4	.60	.39	1.5	112	24	28	18	11	6.5	4.4
11	1.4	1.4	.60	.34	2.2	99	22	27	17	11	6.3	4.1
12	1.2	1.3	.57	.28	29	89	20	27	16	11	6.1	3.8
13	.93	1.4	.55	.23	6.7	74	20	28	16	9.9	5.9	3.5
14	.95	1.2	.54	.23	6.2	75	19	28	15	9.8	5.8	3.6
15	.93	1.3	.54	.20	5.0	67	20	28	16	9.6	4.6	3.9
16	1.1	1.3	.51	e.20	4.7	60	20	28	16	9.9	4.2	3.8
17	1.6	1.0	.48	e.38	4.9	56	215	29	16	10	4.6	3.4
18	1.3	.92	.46	e.45	3.7	53	250	28	17	10	3.8	3.5
19	1.0	.81	.41	e.30	3.0	51	80	26	16	10	4.0	3.3
20	.85	.76	.39	e.26	172	50	64	26	17	9.7	4.1	3.6
21	1.2	.71	.39	e.26	1020	57	54	26	17	10	3.6	3.6
22	1.1	.76	.44	e.19	263	37	48	26	16	11	3.1	3.6
23	1.4	.79	.51	e.09	1010	54	46	25	17	12	4.8	3.3
24	1.5	.76	.50	e.10	130	57	42	e25	18	9.6	3.4	3.1
25	1.3	.73	.53	e.96	49	57	44	e25	17	9.4	4.9	3.6
26	1.1	.72	.52	e1.4	56	57	32	e28	17	9.2	3.2	3.0
27	1.1	.66	.45	.99	90	55	29	e28	17	8.7	2.6	2.5
28	1.2	.57	.44	.72	68	44	38	e40	17	8.2	2.2	2.8
29	1.3	.55	.45	.59	44	47	40	e36	17	7.9	2.2	2.7
30	1.2	.59	.45	.59	---	48	39	e35	17	8.1	2.3	2.6
31	1.2	---	.45	.70	---	46	---	e32	---	8.8	2.3	---
TOTAL	37.12	30.26	15.84	15.82	2972.33	2456	1472	948	584	329.8	157.6	116.5
MEAN	1.20	1.01	.51	.51	102	79.2	49.1	30.6	19.5	10.6	5.08	3.88
MAX	1.7	1.7	.64	1.4	1020	310	250	40	31	16	9.3	6.1
MIN	.68	.55	.39	.09	.22	25	19	25	15	7.9	2.2	2.5
AC-FT	74	60	31	31	5900	4870	2920	1880	1160	654	313	231

e Estimated

11118501 VENTURA RIVER NEAR VENTURA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1957, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.12	9.68	33.2	138	191	266	91.0	35.4	20.8	13.2	9.67	8.33
MAX	27.8	45.3	115	1106	1061	1953	877	232	110	65.0	43.2	28.7
(WY)	1942	1947	1937	1952	1941	1938	1941	1941	1941	1941	1941	1941
MIN	.39	.29	.14	2.16	1.72	2.71	2.54	1.34	1.64	.92	.37	.23
(WY)	1936	1937	1933	1949	1949	1951	1951	1933	1936	1936	1935	1935

SUMMARY STATISTICS	WATER YEARS 1933 - 1957	
ANNUAL TOTAL		
ANNUAL MEAN	72.9	
HIGHEST ANNUAL MEAN	359	1941
LOWEST ANNUAL MEAN	2.31	1951
HIGHEST DAILY MEAN	17900	Mar 2 1938
LOWEST DAILY MEAN	.00	Apr 27 1934
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1934
INSTANTANEOUS PEAK FLOW	63600	Feb 10 1978
INSTANTANEOUS PEAK STAGE	29.30	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	52800	
10 PERCENT EXCEEDS	84	
50 PERCENT EXCEEDS	11	
90 PERCENT EXCEEDS	2.2	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.57	19.4	30.0	147	331	211	82.9	44.5	24.4	16.3	11.5	9.96
MAX	50.3	282	240	1883	2919	1804	766	409	160	65.8	33.0	29.0
(WY)	1984	1966	1966	1969	1998	1983	1983	1998	1998	1998	1998	1998
MIN	.000	.000	.11	.51	2.04	3.17	3.19	2.89	2.07	1.48	.63	.005
(WY)	1995	1995	1995	2000	1961	1961	1961	1961	1961	1961	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	4245.12		9135.27			
ANNUAL MEAN	11.6		25.0		76.6	
HIGHEST ANNUAL MEAN					384	1995
LOWEST ANNUAL MEAN					2.22	1961
HIGHEST DAILY MEAN	53	Jan 25	1020	Feb 21	22000	Feb 9 1978
LOWEST DAILY MEAN	.39	Dec 20	.09	Jan 23	.00	Nov 28 1977
ANNUAL SEVEN-DAY MINIMUM	.44	Dec 16	.24	Jan 18	.00	Sep 7 1994
ANNUAL RUNOFF (AC-FT)	8420		18120		55490	
10 PERCENT EXCEEDS	27		48		60	
50 PERCENT EXCEEDS	7.1		5.5		12	
90 PERCENT EXCEEDS	.70		.50		3.0	

11118500 VENTURA RIVER NEAR VENTURA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1907 to December 1908, water years 1967 to current year.
CHEMICAL DATA: December 1907 to December 1908, water years 1967–79.
WATER TEMPERATURE: Water years 1969, 1971–73, 1975–81, 1986.
SEDIMENT DATA: Water years 1969–73, 1975 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1968 to September 1969, October 1970 to September 1973, October 1974 to September 1981, and October 1985 to September 1986.
SUSPENDED-SEDIMENT DISCHARGE: October 1968 to September 1973, October 1974 to September 1981, and October 1985 to September 1986.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB						
11...	1112	2.4	14.5	4	.03	--
22...	1515	191	13.5	50	26	90
22...	1710	174	13.5	47	22	88
MAR						
08...	1140	529	14.0	352	503	95
08...	1320	399	14.0	269	290	95
APR						
05...	1558	34	21.5	15	1.4	70
SEP						
05...	1520	5.9	23.0	11	.18	57

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA

LOCATION.—Lat 34°24'05", long 119°29'08", in El Rincon Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 100 ft upstream from bridge on State Highway 192, 165 ft downstream from Gobernador Creek, and 1.8 mi northeast of Carpinteria.

DRAINAGE AREA.—13.1 mi^2.

PERIOD OF RECORD.—January 1941 to September 1977, October 1978 to current year.

REVISED RECORDS.—WSP 1061: 1943. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 130 ft above sea level, from topographic map. Prior to July 1, 1958, at site 100 ft downstream, at datum 6.00 ft higher. July 2, 1958, to Aug. 27, 1970, at site 65 ft downstream at datum 4.00 ft higher. Aug. 28, 1970, to Sept. 30, 1977, at site 100 ft downstream at same datum.

REMARKS.—Records fair. No regulation upstream from station. Gobernador Land and Water Co. diverts from Gobernador Creek 1.8 mi upstream from station. Small lake 0.8 mi southeast of station and outside the drainage area stores storm runoff and surplus water diverted from Gobernador Creek by Gobernador Land and Water Co. At times this lake is drained by pumping water back into Gobernador Creek 1,000 ft upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,880 ft^3/s, Dec. 27, 1971, gage height, 14.10 ft, from floodmark, from rating curve extended above 130 ft^3/s on basis of slope-area measurement of peak flow; no flow at times each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 125 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1115	512	5.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	13	2.1	.93	.03	.00	.00	.00
2	.00	.00	.00	.00	.00	9.7	1.9	.79	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	9.3	1.7	.65	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	10	1.5	.67	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	27	.91	.73	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	49	.81	.79	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	34	.87	.60	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	50	.59	.49	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	39	.42	.46	.00	.00	.00	.00
10	.00	.00	.00	.00	e3.5	28	.38	.38	.00	.00	.00	.00
11	.00	.00	.00	.00	e5.1	23	.32	.27	.00	.00	.00	.00
12	.00	.00	.00	.00	e5.6	20	.28	.21	.00	.00	.00	.00
13	.00	.00	.00	.00	e6.0	17	.27	.19	.00	.00	.00	.00
14	.00	.00	.00	.00	e5.5	15	.40	.19	.00	.00	.00	.00
15	.00	.00	.00	.00	4.0	14	.44	.22	.00	.00	.00	.00
16	.00	.00	.00	.00	5.2	12	.37	.22	.00	.00	.00	.00
17	.00	.00	.00	.00	4.4	11	16	.19	.00	.00	.00	.00
18	.00	.00	.00	.00	1.5	9.2	27	.10	.00	.00	.00	.00
19	.00	.00	.00	.00	.50	8.4	10	.04	.00	.00	.00	.00
20	.00	.00	.00	.00	13	7.4	7.0	.02	.00	.00	.00	.00
21	.00	.00	.00	.00	41	6.4	5.8	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	15	5.8	4.4	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	126	5.7	3.6	.08	.00	.00	.00	.00
24	.00	.00	.00	.00	42	4.9	3.1	.22	.00	.00	.00	.00
25	.00	.00	.00	.00	21	4.7	2.6	.32	.00	.00	.00	.00
26	.00	.00	.00	.00	14	4.1	2.1	.22	.00	.00	.00	.00
27	.00	.00	.00	.00	22	3.7	1.9	.02	.00	.00	.00	.00
28	.00	.00	.00	.00	20	3.9	1.8	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	15	3.3	1.5	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	3.0	1.2	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	2.5	---	.01	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	370.30	454.0	101.26	9.01	0.03	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	12.8	14.6	3.38	.29	.001	.000	.000	.000
MAX	.00	.00	.00	.00	126	50	27	.93	.03	.00	.00	.00
MIN	.00	.00	.00	.00	.00	2.5	.27	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	734	901	201	18	.06	.00	.00	.00

e Estimated.

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.12	.80	2.52	13.1	18.1	9.92	4.29	1.11	.46	.23	.12	.12
MAX	3.59	16.7	38.9	242	274	83.8	67.8	13.7	6.24	4.35	3.07	3.32
(WY)	1984	1966	1967	1995	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1946	1944	1948	1945	1948	1947	1947	1945	1942	1942	1942	1942

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	188.11		934.60			
ANNUAL MEAN	.52		2.55		3.99	
HIGHEST ANNUAL MEAN					33.5	1969
LOWEST ANNUAL MEAN					.000	1951
HIGHEST DAILY MEAN	13	Apr 11	126	Feb 23	4000	Jan 10 1995
LOWEST DAILY MEAN	.00	Jun 8	.00	Oct 1	.00	Jan 4 1941
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 13	.00	Oct 1	.00	Nov 18 1941
INSTANTANEOUS PEAK FLOW			512	Feb 23	8880	Dec 27 1971
INSTANTANEOUS PEAK STAGE			5.45	Feb 23	14.10	Dec 27 1971
ANNUAL RUNOFF (AC-FT)	373		1850		2890	
10 PERCENT EXCEEDS	1.1		5.9		3.6	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11119745 MISSION CREEK AT ROCKY NOOK PARK, AT SANTA BARBARA, CA

LOCATION.—Lat 34°26'26", long 119°42'39", in Santa Barbara County, Hydrologic Unit 18060013, on right bank, 50 ft southeast of entrance to Rocky Nook Park, 75 ft upstream from bridge on Los Olivos Street, in Santa Barbara.

DRAINAGE AREA.—6.60 mi^2.

PERIOD OF RECORD.—Water years 1984–86. October 1997 to current year.
WATER TEMPERATURE: Water years 1984–86 (storm season only).
SEDIMENT DATA: Water years 1984–86 (storm season only).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 335 ft above sea level, from topographic map.

REMARKS.—Records poor. At times water is released to creek for ground-water recharge from Gibraltar Reservoir through Mission Tunnel several miles upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,010 ft^3/s, Feb. 3, 1998, gage height, 9.52 ft, from rating curve extended above 838 ft^3/s; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.06	.05	.28	.08	.43	5.3	.88	1.9	.51	.18	.12	.17
2	e.06	.06	.20	.09	.36	3.8	.87	1.7	.49	.19	.17	.18
3	e.05	.06	.16	.08	.34	3.9	.84	1.5	.47	.19	.22	.19
4	e.05	.06	.15	.07	.50	5.1	.81	1.4	.46	.17	.24	.18
5	.04	.06	.14	.07	.41	24	.78	1.3	.41	.17	.24	.19
6	.03	.12	.13	.07	.36	38	.78	1.3	.37	.18	.25	.18
7	.02	.25	.12	.06	.33	20	.78	1.3	.31	.19	.22	.18
8	.02	2.2	.10	.06	.32	55	.75	1.3	.32	.21	.25	.14
9	.02	.40	.11	.06	.33	25	.69	1.2	.32	.21	.32	.17
10	.02	.32	.13	.06	4.2	16	.62	1.2	.29	.22	.25	.14
11	.02	.30	.13	.20	2.5	11	.59	1.2	.29	.24	.21	.11
12	.02	.30	.10	.10	18	8.0	.57	1.1	.28	.23	.21	.09
13	.02	.26	.09	.11	7.2	6.5	.55	.95	.26	.21	.24	.08
14	.02	.25	.09	.15	14	5.1	.58	1.0	.27	.19	.23	.07
15	.02	.26	.08	.15	5.0	4.2	.60	1.2	.26	.19	.20	.10
16	.02	.23	.07	.17	3.4	3.5	.64	1.0	.26	.20	.12	.08
17	.03	.23	.07	.27	2.8	3.0	62	.99	.31	.19	.09	.06
18	.03	.37	.06	.42	1.7	2.6	41	.96	.33	.16	.10	.07
19	.03	1.1	.06	.28	1.3	2.3	15	.90	.29	.13	.17	.08
20	.03	.36	.06	.25	28	2.3	9.0	.88	.28	.11	.15	.12
21	.03	.28	.06	.24	71	1.9	6.3	.84	.26	.11	.17	.23
22	.04	.24	.18	.22	21	1.5	5.1	.84	.24	.13	.20	.29
23	.04	.21	.15	.23	142	1.4	4.4	.85	.23	.12	.21	.28
24	.04	.19	.17	.28	24	1.4	3.9	.90	.21	.11	.20	.25
25	.04	.20	.06	2.8	10	1.3	3.2	.92	.19	.10	.19	.17
26	.04	.24	.05	.79	5.5	1.2	2.6	.84	.17	.08	.15	.15
27	.04	.23	.04	.35	20	1.2	2.5	.71	.16	.08	.13	.16
28	.04	.26	.04	.28	12	1.1	2.3	.64	.15	.08	.15	.21
29	.04	.23	.04	.26	7.2	1.1	2.1	.59	.15	.09	.18	.19
30	.04	.26	.04	.28	---	1.0	1.9	.56	.16	.10	.19	.21
31	.05	---	.05	.61	---	.96	---	.53	---	.10	.20	---
TOTAL	1.05	9.58	3.21	9.14	404.18	258.66	172.63	32.50	8.70	4.86	5.97	4.72
MEAN	.034	.32	.10	.29	13.9	8.34	5.75	1.05	.29	.16	.19	.16
MAX	.06	2.2	.28	2.8	142	55	62	1.9	.51	.24	.32	.29
MIN	.02	.05	.04	.06	.32	.96	.55	.53	.15	.08	.09	.06
AC-FT	2.1	19	6.4	18	802	513	342	64	17	9.6	12	9.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

MEAN	.11	.48	3.09	1.44	28.1	4.59	2.34	1.70	.76	.44	.32	.19
MAX	.47	1.52	9.47	5.79	138	9.55	6.20	8.39	3.18	2.27	1.60	.79
(WY)	1999	1984	1998	1998	1998	1986	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.10	.20	.67	.29	.28	.039	.029	.010	.007	.008
(WY)	1998	1998	2000	1986	1984	1985	1984	1985	1984	1984	1984	1984

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	136.74		915.20			
ANNUAL MEAN	.37		2.50		3.99	
HIGHEST ANNUAL MEAN					14.4	1998
LOWEST ANNUAL MEAN					.46	1999
HIGHEST DAILY MEAN	9.0	Mar 25	142	Feb 23	524	Feb 3 1998
LOWEST DAILY MEAN	.01	Aug 27	.02	Oct 7	.00	Aug 15 1984
ANNUAL SEVEN-DAY MINIMUM	.02	Aug 24	.02	Oct 7	.00	Aug 15 1984
INSTANTANEOUS PEAK FLOW			586	Feb 23	1010	Feb 3 1998
INSTANTANEOUS PEAK STAGE			8.21	Feb 23	9.52	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	271		1820		2890	
10 PERCENT EXCEEDS	.84		3.9		3.4	
50 PERCENT EXCEEDS	.23		.24		.29	
90 PERCENT EXCEEDS	.04		.06		.01	

e Estimated

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA

LOCATION.—Lat 34°25'35", long 119°43'20", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank, 200 ft downstream from Los Olivos Street, in Santa Barbara.

DRAINAGE AREA.—8.38 mi^2.

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder, low-flow concrete control and crest-stage gage. Concrete-lined channel. Elevation of gage is 105 ft above sea level, from topographic map.

REMARKS.—Records good. At times water is released to creek for ground-water recharge from Gibraltar Reservoir through Mission Tunnel several miles upstream. Control installed Nov. 26, 1979.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,090 ft^3/s, Feb. 23, 1998, gage height, 5.67 ft, from rating curve extended above 41 ft^3/s on basis of computation of flow in concrete-lined channel; maximum gage height, 6.60 ft, Jan. 10, 1995; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	0930	928	4.03	Apr. 17	0930	304	3.04

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.14	.00	.00	.00	2.3	.17	.00	.00	.00	.00	.00
2	.00	.23	.00	.00	.00	.88	.06	.00	.00	.00	.00	.00
3	.00	.10	.00	.00	.00	8.1	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	33	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	44	.00	.00	.00	.00	.00	.00
7	.00	.43	.00	.00	.00	19	.00	.00	.00	.00	.00	.00
8	.00	8.4	.00	.00	.00	62	.00	.00	.00	.00	.00	.00
9	.00	.07	.00	.00	.00	25	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	15	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	2.8	12	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	20	11	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	15	7.6	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	20	4.9	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	7.9	2.9	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	6.4	1.5	.03	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	5.8	.75	69	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	2.2	.33	47	.00	.00	.00	.00	.00
19	.00	.00	.00	.01	.69	.10	15	.00	.00	.00	.00	.00
20	.00	.00	.00	.01	33	.06	11	.00	.00	.00	.00	.00
21	.00	.00	.00	.01	76	10	5.4	.00	.00	.00	.00	.00
22	.00	.00	.00	.01	24	8.3	2.0	.00	.00	.00	.00	.00
23	.00	.00	.00	.01	157	6.4	.61	.00	.00	.00	.00	.00
24	.00	.00	.00	.01	27	4.9	.09	.00	.00	.00	.00	.00
25	.00	.00	.00	.01	13	3.7	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	6.4	2.7	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	23	1.9	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	10	1.3	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	4.8	.99	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.66	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.36	---	.00	---	.00	.00	---
TOTAL	0.00	9.37	0.00	0.07	454.99	301.63	150.36	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.31	.000	.002	15.7	9.73	5.01	.000	.000	.000	.000	.000
MAX	.00	8.4	.00	.01	157	62	69	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
AC-FT	.00	19	.00	.1	902	598	298	.00	.00	.00	.00	.00

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.15	1.05	2.52	8.64	15.8	9.09	2.26	1.06	.18	.021	.037	.13
MAX	2.01	14.0	13.9	79.9	176	62.3	17.2	11.3	1.97	.49	1.08	1.37
(WY)	1984	1973	1972	1995	1998	1978	1983	1998	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1975	1973	1976	1972	1972	1972	1972	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	91.87		916.42			
ANNUAL MEAN	.25		2.50		3.35	
HIGHEST ANNUAL MEAN					18.4	1998
LOWEST ANNUAL MEAN					.12	1990
HIGHEST DAILY MEAN	25	Mar 25	157	Feb 23	1390	Jan 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
INSTANTANEOUS PEAK FLOW			928	Feb 23	3090	Feb 23 1998
INSTANTANEOUS PEAK STAGE			4.03	Feb 23	6.60	Jan 10 1995
ANNUAL RUNOFF (AC-FT)	182		1820		2420	
10 PERCENT EXCEEDS	.00		4.9		3.7	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, CA

LOCATION.—Lat 34°26'42", long 119°48'10", in Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, at University Drive, 0.2 mi east of Patterson Avenue, and 1.5 mi northeast of Goleta.

DRAINAGE AREA.—6.35 mi^2.

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Some pumping for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,600 ft^3/s, Mar. 10, 1995, gage height, 10.16 ft, from rating curve extended above 3,000 ft^3/s on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1000	566	3.68	Mar. 8	0600	125	2.25
Mar. 6	0600	103	2.11	Apr. 17	0945	109	2.23

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.30	1.7	4.1	.56	e.52	.07	.00	.00	.00
2	.00	.00	.00	.00	1.2	3.5	.40	e.50	.02	.00	.00	.00
3	.00	.00	.00	.00	.25	5.2	.53	e.48	.09	.00	.00	.00
4	.00	.00	.00	.00	3.8	6.7	.41	e.46	.06	.00	.00	.00
5	.00	.00	.00	.00	3.4	37	.41	e.42	.07	.00	.00	.00
6	.00	.00	.00	.00	2.1	32	.65	e.40	.04	.00	.00	.00
7	.00	.00	.00	.00	1.9	11	.79	e.36	e.04	.00	.00	.00
8	.00	5.0	.00	.00	.04	43	.75	e.34	e.04	e.10	.00	.00
9	.00	.01	.00	.00	.13	11	.74	e.30	e.03	e.10	.00	.00
10	.00	.00	.00	.00	8.6	6.6	.67	e.27	e.03	e.20	.00	.00
11	.00	.00	.00	.00	2.6	4.6	.65	.20	e.02	e.30	.00	.00
12	.00	.00	.00	.00	15	3.4	.81	.27	e.02	e.30	.00	.00
13	.00	.00	.00	.00	8.4	2.7	.77	.16	e.02	e.20	.00	.00
14	.00	.00	.00	.00	16	2.5	.84	.08	e.02	e.20	.00	.00
15	.00	.00	.00	.00	4.6	2.3	.98	.21	e.01	e.10	.00	.00
16	.00	.00	.00	.00	4.5	2.1	.95	.35	e.01	e.10	.00	.00
17	.00	.00	.00	1.3	2.8	1.9	36	e.26	e.00	e.00	.00	.00
18	.00	.00	.00	1.5	2.1	2.1	19	e.28	.00	.00	.00	.00
19	.00	.00	.00	.00	2.1	2.0	3.2	e.30	.00	.00	.00	.00
20	.00	.00	.00	.00	22	2.3	.80	e.33	.00	.00	.00	.00
21	.00	.00	.00	.00	68	2.3	.71	e.24	.00	.00	.00	.00
22	.00	.00	.00	.00	13	2.1	.60	.20	.00	.00	.00	.00
23	.00	.00	.00	.00	112	1.7	.79	.29	.00	.00	.00	.00
24	.00	.00	.00	3.9	12	1.5	.72	.29	.00	.00	.00	.00
25	.00	.00	.00	12	5.5	1.1	.80	.35	.00	.00	.00	.00
26	.00	.00	.00	3.6	4.2	1.7	e.80	.21	.00	.00	.00	.00
27	.00	.00	.00	2.5	20	1.6	e.75	.08	.00	.00	.00	.00
28	.00	.00	.00	2.3	8.9	1.3	e.75	.05	.00	.00	.00	.00
29	.00	.00	.00	1.7	5.1	1.3	e.62	.08	.00	.00	.00	.00
30	.00	.00	.00	2.9	---	1.4	e.55	.09	.00	.00	.00	.00
31	.00	---	.00	3.1	---	1.1	---	.03	---	.00	.00	---
TOTAL	0.00	5.01	0.00	35.10	351.92	203.1	77.00	8.40	0.59	1.60	0.00	0.00
MEAN	.000	.17	.000	1.13	12.1	6.55	2.57	.27	.020	.052	.000	.000
MAX	.00	5.0	.00	12	112	43	36	.52	.09	.30	.00	.00
MIN	.00	.00	.00	.00	.04	1.1	.40	.03	.00	.00	.00	.00
AC-FT	.00	9.9	.00	70	698	403	153	17	1.2	3.2	.00	.00

e Estimated.

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.12	.26	1.32	5.58	9.23	7.34	1.53	.75	.36	.28	.11	.080
MAX	2.05	2.35	8.18	61.2	70.4	32.9	15.9	14.4	8.10	7.47	2.66	1.36
(WY)	1984	1983	1984	1995	1998	1978	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.002	.001	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1975	1990	1989	1977	1972	1972	1972	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	117.78		682.72			
ANNUAL MEAN	.32		1.87		2.21	
HIGHEST ANNUAL MEAN					11.4	1998
LOWEST ANNUAL MEAN					.039	1990
HIGHEST DAILY MEAN	21	Mar 25	112	Feb 23	629	Jan 10 1995
LOWEST DAILY MEAN	.00	May 25	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	May 25	.00	Oct 1	.00	Oct 1 1970
INSTANTANEOUS PEAK FLOW			566	Feb 23	4600	Mar 10 1995
INSTANTANEOUS PEAK STAGE			3.68	Feb 23	10.16	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	234		1350		1600	
10 PERCENT EXCEEDS	.69		3.3		2.0	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11120000 ATASCADERO CREEK NEAR GOLETA, CA

LOCATION.—Lat 34°25'29", long 119°48'39", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of center pier of county road bridge, 100 ft downstream from Maria Ygnacio Creek, 1.3 mi upstream from mouth, and 1.3 mi southeast of Goleta.

DRAINAGE AREA.—18.9 mi^2.

PERIOD OF RECORD.—October 1941 to current year. Prior to October 1947, published as "Alascadero Creek near Goleta."
SEDIMENT CONCENTRATION: Water year 1982.
SUSPENDED-SEDIMENT DISCHARGE: Water year 1982.
WATER TEMPERATURE: Water year 1982.

REVISED RECORDS.—WSP 1635: 1943–45(M), 1947(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and broad-crested weir. Datum of gage is 8.59 ft above sea level, Santa Barbara County benchmark. Prior to Dec. 14, 1967, at site 275 ft downstream, datum 4.00 ft higher. Dec. 14, 1967, to Sept. 30, 1976, at datum 4.00 ft higher; Oct. 1, 1976, to Sept. 30, 1978, at datum 2.00 ft higher, both at present site.

REMARKS.—Records fair. No regulation upstream from station. Small diversions for irrigation upstream from station. Some low-flow results from return irrigation wastewater.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,200 ft^3/s, Mar. 10, 1995, gage height, 12.45 ft, present datum, from rating curve extended above 6,900 ft^3/s; maximum gage height, 17.3 ft, from floodmark, Dec. 3, 1974, present datum; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 260 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0100	674	3.39	Feb. 27	0900	484	3.36
Feb. 21	0900	1,150	3.90	Mar. 8	0600	922	3.64
Feb. 23	1000	1,720	4.67	Apr. 17	1015	911	3.63

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.05	.10	.10	.17	11	.80	.99	.21	.17	.05	.07
2	.02	.06	.08	.10	.18	11	.59	1.3	.21	.15	.05	.06
3	.02	.07	.08	.10	.39	24	.68	1.2	.22	.15	.05	.04
4	.03	.07	.07	.10	4.7	30	.66	1.2	.25	.10	.06	.04
5	.03	.08	.08	.10	.32	159	.58	1.1	.23	.09	.04	.03
6	.02	.07	.08	.10	.18	188	.60	.71	.15	.09	.04	.03
7	.02	.12	.07	.08	.16	37	.75	.65	.15	.07	.03	.03
8	.02	38	.09	.09	.17	230	.71	.67	.14	.07	.10	.03
9	.03	.23	.07	.10	.17	35	.72	.74	.14	.07	.15	.04
10	.06	.15	.07	.10	43	17	.75	.51	.66	.07	.05	.03
11	.05	.12	.05	.12	9.2	11	.55	.31	.71	.09	.03	.04
12	.05	.10	.06	.11	72	8.4	.59	.39	.71	.09	.03	.04
13	.05	.10	.08	.10	55	7.0	.46	.38	.68	.07	.03	.03
14	.05	.10	.08	.10	55	6.0	.66	.31	.69	.05	.02	.02
15	.04	.11	.07	.12	13	4.9	.60	.33	.18	.05	.05	.04
16	.05	.13	.07	.12	12	4.0	.62	.20	.10	.06	.04	.20
17	.05	.42	.08	1.9	3.4	3.5	255	.19	.16	.06	.03	.05
18	.04	.13	.07	.70	1.4	3.2	128	.22	.20	.07	.02	.04
19	.05	.09	.08	.24	.86	2.9	20	.24	.16	.07	.03	.07
20	.06	1.1	.08	.16	88	2.8	9.3	.19	.10	.07	.03	.17
21	.05	.13	.07	.13	308	2.4	6.5	.22	.10	.07	.03	.19
22	.05	.16	.07	.12	37	2.1	4.1	.20	.10	.08	.04	.06
23	.05	.17	.09	.22	434	2.0	3.3	.25	.10	.06	.04	.03
24	.05	.09	.08	.81	41	1.9	2.5	.27	.15	.05	.04	.03
25	.05	.08	.08	54	15	1.9	1.9	.26	.11	.02	.05	.03
26	.39	.09	.08	3.8	11	1.8	1.7	.19	.10	.02	.07	.03
27	.45	.11	.08	.28	88	1.8	1.4	.23	.10	.03	.12	.04
28	.23	.12	.10	.18	23	1.5	1.1	.17	.28	.02	.08	.04
29	.09	.11	.08	.18	11	1.3	1.0	.18	.24	.04	.32	.03
30	.06	.10	.08	1.1	---	1.3	.90	.21	.12	.03	.57	.04
31	.05	---	.08	.84	---	1.1	---	.21	---	.04	.17	---
TOTAL	2.29	42.46	2.40	66.30	1327.30	814.8	447.02	14.22	7.45	2.17	2.46	1.62
MEAN	.074	1.42	.077	2.14	45.8	26.3	14.9	.46	.25	.070	.079	.054
MAX	.45	38	.10	54	434	230	255	1.3	.71	.17	.57	.20
MIN	.02	.05	.05	.08	.16	1.1	.46	.17	.10	.02	.02	.02
AC-FT	4.5	84	4.8	132	2630	1620	887	28	15	4.3	4.9	3.2

11120000 ATASCADERO CREEK NEAR GOLETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.34	3.24	5.35	17.5	23.4	16.9	4.29	.98	.24	.11	.090	.25
MAX	8.08	49.8	41.5	230	266	158	63.5	24.5	4.50	3.42	1.84	4.68
(WY)	1984	1966	1967	1969	1998	1998	1958	1998	1998	1998	1998	1976
MIN	.000	.000	.000	.000	.000	.010	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1943	1951	1948	1990	1950	1942	1942	1942	1942	1942

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	595.11		2730.49			
ANNUAL MEAN	1.63		7.46		5.97	
HIGHEST ANNUAL MEAN					40.7	1998
LOWEST ANNUAL MEAN					.018	1951
HIGHEST DAILY MEAN	121	Mar 25	434	Feb 23	2410	Jan 25 1969
LOWEST DAILY MEAN	.00	Aug 2	.02	Oct 2	.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.01	Aug 16	.02	Oct 2	.00	Oct 1 1941
INSTANTANEOUS PEAK FLOW			1720	Feb 23	10200	Mar 10 1995
INSTANTANEOUS PEAK STAGE			4.67	Feb 23	17.30	Dec 3 1974
ANNUAL RUNOFF (AC-FT)	1180		5420		4330	
10 PERCENT EXCEEDS	1.7		6.7		3.4	
50 PERCENT EXCEEDS	.23		.12		.03	
90 PERCENT EXCEEDS	.04		.04		.00	

11120500 SAN JOSE CREEK NEAR GOLETA, CA

LOCATION.—Lat 34°27'33", long 119°48'29", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 1.1 mi downstream from unnamed tributary, and 1.7 mi northeast of Goleta.

DRAINAGE AREA.—5.51 mi^2.

PERIOD OF RECORD.—January 1941 to January 1995, October 1995 to current year.
CHEMICAL DATA: Water years 1978–91.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage, and concrete low-water control. Datum of gage is 95.61 ft above sea level, Santa Barbara County Road Department datum. Prior to Dec. 24, 1955, at datum 5.50 ft higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft higher. Prior to Oct. 1, 1971, at site 75 ft downstream.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Many small diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,000 ft^3/s, Jan. 25, 1969, gage height, 10.10 ft, from rating curve extended above 400 ft^3/s on basis of slope-area measurement at gage height 9.32 ft; maximum gage height, 12.74 ft, present datum, Jan. 21, 1943; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	0930	321	5.21	Apr. 17	1115	117	4.23

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.09	.08	.16	.27	.73	9.0	1.6	1.8	.45	.43	.29	.12
2	e.09	.06	.18	.20	.56	6.8	1.5	2.2	.53	.52	.26	.13
3	e.08	.08	.23	.30	.46	6.3	1.5	3.1	.56	.42	.20	.14
4	e.07	.09	.18	.28	.70	9.3	1.5	2.3	.72	.37	.21	.13
5	.07	.09	.19	.14	.48	27	1.3	2.5	.69	.36	.30	.11
6	.05	.11	.26	.14	.45	26	1.1	2.7	.45	.32	.29	.09
7	.05	.13	.27	.19	.39	15	1.2	2.7	.56	.35	.18	.09
8	.05	1.5	.19	.19	.34	32	.97	2.9	.49	.31	.21	.08
9	.04	.39	.23	.20	.33	17	.92	1.8	.51	.35	.16	.09
10	.04	.34	.27	.23	e7.6	10	.81	1.9	.46	.48	.13	.12
11	.05	.32	.27	.14	e3.0	7.2	.59	1.4	.45	.45	.11	.09
12	.04	.31	.34	.12	e17	5.6	.57	.99	.49	.38	.12	.11
13	.04	.23	.37	.14	e10	4.6	.62	.85	.41	.39	.17	.10
14	.04	.32	.26	.16	e18	3.9	.76	.97	.40	.31	.14	.08
15	.05	.32	.30	.30	e6.0	3.7	.89	.87	.46	.32	.11	.07
16	.05	.22	.32	.37	e6.5	3.2	.99	.56	.48	.38	.10	.07
17	.07	.16	.35	.50	e4.2	2.9	33	.39	.71	.34	.09	.07
18	.11	.23	.33	.88	e3.3	2.7	29	.34	1.1	.32	.11	.08
19	.05	.28	.15	.71	e3.4	2.5	13	.31	.88	.27	.11	.07
20	.04	.38	.14	.71	e27	2.3	8.4	.43	.63	.24	.13	.08
21	.04	.39	.16	.71	e80	2.2	8.8	.47	.60	.27	.10	.13
22	.04	.36	.12	.74	e20	2.0	9.2	.42	.62	.30	.09	.16
23	.04	.24	.22	.93	81	1.9	7.9	.45	.57	.36	.09	.14
24	.06	.16	.24	1.1	27	1.9	5.5	.61	.64	.30	.11	.15
25	.05	.20	.27	3.2	19	1.8	3.9	.57	.83	.31	.11	.14
26	.06	.26	.27	1.8	14	1.8	4.0	.52	.70	.27	.13	.16
27	.09	.33	.27	1.2	22	1.7	3.7	.55	.52	.23	.12	.15
28	.14	.37	.31	1.0	17	1.7	3.4	.52	.40	.26	.15	.13
29	.09	.37	.30	.87	12	1.8	2.8	.47	.37	.28	.22	.13
30	.07	.30	.32	.87	---	1.8	2.1	.49	.42	.33	.12	.17
31	.07	---	.18	1.0	---	1.7	---	.48	---	.29	.14	---
TOTAL	1.92	8.62	7.65	19.59	402.44	217.3	151.52	36.56	17.10	10.51	4.80	3.38
MEAN	.062	.29	.25	.63	13.9	7.01	5.05	1.18	.57	.34	.15	.11
MAX	.14	1.5	.37	3.2	81	32	33	3.1	1.1	.52	.30	.17
MIN	.04	.06	.12	.12	.33	1.7	.57	.31	.37	.23	.09	.07
AC-FT	3.8	17	15	39	798	431	301	73	34	21	9.5	6.7

e Estimated.

11120500 SAN JOSE CREEK NEAR GOLETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.26	1.09	2.38	5.62	12.5	7.21	2.91	.95	.37	.22	.15	.15
MAX	6.40	21.2	23.5	35.6	308	98.8	29.0	13.9	4.26	3.58	1.45	1.40
(WY)	1984	1966	1967	1952	1998	1998	1958	1998	1998	1998	1998	1954
MIN	.000	.000	.000	.000	.021	.10	.021	.000	.000	.000	.000	.000
(WY)	1947	1948	1948	1948	1948	1990	1990	1948	1946	1946	1946	1946

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	389.61		881.39			
ANNUAL MEAN	1.07		2.41		2.64	
HIGHEST ANNUAL MEAN					37.4	1998
LOWEST ANNUAL MEAN					.042	1948
HIGHEST DAILY MEAN	35	Mar 25	81	Feb 23	1000	Feb 3 1998
LOWEST DAILY MEAN	.04	Oct 9	.04	Oct 9	.00	Jan 2 1941
ANNUAL SEVEN-DAY MINIMUM	.04	Oct 8	.04	Oct 8	.00	Aug 18 1942
INSTANTANEOUS PEAK FLOW			321	Feb 23	2000	Jan 25 1969
INSTANTANEOUS PEAK STAGE			5.21	Feb 23	12.74	Jan 21 1943
ANNUAL RUNOFF (AC-FT)	773		1750		1910	
10 PERCENT EXCEEDS	1.6		4.9		2.3	
50 PERCENT EXCEEDS	.31		.35		.26	
90 PERCENT EXCEEDS	.07		.09		.00	

11120510 SAN JOSE CREEK AT GOLETA, CA

LOCATION.—Lat 34°25'49", long 119°49'16", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, south of Hollister Avenue on Kellogg Avenue, and 0.5 mi southeast of Goleta.

DRAINAGE AREA.—9.42 mi^2.

PERIOD OF RECORD.—October 1970 to September 1992, October 1997 to September 2000 (discontinued). November 1955 to September 1970 in files of Santa Barbara County Flood Control and Water Conservation District and Water Agency.

REVISED RECORDS.—WDR CA-75-1: 1973(M).

GAGE.—Water-stage recorder and concrete channel. Elevation of gage is 10 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation upstream from station. Diversions for irrigation and domestic use upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,470 ft^3/s, Feb. 7, 1998, gage height, 5.68 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	unknown	unknown	unknown	Apr. 17	1145	266	2.41

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.03	.06	e.09	e.11	e.65	e5.5	1.3	.98	.34	.21	.14	.10
2	e.04	e.05	e.08	e.10	e.45	3.8	1.2	.98	.38	.24	.15	.10
3	e.06	e.04	e.09	e.09	e.40	3.7	1.1	.98	.36	.22	.14	.09
4	e.08	e.05	e.08	e.09	e.45	4.1	.98	.98	.36	.16	.13	.08
5	.08	e.06	e.07	e.10	e.35	80	.92	.98	.39	.14	.10	.10
6	.08	e.06	e.06	e.10	e.35	110	.71	.91	.27	.14	.09	.10
7	.06	e.08	e.08	e.09	e.33	76	.60	.81	.29	.13	.13	.09
8	.06	e1.6	e.08	e.11	e.30	119	.60	.78	.27	.08	.14	.07
9	.04	e.40	e.09	e.12	e.30	82	.61	.72	.26	.06	.14	.07
10	.04	e.30	e.08	e.12	e10	35	.52	.72	.21	.22	.13	.05
11	.07	e.27	e.08	e.11	e4.0	8.9	.50	.68	.18	.27	.11	.06
12	.07	e.25	e.09	e.10	e22	6.0	.51	.65	.25	.21	.12	.08
13	.07	e.20	e.10	e.11	e8.0	5.6	.50	.64	.20	.18	.10	.07
14	.07	e.22	e.10	e.12	e23	5.1	.55	.60	.18	.16	.14	.08
15	.07	e.18	e.11	e.13	e7.0	4.9	.57	.60	.22	.11	.14	.07
16	.05	e.17	e.11	e.15	e4.5	4.6	.45	.53	.26	.16	.15	.06
17	.04	e.14	e.10	e.33	e2.9	4.3	109	.43	.34	.22	.14	.05
18	.07	e.10	e.12	e.88	e2.6	4.0	60	.42	.68	.16	.13	.06
19	.06	e.11	e.09	e.70	e3.0	3.7	4.2	.34	.56	.17	.10	.08
20	.06	e.10	e.09	e.70	e40	3.4	3.9	.34	.30	.14	.10	.08
21	.06	e.09	e.10	e.65	e130	3.2	3.4	.39	.30	.13	.13	.07
22	.07	e.10	e.09	e.66	e60	3.0	2.5	.42	.55	.10	.14	.08
23	.05	e.09	e.10	e.90	e145	2.9	1.8	.42	.27	.09	.15	.06
24	.04	e.08	e.11	e1.2	e60	2.7	1.3	.50	.27	.13	.14	.05
25	.06	e.09	e.12	e3.6	e40	2.5	1.2	.45	.34	.15	.13	.07
26	.07	e.10	e.11	e1.6	e18	2.3	1.0	.41	.39	.14	.11	.07
27	.07	e.11	e.11	e1.0	e35	2.0	.98	.36	.26	.15	.10	.08
28	.07	e.10	e.10	e.70	e22	1.8	1.1	.35	.22	.13	.13	.08
29	.07	e.12	e.12	e.50	e11	1.7	1.1	.38	.18	.11	.12	.08
30	.04	e.10	e.13	e.55	---	1.5	1.1	.39	.21	.11	.12	.06
31	.04	---	e.10	e1.1	---	1.5	---	.36	---	.15	.11	---
TOTAL	1.84	5.42	2.98	16.82	651.58	594.7	204.20	18.50	9.29	4.77	3.90	2.24
MEAN	.059	.18	.096	.54	22.5	19.2	6.81	.60	.31	.15	.13	.075
MAX	.08	1.6	.13	3.6	145	119	109	.98	.68	.27	.15	.10
MIN	.03	.04	.06	.09	.30	1.5	.45	.34	.18	.06	.09	.05
AC-FT	3.6	11	5.9	33	1290	1180	405	37	18	9.5	7.7	4.4

e Estimated.

11120510 SAN JOSE CREEK AT GOLETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.37	1.15	2.86	5.10	17.1	10.6	2.57	1.06	.45	.25	.12	.17
MAX	7.11	7.65	16.5	40.5	174	52.7	16.1	9.01	5.80	3.81	1.85	1.67
(WY)	1984	1973	1984	1983	1998	1978	1983	1998	1998	1998	1983	1983
MIN	.000	.000	.000	.005	.083	.000	.000	.000	.000	.000	.000	.000
(WY)	1981	1981	1990	1976	1972	1990	1972	1972	1972	1971	1972	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	268.06		1516.24			
ANNUAL MEAN	.73		4.14		3.41	
HIGHEST ANNUAL MEAN					20.0	1998
LOWEST ANNUAL MEAN					.15	1990
HIGHEST DAILY MEAN	55	Mar 25	145	Feb 23	649	Mar 4 1978
LOWEST DAILY MEAN	.00	Mar 5	.03	Oct 1	.00	Jun 30 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 5	.05	Oct 30	.00	Jun 30 1971
INSTANTANEOUS PEAK FLOW			266	Apr 17	2470	Feb 7 1998
INSTANTANEOUS PEAK STAGE			2.41	Apr 17	5.68	Feb 7 1998
ANNUAL RUNOFF (AC-FT)	532		3010		2470	
10 PERCENT EXCEEDS	1.6		3.9		3.4	
50 PERCENT EXCEEDS	.09		.17		.07	
90 PERCENT EXCEEDS	.00		.07		.00	

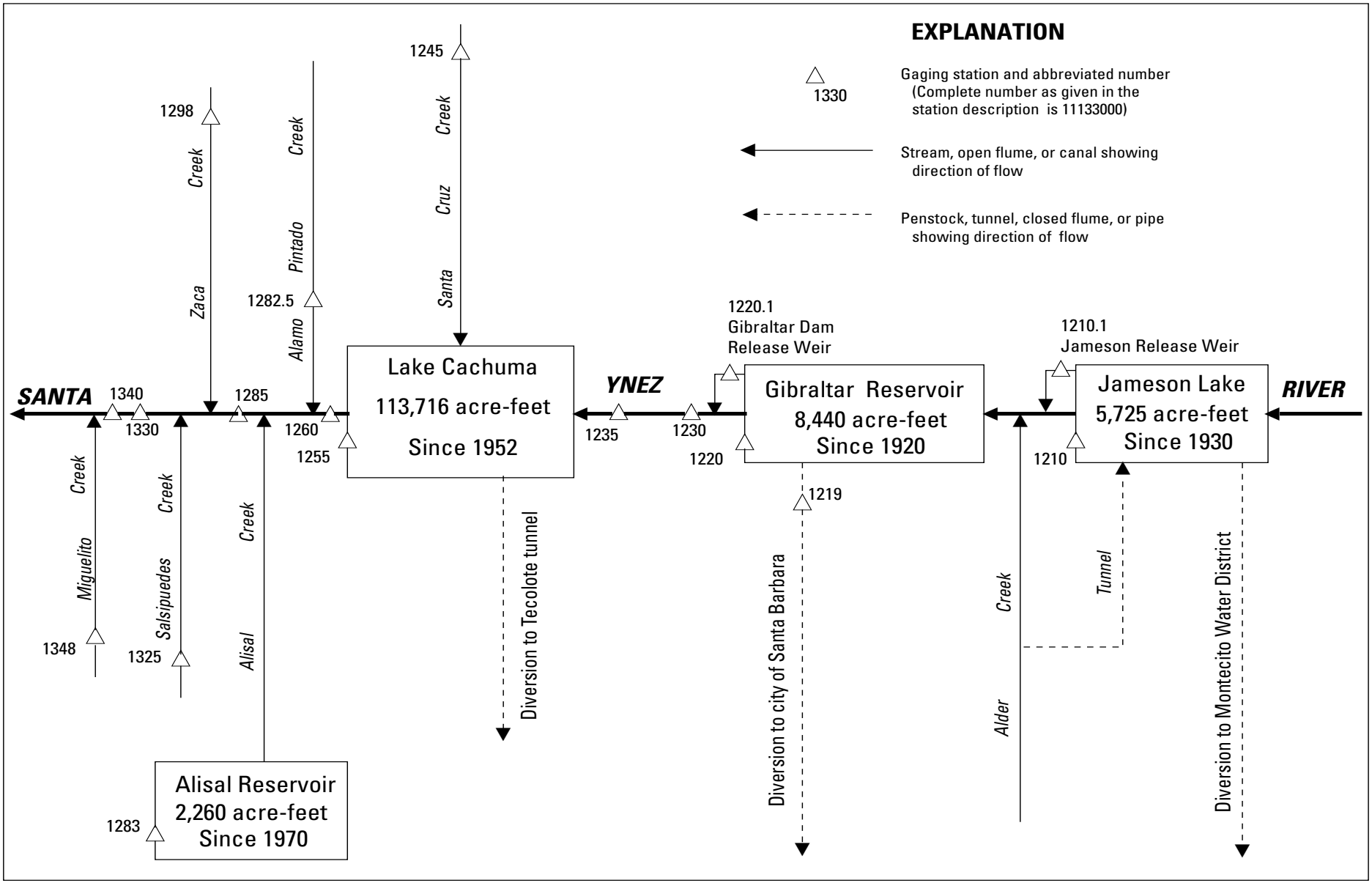

Figure 20. Diversions and storage in Santa Ynez River Basin.

11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.—Lat 34°29'32", long 119°30'25", in NE 1/4 NW 1/4 sec.28, T.5 N., R.25 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Juncal Dam, 6.5 mi north of Carpinteria, and 8 mi northeast of Montecito.

DRAINAGE AREA.—13.9 mi^2, excludes area of Alder Creek.

PERIOD OF RECORD.—December 1930 to current year. Prior to October 1938, published as "at Juncal Reservoir, near Montecito."

GAGE.—Two water-stage recorders. Datum of lake gage is 2,021.6 ft U.S. Bureau of Reclamation Datum or 2,000 ft above sea level. Supplementary gage and sharp-crested weir on outlet conduit of lake release, at different datum.

REMARKS.—Records of total inflow represent all water reaching Jameson Lake, including precipitation on the lake. Total inflow computed on basis of records of storage, diversion (draft) to city of Montecito, spill and release (station 11121010) to river, evaporation, and seepage. Records of net inflow exclude precipitation on lake surface. Monthly evaporation from lake surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on survey made in 1994. Lake capacity at spillway level, gage height 223.82 ft, 5,213 acre-ft. Dead storage, 32 acre-ft, below lowest outlet at gage height 139.0 ft included in these records. There is no regulation or diversion upstream from station. At times flow of Alder Creek, which enters Santa Ynez River 2 mi downstream from Juncal Dam, is diverted at elevation 2,250 ft through a tunnel to Jameson Lake and is included in these records. See schematic diagram of Santa Ynez River Basin.

COOPERATION.—Reservoir-operation records and related data provided by Montecito Water District.

AVERAGE DISCHARGE.—69 years (water years 1932–00), spill and release, 9.93 ft^3/s, 7,194 acre-ft/yr.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Elevation (ft)[a]	Contents (acre-ft)	Change in contents (acre-ft)	Draft (acre-ft)	Spill and release (acre-ft)	Evaporation and seepage (acre-ft)	Total inflow (acre-ft)	Rain on reservoir (acre-ft)	Net inflow (acre-ft)
Sept. 30	2,215.98	4,310							
Oct. 31	2,213.85	4,080	–230	207	0	28	5	0	5
Nov. 30	2,212.13	3,900	–180	171	0	23	14	14	0
Dec. 31	2,210.51	3,740	–160	167	0	12	19	0	19
CAL YR 1999			–1,390	1,884	188	320	1,002	161	841
Jan. 31	2,209.58	3,640	–100	127	0	7	34	22	12
Feb. 28	2,219.29	4,680	+1,040	70	0	0	1,110	134	976
Mar. 31	2,223.95	5,230	+550	69	133	19	771	36	735
Apr. 30	2,223.95	5,230	0	100	1,040	51	1,191	54	1,137
May 31	2,223.66	5,190	–40	126	201	75	362	0	362
June 30	2,222.38	5,040	–150	154	0	93	97	0	97
July 31	2,220.59	4,830	–210	171	0	84	45	0	45
Aug. 31	2,218.44	4,590	–240	199	0	63	22	0	22
Sept. 30	2,216.34	4,350	–240	202	0	54	16	0	16
WTR YR 2000			+40	1,763	1,374	509	3,686	260	3,426

a Elevation at 0800.

NOTE.—For months when inflow to the lake was small and other quantities were large, preliminary computations may indicate negative net inflow. This arises primarily from the difficulty of computing net inflow as the residual of several large quantities, which are not conducive to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11122000 SANTA YNEZ RIVER ABOVE GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.—Lat 34°31'34", long 119°41'08", in NW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Gibraltar Dam, and 7 mi north of Santa Barbara.

DRAINAGE AREA.—216 mi^2.

PERIOD OF RECORD.—April 1920 to current year. November 1903 to November 1918 (fragmentary) at river station at damsite; records not equivalent because records since April 1920 are based on operation of Gibraltar Reservoir, and since December 1930, Jameson Lake. Prior to October 1945, published as "Santa Ynez River near Santa Barbara."

REVISED RECORDS.—WSP 706: 1921–22. WSP 1041: 1944. WSP 1395: DA. WSP 1635: 1914, 15 (M). WDR CA-86-1: 1934–43.

GAGE.—Two water-stage recorders. Datum of gage is sea level. Supplementary gage and sharp-crested weir on diversion from reservoir at different datum. See WSP 1735 for history of changes on both gages prior to Oct. 1, 1955. Spill and release measured by station (11123000) downstream from dam.

REMARKS.—Records of total inflow represent all water reaching Gibraltar Reservoir, including precipitation on reservoir. Total inflow computed on basis of records of storage, diversion (draft—station 11121900) to city of Santa Barbara, spill and release (station 11123000) to river, evaporation, and seepage. Records of net inflow exclude precipitation on reservoir surface. Monthly evaporation from reservoir surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on survey made in September 1998. Reservoir capacity at spillway level, elevation, 1,399.82 ft, 7,220 acre-ft. Lowest outlet at elevation 1,333.86 ft. Flow regulated by Jameson Lake (station 11121000) since December 1930. See schematic diagram of Santa Ynez River Basin.

COOPERATION.—Reservoir-operation records and related data provided by city of Santa Barbara.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Elevation (ft)[a]	Contents (acre-ft)	Change in contents (acre-ft)	Draft (acre-ft)	Spill and release (acre-ft)	Evaporation and seepage (acre-ft)	Total inflow (acre-ft)	Rain on reservoir (acre-ft)	Net inflow (acre-ft)
Sept. 30	1,378.87	3,010							
Oct. 31	1,378.53	2,960	–50	0	0	80	30	0	30
Nov. 30	1,378.51	2,960	0	0	0	39	39	22	17
Dec. 31	1,378.40	2,940	–20	0	0	39	19	0	19
CAL YR 1999			–3,840	4,747	7,108	1,001	9,016	310	8,706
Jan. 31	1,378.63	2,980	+40	0	0	28	68	30	38
Feb. 28	1,397.75	6,730	+3,750	0	6,020	36	9,806	272	9,534
Mar. 31	1,399.43	7,130	+400	0	10,320	89	10,809	73	10,736
Apr. 30	1,399.29	7,090	–40	0	6,560	122	6,642	107	6,535
May 31	1,399.31	7,100	+10	0	1,640	147	1,797	1	1,796
June 30	1,399.33	7,100	0	5	117	172	294	4	290
July 31	1,396.75	6,500	–600	487	9	177	73	0	73
Aug. 31	1,390.49	5,130	–1,370	738	992	173	533	0	553
Sept. 30	1,385.63	4,190	–940	749	212	106	127	0	127
WTR YR 2000			+1,180	1,979	25,870	1,208	30,237	509	29,728

a Elevation at 0800.

NOTE. For months when inflow to the lake was small and other quantities were large, preliminary computations may indicate negative net inflow. This arises primarily from the difficulty of computing net inflow as the residual of several large quantities, which are not conducive to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.—Lat 34°31'28", long 119°41'11", in SW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on left bank, 700 ft downstream from Gibraltar Dam, and 7 mi north of Santa Barbara.

DRAINAGE AREA.—216 mi^2.

PERIOD OF RECORD.—April 1920 to current year. Monthly discharge only prior to October 1933. Daily records for water years 1934–43 in files of U.S. Geological Survey.

REVISED RECORDS.—WDR CA-86-1: 1934–43.

GAGE.—Two water-stage recorders. Datum of gage on main channel is 1,227 ft above sea level. Supplementary gage and sharp-crested weir on the release channel from Gibraltar Dam to river at different datum (station 11122010). See WSP 1735 for history of changes on both gages prior to May 20, 1958.

REMARKS.—Records fair. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 1,980 acre-ft during current year from Gibraltar Reservoir; Montecito Water District diverted 1,760 acre-ft during current year from Jameson Lake. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 54,200 ft^3/s, Jan. 25, 1969, gage height, 25.8 ft, from rating curve extended above 2,100 ft^3/s on basis of computations of flow from gate openings and flow over dam at gage heights 17.5 and 25.8 ft; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	156	49	51	8.6	.33	.01	12
2	.00	.00	.00	.00	.00	128	46	51	8.0	.31	.00	12
3	.00	.00	.00	.00	.00	113	43	49	7.6	.32	.00	12
4	.00	.00	.00	.00	.00	115	41	37	7.1	.26	.00	12
5	.00	.00	.00	.00	.00	142	39	34	6.5	.25	.00	6.0
6	.00	.00	.00	.00	.00	254	38	38	5.1	.22	.00	.07
7	.00	.00	.00	.00	.00	343	31	39	2.9	.19	.00	.01
8	.00	.00	.00	.00	.00	484	23	39	2.5	.19	.00	.00
9	.00	.00	.00	.00	.00	576	27	38	.78	.18	.00	.00
10	.00	.00	.00	.00	.00	426	29	36	.69	.17	.00	.00
11	.00	.00	.00	.00	.00	331	31	34	.67	.17	4.9	.00
12	.00	.00	.00	.00	.00	278	29	32	.60	.15	12	.00
13	.00	.00	.00	.00	.00	376	29	31	.53	.13	12	.00
14	.00	.00	.00	.00	4.4	739	28	29	.54	.13	13	.00
15	.00	.00	.00	.00	10	297	32	29	.52	.12	12	.00
16	.00	.00	.00	.00	12	191	67	28	.53	.12	12	.00
17	.00	.00	.00	.00	13	116	189	27	.49	.12	12	.00
18	.00	.00	.00	.00	13	3.1	864	26	.49	.12	12	.00
19	.00	.00	.00	.00	9.3	3.3	518	24	.52	.12	13	.00
20	.00	.00	.00	.00	3.7	3.5	263	20	.57	.11	13	.00
21	.00	.00	.00	.00	6.3	3.6	121	22	.56	.10	13	.00
22	.00	.00	.00	.00	34	3.7	139	20	.54	.10	13	.00
23	.00	.00	.00	.00	985	3.9	128	18	.38	.09	12	.00
24	.00	.00	.00	.00	710	4.2	94	10	.35	.09	12	.00
25	.00	.00	.00	.00	362	4.8	80	6.6	.36	.09	12	.00
26	.00	.00	.00	.00	236	5.4	80	9.1	.33	.08	12	.00
27	.00	.00	.00	.00	203	6.0	76	11	.33	.08	12	.00
28	.00	.00	.00	.00	239	6.3	71	11	.39	.06	12	.00
29	.00	.00	.00	.00	195	12	55	10	.35	.05	12	.00
30	.00	.00	.00	.00	---	27	46	9.3	.34	.04	13	.00
31	.00	---	.00	.00	---	50	---	8.8	---	.02	12	---
TOTAL	0.00	0.00	0.00	0.00	3035.70	5201.8	3306	827.8	59.16	4.51	250.91	54.08
MEAN	.000	.000	.000	.000	105	168	110	26.7	1.97	.15	8.09	1.80
MAX	.00	.00	.00	.00	985	739	864	51	8.6	.33	13	12
MIN	.00	.00	.00	.00	.00	3.1	23	6.6	.33	.02	.00	.00
AC-FT	.00	.00	.00	.00	6020	10320	6560	1640	117	8.9	498	107

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.71	6.21	26.0	127	258	242	105	31.0	8.38	3.62	1.65	.59
MAX	32.6	336	607	2077	3090	1712	1168	441	126	43.6	24.1	13.5
(WY)	1984	1966	1967	1969	1998	1983	1958	1998	1998	1983	1995	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1960	1959	1944	1938	1949	1948	1948	1940	1960	1960	1960	1960

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1934 - 2000	
ANNUAL TOTAL	2625.86		12739.96			
ANNUAL MEAN	7.19		34.8		66.5	
HIGHEST ANNUAL MEAN					437	1969
LOWEST ANNUAL MEAN					.000	1961
HIGHEST DAILY MEAN	100	Feb 10	985	Feb 23	26600	Jan 25 1969
LOWEST DAILY MEAN	.00	Aug 26	.00	Oct 1	.00	Dec 16 1933
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 26	.00	Oct 1	.00	Dec 16 1933
INSTANTANEOUS PEAK FLOW			3990	Feb 23	54200	Jan 25 1969
INSTANTANEOUS PEAK STAGE			12.98	Feb 23	25.80	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	5210		25270		48190	
10 PERCENT EXCEEDS	16		68		81	
50 PERCENT EXCEEDS	4.4		.11		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°32'37", long 119°51'50", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.3 mi downstream from Los Laureles Canyon Creek, 10 mi downstream from Gibraltar Reservoir, and 13.3 mi east of Santa Ynez.

DRAINAGE AREA.—277 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—April 1947 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder. Datum of gage is 787.8 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow regulated by Jameson Lake and Gibraltar Reservoir (stations 11121000 and 11122000). Water diverted out of basin from these reservoirs to cities of Montecito and Santa Barbara for municipal supply. Low flow affected by intermittent pumping for irrigation from infiltration gallery in riverbed at station. Satellite telemeter at station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 67,500 ft^3/s, Jan. 25, 1969, gage height, 18.88 ft, from rating curve extended above 11,600 ft^3/s on basis of peak flow for station below Gibraltar Dam plus tributary inflow; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.00	.03	.11	.62	270	77	73	13	e1.9	.05	8.3
2	.14	.00	.06	.09	.60	231	67	73	12	e1.8	.00	8.4
3	.14	.03	.04	.05	.52	204	64	70	11	e1.8	.00	8.5
4	e.12	.00	.00	.10	.76	199	65	67	11	1.2	.27	8.0
5	e.10	.01	.01	.06	.85	285	61	53	10	1.1	.07	8.2
6	e.08	.00	.02	.10	.95	405	61	53	9.5	1.3	.07	7.0
7	.07	.03	.05	.04	.81	450	63	53	8.6	1.1	.17	4.2
8	.08	.22	.05	.14	.73	722	39	53	8.2	1.4	.04	2.7
9	.00	.11	.05	.12	.87	725	43	52	7.8	.93	.00	2.0
10	.00	.10	.10	.01	1.2	549	45	50	6.3	.94	.00	2.0
11	.00	.10	.09	.12	1.7	434	47	47	5.7	1.3	.00	1.7
12	.00	.10	.00	.09	21	359	44	45	5.0	1.3	.00	1.3
13	.00	.06	.08	.06	11	347	42	43	4.3	.92	.00	1.0
14	.00	.03	.02	.15	24	663	45	41	3.8	1.4	.02	.89
15	.05	.08	.08	.10	10	486	48	40	e3.7	1.3	.00	.79
16	.00	.03	.06	.20	6.5	234	76	39	e3.5	.87	e.00	.69
17	.16	.09	.07	.24	7.1	223	490	38	e3.3	1.3	e.00	1.1
18	.07	.05	.05	.23	10	87	937	36	e3.2	.96	.14	.86
19	.06	.05	.03	.24	12	52	534	34	e3.0	.64	.00	.68
20	.10	.09	.06	.26	82	39	303	32	e2.8	.99	.00	.47
21	.00	.08	.04	.28	600	31	177	29	e2.7	.62	.00	.36
22	.03	.09	.08	.31	186	30	185	28	e2.5	1.0	.00	.81
23	.00	.06	.09	.33	1170	32	173	25	e2.4	.51	.00	.98
24	.00	.00	.09	.37	1160	27	148	24	e2.3	.67	.00	.73
25	.00	.04	.08	.49	607	23	113	20	e2.2	.39	.36	.65
26	.01	.06	.03	.46	401	25	110	15	e2.1	.34	3.0	.52
27	.15	.01	.09	.49	364	26	101	14	e2.1	.30	4.8	.64
28	.00	.04	.06	.55	375	23	96	14	e2.0	.24	5.6	.57
29	.13	.05	.06	.56	320	20	92	14	e2.0	.15	6.2	.74
30	.00	.00	.09	.56	---	29	73	14	e1.9	.07	7.6	.51
31	.06	---	.06	.59	---	56	---	13	---	.03	8.4	---
TOTAL	1.72	1.61	1.72	7.50	5376.21	7286	4419	1202	157.9	28.77	36.79	75.29
MEAN	.055	.054	.055	.24	185	235	147	38.8	5.26	.93	1.19	2.51
MAX	.17	.22	.10	.59	1170	725	937	73	13	1.9	8.4	8.5
MIN	.00	.00	.00	.01	.52	20	39	13	1.9	.03	.00	.36
AC-FT	3.4	3.2	3.4	15	10660	14450	8770	2380	313	57	73	149

e Estimated.

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.57	7.87	37.4	187	368	307	130	42.9	12.3	3.99	1.16	.46
MAX	18.8	315	608	2755	4250	2525	1480	542	201	79.3	15.8	7.57
(WY)	1984	1966	1967	1969	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
(WY)	1948	1948	1948	1948	1948	1990	1951	1951	1948	1948	1947	1947

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	4922.00		18594.51			
ANNUAL MEAN	13.5		50.8		90.1	
HIGHEST ANNUAL MEAN					595	1998
LOWEST ANNUAL MEAN					.013	1961
HIGHEST DAILY MEAN	202	Feb 10	1170	Feb 23	33700	Jan 25 1969
LOWEST DAILY MEAN	.00	Oct 9	.00	Oct 9	.00	Jun 24 1947
ANNUAL SEVEN-DAY MINIMUM	.01	Oct 9	.00	Aug 9	.00	Jul 5 1947
INSTANTANEOUS PEAK FLOW			2210	Feb 23	67500	Jan 25 1969
INSTANTANEOUS PEAK STAGE			6.52	Feb 23	18.88	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	9760		36880		65260	
10 PERCENT EXCEEDS	34		104		95	
50 PERCENT EXCEEDS	6.6		.90		.10	
90 PERCENT EXCEEDS	.04		.00		.00	

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1973–89, 1991 to current year.
CHEMICAL DATA: Water years 1973–89, 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
07...	1305	.06	--	--	--	7.5	1250	20.5	--	--	--
DEC											
07...	1235	.08	--	--	--	7.6	1360	12.0	--	--	--
JAN											
11...	1200	.13	--	--	--	7.8	1280	12.5	--	--	--
FEB											
07...	1450	.82	--	--	--	7.7	1320	15.5	--	--	--
MAR											
08...	1645	675	--	--	--	8.2	945	14.0	--	--	--
APR											
18...	1500	906	--	--	--	8.2	1060	16.5	--	--	--
27...	1145	103	747	106	9.5	8.3	1020	19.5	480	111	50.1
MAY											
31...	1645	13	--	--	--	8.0	1120	24.5	--	--	--
JUL											
03...	1750	1.8	--	--	--	7.7	1110	23.0	--	--	--
SEP											
16...	1220	.69	--	--	--	7.4	1250	20.5	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
07...	--	--	--	--	--	--	--	--	--	--
DEC										
07...	--	--	--	--	--	--	--	--	--	--
JAN										
11...	--	--	--	--	--	--	--	--	--	--
FEB										
07...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	--	--	--	--	--	--	--	--	--	--
APR										
18...	--	--	--	--	--	--	--	--	--	--
27...	2.2	.9	45.8	17	198	241	13.3	.4	13.8	346
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	--	--	--	--	--	--	--	--	--	--
SEP										
16...	--	--	--	--	--	--	--	--	--	--

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
07...	--	--	--	--	--	952	--	--	--	--
DEC										
07...	--	--	--	--	--	1000	--	--	--	--
JAN										
11...	--	--	--	--	--	1000	--	--	--	--
FEB										
07...	--	--	--	--	--	994	--	--	--	--
MAR										
08...	--	--	--	--	--	679	--	--	--	--
APR										
18...	--	--	--	--	--	726	--	--	--	--
27...	<.020	<.050	<.010	<.010	.99	730	701	428	<10	5
MAY										
31...	--	--	--	--	--	818	--	--	--	--
JUL										
03...	--	--	--	--	--	792	--	--	--	--
SEP										
16...	--	--	--	--	--	936	--	--	--	--

< Actual value is known to be less than the value shown.

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°35'48", long 119°54'28", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 0.6 mi downstream from Pine Canyon, and 9.9 mi east of Santa Ynez.

DRAINAGE AREA.—74.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder. Datum of gage is 783.38 ft above sea level. See WSP 1735 for history of changes prior to Sept. 27, 1952. Sept. 27, 1952, to June 24, 1969, at datum 3.25 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,050 ft^3/s, Feb. 24, 1969, gage height, 14.45 ft, from floodmark, present datum, from rating curve extended above 2,500 ft^3/s on basis of slope-area measurement at gage height 14.16 ft; no flow at times since 1953.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, from rating curve extended above 5,000 ft^3/s on basis of slope-area measurement at gage height 12.10 ft, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	1845	215	8.22	Mar. 5	1215	164	8.00
Feb. 21	1015	595	9.28	Apr. 17	1630	260	8.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.50	1.2	3.1	41	e22	20	6.8	e2.1	.00	.00
2	.00	.00	.57	1.2	2.9	33	e21	19	7.2	e2.1	.00	.00
3	.00	.00	.57	1.3	2.9	30	e21	19	6.9	e2.0	.00	.00
4	.00	.00	.58	1.3	3.0	28	e20	18	6.6	2.0	.00	.00
5	.00	.00	.60	1.3	3.1	78	e20	18	6.1	2.2	.00	.00
6	.00	.00	.66	1.3	3.0	85	e19	18	6.1	2.2	.00	.00
7	.00	.00	.68	1.3	3.0	64	e19	17	5.9	2.2	.00	.00
8	.00	.14	.77	1.3	3.0	91	e19	16	6.1	2.0	.00	.00
9	.00	.06	.82	1.3	3.0	93	e19	16	6.7	1.7	.00	.00
10	.00	.00	.82	1.3	3.7	67	e18	15	6.3	1.4	.00	.00
11	.00	.00	.84	1.3	14	60	e18	15	5.7	1.2	.00	.00
12	.00	.00	.86	1.3	31	56	e18	15	5.2	.84	.00	.00
13	.00	.00	.90	1.3	60	50	e18	14	4.7	.49	.00	.00
14	.00	.00	.98	1.3	88	45	17	14	4.4	.32	.00	.00
15	.00	.00	1.0	1.4	43	41	18	14	4.1	.22	.00	.00
16	.00	.00	.96	1.3	17	38	17	14	3.9	.14	.00	.00
17	.00	.00	.99	1.4	18	35	84	14	3.9	.11	.00	.00
18	.00	.00	1.0	1.6	9.8	33	95	12	3.8	.10	.00	.00
19	.00	.00	.96	1.7	5.8	31	65	12	3.8	.08	.00	.00
20	.00	.21	.96	1.8	68	e31	44	11	3.8	.07	.00	.00
21	.00	.27	.99	1.8	313	e30	34	10	3.7	.06	.00	.00
22	.00	.25	1.0	1.8	108	e29	30	9.7	3.5	.04	.00	.00
23	.00	.25	1.0	1.9	249	e28	27	9.5	3.3	.04	.00	.00
24	.00	.25	1.0	2.0	122	e27	23	9.2	3.0	.04	.00	.00
25	.00	.27	1.0	5.0	67	e27	22	9.4	2.9	.00	.00	.00
26	.00	.33	1.0	5.5	56	e26	20	9.8	2.7	.00	.00	.00
27	.00	.40	1.0	3.5	61	e25	18	9.1	2.6	.00	.00	.00
28	.00	.46	1.1	3.0	69	e24	20	8.2	2.5	.00	.00	.00
29	.00	.48	1.1	3.0	52	e24	22	7.1	2.3	.00	.00	.00
30	.00	.48	1.1	2.9	---	e23	21	6.4	2.1	.00	.00	.00
31	.00	---	1.2	3.0	---	e22	---	6.8	---	.00	.00	---
TOTAL	0.00	3.85	27.51	60.6	1482.3	1315	829	406.2	136.6	23.65	0.00	0.00
MEAN	.000	.13	.89	1.95	51.1	42.4	27.6	13.1	4.55	.76	.000	.000
MAX	.00	.48	1.2	5.5	313	93	95	20	7.2	2.2	.00	.00
MIN	.00	.00	.50	1.2	2.9	22	17	6.4	2.1	.00	.00	.00
AC-FT	.00	7.6	55	120	2940	2610	1640	806	271	47	.00	.00

e Estimated.

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.65	3.08	11.9	37.4	73.2	61.2	36.9	15.2	6.28	2.29	.95	.55
MAX	12.4	50.4	205	510	743	355	378	141	63.0	27.9	13.7	8.68
(WY)	1984	1966	1967	1969	1969	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.10	.23	.11	.000	.000	.000	.000	.000
(WY)	1954	1954	1954	1963	1951	1948	1961	1961	1961	1959	1953	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	2073.85		4284.71			
ANNUAL MEAN	5.68		11.7		20.5	
HIGHEST ANNUAL MEAN					134	1969
LOWEST ANNUAL MEAN					.066	1990
HIGHEST DAILY MEAN	56	Feb 9	313	Feb 21	5000	Feb 24 1969
LOWEST DAILY MEAN	.00	Sep 21	.00	Oct 1	.00	Jul 6 1953
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 25	.00	Oct 1	.00	Jul 6 1953
INSTANTANEOUS PEAK FLOW			595	Feb 21	7050	Feb 24 1969
INSTANTANEOUS PEAK STAGE			9.28	Feb 21	14.45	Feb 24 1969
ANNUAL RUNOFF (AC-FT)	4110		8500		14860	
10 PERCENT EXCEEDS	14		31		34	
50 PERCENT EXCEEDS	1.6		1.3		1.3	
90 PERCENT EXCEEDS	.00		.00		.00	

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1991 to current year.
CHEMICAL DATA: October 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
DEC											
14...	1445	1.1	--	--	--	8.6	1310	14.0	--	--	--
JAN											
11...	1535	1.4	--	--	--	7.9	1170	16.0	--	--	--
FEB											
09...	1205	3.0	--	--	--	7.8	1280	17.5	--	--	--
APR											
13...	1425	16	--	--	--	8.0	914	22.0	--	--	--
28...	1220	22	748	102	9.3	8.4	852	19.0	390	80.1	46.7
JUN											
01...	1440	7.4	--	--	--	8.2	907	28.0	--	--	--
JUL											
03...	1515	2.4	--	--	--	8.1	952	27.5	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	--	--	--	--	--	--	--	--	--	--
28...	1.9	.8	37.5	17	203	239	4	10.2	<.1	17.8	238
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
DEC										
14...	--	--	--	--	--	960	--	--	--	--
JAN										
11...	--	--	--	--	--	920	--	--	--	--
FEB										
09...	--	--	--	--	--	902	--	--	--	--
APR										
13...	--	--	--	--	--	633	--	--	--	--
28...	<.020	<.050	<.010	<.010	.76	560	554	186	<10	4
JUN										
01...	--	--	--	--	--	634	--	--	--	--
JUL										
03...	--	--	--	--	--	692	--	--	--	--

< Actual value is known to be less than value shown.

11125500 LAKE CACHUMA NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°34'57", long 119°58'47", in Lomas de la Purification Grant, Santa Barbara County, Hydrologic Unit 18060010, at Bradbury Dam on Santa Ynez River, on upstream face near left end of dam, and 6.1 mi east of Santa Ynez.

DRAINAGE AREA.—417 mi^2.

PERIOD OF RECORD.—November 1952 to current year. Prior to October 1985, only monthend elevations and contents and total diversions published. November 1952 to October 1960, published as "Cachuma Reservoir near Santa Ynez."
CHEMICAL DATA: Water Year 1998.

GAGE.—Water-stage recorder. Datum of gage is sea level (U.S. Bureau of Reclamation benchmark). Prior to Oct. 1, 1965, nonrecording gage.

REMARKS.—Reservoir is formed by earthfill dam. Storage began November 1952. Dead storage below outlet gage to river, elevation, 600 ft, 531 acre-ft, included in contents. Capacity below sill of inlet to Tecolote Tunnel, elevation, 660 ft, 26,771 acre-ft; below spillway level, elevation, 720 ft, 113,716 acre-ft; and below top of four radial gates, elevation, 750 ft, 190,409 acre-ft. Water is released from outlet to Santa Ynez River to satisfy downstream water rights. Water diverted to Tecolote Tunnel for use by city of Santa Barbara, nearby communities, Santa Ynez River Water Conservation District, and Cachuma Recreation Area. Records, including extremes, represent total contents at 0800 hours. See schematic diagram of Santa Ynez River Basin.

COOPERATION.—Reservoir elevation, contents, and diversion figures provided by U.S. Bureau of Reclamation. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 221,100 acre-ft, Feb. 24, 1969, elevation, 755.11 ft; minimum since initial filling in April 1958, 27,681 acre-ft, Feb. 27, 1991, elevation, 661.06 ft.

EXTREMES (AT 0800) FOR CURRENT YEAR.—Maximum contents, 192,948 acre-ft, Apr. 24, elevation, 750.83 ft; minimum, 155,671 acre-ft, Feb. 9, elevation, 737.72 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on surveys by U.S. Bureau of Reclamation)

680	47,346	710	93,627	740	161,730
690	60,576	720	113,716	750	190,409
700	75,972	730	136,306	760	222,431

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168605	164034	161409	157993	156090	172304	189048	192917	191663	188292	182976	178258
2	168438	163899	161248	157834	156037	172755	189108	192887	191571	188110	182828	178114
3	168271	163763	161141	157754	155933	173154	189130	192887	191510	187959	182710	177970
4	168049	163601	161061	157702	155907	173581	189199	192856	191480	187747	182532	177826
5	167910	163465	160953	157596	155880	174094	189229	192826	191388	187596	182385	177681
6	167715	163302	160873	157516	155828	175348	189260	192826	191266	187384	182207	177537
7	167576	163221	160712	157384	155776	176470	189290	192795	191143	187235	182030	177364
8	167437	163275	160552	157278	155723	177970	189320	192764	191021	187085	181882	177162
9	167270	163248	160418	157172	155671	179920	189350	192764	190898	186936	181705	176700
10	167132	163140	160284	157092	155697	181469	189350	192734	190776	186816	181557	176297
11	167022	163113	160204	156987	155750	182621	189381	192581	190654	186696	181410	175893
12	166830	163004	160123	156934	156064	183567	189381	192611	190531	186577	181264	175491
13	166665	162950	160043	156854	156247	184364	189411	192550	190409	186487	181088	175092
14	166501	162869	159882	156775	156457	185231	189471	192520	190288	186308	180972	174607
15	166363	162842	159775	156669	156642	186696	189592	192489	190197	186128	180796	174208
16	166226	162787	159695	156616	156695	187384	189683	192428	190046	185979	180650	173923
17	166061	162733	159588	156536	156775	187898	190409	192397	189895	185769	180504	173724
18	165896	162652	159454	156483	156828	188322	192611	192367	189834	185620	180417	173553
19	165732	162570	159320	156483	156801	188443	192795	192336	189774	185500	180271	173325
20	165594	162489	159239	156404	157066	188473	192642	192306	189683	185351	180154	173040
21	165430	162354	159159	156352	158337	188624	192826	192244	189623	185231	180008	172812
22	165265	162218	159026	156325	160900	188685	192856	192183	189562	185082	179862	172614
23	165100	162137	158920	156273	161920	188715	192887	192153	189441	184962	179745	172361
24	164935	162055	158814	156247	166501	188745	192948	192153	189320	184783	179599	172192
25	164825	161974	158708	156352	168299	188806	192887	192122	189229	184424	179424	172051
26	164688	161838	158602	156352	169272	188836	192856	192091	189108	184128	179219	171797
27	164606	161757	158469	156299	170192	188866	192887	192061	188957	183803	179044	171516
28	164496	161650	158364	156273	171009	188866	192887	192000	188806	183596	178898	171234
29	164387	161516	158337	156247	171741	188897	192917	191939	188655	183389	178722	171009
30	164278	161489	158231	156221	---	188927	192917	191847	188503	183212	178547	170840
31	164170	---	158099	156142	---	188987	---	191755	---	183094	178403	---
MAX	168605	164034	161409	157993	171741	188987	192948	192917	191663	188292	182976	178258
MIN	164170	161489	158099	156142	155671	172304	189048	191755	188503	183094	178403	170840
a	740.90	739.91	738.64	737.90	743.63	749.53	750.82	750.44	749.37	747.56	745.96	743.31
b	-4602	-2681	-3390	-1957	+15599	+17246	+3930	-1162	-3252	-5409	-4691	-7563
c	1052	503	448	321	442	792	1077	1531	1704	1653	1703	1210

CAL YR 1999 b -21149
WTR YR 2000 b +2068

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Diversion, in acre-feet, to Tecolote Tunnel.

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°35'21", long 119°59'16", in Canada de los Pinos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 0.7 mi downstream from Bradbury Dam, and 5.5 mi southeast of Santa Ynez.

DRAINAGE AREA.—422 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—December 1928 to September 1931, October 1932 to September 1976, May 1994 to current year (seasonal records only).

GAGE.—Water-stage recorder. Datum of gage is 545.66 ft above sea level (Bureau of Reclamation benchmark). Prior to Oct. 1, 1955, at site 2.5 mi downstream at different datum. Oct. 1, 1955, to Sept. 16, 1969, at site 0.4 mi downstream at datum 7.2 ft higher.

REMARKS.—Records fair except for estimated discharges, which are poor. No records computed above 250 ft^3/s. Flow regulated by Jameson Lake since December 1930, Gibraltar Reservoir, and Lake Cachuma since November 1952 (stations 11121000, 11122000, 11125500). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito and Santa Barbara, and to the Santa Ynez Valley for municipal supply. Some water pumped from wells along river banks for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 79,000 ft^3/s, Jan. 25, 1969, gage height, 22.00 ft, from floodmark, present datum, on basis of computation of maximum flow over dam; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.00	---	---	---	---	e2.8	47	2.6	e2.0	e2.6	20
2	1.7	.00	---	---	---	---	e2.8	38	2.6	e1.8	2.2	e20
3	1.7	.37	---	---	---	---	e2.7	14	2.7	e1.9	2.1	e13
4	2.0	.70	---	---	---	---	e2.8	14	2.8	e1.9	2.1	e21
5	6.6	.54	---	---	---	---	e2.8	10	2.9	e1.7	2.0	e34
6	12	.45	---	---	---	---	e2.8	5.2	3.0	e1.7	1.9	e54
7	3.0	.26	---	---	---	---	e2.8	4.0	2.9	e1.7	1.9	e60
8	2.0	1.1	---	---	---	---	e2.8	2.7	2.9	e1.6	1.9	e54
9	1.2	1.7	---	---	---	---	e2.8	3.0	2.7	e1.8	1.8	e218
10	.23	1.5	---	---	---	---	e2.8	3.0	2.7	e1.9	e1.9	---
11	.03	1.1	---	---	---	---	e2.8	3.1	2.8	e1.9	e1.9	---
12	.10	.97	---	---	---	---	e2.7	3.0	2.6	e2.1	1.7	---
13	.19	.85	---	---	---	---	e2.7	2.9	2.7	e2.3	1.6	---
14	.25	.78	---	---	---	---	e2.7	2.8	2.5	e1.9	1.6	e185
15	.20	.66	---	---	---	---	e2.8	2.5	2.5	e2.2	e1.8	e95
16	.31	.83	---	---	---	---	e2.7	1.9	2.4	e2.5	e1.7	e20
17	.18	1.0	---	---	---	---	e2.6	1.4	2.6	e2.7	e1.6	e11
18	.05	1.1	---	---	---	---	e2.0	1.4	e3.0	e2.6	e1.5	e24
19	.01	.98	---	---	---	---	---	1.5	e3.7	e2.6	e1.3	e25
20	.00	.89	---	---	---	---	---	1.5	e3.3	e3.2	1.2	e56
21	.00	1.1	---	---	---	---	---	1.5	e3.0	e3.7	e1.3	e67
22	.01	1.6	---	---	---	---	---	1.5	e3.7	e3.7	e1.3	e60
23	.56	1.8	---	---	---	---	---	1.6	e3.3	e4.3	e1.0	e60
24	1.1	1.8	---	---	---	---	---	1.5	e3.7	e2.4	e.96	57
25	1.7	1.9	---	---	---	---	---	2.0	e3.5	e248	e3.5	58
26	1.7	1.9	---	---	---	---	154	2.1	e3.7	e240	e3.2	44
27	1.8	1.9	---	---	---	---	51	2.1	e2.4	e58	e3.0	e67
28	1.8	1.8	---	---	---	---	46	2.3	e2.4	e20	e3.0	e50
29	1.0	1.9	---	---	---	---	46	2.3	e2.1	e5.7	e4.8	e15
30	.21	1.8	---	---	---	---	46	2.3	e2.0	e4.3	e11	e19
31	.00	---	---	---	---	---	---	2.6	---	e2.4	16	---
TOTAL	43.33	33.28	---	---	---	---	---	184.7	85.7	634.5	85.36	---
MEAN	1.40	1.11	---	---	---	---	---	5.96	2.86	20.5	2.75	---
MAX	12	1.9	---	---	---	---	---	47	3.7	248	16	---
MIN	.00	.00	---	---	---	---	---	1.4	2.0	1.6	.96	---
AC-FT	86	66	---	---	---	---	---	366	170	1260	169	---

e Estimated

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.— October 1991 to current year.
CHEMICAL DATA: October 1991 to current year.
SPECIFIC CONDUCTANCE: July 1994 to November 1994, October 1995 to current year.
WATER TEMPERATURE: July 1994 to current year.

PERIOD OF DAILY RECORD.—July 1994 to current year.
SPECIFIC CONDUCTANCE: July 1994 to November 1994, October 1995 to current year.
WATER TEMPERATURE: July 1994 to current year.

INSTRUMENTATION.—Water-quality monitor since July 1994.

REMARKS.—Water-quality samples collected below spillway. Interruption in record was due to the malfunction of the recording instrument. Continuous water quality is not collected Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,020 microsiemens, Aug. 31, 1999, several days in September 1999 and June 8, 9, 2000; minimum recorded, 194 microsiemens, Dec. 6, 1997.
WATER TEMPERATURE: Maximum recorded, 29.5°C, Aug 3, 1999; minimum recorded, 9.0°C, Nov. 15, 1994, Jan. 6, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,020 microsiemens, June 8, 9; minimum recorded, 753 microsiemens, July 2.
WATER TEMPERATURE: Maximum recorded, 27.0°C, Oct. 10, 11; minimum recorded, 12.5°C, Nov. 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
13...	1420	.33	--	--	--	7.8	969	25.0	--	--	--
NOV											
08...	1400	1.0	--	--	--	7.7	929	18.0	--	--	--
DEC											
15...	1225	2.3	--	--	--	7.7	961	12.5	--	--	--
JAN											
10...	1515	1.6	--	--	--	7.6	982	12.0	--	--	--
FEB											
08...	1345	1.7	--	--	--	7.5	961	14.5	--	--	--
MAR											
14...	1450	2.8	--	--	--	7.6	928	17.5	--	--	--
APR											
19...	1230	--	--	--	--	7.9	938	16.0	--	--	--
27...	1700	46	754	117	11.4	8.4	918	16.0	420	89.1	49.2
MAY											
31...	1410	2.7	--	--	--	8.0	953	21.0	--	--	--
JUL											
07...	1340	1.5	--	--	--	8.2	902	23.0	--	--	--
AUG											
01...	1245	2.3	--	--	--	8.1	909	23.3	--	--	--
SEP											
15...	1430	84	--	--	--	8.2	940	15.5	--	--	--

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
13...	--	--	--	--	--	--	--	--	--	--
NOV										
08...	--	--	--	--	--	--	--	--	--	--
DEC										
15...	--	--	--	--	--	--	--	--	--	--
JAN										
10...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
14...	--	--	--	--	--	--	--	--	--	--
APR										
19...	--	--	--	--	--	--	--	--	--	--
27...	2.5	.9	40.7	17	167	205	11.7	.2	15.0	306
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	--	--	--	--	--	--	--	--	--	--
AUG										
01...	--	--	--	--	--	--	--	--	--	--
SEP										
15...	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
13...	--	--	--	--	--	695	--	--	--	--
NOV										
08...	--	--	--	--	--	680	--	--	--	--
DEC										
15...	--	--	--	--	--	699	--	--	--	--
JAN										
10...	--	--	--	--	--	697	--	--	--	--
FEB										
08...	--	--	--	--	--	691	--	--	--	--
MAR										
14...	--	--	--	--	--	627	--	--	--	--
APR										
19...	--	--	--	--	--	667	--	--	--	--
27...	<.020	.073	<.010	.015	.89	653	616	294	<10	11
MAY										
31...	--	--	--	--	--	668	--	--	--	--
JUL										
07...	--	--	--	--	--	658	--	--	--	--
AUG										
01...	--	--	--	--	--	671	--	--	--	--
SEP										
15...	--	--	--	--	--	657	--	--	--	--

< Actual value is known to be less than value shown.

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	930	911	953	935	---	---	---	---	---	---	---	---
2	925	909	950	934	---	---	---	---	---	---	---	---
3	931	914	952	934	---	---	---	---	---	---	---	---
4	929	912	950	935	---	---	---	---	---	---	---	---
5	926	913	946	932	---	---	---	---	---	---	---	---
6	938	909	944	929	---	---	---	---	---	---	---	---
7	939	924	937	927	---	---	---	---	---	---	---	---
8	949	924	933	918	---	---	---	---	---	---	---	---
9	956	935	931	918	---	---	---	---	---	---	---	---
10	964	941	937	921	---	---	---	---	---	---	---	---
11	969	948	938	923	---	---	---	---	---	---	---	---
12	974	947	942	927	---	---	---	---	---	---	---	---
13	977	953	943	928	---	---	---	---	---	---	---	---
14	974	957	945	929	---	---	---	---	---	---	---	---
15	980	956	949	932	---	---	---	---	---	---	---	---
16	978	957	950	937	---	---	---	---	---	---	---	---
17	977	954	945	940	---	---	---	---	---	---	---	---
18	973	954	946	936	---	---	---	---	---	---	---	---
19	973	951	948	934	---	---	---	---	---	---	---	---
20	973	951	948	938	---	---	---	---	---	---	---	---
21	968	954	951	937	---	---	---	---	---	---	---	---
22	971	952	949	936	---	---	---	---	---	---	---	---
23	971	950	947	936	---	---	---	---	---	---	---	---
24	965	948	944	934	---	---	---	---	---	---	---	---
25	956	943	947	932	---	---	---	---	---	---	---	---
26	956	942	947	937	---	---	---	---	---	---	---	---
27	953	940	951	938	---	---	---	---	---	---	---	---
28	956	942	951	941	---	---	---	---	---	---	---	---
29	955	937	953	940	---	---	---	---	---	---	---	---
30	951	935	953	944	---	---	---	---	---	---	---	---
31	950	937	---	---	---	---	---	---	---	---	---	---
MONTH	980	909	953	918	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	967	955	882	769	929	901	936	924
2	---	---	---	---	978	955	885	753	937	893	964	927
3	---	---	---	---	961	951	901	799	947	895	958	931
4	---	---	---	---	958	947	865	788	944	879	949	928
5	---	---	---	---	952	944	896	757	953	891	941	932
6	---	---	---	---	949	942	911	872	943	889	942	936
7	---	---	---	---	942	932	909	863	949	909	945	938
8	---	---	---	---	1020	897	950	774	939	907	951	918
9	---	---	---	---	1020	895	946	804	941	886	935	921
10	---	---	---	---	929	886	884	782	943	882	938	918
11	---	---	---	---	976	902	960	842	941	864	936	918
12	---	---	---	---	909	892	936	854	948	924	937	918
13	---	---	---	---	910	889	891	839	948	897	938	923
14	---	---	---	---	917	877	889	817	939	898	939	921
15	---	---	---	---	886	871	897	787	944	866	942	932
16	---	---	---	---	880	848	930	861	949	884	956	932
17	---	---	---	---	882	842	936	843	952	914	948	934
18	---	---	---	---	873	839	935	858	952	906	946	933
19	---	---	---	---	885	861	945	879	951	867	943	923
20	---	---	---	---	881	844	920	870	952	888	942	921
21	---	---	---	---	880	838	936	882	961	860	934	880
22	---	---	---	---	901	826	919	848	953	935	892	845
23	---	---	---	---	918	887	922	859	963	941	845	803
24	---	---	---	---	906	874	968	867	958	934	808	782
25	---	---	---	---	897	839	895	882	955	898	821	779
26	---	---	---	---	872	848	905	886	923	896	897	821
27	---	---	---	---	873	827	905	877	923	898	976	891
28	---	---	---	---	891	821	906	866	927	901	928	913
29	---	---	---	---	884	842	911	881	929	906	931	921
30	---	---	---	---	872	809	924	845	932	925	934	919
31	---	---	---	---	---	---	919	892	941	913	---	---
MONTH	---	---	---	---	1020	809	968	753	963	860	976	779

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.0	22.0	21.0	17.5	---	---	---	---	---	---	---	---
2	25.0	22.0	20.5	17.0	---	---	---	---	---	---	---	---
3	25.0	22.0	20.0	17.5	---	---	---	---	---	---	---	---
4	24.5	22.0	19.5	17.0	---	---	---	---	---	---	---	---
5	24.0	22.0	19.5	17.0	---	---	---	---	---	---	---	---
6	24.5	22.5	19.0	17.0	---	---	---	---	---	---	---	---
7	25.0	22.0	17.5	16.0	---	---	---	---	---	---	---	---
8	25.5	21.5	18.0	15.5	---	---	---	---	---	---	---	---
9	26.5	22.5	17.5	16.0	---	---	---	---	---	---	---	---
10	27.0	22.5	17.5	15.5	---	---	---	---	---	---	---	---
11	27.0	22.5	18.0	15.0	---	---	---	---	---	---	---	---
12	26.5	22.0	17.5	15.5	---	---	---	---	---	---	---	---
13	25.5	22.5	17.5	15.5	---	---	---	---	---	---	---	---
14	24.5	22.5	18.0	15.5	---	---	---	---	---	---	---	---
15	25.5	22.5	18.5	16.0	---	---	---	---	---	---	---	---
16	25.5	22.5	17.5	16.5	---	---	---	---	---	---	---	---
17	25.0	22.0	18.0	16.5	---	---	---	---	---	---	---	---
18	24.5	21.0	17.5	15.0	---	---	---	---	---	---	---	---
19	24.5	20.5	16.5	14.5	---	---	---	---	---	---	---	---
20	24.5	20.5	17.5	16.0	---	---	---	---	---	---	---	---
21	24.5	20.0	17.5	15.0	---	---	---	---	---	---	---	---
22	23.5	19.5	16.0	14.0	---	---	---	---	---	---	---	---
23	23.0	20.0	15.0	13.0	---	---	---	---	---	---	---	---
24	22.5	19.5	15.0	12.5	---	---	---	---	---	---	---	---
25	22.0	19.5	15.0	13.0	---	---	---	---	---	---	---	---
26	22.0	19.0	15.0	13.0	---	---	---	---	---	---	---	---
27	21.5	19.5	16.0	14.0	---	---	---	---	---	---	---	---
28	22.0	19.5	15.5	14.0	---	---	---	---	---	---	---	---
29	21.5	18.5	16.0	14.0	---	---	---	---	---	---	---	---
30	21.0	18.0	16.0	14.5	---	---	---	---	---	---	---	---
31	21.0	17.5	---	---	---	---	---	---	---	---	---	---
MONTH	27.0	17.5	21.0	12.5	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	23.0	18.5	25.0	21.5	24.5	21.5	19.5	18.0
2	---	---	---	---	23.0	19.5	24.5	21.5	25.0	22.0	20.0	17.5
3	---	---	---	---	23.0	19.5	24.0	21.0	25.0	22.0	20.0	17.5
4	---	---	---	---	23.0	19.5	24.0	21.0	25.5	22.0	20.0	17.5
5	---	---	---	---	22.5	19.5	24.0	21.0	25.0	22.0	19.5	17.0
6	---	---	---	---	23.0	19.5	24.0	21.0	24.5	22.0	19.5	17.0
7	---	---	---	---	23.0	19.5	24.0	20.5	24.0	21.5	19.5	17.0
8	---	---	---	---	21.0	19.5	24.0	20.5	24.0	21.0	19.0	15.0
9	---	---	---	---	22.0	18.5	24.0	21.0	23.5	21.0	16.0	14.5
10	---	---	---	---	22.0	19.0	24.0	21.0	23.0	20.5	15.5	14.5
11	---	---	---	---	22.5	18.5	24.0	21.0	23.5	21.0	15.5	14.0
12	---	---	---	---	22.5	19.0	24.0	21.0	23.5	21.0	15.0	14.0
13	---	---	---	---	24.0	19.5	24.0	20.5	23.5	21.0	15.5	14.5
14	---	---	---	---	25.5	21.5	24.0	20.5	23.5	20.5	15.5	14.5
15	---	---	---	---	25.5	22.0	24.5	21.0	23.5	20.5	16.5	14.5
16	---	---	---	---	25.0	22.0	24.0	21.5	24.0	21.0	17.0	14.5
17	---	---	---	---	26.0	22.0	24.0	21.5	24.0	21.0	17.5	15.0
18	---	---	---	---	25.0	22.0	24.5	21.0	23.5	21.0	18.0	15.5
19	---	---	---	---	24.0	22.0	24.5	21.5	23.5	20.5	17.0	15.5
20	---	---	---	---	24.5	21.0	24.0	21.5	23.0	20.0	17.0	15.0
21	---	---	---	---	25.0	21.5	24.5	21.0	22.5	20.0	17.0	15.5
22	---	---	---	---	25.0	22.0	24.5	21.0	22.5	20.0	17.5	16.0
23	---	---	---	---	24.0	21.5	25.0	21.5	22.5	20.0	18.5	16.5
24	---	---	---	---	25.0	21.5	24.0	19.0	22.5	20.0	19.0	17.0
25	---	---	---	---	26.0	22.0	19.0	16.5	23.5	20.5	19.0	17.0
26	---	---	---	---	25.0	22.0	18.0	15.5	23.0	19.5	17.5	15.5
27	---	---	---	---	25.5	22.0	19.0	15.5	22.5	19.5	16.5	15.5
28	---	---	---	---	25.5	22.0	19.5	16.0	22.0	19.0	16.5	15.0
29	---	---	---	---	25.5	22.0	21.0	17.0	21.5	19.0	17.0	15.0
30	---	---	---	---	24.5	22.0	22.0	18.5	20.5	19.0	17.0	15.0
31	---	---	---	---	---	---	23.5	20.0	19.5	18.5	---	---
MONTH	---	---	---	---	26.0	18.5	25.0	15.5	25.5	18.5	20.0	14.0

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.—Lat 34°37'06", long 120°07'11", in NW 1/4 NW 1/4 sec.11, T.6 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank, at downstream side of bridge on Alamo Pintado Road, and 1.5 mi northeast of Solvang.

DRAINAGE AREA.—29.4 mi^2.

PERIOD OF RECORD.—October 1970 to September 1985, October 1989 to September 1992, October 1994 to current year. Records prior to October 1970 in files of Santa Barbara County Flood Control District.
CHEMICAL DATA: Water year 1997.

REVISED RECORDS.—WDR CA-98-1: 1997.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 540.49 ft above sea level, Santa Barbara County datum.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,680 ft^3/s, Feb. 3, 1998, gage height, 11.69 ft, from rating curve extended above 1,050 ft^3/s; no flow most of each year.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 10.32 ft, from information provided by Santa Barbara County Flood Control District.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1145	222	3.33				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	2.5	1.1	2.0	6.1	5.4	3.0	1.7	1.8	1.6	1.6
2	1.7	1.5	2.3	1.3	2.1	5.8	5.3	3.1	1.4	1.9	2.0	1.6
3	1.7	1.6	2.3	1.4	2.2	5.8	5.3	3.1	1.3	1.7	2.1	1.3
4	1.8	1.6	2.4	1.8	2.3	5.6	5.2	3.1	1.3	1.8	1.9	1.2
5	1.8	1.5	2.3	2.2	2.3	7.3	5.0	3.1	1.4	1.7	2.0	1.3
6	1.8	1.7	2.3	2.3	2.4	8.2	5.0	3.0	1.2	1.7	2.1	1.4
7	1.7	1.9	2.3	2.0	2.2	6.9	4.9	3.0	1.5	1.9	2.1	1.3
8	1.6	3.7	2.3	2.1	2.2	8.1	4.8	3.0	1.6	1.7	2.1	1.4
9	1.6	2.2	2.5	2.2	2.2	7.1	4.7	2.9	1.3	1.7	2.1	1.4
10	1.6	2.2	2.5	2.2	2.5	6.4	4.6	2.8	1.0	1.9	2.2	1.4
11	1.6	2.3	2.3	2.3	2.4	6.4	4.5	2.7	.87	1.6	2.4	1.5
12	1.7	2.2	2.2	2.2	3.1	6.3	4.3	2.5	.80	.92	2.1	1.3
13	1.7	2.2	2.1	2.0	4.2	6.3	4.3	2.3	.98	1.0	2.1	1.3
14	1.7	2.3	2.2	2.1	2.8	6.3	4.2	1.8	1.5	1.0	1.8	1.4
15	1.8	2.2	2.2	1.9	2.3	6.7	4.0	1.5	1.4	1.0	1.9	1.3
16	1.8	2.1	2.1	1.9	2.6	7.0	4.0	1.8	1.7	.94	1.8	1.5
17	1.7	2.1	2.2	2.0	2.4	6.8	18	2.2	2.1	1.0	1.8	1.5
18	1.7	2.1	2.4	2.0	2.3	6.8	9.7	2.2	1.8	1.1	1.9	1.3
19	1.6	2.1	2.3	1.8	2.4	6.9	3.3	2.0	1.7	1.2	2.0	1.2
20	1.6	2.2	2.2	1.4	3.7	6.7	4.2	2.1	1.8	1.2	2.4	1.4
21	1.4	2.2	2.2	1.5	20	6.8	7.6	2.1	2.0	1.3	2.6	1.5
22	1.4	2.2	2.1	1.6	3.6	6.3	6.3	2.2	2.2	1.1	2.5	1.6
23	1.5	2.3	2.0	1.6	26	5.9	4.6	2.1	2.0	1.0	2.0	1.4
24	1.5	2.3	2.0	1.7	6.8	5.9	4.0	2.0	2.1	1.1	1.6	1.3
25	1.5	2.2	2.0	2.9	6.3	5.8	3.5	2.1	2.1	1.1	1.7	1.4
26	1.6	2.2	1.9	2.1	6.3	5.8	3.1	2.1	2.0	1.5	1.6	1.4
27	1.6	2.3	1.9	2.2	6.8	5.8	3.0	2.1	1.9	1.5	1.7	1.4
28	1.6	2.3	1.8	2.0	6.2	5.6	3.0	2.1	1.9	1.5	1.5	1.4
29	1.6	2.2	1.2	1.8	6.1	5.6	3.0	2.0	2.0	1.7	1.5	1.5
30	1.5	2.3	1.0	1.9	---	5.6	3.0	2.0	1.9	1.9	1.7	1.6
31	1.6	---	1.1	2.2	---	5.6	---	1.7	---	1.9	1.7	---
TOTAL	50.7	63.7	65.1	59.7	138.7	198.2	151.8	73.7	48.45	44.36	60.5	42.1
MEAN	1.64	2.12	2.10	1.93	4.78	6.39	5.06	2.38	1.62	1.43	1.95	1.40
MAX	1.8	3.7	2.5	2.9	26	8.2	18	3.1	2.2	1.9	2.6	1.6
MIN	1.4	1.5	1.0	1.1	2.0	5.6	3.0	1.5	.80	.92	1.5	1.2
AC-FT	101	126	129	118	275	393	301	146	96	88	120	84

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.41	.61	.68	4.08	13.6	8.01	2.21	.97	.76	.47	.53	.41
MAX	3.06	5.73	3.31	56.8	219	44.8	22.9	7.62	4.83	3.29	3.38	3.53
(WY)	1999	1996	1999	1995	1998	1995	1998	1998	1995	1999	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1971	1973	1971	1971	1971	1971	1971	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	1241.3		997.01			
ANNUAL MEAN	3.40		2.72		2.66	
HIGHEST ANNUAL MEAN					25.3	1998
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	21	Apr 11	26	Feb 23	1150	Feb 3 1998
LOWEST DAILY MEAN	1.0	Dec 30	.80	Jun 12	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	1.5	Oct 19	.99	Jul 12	.00	Oct 1 1970
INSTANTANEOUS PEAK FLOW			222	Feb 23	3680	Feb 3 1998
INSTANTANEOUS PEAK STAGE			3.33	Feb 23	11.69	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	2460		1980		1930	
10 PERCENT EXCEEDS	5.0		5.8		3.2	
50 PERCENT EXCEEDS	3.1		2.1		.00	
90 PERCENT EXCEEDS	1.7		1.3		.00	

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.—Lat 34°32'56", long 120°07'45", in NE 1/4 NW 1/4 sec.4, T.5 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, in cove on right bank, 0.4 mi upstream from reservoir spillway, and 3 mi south of Solvang.

DRAINAGE AREA.—7.83 mi^2.

PERIOD OF RECORD.—December 1971 to current year. Prior to October 1985, only monthend elevations and contents published.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Lake is formed by earthfill dam. Storage began Dec. 19, 1970. Usable capacity, 2,260 acre-ft, between bottom of outlet gate at elevation 555.70 ft, and crest of spillway at elevation 599.88 ft. Dead storage, 110 acre-ft. Inflow must total 150 acre-ft during any one month between November and June in order to store flows for that water year. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 2,770 acre-ft, Mar. 4, 1978, elevation, 604.31 ft; minimum, 748 acre-ft, Nov. 8–10, 1972, elevation, 577.15 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 2,450 acre-ft, Feb. 23, maximum elevation, 600.75 ft, Feb. 23; minimum contents, 1,970 acre-ft, Jan. 21, 22, minimum elevation, 595.43 ft, Jan. 21, 22.

Capacity table (elevation in feet, and contents, in acre-feet)
(Based on data provided by Santa Barbara County Flood Control District in 1971)

590	1,540	600	2,380
595	1,940	605	2,840

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2090	2020	2010	1980	1980	2390	2380	2380	2370	2320	2240	2140
2	2090	2020	2010	1980	1980	2390	2380	2380	2370	2320	2230	2130
3	2090	2020	2010	1980	1980	2390	2380	2380	2360	2310	2230	2130
4	2090	2010	2000	1980	1990	2390	2380	2380	2360	2310	2230	2130
5	2080	2010	2000	1980	1990	2400	2380	2380	2360	2310	2220	2130
6	2080	2010	2000	1980	1990	2400	2380	2380	2360	2300	2220	2120
7	2080	2020	2000	1980	1990	2400	2380	2380	2360	2300	2220	2120
8	2070	2020	2000	1980	1990	2420	2380	2380	2360	2300	2210	2120
9	2070	2020	2000	1980	1990	2410	2380	2380	2360	2290	2210	2110
10	2070	2020	2000	1980	2000	2400	2380	2380	2360	2290	2210	2110
11	2070	2020	2000	1980	2020	2400	2380	2370	2360	2290	2200	2110
12	2070	2020	2000	1980	2060	2390	2380	2380	2360	2290	2200	2110
13	2060	2020	2000	1980	2090	2390	2380	2370	2350	2290	2200	2100
14	2060	2020	2000	1980	2160	2390	2380	2370	2350	2290	2190	2100
15	2060	2020	2000	1980	2190	2390	2380	2370	2350	2280	2190	2100
16	2060	2020	1990	1980	2200	2390	2380	2370	2350	2280	2190	2090
17	2060	2020	1990	1980	2200	2390	2440	2370	2340	2280	2180	2090
18	2050	2020	1990	1980	2210	2390	2420	2370	2340	2280	2180	2090
19	2050	2020	1990	1980	2210	2390	2400	2370	2340	2270	2180	2080
20	2050	2020	1990	1980	2290	2380	2400	2370	2340	2270	2170	2080
21	2040	2020	1990	1970	2420	2380	2390	2370	2340	2270	2170	2070
22	2040	2020	1990	1970	2400	2380	2390	2370	2340	2270	2170	2070
23	2040	2020	1990	1980	2450	2380	2390	2370	2340	2260	2170	2070
24	2040	2020	1990	1980	2400	2380	2390	2370	2330	2260	2160	2070
25	2040	2020	1990	1980	2390	2380	2380	2370	2330	2260	2160	2070
26	2030	2020	1980	1980	2390	2380	2380	2370	2330	2250	2150	2060
27	2030	2020	1980	1980	2400	2380	2380	2370	2330	2250	2150	2060
28	2030	2020	1980	1980	2390	2380	2380	2370	2330	2250	2150	2060
29	2030	2020	1980	1980	2390	2380	2380	2370	2320	2240	2150	2060
30	2020	2010	1980	1980	---	2380	2380	2370	2320	2240	2140	2050
31	2020	---	1980	1980	---	2380	---	2370	---	2240	2140	---
MAX	2090	2020	2010	1980	2450	2420	2440	2380	2370	2320	2240	2140
MIN	2020	2010	1980	1970	1980	2380	2380	2370	2320	2240	2140	2050
a	596.03	595.91	595.55	599.55	600.12	600.04	600.01	599.87	599.33	598.45	597.34	596.37
b	-80	-10	-30	0	+410	-10	0	-10	-50	-80	-100	-90

CAL YR 1999 b -300
WTR YR 2000 b -50

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11128500 SANTA YNEZ RIVER AT SOLVANG, CA

LOCATION.—Lat 34°35'06", long 120°08'37", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, near left bank, on downstream end of pier of Alisal Road Bridge, 25 ft downstream from Alisal Creek, 0.8 mi southwest of Solvang, and 10 mi downstream from Lake Cachuma.

DRAINAGE AREA.—579 mi^2.

PERIOD OF RECORD.—October 1996 to current year.
CHEMICAL DATA: October 1996 to current year.

PERIOD OF DAILY RECORD.—August 1997 to current year.
SPECIFIC CONDUCTANCE: August 1997 to September 1997, April 1999 to current year.
WATER TEMPERATURE: August 1997 to current year.

INSTRUMENTATION.—Water-quality monitor since August 1997.

REMARKS.—Interruptions in record due to malfunction of the recording instrument. Continuous water quality is not collected Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 2,060 microsiemens, Sept. 23, 1997; minimum recorded, 527 microsiemens, Sept. 4, 1997.
WATER TEMPERATURE: Maximum recorded, 31.5°C, Aug. 2, 2000; minimum recorded, 11.0°C, June 12, 17 and 18, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,200 microsiemens, Nov. 30; minimum recorded, 740 microsiemens, Apr. 20.
WATER TEMPERATURE: Maximum recorded, 31.5°C, Aug. 2 ; minimum recorded, 12.0°C, May 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
07...	1710	1.5	--	--	--	8.1	1040	23.0	--	--	--
NOV											
09...	1600	2.8	--	--	--	7.8	1110	19.0	--	--	--
DEC											
07...	1540	3.2	--	--	--	7.9	1220	15.0	--	--	--
JAN											
12...	1605	3.2	--	--	--	7.8	1220	14.5	--	--	--
FEB											
10...	1535	8.1	--	--	--	8.1	1060	15.0	--	--	--
MAR											
13...	1625	23	--	--	--	8.0	936	18.5	--	--	--
APR											
19...	1630	1050	--	--	--	7.8	794	18.0	--	--	--
MAY											
11...	1200	17	761	123	11.9	8.5	1050	17.0	450	89.1	56.4
JUN											
01...	1740	4.2	--	--	--	8.0	1040	24.5	--	--	--
JUL											
06...	1445	1.1	--	--	--	8.0	1000	23.5	--	--	--
AUG											
02...	1125	3.4	--	--	--	8.2	1060	27.5	--	--	--
SEP											
16...	1600	54	--	--	--	8.2	1010	23.0	--	--	--

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 07...	--	--	--	--	--	--	--	--	--	--	--
NOV 09...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	2.1	1	49.3	19	268	308	10	34.8	.4	24.8	267
JUN 01...	--	--	--	--	--	--	--	--	--	--	--
JUL 06...	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 07...	--	--	--	--	--	786	--	--	--	--
NOV 09...	--	--	--	--	--	812	--	--	--	--
DEC 07...	--	--	--	--	--	836	--	--	--	--
JAN 12...	--	--	--	--	--	840	--	--	--	--
FEB 10...	--	--	--	--	--	772	--	--	--	--
MAR 13...	--	--	--	--	--	655	--	--	--	--
APR 19...	--	--	--	--	--	482	--	--	--	--
MAY 11...	<.020	.118	<.010	.016	.95	696	686	261	<10	e2
JUN 01...	--	--	--	--	--	714	--	--	--	--
JUL 06...	--	--	--	--	--	750	--	--	--	--
AUG 02...	--	--	--	--	--	774	--	--	--	--
SEP 16...	--	--	--	--	--	703	--	--	--	--

< Actual value is known to be less than value shown.
e Estimated.

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1080	1040	1100	1080	---	---	---	---	---	---	---	---
2	1080	1040	1100	1080	---	---	---	---	---	---	---	---
3	1080	1050	1090	1080	---	---	---	---	---	---	---	---
4	1080	1050	1090	1080	---	---	---	---	---	---	---	---
5	1080	1020	1080	1070	---	---	---	---	---	---	---	---
6	1080	1040	1080	1070	---	---	---	---	---	---	---	---
7	1070	1010	1080	1060	---	---	---	---	---	---	---	---
8	1070	1040	1080	1030	---	---	---	---	---	---	---	---
9	1070	1050	1110	1080	---	---	---	---	---	---	---	---
10	1080	1030	1120	1110	---	---	---	---	---	---	---	---
11	1070	1020	1130	1120	---	---	---	---	---	---	---	---
12	1070	1040	1130	1120	---	---	---	---	---	---	---	---
13	1070	993	1130	1120	---	---	---	---	---	---	---	---
14	1080	1050	1130	1120	---	---	---	---	---	---	---	---
15	1070	1050	1130	1110	---	---	---	---	---	---	---	---
16	1070	988	1120	1110	---	---	---	---	---	---	---	---
17	1070	1040	1120	1110	---	---	---	---	---	---	---	---
18	1080	1030	1130	1120	---	---	---	---	---	---	---	---
19	1100	1080	1130	1120	---	---	---	---	---	---	---	---
20	1100	1090	1130	1090	---	---	---	---	---	---	---	---
21	1100	1080	1140	1120	---	---	---	---	---	---	---	---
22	1100	1080	1140	1130	---	---	---	---	---	---	---	---
23	1090	1080	1140	1140	---	---	---	---	---	---	---	---
24	1090	1080	1150	1140	---	---	---	---	---	---	---	---
25	1090	1080	1150	1150	---	---	---	---	---	---	---	---
26	1090	1070	1150	1150	---	---	---	---	---	---	---	---
27	1090	1080	1160	1150	---	---	---	---	---	---	---	---
28	1090	1080	1170	1150	---	---	---	---	---	---	---	---
29	1100	1080	1190	1160	---	---	---	---	---	---	---	---
30	1100	1090	1200	1180	---	---	---	---	---	---	---	---
31	1100	1080	---	---	---	---	---	---	---	---	---	---
MONTH	1100	988	1200	1030	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1160	1130	987	961	1040	1020	979	964	1080	1060	---	---
2	1140	1110	1010	981	1040	1020	977	961	1080	1050	---	---
3	1110	1080	1050	1000	1030	1020	970	957	1080	1060	---	---
4	1090	1060	1060	1040	1030	989	968	953	1080	1060	---	---
5	1060	1050	1040	1020	998	935	967	951	1080	1060	---	---
6	1050	1040	1050	1030	947	927	1010	949	1080	1060	---	---
7	1060	1040	1050	1030	942	924	1020	989	1080	1060	---	---
8	1060	1050	1060	1040	930	916	1020	999	1080	1060	---	---
9	1060	1040	1070	1050	928	906	1020	993	1080	1060	---	---
10	1060	1040	1060	1050	924	899	1020	986	1090	1060	1030	1000
11	1040	1010	1060	1040	899	877	1020	989	1100	1080	1000	990
12	1030	1000	1060	1040	888	869	1020	986	1110	1080	994	979
13	1000	988	1050	969	892	868	1020	989	1110	1060	989	977
14	1000	995	1040	1000	889	865	1020	990	1100	1060	989	969
15	1000	999	1060	1040	1010	888	1020	1000	1100	---	993	976
16	1000	998	1070	1050	1010	902	1030	996	---	---	1020	990
17	1000	988	1090	1060	1010	902	1030	998	---	---	1040	1020
18	988	915	1090	1070	1020	962	1030	991	---	---	1040	1030
19	915	758	1090	1070	1020	1000	1030	982	---	---	1040	1020
20	758	740	1100	1070	1020	1000	1030	999	---	---	1030	1010
21	763	741	1080	1040	1010	995	1030	1010	---	---	1020	997
22	775	761	1040	1010	1010	992	---	---	---	---	1020	988
23	777	760	1020	998	1000	985	---	---	---	---	996	967
24	791	771	1020	1000	1000	984	---	---	---	---	975	942
25	814	787	1010	976	997	981	---	---	---	---	965	932
26	839	806	988	969	993	978	---	---	---	---	959	937
27	866	832	1010	977	993	976	1060	1040	---	---	970	935
28	887	860	1010	990	987	971	1060	1040	---	---	973	941
29	929	886	1010	991	987	969	1060	1040	---	---	1060	960
30	977	929	1020	992	983	966	1070	1050	---	---	1100	1050
31	---	---	1040	1020	---	---	1070	1040	---	---	---	---
MONTH	1160	740	1100	961	1040	865	---	---	---	---	1100	932

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.5	16.0	21.5	15.5	---	---	---	---	---	---	---	---
2	25.0	17.5	20.5	14.0	---	---	---	---	---	---	---	---
3	25.0	17.5	20.5	16.0	---	---	---	---	---	---	---	---
4	24.5	16.5	21.0	16.0	---	---	---	---	---	---	---	---
5	25.0	15.5	20.5	16.5	---	---	---	---	---	---	---	---
6	24.0	17.0	20.0	16.0	---	---	---	---	---	---	---	---
7	25.0	16.5	19.5	16.0	---	---	---	---	---	---	---	---
8	26.5	15.0	19.5	15.5	---	---	---	---	---	---	---	---
9	26.0	15.5	20.0	16.0	---	---	---	---	---	---	---	---
10	25.5	15.5	20.0	15.5	---	---	---	---	---	---	---	---
11	25.0	14.5	20.0	16.0	---	---	---	---	---	---	---	---
12	25.0	15.0	19.5	15.0	---	---	---	---	---	---	---	---
13	24.0	15.5	19.0	14.5	---	---	---	---	---	---	---	---
14	22.0	17.0	19.5	15.0	---	---	---	---	---	---	---	---
15	24.0	18.0	20.0	16.0	---	---	---	---	---	---	---	---
16	24.0	18.0	19.5	16.0	---	---	---	---	---	---	---	---
17	24.0	17.0	18.0	15.0	---	---	---	---	---	---	---	---
18	23.5	15.0	18.5	14.0	---	---	---	---	---	---	---	---
19	23.5	17.0	18.5	14.5	---	---	---	---	---	---	---	---
20	23.0	15.5	18.5	15.5	---	---	---	---	---	---	---	---
21	23.0	15.5	17.5	14.5	---	---	---	---	---	---	---	---
22	22.0	14.5	17.5	14.0	---	---	---	---	---	---	---	---
23	22.0	17.0	17.0	13.5	---	---	---	---	---	---	---	---
24	22.5	16.5	17.0	13.0	---	---	---	---	---	---	---	---
25	22.0	17.0	17.0	13.5	---	---	---	---	---	---	---	---
26	22.0	17.0	17.0	13.0	---	---	---	---	---	---	---	---
27	22.0	17.0	17.5	14.5	---	---	---	---	---	---	---	---
28	22.0	17.0	17.0	14.0	---	---	---	---	---	---	---	---
29	21.5	15.0	17.5	14.5	---	---	---	---	---	---	---	---
30	21.5	15.5	17.5	14.5	---	---	---	---	---	---	---	---
31	21.5	14.5	---	---	---	---	---	---	---	---	---	---
MONTH	26.5	14.5	21.5	13.0	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	23.5	13.5	23.5	16.0	25.0	15.0	25.0	18.5	31.0	22.5	---	---
2	24.0	14.0	23.5	16.0	24.0	17.0	24.5	18.5	31.5	23.0	---	---
3	24.5	14.5	23.5	16.5	23.5	16.0	24.0	18.0	30.5	22.5	---	---
4	24.0	16.5	24.0	16.5	24.0	16.0	24.0	18.0	31.0	22.0	---	---
5	23.0	16.5	23.0	15.0	24.0	16.5	24.5	18.5	29.5	21.5	---	---
6	22.0	16.5	23.0	16.0	24.5	16.5	24.5	18.5	29.0	21.5	---	---
7	24.0	16.0	23.0	15.0	23.5	17.0	24.0	18.5	29.0	22.0	---	---
8	23.5	16.5	23.5	16.5	21.5	17.0	24.5	18.5	29.5	21.5	---	---
9	23.5	16.0	23.5	16.0	22.5	15.5	25.5	19.0	29.0	21.0	---	---
10	24.5	15.5	21.5	15.0	23.5	16.5	25.5	19.0	29.0	21.0	22.5	17.0
11	25.5	16.5	21.0	12.0	23.5	16.5	25.5	19.0	29.5	21.0	22.5	15.5
12	25.5	16.5	22.5	13.0	23.5	16.0	26.0	19.0	30.0	20.5	21.0	15.5
13	23.5	17.0	22.5	14.5	25.5	17.5	25.5	18.0	29.5	21.0	22.5	16.5
14	20.0	16.5	20.5	14.0	27.5	18.5	26.5	18.5	30.0	20.0	23.5	17.0
15	20.0	16.5	22.0	15.5	26.0	18.0	26.0	19.5	---	---	23.0	18.0
16	18.0	16.0	20.5	14.5	25.5	18.0	26.0	19.5	---	---	23.0	17.5
17	18.0	15.0	22.0	13.5	25.0	18.5	27.0	20.0	---	---	25.0	18.5
18	19.0	15.5	23.5	14.5	25.5	18.5	27.5	19.5	---	---	25.0	18.0
19	21.5	16.5	23.5	16.0	24.0	18.0	28.0	19.5	---	---	24.5	18.5
20	22.5	16.0	25.0	16.0	26.0	18.0	27.0	19.5	---	---	24.0	18.5
21	20.0	16.0	25.5	16.5	25.0	18.5	26.5	20.0	---	---	22.5	19.0
22	22.5	15.5	26.5	17.0	25.5	18.5	---	---	---	---	20.5	18.0
23	22.5	15.5	26.0	17.0	25.5	18.0	---	---	---	---	22.0	18.0
24	23.0	14.0	22.5	17.5	26.0	18.5	---	---	---	---	23.0	17.0
25	23.0	14.0	22.5	17.0	25.5	18.5	---	---	---	---	23.0	18.0
26	24.0	15.5	24.0	15.0	25.5	18.5	---	---	---	---	23.0	18.5
27	23.5	16.0	25.0	16.5	25.5	18.5	28.0	21.5	---	---	21.5	18.0
28	22.0	16.0	25.0	16.5	26.5	18.5	29.0	22.0	---	---	22.0	17.5
29	22.5	14.0	24.0	16.0	25.5	18.5	29.0	22.0	---	---	22.5	18.0
30	24.0	14.5	23.5	15.5	25.0	18.5	29.0	22.0	---	---	23.5	18.0
31	---	---	24.5	15.0	---	---	30.0	21.5	---	---	---	---
MONTH	25.5	13.5	26.5	12.0	27.5	15.0	---	---	---	---	---	---

11129800 ZACA CREEK NEAR BUELLTON, CA

LOCATION.—Lat 34°38'55", long 120°11'00", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 2 ft upstream from bridge on Frontage Road, 0.9 mi upstream from Dry Creek, 2.4 mi north of Buellton, and 4.0 mi upstream from mouth.

DRAINAGE AREA.—32.8 mi^2.

PERIOD OF RECORD.—September 1963 to September 1981, October 1989 to September 1992, October 1994 to current year.
CHEMICAL DATA: April 1997 to September 1997.

Gage.—Water-stage recorder. Datum of gage is 471.54 ft above sea level.

REMARKS.—Records fair, except for estimated daily discharges, Apr. 24 to June 5, which are poor. Some pumping from wells along stream for irrigation upstream from station. Small regulation by Zaca Lake, about 15 mi upstream. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,390 ft^3/s, Feb. 24, 1969, gage height, 9.20 ft; maximum gage height, 12.59 ft, Feb. 3, 1998; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	0945	246	5.30				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.07	.14	.13	.75	.23	e.23	e.06	.00	.00	.00
2	.00	e.00	.06	.13	.13	.56	.23	e.23	e.05	.00	.00	.00
3	.00	e.00	.05	.12	.11	.51	.23	e.23	e.05	.00	.00	.00
4	.00	e.00	.06	.13	.18	.45	.23	e.23	e.04	.00	.00	.00
5	.00	e.00	.08	.13	.13	9.3	.23	e.23	e.03	.00	.00	.00
6	.00	e.00	.09	.12	.12	15	.23	e.23	.03	.00	.00	.00
7	.00	e.00	.08	.14	.14	7.7	.23	e.23	.02	.00	.00	.00
8	.00	e.00	.07	.14	.15	8.1	.23	e.23	.04	.00	.00	.00
9	.00	.00	.09	.12	.15	5.8	.23	e.23	.04	.00	.00	.00
10	.00	.00	.11	.12	.39	3.6	.23	e.23	.04	.00	.00	.00
11	.00	.00	.10	.12	.28	2.2	.23	e.23	.03	.00	.00	.00
12	.00	.01	.09	.12	1.1	1.5	.23	e.23	.01	.00	.00	.00
13	.00	.01	.10	.11	2.1	1.2	.23	e.23	.00	.00	.00	.00
14	.00	.01	.10	.08	.65	.81	.31	e.23	.00	.00	.00	.00
15	e.00	.01	.11	.09	.43	.62	.23	e.23	.00	.00	.00	.00
16	e.00	.03	.10	.09	.39	.53	.24	e.22	.00	.00	.00	.00
17	e.00	.04	.10	.12	.40	.48	10	e.22	.00	.00	.00	.00
18	e.00	.03	.10	.15	.30	.46	9.6	e.20	.00	.00	.00	.00
19	e.00	.04	.11	.11	.29	.44	2.1	e.19	.00	.00	.00	.00
20	e.00	.08	.10	.11	5.4	.40	.89	e.17	.00	.00	.00	.00
21	e.00	.04	.09	.10	20	.38	.51	e.16	.00	.00	.00	.00
22	e.00	.02	.08	.10	14	.38	.41	e.15	.00	.00	.00	.00
23	e.00	.03	.09	.14	63	.41	.32	e.14	.00	.00	.00	.00
24	e.00	.04	.10	.19	16	.41	e.29	e.13	.00	.00	.00	.00
25	e.00	.05	.11	.41	1.7	.37	e.27	e.12	.00	.00	.00	.00
26	e.00	.05	.11	.18	.37	.28	e.25	e.11	.00	.00	.00	.00
27	e.00	.05	.11	.12	10	.29	e.24	e.10	.00	.00	.00	.00
28	e.00	.05	.12	.12	6.9	.25	e.23	e.09	.00	.00	.00	.00
29	e.00	.05	.12	.11	1.8	.24	e.23	e.08	.00	.00	.00	.00
30	e.00	.06	.13	.11	---	.24	e.23	e.07	.00	.00	.00	.00
31	e.00	---	.14	.14	---	.23	---	e.07	---	.00	.00	---
TOTAL	0.00	0.70	2.97	4.11	146.74	63.89	29.34	5.67	0.44	0.00	0.00	0.00
MEAN	.000	.023	.096	.13	5.06	2.06	.98	.18	.015	.000	.000	.000
MAX	.00	.08	.14	.41	63	15	10	.23	.06	.00	.00	.00
MIN	.00	.00	.05	.08	.11	.23	.23	.07	.00	.00	.00	.00
AC-FT	.00	1.4	5.9	8.2	291	127	58	11	.9	.00	.00	.00

e Estimated.

11129800 ZACA CREEK NEAR BUELLTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.006	.062	.48	3.17	10.1	4.66	1.37	.53	.18	.030	.007	.006
MAX	.13	1.22	7.64	32.1	120	40.1	9.75	5.69	2.52	.42	.13	.090
(WY)	1999	1997	1997	1969	1998	1995	1995	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1964	1967	1964	1968	1964	1964	1964	1964	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	111.64		253.86			
ANNUAL MEAN	.31		.69		1.67	
HIGHEST ANNUAL MEAN					11.6	1998
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	13	Apr 12	63	Feb 23	598	Feb 3 1998
LOWEST DAILY MEAN	.00	Jun 30	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 5	.00	Oct 1	.00	Oct 1 1963
INSTANTANEOUS PEAK FLOW			246	Feb 23	1390	Feb 24 1969
INSTANTANEOUS PEAK STAGE			5.30	Feb 23	12.59	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	221		504		1210	
10 PERCENT EXCEEDS	.38		.43		.98	
50 PERCENT EXCEEDS	.09		.06		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA

LOCATION.—Lat 34°35'19", long 120°24'27", in W 1/2 sec.24, T.6 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank, at bridge on Jalama Road, 0.4 mi downstream from El Jaro Creek, and 4.4 mi southeast of Lompoc.

DRAINAGE AREA.—47.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1941 to current year.

REVISED RECORDS.—WSP 2128: Drainage area.

GAGE.—Water-stage recorder and concrete low-water control. Elevation of gage is 220 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation upstream from station. Small diversions for irrigation upstream from station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,400 ft^3/s, Mar. 15, 1952, gage height, 20.80 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	0715	2,880	7.98	Mar. 8	0400	939	4.25
Feb. 27	1015	441	3.21	Apr. 17	0630	3,370	8.83

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	1.2	e1.8	e1.6	2.4	20	9.2	e16	5.9	4.0	2.2	2.1
2	e1.5	1.2	e1.8	e1.6	2.0	17	9.1	e16	6.0	3.9	2.1	2.0
3	e1.5	1.3	e1.7	e1.6	2.1	19	8.9	e15	5.9	3.9	2.1	1.9
4	e1.5	1.7	e1.7	e1.5	7.1	20	9.0	e14	5.9	3.7	2.1	e2.0
5	e1.5	1.8	e1.7	e1.5	3.7	129	9.1	e14	5.8	3.5	2.1	e1.9
6	e1.4	1.9	e1.6	e1.4	2.7	135	9.1	e13	5.7	3.3	2.2	e1.9
7	1.4	2.9	e1.6	e1.3	2.3	46	9.1	e13	5.3	3.2	2.2	e1.8
8	1.4	21	e1.6	e1.3	2.2	148	8.9	e12	5.3	3.1	2.1	1.9
9	1.3	7.8	e1.6	e1.2	2.2	47	9.0	e12	5.2	3.2	2.2	2.0
10	1.3	5.7	e1.6	e1.2	13	41	8.9	e11	5.0	3.2	2.3	2.0
11	1.3	5.1	e1.6	e1.2	11	42	8.4	e10	4.6	3.2	2.3	1.9
12	1.2	5.0	e1.6	e1.1	42	41	8.1	e10	4.4	3.1	2.5	1.8
13	1.2	4.8	e1.6	e1.1	47	35	8.0	e9.6	4.3	3.1	2.5	1.7
14	1.4	4.7	e1.6	e1.1	94	30	9.8	e9.2	4.1	2.9	2.5	1.8
15	e1.4	4.9	e1.6	e1.1	34	27	9.2	e8.7	3.9	2.9	2.3	2.0
16	e1.4	5.2	e1.6	e2.6	18	24	9.6	e8.4	3.9	2.9	2.3	2.0
17	e1.4	5.6	e1.6	2.3	15	22	869	7.9	4.4	2.6	2.3	1.9
18	e1.4	5.1	e1.6	2.8	12	21	248	7.7	4.8	2.5	2.2	1.8
19	1.4	e3.5	e1.6	2.3	10	20	67	7.5	4.3	2.4	2.4	1.9
20	1.3	e3.1	e1.6	2.1	94	19	56	7.3	4.1	2.4	2.5	2.1
21	1.2	e2.7	e1.6	2.0	293	18	50	7.1	4.1	2.5	2.4	2.1
22	e1.2	e2.5	e1.6	1.9	104	17	41	6.7	4.0	2.4	2.4	2.2
23	e1.3	e2.3	e1.6	2.3	665	16	35	6.8	3.9	2.3	2.5	2.4
24	e1.6	e2.2	e1.6	3.1	70	16	28	7.4	4.1	2.2	2.6	2.0
25	e1.6	e2.1	e1.6	7.4	28	15	22	7.4	4.0	2.2	2.5	1.9
26	e2.1	e2.0	e1.6	5.0	18	14	21	7.3	3.8	2.3	2.5	1.9
27	e2.0	e2.0	e1.6	2.7	122	13	21	7.0	3.8	2.3	2.4	1.9
28	1.9	e1.9	e1.6	2.1	40	12	20	6.5	3.7	2.3	2.1	1.9
29	1.7	e1.9	e1.6	2.1	24	11	19	6.0	3.8	2.2	2.0	1.9
30	1.2	e1.8	e1.6	2.3	---	10	19	6.0	4.0	2.2	2.0	1.9
31	1.2	---	e1.6	3.3	---	9.7	---	6.0	---	2.2	2.1	---
TOTAL	44.7	114.9	50.3	66.1	1780.7	1054.7	1659.4	296.5	138.0	88.1	70.9	58.5
MEAN	1.44	3.83	1.62	2.13	61.4	34.0	55.3	9.56	4.60	2.84	2.29	1.95
MAX	2.1	21	1.8	7.4	665	148	869	16	6.0	4.0	2.6	2.4
MIN	1.2	1.2	1.6	1.1	2.0	9.7	8.0	6.0	3.7	2.2	2.0	1.7
AC-FT	89	228	100	131	3530	2090	3290	588	274	175	141	116

e Estimated.

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.82	2.23	7.48	24.2	44.8	38.3	16.1	4.81	2.46	1.44	.98	.82
MAX	4.26	48.6	102	281	474	545	158	33.1	12.7	8.69	5.77	4.51
(WY)	1942	1966	1956	1995	1998	1995	1941	1998	1998	1998	1941	1941
MIN	.000	.041	.050	.081	.33	.36	.21	.000	.000	.000	.015	.010
(WY)	1962	1991	1990	1991	1991	1990	1989	1961	1961	1961	1972	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	2956.6		5422.8			
ANNUAL MEAN	8.10		14.8		11.6	
HIGHEST ANNUAL MEAN					80.6	1995
LOWEST ANNUAL MEAN					.17	1990
HIGHEST DAILY MEAN	511	Mar 25	869	Apr 17	5390	Mar 11 1995
LOWEST DAILY MEAN	1.2	Oct 12	1.1	Jan 12	.00	Jul 23 1948
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 7	1.1	Jan 9	.00	Jul 23 1948
INSTANTANEOUS PEAK FLOW			3370	Apr 17	11400	Mar 15 1952
INSTANTANEOUS PEAK STAGE			8.83	Apr 17	20.80	Mar 15 1952
ANNUAL RUNOFF (AC-FT)	5860		10760		8400	
10 PERCENT EXCEEDS	12		21		12	
50 PERCENT EXCEEDS	3.4		2.6		1.5	
90 PERCENT EXCEEDS	1.6		1.5		.10	

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1978 to current year.
CHEMICAL DATA: Water years 1978 to current year.
pH: Water years 1982–83.
WATER TEMPERATURE: Water years 1982–98.

PERIOD OF DAILY RECORD.—Water years 1982–98.
pH: Water years 1982–83.
WATER TEMPERATURE: Water years 1982–98.

INSTRUMENTATION.—Water-quality monitor, water years 1982–83.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
06...	1450	1.5	--	--	--	8.3	1370	19.5	--	--	--
NOV											
03...	1140	1.4	--	--	--	8.3	1400	14.5	--	--	--
DEC											
06...	1300	1.6	--	--	--	8.2	1400	--	--	--	--
JAN											
03...	1255	1.6	--	--	--	8.2	1410	8.5	--	--	--
FEB											
01...	1340	2.3	--	--	--	8.2	1400	12.0	--	--	--
MAR											
09...	1200	44	--	--	--	8.3	1070	11.0	--	--	--
APR											
06...	1335	9.1	--	--	--	8.3	1360	15.0	--	--	--
26...	1100	20	758	97	10.2	8.3	1320	13.0	570	148	47.6
JUN											
05...	1225	5.8	--	--	--	8.3	1310	21.0	--	--	--
28...	0945	3.7	--	--	--	8.2	1270	19.5	--	--	--
AUG											
04...	1225	2.3	--	--	--	8.4	1280	23.0	--	--	--
SEP											
07...	1245	1.8	--	--	--	8.5	1220	18.5	--	--	--
29...	1355	1.9	--	--	--	8.3	1280	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
03...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	--	--	--	--	--	--	--	--	--	--
FEB										
01...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
26...	2.3	2	85.1	25	308	376	80.8	.6	24.6	307
JUN										
05...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT										
06...	--	--	--	--	--	876	--	--	--	--
NOV										
03...	--	--	--	--	--	926	--	--	--	--
DEC										
06...	--	--	--	--	--	898	--	--	--	--
JAN										
03...	--	--	--	--	--	910	--	--	--	--
FEB										
01...	--	--	--	--	--	906	--	--	--	--
MAR										
09...	--	--	--	--	--	726	--	--	--	--
APR										
06...	--	--	--	--	--	910	--	--	--	--
26...	<.020	.773	<.010	.130	1.26	926	893	521	<10	56
JUN										
05...	--	--	--	--	--	838	--	--	--	--
28...	--	--	--	--	--	848	--	--	--	--
AUG										
04...	--	--	--	--	--	840	--	--	--	--
SEP										
07...	--	--	--	--	--	884	--	--	--	--
29...	--	--	--	--	--	856	--	--	--	--

< Actual value is known to be less than the value shown.

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA

LOCATION.—Lat 34°38'14", long 120°25'28", in Canada de Salsipuedes Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.6 mi upstream from State Highway 246, 1.9 mi east of Lompoc, 1.8 mi downstream from Salsipuedes Creek, and 32 mi downstream from Lake Cachuma.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.—789 mi^2.

PERIOD OF RECORD.—May 1947 to November 1951 (irrigation seasons only). May 1952 to September 1963, October 1964 to September 1979, October 1980 to current year. Records equivalent, except for low-flow periods, to those published as "near Lompoc" (station 11133500), November to December 1906, October 1907 to September 1918, May 1925 to September 1960, and October 1978 to September 1980.

REVISIONS.—WSP 1928: Drainage area.

GAGE.—Two water-stage recorders. Elevation of main gage is 85 ft (prior to Apr. 10, 1991, at datum 5 ft higher) above sea level, from topographic map. See WSP 1715 for history of changes prior to Oct. 1, 1961. Since Oct. 1, 1961, at various sites and datums within 0.1 mi of present site. Supplementary gage, used for high-water periods, at site 0.6 mi downstream at datum 79.25 ft above sea level.

REMARKS.—Records good. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952, by Lake Cachuma (stations 11121000, 11122000, and 11125500). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream. Satellite telemeter at station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 80,000 ft^3/s, Jan. 25, 1969, gage height, 24.20 ft, from supplementary gage; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 9, 1907, reached a stage of 22.0 ft, site and datum then in use, discharge, 120,000 ft^3/s, from mean-depth study.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	1.2	1.9	1.5	17	138	47	101	19	3.8	2.2	1.5
2	.84	1.2	2.0	1.6	19	121	47	102	18	3.6	2.1	1.2
3	.90	1.3	1.7	1.6	14	111	46	104	17	3.6	2.0	1.2
4	1.0	1.4	1.5	1.3	15	99	44	88	16	3.7	2.0	1.3
5	1.1	1.4	1.4	1.3	18	239	43	82	16	4.0	2.0	1.0
6	1.2	1.4	1.8	1.8	17	541	41	76	15	4.0	2.1	.84
7	1.3	1.7	1.9	2.5	17	392	41	68	14	4.5	2.2	.76
8	1.1	9.1	1.6	2.8	16	572	39	65	14	4.1	2.2	.79
9	.84	5.7	1.6	3.3	16	449	36	60	13	3.7	2.3	.87
10	.61	2.7	1.8	4.4	20	e194	34	54	12	4.0	2.4	.89
11	.56	2.2	1.7	4.5	25	e152	29	50	12	4.5	2.4	1.0
12	.45	1.9	1.9	4.1	38	e142	25	50	12	4.5	2.3	.87
13	.46	2.0	2.1	3.9	44	e130	21	49	10	4.3	2.0	.77
14	.68	2.0	1.8	4.0	137	e120	26	51	9.6	3.7	1.8	19
15	.92	1.9	1.5	4.5	95	e112	28	50	8.0	3.7	1.7	51
16	1.3	2.1	1.8	5.4	63	e102	29	47	7.2	3.5	1.5	49
17	1.4	2.3	1.8	6.5	46	e97	1850	46	7.6	3.3	1.3	24
18	1.3	2.2	1.8	7.5	37	90	967	40	8.0	3.1	1.2	14
19	1.3	2.0	2.5	7.3	31	90	1130	38	7.9	2.9	1.3	7.3
20	1.2	2.2	1.7	7.7	140	86	759	31	7.2	2.8	1.4	5.1
21	.90	2.4	1.6	7.7	1150	84	396	29	6.3	e3.3	1.4	14
22	.92	2.1	1.4	7.8	866	76	324	26	6.0	e3.0	1.5	30
23	.98	1.7	1.5	8.6	4360	73	307	25	6.0	e2.7	1.5	38
24	1.1	1.9	1.6	11	1070	75	294	25	6.3	e2.5	1.5	40
25	1.2	1.9	1.4	16	276	69	292	25	6.5	2.2	1.5	40
26	1.4	2.0	1.5	17	156	62	252	25	6.7	2.3	1.3	39
27	1.4	2.1	1.9	14	290	61	168	23	5.9	2.4	1.3	38
28	1.3	2.1	1.6	15	245	60	121	23	5.3	2.4	1.5	39
29	1.2	2.2	1.5	16	157	57	103	22	5.2	2.3	1.5	38
30	1.2	2.3	1.6	17	---	54	100	21	4.5	2.2	1.4	33
31	1.2	---	1.7	16	---	50	---	20	---	2.2	1.6	---
TOTAL	32.12	68.6	53.1	223.6	9395	4698	7639	1516	302.2	102.8	54.4	531.39
MEAN	1.04	2.29	1.71	7.21	324	152	255	48.9	10.1	3.32	1.75	17.7
MAX	1.4	9.1	2.5	17	4360	572	1850	104	19	4.5	2.4	51
MIN	.45	1.2	1.4	1.3	14	50	21	20	4.5	2.2	1.2	.76
AC-FT	64	136	105	444	18630	9320	15150	3010	599	204	108	1050

e Estimated.

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.96	6.81	31.2	239	524	434	192	71.6	19.1	5.28	3.21	3.53
MAX	29.9	112	291	3303	7452	3590	1253	993	310	78.3	26.8	29.4
(WY)	1992	1966	1984	1969	1998	1983	1998	1998	1998	1998	1997	1992
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1989	1961	1990	1961	1961	1961	1960	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1952 - 2000	
ANNUAL TOTAL	11761.94		24616.21			
ANNUAL MEAN	32.2		67.3		126	
HIGHEST ANNUAL MEAN					941	1998
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	1480	Mar 25	4360	Feb 23	38000	Jan 25 1969
LOWEST DAILY MEAN	.45	Oct 12	.45	Oct 12	.00	Sep 18 1953
ANNUAL SEVEN-DAY MINIMUM	.65	Oct 9	.65	Oct 9	.00	Oct 23 1953
INSTANTANEOUS PEAK FLOW			11900	Feb 23	80000	Jan 25 1969
INSTANTANEOUS PEAK STAGE			11.53	Apr 17	24.20	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	23330		48830		90920	
10 PERCENT EXCEEDS	67		111		115	
50 PERCENT EXCEEDS	6.4		5.2		1.9	
90 PERCENT EXCEEDS	.99		1.2		.00	

11133000 SANTA YNEZ RIVER AT NARROWS NEAR LOMPOC, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1978–88, October 1996 to current year.
CHEMICAL DATA: Water years 1978–88, October 1996 to current year.

PERIOD OF DAILY RECORD.—October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1998.

REMARKS.—Interruptions in record were due to malfunction of the recording instrument. Continuous water quality is not collected Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,890 microsiemens, July 16, 1999; minimum recorded, 963 microsiemens, April 14, 1999.
WATER TEMPERATURE: Maximum recorded, 32.0°C, July 12, 13, 1999; minimum recorded, 8.3°C, Nov. 24, 1999.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Aug. 20; minimum recorded, 1,120 microsiemens, Sept. 29, 30.
WATER TEMPERATURE: Maximum recorded, 31.5°C, June 14; minimum recorded, 8.5°C, Nov. 23, 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
08...	1350	.87	--	--	--	7.7	1570	27.0	--	--	--
NOV											
12...	1500	2.1	--	--	--	7.8	1620	21.0	--	--	--
DEC											
17...	1535	1.8	--	--	--	8.2	1610	12.5	--	--	--
JAN											
14...	1325	4.2	--	--	--	8.1	1650	14.5	--	--	--
FEB											
11...	1520	21	--	--	--	8.5	1510	13.5	--	--	--
MAR											
10...	1455	103	--	--	--	7.9	1170	16.5	--	--	--
APR											
14...	1340	31	--	--	--	8.1	1450	17.5	--	--	--
26...	1510	216	764	110	9.4	8.3	1160	23.0	530	114	59.0
JUN											
02...	1150	19	--	--	--	8.0	1490	19.5	--	--	--
JUL											
07...	1655	4.4	--	--	--	8.1	1440	25.5	--	--	--
AUG											
04...	1100	2.0	--	--	--	8.1	1580	23.5	--	--	--
SEP											
08...	1200	.88	--	--	--	8.0	1630	23.0	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
08...	--	--	--	--	--	--	--	--	--	--
NOV										
12...	--	--	--	--	--	--	--	--	--	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
JAN										
14...	--	--	--	--	--	--	--	--	--	--
FEB										
11...	--	--	--	--	--	--	--	--	--	--
MAR										
10...	--	--	--	--	--	--	--	--	--	--
APR										
14...	--	--	--	--	--	--	--	--	--	--
26...	3.3	1	60.6	20	241	299	46.3	.5	23.0	317
JUN										
02...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	--	--	--	--	--	--	--	--	--	--

11133000 SANTA YNEZ RIVER AT NARROWS NEAR LOMPOC, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
08...	--	--	--	--	--	1160	--	--	--	--
NOV										
12...	--	--	--	--	--	1130	--	--	--	--
DEC										
17...	--	--	--	--	--	1150	--	--	--	--
JAN										
14...	--	--	--	--	--	1230	--	--	--	--
FEB										
11...	--	--	--	--	--	1120	--	--	--	--
MAR										
10...	--	--	--	--	--	738	--	--	--	--
APR										
14...	--	--	--	--	--	1000	--	--	--	--
26...	<.020	.307	<.010	.065	1.10	806	772	355	e10	5
JUN										
02...	--	--	--	--	--	1030	--	--	--	--
JUL										
07...	--	--	--	--	--	972	--	--	--	--
AUG										
04...	--	--	--	--	--	1090	--	--	--	--
SEP										
08...	--	--	--	--	--	1150	--	--	--	--

< Actual value is known to be less than value shown.
e Estimated.

11133000 SANTA YNEZ RIVER AT NARROWS NEAR LOMPOC, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	1650	1620	---	---	---	---	---	---	---	---
14	---	---	1650	1620	---	---	---	---	---	---	---	---
15	---	---	1640	1620	---	---	---	---	---	---	---	---
16	---	---	1670	1610	---	---	---	---	---	---	---	---
17	---	---	1640	1620	---	---	---	---	---	---	---	---
18	---	---	1660	1620	---	---	---	---	---	---	---	---
19	---	---	1660	1630	---	---	---	---	---	---	---	---
20	---	---	1640	1620	---	---	---	---	---	---	---	---
21	---	---	1650	1640	---	---	---	---	---	---	---	---
22	---	---	1660	1640	---	---	---	---	---	---	---	---
23	---	---	1660	1630	---	---	---	---	---	---	---	---
24	---	---	1660	1630	---	---	---	---	---	---	---	---
25	---	---	1660	1620	---	---	---	---	---	---	---	---
26	---	---	1660	1610	---	---	---	---	---	---	---	---
27	---	---	1650	1610	---	---	---	---	---	---	---	---
28	---	---	1660	1610	---	---	---	---	---	---	---	---
29	---	---	1650	1600	---	---	---	---	---	---	---	---
30	---	---	1650	1600	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1400	1360	1270	1220	1490	1430	1450	1400	1700	1500	1680	1610
2	1410	1370	1280	1240	1520	1480	1460	1420	1650	1520	1690	1650
3	1460	1380	1290	1260	1530	1480	1500	1420	1620	1530	1700	1660
4	1470	1380	1320	1280	1520	1480	1500	1420	1620	1550	1750	1680
5	1470	1380	1340	1300	1500	1430	1570	1410	1730	1540	1750	1690
6	1480	1380	1350	1320	1460	1420	1590	1390	1620	1570	1730	1670
7	1500	1390	1380	1340	1450	1410	1510	1360	1610	1580	1700	1630
8	1500	1390	1400	1360	1440	1410	1540	1380	1600	1580	1680	1620
9	1500	1390	1420	1380	1440	1420	1570	1400	1610	1580	1630	1600
10	1510	1400	1440	1400	1440	1410	1530	1400	1640	1580	1620	1590
11	1520	1410	1460	1420	1460	1410	1540	1380	1620	1590	1660	1600
12	1460	1420	1460	1400	1590	1400	1520	1400	1630	1570	1660	1630
13	1470	1440	1450	1380	1550	1400	1500	1410	1620	1580	1700	1630
14	1460	1440	1460	1380	1480	1410	1510	1420	1650	1610	1670	1290
15	1440	1430	1440	1380	1460	1400	1490	1430	1630	1590	1290	1230
16	1430	1410	1440	1390	1530	1400	1500	1440	1640	1610	1280	1220
17	1410	1380	1460	1410	1590	1380	1530	1450	1660	1620	1360	1280
18	1380	1360	1480	1410	1560	1370	1570	1440	1680	1640	1430	1350
19	1360	1340	1480	1420	1550	1350	1520	1450	1690	1660	1470	1430
20	1340	1300	1500	1460	1560	1350	1660	1420	1830	1680	1510	1450
21	1300	1260	1510	1460	1570	1340	1540	1450	1740	1680	1510	1450
22	1260	1240	1510	1460	1560	1330	1530	1460	1750	1660	1510	1320
23	1240	1210	1510	1460	1510	1340	1530	1480	1740	1650	1350	1290
24	1240	1170	1480	1460	1470	1350	1620	1480	1720	1660	1300	1260
25	1200	1160	1490	1450	1410	1360	1660	1470	1700	1610	1270	1220
26	1170	1150	1500	1460	1420	1370	1650	1470	1660	1600	1230	1200
27	1180	1160	1500	1460	1440	1370	1680	1470	1660	1600	1220	1170
28	1200	1170	1510	1470	1410	1380	1680	1480	1700	1610	1190	1150
29	1210	1180	1480	1430	1420	1380	1560	1500	1690	1640	1170	1120
30	1240	1200	1460	1430	1430	1380	1730	1520	1670	1640	1170	1120
31	---	---	1460	1430	---	---	1660	1510	1690	1660	---	---
MONTH	1520	1150	1510	1220	1590	1330	1730	1360	1830	1500	1750	1120

11133000 SANTA YNEZ RIVER AT NARROWS NEAR LOMPOC, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	20.5	13.0	---	---	---	---	---	---	---	---
14	---	---	20.5	13.0	---	---	---	---	---	---	---	---
15	---	---	20.5	14.5	---	---	---	---	---	---	---	---
16	---	---	20.5	14.0	---	---	---	---	---	---	---	---
17	---	---	19.5	13.0	---	---	---	---	---	---	---	---
18	---	---	19.5	11.0	---	---	---	---	---	---	---	---
19	---	---	19.0	11.0	---	---	---	---	---	---	---	---
20	---	---	20.0	13.5	---	---	---	---	---	---	---	---
21	---	---	17.5	11.5	---	---	---	---	---	---	---	---
22	---	---	17.5	9.5	---	---	---	---	---	---	---	---
23	---	---	17.0	8.5	---	---	---	---	---	---	---	---
24	---	---	18.0	8.5	---	---	---	---	---	---	---	---
25	---	---	18.5	9.0	---	---	---	---	---	---	---	---
26	---	---	18.0	9.0	---	---	---	---	---	---	---	---
27	---	---	19.0	11.0	---	---	---	---	---	---	---	---
28	---	---	18.0	11.0	---	---	---	---	---	---	---	---
29	---	---	19.0	11.5	---	---	---	---	---	---	---	---
30	---	---	19.0	11.5	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	24.0	11.5	24.5	16.0	28.5	14.0	28.0	18.0	28.5	18.5	25.0	21.0
2	24.0	12.5	23.5	15.5	26.5	17.0	26.0	18.0	26.5	19.5	26.5	21.0
3	25.0	13.5	23.5	15.5	27.0	16.0	25.5	17.5	25.5	19.5	25.5	21.5
4	22.5	16.0	24.5	15.5	27.0	16.5	25.5	17.0	24.5	19.5	26.0	21.5
5	19.5	14.5	24.0	15.0	26.5	15.5	26.0	17.0	24.5	20.5	25.5	20.0
6	21.5	14.0	24.0	15.0	27.5	16.0	24.5	17.0	22.5	20.5	26.0	19.5
7	24.0	14.0	24.5	14.5	27.5	16.5	26.0	17.0	23.5	20.5	25.0	19.0
8	23.5	14.5	25.0	17.0	26.0	17.0	26.5	17.0	24.5	20.0	23.5	21.0
9	23.5	14.0	24.5	15.5	26.5	14.5	27.0	18.0	24.0	20.0	24.0	21.5
10	23.5	13.0	23.5	14.5	26.0	14.5	25.5	18.0	24.5	20.0	23.5	21.0
11	25.5	14.0	23.5	12.0	27.5	14.5	26.0	17.5	25.0	20.5	24.0	19.5
12	26.0	14.0	24.5	12.0	26.5	14.0	27.0	17.0	25.5	20.5	25.0	19.5
13	24.5	14.0	25.5	14.0	30.0	16.0	26.5	15.0	25.0	21.0	24.5	21.5
14	22.5	15.0	24.0	13.5	31.5	17.0	27.0	15.5	25.5	19.5	29.5	21.0
15	20.0	14.5	24.0	16.0	30.5	17.5	26.5	18.0	25.5	21.0	28.5	21.5
16	16.5	14.0	25.0	14.5	31.0	18.5	26.0	18.0	26.0	20.5	28.0	20.0
17	15.0	12.5	25.0	13.5	28.5	19.0	26.0	17.5	25.5	20.5	29.5	19.5
18	16.5	12.5	27.0	14.0	29.0	18.0	26.5	18.0	25.5	19.5	29.0	18.0
19	19.0	14.0	28.0	16.0	27.5	18.0	26.0	17.5	22.5	20.5	28.5	19.5
20	19.5	15.0	29.0	15.5	29.5	17.5	25.5	17.0	22.5	20.5	29.5	19.5
21	18.0	15.5	30.0	16.0	29.0	18.0	25.5	17.0	22.5	21.0	24.0	20.5
22	20.5	14.5	30.5	17.0	29.5	18.5	26.5	17.5	22.5	21.0	26.0	19.0
23	20.5	14.5	29.0	18.0	27.5	18.0	27.5	17.0	23.5	20.5	25.5	20.0
24	21.5	14.0	23.0	18.5	29.5	18.5	26.5	18.0	23.0	21.0	27.0	17.0
25	21.5	15.0	25.0	17.0	29.0	18.5	24.0	18.0	24.0	21.5	27.0	19.5
26	24.0	15.5	26.0	14.5	28.5	18.5	24.5	18.5	23.5	21.5	26.0	19.5
27	23.0	16.0	29.0	16.0	29.0	18.5	26.5	18.0	23.5	22.0	24.5	19.0
28	21.5	15.0	29.0	16.0	29.0	18.5	26.0	18.5	23.5	22.0	24.5	16.5
29	22.0	13.0	26.5	15.5	28.5	18.5	26.0	18.5	23.5	22.5	26.0	17.5
30	24.5	13.5	26.0	15.5	28.0	18.5	26.0	18.5	25.0	22.5	26.5	18.0
31	---	---	28.0	15.0	---	---	27.0	19.0	25.0	22.5	---	---
MONTH	26.0	11.5	30.5	12.0	31.5	14.0	28.0	15.0	28.5	18.5	29.5	16.5

11134000 SANTA YNEZ RIVER AT H STREET, NEAR LOMPOC, CA.

LOCATION.—Lat 34°40'06", long 120°27'25", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, near left bank, on downstream side of H Street Bridge, on State Highway 1, and 2 mi north of Lompoc.

DRAINAGE AREA.—816 mi^2.

PERIOD OF RECORD.—October 1946 to September 1962, October 1998 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Various datums used during period of record.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952, by Lake Cachuma (stations 11121000, 11122000, and 11125500). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream. Satellite telemeter at station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge prior to regulation by Lake Cachuma, 37,900 ft^3/s, Jan. 16, 1952, gage height, 17.4 ft (datum then in use), from rating curve extended above 2,900 ft^3/s. Maximum discharge after regulation by Lake Cachuma, 11,900 ft^3/s, Feb. 23, 2000, gage height 10.65 ft; no flow for several months in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e130	e40	e100	7.8	.00	.00	.00
2	.00	.00	.00	.00	.00	e120	e38	e100	7.6	.00	.00	.00
3	.00	.00	.00	.00	.00	e110	e36	e95	8.1	.00	.00	.00
4	.00	.00	.00	.00	.00	e90	e34	e84	6.7	.00	.00	.00
5	.00	.00	.00	.00	.00	e290	e32	e76	6.5	.00	.00	.00
6	.00	.00	.00	.00	.00	e690	e30	e69	5.3	.00	.00	.00
7	.00	.00	.00	.00	.00	e500	e28	e61	3.9	.00	.00	.00
8	.00	.00	.00	.00	.00	e720	e28	e57	3.3	.00	.00	.00
9	.00	.00	.00	.00	.00	e560	e26	e52	3.3	.00	.00	.00
10	.00	.00	.00	.00	.00	e210	e26	e46	2.2	.00	.00	.00
11	.00	.00	.00	.00	.00	e160	e25	e45	1.2	.00	.00	.00
12	.00	.00	.00	.00	e.00	e140	e25	43	.85	.00	.00	.00
13	.00	.00	.00	.00	e20	e125	e24	44	.03	.00	.00	.00
14	.00	.00	.00	.00	e100	e115	e24	42	.00	.00	.00	.00
15	.00	.00	.00	.00	e80	e105	e26	39	.00	.00	.00	.00
16	.00	.00	.00	.00	e35	e95	e35	35	.00	.00	.00	.00
17	.00	.00	.00	.00	e25	e87	e2000	e33	.00	.00	.00	.00
18	.00	.00	.00	.00	e14	e90	e1000	e31	.00	.00	.00	.00
19	.00	.00	.00	.00	e12	e90	e1200	26	.00	.00	.00	.00
20	.00	.00	.00	.00	e110	e80	e800	25	.00	.00	.00	.00
21	.00	.00	.00	.00	e1200	e75	e350	23	.00	.00	.00	.00
22	.00	.00	.00	.00	e800	e60	e300	21	.00	.00	.00	.00
23	.00	.00	.00	.00	e5000	e50	e280	18	.00	.00	.00	.00
24	.00	.00	.00	.00	e1200	e54	e270	17	.00	.00	.00	.00
25	.00	.00	.00	.00	e250	e52	e267	17	.00	.00	.00	.00
26	.00	.00	.00	.00	e130	e50	e229	16	.00	.00	.00	.00
27	.00	.00	.00	.00	e350	e48	e170	18	.00	.00	.00	1.4
28	.00	.00	.00	.00	e250	e46	e139	13	.00	.00	.00	8.5
29	.00	.00	.00	.00	e110	e45	e114	12	.00	.00	.00	13
30	.00	.00	.00	.00	---	e43	e108	10	.00	.00	.00	15
31	.00	---	.00	.00	---	e42	---	9.6	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	9686.00	5072	7704	1277.6	56.78	0.00	0.00	37.90
MEAN	.000	.000	.000	.000	334	164	257	41.2	1.89	.000	.000	1.26
MAX	.00	.00	.00	.00	5000	720	2000	100	8.1	.00	.00	15
MIN	.00	.00	.00	.00	.00	42	24	9.6	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	19210	10060	15280	2530	113	.00	.00	75

e Estimated.

11134000 SANTA YNEZ RIVER AT H STREET, NEAR LOMPOC, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1952, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	2.33	9.46	301	43.9	293	69.8	15.5	2.45	.29	.000	.000
MAX	.000	14.0	54.8	1741	215	1722	416	92.9	14.7	1.73	.000	.000
(WY)	1947	1947	1947	1952	1952	1952	1952	1952	1952	1952	1947	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1947	1948	1948	1948	1948	1948	1948	1948	1947	1947	1947	1947

SUMMARY STATISTICS	WATER YEARS 1947 - 1952	
ANNUAL MEAN	62.1	
HIGHEST ANNUAL MEAN	354	1952
LOWEST ANNUAL MEAN	.000	1948
HIGHEST DAILY MEAN	19600	Jan 16 1952
LOWEST DAILY MEAN	.00	Oct 1 1946
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1946
INSTANTANEOUS PEAK FLOW	37900	Jan 16 1952
INSTANTANEOUS PEAK STAGE	17.40	Jan 16 1952
ANNUAL RUNOFF (AC-FT)	44980	
10 PERCENT EXCEEDS	25	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.94	2.35	28.0	28.8	165	106	126	30.0	4.61	.042	.000	.11
MAX	11.3	19.8	166	181	934	443	1046	282	50.6	.51	.000	1.26
(WY)	1999	1999	1956	1956	1962	1958	1958	1958	1958	1958	1953	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1953	1955	1954	1957	1955	1960	1957	1953	1953	1953	1953	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	9966.10		23834.28			
ANNUAL MEAN	27.3		65.1		40.1	
HIGHEST ANNUAL MEAN					181	1958
LOWEST ANNUAL MEAN					.051	1957
HIGHEST DAILY MEAN	1500	Mar 25	5000	Feb 23	5000	Feb 23 2000
LOWEST DAILY MEAN	.00	Jun 23	.00	Oct 1	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 23	.00	Oct 1	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			11900	Feb 23	11900	Feb 23 2000
INSTANTANEOUS PEAK STAGE			10.65	Feb 23	10.65	Feb 23 2000
ANNUAL RUNOFF (AC-FT)	19770		47280		29080	
10 PERCENT EXCEEDS	60		109		50	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11134800 MIGUELITO CREEK AT LOMPOC, CA

LOCATION.—Lat 34°37'54", long 120°27'50", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 120 ft upstream from drop structure to debris basin, and 1,900 ft south of Lompoc Union High School.

DRAINAGE AREA.—11.6 mi^2.

PERIOD OF RECORD.—October 1970 to May 6, 1986, October 1987 to current year.
CHEMICAL DATA: Water years 1980–86, 1988–97.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 97.94 ft above sea level, Santa Barbara County Flood Control District datum. Prior to May 6, 1986, on right bank at site 350 ft downstream at different datum.

REMARKS.—Records poor. No regulation or diversion upstream from station; some pumping from wells along stream for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,660 ft^3/s, Feb. 3, 1998, gage height, 4.61 ft, from theoretical rating curve above 50 ft^3/s; no flow for many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 5.83 ft, site in use prior to 1986, from floodmark, discharge, 680 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 140 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 20	1730	267	1.56	Apr. 17	0600	271	1.57
Feb. 23	0700	281	1.59				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.08	.68	1.1	.28	2.2	2.0	2.4	6.4	2.4	2.1	3.3
2	.33	.15	.69	.49	.37	1.9	2.0	2.4	5.6	2.0	1.9	1.5
3	.33	.17	.68	.43	.68	1.7	2.0	2.4	5.6	2.0	1.7	1.3
4	.33	.20	.60	.43	1.5	1.7	2.2	2.4	5.6	2.7	e1.6	e1.2
5	.33	.12	.61	.33	.43	8.8	2.4	2.4	6.0	3.4	e1.5	e1.1
6	.33	.12	.60	.33	.41	12	2.7	2.2	6.0	2.3	e1.4	e1.0
7	.33	e.81	.45	.28	.33	3.4	3.0	2.0	5.0	1.9	e1.3	e.95
8	.33	e6.1	e.40	.23	.33	12	2.8	2.1	4.8	1.7	e1.3	e.90
9	e.34	1.3	e.40	.23	.43	3.2	3.1	2.4	4.8	1.7	e1.2	e.83
10	e.36	1.2	e.39	.21	3.9	2.6	4.5	2.5	5.3	1.7	e1.2	e.77
11	e.33	1.6	e.39	.13	2.7	2.2	4.9	2.4	5.8	1.7	e1.1	e.72
12	.23	1.7	e.39	.13	5.3	2.0	4.8	2.7	6.2	1.8	e1.1	e.68
13	.20	1.7	e.39	.13	4.7	1.9	4.9	3.5	6.6	1.7	e1.4	e.64
14	.08	1.6	e.38	.13	4.7	1.7	6.7	4.3	7.0	1.9	e1.6	e.60
15	.08	1.4	e.38	.13	1.5	1.8	6.8	5.6	6.6	2.4	e2.0	e.56
16	.07	1.4	e.38	.23	1.0	2.0	7.5	6.5	6.0	3.2	2.4	e.53
17	.09	1.5	e.37	.33	.64	1.9	66	7.8	6.3	2.8	2.4	e.49
18	.13	1.4	e.37	.33	.34	1.7	16	8.7	6.6	2.9	2.3	e.46
19	.13	1.4	e.57	.28	.29	1.7	4.1	9.2	6.4	2.7	2.7	.43
20	.14	1.5	e.58	.23	21	1.7	3.3	10	6.9	2.5	2.7	.43
21	.13	1.1	e.58	.23	30	1.7	2.9	9.2	6.1	2.4	3.1	.43
22	.13	1.1	e.59	.23	6.2	2.0	2.8	10	5.4	2.4	3.3	.38
23	.13	1.1	e.59	.31	33	2.0	2.6	12	5.5	2.5	3.4	.37
24	.22	.82	e.60	.42	4.0	2.0	2.4	11	5.7	2.0	3.8	.41
25	.20	.70	e.60	.68	2.2	1.9	2.4	8.6	7.1	2.0	3.9	.43
26	.24	.99	e.63	.23	1.7	1.7	2.4	6.7	7.8	1.8	4.2	.43
27	.23	.70	1.3	.23	13	1.8	2.4	6.3	3.3	1.7	4.4	.43
28	.17	.70	.70	.23	2.9	1.7	2.4	6.0	2.7	1.7	3.9	.43
29	.14	1.1	.66	.23	2.4	1.8	2.4	5.6	2.4	1.7	3.8	.43
30	.10	1.1	.69	.30	---	1.9	2.4	5.9	2.6	2.0	5.1	.38
31	.09	---	.75	.26	---	2.0	---	6.2	---	2.0	5.4	---
TOTAL	6.60	34.86	17.39	9.46	146.23	88.6	176.8	171.4	168.1	67.6	79.2	22.51
MEAN	.21	1.16	.56	.31	5.04	2.86	5.89	5.53	5.60	2.18	2.55	.75
MAX	.36	6.1	1.3	1.1	33	12	66	12	7.8	3.4	5.4	3.3
MIN	.07	.08	.37	.13	.28	1.7	2.0	2.0	2.4	1.7	1.1	.37
AC-FT	13	69	34	19	290	176	351	340	333	134	157	45

e Estimated.

11134800 MIGUELITO CREEK AT LOMPOC, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.28	.61	1.64	3.68	7.53	8.61	2.21	1.30	.92	.63	.48	.36
MAX	1.39	2.77	8.69	37.9	75.6	106	14.2	6.04	5.60	2.64	2.55	2.05
(WY)	1984	1996	1993	1995	1998	1995	1983	1983	2000	1983	2000	1983
MIN	.001	.001	.008	.019	.047	.091	.076	.053	.008	.016	.006	.000
(WY)	1973	1978	1990	1991	1972	1972	1972	1972	1992	1992	1972	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	475.76		988.75			
ANNUAL MEAN	1.30		2.70		2.34	
HIGHEST ANNUAL MEAN					13.8	1995
LOWEST ANNUAL MEAN					.15	1972
HIGHEST DAILY MEAN	44	Mar 25	66	Apr 17	1170	Mar 11 1995
LOWEST DAILY MEAN	.07	Oct 16	.07	Oct 16	.00	Jul 21 1971
ANNUAL SEVEN-DAY MINIMUM	.10	Oct 14	.10	Oct 14	.00	Sep 8 1971
INSTANTANEOUS PEAK FLOW			281	Feb 23	2660	Feb 3 1998
INSTANTANEOUS PEAK STAGE			1.59	Feb 23	4.61	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	944		1960		1690	
10 PERCENT EXCEEDS	2.2		6.2		2.9	
50 PERCENT EXCEEDS	.70		1.7		.41	
90 PERCENT EXCEEDS	.23		.23		.02	

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA

LOCATION.—Lat 34°46'56", long 120°31'47", in Jesus Maria Grant, Santa Barbara County, Hydrologic Unit 18060009, on Vandenberg Military Reservation, on downstream side of San Antonio Road Bridge, 0.7 mi east of junction of San Antonio Road and Lompoc–Casmalia Road, and 3.8 mi south of Casmalia.

DRAINAGE AREA.—135 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1955 to September 1993, October 1994 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 160 ft above sea level, from topographic map. Prior to June 27, 1958, at datum 2.00 ft higher.

REMARKS.—Records fair. No regulation upstream from station. Flow affected by pumping from wells along stream for irrigation upstream from station. At times water is released to creek from Vandenberg Air Force Base Water Treatment Plant.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,680 ft^3/s, Mar. 1, 1983, gage height, 14.32 ft, from rating curve extended above 1,100 ft^3/s on basis of slope-area measurement at gage height 12.93 ft; minimum daily, 0.10 ft^3/s, June 19, 20, 1957.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	1945	165	3.39	Mar. 5	0845	531	4.53
Feb. 23	1530	793	5.86	Apr. 17	1030	420	3.80
Feb. 27	1045	485	4.51				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.80	e.77	e.62	e.72	1.0	e29	e12	2.3	1.6	1.1	.66	.76
2	e.59	e.72	e.61	e.71	.99	e26	e9.6	2.2	1.4	.98	.66	.62
3	e.76	e.74	e.57	e.67	1.0	e21	e13	2.5	2.0	.96	.67	.60
4	e.65	e.76	e.59	e.67	1.3	e20	e8.4	2.2	1.2	.95	.67	.61
5	e.64	e.68	e.56	e.62	1.1	e164	e10	2.7	1.2	.95	.67	.84
6	e.70	e.79	e.59	e.59	1.1	e134	e9.3	2.3	1.3	.96	.72	.65
7	e.93	e.85	e.61	e.62	1.1	e42	e7.6	2.3	1.3	1.1	.72	.62
8	e.61	e1.3	e.66	e.69	1.1	e64	e10	2.1	1.2	.98	.71	.84
9	e.61	e.77	e.86	e.74	1.2	e22	e10	2.1	1.1	.97	.73	.75
10	e.95	e.80	e.80	e.66	1.7	e37	e7.0	2.0	1.2	.90	.75	.96
11	e.61	e.77	e.82	e.65	2.0	e29	2.5	1.9	1.4	.94	.68	.83
12	e.63	e.82	e.90	e.68	9.1	e23	2.2	2.1	1.2	.92	.68	.77
13	e1.0	e.89	e.78	e.75	16	e24	2.3	1.7	1.2	.89	.68	.75
14	e.76	e.76	e.84	e.75	19	e31	2.9	2.0	1.1	.84	.66	.78
15	e.74	e.72	e.91	e.86	6.5	e27	2.3	1.7	1.1	.81	.68	.83
16	e.77	e.79	e.93	e1.0	2.4	e29	2.6	1.6	1.0	.83	.63	.86
17	e.74	e.76	e.90	e.94	4.8	e21	118	2.3	1.1	.80	.60	.88
18	e.78	e.70	e.80	e.85	2.1	e32	49	2.0	1.2	.73	.60	.96
19	e.77	e.73	e.90	e.79	1.0	e32	10	1.9	1.0	.66	.62	1.9
20	e.82	e.62	e.81	e1.1	9.1	e20	6.0	1.6	.90	.68	.66	3.1
21	e.79	e.59	e.81	e1.3	157	e19	4.3	1.7	2.1	.68	e.67	1.4
22	e.76	e.58	e.78	e1.0	59	e20	3.2	1.4	.87	.69	e.69	5.0
23	e.82	e.67	e.81	e1.7	e362	e11	2.7	2.1	.87	.68	.70	7.0
24	e.89	e.62	e2.1	e1.7	e107	e12	2.8	1.6	.93	.67	.66	7.2
25	e.93	e.68	e.69	e1.6	e39	e12	2.7	2.0	1.0	.68	.65	7.7
26	e.83	e.64	e.77	e1.3	e19	e9.1	2.6	1.5	.92	.69	.67	e7.9
27	e.80	e.66	e.80	e.98	e169	e14	2.7	1.6	.90	.67	.68	e8.1
28	e.75	e.63	e.73	e.98	e96	e10	2.4	1.3	.90	.67	.71	e7.4
29	e.72	e.59	e.78	e1.1	e52	e8.0	2.6	1.3	.90	.68	.68	e11
30	e.71	e.56	e.79	e1.0	---	e11	2.4	1.3	.93	.66	.67	e11
31	e.77	---	e.73	e1.5	---	e10	---	1.2	---	.67	.76	---
TOTAL	23.63	21.96	24.85	29.22	1143.59	963.1	323.1	58.5	35.02	25.39	20.99	92.61
MEAN	.76	.73	.80	.94	39.4	31.1	10.8	1.89	1.17	.82	.68	3.09
MAX	1.0	1.3	2.1	1.7	362	164	118	2.7	2.1	1.1	.76	11
MIN	.59	.56	.56	.59	.99	8.0	2.2	1.2	.87	.66	.60	.60
AC-FT	47	44	49	58	2270	1910	641	116	69	50	42	184

e Estimated.

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.79	1.56	2.83	11.6	29.5	20.6	7.41	1.45	.94	.68	.69	.78
MAX	2.36	6.73	10.6	104	273	234	149	3.85	2.07	1.59	1.84	3.09
(WY)	1964	1973	1956	1995	1998	1983	1958	1983	1983	1983	1981	2000
MIN	.19	.19	.29	.41	.54	.44	.30	.24	.17	.18	.21	.16
(WY)	1990	1990	1990	1991	1991	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	782.35		2761.96			
ANNUAL MEAN	2.14		7.55		6.44	
HIGHEST ANNUAL MEAN					39.7	1983
LOWEST ANNUAL MEAN					.47	1990
HIGHEST DAILY MEAN	129	Mar 25	362	Feb 23	2040	Mar 2 1983
LOWEST DAILY MEAN	.56	Nov 30	.56	Nov 30	.10	Jun 19 1957
ANNUAL SEVEN-DAY MINIMUM	.59	Nov 29	.59	Nov 29	.13	Jul 27 1990
INSTANTANEOUS PEAK FLOW			793	Feb 23	4680	Mar 1 1983
INSTANTANEOUS PEAK STAGE			5.86	Feb 23	14.32	Mar 1 1983
ANNUAL RUNOFF (AC-FT)	1550		5480		4670	
10 PERCENT EXCEEDS	3.1		13		4.8	
50 PERCENT EXCEEDS	.96		.94		1.0	
90 PERCENT EXCEEDS	.65		.66		.38	

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1978 to current year.
CHEMICAL DATA: Water years 1978 to current year.
pH: December 1981 to September 1983.
WATER TEMPERATURE: December 1981 to September 1983.

PERIOD OF DAILY RECORD.—December 1981 to September 1983.
pH: December 1981 to September 1983.
WATER TEMPERATURE: December 1981 to September 1983.

INSTRUMENTATION.—Water-quality monitor from December 1981 to September 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
06...	1150	.75	--	--	--	8.0	3010	18.0	--	--	--
NOV											
01...	1315	.68	--	--	--	8.0	2940	17.0	--	--	--
DEC											
08...	1350	.72	--	--	--	8.1	2830	10.0	--	--	--
JAN											
03...	1600	.71	--	--	--	7.9	2800	10.0	--	--	--
31...	1145	1.1	--	--	--	7.8	2770	11.5	--	--	--
MAR											
09...	1645	21	--	--	--	8.0	1780	15.5	--	--	--
APR											
14...	1550	3.7	--	--	--	8.2	3000	21.5	--	--	--
24...	1330	3.1	763	93	7.8	8.1	3600	24.0	1200	309	96.6
JUN											
10...	1135	1.1	--	--	--	8.1	3420	23.0	--	--	--
28...	1245	.87	--	--	--	8.2	3270	27.5	--	--	--
AUG											
07...	1355	.76	--	--	--	8.2	3080	27.5	--	--	--
SEP											
07...	1120	.55	--	--	--	8.1	3120	19.0	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
APR										
14...	--	--	--	--	--	--	--	--	--	--
24...	18.1	5	357	39	357	436	425	.4	54.0	1030
JUN										
10...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
06...	--	--	--	--	--	1960	--	--	--	--
NOV										
01...	--	--	--	--	--	1920	--	--	--	--
DEC										
08...	--	--	--	--	--	1830	--	--	--	--
JAN										
03...	--	--	--	--	--	1830	--	--	--	--
31...	--	--	--	--	--	1840	--	--	--	--
MAR										
09...	--	--	--	--	--	1240	--	--	--	--
APR										
14...	--	--	--	--	--	2280	--	--	--	--
24...	8.23	2.83	.944	.816	3.60	2650	2530	2040	<10	1370
JUN										
10...	--	--	--	--	--	2330	--	--	--	--
28...	--	--	--	--	--	2180	--	--	--	--
AUG										
07...	--	--	--	--	--	2040	--	--	--	--
SEP										
07...	--	--	--	--	--	2130	--	--	--	--

< Actual value is known to be less than value shown.

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA

LOCATION.—Lat 35°01'19", long 120°13'39", SW 1/4 sec.14, T.11 N., R.32 W., San Luis Obispo–Santa Barbara County Line, Hydrologic Unit 18060007, on downstream side of bridge on State Highway 166, 1.5 mi downstream from Buckhorn Canyon, and 13 mi northeast of Santa Maria.

DRAINAGE AREA.—886 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1903 to December 1905 (published as Santa Maria River near Santa Maria), October 1959 to current year. Monthly discharge only for October 1903 and July 1904. Yearly estimate for water year 1941 (incomplete), published in WSP 1315-B.

REVISED RECORDS.—WDR CA-71-1: Drainage area. WDR CA-77-1: 1976.

GAGE.—Water-stage recorder. Elevation of gage is 760 ft above sea level, from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 26,200 ft^3/s, Feb. 23, 1998, gage height, 14.76 ft, from rating curve extended above 4,900 ft^3/s on basis of slope-area measurement at gage height 14.76 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1645	653	8.06	Apr. 18	1715	363	7.43
Feb. 27	1730	280	7.19				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.12	.19	.00	2.0	42	7.8	7.1	2.4	1.2	.45	.34
2	.16	.14	.14	.00	1.7	30	7.7	6.8	2.4	1.1	.37	.52
3	.17	.21	.06	.00	1.7	28	7.5	6.6	2.4	1.1	.34	.31
4	.16	.21	.12	.00	2.0	28	7.3	6.1	2.3	1.2	.34	.49
5	.16	.22	.15	.00	1.9	44	7.4	5.8	2.3	1.2	.32	.46
6	.14	.27	.13	.00	1.6	67	7.4	5.6	2.2	1.2	.32	.50
7	.11	.39	.07	.00	1.3	51	7.5	5.4	2.1	1.2	.36	.50
8	.11	.76	.08	.00	1.3	50	7.1	5.3	2.2	1.2	.39	.40
9	.10	.40	.21	.00	1.2	62	6.7	5.2	2.1	1.0	.36	.33
10	.08	.30	.20	.00	3.0	58	6.5	5.0	1.9	.95	.34	.58
11	.15	.22	.17	.00	3.8	50	6.0	4.6	1.8	.91	.38	.32
12	.19	.20	.10	.00	36	42	5.7	4.5	1.7	.93	.35	.36
13	.17	.17	.10	.00	39	36	5.4	4.5	1.6	.92	.32	.19
14	.22	.18	.00	.00	46	31	6.8	4.3	1.6	.90	.32	.17
15	.22	.17	.01	.00	31	26	7.0	4.3	1.5	.89	.34	.16
16	.19	.34	.00	.00	17	21	6.6	4.5	1.5	.88	.32	.17
17	.22	.36	.00	.00	18	18	76	4.3	1.5	.79	.30	.26
18	.21	.25	.00	.48	13	15	141	3.9	1.5	.76	.32	.28
19	.18	.30	.00	.00	9.2	14	81	3.6	1.5	.73	.35	.26
20	.15	.30	.00	.00	12	13	42	3.4	1.6	.71	.34	.25
21	.16	.22	.00	.51	144	12	29	e3.9	1.5	.70	.34	.40
22	e.15	.18	.00	.76	167	12	20	e4.0	1.5	.69	.41	.33
23	e.15	.24	.00	1.4	271	11	16	3.5	1.5	.70	.40	.29
24	e.14	.22	.00	3.3	121	11	12	3.3	1.5	.71	.36	.29
25	e.14	.20	.00	3.8	73	10	10	3.0	1.4	.69	.35	.27
26	e.13	.19	.00	3.0	61	9.6	9.3	3.0	1.4	.68	.39	.31
27	.25	.16	.00	2.6	118	9.3	8.7	2.9	1.3	.65	.39	.27
28	.30	.15	.00	2.4	87	9.0	8.2	2.6	1.3	.60	.39	.29
29	e.25	.20	.00	2.2	62	8.8	7.8	2.6	1.3	.54	.44	.26
30	.20	.18	.00	2.2	---	8.8	7.4	2.7	1.3	.51	.37	.21
31	.21	---	.00	2.3	---	7.9	---	2.7	---	.50	.29	---
TOTAL	5.36	7.45	1.73	24.95	1346.7	835.4	578.8	135.0	52.1	26.74	11.06	9.77
MEAN	.17	.25	.056	.80	46.4	26.9	19.3	4.35	1.74	.86	.36	.33
MAX	.30	.76	.21	3.8	271	67	141	7.1	2.4	1.2	.45	.58
MIN	.08	.12	.00	.00	1.2	7.9	5.4	2.6	1.3	.50	.29	.16
AC-FT	11	15	3.4	49	2670	1660	1150	268	103	53	22	19

e Estimated.

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.82	2.60	15.4	40.2	119	105	27.2	8.42	4.46	1.99	1.24	1.73
MAX	11.3	23.6	275	467	1210	974	243	96.9	66.0	26.2	20.8	22.7
(WY)	1999	1966	1967	1969	1998	1995	1998	1998	1998	1998	1998	1990
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1960	1960	1960	1960	1964	1961	1961	1961	1961	1960	1960	1960

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	2063.49		3035.06			
ANNUAL MEAN	5.65		8.29		26.9	
HIGHEST ANNUAL MEAN					168	1998
LOWEST ANNUAL MEAN					.002	1964
HIGHEST DAILY MEAN	35	Feb 9	271	Feb 23	10000	Feb 24 1998
LOWEST DAILY MEAN	.00	Dec 14	.00	Dec 14	.00	Oct 1 1959
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 16	.00	Dec 16	.00	Oct 1 1959
INSTANTANEOUS PEAK FLOW			653	Feb 23	26200	Feb 23 1998
INSTANTANEOUS PEAK STAGE			8.06	Feb 23	14.76	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	4090		6020		19460	
10 PERCENT EXCEEDS	15		18		21	
50 PERCENT EXCEEDS	1.6		.70		.52	
90 PERCENT EXCEEDS	.11		.01		.00	

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water year 1978 to current year.
CHEMICAL DATA: Water year 1978 to current year.
SEDIMENT DATA: January 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
07...	1050	.12	--	--	--	8.2	1510	20.0	--	--	--
NOV											
02...	1240	.04	--	--	--	8.3	1420	22.5	--	--	--
FEB											
08...	1400	1.3	--	--	--	8.2	2300	20.5	--	--	--
MAR											
10...	1400	60	--	--	--	8.3	1410	17.5	--	--	--
APR											
07...	1115	8.1	--	--	--	8.3	1910	20.0	--	--	--
25...	1545	10	745	105	8.1	8.1	2310	27.0	880	193	97.2
JUN											
12...	0905	1.8	--	--	--	8.1	1560	19.0	--	--	--
27...	1200	1.3	--	--	--	8.0	1460	27.5	--	--	--
AUG											
05...	1250	.32	--	--	--	8.2	1440	33.5	--	--	--
SEP											
07...	1540	.10	--	--	--	8.2	1400	28.0	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
07...	--	--	--	--	--	--	--	--	--	--
NOV										
02...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
10...	--	--	--	--	--	--	--	--	--	--
APR										
07...	--	--	--	--	--	--	--	--	--	--
25...	5.9	3	185	31	213	260	130	.3	17.0	896
JUN										
12...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
AUG										
05...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
07...	--	--	--	--	--	1050	--	--	--	--
NOV										
02...	--	--	--	--	--	1070	--	--	--	--
FEB										
08...	--	--	--	--	--	1900	--	--	--	--
MAR										
10...	--	--	--	--	--	996	--	--	--	--
APR										
07...	--	--	--	--	--	1470	--	--	--	--
25...	<.020	.299	<.010	.011	2.43	1790	1650	467	<10	24
JUN										
12...	--	--	--	--	--	1120	--	--	--	--
27...	--	--	--	--	--	1100	--	--	--	--
AUG										
05...	--	--	--	--	--	1080	--	--	--	--
SEP										
07...	--	--	--	--	--	1060	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JAN 2000					
24...	1145	3.1	15.5	126	1.1
FEB					
08...	1410	1.3	20.5	6	.02
17...	1250	22	16.0	252	15
21...	1225	102	9.5	3540	976
22...	1425	107	11.0	55200	15900
MAR					
01...	1450	40	15.5	8070	865
10...	1410	60	17.5	1020	164
15...	1440	26	24.0	370	26
20...	1225	14	18.5	54	2.1
29...	1540	8.7	23.5	24	.56

< Actual value is known to be less than value shown.

11138500 SISQUOC RIVER NEAR SISQUOC, CA—Continued

LOCATION.—Lat 34°50'23", long 120°10'02", in Sisquoc Grant, Santa Barbara County, Hydrologic Unit 18060008, on left bank 2.6 mi upstream from La Brea Creek and 7 mi east of Sisquoc.

DRAINAGE AREA.—281 mi^2.

PERIOD OF RECORD.—Water years 1978 to current year.
WATER-DISCHARGE: WATER YEARS 1944–99.
CHEMICAL DATA: Water years 1978 to current year.

REMARKS.—Water-discharge records were collected during water years 1943–99.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
13...	1315	1.5	--	--	--	[1]8.2	--	18.5	--	--	--
NOV											
04...	1520	1.3	--	--	--	8.0	1310	19.0	--	--	--
DEC											
07...	1440	1.6	--	--	--	8.3	1370	14.0	--	--	--
JAN											
04...	1435	1.5	--	--	--	8.2	1290	13.0	--	--	--
FEB											
02...	1445	2.0	--	--	--	8.3	1340	17.0	--	--	--
MAR											
14...	1300	169	--	--	--	8.5	967	15.5	--	--	--
APR											
15...	1130	31	--	--	--	8.4	1150	15.0	--	--	--
MAY											
10...	1120	31	750	95	8.9	8.4	1130	17.5	510	98.0	64.1
JUN											
12...	1105	7.6	--	--	--	8.3	1190	18.5	--	--	--
27...	1350	3.5	--	--	--	8.2	1190	25.5	--	--	--
AUG											
05...	1555	1.1	--	--	--	8.4	1160	29.0	--	--	--
SEP											
14...	1245	.82	--	--	--	8.2	1250	21.0	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT											
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	--	--	--	--	--	--	--	--	--	--	--
FEB											
02...	--	--	--	--	--	--	--	--	--	--	--
MAR											
14...	--	--	--	--	--	--	--	--	--	--	--
APR											
15...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	1.9	1	49.8	18	215	254	4	18.0	.4	17.4	390
JUN											
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

[1] Lab value.

11138500 SISQUOC RIVER NEAR SISQUOC, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
13...	--	--	--	--	--	1010	--	--	--	--
NOV										
04...	--	--	--	--	--	996	--	--	--	--
DEC										
07...	--	--	--	--	--	1030	--	--	--	--
JAN										
04...	--	--	--	--	--	1040	--	--	--	--
FEB										
02...	--	--	--	--	--	1040	--	--	--	--
MAR										
14...	--	--	--	--	--	673	--	--	--	--
APR										
15...	--	--	--	--	--	866	--	--	--	--
MAY										
10...	<.020	<.050	<.010	.011	1.12	826	768	138	<10	3
JUN										
12...	--	--	--	--	--	894	--	--	--	--
27...	--	--	--	--	--	882	--	--	--	--
AUG										
05...	--	--	--	--	--	884	--	--	--	--
SEP										
14...	--	--	--	--	--	938	--	--	--	--

< Actual value is known to be less than value shown.

11140000 SISQUOC RIVER NEAR GAREY, CA

LOCATION.—Lat 34°53'38", long 120°18'20", in SW 1/4 sec.36,T.10 N., R.33W., Santa Barbara County, Hydrologic Unit 18060008, on downstream side of Santa Maria Mesa Road Bridge, near left bank, 0.6 mi northeast of Garey, and 3.7 mi downstream from Tepusque t Creek.

DRAINAGE AREA.—471 mi^2.

PERIOD OF RECORD.—October 1940 to current year. Records for water year 1941 incomplete; yearly estimate and monthly discharge o nly for October 1940 and January 1941, published in WSP 1315-B.

REVISED RECORDS.—WSP 1011: 1941, 1943. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of main gage is 354.8 ft above sea level, Santa Barbara County datum. See WSP 1735 for history of changes of main gage prior to Oct. 1, 1959. Oct. 1, 1959, to Dec. 30, 1965, at datum 6.00 ft higher. Since Oct. 1, 1959, supplementary gage on downstream side of bridge near right bank at same datum. Supplementary gage discontinued June 8, 1992.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation of about 7,000 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33,600 ft^3/s, Mar. 1, 1983, gage height, 11.16 ft, from rating curve extended above 22,000 ft^3/s; maximum gage height, 13.50 ft, Dec. 6, 1966; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	2300	3,980	7.35	Mar. 6	0530	467	6.01
Feb. 28	0245	397	5.96	Apr. 17	2315	1,520	6.57

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	138	25	e9.4	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	102	21	e8.3	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	85	21	e7.2	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	83	18	e6.1	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	139	17	e5.5	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	335	16	e4.7	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	258	15	e4.2	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	243	14	e3.6	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	290	12	e3.1	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	228	11	e2.7	.00	.00	.00	.00
11	.00	.00	.00	.00	e26	189	7.9	e2.4	.00	.00	.00	.00
12	.00	.00	.00	.00	e81	168	4.5	e2.3	.00	.00	.00	.00
13	.00	.00	.00	.00	e75	142	4.4	1.8	.00	.00	.00	.00
14	.00	.00	.00	.00	e83	132	8.0	1.0	.00	.00	.00	.00
15	.00	.00	.00	.00	e62	131	10	1.0	.00	.00	.00	.00
16	.00	.00	.00	.00	e28	126	10	.81	.00	.00	.00	.00
17	.00	.00	.00	.00	e33	110	221	.44	.00	.00	.00	.00
18	.00	.00	.00	.00	e24	100	736	.18	.00	.00	.00	.00
19	.00	.00	.00	.00	e17	86	281	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	e34	81	126	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	e470	76	78	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	441	e68	54	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	652	e60	41	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	676	e55	35	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	224	e49	32	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	132	e44	27	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	200	e39	22	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	358	e36	18	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	201	e32	16	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	e29	11	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	e26	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	3817.00	3680	1912.8	64.73	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	132	119	63.8	2.09	.000	.000	.000	.000
MAX	.00	.00	.00	.00	676	335	736	9.4	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	26	4.4	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	7570	7300	3790	128	.00	.00	.00	.00

e Estimated.

11140000 SISQUOC RIVER NEAR GAREY, CA Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.12	2.65	18.3	99.6	230	186	90.0	21.1	4.22	.77	.15	.16
MAX	3.88	39.0	506	1531	3310	1833	1072	407	135	35.8	5.99	4.20
(WY)	1968	1966	1967	1969	1998	1983	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1944	1944	1947	1947	1947	1946	1945	1942	1942	1942

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	4971.03		9474.53			
ANNUAL MEAN	13.6		25.9		53.5	
HIGHEST ANNUAL MEAN					446	1998
LOWEST ANNUAL MEAN					.000	1948
HIGHEST DAILY MEAN	649	Feb 10	736	Apr 18	13900	Feb 3 1998
LOWEST DAILY MEAN	.00	Jun 4	.00	Oct 1	.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 4	.00	Oct 1	.00	Oct 1 1941
INSTANTANEOUS PEAK FLOW			3980	Feb 21	33600	Mar 1 1983
INSTANTANEOUS PEAK STAGE			7.35	Feb 21	13.50	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	9860		18790		38730	
10 PERCENT EXCEEDS	45		77		51	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11140585 SANTA MARIA RIVER AT SUEY CROSSING, NEAR SANTA MARIA, CA

LOCATION.—Lat 34°57'38", long 120°24'08",Santa Barbara County, Hydrologic Unit 18060008, on left bank wing wall, on Suey Road, below the mouth of Suey Creek, and 0.9 mi east of Santa Maria City Boundary.

PERIOD OF RECORD.—June 1999 to September 2000 (discontinued).

WATER DISCHARGE: Water year 1999.

SEDIMENT DATA: June 1999 to September 2000 (discontinued).

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
FEB					
24...	1315	376	11.0	901	915
MAR					
07...	1510	164	11.5	246	109
30...	1310	116	21.0	395	124
APR					
07...	1430	127	21.0	266	91

11141050 ORCUTT CREEK NEAR ORCUTT, CA

LOCATION.—Lat 34°53'01", long 120°29'38", in SW 1/4 SE 1/4 sec.6, T.9 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060008, on right bank, 10 ft upstream from Black Road Bridge, 0.2 mi northeast of State Highway 1, and 3.0 mi northwest of Orcutt.

DRAINAGE AREA.—18.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1982 to September 1992, October 1994 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 160 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Natural flow affected by pumping and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,830 ft^3/s, Mar. 1, 1983, gage height, 7.53 ft, from floodmarks, from rating curve extended above 10 ft^3/s on basis of slope-area measurements at gage heights 4.83 and 7.53 ft; maximum gage height, 11.07 ft, Mar. 10, 1995; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharge greater than base discharge of 25 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 8	0330	58	2.18	Feb. 27	unknown	684	4.99
Feb. 12	0200	153	2.80	Mar. 8	unknown	549	4.57
Feb. 23	unknown	780	5.27	Apr. 17	0630	523	4.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.01	.06	.45	.08	e3.4	.20	.25	.11	e.10	.05	.00
2	.02	.02	.07	.10	.07	e2.5	.28	.23	.08	e.15	.01	.00
3	.01	.04	.07	.10	.07	e2.1	.19	.24	.15	e.12	.01	.00
4	.04	.05	.12	.11	1.7	e1.7	.19	.21	.10	e.11	.39	.00
5	.02	.04	.08	.23	.29	e99	.23	.22	.08	e.09	.01	.00
6	.01	.02	.06	.11	.07	e110	.24	.23	.07	e.10	.00	.00
7	.02	.19	.11	.18	.07	e16	.20	.25	.07	e.10	.00	.09
8	.02	12	.07	.21	.07	e95	.26	.22	.10	e.10	.00	.28
9	.02	.39	.05	.16	.07	13	.22	.16	.07	e.08	.00	.03
10	.02	.08	.06	.14	3.0	2.8	.18	.21	.10	e.07	.00	.00
11	.01	.07	.04	.14	3.4	1.8	.29	.18	.09	e.07	.17	.00
12	.03	.07	.04	.12	28	1.5	.15	.16	.04	e.05	.03	.29
13	.02	.06	.05	.09	37	1.1	.15	.27	.06	e.05	.03	.01
14	.01	.07	.06	.10	27	1.0	2.3	.17	.05	e.05	.00	.00
15	.03	.11	.06	.10	3.2	.88	.91	.15	.06	e.04	.00	.00
16	.03	.13	.05	.33	13	.66	.25	.14	.06	e.04	.00	.00
17	.02	.11	.07	.62	10	.54	100	.12	.10	e.03	.00	.00
18	.01	.11	.10	.69	.38	.52	48	.16	.07	e.04	.00	.00
19	.03	.18	.14	.49	.09	.53	3.8	.12	.04	e.03	.00	.00
20	.02	.09	.05	.21	32	.52	2.0	.14	.09	e.02	.00	.00
21	.04	.06	.06	.15	183	.51	1.4	.13	.06	e.02	.00	.03
22	.02	.06	.05	.12	e23	.44	1.0	.12	.06	e.02	.00	.00
23	.01	.07	.06	.92	e210	.39	.84	.11	.06	e.01	.00	.00
24	.01	.09	.07	2.1	e27	.41	.68	.17	.07	e.01	.04	.04
25	.02	.29	.30	3.4	e6.4	.47	.45	.13	.09	e.01	.00	.02
26	.01	.06	.07	1.3	e2.3	.42	.41	.12	.08	e.03	.00	.00
27	.02	.09	.06	.15	e55	.41	.40	.14	.35	e.00	.00	.03
28	.05	.06	.05	.08	e7.9	.37	.31	.08	.18	e.00	.05	.01
29	.01	.09	.08	.08	e5.7	.33	.29	.08	e.13	e.01	.00	.00
30	.00	.10	.09	.08	---	.36	.34	.08	e.13	e.02	.00	.04
31	.01	---	.10	.19	---	.25	---	.07	---	e.01	.00	---
TOTAL	0.63	14.81	2.40	13.25	679.86	358.91	166.16	5.06	2.80	1.58	0.79	0.87
MEAN	.020	.49	.077	.43	23.4	11.6	5.54	.16	.093	.051	.025	.029
MAX	.05	12	.30	3.4	210	110	100	.27	.35	.15	.39	.29
MIN	.00	.01	.04	.08	.07	.25	.15	.07	.04	.00	.00	.00
AC-FT	1.2	29	4.8	26	1350	712	330	10	5.6	3.1	1.6	1.7

e Estimated.

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.078	.32	.75	3.36	10.4	13.5	1.55	.40	.16	.11	.086	.079
MAX	.29	1.27	2.68	27.5	76.7	120	8.88	3.04	.43	.34	.23	.26
(WY)	1984	1998	1992	1995	1998	1995	1998	1998	1998	1998	1983	1998
MIN	.000	.000	.018	.040	.070	.059	.020	.031	.009	.003	.003	.005
(WY)	1995	1995	1996	1985	1984	1989	1990	1986	1996	1996	1992	1996

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	397.21		1247.12			
ANNUAL MEAN	1.09		3.41		2.53	
HIGHEST ANNUAL MEAN					13.8	1995
LOWEST ANNUAL MEAN					.090	1990
HIGHEST DAILY MEAN	73	Mar 25	210	Feb 23	1460	Mar 10 1995
LOWEST DAILY MEAN	.00	Jul 24	.00	Oct 30	.00	Oct 1 1982
ANNUAL SEVEN-DAY MINIMUM	.02	Oct 26	.00	Aug 14	.00	Oct 1 1982
INSTANTANEOUS PEAK FLOW			780	Feb 23	1830	Mar 1 1983
INSTANTANEOUS PEAK STAGE			5.27	Feb 23	11.07	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	788		2470		1830	
10 PERCENT EXCEEDS	.69		1.7		1.3	
50 PERCENT EXCEEDS	.11		.09		.08	
90 PERCENT EXCEEDS	.02		.00		.00	

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1983-92, October 1993 to current year.
CHEMICAL DATA: Water years 1983–92, October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
06...	1050	.01	--	--	--	7.7	2750	16.0	--	--	--
NOV											
01...	1140	.02	--	--	--	8.0	2960	13.0	--	--	--
DEC											
08...	1220	.07	--	--	--	8.5	2510	17.5	--	--	--
JAN											
04...	1040	.11	--	--	--	8.1	2430	13.5	--	--	--
31...	1445	.40	--	--	--	8.6	2770	14.5	--	--	--
MAR											
08...	1540	17	--	--	--	7.8	521	11.0	--	--	--
APR											
10...	1030	.23	--	--	--	8.6	3030	14.5	--	--	--
25...	0945	.45	762	101	10.9	8.1	2820	11.5	560	117	65.0
JUN											
10...	1020	.19	--	--	--	8.0	3240	15.0	--	--	--
29...	0905	.13	--	--	--	7.9	2810	19.0	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
JAN										
04...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	--	--	--	--	--	--	--	--	--	--
APR										
10...	--	--	--	--	--	--	--	--	--	--
25...	6.7	7	376	59	244	298	562	.4	29.4	336
JUN										
10...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
06...	--	--	--	--	--	1690	--	--	--	--
NOV										
01...	--	--	--	--	--	1840	--	--	--	--
DEC										
08...	--	--	--	--	--	1650	--	--	--	--
JAN										
04...	--	--	--	--	--	1590	--	--	--	--
31...	--	--	--	--	--	1800	--	--	--	--
MAR										
08...	--	--	--	--	--	416	--	--	--	--
APR										
10...	--	--	--	--	--	1960	--	--	--	--
25...	.033	8.21	.062	.514	2.41	1770	1680	761	20	598
JUN										
10...	--	--	--	--	--	2040	--	--	--	--
29...	--	--	--	--	--	1780	--	--	--	--

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low- or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites are given in separate tables.

Crest-Stage Partial-Record Stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage station is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current year is given. Information on some lower floods may have been obtained but is not published here. The years given in the period of record represent water years for which the annual maximum has been obtained.

Annual maximum discharge at crest-stage partial-record stations during water year 2000

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		BRISTOL LAKE BASIN					
10253000	Gourd Creek near Ludlow, CA	Lat 34°40’35", long 116°01’20", in SW 1/4 sec.23, T.7 N., R.9 E., San Bernardino County, Hydrologic Unit 18090208, at culvert on U.S. Highway 40 (formerly U.S. Highway 66), and 8.5 mi southeast of Ludlow.	0.30	1959–74, 1976–00	09-29-00	11.68	20.4
10262600	Boom Creek near Barstow, CA	Lat 34°54’20", long 116°56’55", NW 1/4 NE 1/4 sec.2, T.9 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, at culvert on Interstate Highway 15, and 4.3 mi east of Barstow.	.24	1956–66, 1967–73a, 1976–97, 1999-00		—	0
		ANTELOPE VALLEY					
10263900	Buckhorn Creek near Valyermo, CA	Lat 34°53’35", long 117°55’13", in SW 1/4 sec.15, T.3 N., R.10 W., Los Angeles County, Hydrologic Unit 18090206, Angeles National Forest, at culvert on State Highway 2, and 8.1 mi southwest of Valyermo.	.48	1961–66a, 1967–69, 1971–73, 1977–00	02-20-00	2.69	27.7
10264530	Pine Creek near Palmdale, CA	Lat 34°36’09", long 118°314’48", in SE 1/4 SW 1/4 sec.15, T.6 N., R.13 W., Los Angeles County, on left bank, at culvert on Elizabeth Lake Road, and 7.5 mi northwest of Palmdale.	1.78	1958–73, 1977–88, 1988–94a, 1997-00		—	0
10264560	Spencer Canyon Creek near Fairmont, CA	Lat 34°46’33", long 118°34’08", in SW 1/4 SW 1/4 sec.15, T.8 N., R.16 W., Los Angeles County, Hydrologic Unit 18090206, at culvert on State Highway 138, and 8.5 mi northwest of Fairmont.	3.60	1959–64, 1965–73a, 1974, 1978–00		—	0
10264605	Joshua Creek near Mojave, CA	Lat 35°00’45", long 118°20’40" in SE 1/4 SE 1/4 sec.27, T.11 N., R.14 W., Kern County, Hydrologic Unit 18090206, on right bank at culvert on Tehachapi-Willow Springs Road, and 10.0 mi southwest of Mojave.	3.83	1989-94a, 2000		—	0
10264646	South Drainage Bissell/ Rosamond Hills near Edwards Air Force Base, CA	Lat 34°53’18", long 117°58’23" in NE 1/4 NW 1/4 sec.7, T.9 N., R.10 W., Kern County, Hydrologic Unit 18090206, 1.8 mi southwest of intersection of Forbes Avenue and Rosamond Boulevard, and 2.3 mi southwest of Edwards Air Force Base.	9.25	1996–00		—	0
10264656	Mojave Creek near Edwards Air Force Base, CA	Lat 34°58’07", long 117°59’38" in NW 1/4 NE 1/4 sec.13, T.10 N., R.11 W., Los Angeles County, Hydrologic Unit 18090206, 3.75 mi northwest of intersection of Forbes and Mojave Avenues, and 3.75 mi northwest of Edwards Air Force Base.	—	1996–00		—	0

a Operated as a continuous-record station.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		ANTELOPE VALLEY (continued)					
10264673	North Base Tributary at railroad crossing near Edwards Air Force Base, CA	Lat 34°59'32", long 117°53'09", in SW 1/4 NE 1/4 sec.1, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, 0.6 mi north on Rosamond Boulevard, from intersection of north Base Boulevard, 6.6 mi north of intersection of Mojave Boulevard, in Edwards Air Force Base.	—	1997–00		—	0
		SANTA ANA RIVER BASIN					
11070185	Lamb Canyon Creek at Victory Ranch, near San Jacinto, CA	Lat 33°51'31", long 117°00'53", in NW 1/4 NW 1/4 sec.5, T.4 S., R.1 W., Riverside County, Hydrologic Unit 18070202, on left bank, at private road culvert crossing, 0.25 mi upstream of confluence with San Jacinto River, and 6.0 mi northwest of San Jacinto.	3.97	1997–2000	02-21-00	5.95	77
		SANTA YNEZ RIVER BASIN					
11131700	Santa Rita Creek near Lompoc, CA	Lat 34°38'41", long 120°22'09", in Santa Rita Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 2.4 mi upstream from mouth, and 6.5 mi east of Lompoc.	14.1	1976–79 1981–00		—	0
11133700	Purisima Creek near Lompoc, CA	Lat 34°41'34", long 120°25'51", in Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 1.1 mi northeast of junction of Buener Road and Lompoc–Casmalia Road, and 4.0 mi northeast of Lompoc.	4.75	1972–75a 1976–00		—	0
11135200	Rodeo–San Pasqual Creek near Lompoc, CA	Lat 34°38'42", long 120°30'57", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.1 mi east of Dewolf Avenue at Highway 246, and 3.3 mi west of Lompoc.	7.80	1971–72 1973–78 1980–00	04-17-00	4.99	1,430

a Operated as a continuous-record station.

Water-quality partial-record stations are particular sites where chemical-quality, biological, and (or) sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

SANTA ANA RIVER BASIN

11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CA

LOCATION.—Lat 34°56'40", long 120°17'30", in Suey Grant, Santa Barbara County, Hydrologic Unit 18060007, on left bank, 3.5 mi upstream from mouth, 4 mi northeast of Garey, and 4.4 mi downstream from Twitchell Dam.

DRAINAGE AREA.—1,132 mi^2.

PERIOD OF RECORD.—April 24, 2000.

WATER DISCHARGE: Water years 1959–83.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
APR				
24...	1354	e155	812	e340
24...	1420	e110	855	e254
24...	1445	e100	654	e176
24...	1500	e96	513	e133
24...	1527	e67	376	e68
24...	1542	e62	314	e53

e Estimated.

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA

LOCATION.—Lat 34°10'14", long 116°49'48", in NW 1/4 SE 1/4 sec.13, T.1 N., R.1 E., San Bernardino County, Hydrologic Unit 18070203, approximately 0.3 mi upstream from Highway 38 and 9.0 mi northeast of Angelus Oaks.

DRAINAGE AREA.—7.31 mi^2.

PERIOD OF RECORD.—October 1998 to current year.
CHEMICAL DATA: October 1998 to September 2000 (discontinued).
WATER TEMPERATURE: October 1999 to September 2000.
SEDIMENT DATA: October 1998 to September 2000 (discontinued).

PERIOD OF DAILY RECORD.— October 1999 to September 2000.
WATER TEMPERATURE: October 1999 to September 2000.

INSTRUMENTATION.— Water-quality monitor recording water temperature since October 1999.

REMARKS.—Interruptions in record were due to flow too low to record data. Chemical, sediment, and continuous-monitoring data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF RECORD.—
WATER TEMPERATURE: Maximum recorded, 16.0°C, June 16, 24, 2000; minimum recorded, 0.0°C, several days in 1999 and 2000.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 16.0°C, June 16, 24, 2000; minimum recorded, 0.0°C, several days in 1999 and 2000.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
12...	1520	3.5	611	89	8.5	7.6	68	16.5	7.5	25
JAN										
10...	1650	4.3	605	94	10.0	7.8	64	5.0	3.0	24
APR										
09...	1530	6.1	605	97	9.1	7.7	69	18.0	8.0	24
AUG										
14...	1100	3.4	607	114	10.2	7.8	73	22.0	10.0	25

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT									
12...	8.16	1.16	.9	.3	3.7	24	30	36	.4
JAN									
10...	7.54	1.13	.8	.3	3.6	24	30	37	.4
APR									
09...	7.66	1.27	1.0	.3	3.8	24	32	39	.6
AUG									
14...	8.25	1.18	.8	.3	3.8	24	34	41	.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT									
12...	.2	12.0	1.9	e.10	.14	<.020	<.050	<.010	e.003
JAN									
10...	.1	11.5	1.5	<.10	<.10	<.020	<.050	<.010	e.003
APR									
09...	.3	12.0	1.8	e.10	.13	<.020	<.050	<.010	e.004
AUG									
14...	.2	11.4	1.8	<.10	e.10	<.020	<.050	<.010	<.006

e Estimated.
< Actual value is known to be less than value shown.

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT									
12...	<.010	e.006	.56	.3	.05	38	46	10	<2
JAN									
10...	<.010	e.006	.53	.4	.08	56	45	e10	<2
APR									
09...	<.010	.012	2.1	.4	.07	51	48	30	<2
AUG									
14...	<.010	e.007	.61	.5	.06	47	48	10	e1

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
12...N	1520	3.5	7.5	2	.02	79
JAN						
10...N	1650	4.3	3.0	1	.01	69
APR						
09...N	1530	6.1	8.0	4	.07	71
AUG						
14...N	1100	3.4	10.0	3	.03	57

< Actual value is known to be less than the value shown.
e Estimated.
N Suspended-sediment data determined from sample collected and processed according to National Water-Quality (NAWQA) Program protocol.

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	7.0	3.5	4.0	2.0	1.5	1.0	5.0	2.5	3.0	.5
2	---	---	6.5	4.0	4.0	1.5	1.0	---	4.5	2.5	3.5	.0
3	---	---	6.0	3.0	2.5	1.0	---	---	3.5	1.5	3.5	2.0
4	---	---	5.5	2.5	2.5	.5	---	---	4.0	2.0	4.0	1.0
5	---	---	5.5	2.0	2.5	.0	---	---	4.5	2.0	1.0	.0
6	---	---	6.5	3.0	2.5	.5	---	---	4.0	1.0	---	.0
7	---	---	6.5	3.5	2.5	1.0	---	---	4.5	1.0	---	.0
8	---	---	6.5	3.0	1.5	.0	---	---	5.0	2.5	1.0	.0
9	---	---	5.0	2.0	2.0	.5	---	---	5.0	2.5	2.0	.0
10	---	---	5.0	2.0	1.0	.0	3.0	1.5	4.0	2.0	3.0	.5
11	---	---	5.5	2.5	1.0	.0	4.0	1.5	3.5	1.5	3.5	1.0
12	---	---	6.0	2.0	2.5	.5	3.5	1.5	2.5	.0	4.0	1.5
13	---	---	6.0	3.0	3.0	1.0	3.0	.5	3.5	2.0	4.5	1.5
14	---	---	6.0	2.5	2.5	.5	4.0	1.5	5.0	3.0	5.0	1.5
15	---	---	6.5	4.0	3.0	1.0	4.5	2.5	4.5	1.5	5.5	2.0
16	---	---	6.5	3.5	3.5	1.5	5.0	3.0	4.0	.0	5.5	2.0
17	---	---	5.0	2.5	3.5	1.0	5.5	4.5	1.5	.0	5.5	2.0
18	---	---	5.0	2.0	4.0	1.5	6.0	4.0	3.0	.0	6.0	2.0
19	---	---	4.5	2.5	3.5	1.5	5.0	2.5	3.5	1.0	6.5	2.0
20	---	---	5.0	2.5	3.0	1.5	5.5	3.5	3.0	1.0	3.5	.5
21	---	---	3.0	1.0	3.0	.5	5.0	3.0	1.5	.0	3.0	.0
22	---	---	1.5	.0	1.5	.5	4.5	2.0	1.5	.0	5.0	1.0
23	---	---	2.5	.0	2.5	1.0	5.0	2.0	1.5	.0	5.0	1.0
24	---	---	2.0	.0	2.0	.5	6.0	4.5	---	.0	6.0	2.0
25	---	---	4.0	1.0	2.5	.0	5.0	4.0	2.5	.0	6.5	2.0
26	---	---	4.0	1.5	2.5	.5	4.0	1.5	2.5	.5	6.5	2.0
27	---	---	4.5	2.0	2.0	.5	2.5	.5	3.0	1.0	5.0	3.0
28	7.2	3.9	4.5	1.5	2.0	.0	2.5	.5	3.0	.5	6.5	2.0
29	6.0	3.5	5.0	3.0	2.0	.0	2.5	.5	3.5	.5	6.0	2.0
30	6.5	3.5	5.5	3.0	2.0	.0	3.5	1.5	---	---	6.0	2.0
31	7.0	3.5	---	---	1.5	.5	4.0	2.5	---	---	4.5	1.5
MONTH	---	---	7.0	.0	4.0	.0	---	---	---	.0	---	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	1.5	11.5	4.5	13.5	6.5	13.5	7.5	15.0	10.5	9.5	6.0
2	7.5	2.0	11.5	5.0	13.0	6.5	13.0	7.0	13.5	10.0	9.5	4.5
3	8.5	3.0	12.0	5.5	13.0	6.0	12.5	6.5	14.0	10.0	10.0	5.0
4	8.5	3.0	12.0	5.0	13.5	6.5	12.0	5.5	12.5	10.0	10.0	5.5
5	8.5	3.0	11.0	5.0	13.5	7.0	12.0	6.0	14.0	9.0	10.0	5.5
6	8.5	2.5	11.5	5.5	13.5	6.0	12.5	5.5	14.0	8.5	10.5	6.0
7	9.0	2.0	12.5	6.0	13.5	6.5	12.5	5.5	13.0	8.0	10.0	7.0
8	9.0	4.0	12.0	7.0	12.0	6.5	12.5	6.0	12.5	7.5	11.0	7.0
9	8.5	2.5	12.5	5.0	11.5	5.0	13.0	7.0	12.5	7.5	9.5	4.5
10	8.0	2.5	12.0	6.0	12.5	5.5	12.5	6.0	13.5	8.0	9.5	4.5
11	9.0	3.0	9.5	4.0	13.0	6.0	13.0	7.0	14.0	9.0	11.0	6.0
12	9.0	3.0	9.5	2.5	13.0	7.0	13.0	7.0	14.0	9.0	11.5	7.0
13	9.0	3.5	10.5	3.0	15.0	8.0	13.0	7.5	14.0	9.5	12.0	8.0
14	6.0	4.0	11.0	4.5	15.5	9.5	13.5	8.5	12.5	9.5	12.0	8.0
15	8.0	1.5	10.5	5.0	15.5	9.0	13.0	9.0	12.0	10.0	12.0	8.5
16	8.5	2.5	7.5	4.0	16.0	9.0	13.0	8.0	11.5	9.5	12.0	8.5
17	6.5	1.5	10.5	3.0	---	---	13.0	7.0	14.0	9.5	11.5	8.0
18	3.0	.0	11.5	5.0	---	---	13.5	7.5	13.5	9.0	11.5	8.0
19	7.0	.5	10.5	5.5	---	---	14.5	8.5	12.0	7.0	11.5	7.5
20	8.5	1.5	13.0	6.0	---	---	14.0	8.0	11.5	6.0	11.5	8.0
21	5.0	2.5	13.0	6.5	---	---	14.0	8.0	11.5	6.5	11.0	7.5
22	9.0	4.0	13.5	7.0	---	---	15.5	9.0	12.5	7.0	9.5	6.0
23	10.0	3.0	14.0	7.5	---	8.5	15.0	10.0	12.5	8.5	9.5	6.5
24	10.5	3.5	13.0	8.5	16.0	8.5	14.5	9.5	11.5	9.0	9.0	4.5
25	11.0	4.0	14.0	8.0	12.0	9.0	14.5	9.5	11.0	9.5	8.5	4.0
26	11.5	4.0	14.0	7.0	12.5	9.0	14.0	9.0	13.0	9.0	9.0	5.5
27	11.5	5.0	15.0	7.5	14.0	9.0	14.0	8.5	12.0	9.0	9.5	6.0
28	10.0	4.0	15.0	8.5	14.5	9.5	13.5	8.5	11.5	9.5	9.0	5.0
29	9.5	3.5	14.5	8.0	13.5	9.0	14.0	9.5	11.0	9.5	9.0	4.5
30	10.5	3.5	14.0	8.0	14.0	8.5	14.5	9.5	12.0	8.5	9.0	5.0
31	---	---	14.0	7.5	---	---	14.5	10.0	11.0	6.5	---	---
MONTH	11.5	.0	15.0	2.5	---	---	15.5	5.5	15.0	6.0	12.0	4.0

SANTA MARIA RIVER BASIN

345727120375401 GREEN CANYON CREEK AT MAIN STREET, NEAR GUADALUPE, CA

LOCATION.—Lat 34°57'27", long 120°37'54", Santa Barbara County, Hydrologic Unit 18060008, at culvert, on West Main Street, and 3.6 mi southwest of Guadalupe.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—Water years 1986 to current year.
CHEMICAL DATA: Water years 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
MAY												
26...	1230	15	764	77	7.2	7.8	2670	18.0	1200	283	124	11.1
SEP												
06...	1130	15	768	93	8.8	7.6	2740	18.0	1200	271	130	6.3

DATE	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
MAY												
26...	2	155	21	323	394	183	.4	28.3	862	.141	5.18	.218
SEP												
06...	2	175	24	306	373	195	.4	29.4	876	.084	34.4	.147

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	ALA-CHLOR TOTAL RECOVER (UG/L) (77825)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	AME-TRYNE TOTAL (UG/L) (82184)	ATRA-ZINE WATER UNFLTRD REC (UG/L) (39630)	BROM-ACIL WATER WHLREC (UG/L) (30234)
MAY												
26...	.331	2.85	2100	1870	331	<10	318	<.1	<.2	<.1	<.1	<.2
SEP												
06...	.237	3.04	2240	2020	346	<30	172	<.1	<.2	<.1	<.1	<.4

DATE	BUTA-CHLOR WATER WHLREC (UG/L) (30235)	BUTYL-ATE WATER WHLREC (UG/L) (30236)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	CARBOX-IN WATER WHOLE RECOV-ERABLE (UG/L) (30245)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYAN-AZINE TOTAL (UG/L) (81757)	CYCLO-ATE WATER WHOLE RECOV-ERABLE (UG/L) (30254)	DEETHYL ATRA-ZINE, WATER, WHOLE, TOTAL (UG/L) (75981)	DEF TOTAL (UG/L) (39040)	DE-ISO PROPYL ATRAZIN WATER, WHOLE, TOTAL (UL) (75980)	DI-AZINON, TOTAL (UG/L) (39570)
MAY												
26...	<.1	<.1	<.01	<.2	<4	.05	<.2	<.1	<.2	<.02	<.2	<.02
SEP												
06...	<.1	<.1	<.01	<.2	5	.05	<.2	<.1	<.2	<.02	<.2	<.02

< Actual value is known to be less than value shown.

SANTA MARIA RIVER BASIN

345727120375401 GREEN CANYON CREEK AT MAIN STREET, NEAR GUADALUPE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	DIPHEN-AMID WATER WHOLE RECOV-ERABLE (UG/L) (30255)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEXAZI-NONE WATER WHOLE RECOV-ERABLE (UG/L) (30264)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)
MAY											
26...	7.6	<.1	<.03	<.4	<23	<.01	<.01	<.2	<.2	<.2	<.2
SEP											
06...	3.2	<.1	<.03	<.4	16	<.01	<.01	<.2	<.2	<.2	<.2

DATE	MALA-THION, TOTAL (UG/L) (39530)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METOLA-CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	METRI-BUZIN WATER WHOLE TOT.REC (UG/L) (82611)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	PARA-THION, TOTAL (UG/L) (39540)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)
MAY											
26...	e.02	<2	<.01	<.2	<.1	<.2	e74	180	250	<.01	<5
SEP											
06...	e.03	<2	<.01	<.2	<.1	<.2	27	150	90	<.01	<10

DATE	PHORATE TOTAL (UG/L) (39023)	PROME-TONE TOTAL (UG/L) (39056)	PROME-TRYNE TOTAL (UG/L) (39057)	PROPA-CHLOR WATER WHOLE RECOV. (UG/L) (30295)	PRO-PAZINE TOTAL (UG/L) (39024)	SIMA-ZINE TOTAL (UG/L) (39055)	SIME-TRYNE TOTAL (UG/L) (39054)	TER-BACIL WATER WHOLE RECOV. (UG/L) (30311)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	TRI-FLURA-LIN TOTAL RECOVER (UG/L) (39030)	VER-NOLATE WATER WHOLE RECOV. (UG/L) (30324)
MAY											
26...	<.02	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<80	<.1	<.1
SEP											
06...	<.02	<.2	<.1	<.1	<.1	<.1	<.1	<.2	170	<.1	<.1

< Actual value known to be less than value shown.
e Estimated.

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