Water Resources Data

California

Water Year 2001

Following is the PDF version to one of the four volume set of Water Resources Data for the state of California. For your convenience the Table of Contents, Surface-Water and Water-Quality Stations in Downstream Order, and the Index have been linked to the appropriate page within the volume. In addition, those items that are colored dark blue are also linked to the appropriate page and all web links have been activated.

All comments/suggestions on format should be forwarded to kengelki@usgs.gov.

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U.S. Geological Survey

Water Resources Data California Water Year 2001

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

By J.R. Smithson, L.A. Freeman, G.L. Rockwell, S.W. Anderson, and G.L. Pope

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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 2001 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 3 contains discharge records for 180 gaging stations, stage and contents for 44 lakes and reservoirs, and water quality for 44 stations. Also included are 1 crest-stage partial-record station, 1 miscellaneous partial-record sites, and 6 miscellaneous-measurement 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 USGS Water Data for the period of record shown for each station.

Station No.	Station name	Drainage area (mi^2)	Period of record
10295200	West Walker River at Leavitt Meadows, near Coleville	73.4	1945–64
10303000	Silver King Creek near Coleville	31.8	1947–51
10303500	East Fork Carson River at Silver King Valley, near Markleeville	—	1947–51
10336593	Grass Lake Creek near Meyers	6.99	1971–74
10336600	Upper Truckee River near Meyers	33.1	1961–86
10336625	Fallen Leaf Lake near Camp Richardson	16.7	1968–92
10336626	Taylor Creek near Camp Richardson	16.7	1968–92
10336675	Ward Creek at Stanford Rock Trail Crossing, near Tahoe City	8.97	1991–2001
10336686	Carnelian Creek at Carnelian Bay	2.93	1999–2000
10336759	Edgewood Creek near Stateline, NV	320	1983–87
10338100	Summit Creek above Donner Lake, near Truckee	4.96	1997–98
10339419	Truckee River above Prosser Creek, near Truckee	644	1994–98
10341950	Little Truckee River below diversion dam, near Sierraville	36.1	1993–98
10342000	Little Truckee River near Hobart Mills	37.1	1947–72
10343200	Little Truckee River at Highway 89, near Truckee	59.0	1993–94
10345700	Bronco Creek at Floriston	15.4	1993–98
11185000	Grayson Creek near Hookston	1.96	1955–60
11185100	Grayson Creek near Pacheco	4.35	1954–58
11185300	Golden Trout Creek near Cartago	23.6	1957–67, 1969
11185350	Kern River near Quaking Aspen Camp	530	1961–71, 1973–74
11185400	Little Kern River near Quaking Aspen Camp	132	1957–69
11185600	Packsaddle Canyon Creek near Fairview	4.05	1960–66
11186340	Salmon Creek Tributary B near Fairview	.46	1963–69
11186360	Salmon Creek Tributary C near Fairview	.30	1963–69
11186380	Salmon Creek Tributary E near Fairview	.23	1963–69
11186500	Salmon Creek near Kernville	25.8	1922–23
11187000	Kern River at Kernville	1,009	1905–12, 1953–93
11188000	Kern River at Isabella	1,068	1911, 1926–35
11188200	South Fork Kern River near Olancha	146	1956–67, 1969
11189700	Kelso Creek near Weldon	101	1958–66
11190000	South Fork Kern River at Isabella	982	1929–52
11191000	Kern River below Isabella Dam	2,074	1945–90
11193000	Kern River below Kern Canyon Powerhouse, near Bakersfield	2,307	1954–64
11194000	Kern River near Bakersfield	2,407	1894–1976
11194200	Wagon Wheel Creek near Reward	1.38	1966–71
11195500	San Emigdio Creek at San Emigdio Ranchhouse	48.8	1959–81
11195600	Pastoria Creek near Lebec	27.5	1965–71
11196000	Tejon Creek at Tejon Ranchhouse	48.7	1895–96
11196400	Caliente Creek above Tehachapi Creek, near Caliente	165	1962–83
11196420	Tehachapi Creek near Tehachapi	53.2	1963–85
11197250	Avenal Creek near Avenal	57.1	1962–86
11197800	Poso Creek near Oildale	230	1959–85
11199000	White River near Ornia Hot Springs	14.0	1911–13
11200000	Deer Creek at California Hot Springs	16.8	1911–15, 1917–34
11201200	Deer Creek Diversion near Terra Bella	—	1971–87
11201500	Pacific Gas & Electric Co. Conduit near Springville	—	1940–54, 1966–67, 1969–71, 1976–83
11201800	North Fork of Middle Fork Tule River below Hossack Creek, near Springville	33.8	1909–13
11202750	Middle Fork Tule River above Springville	92.4	1979–88
11203000	Bear Creek near Springville	13.5	1911–16
11203100	North Fork Tule River at Springville	97.6	1957–67
11203190	Tule River Diversion Ditch near Springville	—	1968–88
11203200	Tule River near Springville	247	1958–68

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11203220	Tule River at Highway 190, near Springville	247	1968–90
11203500	Tule River near Porterville	253	1902–60
11204000	South Fork Tule River near Porterville	80.3	1911–23, 1925, 1928–32
11204500	South Fork Tule River near Success	109	1930–54, 1956–90
11204680	Pioneer Ditch below Success Dam	—	1959–90
11204900	Tule River below Success Dam	393	1953–90
11205000	Tule River at Worth Bridge, near Porterville	395	1954–60
11205680	Frazier Creek near Strathmore	3.05	1974–94
11208500	Middle Fork Kaweah River Tributary near Hammond	1.90	1967–70, 1972–73
11208610	Monarch Creek near Hammond	1.89	1968–73
11208620	East Fork Kaweah River below Mosquito Creek, near Hammond	16.0	1968–73
11208625	East Fork Kaweah River at Sequoia National Park boundary, near Hammond	23.7	1968–71
11209500	North Fork Kaweah River near Three Rivers	129	1911–60, 1980–81
11209900	Kaweah River at Three Rivers	418	1959–90
11210000	South Fork Kaweah River near Three Rivers	66.5	1912–24
11210100	South Fork Kaweah River at Three Rivers	86.7	1959–90
11210500	Kaweah River near Three Rivers	519	1904–18, 1921–61
11210850	Lemoncove Ditch below Terminus Dam	—	1962–90
11210930	Foothill Ditch below Terminus Dam	—	1962–90
11210950	Kaweah River below Terminus Dam	561	1962–90
11211300	Dry Creek near Lemoncove	75.6	1960–94
11211500	Kaweah River at McKay Point, near Lemoncove	647	1919–21
11211785	Cottonwood Creek above Collier Creek, near Elderwood	52.3	1985–94
11211790	Cottonwood Creek near Elderwood	60.4	1971–85
11212000	Sand Creek near Orange Cove	31.6	1944–54, 1956, 1967, 1969, 1971–84, 1985–94
11212500	South Fork Kings River near Cedar Grove	408	1951–57
11213000	Kings River near Hume	835	1922–36, 1952–58
11213500	Kings River above North Fork, near Trimmer	952	1927–28, 1932–82
11214000	North Fork Kings River below Meadowbrook	37.7	1922–35, 1957–81
11214200	Fleming Creek near Blackcap Mountain	15.0	1957–65
11214400	Post Corral Creek near Blackcap Mountain	27.9	1957–65
11214500	Helms Creek at Sand Meadows	34.7	1923–31, 1956–58
11215500	Rancheria Creek near Smith Meadows	21.3	1925–31
11215800	Teakettle Creek Tributary No. 3 near Dinkey Creek	.86	1958–69, 1977–83
11215810	Teakettle Creek Tributary No. 7 near Patterson Mountain	.11	1958–63
11215820	Teakettle Creek Tributary No. 2 near Dinkey Creek	.85	1958–69, 1977–83
11215830	Teakettle Creek Tributary No. 2a near Dinkey Creek	.27	1958–69, 1977–83
11215840	Teakettle Creek Tributary No. 1 near Dinkey Creek	.77	1958–69, 1977–83
11216000	North Fork Kings River below Rancheria Creek	229	1927–50
11216800	Rock Creek at Dinkey Creek	7.60	1961–70
11217000	Dinkey Creek at Dinkey Meadow, near Shaver Lake	50.7	1922–35, 1977–87
11217500	Deer Creek below east Fork, near Shaver Lake	19.0	1924–31
11218000	Dinkey Creek at mouth, near Trimmer	132	1920–37
11218500	Kings River below North Fork, near Trimmer	1,342	1951–93
11219000	Big Creek near Tollhouse	19.8	1911–13
11220000	Big Creek above Pine Flat Lake, near Trimmer	70.0	1954–73
11220500	Sycamore Creek above Pine Flat Lake, near Trimmer	56.1	1953–73
11221500	Kings River below Pine Flat Dam	1,545	1954–90
11221700	Mill Creek near Piedra	127	1958–94
11222000	Kings River at Piedra	1,693	1896–1959
11225000	Los Gatos Creek near Coalinga	105	1932–41
11226000	North Fork San Joaquin River below Iron Creek	35.5	1922–28, 1959–69

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11226500	San Joaquin River at Miller Crossing	249	1921–28, 1951–91
11227000	West Fork Granite Creek near Timber Knob	26.4	1922–25
11227500	Middle Fork Granite Creek near Cattle Mountain	2.25	1922–23
11228000	East Fork Granite Creek near Cattle Mountain	14.6	1922–25
11228500	Granite Creek near Cattle Mountain	47.8	1922–28, 1966–86
11230000	South Fork San Joaquin River near Florence Lake	171	1922–81, 1984
11230650	Bolsillo Creek above diversion dam, near Big Creek	1.3	1986
11232000	South Fork San Joaquin River near Hoffman Meadow	424	1922–28
11232500	Jackass Creek near Bass Lake	12.1	1922–28, 1961–68
11234500	Chiquito Creek near Bass Lake	60.1	1922–28, 1956–70
11235000	San Joaquin River above Big Creek	1,050	1913–15, 1922–62
11236080	Huntington–Shaver Conduit at Huntington Lake	—	1975–83
11238000	Pitman Creek at Big Creek	23.7	1910–16, 1922–27
11239000	Huntington–Shaver Conduit near Shaver Lake	—	1929–85
11242350	Soquel diversion near Sugar Pine	—	1970–77
11243300	Brown's Creek Canal at Bass Lake	—	1987–98
11245000	South Fork Willow Creek near North Fork	39.8	1910–17
11245500	Whiskey Creek near North Fork	11.6	1911–16
11246000	Cascadel Creek near North Fork	3.31	1910–12
11247000	San Joaquin River below Kerckhoff Powerhouse, near Prather	1,480	1910–14, 1937, 1943–82, 1988–89
11247200	Big Sandy Creek Tributary near Tollhouse	.46	1969–71
11247500	Big Sandy Creek near Auberry	27.3	1947–51
11248000	Fine Gold Creek near Friant	92.7	1937–58
11250500	Cottonwood Creek near Friant	35.6	1942–51
11251500	Little Dry Creek near Friant	57.9	1942–56
11251600	Little Dry Creek at mouth, near Friant	77.4	1957–61
11252500	San Joaquin River at Herndon	1,802	1895–1901
11253000	San Joaquin River near Biola	1,811	1953–61
11255500	Panoche Creek below Silver Creek, near Panoche	293	1950–53, 1959–70
11255550	Little Panoche Creek Tributary No. 1, near Panoche	.33	1959–64
11256000	San Joaquin River near Dos Palos	4,669	1941–54
11257100	Miami Creek near Oakhurst	10.6	1961–80
11257500	Fresno River near Knowles	133	1911–13, 1915–90
11257700	Picayune Creek near Coarsegold	8.17	1965–68
11258000	Fresno River below Hidden Dam, near Daulton	237	1942–90
11258800	East Fork Chowchilla River near Ahwahnee	57.8	1958–67
11258900	West Fork Chowchilla River near Mariposa	33.6	1958–80
11258920	North Fork Chowchilla River near Nippinnawassee	13.6	1959–67
11258960	Chowchilla River above Willow Creek, near Raymond	173	1980–90
11258980	Chowchilla River near Raymond	201	1972–80
11259000	Chowchilla River below Buchanan Dam, near Raymond	236	1922–23, 1931–72, 1976–90
11259300	Chowchilla River below Raynor Creek, near Raymond	254	1973–75
11259900	Chamberlain Slough near El Nido	—	1940–49
11260000	San Joaquin River above Sand Slough, near El Nido	6,447	1940–49
11260000	San Joaquin River near El Nido	6,443	1940–49
11260001	San Joaquin River plus Chamberlain Slough, near El Nido	6,450	1940–49
11260200	Bear Creek near Catheys Valley	24.9	1958–69
11260225	Burns Creek at Hornitos	26.7	1965–69
11260480	Mariposa Creek near Catheys Valley	65.7	1959–80
11261000	Salt Slough near Los Banos	—	1941–68
11261500	San Joaquin River at Fremont Ford Bridge	7,615	1937–70, 1986–89
11262800	Los Banos Creek near Los Banos	159	1959–66
11262890	San Luis Drain, Site A, near South Dos Palos	—	1999

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11263000	San Luis Creek near Los Banos	84.6	1950–63
11265000	Tenaya Creek near Yosemite	46.9	1912–58
11265500	Merced River at Yosemite	236	1912–17
11266000	Yosemite Creek at Yosemite	42.7	1912–16, 1918
11267300	South Fork Merced River at Wawona	100	1959–68
11267500	South Fork Merced River near Wawona	132	1912, 1914–15, 1918–21
11268000	South Fork Merced River near El Portal	241	1951–75
11268200	Merced River near Briceburg	691	1966–74
11268500	Merced River at Bagby	911	1923–30, 1932–66
11269300	Maxwell Creek at Coulterville	17	1960–74, 1976–80
11270000	Merced River at Exchequer	1,037	1901–14, 1916–64
11270800	Northside Canal at Merced Falls	—	1987–94
11271320	Dry Creek near Snelling	67.6	1966–92
11271500	Merced River near Livingston	1,259	1922–24, 1926–44
11272500	Merced River near Stevinson	1,273	1941–95
11273000	Merced River Slough near Newman	1,276	1942–72
11274554	Spanish Grant Combined Drain near Patterson	—	1993–95
11274600	Del Puerto Creek Tributary No. 1 near Patterson	.71	1964–69
11274610	Del Puerto Creek Tributary No. 2 near Patterson	.024	1959–63
11274710	Maclure Creek below Maclure Glacier, near Tuolumne Meadows	.37	1967–72
11274800	Tuolumne River at Hetch Hetchy Cabin, near Sequoia	404	1911–16
11275000	Falls Creek near Hetch Hetchy	46	1916–83
11277000	Cherry Creek near Hetch Hetchy	111	1910–55
11278200	Cherry Creek Canal near Early Intake	—	1956–71, 1987–96
11278500	Jawbone Creek near Tuolumne	19.1	1911
11279500	South Fork Toulumne River at Italian Flat, near Sequoia	64.9	1925–30, 1932–33
11280000	South Fork Tuolumne River near Sequoia	68.3	1914–17
11281500	Middle Tuolumne River near Mather	52.4	1925–29, 1932–33
11282500	South Fork Tuolumne River near Buck Meadows	164	1912, 1914, 1917–21
11283000	Tuolumne River near Buck Meadows	924	1908, 1911–36
11283100	Lily Creek near Pinecrest	11.9	1964–74
11283200	Bell Creek near Pinecrest	9.11	1964–79
11283250	Clavey River near Long Barn	48.9	1987–94
11283350	Reed Creek near Long Barn	27.2	1987–94
11283500	Clavey River near Buck Meadows	144	1960–84, 1987–94
11284500	Big Creek near Groveland	25	1932–33, 1960–74
11284700	North Fork Tuolumne River near Long Barn	23.1	1962–86
11285000	North Fork Tuolumne River above Dyer Creek, near Tuolumne	69.2	1959–66
11286500	Woods Creek near Jacksonville	97.2	1926–68
11288000	Tuolumne River above La Grange Dam, near La Grange	1,532	1896–1970
11288500	Tuolumne River at La Grange	1,539	1896–1911
11291500	Relief Creek near Baker Station	24.4	1911–18
11292500	Clark Fork Stanislaus River near Dardanelle	67.5	1951–94
11292680	Cascade Creek near Pinecrest	4.97	1963–65
11293000	Middle Fork Stanislaus River at Sand Bar Flat, near Avery	325	1906–66
11293500	North Fork Stanislaus River below Silver Creek	27.8	1953–88
11293650	North Fork Stanislaus River at Camp Wolfesboro, near Big Meadows	47.4	1994–96
11293700	Hobart Creek at North Fork Stanislaus River Diversion Tunnel Outlet, near New Spicer Meadow Dam	1.13	1989–94
11294300	North Fork Stanislaus River below Ganns Dam Site, near Big Meadow	111	1961–67
11294400	North Fork Stanislaus River at Sourgrass Campground, near Dorrington	149	1991–96
11295000	Utica Canal near Avery	—	1970, 1976–89
11295400	Stanislaus River near Hathaway Pines	629	1967–94

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11299500	Stanislaus River below Melones Powerhouse, near Sonora	905	1931–67
11300000	Stanislaus River near Knights Ferry	980	1916–33
11300600	South San Joaquin Main Canal below diversion point, near Knights Ferry	—	1983–89
11300700	South San Joaquin Main Canal below Woodward Reservoir, near Oakdale	—	1982–89
11300800	North Main Canal below diversion point, near Knights Ferry	—	1983–89
11304000	Corral Hollow Creek near Tracy	61.6	1959–66
11305000	San Domingo Creek near San Andreas	26.2	1950–62
11305500	San Antonio Creek near San Andreas	48.0	1950–59
11306000	South Fork Calaveras River near San Andreas	118	1950–79
11306500	Calaveritas Creek near San Andreas	53	1950–66
11307000	Esperanza Creek near Mokelumne Hill	16.6	1952–59, 1962–71
11307500	Jesus Maria Creek near Mokelumne Hill	34.6	1950–59
11308000	North Fork Calaveras River near San Andreas	85.2	1950–79
11308300	Eldorado Creek at Mountain Ranch	1.97	1963–73
11308500	Murray Creek near San Andreas	23.6	1950–59
11308900	Calaveras River below New Hogan Dam, near Valley Springs	363	1961–90
11309000	Cosgrove Creek near Valley Springs	21.6	1930–69
11309500	Calaveras River at Jenny Lind	393	1907–66
11310500	Calaveras River near Stockton	—	1926, 1944–50
11311000	Stockton Diverting Canal at Stockton	—	1944–53
11311500	Bear Creek near Clements	42.2	1927
11312000	Bear Creek near Lockeford	47.4	1931–85
11312500	Bear Creek at Harmony School, near Lockeford	51.1	1927–31
11315500	Bear River at Pardoe Camp	33	1928–51
11316000	Bear River near Salt Springs Dam	48	1952–87
11316500	North Fork Mokelumne River near West Point	273	1924–32
11317500	South Fork Mokelumne River near Railroad Flat	38.7	1912–34
11318000	Licking Fork Mokelumne River near Railroad Flat	6.32	1912–13, 1915–16
11321000	Mokelumne River at Lancha Plana	587	1926–63
11321500	Camanche Creek near Camanche	5.19	1933–34
11322000	Rabbit Creek near Camanche	8.55	1932–34
11326300	Dry Creek above Sutter Creek, near Ione	70.9	1960–70
11326500	Sutter Creek near Volcano	29.8	1924–27
11327000	Sutter Creek near Sutter Creek	48.1	1936–41, 1961–80
11327500	Sutter Creek at Sutter Creek	50.7	1922–36
11328000	Dry Creek near Ione	266	1912, 1926–32
11329000	Goose Creek near Elliott	8.26	1928–33
11329500	Dry Creek near Galt	324	1927–33, 1945–87, 1996–98
11330000	North Fork Cosumnes River at Cosumnes Mine	38.7	1949–53
11331000	Camp Creek near Sly Park	8.59	1924
11331500	Camp Creek near Camino	32.4	1949–56
11332500	Sly Park Creek near Pollock Pines	18.2	1947–55
11333500	North Fork Cosumnes River near El Dorado	205	1884, 1912–41, 1949–83, 1985–87
11334200	Middle Fork Cosumnes River near Somerset	107	1958–71
11334300	South Fork Cosumnes River near River Pines	64.3	1958–80
11334500	Cosumnes River near Plymouth	436	1952–60
11335700	Deer Creek near Sloughhouse	46	1961–66, 1968–77
11336000	Cosumnes River at McConnel	724	1942–82
11336500	Hadselville Creek at Clay	18.1	1931
11337500	Marsh Creek near Byron	42.6	1953–83

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
10336625	Fallen Leaf Lake near Camp Richardson	16.7	1968–92
10339380	Martis Creek Lake near Truckee	39.6	1972–90
11190500	Isabella Lake near Lake Isabella	2,074	1954–90
11197000	Tulare Lake in Kings County	—	1969–82
11204700	Success Lake near Success	391	1962–90
11210900	Lake Kaweah near Lemoncove	560	1962–90
11221000	Pine Flat Lake near Piedra	1,545	1952–90
11257950	Hensley Lake near Daulton	236	1976–90
11258990	H.V. Eastman Lake near Raymond	235	1976–90
11308700	New Hogan Lake near Valley Springs	362	1964–90
11320000	Pardee Reservoir near Valley Springs	578	1962–93
11322300	Camanche Reservoir near Clements	621	1964–93

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 USGS Water Data for the period of record shown for each location.

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
10336593	Grass Lake Creek near Meyers	6.4	T,S	1972–74, 1997–2001
10336610	Upper Truckee River at South Lake Tahoe	54.9	C,T,S	1972–74, 1978, 1980–92
10336612	Upper Truckee River at mouth, near Venice Drive	56.5	T	1997–2001
10336630	Eagle Creek near Camp Richardson	6.38	T,S	1972–74
10336640	Meeks Creek at Meeks Bay	8.08	T,S	1971–74
10336645	General Creek near Meeks Bay	7.44	C,T,S	1981–92
10336650	Quail Lake Creek at Homewood	.95	T,S	1972–74
10336655	Madden Creek near Homewood	1.40	T,S	1972–74
10336658	Madden Creek at Homewood	2.06	T,S	1972–73
10336670	Ward Creek near Tahoe Pines	2.03	T,S	1973–76
10336672	Ward Creek Tributary near Tahoe Pines	.91	T,S	1973–76
10336684	Dollar Creek near Tahoe City	1.07	T,S	1972–74
10336689	Snow Creek at Tahoe Vista	4.43	C,T,S	1981–85
10336740	Logan House Creek near Glenbrook, NV	2.08	S	1984–87
10336759	Edgewood Creek near Stateline, NV	3.20	S	1983–87
10336780	Trout Creek near Tahoe Valley	36.7	C,T,S	1971–74, 1978, 1980–85, 1987–88
10336795	Trout Creek near moth east, near Bellevue/Eldorado Avenue	41	T	1997—2001
10337000	Lake Tahoe at Tahoe City	506	WQ	1969, 1978–79
10337500	Truckee River at Tahoe City	507	WQ,T	1978–81, 1993–94
10338000	Truckee River near Truckee	553	WQ,C,T	1951–66, 1977–94
10338700	Donner Creek at Highway 89, near Truckee	29.1	T	1993–94
10339250	Martis Creek at State Highway 267, near Truckee	25.8	WQ,T,S	1975–95
10339380	Martis Creek Lake near Truckee	39.6	WQ,S	1975–95
10339400	Martis Creek near Truckee	—	WQ,S	1975–95
10339419	Truckee River above Prosser Creek, near Truckee	644	C,T	1994–98
10340500	Prosser Creek below Prosser Creek Dam, near Truckee	52.9	T	1993–98
10341950	Little Truckee River below Diversion Dam, near Sierraville	36.1	T	1993–94
10343200	Little Truckee River at Highway 89, near Truckee	59.0	T	1993–94

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
10344500	Little Truckee River below Boca Dam, near Truckee	173	T	1993–98
10346000	Truckee River at Farad	932	WQ,B,C, T,S	1951–61, 1964–81, 1993–98
10345700	Bronco Creek at Floriston	15.4	T	1993–94
10345900	Truckee River at Floriston	932	T	1968–71
10346000	Truckee River at Farad	932	WQ,B,S	1951–61, 1964–81
11185350	Kern River near Quaking Aspen Camp	530	T	1966–74
11187000	Kern River at Kernville	1,009	WQ,B,T,S	1962–93
11191000	Kern River below Isabella Dam	2,074	WQ,T	1956–66, 1971–94
11204900	Tule River below Success Dam	393	WQ,T	1962–69, 1971–94
11206500	Middle Fork Kaweah River near Potwisha Camp	102	WQ,C,T	1958–63, 1972, 1980–81
11208000	Marble Fork Kaweah River at Potwisha Camp	51.4	WQ,C,T	1980–81
11208610	Monarch Creek near Hammond	1.89	T	1969–73
11208620	East Fork Kaweah River below Mosquito Creek, near Hammond	16.0	T	1968–73
11208625	East Fork Kaweah River at Sequoia National Park boundary, near Hammond	23.7	T	1968–71
11208730	East Fork Kaweah River near Three Rivers	85.8	WQ,T,S	1968–76
11209500	North Fork Kaweah River near Three Rivers	129	T	1980–81
11209900	Kaweah River at Three Rivers	418	T	1966, 1968–88
11210950	Kaweah River below Terminus Dam	561	WQ,T	1962–94
11213500	Kings River above North Fork, near Trimmer	952	T	1966–79
11216500	North Fork Kings River above Dinkey Creek, at Balch Camp	250	T	1968–79
11218500	Kings River below North Fork, near Trimmer	1,342	WQ,B,T,S	1956–93
11221500	Kings River below Pine Flat Dam	1,545	WQ,T	1956–66, 1970–94
11230000	South Fork San Joaquin River near Florence Lake	171	T	1961
11235000	San Joaquin River above Big Creek	1050	T	1961–62
11237000	Big Creek below Huntington Lake	81.1	T	1961–70
11245000	South Fork Willow Creek near North Fork	39.8	T	1961
11246500	Willow Creek at mouth, near Auberry	130	T	1961–72
11247000	San Joaquin River below Kerckhoff Powerhouse, near Prather	1,480	T	1961–68, 1970–74
11253500	James Bypass near San Joaquin	—	T	1969–71
11257500	Fresno River near Knowles	133	T	1971–88
11258000	Fresno River below Hidden Dam, near Daulton	237	T	1976–90
11258960	Chowchilla River above Willow Creek, near Raymond	173	T	1980–88
11258980	Chowchilla River near Raymond	201	T	1971–80
11259000	Chowchilla River below Buchanan Dam, near Raymond	236	WQ,T	1958–65, 1976–94
11260815	San Joaquin River near Stevinson	7,388	C,T	1989–96
11261100	Salt Slough at Highway 165, near Stevinson	—	WQ,S	1983–88, 1993–94
11262890	San Luis, Site A, near South Dos Palos	—	C,T	1999
11262900	Mud Slough near Gustine	—	WQ,S	1985–94, 1999
11266500	Merced River at Pohono Bridge, near Yosemite	321	WQ,T,S	1971–72, 1981–82, 1994, 1995
11268000	South Fork Merced River near El Portal	241	T	1975–78
11268200	Merced River near Briceburg	691	T	1976–77
11272500	Merced River near Stevinson	1,273	C,T	1989–92
11274000	San Joaquin River near Newman	9,520	WQ,C,T,S	1989, 1992–95
11274554	Spanish Grant Combined Drain near Patterson	—	WQ,C,T,S	1993–95
11274560	Turlock Irrigation District Lateral No. 5 near Crows Landing	—	C,T,S	1992–95, 1999
11274570	San Joaquin River at Patterson Bridge, near Patterson	9,760	C,T,S	1989–95
11283100	Lily Creek near Pinecrest	11.9	T	1965–74
11290000	Tuolumne River at Modesto	1,884	WQ,C,T,S	1989–95
11292700	Middle Fork Stanislaus River at Hells Half Acre Bridge, near Pinecrest	287	T	1966–71, 1973–78
11294500	North Fork Stanislaus River near Avery	163	T	1990–98
11295400	Stanislaus River near Hathaway Pines	629	T	1970–83

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
11303000	Stanislaus River at Ripon	1,075	WQ,S	1985–88, 1994
11303500	San Joaquin River near Vernalis	13,536	B	1974–81
11306000	South Fork Calaveras River near San Andreas	118	T	1974–79
11308000	North Fork Calaveras River near San Andreas	85.2	T	1974–79
11308600	Calaveras River above New Hogan Reservoir, near San Andreas	307	T	1970–82, 1984–88
11308900	Calaveras River below New Hogan Dam, near Valley Springs	363	WQ,T	1964–66, 1971–94
11312000	Bear Creek near Lockeford	47.4	C	1976
11313010	Delta–Mendota Canal below Tracy Pump Plant, near Tracy	—	T	1960–66
11319500	Mokelumne River near Mokelumne Hill	544	WQ,T	1961–80
11323500	Mokelumne River below Camanche Dam	621	WQ,T,S	1906–07, 1956–76
11325500	Mokelumne River at Woodbridge	661	WQ,C,T,S	1951–94
11335000	Cosumnes River at Michigan Bar	536	WQ,T,S	1953–80

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

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WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2000
VOLUME 3—SOUTHERN CENTRAL VALLEY BASINS AND THE GREAT BASIN FROM WALKER RIVER TO TRUCKEE RIVER

By J.R. Smithson, L.A. Freeman, G.L. Rockwell, S.W. Anderson, *and* G.L. Pope

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 180 streamflow-gaging stations and 2 partial-record stations; (2) stage and content records for 44 lakes and reservoirs; (3) precipitation records for 1 station; and (5) water-quality records for 50 streamflow-gaging stations and 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-01-3." 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:

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

California State Water Resources Control Board, Winston H. Hickox, Secretary for Environmental Protection.

East Bay Municipal Utility District, Michael J. Wallis, Director of Operations and Maintenance.

Madera Irrigation District, Stephen H. Ottemoeller, General Manager.

Sacramento County Department of Public Works, Warren H. Harada, Administrator.

San Luis and Delta–Mendota Water Authority, Daniel G. Nelson, Executive Director.

San Francisco, city and county, Hetch-Hetchy Water and Power, Lawrence T. Klein, General Manager.

Tulare County Resource Management Agency, Douglas Wilson, Director.

Turlock Irrigation District, Chris L. Kiriakou, Assistant General Manager–Energy Resources.

Woodbridge Irrigation District, Anders Christensen, Manager.

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 Interior, Bureau of Indian Affairs, and National Park Service.

The following organizations aided in collecting records: Calaveras County Water District, Olcese Water District, Pacific Gas & Electric Co., Southern California Edison Co., Merced and Oakdale–South San Joaquin Irrigation Districts, Northern California Power Agency, and Utica Power Authority.

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 streamflow 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. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrology Benchmark Program can be found at:

http://water.usgs.gov/hgn/

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. 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. Additional information about the NASQAN program can be found at:

http://water.usgs.gov/nasqan

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical consituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmosphiric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at:

http://bqs.usgs.gov/acidrain/

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 59 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 can be found at:

http://water.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. 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).

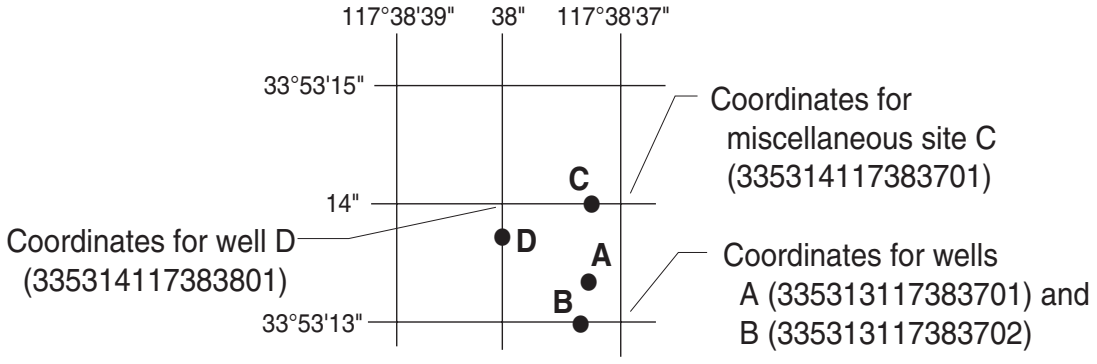

Figure 1. System for numbering miscellaneous sites (latitude and longitude).

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.

Change in National Trends Network Procedures

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 Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495 (Telephone: 217-333-7873).

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 (2001) 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.

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 adequately interpreted 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 that 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 blank samples 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:

Source solution blank is a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank is a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

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.

Pump blank is a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank is a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

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.

Canister blank is a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank 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:

Concurrent sample is a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

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.

Concurrent sample is a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample is a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

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

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English 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 a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP 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.

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 that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1–March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

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.

Artificial substrate is a device that 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. (See also "Substrate")

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). (See also "Biomass")

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.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler may also contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms 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 mass per unit area or volume of habitat.

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

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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members 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:

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

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159

From cell volume, total algal biomass expressed as biovolume (μm^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.

Cfs-day (See "Cubic foot per second-day")

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. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

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 where data are collected with sufficient frequency to define daily mean values and variations within a day.

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 gage. 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, 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 or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-feet" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Mean concentration of suspended sediment","Sediment", and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data Collection Platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum", "Land-surface datum", "National Geodetic Vertical Datum of 1929", and "North American Vertical Datum of 1988")

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. (See also "Phytoplankton")

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

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water 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 concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It 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 the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

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

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. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas 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 contains a drainage system with a common outlet for its surface runoff (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105°C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass", "Biomass", and "Wet mass")

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. (See also "Wet weight")

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. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

***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. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

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. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed 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 streambed sediments.

Fecal coliform bacteria are present in the intestine 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 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. 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. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

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 a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments, and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

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

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

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.

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. (See also "Phytoplankton")

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily 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

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N}$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

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 index stations referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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 USGS. Each hydrologic unit is identified by an 8-digit number.

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. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

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.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

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 concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

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

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

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.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The 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. One microgram per liter is equivalent to 1 part per billion.

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.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Miscellaneous site, miscellaneous station, or miscellaneous sampling site, is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

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 benthic invertebrate 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 fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level". Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. (See "North American Vertical Datum of 1988") *See also NOAA web site:*

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

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

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.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

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), particulate organic carbon (POC), or total organic carbon (TOC).

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. (See also "Ash mass", "Biomass", and "Dry mass"

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.

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 USGS 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 as 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 matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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, mass, or volume.

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, 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.

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. (See also "Plankton")

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 radioactive nuclide that yields 3.7×10^{-10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 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.

Polychlorinated biphenyls (PCBs) 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 (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) 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. (See also "Primary productivity")

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. (See also "Primary productivity")

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 bed (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. (See also "Bed material")

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 (See "Recurrence interval")

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum").

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the 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 MIL/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.

Substrate Embeddedness Class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0	< no gravel or larger substrate
1	>75%
2	51-75%
3	26-50%
4	5-25%
5	<5%

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which 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 operationally defined as 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 water-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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

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 analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows:

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

(See also "Sediment", "Suspended sediment", and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. 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. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105°C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

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.

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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*

Temperature preferences:

Cold — preferred water temperature for the species is less than 20°C or spawning temperature preference less than 16°C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm — preferred water temperatures for the species is greater than 20°C or spawning temperature preference greater than 16°C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool — intermediate between cold and warm water temperature preferences.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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 a common chemical or sediment discharge unit. It is the quantity of a substance in solution in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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. A 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 water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

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 intestine 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. (See also "Bacteria")

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 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. A 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 organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Sediment", "Suspended sediment", "Suspended-Sediment Concentration", "Bedload", and "Bedload discharge")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment", "Suspended-Sediment Load", and "Total load")

Trophic groups:

Filer feeder—diet composed of suspended plant and/or animal material.
Herbivore—diet composed predominantly of plant material.
Invertivore—diet composed predominantly of invertebrates.
Omnivore—diet composed of at least 25-percent plant and 25-percent animal material.
Piscivore—diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1. ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the "REMARKS" column of the Annual Data Report.

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.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) 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 VOCs are human-made 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 table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

Water year in USGS 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, 2001, is called the "2001 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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

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. (See also "Plankton")

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 soluble 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.

3-B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI Book 3, Chapter B8. 2001. 29 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.

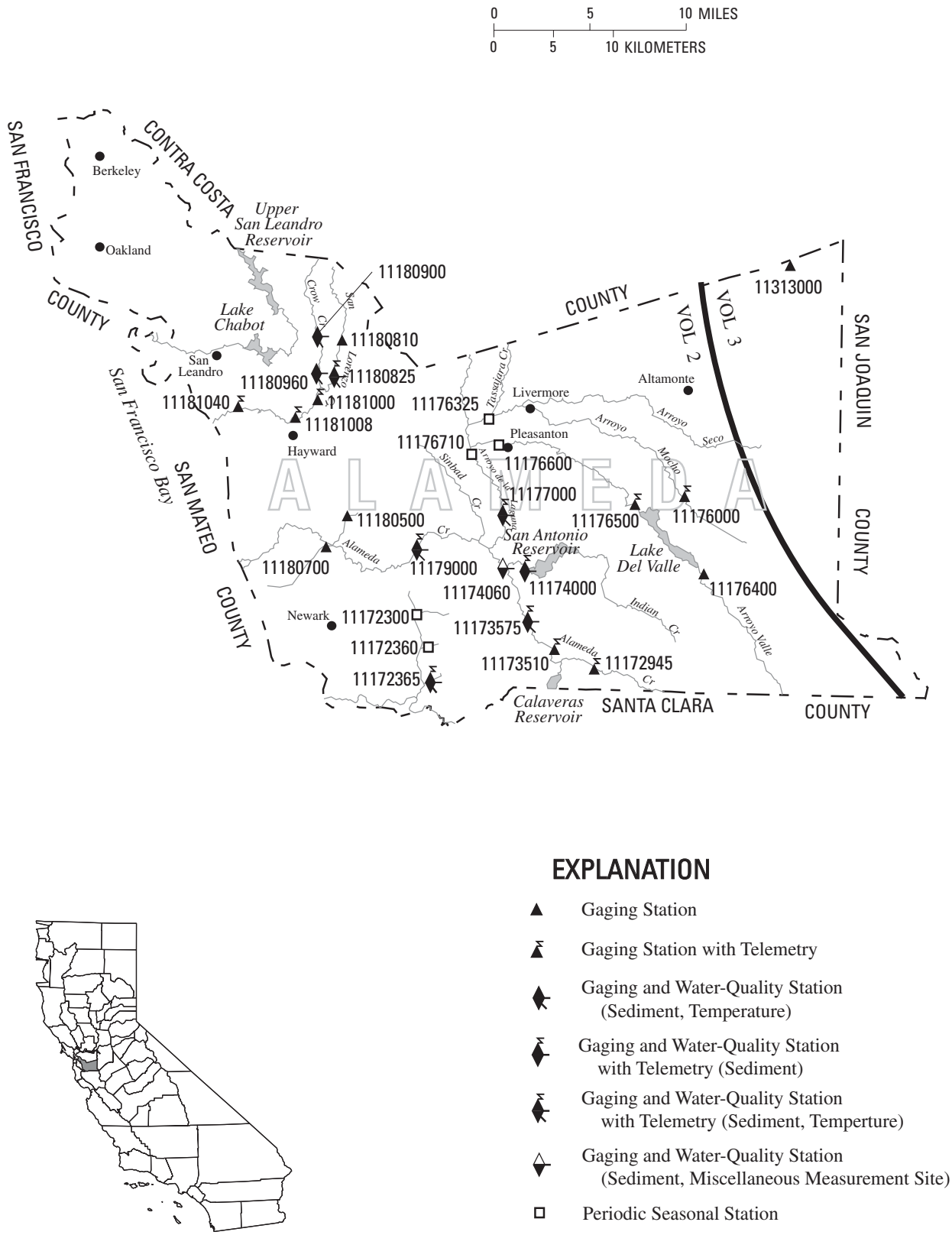

Figure 2. Location of discharge and water-quality stations in Alameda County.
(NOTE: Records for stations 11172945 through 11181040 published in volume 2.)

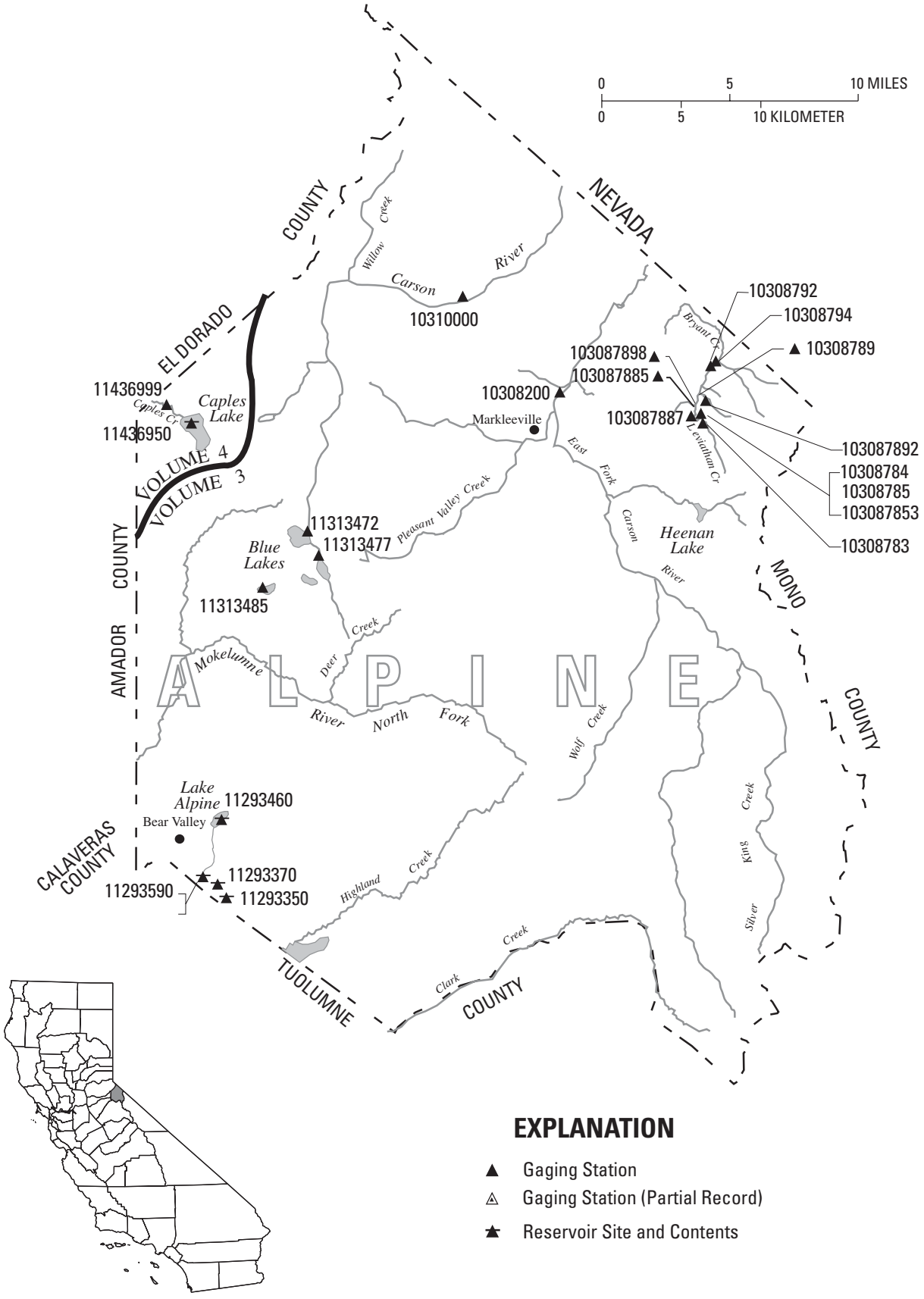

Figure 3. Location of discharge stations in Alpine County.
(NOTE: Station 10297000 in Douglas County, Nevada, shown on Mono County map.
Record for stations 11436950 and 11436999 published in volume 4.)

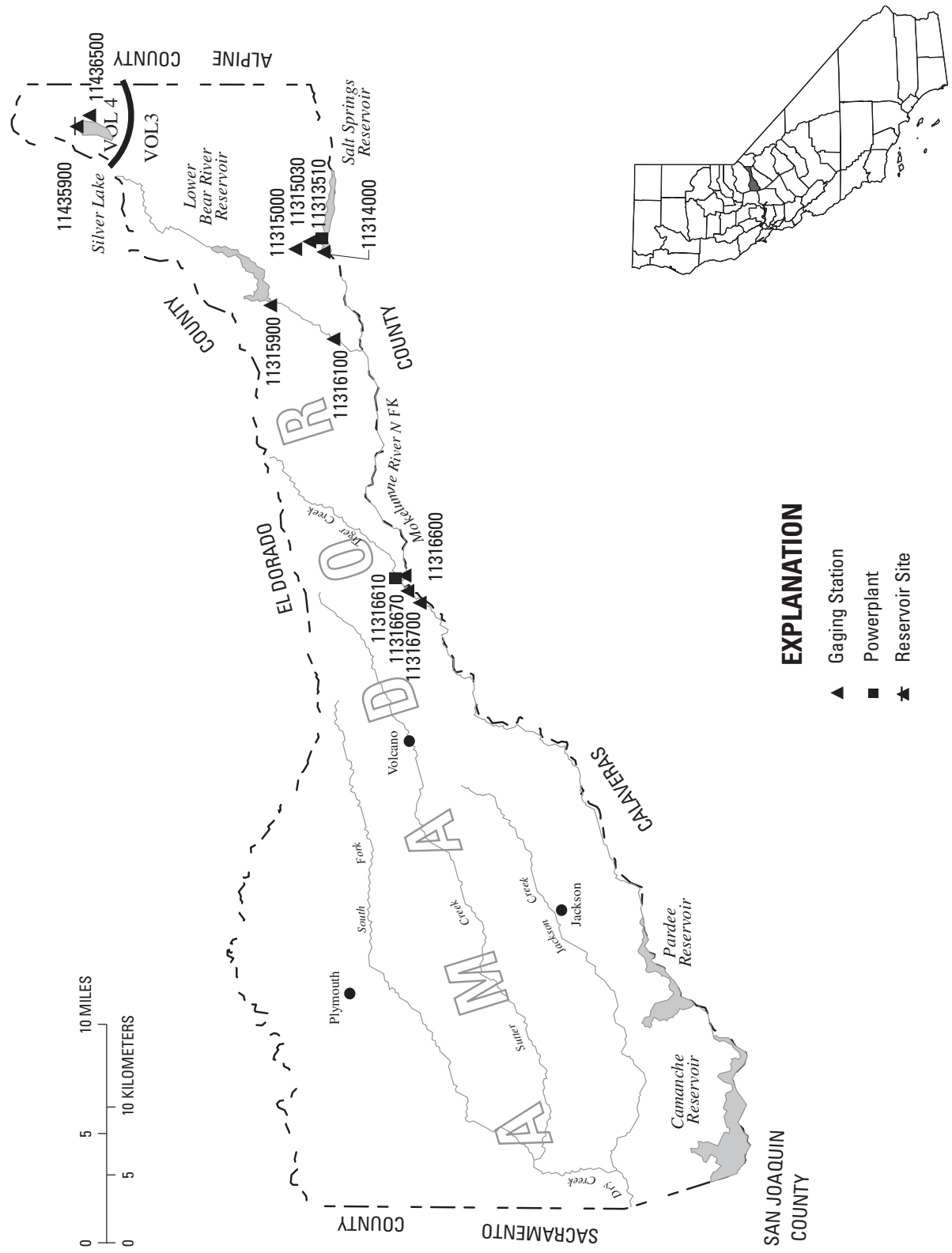

Figure 4. Location of discharge stations in Amador County. (NOTE: Record for station 11435900 published in volume 4.)

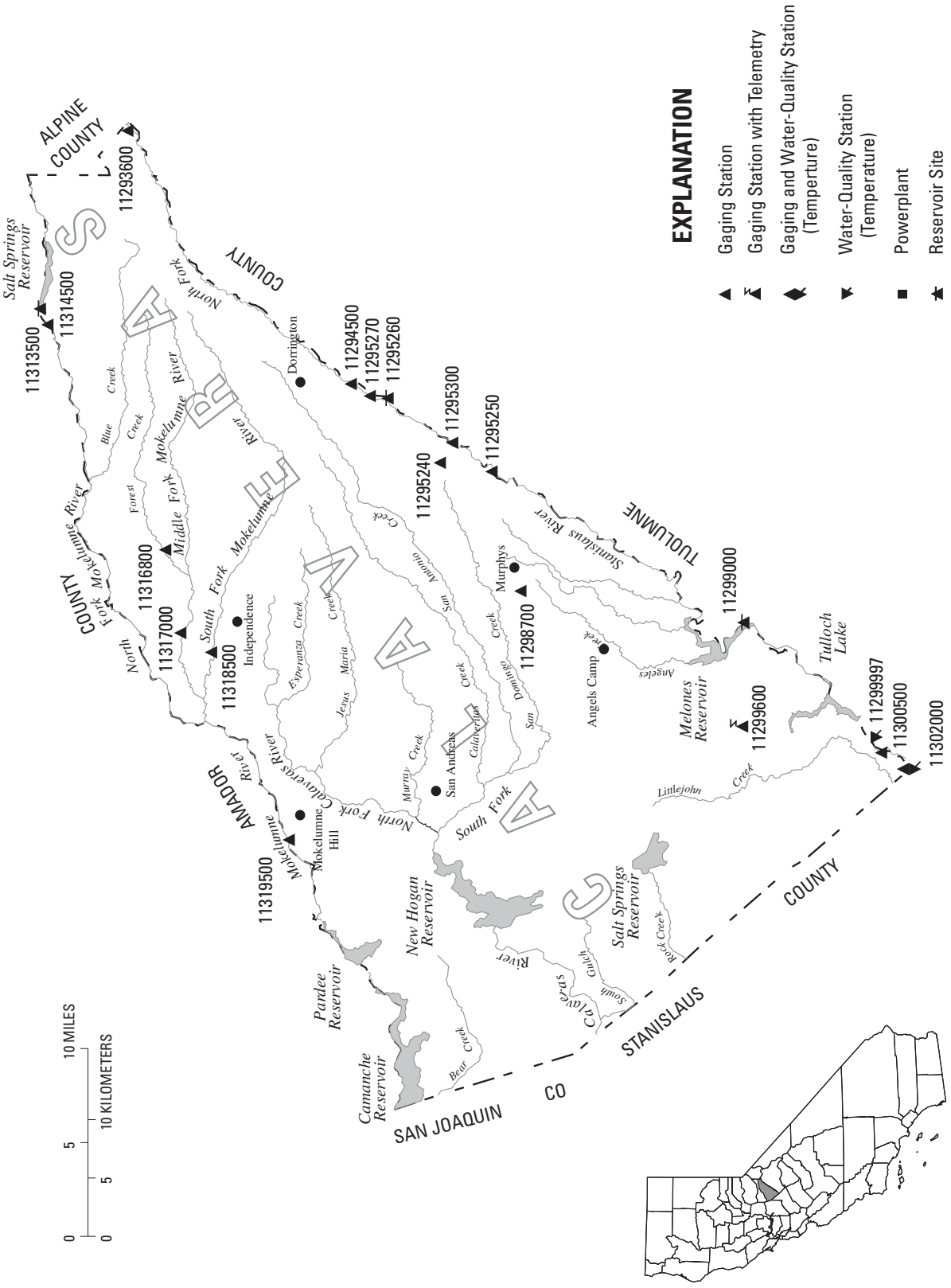

Figure 5. Location of discharge and water-quality stations in Calaveras County.

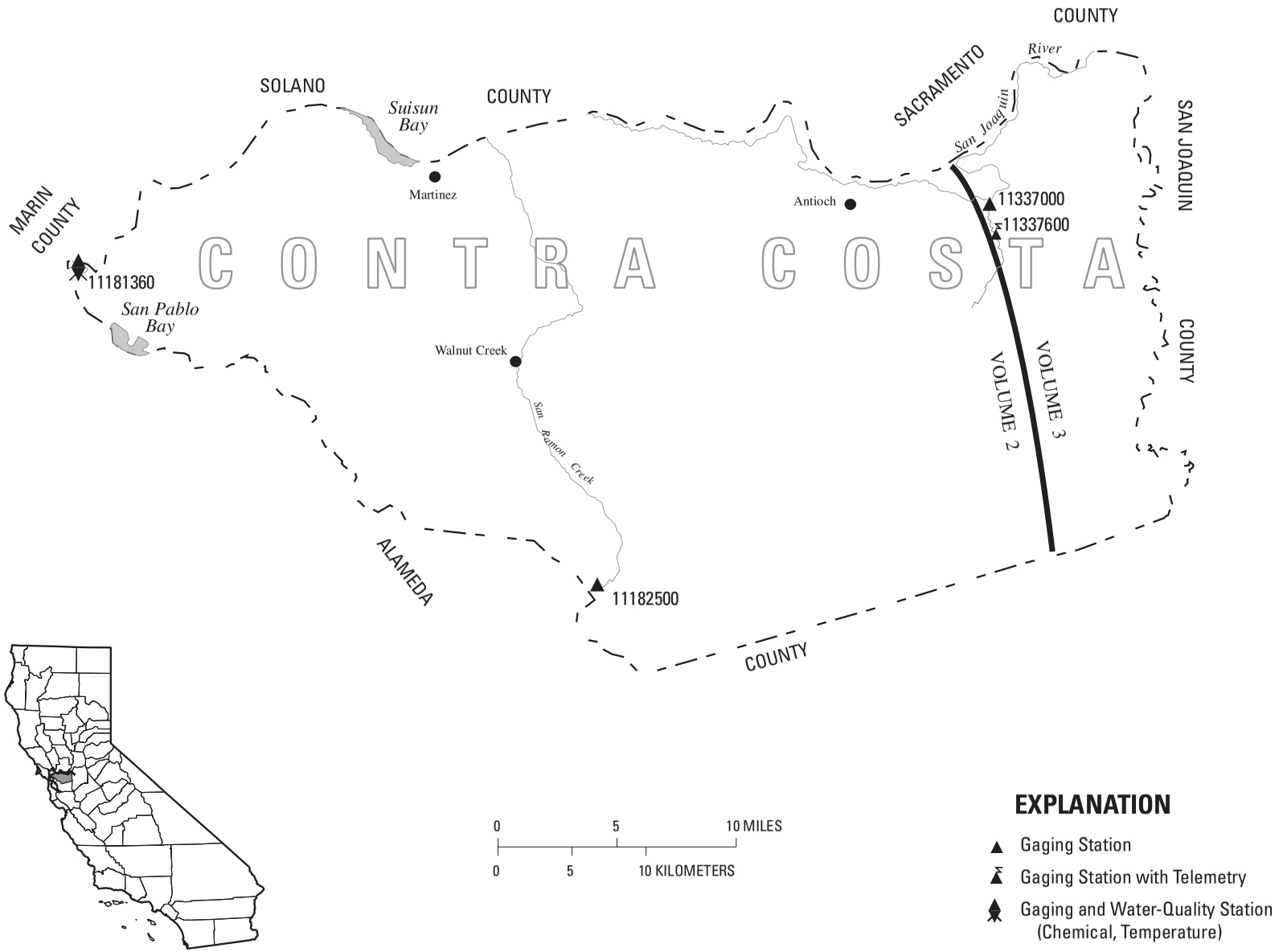

Figure 6. Location of discharge and water-quality stations in Contra Costa County.
(NOTE: Records for stations 11181360 and 11182500 published in volume 2.)

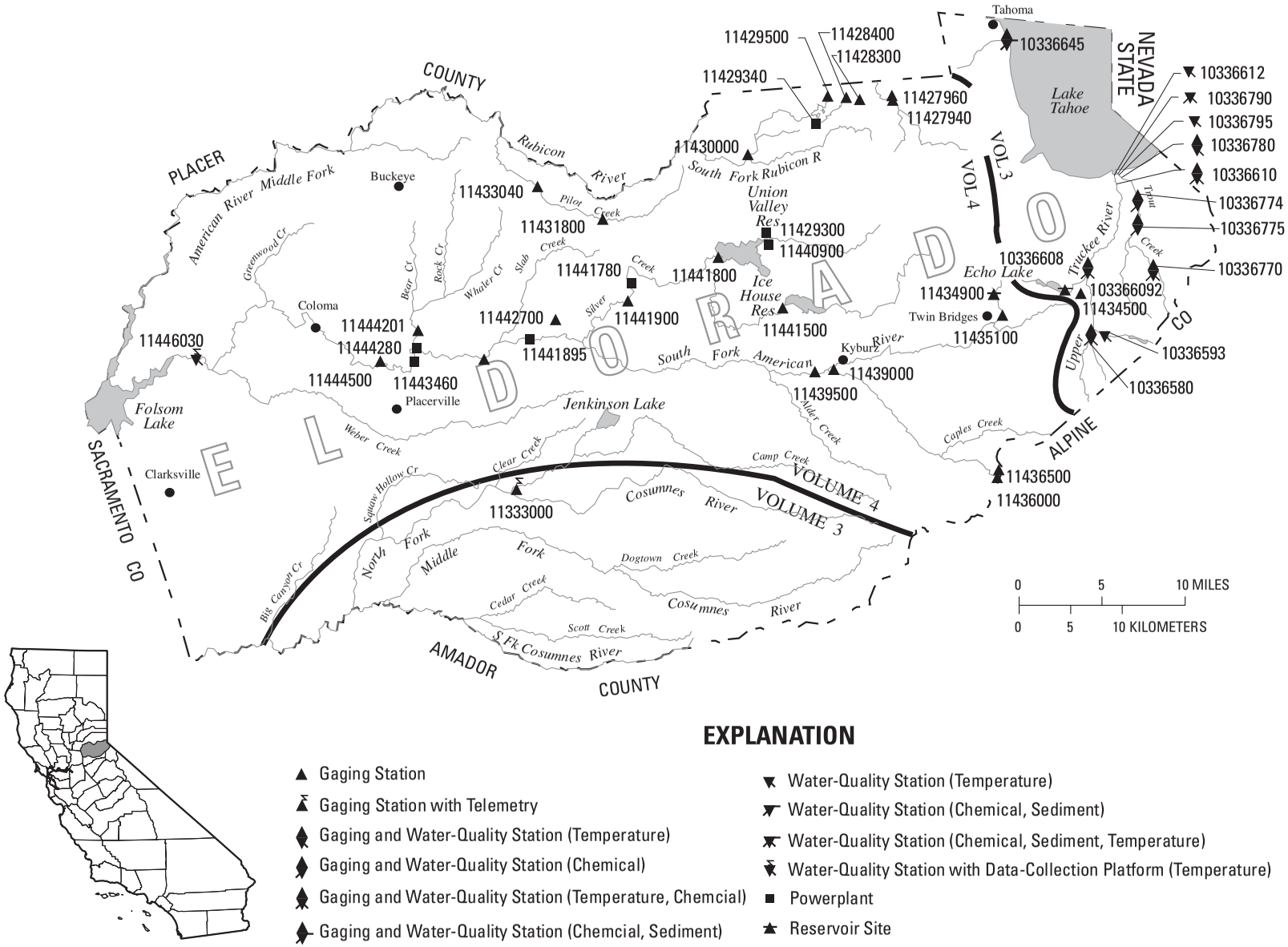

Figure 7. Location of discharge and water-quality stations in El Dorado County.
(NOTE: Records for stations 11427800 through 11446030 published in volume 4.)

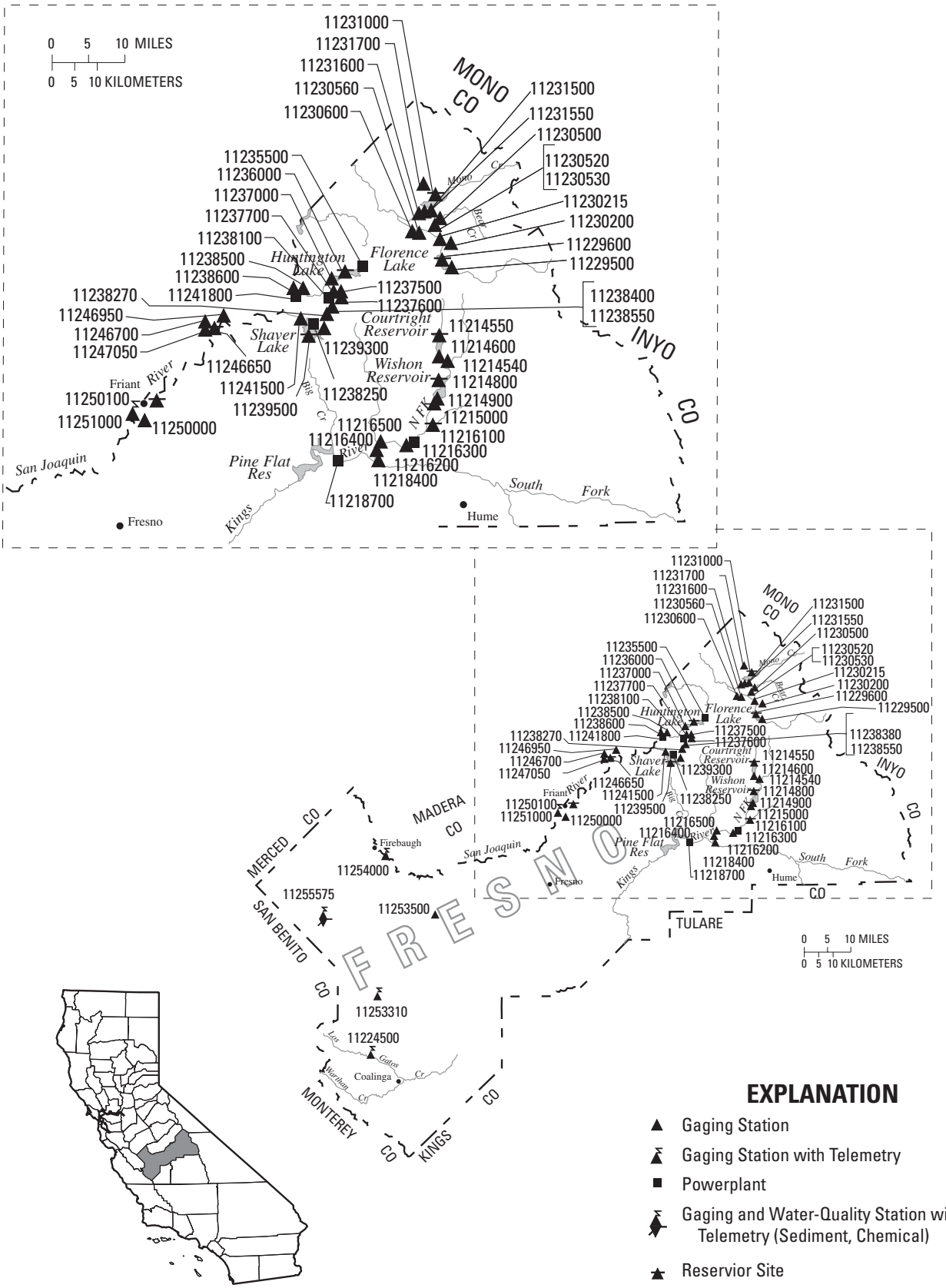

Figure 8. Location of discharge and water-quality stations in Fresno County.

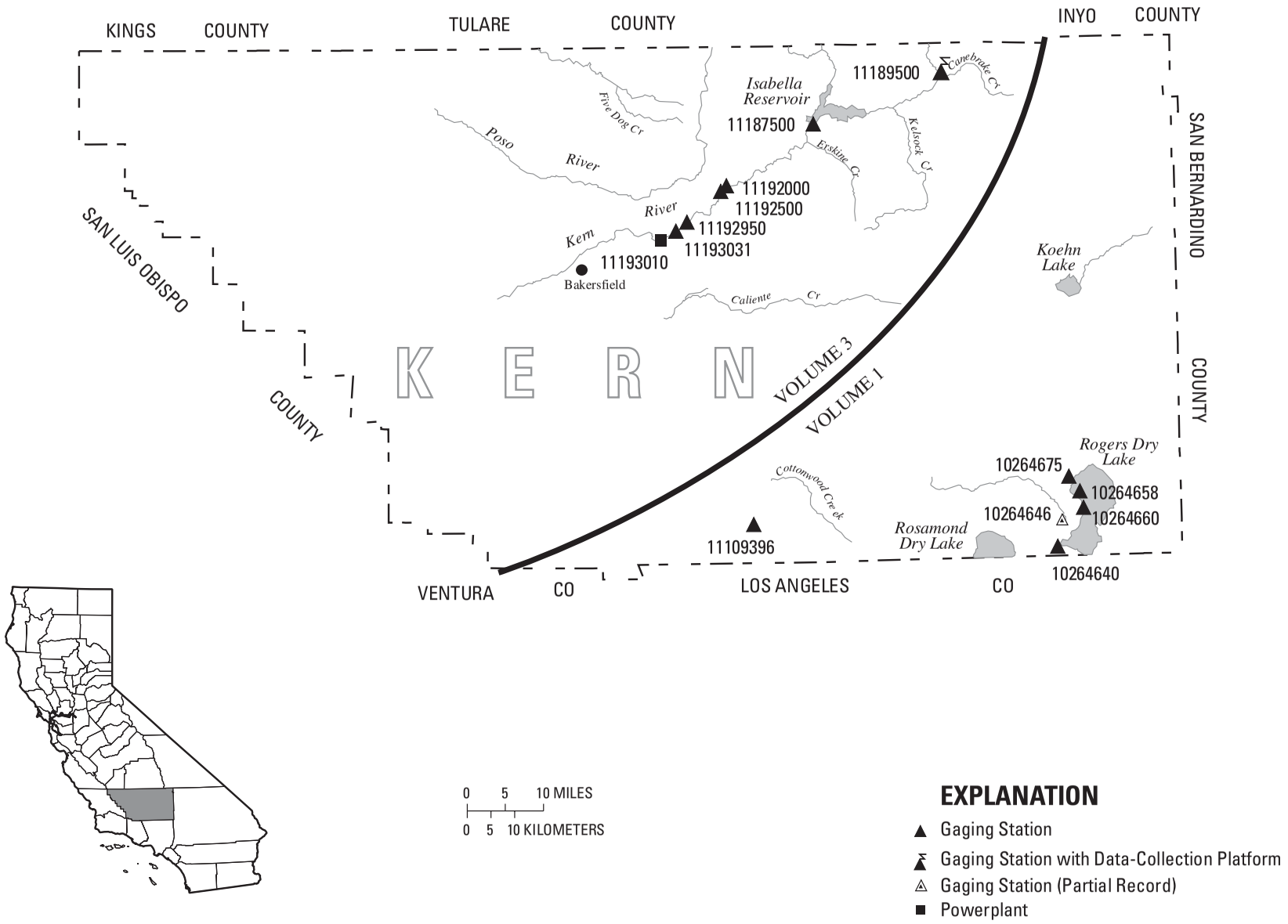

Figure 9. Location of discharge stations in Kern County.
(NOTE: Records for stations10264640 through 10264675, and 11109396 published in volume 1.)

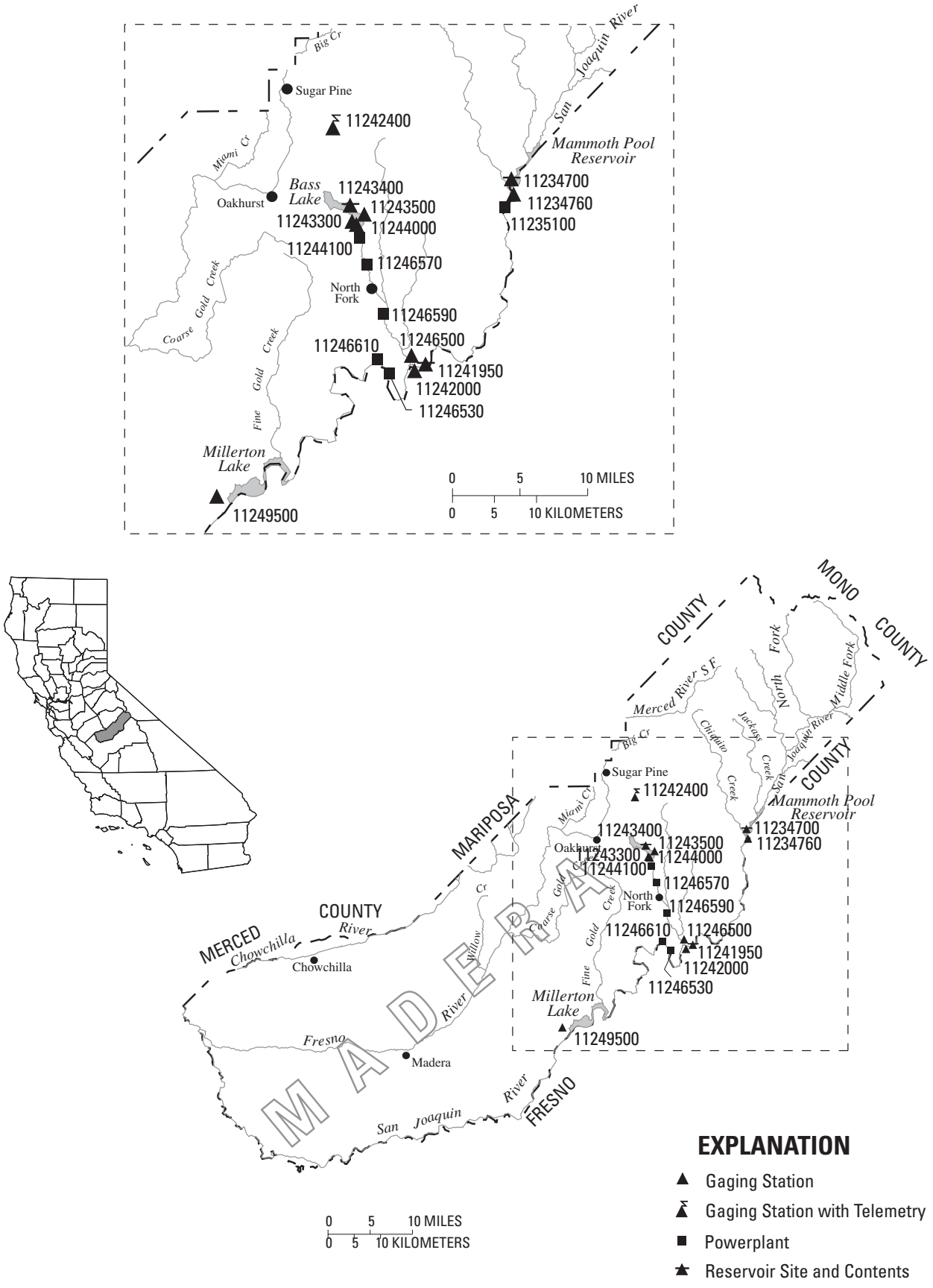

Figure 10. Location of discharge stations in Madera County.

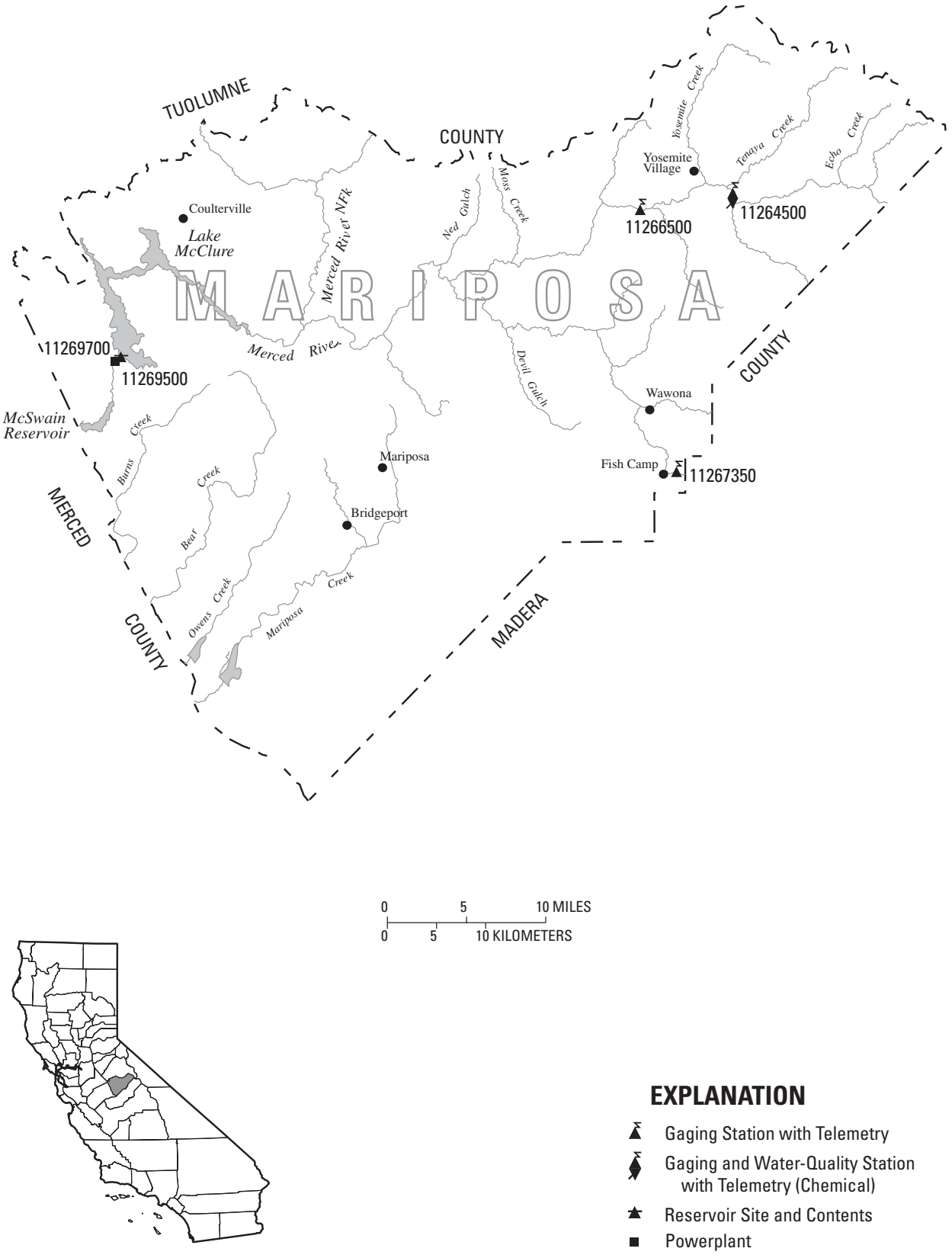

Figure 11. Location of discharge stations in Mariposa County.

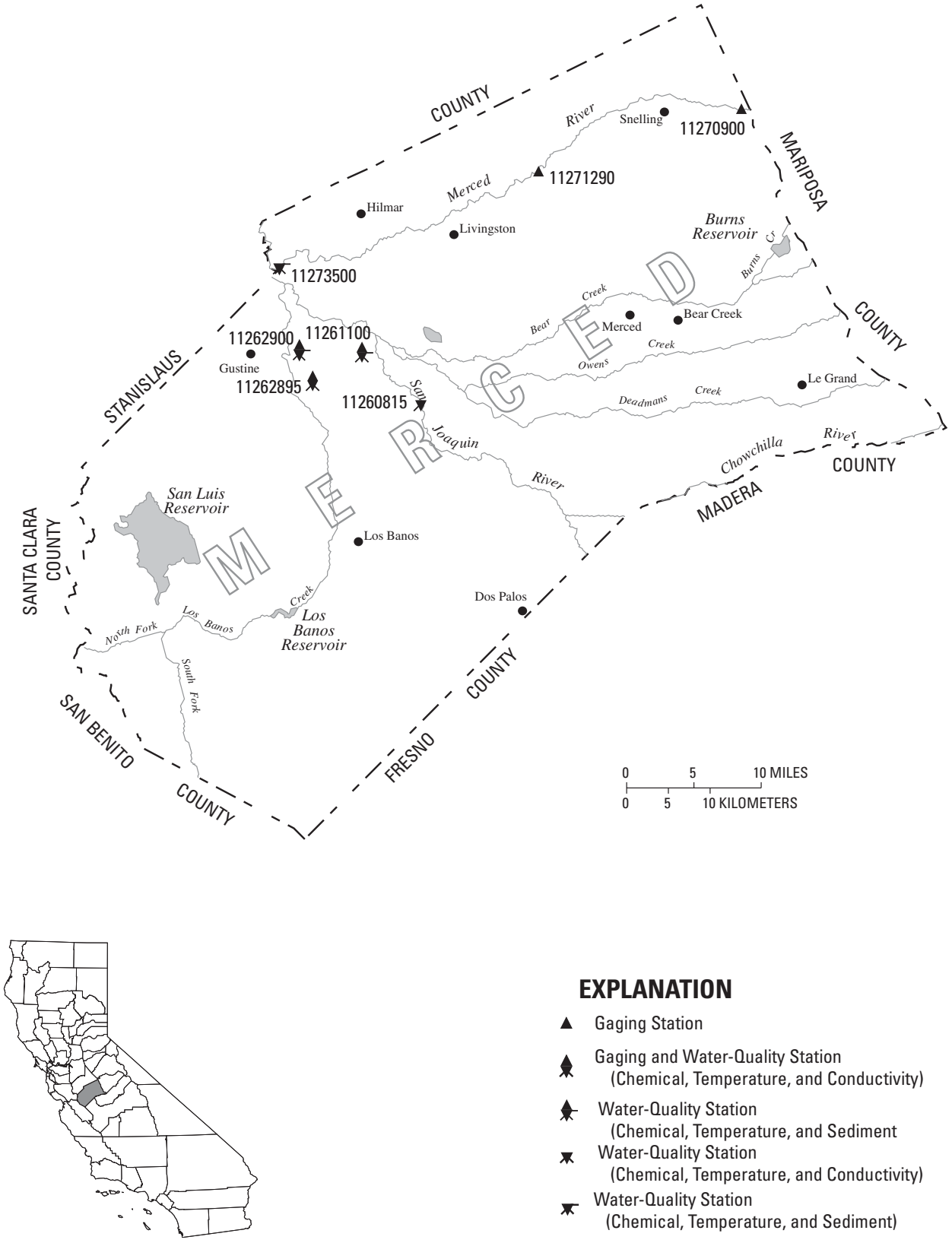

Figure 12. Location of discharge and water-quality stations in Merced County.

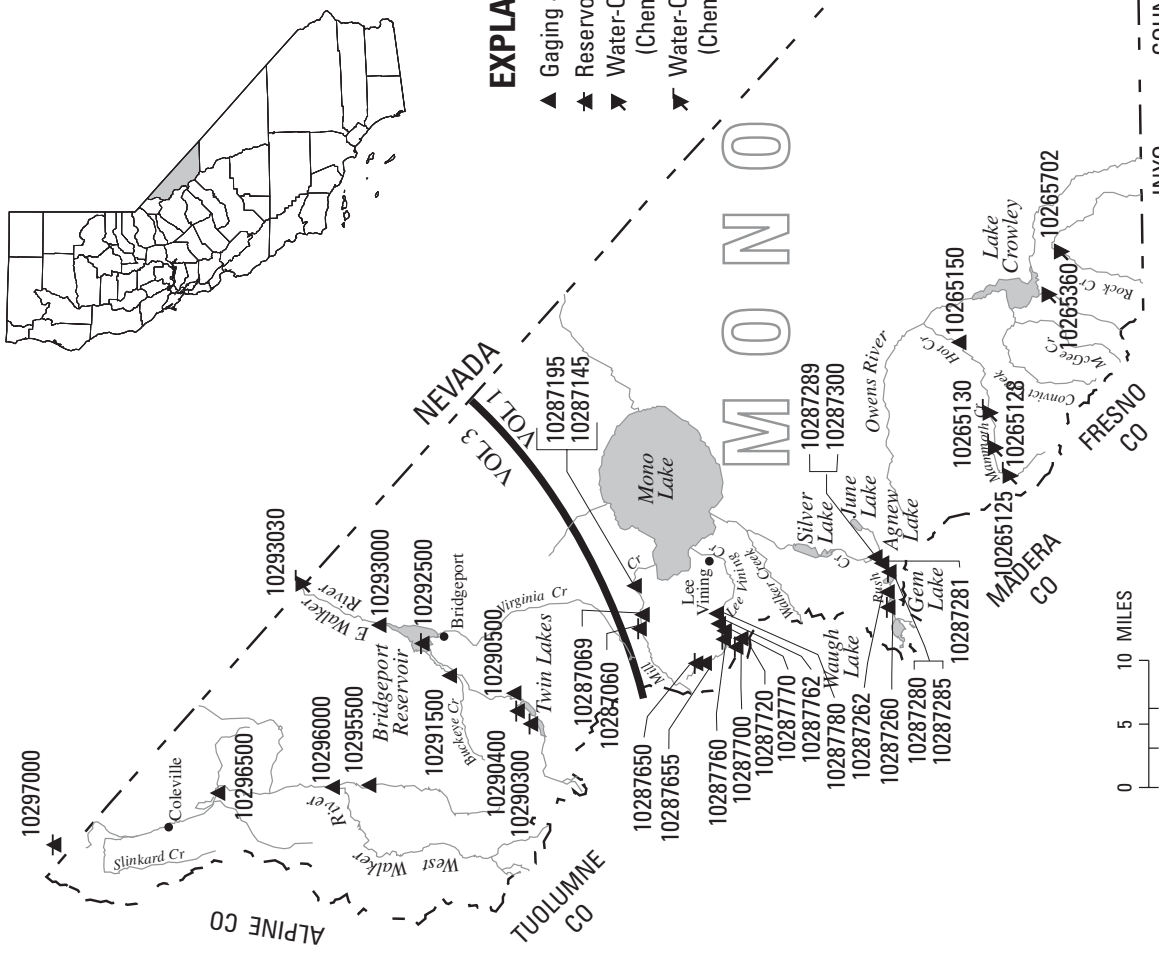

Figure 13. Location of discharge stations in Mono County.
(NOTE: Records for stations 10265150 through 10287780 published in volume 1. Station 10297000 is actually located in Douglas County, Nevada.)

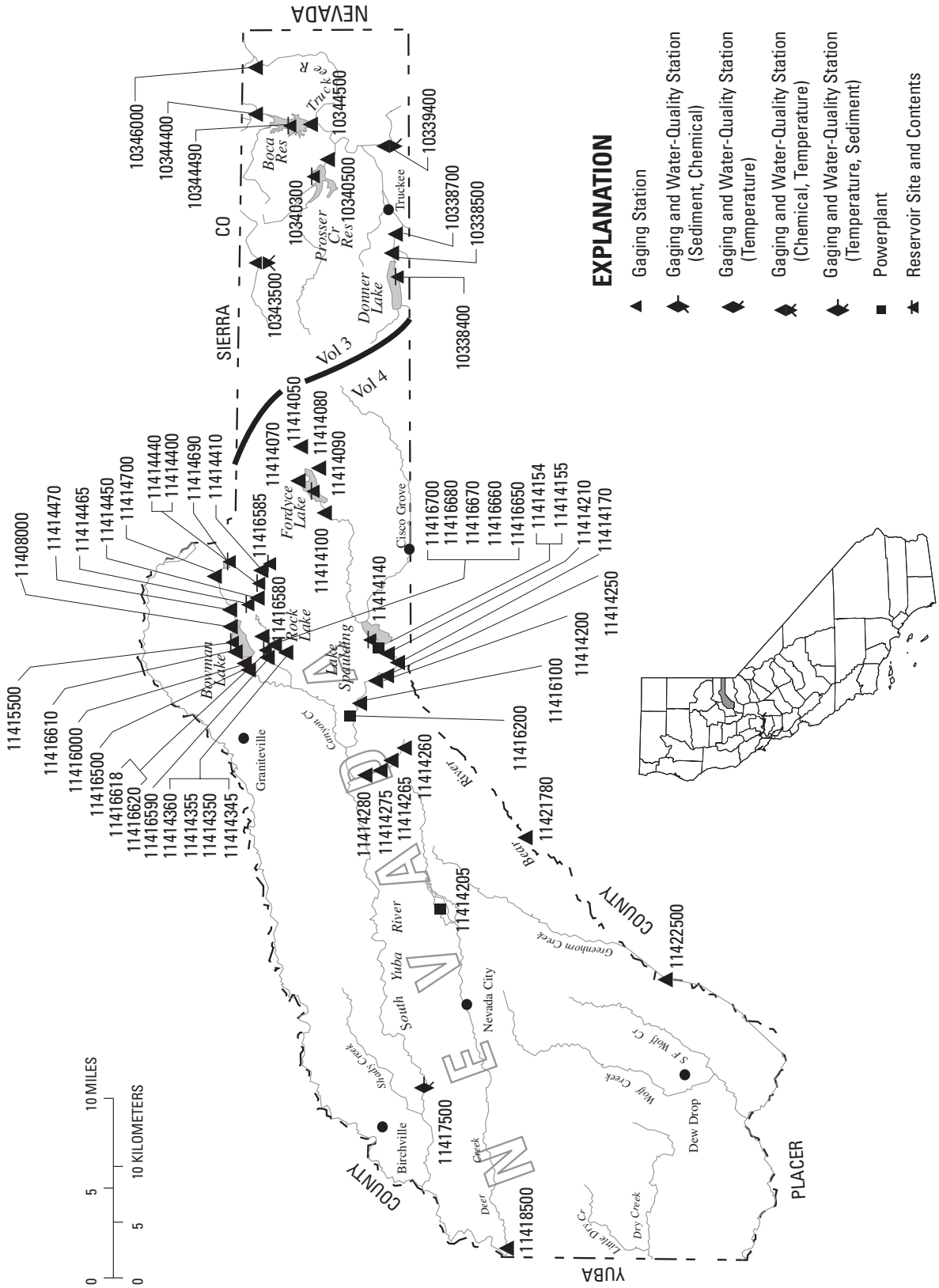

Figure 14. Location of discharge and water-quality stations in Nevada County.
(NOTE: Records for stations 11408000 through 11422500 published in volume 4.)

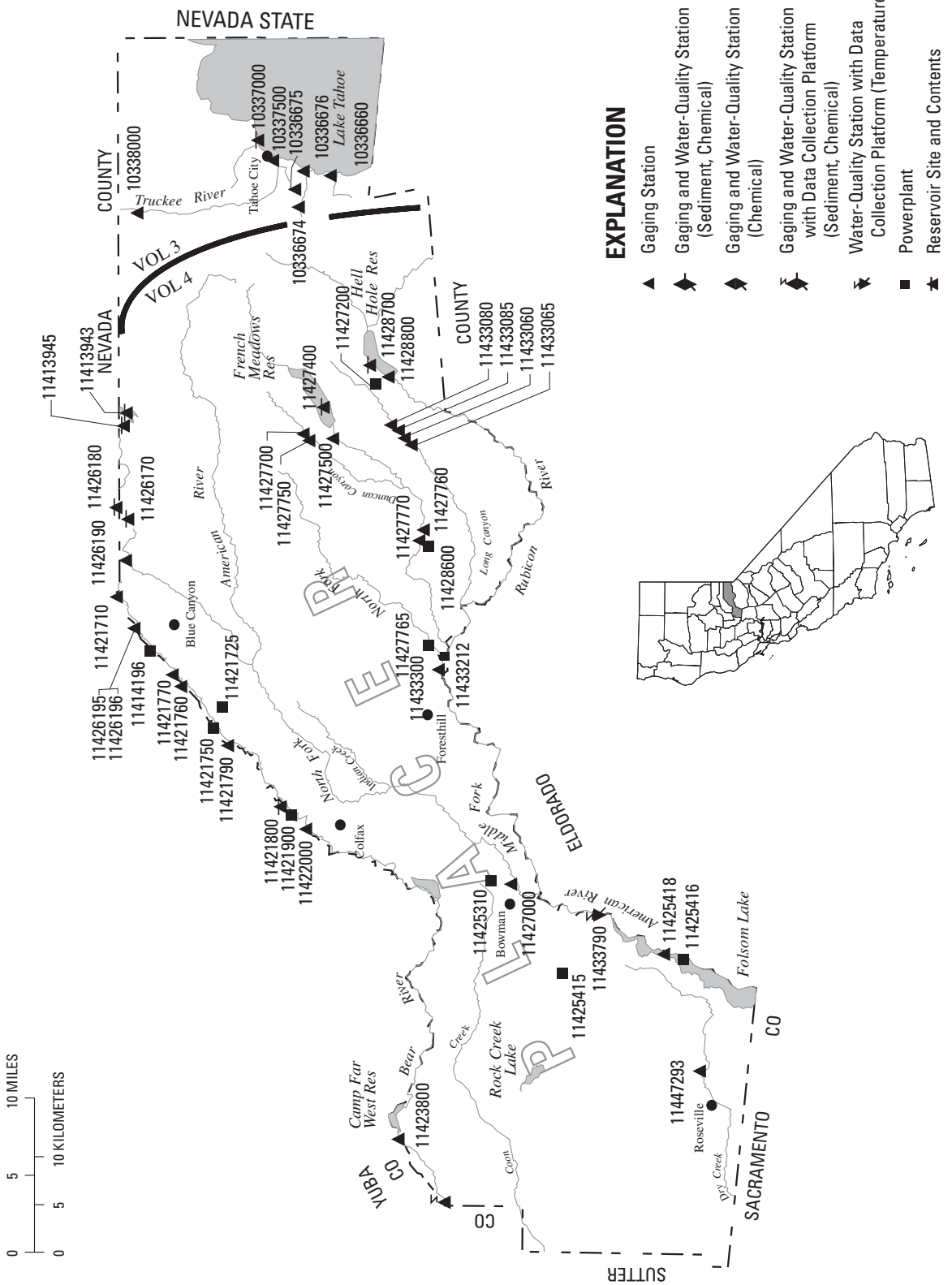

Figure 15. Location of discharge and water-quality stations in Placer County.
(NOTE: Records for stations 11413940 through 11447293 published in volume 4.)

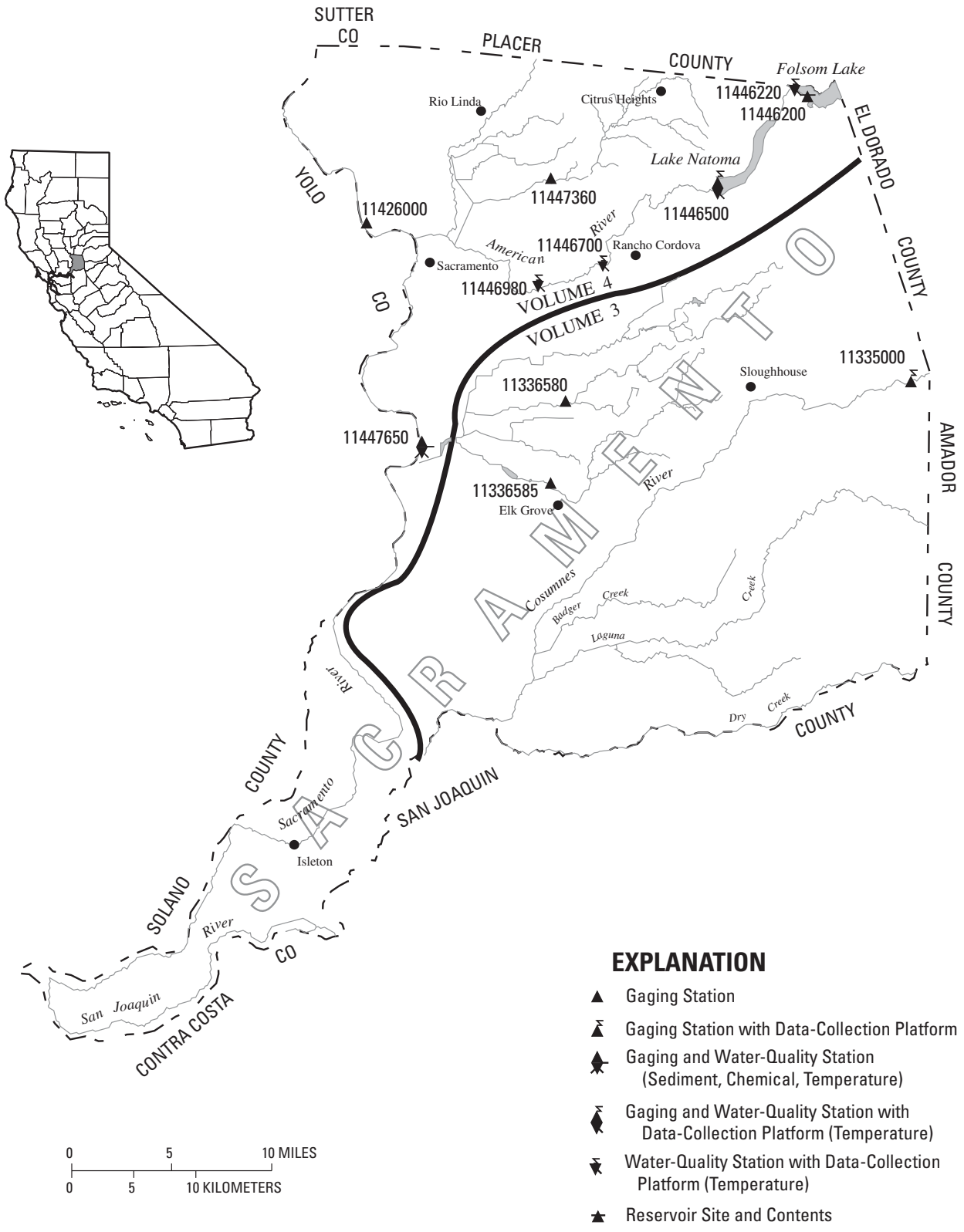

Figure 16. Location of discharge and water-quality stations in Sacramento County.
(NOTE: Records for stations 11426000 through 11447650 published in volume 4.)

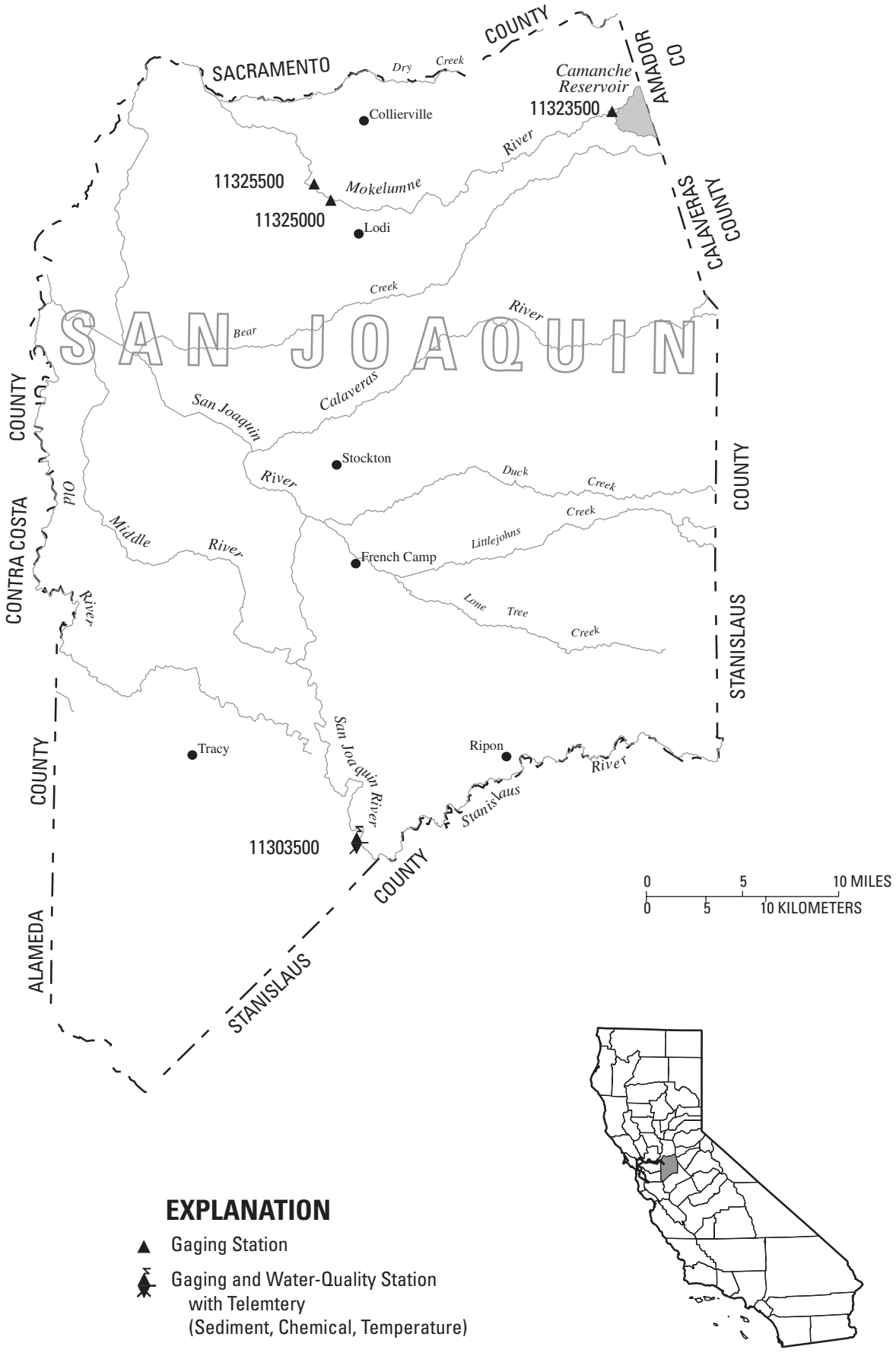

Figure 17. Location of discharge and water-quality stations in San Joaquin County.

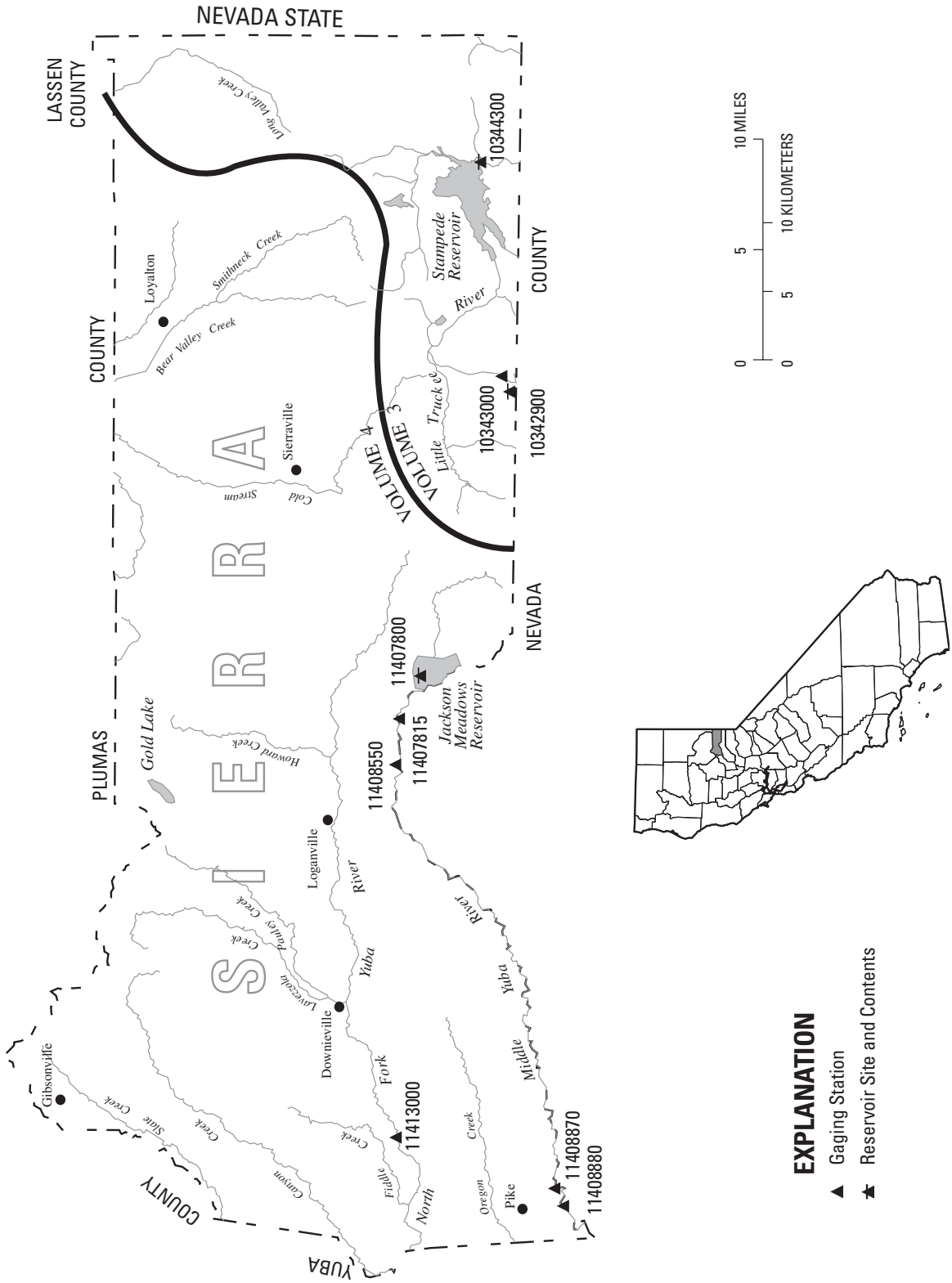

Figure 18. Location of discharge stations in Sierra County.
(NOTE: Records for stations 11407800 through 11413000 published in volume 4.)

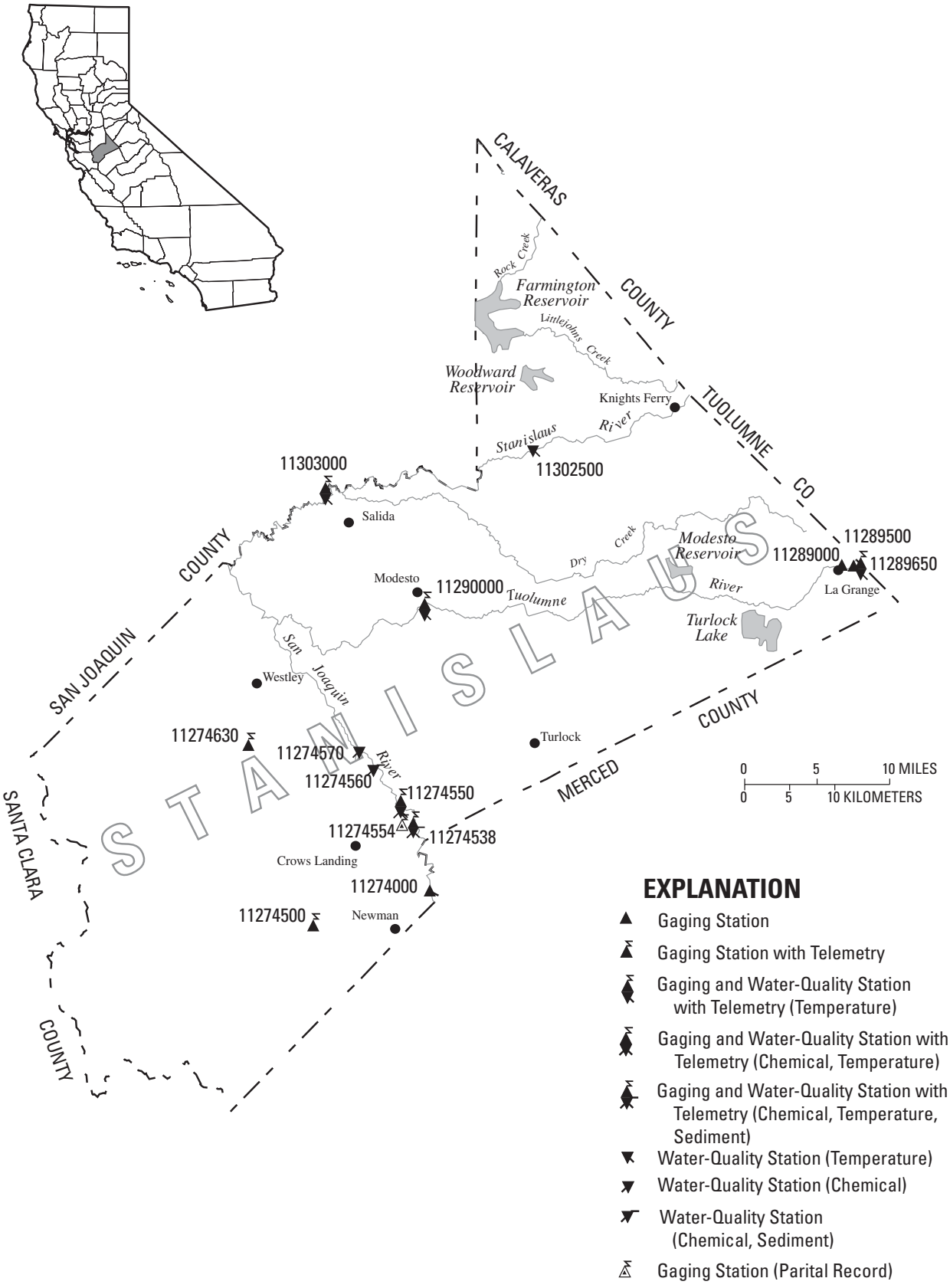

Figure 19. Location of discharge and water-quality stations in Stanislaus County.

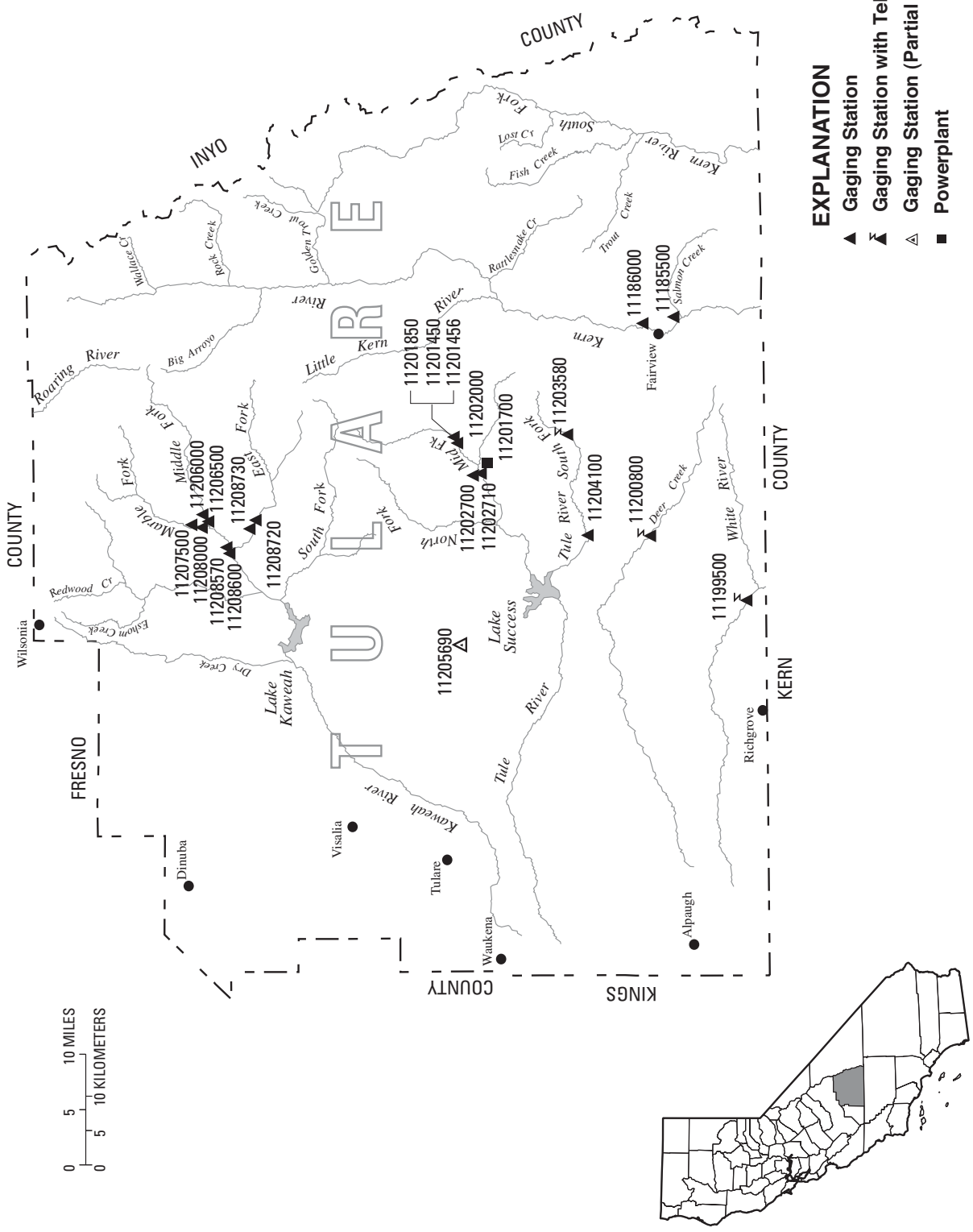

Figure 20. Location of discharge stations in Tulare County.

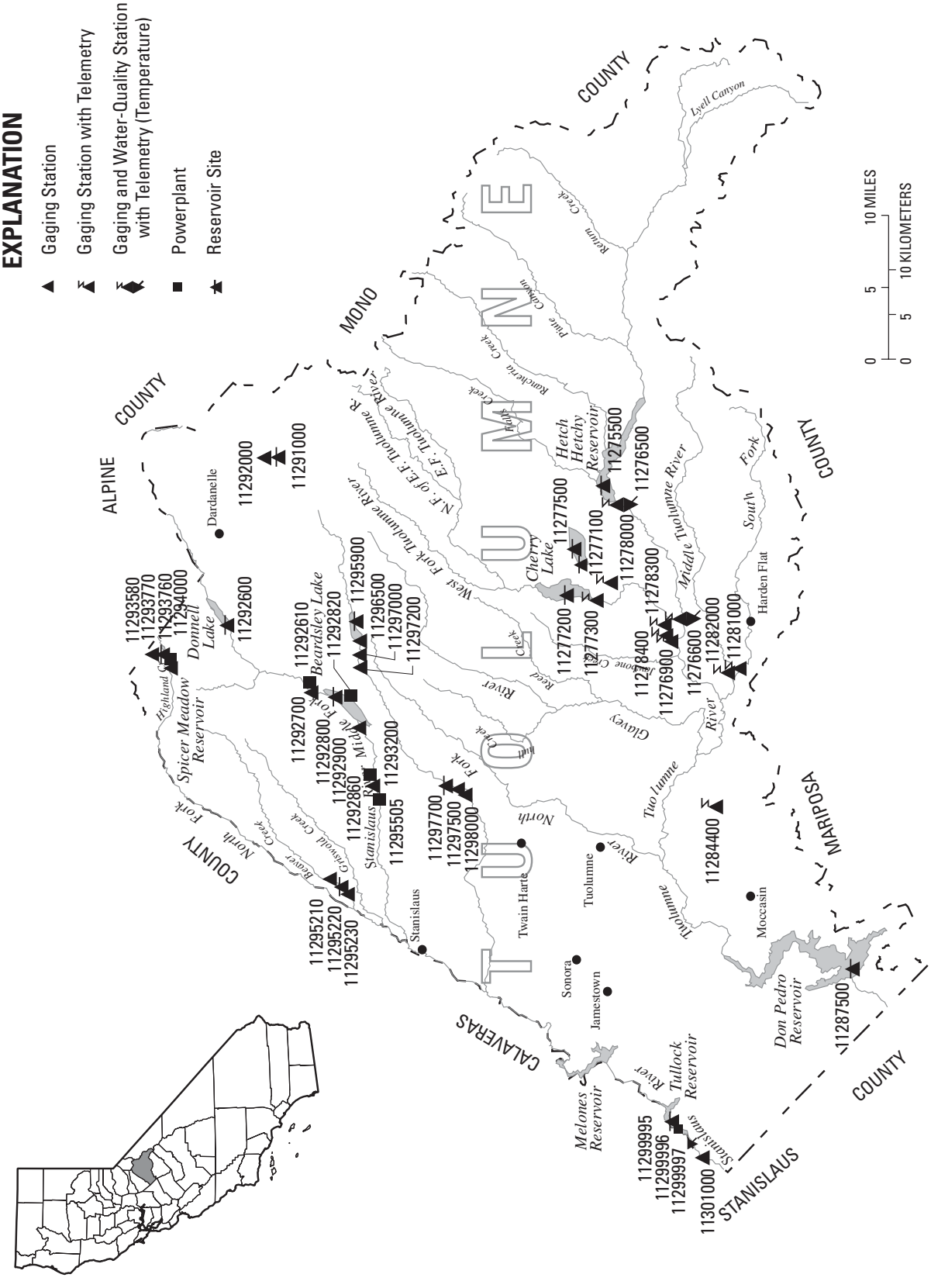

Figure 21. Location of discharge and water-quality stations in Tuolumne County.

Remark Codes

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

PRINTED OUTPUT	REMARK
e	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
U	Material specifically analyzed for, but not detected.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.
K	Results based on colony count outside the acceptance 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.
N	Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.
A	Samples collected by another agency.
&	Biological organism estimated as dominant.
*	Instantaneous discharge at the time of cross-sectional measurements.
**	Partial sampled width.
1	Laboratory value.
2	Laboratory fixed-end point titration.
†	Sample collected using an automatic sampler.

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.

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.

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 abailable from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°09'15", long 119°20'58", in NW 1/4 NE 1/4 sec.5, T.3 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of upper lake dam on Robinson Creek, and 10 mi southwest of Bridgeport.

DRAINAGE AREA.—29.5 mi^2.

PERIOD OF RECORD.—December 1961 to February 1964, September 1964 to current year.

GAGE.—Nonrecording gage. Elevation of gage is 7,212.86 ft above sea level (project datum of U.S. Indian Irrigation Service).

REMARKS.—Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft, between elevations 7,200 ft, natural rim, and 7,207 ft, spillway crest. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents observed, 2,990 acre-ft, July 7, 1983, elevation, 7,209.85 ft; minimum observed, 30 acre-ft, Nov. 1, 1990, elevation, 7,200.11 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.—No usable contents observed Oct. 17, 1961.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 2,580 acre-ft, June 1, elevation, 7,208.60 ft; minimum observed, 1,720 acre-ft, Aug. 30, elevation, 7,205.89 ft.

MONTHEND ELEVATION, IN FEET ABOVE SEA LEVEL, AND TOTAL CONTENTS,
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
September 30	7,207.16	2,120	—
October 31	7,207.16	2,120	0
November 30	7,206.09	1,780	-340
December 31	7,206.81	2,010	+230
CALENDAR YEAR 2000	—	—	+240
January 31	7,206.78	2,000	-10
February 28	7,206.12	1,790	-210
March 31	7,207.56	2,250	+460
April 30	7,207.88	2,350	+100
May 31	7,208.57	2,570	+220
June 30	7,207.87	2,350	-220
July 31	7,206.55	1,930	-420
August 31	7,205.90	1,720	-210
September 30	7,206.25	1,830	+110
WATER YEAR 2001	—	—	-290

NOTE.--Monthend elevations are interpolated from readings made during the year.

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°10'05", long 119°19'33", in NE 1/4 NE 1/4 sec.33, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at outlet of lower lake dam on Robinson Creek, and 8 mi southwest of Bridgeport.

DRAINAGE AREA.—38.9 mi^2.

PERIOD OF RECORD.—December 1961 to current year.

GAGE.—Nonrecording gage. Elevation of gage is 7,205.45 ft above sea level (project datum of U.S. Indian Irrigation Service).

REMARKS.—Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft, between elevations 7,190 ft, natural rim, and 7,200 ft, spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 5,560 acre-ft, June 19, 1983, elevation, 7,203.58 ft; no contents, Nov. 17, 1966.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 4,870 acre-ft, June 1, elevation, 7,202.03 ft; minimum observed, 2,690 acre-ft, Oct. 2, elevation 7,196.73 ft.

MONTHEND ELEVATION AND CONTENTS, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
September 30	7,196.78	2,710	—
October 31	7,196.80	2,720	+10
November 30	7,197.30	2,920	+200
December 31	7,198.18	3,270	+350
CALENDAR YEAR 2000	—	—	-880
January 31	7,199.60	3,850	+580
February 28	7,200.60	4,260	+410
March 31	7,200.62	4,270	+10
April 30	7,201.18	4,510	+240
May 31	7,202.00	4,860	+350
June 30	7,201.15	4,500	-360
July 31	7,197.98	3,190	-1,310
August 31	7,197.14	2,860	-330
September 30	7,197.04	2,820	-40
WATER YEAR 2001	—	—	+110

NOTE.--Monthend elevations are interpolated from readings made during the year.

10290500 ROBINSON CREEK AT TWIN LAKES OUTLET, NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°10'20", long 119°19'25", in SE 1/4 SE 1/4 sec.28, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, on left bank, 0.2 mi downstream from Lower Twin Lake, and 8 mi southwest of Bridgeport.

DRAINAGE AREA.—39.1 mi^2.

PERIOD OF RECORD.—October 1953 to September 1975, May 1992 to September 1994 (irrigation season only), October 1994 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7,050 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow regulated by Upper and Lower Twin Lakes. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

REVISIONS.—WSP 1927: Drainage area.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,170 ft^3/s, Jan. 3, 1997, gage height, 5.44 ft; no flow many days, some years.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 209 ft^3/s, May 26, gage height, 3.10 ft; minimum daily, 5.3 ft^3/s, Feb. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	11	6.8	6.3	16	30	71	166	63	90	21
2	20	14	9.4	6.9	6.7	16	36	81	171	62	88	21
3	20	14	e8.6	7.1	6.8	16	36	87	164	64	69	21
4	20	14	e8.6	7.1	6.8	17	35	87	149	69	58	21
5	20	14	e8.7	7.1	6.8	20	35	83	137	73	51	20
6	20	14	e8.7	7.1	6.5	20	35	81	125	76	48	20
7	19	14	e8.7	7.0	5.3	19	38	82	120	77	48	18
8	19	14	e8.7	6.8	5.3	19	37	90	117	76	40	18
9	20	13	e8.8	6.7	5.4	19	35	104	116	75	36	18
10	20	13	e8.8	5.9	6.9	19	32	119	113	72	35	18
11	20	13	e8.9	5.9	9.3	18	31	132	109	69	34	17
12	20	12	e8.9	5.9	11	17	30	143	104	64	34	17
13	20	12	e8.9	5.8	13	17	29	153	98	70	34	17
14	20	12	e8.9	5.7	14	16	27	157	94	77	34	17
15	20	e12	e8.5	5.7	15	16	26	156	89	74	33	17
16	20	e12	e8.1	5.7	15	16	26	165	84	76	33	17
17	20	e12	e7.9	5.8	15	15	25	185	82	73	32	17
18	20	e12	7.7	5.9	15	15	25	195	80	72	31	18
19	19	e12	7.7	6.0	16	15	27	196	79	73	30	18
20	19	e12	7.7	6.0	17	15	28	192	78	77	27	18
21	18	e12	7.4	6.0	17	15	29	187	77	85	27	18
22	17	e12	6.9	6.0	18	16	29	184	78	92	27	18
23	17	e12	6.8	6.0	18	16	28	186	78	93	25	18
24	17	e12	6.8	6.0	18	17	28	193	79	92	23	18
25	16	e12	6.8	6.0	18	17	30	201	78	92	23	13
26	15	e12	6.8	6.0	17	18	33	206	75	90	23	8.1
27	16	e12	6.8	6.0	17	19	39	202	71	89	22	8.0
28	15	e12	6.8	6.0	17	20	50	192	68	89	22	7.9
29	15	e12	6.8	6.0	---	22	56	180	66	92	22	8.2
30	13	e12	6.8	6.0	---	24	63	171	64	93	22	8.0
31	13	---	6.8	6.2	---	27	---	167	---	91	22	---
TOTAL	568	379	248.7	193.1	343.1	552	1008	4628	3009	2430	1143	494.2
MEAN	18.3	12.6	8.02	6.23	12.3	17.8	33.6	149	100	78.4	36.9	16.5
MAX	20	14	11	7.1	18	27	63	206	171	93	90	21
MIN	13	12	6.8	5.7	5.3	15	25	71	64	62	22	7.9
AC-FT	1130	752	493	383	681	1090	2000	9180	5970	4820	2270	980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

MEAN	21.8	9.37	7.73	16.7	16.8	17.5	45.9	109	191	163	96.2	50.3
MAX	42.4	30.9	36.1	166	63.4	44.8	79.4	187	349	400	199	89.0
(WY)	1999	1999	1997	1997	1963	1997	1959	1997	1969	1995	1995	1974
MIN	7.00	.67	.000	.000	.000	.000	22.3	59.1	68.2	62.0	35.1	15.9
(WY)	1995	1958	1954	1954	1954	1955	1975	1955	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001	
ANNUAL TOTAL	21915.7		14996.1			
ANNUAL MEAN	59.9		41.1		63.9	
HIGHEST ANNUAL MEAN					100	1995
LOWEST ANNUAL MEAN					33.8	1961
HIGHEST DAILY MEAN	266	May 30	206	May 26	998	Jan 3 1997
LOWEST DAILY MEAN	6.8	Dec 23	5.3	Feb 7	.00	Nov 3 1953
ANNUAL SEVEN-DAY MINIMUM	6.8	Dec 23	5.8	Jan 11	.00	Nov 3 1953
MAXIMUM PEAK FLOW			209	May 26	1170	Jan 3 1997
MAXIMUM PEAK STAGE			3.10	May 26	5.44	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	43470		29740		46320	
10 PERCENT EXCEEDS	176		96		164	
50 PERCENT EXCEEDS	25		19		31	
90 PERCENT EXCEEDS	12		6.8		.60	

e Estimated.

10291500 BUCKEYE CREEK NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°14'20", long 119°19'30", in NE 1/4 NE 1/4 sec.04, T.4 N., R.24 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank at Buckeye Hot Springs, 0.6 mi downstream from Eagle Creek, and about 5.5 mi southwest of Bridgeport.

DRAINAGE AREA.—44.1 mi^2.

PERIOD OF RECORD.—November 1910 to September 1914 (fragmentary), October 1953 to September 1979, October 1995 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,900 ft above sea level, from topographic map. November 1910 to September 1914, non-recording gage at site 0.5 mi downstream at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

REVISIONS.—WSP 1927: Drainage area.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,750 ft^3/s, Jan. 2, 1997, gage height, 7.49 ft; minimum daily, 4.5 ft^3/s, Jan. 12, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of June 21, 1911, reached an observed stage of 4.8 ft, discharge not determined, site and datum then in use.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 30	2330	183	2.68	May 25	2245	*321	*3.11

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	15	e13	e12	e12	78	144	160	41	21	e13
2	15	18	15	e13	e12	12	64	131	146	40	20	e13
3	16	18	15	e13	13	13	50	94	112	43	21	e14
4	16	18	15	e13	13	12	44	85	101	45	25	e16
5	15	18	14	e13	13	12	41	95	96	46	24	16
6	16	18	14	e13	13	12	39	118	98	42	22	15
7	16	16	14	e13	14	12	35	141	99	42	22	e14
8	16	17	15	e13	e14	13	e34	179	95	40	29	e13
9	16	17	15	13	e14	13	33	182	92	42	23	e12
10	20	17	14	e13	e14	12	32	179	87	40	21	e12
11	19	17	14	e13	e14	12	31	187	83	37	20	e12
12	19	21	14	e13	e13	12	30	199	79	36	19	e13
13	19	e21	14	e13	e12	12	30	192	75	34	18	e13
14	19	e20	15	e13	e11	13	30	168	69	33	17	e12
15	18	e20	15	e13	e11	13	33	185	68	31	17	e12
16	18	e19	14	e12	e10	13	40	240	67	30	16	e12
17	17	e18	14	e12	10	15	45	203	66	29	16	e12
18	17	e17	15	e12	9.3	20	46	185	62	28	15	e12
19	17	e17	15	e12	e10	25	45	177	60	27	15	e12
20	17	e16	14	e12	e10	32	41	173	59	26	15	e12
21	17	e16	14	e12	11	36	39	178	59	26	15	e12
22	16	15	13	e12	11	38	38	183	60	25	15	e12
23	16	15	14	e12	e11	41	42	199	60	24	15	e12
24	17	15	13	e12	e11	43	55	203	57	25	15	e12
25	17	15	13	e12	e11	46	75	208	50	24	14	e15
26	17	15	e13	e12	e11	45	97	183	49	24	14	e14
27	18	15	e13	12	11	46	107	164	47	23	14	e13
28	18	15	e13	e12	11	58	105	152	45	22	14	e12
29	20	15	e13	e12	---	66	97	143	44	21	13	e11
30	18	15	e13	e12	---	66	121	154	42	20	13	e11
31	18	---	e13	e12	---	74	---	150	---	21	13	---
TOTAL	534	512	435	387	330.3	849	1597	5174	2287	987	551	384
MEAN	17.2	17.1	14.0	12.5	11.8	27.4	53.2	167	76.2	31.8	17.8	12.8
MAX	20	21	15	13	14	74	121	240	160	46	29	16
MIN	15	15	13	12	9.3	12	30	85	42	20	13	11
AC-FT	1060	1020	863	768	655	1680	3170	10260	4540	1960	1090	762

10291500 BUCKEYE CREEK NEAR BRIDGEPORT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.1	22.2	22.0	24.3	21.5	25.9	51.3	141	204	128	51.8	29.4
MAX	41.4	44.4	52.2	158	55.8	70.6	115	322	432	399	115	65.6
(WY)	1957	1974	1965	1997	1997	1997	1997	1969	1911	1911	1967	1911
MIN	7.43	11.6	10.2	10.2	10.2	11.7	22.3	32.2	43.4	18.8	9.76	7.55
(WY)	1978	1962	1978	1960	1977	1977	1967	1977	1976	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1911 - 2001	
ANNUAL TOTAL	19829		14027.3			
ANNUAL MEAN	54.2		38.4		60.9	
HIGHEST ANNUAL MEAN					114	1969
LOWEST ANNUAL MEAN					19.5	1977
HIGHEST DAILY MEAN	277	May 28	240	May 16	1050	Jan 2 1997
LOWEST DAILY MEAN	12	Jan 15	9.3	Feb 18	4.5	Jan 12 1963
ANNUAL SEVEN-DAY MINIMUM	13	Dec 24	10	Feb 14	5.5	Jan 11 1963
MAXIMUM PEAK FLOW			321	May 25	2750	Jan 2 1997
MAXIMUM PEAK STAGE			3.11	May 25	7.49	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	39330		27820		44090	
10 PERCENT EXCEEDS	165		98		172	
50 PERCENT EXCEEDS	20		17		28	
90 PERCENT EXCEEDS	14		12		14	

e Estimated.

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°19'30", long 119°12'40", in SE 1/4 NE 1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, at Bridgeport Dam on East Walker River, and 4.5 mi north of Bridgeport.

DRAINAGE AREA.—358 mi^2.

PERIOD OF RECORD.—March 1926 to current year. Month end contents only for some periods, published in WSP 1314.

REVISED RECORDS.—WSP 1180: 1949. WSP 1927: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,466.44 ft above sea level (project datum).

REMARKS.—Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft, between elevations 6,415 ft, approximate elevation of bottom of reservoir, and 6,461 ft. Crest of spillway is at elevation 6,460.75 ft; however, there are four siphons that become operative prior to reaching this spillway. Elevation of sill of outlet gate, 6,412 ft. No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 44,880 acre-ft, June 16, 1974, elevation 6,460.78 ft; no usable contents at times in water years 1929, 1930, 1960, 1977, 1988, and 1989.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 25,720 acre-ft, Apr. 2, elevation, 6,453.48 ft; minimum 6,800 acre-ft, Sept. 30, elevation, 6,440.64 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

6,425	334	6,440	6,240	6,450	18,780	6,460	42,460
6,430	1,130	6,445	11,380	6,455	29,160	6,461	45,490
6,435	2,920						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10900	9850	12030	14370	17090	20030	25540	23020	25100	20030	13990	8910
2	10710	9940	12100	14420	17150	20140	25340	22850	25140	19940	13790	8780
3	10540	10020	12190	14490	17250	20270	25210	22680	25030	19680	13600	8650
4	10320	10050	12280	14570	17350	20400	25120	22480	25100	19500	13410	8580
5	10090	10120	12350	14690	17460	20580	25100	22330	25120	19350	13200	8500
6	9860	10260	12400	14740	17540	20720	25060	22170	25100	19240	13000	8410
7	9670	10320	12500	14820	17630	20870	25080	22070	25060	19130	12810	8320
8	9500	10260	12600	14950	17710	21030	25080	21990	24950	19020	12640	8190
9	9330	10440	12730	15070	17770	21250	25120	21950	24880	18930	12570	8110
10	9320	10510	12790	15200	17890	21380	25140	21890	24750	18800	12480	8030
11	9300	10550	12860	15290	18010	21560	25190	21850	24620	18660	12370	7940
12	9290	10600	12940	15350	18110	21720	25170	21890	24430	18540	12220	7930
13	9310	10710	12960	15470	18210	21890	25140	21970	24260	18400	12040	7910
14	9310	10710	13090	15570	18330	22110	25120	22010	24080	18280	11840	7910
15	9340	10780	13190	15690	18380	22330	25060	22110	23910	18160	11700	7890
16	9400	10840	13270	15790	18520	22600	25080	22310	23740	17970	11550	7880
17	9430	10870	13340	15870	18630	23060	24920	22640	23500	17800	11470	7810
18	9430	10930	13410	15950	18750	23600	24840	22950	23330	17590	11370	7730
19	9420	11010	13490	16040	18890	24040	24750	23120	23160	17350	11260	7620
20	9360	11100	13530	16150	18960	24430	24640	23330	23000	17090	11160	7510
21	9390	11170	13620	16200	19090	24750	24540	23500	22790	16890	11000	7420
22	9380	11240	13700	16300	19240	25010	24350	23600	22520	16690	10770	7320
23	9350	11320	13810	16390	19310	25210	24220	23770	22130	16500	10520	7220
24	9350	11390	13890	16460	19420	25320	24120	24040	21800	16330	10270	7170
25	9380	11450	13920	16570	19530	25390	23970	24330	21420	16110	10030	7060
26	9430	11580	13980	16660	19640	25430	23790	24580	21150	15880	9820	6990
27	9480	11670	14020	16760	19770	25320	23680	24770	20890	15600	9600	6940
28	9550	11770	14110	16820	19880	25390	23470	24950	20680	15260	9400	6890
29	9610	11900	14180	16920	---	25340	23310	25030	20470	14950	9240	6860
30	9670	11950	14260	16980	---	25360	23180	25100	20250	14600	9120	6810
31	9770	---	14320	17030	---	25410	---	25120	---	14300	9010	---
MAX	10900	11950	14320	17030	19880	25430	25540	25120	25140	20030	13990	8910
MIN	9290	9850	12030	14370	17090	20030	23180	21850	20250	14300	9010	6810
a	6443.61	6445.46	6447.22	6448.98	6450.60	6453.34	6452.29	6453.21	6450.80	6447.21	6442.91	6440.65
b	-1240	+2180	+2370	+2710	+2850	+5530	-2230	+1940	-4870	-5950	-5290	-2200

CAL YR 2000 MAX 39570 MIN 9290 b -2680
WTR YR 2001 MAX 25540 MIN 6810 b -4200

a Elevation, in feet above sea level, at end of month.
b Change in contents.

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°19'40", long 119°12'50", in SW 1/4 NE 1/4 sec.34, T.6 N., R.25 E., Mono County, Hydrologic Unit 16050301, in Toiyabe National Forest, on right bank, 1,500 ft downstream from Bridgeport Reservoir, 5 mi north of Bridgeport, and 10 mi upstream from Sweetwater Creek.

DRAINAGE AREA.—359 mi^2.

PERIOD OF RECORD.—July 1911 to September 1914 (gage height only), October and November 1921, May 1922 to September 1924, March to July 1925, October 1925 to current year.

REVISED RECORDS.—WSP 1927: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,400 ft above sea level, from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mi downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder, and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft lower. May 26, 1939, to Nov. 27, 1988, water-stage recorder at datum 2.00 ft higher.

REMARKS.—Records excellent. Diversions for irrigation of meadow pasturelands near Bridgeport. Flow regulated by Bridgeport Reservoir (station 10292500). These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,910 ft^3/s, Jan. 4, 1997, gage height, 6.74 ft; minimum daily, 0.20 ft^3/s, Nov. 2, 1955.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 246 ft^3/s, May 12, gage height, 3.75 ft; minimum daily, 16 ft^3/s, Jan. 5–17, Mar. 1–18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	26	26	24	31	16	121	172	206	133	157	90
2	123	26	26	26	29	16	121	179	201	120	136	102
3	147	26	26	22	22	16	121	178	194	110	117	107
4	149	26	26	18	22	16	108	178	183	122	131	82
5	148	26	26	16	22	16	91	173	154	123	150	70
6	148	26	26	16	22	16	91	166	135	118	154	74
7	141	26	26	16	24	16	91	170	135	102	151	83
8	126	26	26	16	28	16	85	182	135	90	135	85
9	116	26	26	16	25	16	73	200	136	99	118	80
10	81	26	27	16	22	16	73	214	136	111	105	73
11	72	26	30	16	22	16	73	214	145	106	120	64
12	65	26	27	16	22	16	73	225	164	91	136	56
13	56	26	30	16	24	16	73	240	175	80	145	42
14	50	26	26	16	27	16	73	229	166	84	152	38
15	37	26	26	16	31	16	73	215	141	90	136	41
16	33	27	26	16	25	16	81	215	140	98	115	46
17	46	30	26	16	22	16	91	210	146	120	95	57
18	65	29	30	18	22	16	99	203	136	132	92	79
19	65	26	30	24	22	30	110	209	123	132	103	88
20	65	26	26	27	24	39	111	217	128	132	103	88
21	65	26	26	26	28	45	125	217	140	122	121	80
22	65	26	26	24	27	60	144	217	176	110	164	80
23	65	26	26	25	28	64	134	213	209	115	171	80
24	65	26	26	24	25	73	121	190	229	121	164	76
25	61	26	28	25	22	85	135	169	212	121	163	71
26	49	26	30	22	22	100	160	176	177	135	162	67
27	39	26	27	22	21	121	162	193	148	154	148	59
28	39	26	23	22	17	122	160	193	133	163	130	54
29	39	26	23	27	---	122	167	193	133	175	121	54
30	34	26	23	28	---	121	167	196	133	174	102	53
31	26	---	23	28	---	121	---	213	---	169	90	---
TOTAL	2384	788	819	640	678	1391	3307	6159	4769	3752	4087	2119
MEAN	76.9	26.3	26.4	20.6	24.2	44.9	110	199	159	121	132	70.6
MAX	149	30	30	28	31	122	167	240	229	175	171	107
MIN	26	26	23	16	17	16	73	166	123	80	90	38
AC-FT	4730	1560	1620	1270	1340	2760	6560	12220	9460	7440	8110	4200

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.9	29.8	38.3	46.1	51.7	89.8	176	259	312	302	241	155
MAX	301	325	398	804	345	417	721	880	1001	797	638	406
(WY)	1984	1983	1984	1997	1997	1983	1952	1938	1938	1967	1983	1983
MIN	7.35	1.10	2.50	.50	.62	5.39	27.5	57.5	36.0	20.4	13.3	17.1
(WY)	1931	1956	1960	1950	1950	1927	1961	1991	1924	1924	1924	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1922 - 2001	
ANNUAL TOTAL	43189		30893			
ANNUAL MEAN	118		84.6		147	
HIGHEST ANNUAL MEAN					443	1983
LOWEST ANNUAL MEAN					37.5	1931
HIGHEST DAILY MEAN	300	Jul 26	240	May 13	1880	Jan 4 1997
LOWEST DAILY MEAN	23	Feb 23	16	Jan 5	.20	Nov 2 1955
ANNUAL SEVEN-DAY MINIMUM	23	Feb 23	16	Jan 5	.20	Nov 2 1955
MAXIMUM PEAK FLOW			246	May 12	1910	Jan 4 1997
MAXIMUM PEAK STAGE			3.75	May 12	6.74	Jan 4 1997
ANNUAL RUNOFF (AC-FT)	85670		61280		106600	
10 PERCENT EXCEEDS	242		175		346	
50 PERCENT EXCEEDS	100		73		96	
90 PERCENT EXCEEDS	26		22		7.0	

10293030 EAST WALKER RIVER AT STATELINE, NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°24'52", long 119°09'57", in SE 1/4 NW 1/4 sec.31, T.7 N., R.26 E., Mono County, Hydrologic Unit 16050301, 10.5 mi northeast of Bridgeport, and 21.4 mi southeast of Coleville.

DRAINAGE AREA.—399.97 mi^2.

PERIOD OF RECORD.—August to September 2001.
CHEMICAL DATA.—August to September 2001.
SEDIMENT DATA.—August to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	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)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)
AUG 16...	1200	123	3.7	7.3	8.8	179	20.0	57.7	17.0	17.7

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS PHORUS TOTAL (MG/L AS AL) (00665)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
AUG 16...	3.70	3.71	2.5	124	.88	.423	.29	3	59	.12	<.9	18.5

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
AUG 16...	18	<.06	<.06	<.04	e.02	<.8	<1	.17	<1	.9	1.0

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
AUG 16...	70	210	e.06	<1	36.5	119	<.01	<.01	4.8	4.8	<.06

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
AUG 16...	<1	e.2	<.4	<1.0	<.05	<.04	<.9	<10	<8.0	<1	1

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

10293030 EAST WALKER RIVER AT STATELINE, NEAR BRIDGEPORT, CA—Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
AUG					
01...	1410	123	20.0	5	1.7

10295500 LITTLE WALKER RIVER NEAR BRIDGEPORT, CA

LOCATION.—Lat 38°21'39", long 119°26'38", in NW 1/4 NW 1/4 sec.22, T.6 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on right bank, 0.8 mi North of Sonora Junction, 1.5 mi upstream from mouth, and 14 mi northwest of Bridgeport.

DRAINAGE AREA.—63.1 mi^2.

PERIOD OF RECORD.—April to August 1910, October 1944 to September 1986, October 1995 to current year. Prior to October 1958, published as "East Fork Walker River near Bridgeport."

REVISED RECORDS.—WDR 82-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,790 ft above sea level, from topographic map. April to August 1910, nonrecording gage at site 1 mi upstream at different datum. Prior to Jan. 2, 1997, at same site, at datum 1.0 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,540 ft^3/s, Jan. 2, 1997, gage height, 5.70 ft; minimum daily, 2.6 ft^3/s, Aug. 16, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	0215	*253	*2.54

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	22	e19	e16	e13	42	102	130	33	15	11
2	13	17	20	e18	e16	13	35	95	118	32	14	10
3	14	17	21	e17	16	e13	30	79	98	34	13	11
4	14	17	19	e17	e16	13	27	80	92	36	13	14
5	14	17	19	e16	e16	13	25	81	85	38	13	11
6	14	17	20	e15	16	13	23	90	87	37	12	9.9
7	16	16	e15	e15	e16	14	23	112	87	37	13	9.8
8	15	e16	15	14	e16	15	26	132	80	35	19	9.6
9	16	15	e14	e14	e16	15	25	130	78	36	16	9.5
10	18	e15	14	e14	e16	14	24	144	76	38	14	9.3
11	18	e15	e14	e14	e15	14	23	166	72	30	13	9.7
12	18	e15	14	e14	e15	15	24	169	69	27	13	9.9
13	17	e15	e15	e14	e15	14	24	152	65	25	12	9.7
14	17	e15	16	e14	e15	15	24	143	58	24	12	9.5
15	17	e15	16	e14	e15	15	25	178	57	24	12	8.9
16	16	e16	e16	e14	e14	15	28	200	53	23	12	8.8
17	16	e16	e16	e14	e14	19	30	173	50	22	12	9.0
18	16	e16	e16	e14	14	24	31	160	48	21	11	9.0
19	16	e16	e16	e14	e14	29	31	154	46	21	11	8.9
20	16	e16	e16	e14	14	34	27	151	44	21	11	8.8
21	16	e16	16	e14	e14	37	29	154	43	20	11	8.6
22	15	e16	16	e14	e14	35	29	157	43	19	11	8.7
23	16	e16	e16	e14	e14	33	32	168	43	19	11	8.6
24	16	16	16	14	e13	35	39	176	41	19	11	8.5
25	16	e16	19	e16	e13	37	50	165	38	18	11	9.9
26	16	16	e23	17	13	33	63	155	38	18	11	7.8
27	17	16	e23	17	e13	32	62	146	37	16	10	7.3
28	17	e16	e22	e17	e13	40	55	136	35	16	10	7.3
29	19	15	e21	e17	---	40	59	129	35	15	10	7.5
30	18	18	e20	e16	---	38	72	129	34	15	10	7.5
31	18	---	e20	e16	---	41	---	125	---	15	11	---
TOTAL	499	480	546	471	412	731	1037	4331	1880	784	378	279.0
MEAN	16.1	16.0	17.6	15.2	14.7	23.6	34.6	140	62.7	25.3	12.2	9.30
MAX	19	18	23	19	16	41	72	200	130	38	19	14
MIN	13	15	14	14	13	13	23	79	34	15	10	7.3
AC-FT	990	952	1080	934	817	1450	2060	8590	3730	1560	750	553

e Estimated.

10295500 LITTLE WALKER RIVER NEAR BRIDGEPORT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	20.5	21.6	22.0	22.6	22.7	27.5	51.1	127	174	104	39.2	23.3
MAX	47.7	65.3	98.4	101	58.9	85.7	97.0	323	388	297	137	55.5
(WY)	1983	1951	1951	1997	1986	1986	1986	1969	1983	1967	1983	1983
MIN	6.79	9.84	9.10	9.26	11.0	10.8	20.9	16.5	36.6	9.48	5.41	4.95
(WY)	1978	1949	1949	1949	1977	1977	1976	1977	1976	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	15665		11828.0			
ANNUAL MEAN	42.8		32.4		54.7	
HIGHEST ANNUAL MEAN					113	1983
LOWEST ANNUAL MEAN					13.9	1977
HIGHEST DAILY MEAN	199	May 28	200	May 16	730	May 16 1996
LOWEST DAILY MEAN	10	Jan 2	7.3	Sep 27	2.6	Aug 16 1977
ANNUAL SEVEN-DAY MINIMUM	11	Jan 1	8.0	Sep 24	3.0	Aug 11 1977
MAXIMUM PEAK FLOW			253	May 16	2540	Jan 2 1997
MAXIMUM PEAK STAGE			2.54	May 16	5.70	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	31070		23460		39650	
10 PERCENT EXCEEDS	114		80		145	
50 PERCENT EXCEEDS	21		16		26	
90 PERCENT EXCEEDS	15		11		13	

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CA

LOCATION.—Lat 38°22'47", long 119°26'57", in NE 1/4 SE 1/4 sec.9, T.6 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank, 200 ft downstream from Little Walker River, 10 ft upstream from bridge on U.S. Highway 395, and 13 mi southeast of Coleville.

DRAINAGE AREA.—181 mi^2.

PERIOD OF RECORD.—April 1938 to current year. Prior to October 1958, published as "below East Fork."

REVISED RECORDS.—WDR NV-79-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,591.39 ft above sea level. Prior to Oct. 1, 1939, at site, 125 ft downstream at datum 1.00 ft higher. Oct. 1, 1939, to Sept. 30, 1969, at present site and datum. Oct. 1, 1969, to July 10, 1987, at site 100 ft downstream at same datum. July 10, 1987, to Mar. 5, 1997, at site upstream 100 ft at same datum. Mar. 6, 1997, at site 150 ft downstream at datum 2.00 ft lower.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake, capacity, 1,200 acre-ft, 7 mi upstream. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge observed prior to 1938, 5,800 ft^3/s, Dec. 11, 1937, on basis of slope-area measurement of peak flow.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,300 ft^3/s, Jan. 2, 1997, gage height, 10.11 ft; minimum daily, 9.7 ft^3/s, Sept. 11, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharges of 1,120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	0200	*1,850	*4.84

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	38	37	32	37	e33	445	956	928	160	59	32
2	34	43	41	31	37	33	423	877	860	155	57	30
3	34	42	38	34	36	e33	327	620	609	158	54	30
4	34	37	36	34	38	33	273	546	526	164	53	40
5	34	40	35	34	43	32	239	628	495	173	52	37
6	35	40	36	33	e40	32	215	803	508	163	50	33
7	36	33	36	35	37	35	210	958	531	169	50	31
8	36	37	36	37	38	40	210	1180	496	163	61	29
9	36	35	34	34	37	42	192	1240	472	160	56	28
10	40	32	35	31	38	38	186	1220	433	140	51	26
11	39	28	31	e33	36	35	177	1280	405	113	49	24
12	39	33	35	e35	38	35	170	1370	380	102	47	23
13	39	33	33	38	43	36	171	1260	354	95	46	21
14	41	34	37	40	43	39	168	1160	312	87	44	20
15	40	33	37	40	43	40	176	1200	310	83	43	18
16	37	32	39	38	42	42	195	1660	312	79	42	18
17	35	31	39	30	38	51	234	1450	305	76	40	18
18	35	34	e37	41	37	68	262	1270	284	73	38	17
19	33	36	e38	e39	35	86	275	1140	269	69	37	17
20	32	36	38	37	36	114	247	1140	256	67	36	16
21	32	36	37	41	41	137	245	1170	260	64	36	16
22	31	36	e38	41	e40	151	232	1170	260	62	36	15
23	30	e35	38	38	39	165	247	1320	252	62	36	15
24	33	34	39	35	37	190	315	1330	242	61	35	15
25	31	34	38	34	37	212	452	1240	209	57	34	23
26	33	34	e33	37	34	209	625	1140	195	55	33	23
27	36	34	e35	38	e34	209	710	984	188	60	32	22
28	35	34	35	34	e34	257	709	883	180	61	31	20
29	45	34	35	36	---	313	640	836	174	60	30	20
30	38	31	34	35	---	328	769	874	166	59	30	20
31	42	---	33	36	---	371	---	870	---	60	31	---
TOTAL	1111	1049	1123	1111	1068	3439	9739	33775	11171	3110	1329	697
MEAN	35.8	35.0	36.2	35.8	38.1	111	325	1090	372	100	42.9	23.2
MAX	45	43	41	41	43	371	769	1660	928	173	61	40
MIN	30	28	31	30	34	32	168	546	166	55	30	15
MED	35	34	36	35	38	42	246	1160	311	79	42	22
AC-FT	2200	2080	2230	2200	2120	6820	19320	66990	22160	6170	2640	1380

e Estimated.

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.5	67.9	71.5	78.5	75.3	111	301	782	957	497	153	74.4
MAX	219	539	448	854	246	369	609	1655	2066	1864	663	246
(WY)	1983	1951	1951	1997	1963	1986	1997	1969	1983	1995	1983	1983
MIN	16.6	22.2	20.0	18.1	26.0	32.1	108	139	188	41.1	18.5	12.4
(WY)	1978	1978	1991	1977	1991	1977	1975	1977	1976	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	96883		68722			
ANNUAL MEAN	265		188		266	
HIGHEST ANNUAL MEAN					537	1983
LOWEST ANNUAL MEAN					65.3	1977
HIGHEST DAILY MEAN	1930	May 25	1660	May 16	8660	Jan 2 1997
LOWEST DAILY MEAN	27	Jan 5	15	Sep 22	9.7	Sep 11 1977
ANNUAL SEVEN-DAY MINIMUM	30	Jan 1	16	Sep 18	10	Sep 5 1977
MAXIMUM PEAK FLOW			1850	May 16	12300	Jan 2 1997
MAXIMUM PEAK STAGE			4.84	May 16	10.11	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	192200		136300		192900	
10 PERCENT EXCEEDS	906		622		820	
50 PERCENT EXCEEDS	70		39		89	
90 PERCENT EXCEEDS	34		31		34	

10296500 WEST WALKER RIVER NEAR COLEVILLE, CA

LOCATION.—Lat 38°30'48", long 119°26'56", in NE 1/4 NE 1/4 sec.28, T.8 N., R.23 E., Mono County, Hydrologic Unit 16050302, in Toiyabe National Forest, on left bank, 0.4 mi downstream from Rock Creek, and 5 mi southeast of Coleville.

DRAINAGE AREA.—250 mi^2.

PERIOD OF RECORD.—October 1902 to July 1908 (published as "West Fork of Walker River near Coleville", 1903, 1905–08 and as "Walker River (West Fork) near Coleville", 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year.

REVISED RECORDS.—WSP 880: 1917 (runoff in acre-ft). WSP 1514: 1918, 1923. WDR NV-80-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 5,520 ft above sea level, from topographic map. See WSP 1927 for history of changes prior to July 25, 1964. July 26, 1964, to Jan. 2, 1997, (gage destroyed in 1997 flood) at several sites and datums 2,000 ft downstream from present location, when reestablished Oct. 28, 1997, at new datum.

REMARKS.—Records fair. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poore Lake, capacity, 1,200 acre-ft, 17 mi upstream. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,500 ft^3/s, Jan. 2, 1997, gage height, 10.23 ft; minimum daily, 14 ft^3/s, several days July–September 1924 and Sept. 12, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 17	0030	*1,760	*7.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	50	44	38	44	47	453	849	835	139	67	42
2	40	54	45	35	47	50	405	793	816	136	64	41
3	39	53	43	38	47	45	314	551	583	136	62	40
4	40	49	45	39	49	50	250	480	504	141	61	45
5	40	51	44	39	50	49	211	549	467	150	60	43
6	40	52	42	37	48	50	185	722	472	143	59	39
7	41	46	45	38	40	51	170	848	496	146	58	37
8	41	48	44	45	42	55	164	1030	464	143	69	35
9	41	49	43	40	49	59	154	1140	442	139	70	34
10	50	46	44	34	43	55	147	1110	405	163	63	33
11	50	40	40	38	42	52	145	1150	384	132	60	32
12	51	41	44	44	43	52	138	1270	365	119	57	31
13	50	42	40	38	46	53	138	1160	338	111	55	30
14	51	46	45	44	47	55	133	1110	299	104	54	29
15	51	43	45	44	46	57	139	1080	293	99	53	28
16	49	46	42	40	52	56	150	1530	293	94	51	27
17	47	40	45	40	48	61	181	1370	286	90	50	27
18	47	42	38	45	51	75	212	1130	265	85	48	27
19	46	47	46	47	50	90	228	1020	249	81	47	26
20	45	44	45	40	50	115	201	1010	236	77	46	26
21	45	44	43	42	50	144	194	1040	236	76	46	25
22	45	44	41	44	47	165	185	1030	237	72	46	25
23	44	42	44	42	46	178	196	1150	229	70	46	25
24	46	45	44	43	51	204	256	1220	222	71	45	25
25	44	43	39	40	50	240	379	1100	190	65	44	27
26	45	44	34	43	50	246	533	1010	172	63	43	31
27	48	44	40	45	48	247	620	906	164	67	42	28
28	47	44	40	42	47	299	617	821	158	69	41	27
29	56	46	40	43	---	359	550	771	151	69	40	27
30	49	41	40	43	---	369	662	798	144	67	40	27
31	53	---	37	43	---	402	---	794	---	68	41	---
TOTAL	1422	1366	1311	1273	1323	4030	8310	30542	10395	3185	1628	939
MEAN	45.9	45.5	42.3	41.1	47.2	130	277	985	346	103	52.5	31.3
MAX	56	54	46	47	52	402	662	1530	835	163	70	45
MIN	39	40	34	34	40	45	133	480	144	63	40	25
AC-FT	2820	2710	2600	2520	2620	7990	16480	60580	20620	6320	3230	1860

10296500 WEST WALKER RIVER NEAR COLEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	70.4	70.9	67.8	79.1	81.8	127	306	793	994	530	167	83.9
MAX	299	214	270	905	280	403	636	1756	2055	2492	721	269
(WY)	1905	1974	1965	1997	1963	1986	1910	1969	1983	1907	1995	1907
MIN	21.5	25.4	28.7	26.9	32.0	42.1	118	149	106	26.9	17.4	16.1
(WY)	1978	1930	1960	1930	1929	1933	1975	1977	1924	1924	1924	1924

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1903 - 2001	
ANNUAL TOTAL	92640		65724			
ANNUAL MEAN	253		180		281	
HIGHEST ANNUAL MEAN					669	1907
LOWEST ANNUAL MEAN					74.5	1977
HIGHEST DAILY MEAN	1640	May 25	1530	May 16	9000	Jan 2 1997
LOWEST DAILY MEAN	34	Dec 26	25	Sep 21	14	Jul 24 1924
ANNUAL SEVEN-DAY MINIMUM	39	Dec 25	26	Sep 18	14	Aug 28 1924
MAXIMUM PEAK FLOW			1760	May 17	12500	Jan 2 1997
MAXIMUM PEAK STAGE			7.51	May 17	10.23	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	183800		130400		203300	
10 PERCENT EXCEEDS	843		549		850	
50 PERCENT EXCEEDS	82		50		98	
90 PERCENT EXCEEDS	43		39		38	

10297000 TOPAZ LAKE NEAR TOPAZ, CA

LOCATION.—Lat 38°41'35", long 119°31'10", in NW 1/4 NE 1/4 sec.33, T.10 N., R.22 E., Mono County, Hydrologic Unit 16050301, at outlet works of Topaz Lake on West Walker River, and 5.5 mi north of Topaz.

PERIOD OF RECORD.—December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.—Water-stage recorder. Elevation of gage is above sea level. Prior to Oct. 1, 1978, at datum 4.62 ft higher.

REMARKS.—Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft, between elevations 4,967.68 ft (lowest practical elevation for diversion through tunnel) and 5,000.38 ft (3 ft below top of levee). Usable capacity of reservoir was increased from about 45,000 acre-ft to 59,440 acre-ft in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 60,680 acre-ft, July 3, 1980, July 10, 1995, elevation, 5,000.92 ft, present datum; no usable contents at times in some years.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 40,810 acre-ft, June 2, elevation, 4,996.37 ft; minimum contents, 4,130 acre-ft, Oct. 28, elevation 4,974.97 ft.

Capacity table, (elevation, in feet, and contents, in acre-feet)

4,968	490	4,980	19,760	4,990	37,360	5,000	58,570
4,970	3,580	4,985	28,310	4,995	47,540	5,001	60,870
4,975	11,520						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6860	4530	7450	11190	15000	18880	22220	23440	40490	29810	21200	14790
2	6670	4630	7560	11320	15120	18970	22410	23770	40710	29440	20950	14660
3	6550	4690	7670	11430	15250	19080	22490	23790	40530	29110	20680	14590
4	6340	4770	7800	11560	15400	19200	22540	23620	40200	28760	20290	14480
5	6180	4900	7930	11680	15550	19380	22640	23480	39910	28390	20020	14360
6	6030	4970	8040	11810	15680	19500	22710	23500	39770	28050	19750	14230
7	5930	5050	8130	11990	15810	19640	22870	23700	39650	27730	19470	14100
8	5840	5130	8270	12050	15940	19750	22920	24110	39470	27420	19200	13990
9	5680	5270	8370	12160	16070	19940	22980	24730	39170	27140	18920	13870
10	5600	5380	8510	12390	16240	20090	23040	25350	38880	27260	18650	13790
11	5510	5460	8580	12550	16370	20210	23100	25910	38520	27070	18400	13730
12	5410	5540	8700	12670	16500	20310	23090	26740	38110	26860	18150	13660
13	5340	5570	8880	12800	16650	20410	23040	27450	37610	26690	17900	13610
14	5270	5730	8900	12930	16790	20490	22980	28170	37070	26520	17680	13560
15	5190	5790	9120	13070	16900	20580	22920	28810	36580	26360	17480	13460
16	5130	5880	9230	13200	17050	20660	22920	29990	36160	26120	17320	13330
17	5040	5960	9300	13300	17170	20710	22800	31230	35690	25860	17170	13150
18	4990	6060	9460	13400	17320	20760	22800	32030	35190	25550	16980	12930
19	4930	6150	9540	13510	17470	20830	22760	32570	34760	25210	16770	12670
20	4830	6310	9710	13630	17630	20930	22760	33130	34360	24930	16550	12440
21	4740	6360	9680	13730	17760	21030	22700	33740	33920	24680	16360	12210
22	4680	6450	9950	13820	17910	21190	22660	34530	33470	24450	16160	12000
23	4630	6550	10070	13900	18050	21340	22610	35480	33020	24200	15960	11760
24	4580	6660	10180	14050	18210	21460	22610	36560	32620	23850	15790	11550
25	4580	6770	10320	14180	18330	21560	22640	37610	32190	23500	15650	11350
26	4520	6860	10450	14310	18480	21630	22730	38580	31800	23120	15500	11160
27	4520	7010	10580	14450	18620	21660	22800	39210	31390	22760	15380	11100
28	4490	7050	10690	14510	18750	21680	22900	39630	30960	22410	15230	10970
29	4490	7210	10820	14680	---	21740	22970	39930	30550	22100	15120	10900
30	4490	7340	10970	14790	---	21830	23070	40120	30160	21740	15000	10840
31	4500	---	11080	14900	---	21980	---	40320	---	21470	14900	---
MAX	6860	7340	11080	14900	18750	21980	23100	40320	40710	29810	21200	14790
MIN	4490	4530	7450	11190	15000	18880	22220	23440	30160	21470	14900	10840
a	4970.59	4972.39	4974.73	4977.08	4979.40	4981.32	4981.96	4991.51	4986.06	4981.02	4977.08	4974.58
b	-2500	+2840	+3740	+3820	+3850	+3230	+1090	+17250	-10160	-8690	-6570	-4060

CAL YR 2000 MAX 55940 MIN 4490 a -2890
WTR YR 2001 MAX 40710 MIN 4490 b +3840

a Elevation, in feet above sea level, at end of month.
b Change in contents, in acre-feet.

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'50", long 119°45'50", in SW 1/4 NE 1/4 sec.15, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank, 0.5 mi downstream from Markleeville Creek, 1.5 mi northeast of Markleeville, and at mi 114.75 upstream from Lahontan Dam.

DRAINAGE AREA.—276 mi^2.

PERIOD OF RECORD.—August 1960 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 5,400 ft above sea level, from topographic map. Prior to Oct. 1, 1967, at present site at datum 2.00 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,900 ft^3/s, Jan. 2, 1997, gage height, 11.78 ft; minimum daily, 12 ft^3/s, Sept. 10–13, 23, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 30	2330	1,390	4.11	May 12	0100	*1,550	*4.29

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	55	52	58	59	53	552	1150	520	105	85	41
2	54	59	53	e59	64	64	491	1010	488	108	83	39
3	54	61	52	e64	60	55	357	729	408	119	80	39
4	51	57	54	59	63	65	302	672	373	129	73	41
5	59	57	55	59	69	68	268	758	344	132	72	34
6	60	58	54	58	66	65	242	875	324	116	64	32
7	59	53	59	60	58	71	230	987	312	121	53	31
8	58	52	58	59	52	89	208	1160	293	116	58	30
9	59	56	56	53	68	97	201	1230	278	112	66	30
10	71	52	56	56	61	84	197	1210	259	129	57	30
11	70	46	51	55	54	75	194	1230	244	116	57	30
12	69	46	56	51	50	74	186	1310	235	97	56	32
13	69	53	51	e42	59	78	195	1220	224	97	60	31
14	71	51	58	e37	61	88	188	1110	208	90	60	30
15	70	46	58	e35	67	93	200	1080	202	83	59	30
16	69	50	54	e34	68	90	244	1280	191	81	58	30
17	66	46	58	e33	70	101	302	1140	184	83	55	29
18	55	e54	46	e33	63	139	347	1030	171	83	50	30
19	53	62	70	e34	62	190	355	952	157	74	46	30
20	51	53	65	e38	61	272	306	918	148	74	42	29
21	52	53	58	e50	61	314	303	901	143	73	42	30
22	52	54	54	61	59	330	323	910	138	75	41	30
23	49	50	55	61	56	301	392	939	135	77	40	29
24	51	53	56	58	66	333	526	902	144	75	40	29
25	52	52	51	58	59	380	712	837	138	75	40	33
26	54	53	e50	57	58	355	936	766	131	72	38	37
27	59	53	58	56	58	331	1000	690	128	68	43	32
28	57	53	61	56	57	409	948	608	120	74	44	30
29	79	57	61	60	---	457	856	560	111	74	42	30
30	59	51	59	60	---	444	982	539	101	73	42	31
31	61	---	57	56	---	487	---	517	---	83	40	---
TOTAL	1846	1596	1736	1610	1709	6052	12543	29220	6852	2884	1686	959
MEAN	59.5	53.2	56.0	51.9	61.0	195	418	943	228	93.0	54.4	32.0
MAX	79	62	70	64	70	487	1000	1310	520	132	85	41
MIN	49	46	46	33	50	53	186	517	101	68	38	29
AC-FT	3660	3170	3440	3190	3390	12000	24880	57960	13590	5720	3340	1900

e Estimated.

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	80.9	110	134	196	209	288	548	1138	997	401	146	89.2
MAX	346	476	718	1722	917	983	1121	2447	2996	1721	477	239
(WY)	1983	1984	1965	1997	1986	1986	1982	1969	1983	1995	1983	1983
MIN	24.0	32.6	41.4	44.2	43.9	58.7	183	197	135	58.0	33.0	18.0
(WY)	1978	1977	1991	1977	1991	1977	1977	1977	1992	1977	1977	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	106605		68693			
ANNUAL MEAN	291		188		362	
HIGHEST ANNUAL MEAN					809	1983
LOWEST ANNUAL MEAN					83.7	1977
HIGHEST DAILY MEAN	1840	May 25	1310	May 12	12500	Jan 2 1997
LOWEST DAILY MEAN	46	Nov 11	29	Sep 17	12	Sep 10 1987
ANNUAL SEVEN-DAY MINIMUM	48	Nov 11	30	Sep 17	12	Sep 7 1987
MAXIMUM PEAK FLOW			1550	May 12	18900	Jan 2 1997
MAXIMUM PEAK STAGE			4.29	May 12	11.78	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	211500		136300		262100	
10 PERCENT EXCEEDS	857		544		967	
50 PERCENT EXCEEDS	117		61		144	
90 PERCENT EXCEEDS	53		40		51	

10308783 LEVIATHAN CREEK ABOVE LEVIATHAN MINE, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'05", long 119°39'20", in SW 1/4 NE 1/4 sec.22, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, on right bank, 2 mi north of Highway 89, and 6.5 mi east of Markleeville.

DRAINAGE AREA.—4.16 mi^2.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7,200 ft above sea level, from topographic map.

REMARKS.—Records fair except those below 0.2 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21 ft^3/s, May 7, 1999, gage height, 4.40 ft, maximum gage height, 4.67 ft, Jan. 7, 2001, backwater from ice; minimum daily, 0.02 ft^3/s, several days in August and September, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base discharge of 10 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 7	1300	Unknown	a4.67	Apr 23	1700	Unknown	a4.06

a Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.10	.08	e.10	e.08	e.08	e.51	.47	.10	.04	.03	.03
2	.07	.08	.08	e.10	e.08	e.08	.20	.32	.09	.05	.03	.02
3	.07	.08	.08	e.10	e.08	e.09	.18	.29	.10	.06	.03	.03
4	.07	.08	.08	e.10	e.08	e.09	.16	.25	.10	.07	.03	.03
5	.06	.10	.07	e.10	e.08	e.10	.16	.25	.11	.06	.03	.03
6	.06	.08	.07	e.10	e.08	e.10	.16	.25	.10	.06	.03	.03
7	.06	.07	.08	e.10	e.08	e.10	.14	.24	.09	.07	.03	.03
8	.06	.09	.08	e.09	e.08	e.10	.15	.22	.10	.06	.04	.03
9	.07	.09	.08	e.09	e.08	e.10	.15	.19	.09	.06	.05	.03
10	.08	.10	.08	e.09	e.08	e.12	.15	.18	.09	.06	.04	.02
11	.07	e.10	e.09	e.09	e.08	e.12	.14	.17	.09	.06	.03	.03
12	.08	e.10	.08	e.09	e.08	e.15	.16	.18	.10	.06	.03	.03
13	.08	e.10	.07	e.09	e.08	e.14	.16	.17	.09	.06	.03	.03
14	.08	e.10	.08	e.09	e.08	.22	.17	.16	.09	.04	.03	.04
15	.07	e.10	.08	e.09	e.08	.21	.22	.17	.10	.05	.03	.03
16	.07	.10	.07	e.09	e.08	.21	.27	.15	.08	.05	.03	.03
17	.07	e.10	.07	e.09	e.08	.25	.33	.16	.08	.05	.02	.03
18	.06	e.10	e.08	e.09	e.08	e.39	.33	.16	.08	.05	.03	.03
19	.06	.10	.08	e.09	e.08	e.80	.31	.14	.06	.04	.02	.03
20	.06	.09	.07	e.08	e.08	e.38	.24	.15	.06	.04	.02	.03
21	.07	.09	.07	e.08	e.08	.34	.46	.14	.06	.04	.03	.03
22	.07	.09	.06	e.08	e.08	e.44	.74	.14	.05	.04	.03	.03
23	.07	.07	.06	e.08	e.08	e.43	e1.9	.13	.05	.04	.03	.03
24	.07	.10	.06	e.08	e.08	e.55	e1.6	.12	.06	.04	.03	.03
25	.06	.09	e.08	e.08	e.08	e.72	e1.2	.12	.06	.04	.02	.05
26	.08	.08	e.10	e.08	e.08	e.38	e1.1	.12	.06	.04	.02	.03
27	.09	.09	e.10	e.08	e.08	e.38	e.90	.11	.06	.03	.02	.03
28	.07	.09	e.10	e.08	e.08	e.84	e.68	.11	.06	.03	.03	.04
29	.08	.08	e.10	e.08	---	e.53	.58	.12	.06	.03	.03	.04
30	.09	.09	.11	e.08	---	e.37	.59	.11	.05	.03	.02	.04
31	.08	---	e.10	e.08	---	e.55	---	.11	---	.04	.03	---
TOTAL	2.20	2.73	2.49	2.74	2.24	9.36	14.04	5.60	2.37	1.49	0.90	0.94
MEAN	.071	.091	.080	.088	.080	.30	.47	.18	.079	.048	.029	.031
MAX	.09	.10	.11	.10	.08	.84	1.9	.47	.11	.07	.05	.05
MIN	.06	.07	.06	.08	.08	.08	.14	.11	.05	.03	.02	.02
AC-FT	4.4	5.4	4.9	5.4	4.4	19	28	11	4.7	3.0	1.8	1.9

e Estimated.

10308783 LEVIATHAN CREEK ABOVE LEVIATHAN MINE, NEAR MARKLEEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.090	.13	.16	.18	.18	.50	1.37	2.21	.34	.10	.058	.067
MAX	.11	.20	.24	.27	.29	.83	2.56	6.17	.80	.19	.10	.11
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.071	.091	.080	.088	.080	.30	.47	.18	.079	.048	.029	.031
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	80.89		47.10			
ANNUAL MEAN	.22		.13		.18	
HIGHEST ANNUAL MEAN					.23	2000
LOWEST ANNUAL MEAN					.13	2001
HIGHEST DAILY MEAN	1.9	Apr 13	1.9	Apr 23	15	May 7 1999
LOWEST DAILY MEAN	.03	Jul 27	.02	Aug 17	.02	Aug 17 2001
ANNUAL SEVEN-DAY MINIMUM	.03	Aug 4	.02	Aug 24	.02	Aug 24 2001
MAXIMUM PEAK FLOW			a Unknown	Apr 23	21	May 7 1999
MAXIMUM PEAK STAGE			a4.67	Jan 7	a4.67	Jan 7 2001
ANNUAL RUNOFF (AC-FT)	160		93		131	
10 PERCENT EXCEEDS	.52		.24		.74	
50 PERCENT EXCEEDS	.11		.08		.14	
90 PERCENT EXCEEDS	.05		.03		.05	

a Backwater from ice.

10308784 LEVIATHAN MINE ADIT DRAIN NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'15", long 119°39'28", in NW 1/4 NE 1/4 sec.22, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.2 mi north of State Highway 89, and 6.5 mi southeast of Markleeville.

PERIOD OF RECORD.—November 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7,100 ft above sea level, from topographic map.

REMARKS.—Records excellent.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 0.09 ft^3/s, May 15–18, 1999; minimum daily, 0.0295 ft^3/s, Mar. 31, 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0340	.0347	.0339	.0329	.0313	.0312	.0298	.0329	.0345	.0324	.0312	.0306
2	.0341	.0343	.0337	.0328	.0309	.0312	.0301	.0338	.0348	.0321	.0313	.0304
3	.0342	.0342	.0335	.0327	.0309	.0311	.0307	.0341	.0348	.0328	.0313	.0306
4	.0344	.0343	.0334	.0325	.0310	.0305	.0314	.0342	.0348	.0327	.0316	.0305
5	.0343	.0341	.0334	.0324	.0313	.0301	.0309	.0338	.0343	.0324	.0309	.0308
6	.0343	.0341	.0335	.0326	.0322	.0300	.0314	.0338	.0343	.0330	.0310	e.0308
7	.0345	.0342	.0331	.0325	.0323	.0301	.0318	.0338	.0342	.0330	.0312	.0310
8	.0342	.0344	.0330	.0324	.0320	.0307	.0317	.0338	.0343	.0325	.0315	.0311
9	.0346	.0349	.0332	.0329	.0318	.0316	.0321	.0342	.0342	.0325	.0313	.0308
10	.0354	.0350	.0331	.0331	.0321	.0310	.0319	.0342	.0339	.0330	.0314	.0308
11	.0352	.0350	.0336	.0328	.0316	.0306	.0319	.0343	.0344	.0328	.0314	.0311
12	.0351	.0350	.0337	.0324	.0315	.0305	.0313	.0351	.0342	.0324	.0311	.0312
13	.0350	.0349	.0335	.0325	.0317	.0304	.0314	.0350	.0344	.0323	.0309	.0309
14	.0347	.0348	.0332	.0326	.0312	.0305	.0312	.0351	.0341	.0327	.0310	.0308
15	.0346	.0347	.0329	.0327	.0314	.0311	.0310	.0351	.0337	.0326	.0309	.0307
16	.0343	.0344	.0332	.0325	.0312	.0303	.0306	.0350	.0336	.0328	.0309	.0308
17	.0342	.0347	.0330	.0326	.0309	.0303	.0304	.0350	.0334	.0322	.0309	.0307
18	.0342	.0344	.0334	.0325	.0309	.0305	.0318	.0350	.0336	.0323	.0308	.0305
19	.0342	.0338	.0328	.0323	.0315	.0310	.0321	.0350	.0337	.0325	.0311	.0303
20	.0343	.0338	.0329	.0323	.0308	.0306	.0324	.0349	.0333	.0321	.0312	.0307
21	.0349	.0340	.0326	.0321	.0308	.0307	.0322	.0348	.0329	.0323	.0310	.0306
22	.0351	.0337	.0327	.0320	.0318	.0306	.0323	.0350	.0330	.0323	.0313	.0306
23	.0349	.0336	.0330	.0321	.0319	.0309	.0318	.0348	.0334	.0324	.0311	.0306
24	.0343	.0335	.0331	.0324	.0313	.0307	.0319	.0346	.0331	.0319	.0310	.0304
25	.0347	.0335	.0331	.0323	.0309	.0305	.0317	.0347	.0336	.0316	.0307	.0305
26	.0350	.0334	.0333	.0327	.0304	.0306	.0319	.0348	.0335	.0312	.0303	.0304
27	.0347	.0332	.0328	.0322	.0314	.0305	.0324	.0350	.0334	.0317	.0307	.0303
28	.0343	.0334	.0329	.0321	.0313	.0299	.0326	.0348	.0329	.0315	.0308	.0301
29	.0348	.0333	.0327	.0319	---	.0305	.0327	.0345	.0328	.0317	.0306	.0303
30	.0346	.0338	.0330	.0322	---	.0299	.0325	.0345	.0328	.0318	.0305	.0300
31	.0346	---	.0327	.0319	---	.0295	---	.0345	---	.0316	.0310	---
TOTAL	1.0717	1.0251	1.0279	1.0059	0.8783	0.9476	0.9479	1.0701	1.0139	1.0011	0.9619	0.9189
MEAN	.035	.034	.033	.032	.031	.031	.032	.035	.034	.032	.031	.031
MAX	.0354	.0350	.0339	.0331	.0323	.0316	.0327	.0351	.0348	.0330	.0316	.0312
MIN	.0340	.0332	.0326	.0319	.0304	.0295	.0298	.0329	.0328	.0312	.0303	.0300
AC-FT	2.1	2.0	2.0	2.0	1.7	1.9	1.9	2.1	2.0	2.0	1.9	1.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	.039	.035	.037	.036	.036	.036	.039	.052	.046	.041	.039	.038
MAX	.043	.036	.040	.040	.040	.040	.044	.079	.065	.054	.050	.049
(WY)	2000	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.035	.034	.033	.032	.031	.031	.032	.035	.034	.032	.031	.031
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001
ANNUAL TOTAL	13.3657	11.8703	
ANNUAL MEAN	.037	.033	.035
HIGHEST ANNUAL MEAN			.038 2000
LOWEST ANNUAL MEAN			.033 2001
HIGHEST DAILY MEAN	.0442 May 11	.0354 Oct 10	.0900 May 15 1999
LOWEST DAILY MEAN	.0326 Dec 21	.0295 Mar 31	.0295 Mar 31 2001
ANNUAL SEVEN-DAY MINIMUM	.03 Dec 19	.03 Mar 27	.03 Mar 27 2001
ANNUAL RUNOFF (AC-FT)	27	24	25
10 PERCENT EXCEEDS	.04	.03	.05
50 PERCENT EXCEEDS	.04	.03	.04
90 PERCENT EXCEEDS	.03	.03	.03

e Estimated.

10308785 LEVIATHAN MINE PIT DRAIN NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'15", long 119°39'28", in NW 1/4 NE 1/4 sec.22, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.2 mi north of Highway 89, and 6.5 mi southeast of Markleeville.

PERIOD OF RECORD.—February 2000 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7,100 ft above sea level, from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 0.0035 ft^3/s, Mar. 29, 2001; minimum daily, 0.0004 ft^3/s, several days in September 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0006	.0006	.0005	.0008	.0010	.0013	.0025	.0017	.0011	.0007	.0007	.0007
2	.0006	.0006	.0005	.0008	.0010	.0013	.0023	.0017	.0011	.0007	.0007	.0007
3	.0006	.0006	.0005	.0008	.0011	.0013	.0021	.0017	.0011	.0007	.0007	.0006
4	.0006	.0006	.0005	.0009	.0011	.0013	.0019	.0017	.0010	.0007	.0007	.0006
5	.0006	.0006	.0005	.0009	.0011	.0013	.0019	.0017	.0010	.0007	.0007	.0006
6	.0006	.0006	.0006	.0009	.0012	.0013	.0018	.0018	.0010	.0007	.0006	.0006
7	.0006	.0006	.0006	.0009	.0012	.0013	.0018	.0016	.0010	.0007	.0007	.0006
8	.0006	.0006	.0006	.0009	.0011	.0014	.0018	.0015	.0010	.0007	.0006	.0006
9	.0006	.0006	.0006	.0010	.0012	.0014	.0018	.0015	.0010	.0007	.0006	.0006
10	.0006	.0006	.0006	.0010	.0012	.0014	.0018	.0014	.0010	.0007	.0006	.0006
11	.0006	.0005	.0006	.0010	.0012	.0014	.0017	.0014	.0009	.0007	.0006	.0006
12	.0006	.0005	.0007	.0009	.0011	.0014	.0017	.0014	.0009	.0007	.0006	.0006
13	.0006	.0005	.0006	.0009	.0012	.0014	.0017	.0014	.0009	.0007	.0006	.0006
14	.0006	.0005	.0006	.0010	.0012	.0015	.0017	.0014	.0009	.0007	.0006	.0006
15	.0006	.0005	.0006	.0010	.0012	.0015	.0017	.0013	.0009	.0007	.0006	.0006
16	.0006	.0005	.0006	.0010	.0013	.0015	.0018	.0013	.0009	.0007	.0006	.0006
17	.0006	.0005	.0007	.0010	.0013	.0015	.0018	.0013	.0008	.0007	.0006	.0006
18	.0006	.0005	.0007	.0010	.0013	.0015	.0018	.0013	.0008	.0007	.0006	.0006
19	.0006	.0005	.0007	.0010	.0014	.0015	.0018	.0013	.0008	.0007	.0006	.0004
20	.0006	.0005	.0007	.0010	.0014	.0017	.0018	.0013	.0008	.0007	.0006	.0004
21	.0006	.0005	.0007	.0011	.0014	.0019	.0018	.0013	.0008	.0007	.0006	.0004
22	.0006	.0005	.0007	.0011	.0014	.0019	.0018	.0012	.0008	.0007	.0006	.0004
23	.0006	.0005	.0007	.0011	.0015	.0021	.0019	.0012	.0008	.0007	.0006	.0004
24	.0006	.0005	.0008	.0011	.0014	.0023	.0023	.0012	.0008	.0007	.0006	.0004
25	.0006	.0005	.0007	.0011	.0014	.0026	.0024	.0012	.0007	.0007	.0006	.0004
26	.0006	.0005	.0008	.0011	.0014	.0029	.0021	.0012	.0007	.0007	.0006	.0004
27	.0006	.0005	.0008	.0010	.0013	.0027	.0020	.0012	.0007	.0007	.0006	.0004
28	.0006	.0005	.0008	.0010	.0013	.0027	.0019	.0012	.0007	.0007	.0007	.0004
29	.0006	.0005	.0008	.0010	---	.0035	.0018	.0011	.0007	.0007	.0007	.0004
30	.0006	.0005	.0009	.0010	---	.0027	.0018	.0011	.0007	.0007	.0006	.0004
31	.0006	---	.0009	.0010	---	.0027	---	.0011	---	.0007	.0006	---
TOTAL	0.0186	0.0160	0.0206	0.0303	0.0349	0.0562	0.0570	0.0427	0.0263	0.0217	0.0194	0.0158
MEAN	.001	.001	.001	.001	.001	.002	.002	.001	.001	.001	.001	.001
MAX	.0006	.0006	.0009	.0011	.0015	.0035	.0025	.0018	.0011	.0007	.0007	.0007
MIN	.0006	.0005	.0005	.0008	.0010	.0013	.0017	.0011	.0007	.0007	.0006	.0004
AC-FT	.04	.03	.04	.06	.07	.1	.1	.08	.05	.04	.04	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	.001	.001	.001	.001	.001	.002	.002	.002	.001	.001	.001	.001
MAX	.001	.001	.001	.001	.001	.002	.002	.002	.002	.001	.001	.001
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000
MIN	.001	.001	.001	.001	.001	.001	.002	.001	.001	.001	.001	.001
(WY)	2001	2001	2001	2001	2001	2000	2000	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	0.3595			
ANNUAL MEAN	.001		.001	
HIGHEST ANNUAL MEAN			.001	2001
LOWEST ANNUAL MEAN			.001	2001
HIGHEST DAILY MEAN	.0035	Mar 29	.0035	Mar 29 2001
LOWEST DAILY MEAN	.0004	Sep 19	.0004	Sep 19 2001
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 19	.00	Sep 19 2001
ANNUAL RUNOFF (AC-FT)	.7		.7	
10 PERCENT EXCEEDS	.00		.00	
50 PERCENT EXCEEDS	.00		.00	
90 PERCENT EXCEEDS	.00		.00	

103087853 LEVIATHAN MINE POND 1 NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'15", long 119°39'28", in NW 1/4 NE 1/4 sec.22, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.2 mi north of Highway 89 and 6.5 mi southeast of Markleeville.

PERIOD OF RECORD.—November 1999 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 7,100 ft above sea level, from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 7.88 ft, Apr. 19, 20, 2000; minimum, 4.34 ft, Sept. 27, 2001.

EXTREMES FOR CURRENT YEAR.—Maximum elevation, 6.38 ft, Jan. 22, 23; minimum, 4.34 ft, Sept. 27.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.09	5.36	5.72	6.04	4.67	4.67	5.43	5.85	5.77	5.60	5.49	e5.11
2	5.09	5.37	5.73	6.05	4.67	4.67	5.43	5.83	5.75	5.60	5.50	e5.08
3	5.09	5.37	5.74	6.07	4.68	4.67	5.44	5.84	5.75	5.60	5.47	e5.05
4	5.09	5.38	5.75	6.07	4.68	4.67	5.46	5.83	5.75	5.61	5.46	e5.02
5	5.09	5.39	5.76	6.08	4.68	4.68	5.48	5.84	5.74	5.62	5.47	e4.99
6	5.09	5.39	5.78	6.09	4.67	4.68	5.50	5.84	5.73	5.63	e5.49	e4.96
7	5.09	5.41	5.79	6.10	e4.67	4.68	5.57	5.84	5.74	5.62	e5.48	e4.93
8	5.09	5.42	5.80	6.12	4.67	4.68	5.58	5.84	5.72	5.63	e5.48	e4.91
9	5.10	5.44	5.81	6.13	4.67	4.70	5.60	5.83	5.71	5.63	e5.47	e4.88
10	5.10	5.45	5.81	6.20	4.67	4.70	5.61	5.83	5.71	5.64	e5.46	e4.85
11	5.11	e5.47	5.83	6.25	4.67	4.71	5.64	5.83	5.71	5.64	e5.45	e4.82
12	5.12	5.48	5.84	6.26	4.67	4.72	5.66	5.83	5.69	5.65	e5.44	e4.79
13	5.13	5.50	5.85	6.28	4.67	4.74	5.66	5.83	5.69	5.64	e5.43	e4.76
14	5.14	5.50	5.86	6.29	4.66	4.77	5.68	5.82	5.68	5.64	e5.42	e4.73
15	5.14	5.52	5.88	6.31	4.67	4.78	5.70	5.83	5.68	5.63	e5.41	e4.70
16	5.15	5.52	5.89	6.32	4.66	4.82	5.70	5.83	5.68	5.62	e5.41	e4.67
17	5.15	5.53	5.90	6.32	4.67	4.86	5.70	5.83	5.67	5.62	e5.40	e4.64
18	5.15	5.55	5.91	e6.32	4.67	4.91	5.74	5.84	5.67	5.62	e5.39	e4.62
19	5.16	5.56	5.92	6.34	4.67	4.96	5.76	5.82	5.66	5.62	e5.38	e4.59
20	5.17	5.57	5.93	6.35	4.66	5.01	5.78	5.82	5.65	5.60	e5.37	e4.56
21	5.17	5.58	5.93	6.37	4.66	5.05	5.76	5.81	5.65	5.60	e5.36	e4.53
22	5.18	5.59	5.95	6.38	4.66	5.12	5.79	5.81	5.64	5.60	e5.35	e4.50
23	5.18	5.60	5.96	6.38	4.66	5.17	5.79	5.81	5.63	5.60	e5.33	e4.47
24	5.19	5.62	5.97	4.68	4.66	5.21	5.81	5.80	5.62	5.59	e5.32	e4.44
25	5.20	5.63	5.98	4.67	4.66	5.24	5.87	5.80	5.62	5.59	e5.31	e4.42
26	5.24	5.64	5.99	4.67	4.66	5.27	5.86	5.79	5.62	5.59	e5.28	e4.38
27	5.25	5.64	6.00	4.67	4.66	5.32	5.85	5.78	5.62	5.57	e5.25	e4.34
28	5.27	5.66	6.01	4.66	4.66	5.36	5.84	5.78	5.61	5.55	e5.22	4.36
29	5.33	5.70	6.02	4.66	---	5.38	5.85	5.77	5.61	5.53	e5.19	4.36
30	5.34	5.71	6.03	4.66	---	5.40	5.84	5.77	5.61	5.51	e5.17	4.36
31	5.35	---	6.04	4.66	---	5.42	---	5.76	---	5.52	e5.13	---
MEAN	5.16	5.52	5.88	5.82	4.67	4.94	5.68	5.82	5.68	5.60	5.38	4.69
MAX	5.35	5.71	6.04	6.38	4.68	5.42	5.87	5.85	5.77	5.65	5.50	5.11
MIN	5.09	5.36	5.72	4.66	4.66	4.67	5.43	5.76	5.61	5.51	5.13	4.34

CAL YR 2000 MEAN 6.63 MAX 7.88 MIN 4.67
WTR YR 2001 MEAN 5.41 MAX 6.38 MIN 4.34

e Estimated.

103087885 LEVIATHAN CREEK CHANNEL UNDERDRAIN NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'34", long 119°39'41", in SE 1/4 SW 1/4 sec.15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.9 mi north of State Highway 89, and 6.5 mi east of Markleeville.

PERIOD OF RECORD.—November 1999 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,800 ft above sea level, from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 0.09 ft^3/s, Apr. 20, 21, 2000; minimum, no flow on many days in most years.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 0.0684 ft^3/s, May 1; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0414	.0389	.0389	.0389	.0415	.0424	.0616	.0684	.0636	.0635	.0495	.0000
2	.0410	.0389	.0389	.0389	.0412	.0425	.0618	.0669	.0639	.0633	.0314	.0000
3	.0407	.0389	.0389	.0389	.0406	.0414	.0605	.0670	.0639	.0632	.0000	.0000
4	.0406	.0389	.0389	.0389	.0413	.0428	.0604	.0673	.0631	.0632	.0000	.0000
5	.0400	.0389	.0389	.0389	.0413	.0427	.0602	.0680	.0640	.0632	.0000	.0000
6	.0396	.0390	.0389	.0389	.0418	.0431	.0600	.0678	.0646	.0611	.0000	.0000
7	.0395	.0389	.0389	.0389	.0425	.0427	.0593	.0680	.0641	.0581	.0000	.0000
8	.0392	.0392	.0389	.0390	.0421	.0432	.0588	.0684	.0645	.0579	.0000	.0000
9	.0399	.0389	.0390	.0391	.0431	.0432	.0583	.0675	.0634	.0578	.0000	.0000
10	.0397	.0389	.0390	.0391	.0444	.0432	.0580	.0670	.0637	.0578	.0000	.0000
11	.0397	.0389	.0392	.0402	.0455	.0435	.0576	.0676	.0629	.0578	.0000	.0000
12	.0394	.0389	.0391	.0420	.0455	.0436	.0573	.0675	.0633	.0578	.0000	.0000
13	.0390	.0390	.0398	.0417	.0451	.0434	.0570	.0669	.0631	.0578	.0000	.0000
14	.0390	.0390	.0403	.0412	.0450	.0434	.0566	.0669	.0634	.0578	.0000	.0000
15	.0389	.0389	.0395	.0415	.0450	.0432	.0570	.0677	.0638	.0578	.0000	.0000
16	.0390	.0389	.0397	.0417	.0444	.0433	.0581	.0666	.0641	.0572	.0000	.0000
17	.0390	.0389	.0392	.0422	.0441	.0440	.0583	.0653	.0645	.0567	.0000	.0000
18	.0389	.0389	.0392	.0410	.0437	.0450	.0597	.0652	.0649	.0556	.0000	.0011
19	.0387	.0389	.0393	.0413	.0437	.0465	.0588	.0648	.0652	.0551	.0000	.0000
20	.0392	.0389	.0390	.0418	.0430	.0496	.0596	.0646	.0658	.0548	.0000	.0000
21	.0389	.0389	.0405	.0412	.0433	e.0500	.0594	.0648	.0653	.0537	.0000	.0000
22	.0390	.0389	.0401	.0412	.0440	.0514	.0583	.0641	.0654	.0533	.0000	.0000
23	.0389	.0389	.0411	.0417	.0436	.0527	.0594	.0641	.0645	.0527	.0000	.0000
24	.0389	.0389	.0408	.0424	.0431	.0544	.0613	.0641	.0652	.0528	.0000	.0000
25	.0389	.0389	.0411	.0427	.0431	.0571	.0628	.0638	.0641	.0527	.0000	.0000
26	.0389	.0389	.0401	.0427	.0426	.0578	.0636	.0645	.0650	.0527	.0000	.0000
27	.0409	.0389	.0401	.0428	.0426	.0580	.0645	.0638	.0647	.0527	.0000	.0000
28	e.0409	.0389	.0398	.0428	.0428	.0586	.0649	.0635	.0640	.0524	.0000	.0000
29	.0409	.0393	.0389	.0428	---	.0596	.0660	.0633	.0635	.0523	.0000	.0000
30	.0392	.0389	.0390	.0424	---	.0611	.0676	.0633	.0633	.0523	.0000	.0000
31	.0389	---	.0389	.0421	---	.0615	---	.0633	---	.0515	.0000	---
TOTAL	1.2267	1.1680	1.2239	1.2689	1.2099	1.4949	1.8067	2.0420	1.9248	1.7566	0.0809	0.0011
MEAN	.040	.039	.039	.041	.043	.048	.060	.066	.064	.057	.003	.000
MAX	.0414	.0393	.0411	.0428	.0455	.0615	.0676	.0684	.0658	.0635	.0495	.0011
MIN	.0387	.0389	.0389	.0389	.0406	.0414	.0566	.0633	.0629	.0515	.0000	.0000
AC-FT	2.4	2.3	2.4	2.5	2.4	3.0	3.6	4.1	3.8	3.5	.2	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	.040	.039	.050	.052	.059	.061	.070	.073	.071	.062	.029	.017
MAX	.040	.039	.060	.062	.075	.074	.081	.080	.078	.067	.055	.034
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	.040	.039	.039	.041	.043	.048	.060	.066	.064	.057	.003	.000
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 2000 - 2001
ANNUAL TOTAL	22.0486	15.2044	
ANNUAL MEAN	.060	.042	.042
HIGHEST ANNUAL MEAN			.042 2001
LOWEST ANNUAL MEAN			.042 2001
HIGHEST DAILY MEAN	.0900 Apr 20	.0684 May 1	.0900 Apr 20 2000
LOWEST DAILY MEAN	.0000 Sep 7	.0000 Aug 3	.0000 Sep 7 2000
ANNUAL SEVEN-DAY MINIMUM	.01 Sep 6	.00 Aug 3	.00 Aug 3 2001
ANNUAL RUNOFF (AC-FT)	44	30	30
10 PERCENT EXCEEDS	.08	.06	.08
50 PERCENT EXCEEDS	.06	.04	.06
90 PERCENT EXCEEDS	.04	.00	.04

e Estimated.

103087887 LEVIATHAN MINE POND 4 NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°42'34", long 119°39'41", in SE 1/4 SW 1/4 sec.15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.9 mi north of State Highway 89, and 6.5 mi east of Markleeville.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,800 ft above sea level, from topographic map.

REMARKS.—Records poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 0.3431 ft^3/s, Feb. 10, 1999; no flow on many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
4	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
5	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
6	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
7	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
8	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
9	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
10	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
11	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
12	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
13	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
14	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
15	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
16	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
17	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
18	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
19	.0000	.0000	.0000	.0000	.0000	.0000	.0000	e.0001	.0000	.0000	.0000	.0000
20	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	.0000	.0000	.0000	.0000	---	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	.0000	.0000	.0000	.0000	---	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	.0000	---	.0000	.0000	---	.0000	---	.0000	---	.0000	.0000	---
TOTAL	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0000	0.0000	0.0000	0.0000
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0000	.0000	.0000	.0000
MIN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	.000	.000	.000	.015	.043	.029	.044	.017	.005	.000	.000	.000
MAX	.000	.000	.000	.045	.13	.088	.13	.050	.014	.001	.000	.000
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	2000	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	2000	1999	2000	2000	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001
ANNUAL TOTAL	0.0568	0.0017	
ANNUAL MEAN	.000	.000	.000
HIGHEST ANNUAL MEAN			.000 2000
LOWEST ANNUAL MEAN			.000 2001
HIGHEST DAILY MEAN	.0005 Mar 22	.0001 May 3	.3431 Feb 10 1999
LOWEST DAILY MEAN	.0000 Jan 1	.0000 Oct 1	.0000 Oct 17 1998
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 17 1998
ANNUAL RUNOFF (AC-FT)	.1	.00	.06
10 PERCENT EXCEEDS	.00	.00	.06
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

10308789 LEVIATHAN CREEK ABOVE ASPEN CREEK, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°43'01", long 119°39'33", in NE 1/4 NW 1/4 sec.15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, on right bank, 3.2 mi north of State Highway 89, and 6.5 mi east of Markleeville.

DRAINAGE AREA.—7.07 mi^2.

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,700 ft above sea level, from topographic map.

REMARKS.—Records fair except those below 0.5 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 24 ft^3/s, Apr. 28, 1999, gage height, 5.14 ft; no flow on several days in August 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 24	1545	9.8	4.69

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.20	e.15	e.15	.21	e.19	1.4	1.2	.18	e.07	.04	.11
2	.11	.20	e.15	.14	.21	.19	.87	1.0	.17	.07	.04	.14
3	.11	.19	e.15	.15	.23	e.19	.86	.88	.17	.08	.01	.08
4	.12	.18	e.16	.16	.25	.19	.53	.81	.16	.10	.01	.17
5	.11	.18	e.16	.15	.24	.20	.47	.75	.15	.09	.00	.13
6	.12	.17	e.16	.17	.21	.20	.45	.70	.15	.09	.00	.11
7	.12	.15	.16	.15	e.21	e.20	.74	.65	.14	e.09	.00	.04
8	.12	.17	e.16	.12	e.21	e.20	.70	.62	.12	.09	.00	.09
9	.12	.19	.16	.14	.21	e.20	.89	.58	.12	e.07	.01	.11
10	.14	e.19	.15	.23	.23	e.20	.87	.55	.12	.10	.00	.09
11	.14	e.19	e.15	.15	.20	e.20	.43	.52	.12	.10	.00	.14
12	.15	e.18	e.15	.14	e.20	e.22	.66	.51	.12	.08	.00	.07
13	.15	.18	e.16	.14	.20	e.24	.65	.49	.12	.08	.00	.06
14	.15	.17	e.16	.13	.19	e.26	.76	.43	.13	.07	.00	.23
15	.15	e.17	.16	.13	.20	e.28	.89	.42	.13	.07	.00	.28
16	.15	.15	e.16	.13	.19	.28	1.2	.41	.12	.07	.04	.12
17	.14	e.15	e.17	.14	.19	.46	1.2	.39	.12	.07	.12	.09
18	.14	e.15	e.17	.14	.19	e.80	1.2	.37	.12	.07	.03	.11
19	.14	e.14	.17	.14	.19	1.4	1.2	.36	.13	.07	.05	.11
20	.14	e.14	.17	.14	.19	1.2	.85	.34	.13	.06	.09	.13
21	.16	.14	.17	.14	.19	1.2	2.2	.33	.11	.06	.03	.12
22	.17	.15	.17	.14	e.19	1.3	2.3	.32	.10	.06	.08	.06
23	.16	.15	e.17	.14	e.19	1.2	3.6	.31	.09	.06	.10	.01
24	.16	.14	.17	.14	.19	1.4	3.3	.29	.10	.06	.02	.01
25	.16	e.14	e.16	.16	.18	1.6	2.7	.28	.09	.05	.07	.02
26	.19	.14	e.15	e.19	.18	1.3	2.3	.25	.09	.05	.01	.02
27	.22	.15	.15	e.19	.20	1.2	1.9	.24	.09	.04	.07	.02
28	.20	.15	.16	.21	e.20	1.7	1.5	.23	.09	.04	.09	.02
29	.25	.15	.15	.20	---	1.3	1.3	.22	.09	.04	.06	.01
30	.21	e.15	.16	.21	---	1.2	1.1	.21	e.07	.04	.11	.01
31	.19	---	e.16	.21	---	1.4	---	.20	---	.05	.13	---
TOTAL	4.70	4.90	4.95	4.87	5.67	22.10	39.02	14.86	3.64	2.14	1.21	2.71
MEAN	.15	.16	.16	.16	.20	.71	1.30	.48	.12	.069	.039	.090
MAX	.25	.20	.17	.23	.25	1.7	3.6	1.2	.18	.10	.13	.28
MIN	.11	.14	.15	.12	.18	.19	.43	.20	.07	.04	.00	.01
AC-FT	9.3	9.7	9.8	9.7	11	44	77	29	7.2	4.2	2.4	5.4

e Estimated.

10308789 LEVIATHAN CREEK ABOVE ASPEN CREEK, NEAR MARKLEEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.25	.24	.25	.30	.58	1.20	2.89	3.59	.87	.28	.20	.24
MAX	.34	.36	.39	.47	1.10	1.74	5.38	9.69	2.18	.56	.31	.46
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.15	.16	.16	.16	.20	.71	1.30	.48	.12	.069	.039	.090
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	178.55		110.77			
ANNUAL MEAN	.49		.30		.41	
HIGHEST ANNUAL MEAN					.51	2000
LOWEST ANNUAL MEAN					.30	2001
HIGHEST DAILY MEAN	3.8	Apr 4	3.6	Apr 23	17	May 7 1999
LOWEST DAILY MEAN	.11	Jan 1	.00	Aug 5	.00	Aug 5 2001
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 27	.00	Aug 5	.00	Aug 5 2001
MAXIMUM PEAK FLOW			9.8	Apr 24	24	Apr 28 1999
MAXIMUM PEAK STAGE			4.69	Apr 24	5.14	Apr 28 1999
ANNUAL RUNOFF (AC-FT)	354		220		295	
10 PERCENT EXCEEDS	1.3		.85		1.9	
50 PERCENT EXCEEDS	.24		.16		.31	
90 PERCENT EXCEEDS	.14		.05		.12	

103087892 ASPEN CREEK OVERBURDEN SEEP NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°43'45", long 119°39'11", in NE 1/4 SE 1/4 sec.15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 2.8 mi north of State Highway 89, and 2.1 mi east of Markleeville.

PERIOD OF RECORD.—November 1998 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 7,100 ft above sea level, from topographic map.

REMARKS.—Records not computed above 0.38 ft^3/s. Records poor, including estimated daily discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.0220	e.0200	e.0210	.0171	.0171	.0162	.0215	.0061	.0086	e.0180	.0179	.0116
2	e.0230	.0224	e.0210	.0172	.0175	.0165	.0218	.0066	.0080	e.0180	.0168	.0141
3	e.0230	.0181	e.0220	.0174	.0177	.0168	.0210	.0067	.0083	e.0180	.0162	.0155
4	.0232	.0197	e.0220	.0174	.0192	.0172	.0197	.0068	.0087	e.0180	.0154	.0179
5	.0232	.0165	e.0220	.0174	.0200	.0168	.0184	.0069	.0093	e.0180	.0145	.0200
6	.0248	e.0160	e.0220	.0175	.0203	.0173	.0177	.0068	.0094	e.0180	.0136	.0165
7	.0234	e.0160	e.0220	.0177	.0196	.0201	.0179	.0067	.0097	e.0180	.0130	.0158
8	.0240	.0157	e.0230	.0181	.0199	.0223	.0157	.0065	.0106	e.0180	.0145	.0159
9	e.0240	.0207	e.0230	.0182	.0197	.0233	.0148	.0059	.0109	e.0190	.0137	.0163
10	.0236	.0220	e.0230	.0189	.0172	.0223	.0150	.0060	.0116	e.0190	.0143	.0182
11	.0197	.0227	e.0230	.0188	.0169	.0226	.0149	.0059	.0120	e.0190	.0135	.0186
12	.0174	.0236	e.0230	.0187	.0164	.0231	.0140	.0065	.0122	e.0190	.0125	.0178
13	.0201	e.0240	e.0240	.0163	.0155	.0235	.0132	.0067	.0128	e.0190	e.0130	.0166
14	.0196	e.0240	e.0240	.0155	.0164	.0236	.0120	.0068	.0129	e.0190	.0134	.0163
15	.0210	e.0240	e.0240	.0141	.0173	.0239	.0107	.0073	.0132	e.0190	.0133	.0159
16	.0219	e.0240	e.0240	.0135	.0179	.0237	.0096	.0070	.0133	e.0200	.0130	.0155
17	.0203	e.0240	e.0240	.0131	.0183	.0252	.0088	.0072	.0139	e.0200	.0132	.0151
18	.0205	e.0240	.0247	.0132	.0184	.0266	.0100	.0071	.0142	e.0200	.0139	.0148
19	.0211	e.0240	.0226	.0143	.0178	.0287	.0100	.0072	.0145	e.0200	.0137	.0153
20	.0233	.0238	e.0230	.0154	.0160	.0288	.0097	.0074	.0149	e.0200	.0140	.0149
21	.0241	.0225	e.0180	.0159	.0163	.0296	.0094	.0077	e.0150	e.0200	.0131	.0154
22	e.0240	.0218	.0151	.0162	.0159	.0307	.0100	.0079	e.0150	e.0200	.0131	.0161
23	e.0240	.0215	.0152	.0167	.0145	.0308	.0073	.0078	e.0160	e.0200	.0134	.0162
24	.0232	.0193	.0156	.0156	.0145	.0336	.0063	.0078	e.0160	e.0210	.0096	.0163
25	e.0210	.0220	.0161	.0163	.0143	.0341	.0056	.0080	e.0170	e.0210	.0029	.0172
26	.0204	.0250	.0160	.0141	.0151	.0314	.0059	.0083	e.0170	e.0210	.0037	e.0160
27	.0192	.0251	.0159	.0146	.0153	.0303	.0062	.0088	e.0170	.0194	.0046	e.0160
28	.0174	.0229	.0163	.0148	.0151	.0271	.0064	.0091	e.0170	.0185	.0051	.0168
29	.0191	e.0210	.0160	.0150	---	.0249	.0061	.0089	e.0170	.0178	.0059	.0175
30	.0174	e.0210	.0159	.0154	---	.0235	.0059	.0092	e.0170	.0177	.0084	.0180
31	.0178	---	.0166	.0163	---	.0222	---	.0091	---	.0178	.0116	---
TOTAL	0.6667	0.6473	0.6340	0.5007	0.4801	0.7567	0.3655	0.2267	0.3930	0.5912	0.3748	0.4881
MEAN	.022	.022	.020	.016	.017	.024	.012	.007	.013	.019	.012	.016
MAX	.0248	.0251	.0247	.0189	.0203	.0341	.0218	.0092	.0170	.0210	.0179	.0200
MIN	.0174	.0157	.0151	.0131	.0143	.0162	.0056	.0059	.0080	.0177	.0029	.0116
AC-FT	1.3	1.3	1.3	1.0	1.0	1.5	.7	.4	.8	1.2	.7	1.0

e Estimated.

10308792 LEVIATHAN CREEK ABOVE MOUNTAINEER CREEK, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°44'12", long 119°38'39", in SW 1/4 SW 1/4 sec.2, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, on left bank, 4.4 mi north of State Highway 89, and 7.5 mi northeast of Markleeville.

DRAINAGE AREA.—10.76 mi^2.

PERIOD OF RECORD.—December 1999 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,300 ft above sea level, from topographic map.

REMARKS.—Records fair, including estimated daily discharges.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16 ft^3/s, Feb. 14, 2000, gage height, 8.05 ft; minimum daily, 0.02 ft^3/s, Aug. 11, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges geater than base discharge of 20 ft^3/s and maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 21	1015	14	8.02

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.48	.48	e.45	.57	.56	2.1	1.9	.38	.11	.09	.30
2	.28	.51	.50	e.45	.67	.61	1.5	1.7	.37	.12	.08	.24
3	.27	.51	.52	e.45	.72	.64	1.3	1.5	.37	.13	.06	.23
4	.29	.47	.53	e.45	.78	.70	1.0	1.4	.38	.15	.07	.27
5	.29	.49	.49	e.45	.76	.73	1.0	1.3	.34	.15	.07	.29
6	.29	.50	.55	e.45	.73	.74	1.0	1.2	.31	.14	.06	.25
7	.26	.43	.58	e.45	.58	.94	1.1	1.2	.29	.15	.07	.17
8	.22	.49	.55	e.45	.59	1.1	1.1	1.1	.27	.14	.11	.21
9	.26	.54	.53	.48	.64	.99	1.2	1.1	.25	.16	.10	.17
10	.31	.45	.42	.44	.69	.89	1.1	1.0	.23	.18	.08	.22
11	.30	.44	.36	.46	.71	.79	1.0	.97	.23	.18	.02	.36
12	.31	e.45	.31	.55	.67	.91	1.6	.96	.23	.15	.07	.26
13	.31	e.45	.43	.47	.72	.97	1.5	.93	.24	.13	.08	.05
14	.28	.53	.39	.50	.68	1.0	1.5	.81	.22	.13	.08	.48
15	.27	.49	.40	.45	.62	1.0	1.4	.80	.17	.12	.08	.60
16	.27	.58	.44	.43	.65	1.1	1.7	.77	.17	.14	.07	.37
17	.28	.41	.44	.36	.64	1.5	1.9	.74	.16	.14	.17	.20
18	.28	.57	.43	.45	.65	2.0	1.9	.72	.16	.14	.09	.36
19	.28	e.55	e.45	.56	.68	2.9	2.0	.68	.16	.14	.10	.30
20	.28	e.55	.48	.50	.64	2.4	1.7	.66	.15	.12	.17	.35
21	.35	e.55	.45	.53	.62	2.3	3.5	.63	.15	.11	.09	.32
22	.36	.53	.40	.53	.60	2.3	5.8	.62	.13	.11	.16	.25
23	.33	.41	.42	.57	.60	2.4	5.6	.61	.12	.12	.20	.12
24	.34	.59	.41	.62	.65	2.6	4.7	.57	.13	.11	.11	.12
25	.34	.52	.34	.53	.63	2.8	4.2	.55	.13	.10	.16	.18
26	.47	.56	.36	.57	.60	2.4	3.9	.47	.12	.09	.08	.14
27	.54	.58	.54	.59	.59	2.2	3.3	.46	.12	.08	.12	.16
28	.46	.49	.55	.54	.58	2.7	2.8	.45	.12	.08	.16	.12
29	.66	.51	e.50	.53	---	2.2	2.4	.43	.12	.08	.16	.05
30	.55	.45	e.45	.50	---	2.0	2.2	.41	.11	.09	.21	.10
31	.55	---	e.45	.51	---	2.1	---	.39	---	.10	.32	---
TOTAL	10.58	15.08	14.15	15.27	18.26	48.47	67.0	27.03	6.33	3.89	3.49	7.24
MEAN	.34	.50	.46	.49	.65	1.56	2.23	.87	.21	.13	.11	.24
MAX	.66	.59	.58	.62	.78	2.9	5.8	1.9	.38	.18	.32	.60
MIN	.22	.41	.31	.36	.57	.56	1.0	.39	.11	.08	.02	.05
AC-FT	21	30	28	30	36	96	133	54	13	7.7	6.9	14

e Estimated.

10308792 LEVIATHAN CREEK ABOVE MOUNTAINEER CREEK, NEAR MARKLEEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.34	.50	.46	.79	1.03	2.05	2.60	.90	.31	.26	.29	.26
MAX	.34	.50	.46	1.09	1.40	2.54	2.97	.93	.42	.39	.46	.29
(WY)	2001	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	.34	.50	.46	.49	.65	1.56	2.23	.87	.21	.13	.11	.24
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	358.23		236.79			
ANNUAL MEAN	.98		.65		.65	
HIGHEST ANNUAL MEAN					.65	2001
LOWEST ANNUAL MEAN					.65	2001
HIGHEST DAILY MEAN	7.6	Feb 14	5.8	Apr 22	7.6	Feb 14 2000
LOWEST DAILY MEAN	.16	Jun 22	.02	Aug 11	.02	Aug 11 2001
ANNUAL SEVEN-DAY MINIMUM	.19	Jun 16	.07	Aug 10	.07	Aug 10 2001
MAXIMUM PEAK FLOW			14	Apr 21	16	Feb 14 2000
MAXIMUM PEAK STAGE			8.02	Apr 21	8.05	Feb 14 2000
ANNUAL RUNOFF (AC-FT)	711		470		470	
10 PERCENT EXCEEDS	2.6		1.5		2.2	
50 PERCENT EXCEEDS	.52		.45		.50	
90 PERCENT EXCEEDS	.28		.12		.15	

10308794 BRYANT CREEK BELOW CONFLUENCE, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°44'12", long 119°38'39", in SW 1/4 SW 1/4 sec.2, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, on left bank, 4.4 mi north of State Highway 89, and 7.5 mi northeast of Markleeville.

DRAINAGE AREA.—12.36 mi^2.

PERIOD OF RECORD.—November 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,300 ft above sea level, from topographic map.

REMARKS.—Records good, including estimated daily discharges.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 44 ft^3/s, Apr. 19, 1999, gage height, 5.35 ft, maximum gage height, 7.39 ft, Nov. 12, 2000, backwater from ice; minimum daily, 0.74 ft^3/s, Aug. 2, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40 ft^3/s or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 12	0830	Unknown	a7.39	Apr. 22	1815	19	4.91

a Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.9	1.8	1.7	2.0	2.1	4.4	3.4	1.2	.78	.77	1.2
2	1.3	2.0	1.8	1.6	2.2	2.1	3.6	3.2	1.2	.78	.74	1.1
3	1.5	1.8	1.9	1.7	2.4	1.9	3.0	2.9	1.2	1.1	.77	1.1
4	1.1	1.8	1.8	1.7	2.5	2.0	3.1	2.8	1.3	1.1	.78	1.1
5	1.1	1.8	1.8	1.7	2.3	2.1	2.9	2.6	1.3	1.2	.78	1.1
6	1.2	1.8	e1.8	1.7	2.2	2.1	2.8	2.4	1.3	1.2	.83	1.1
7	1.2	1.7	1.8	1.8	1.8	2.5	3.0	2.3	1.2	1.2	.85	1.0
8	1.3	1.9	1.8	1.8	1.9	2.7	e2.8	2.1	1.2	1.1	.96	1.1
9	1.4	1.8	1.8	1.6	2.3	2.4	2.6	2.2	1.1	1.1	.97	1.0
10	1.5	1.8	1.7	1.6	2.3	2.2	2.6	2.1	1.1	1.2	.88	1.1
11	1.5	1.7	1.9	1.7	2.3	2.2	2.4	2.0	1.2	1.4	.84	1.4
12	1.6	e1.7	1.7	1.7	2.1	2.2	3.0	2.0	1.3	1.2	.80	1.3
13	1.4	e1.7	e1.9	1.7	2.3	2.4	2.8	2.0	1.3	1.1	.81	1.1
14	1.5	e1.7	1.9	1.7	1.9	2.6	2.8	1.8	1.2	1.1	.82	1.5
15	1.6	e1.7	1.9	1.7	1.9	2.5	3.0	1.8	1.2	1.0	.82	1.6
16	1.5	e1.7	1.9	1.7	1.9	2.6	3.3	1.8	1.1	1.0	.77	1.3
17	1.5	e1.8	1.9	2.1	1.9	3.6	3.3	1.7	1.0	1.0	.97	1.2
18	1.5	1.8	e1.9	2.0	1.9	4.4	3.5	1.7	1.1	1.0	.87	1.4
19	1.4	e1.9	e1.9	1.9	1.9	5.4	3.8	1.6	1.1	1.0	.90	1.2
20	1.5	1.9	2.0	1.8	1.9	5.1	3.0	1.6	1.0	.99	.97	1.3
21	1.7	1.8	1.9	1.8	1.9	5.3	5.0	1.6	1.0	.92	.91	1.3
22	1.7	1.7	1.8	1.9	1.9	5.1	8.3	1.5	.85	.93	.99	1.2
23	1.8	1.7	e1.8	1.8	2.0	5.1	9.1	1.5	.83	.93	1.1	1.1
24	1.8	1.8	1.8	1.8	2.0	5.3	7.7	1.4	.91	.90	.94	1.1
25	1.8	1.8	e1.9	1.8	2.0	5.5	6.5	1.3	.98	.87	.96	1.3
26	1.9	1.9	e2.0	1.9	2.0	4.8	5.9	1.3	.98	.90	.86	1.2
27	2.1	1.9	e2.0	1.8	2.0	4.4	5.1	1.3	.93	.89	.91	1.2
28	1.8	1.8	e2.0	1.8	2.0	5.4	4.3	1.4	.89	.88	.97	1.2
29	2.3	1.9	1.7	1.9	---	4.9	3.8	1.4	.84	.84	.99	1.2
30	2.1	1.8	1.6	1.8	---	4.2	3.6	1.3	.81	.84	1.0	1.2
31	1.9	---	1.8	1.8	---	4.4	---	1.2	---	.88	1.2	---
TOTAL	48.8	54.0	57.2	55.0	57.7	109.5	121.0	59.2	32.62	31.33	27.73	36.2
MEAN	1.57	1.80	1.85	1.77	2.06	3.53	4.03	1.91	1.09	1.01	.89	1.21
MAX	2.3	2.0	2.0	2.1	2.5	5.5	9.1	3.4	1.3	1.4	1.2	1.6
MIN	1.1	1.7	1.6	1.6	1.8	1.9	2.4	1.2	.81	.78	.74	1.0
AC-FT	97	107	113	109	114	217	240	117	65	62	55	72

e Estimated.

10308794 BRYANT CREEK BELOW CONFLUENCE, NEAR MARKLEEVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.02	2.19	2.24	2.65	3.47	5.19	8.31	8.02	2.98	1.64	1.60	1.87
MAX	2.47	2.59	2.48	3.26	4.78	6.94	15.6	19.2	6.12	2.61	2.53	2.66
(WY)	2000	2000	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	1.57	1.80	1.85	1.77	2.06	3.53	4.03	1.91	1.09	1.01	.89	1.21
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	950.2		690.28			
ANNUAL MEAN	2.60		1.89		2.34	
HIGHEST ANNUAL MEAN					2.79	2000
LOWEST ANNUAL MEAN					1.89	2001
HIGHEST DAILY MEAN	13	Feb 14	9.1	Apr 23	29	Apr 21 1999
LOWEST DAILY MEAN	1.0	Aug 8	.74	Aug 2	.74	Aug 2 2001
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 5	.79	Aug 1	.79	Aug 1 2001
MAXIMUM PEAK FLOW			19	Apr 22	44	Apr 19 1999
MAXIMUM PEAK STAGE			a7.39	Nov 12	a7.39	Nov 12 2000
ANNUAL RUNOFF (AC-FT)	1880		1370		1700	
10 PERCENT EXCEEDS	4.9		3.0		6.5	
50 PERCENT EXCEEDS	1.9		1.7		2.4	
90 PERCENT EXCEEDS	1.2		.93		1.2	

a Backwater from ice.

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CA

LOCATION.—Lat 38°46'11", long 119°49'58", in NW 1/4 SE 1/4 sec.34, T.11 N., R.19 E., Alpine County, Hydrologic Unit 16050201, in Toiyabe National Forest, on left bank, 0.3 mi downstream from bridge on State Highway 88–89, 0.6 mi southwest of Woodfords, 3.8 mi downstream from Willow Creek, and at mi 21.17 from mouth.

DRAINAGE AREA.—65.4 mi^2.

PERIOD OF RECORD.—October 1900 to May 1907, 1910–11 (fragmentary), October 1938 to current year. January 1890 to March 1892, June 1907 to September 1920 (except parts of 1910–11), at site 0.7 mi downstream; records not equivalent owing to diversions for irrigation.

REVISED RECORDS.—WDR NV-79-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 5,754.5 ft above sea level. Prior to Oct. 1, 1938, nonrecording gage at about the same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft downstream at datum 3.06 ft lower. January 1997 flood, channel changed course upstream and existing site became unusable. Gage moved 200 ft upstream March 1997 at same datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,100 ft^3/s, Jan. 1, 1997, gage height, 15.36 ft (present location); minimum daily, 5.3 ft^3/s, Sept. 2, 1997.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 11, 1937, reached a stage of 8.0 ft, at different datum, from floodmarks, discharge, 3,500 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge at 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 30	2345	*415	*12.04

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	22	21	20	e22	e23	157	314	88	24	21	12
2	20	22	20	19	22	23	135	279	85	23	25	11
3	21	23	20	20	23	e23	97	207	73	23	20	11
4	21	22	20	20	24	23	83	186	66	30	17	11
5	21	22	20	20	24	23	74	210	61	26	17	11
6	21	22	20	20	23	23	69	235	58	23	17	11
7	21	21	20	21	e23	24	65	251	56	24	17	14
8	21	21	20	21	e23	26	61	279	53	23	18	14
9	21	22	20	20	23	26	57	287	50	23	19	14
10	23	21	20	20	22	25	55	272	47	24	17	13
11	23	19	19	20	21	25	56	265	45	23	17	12
12	22	19	20	21	e22	25	54	277	43	22	17	15
13	22	20	20	21	22	27	57	265	41	21	17	18
14	22	21	20	21	22	27	58	246	39	21	22	14
15	21	20	21	21	e22	27	67	238	38	20	21	12
16	21	20	20	21	22	27	81	264	36	20	15	11
17	21	19	21	e22	22	30	98	233	35	20	13	11
18	20	20	19	e25	22	34	112	203	33	25	13	11
19	20	20	22	22	22	41	113	180	32	28	13	11
20	20	20	21	e22	22	50	91	168	31	20	13	11
21	21	20	21	21	22	58	84	164	31	19	13	11
22	21	20	20	21	22	67	87	172	30	19	13	11
23	21	19	21	21	22	76	118	231	29	19	13	11
24	21	20	21	21	22	86	156	190	28	19	13	11
25	21	19	19	21	22	100	199	160	27	19	13	14
26	21	20	18	21	22	97	264	140	27	18	13	17
27	22	20	21	21	22	93	289	120	28	18	13	19
28	23	20	20	e20	22	123	269	106	28	18	13	14
29	25	21	21	21	---	137	245	98	26	17	24	12
30	23	19	20	e21	---	131	275	93	25	18	20	12
31	22	---	20	e22	---	146	---	88	---	18	15	---
TOTAL	664	614	626	648	624	1666	3626	6421	1289	665	512	380
MEAN	21.4	20.5	20.2	20.9	22.3	53.7	121	207	43.0	21.5	16.5	12.7
MAX	25	23	22	25	24	146	289	314	88	30	25	19
MIN	20	19	18	19	21	23	54	88	25	17	13	11
AC-FT	1320	1220	1240	1290	1240	3300	7190	12740	2560	1320	1020	754

e Estimated.

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.4	40.0	47.1	53.7	57.2	78.3	206	378	260	107	48.6	31.0
MAX	79.1	321	347	621	258	283	502	924	996	525	223	120
(WY)	1983	1951	1951	1997	1963	1986	1907	1906	1983	1907	1907	1983
MIN	8.27	13.1	12.8	13.7	16.3	18.2	46.6	56.4	37.4	18.1	11.1	7.00
(WY)	1989	1991	1991	1961	1977	1977	1975	1977	1992	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1901 - 2001	
ANNUAL TOTAL	30313		17735			
ANNUAL MEAN	82.8		48.6		111	
HIGHEST ANNUAL MEAN					290	1907
LOWEST ANNUAL MEAN					26.1	1977
HIGHEST DAILY MEAN	552	Apr 13	314	May 1	5500	Jan 2 1997
LOWEST DAILY MEAN	18	Dec 26	11	Sep 2	5.3	Sep 2 1977
ANNUAL SEVEN-DAY MINIMUM	20	Nov 11	11	Sep 16	5.4	Sep 5 1977
MAXIMUM PEAK FLOW			415	Apr 30	8100	Jan 1 1997
MAXIMUM PEAK STAGE			12.04	Apr 30	15.36	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	60130		35180		80690	
10 PERCENT EXCEEDS	256		136		297	
50 PERCENT EXCEEDS	32		22		46	
90 PERCENT EXCEEDS	20		14		17	

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD, NEAR MEYERS, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°47'47", long 120°01'05", in NW 1/4 SW 1/4 sec.17, T.11 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 0.25 mi upstream from bridge, 0.5 mi upstream of confluence of Big Meadow and Grass Lake Creeks, 0.5 mi west of State Highway 89, and 4.0 mi south of Meyers.

DRAINAGE AREA.—14.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1990 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,490 ft above sea level, from topographic map. Prior to Oct. 1, 1991, at site 1,200 ft downstream at datum 2.54 ft higher.

REMARKS.—Records fair except for Aug. 3 through Sept. 30 and 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, 2,010 ft^3/s, Jan. 2, 1997, gage height, 11.31 ft; minimum daily, 0.76 ft^3/s, Sept. 1, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharges of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	2015	*245	*7.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.5	2.7	2.2	e2.5	3.1	43	118	41	5.6	3.1	1.7
2	1.9	2.6	2.6	2.2	2.6	3.1	33	97	34	5.2	3.1	1.7
3	1.9	2.6	2.6	2.2	2.5	3.2	24	60	29	5.3	2.8	1.7
4	1.9	2.6	2.6	2.3	2.6	3.4	18	60	27	5.2	2.4	1.7
5	1.9	2.7	2.5	2.3	2.9	3.6	13	91	26	5.1	2.1	1.7
6	2.0	2.8	2.5	2.1	2.8	3.7	11	119	25	4.8	2.0	1.7
7	2.1	2.5	2.4	2.1	2.5	3.7	11	137	25	4.7	2.1	1.7
8	2.1	2.6	2.5	2.1	3.0	4.1	10	168	23	4.7	2.0	1.7
9	2.1	2.6	2.4	2.0	2.8	4.4	12	149	21	4.5	1.7	1.7
10	2.6	2.5	2.5	2.0	e3.0	4.2	13	141	20	4.5	1.6	1.7
11	2.6	2.3	2.4	2.5	e3.1	3.9	11	154	18	3.9	1.5	1.7
12	2.4	2.2	2.5	2.5	e3.2	3.8	12	156	18	3.6	1.5	1.7
13	2.4	2.3	2.6	2.2	e3.2	3.9	12	154	17	3.4	1.5	1.7
14	2.4	2.4	2.7	2.1	e3.4	4.4	12	146	15	3.3	1.4	1.7
15	2.4	2.3	2.7	2.1	3.5	4.6	13	181	15	3.2	1.3	1.7
16	2.3	2.3	2.4	2.0	3.2	4.5	15	177	14	3.2	1.4	1.7
17	2.2	2.3	2.4	e2.1	3.0	5.1	20	137	13	3.2	1.3	1.7
18	2.2	2.4	2.3	e2.1	2.8	6.8	26	133	12	3.2	1.4	1.7
19	2.1	2.5	2.3	e2.2	2.9	10	25	121	11	3.2	1.3	1.7
20	2.1	2.4	2.4	2.3	3.1	17	19	113	10	3.1	1.4	1.7
21	2.1	2.4	2.4	2.3	2.9	19	18	109	9.9	3.1	1.4	1.8
22	2.1	2.3	2.4	2.1	3.0	22	17	113	9.4	3.0	1.5	1.9
23	2.2	2.2	2.3	2.1	e3.0	23	26	114	8.5	3.1	1.5	1.5
24	2.2	2.3	2.3	2.4	3.1	25	47	95	7.8	3.5	1.7	1.5
25	2.2	2.3	2.3	2.2	3.1	27	78	81	7.4	3.0	1.5	2.2
26	2.5	2.3	2.3	2.3	3.0	23	93	68	7.4	3.0	1.6	1.6
27	2.5	2.4	2.3	2.2	3.0	23	87	58	7.7	2.9	1.6	1.6
28	2.7	2.5	2.3	2.2	2.9	37	77	50	7.3	2.9	1.6	1.6
29	3.2	2.5	2.2	2.3	---	39	74	46	6.7	2.8	1.6	1.6
30	2.9	2.8	2.2	2.4	---	37	106	43	6.1	3.0	1.6	1.6
31	2.6	---	2.2	e2.4	---	44	---	41	---	3.1	1.7	---
TOTAL	70.7	73.4	75.2	68.5	82.6	419.5	976	3430	492.2	116.3	54.2	50.9
MEAN	2.28	2.45	2.43	2.21	2.95	13.5	32.5	111	16.4	3.75	1.75	1.70
MAX	3.2	2.8	2.7	2.5	3.5	44	106	181	41	5.6	3.1	2.2
MIN	1.9	2.2	2.2	2.0	2.5	3.1	10	41	6.1	2.8	1.3	1.5
AC-FT	140	146	149	136	164	832	1940	6800	976	231	108	101

e Estimated.

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD, NEAR MEYERS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.31	5.89	8.93	17.4	11.9	20.9	51.0	136	121	47.9	9.72	3.73
MAX	5.72	20.7	37.4	120	39.2	41.3	102	216	329	220	45.9	10.4
(WY)	1999	1997	1997	1997	1996	1995	1997	1996	1995	1995	1995	1998
MIN	2.12	2.13	1.69	1.57	2.95	6.64	15.1	51.2	12.1	3.40	1.64	1.30
(WY)	1993	1991	1991	1991	2001	1991	1991	1992	1992	1994	1994	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	11029.2		5909.5			
ANNUAL MEAN	30.1		16.2		37.6	
HIGHEST ANNUAL MEAN					72.3	1995
LOWEST ANNUAL MEAN					14.1	1994
HIGHEST DAILY MEAN	316	May 8	181	May 15	1130	Jan 2 1997
LOWEST DAILY MEAN	1.8	Sep 27	1.3	Aug 15	.76	Sep 1 1990
ANNUAL SEVEN-DAY MINIMUM	1.9	Sep 21	1.4	Aug 14	.97	Aug 29 1990
MAXIMUM PEAK FLOW			245	May 11	2010	Jan 2 1997
MAXIMUM PEAK STAGE			7.43	May 11	11.31	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	21880		11720		27210	
10 PERCENT EXCEEDS	101		45		117	
50 PERCENT EXCEEDS	6.6		2.8		8.0	
90 PERCENT EXCEEDS	2.2		1.7		2.1	

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD, NEAR MEYERS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1990 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature records represent water temperature at probe with in 0.5°C. Water temperature data for September 1997 are unpublished but are available from U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 17.0°C, July 2, 3, 2001; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 17.0°C, July 2, 3; minimum, freezing point, many days November to April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	
OCT										
06...	1410	2.0	53	--	21.5	7.6	--	--	--	
17...	1435	2.2	49	--	17.0	4.8	--	--	--	
NOV										
13...	1500	2.8	46	--	.0	.3	--	--	--	
DEC										
07...	1515	2.5	45	6.9	3.5	1.0	597	97	10.8	
JAN										
05...	1415	2.6	45	--	3.0	.3	--	--	--	
FEB										
12...	1720	4.7	40	--	-7.0	.1	--	--	--	
MAR										
08...	1550	4.1	39	6.5	4.0	1.5	596	100	11.0	
20...	1510	18	24	--	10.5	1.0	--	--	--	
29...	1630	37	19	--	5.0	4.0	--	--	--	
APR										
03...	1335	24	21	--	2.5	1.4	--	--	--	
18...	1640	25	20	--	8.5	4.1	--	--	--	
25...	1615	91	20	--	20.0	5.2	--	--	--	
MAY										
03...	1610	57	20	--	12.0	5.0	--	--	--	
07...	1335	103	21	--	22.0	6.	8	--	--	--
10...	1500	128	20	--	22.0	7.8	--	--	--	
15...	1015	151	19	--	12.0	5.3	--	--	--	
21...	1530	113	22	--	22.0	10.8	--	--	--	
29...	1650	44	27	--	20.5	12.2	--	--	--	
JUN										
08...	1550	21	32	7.5	20.5	12.5	600	98	8.2	
JUL										
02...	1520	5.2	42	--	28.5	16.3	--	--	--	
AUG										
02...	1650	3.1	50	--	26.5	13.7	--	--	--	
SEP										
07...	1530	1.8	54	7.3	24.0	11.5	600	96	8.2	

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD, NEAR MEYERS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
06...	<.003	.07	.005	.017	.034	80	2	.01
17...	<.003	<.04	.004	.013	.022	75	2	.01
NOV								
13...	<.003	.06	.006	.013	.020	83	1	.01
DEC								
07...	<.003	.04	.029	.014	.019	71	1	.01
JAN								
05...	<.003	.05	.052	.012	.025	77	1	.01
FEB								
12...	.004	<.04	.067	.012	.020	157	1	.01
MAR								
08...	<.003	.05	.057	.011	.019	127	1	.01
20...	<.003	.16	.040	.005	.024	555	7	.34
29...	<.003	.10	.018	.004	.013	130	3	.30
APR								
03...	<.003	.10	.014	.004	.014	132	2	.13
18...	.004	.09	.006	.003	.010	97	1	.07
25...	.003	.16	.007	.002	.026	345	11	2.7
MAY								
03...	.004	.09	.003	.004	.013	107	2	.31
07...	.003	.09	.004	.003	.016	167	3	.83
10...	<.003	.15	.004	.003	.018	144	4	1.4
15...	.010	.19	.008	.004	.019	116	4	1.6
21...	<.003	.15	.004	.006	.018	101	2	.61
29...	.008	.08	.007	.009	.021	80	2	.24
JUN								
08...	.005	.09	.009	.012	.021	67	2	.11
JUL								
02...	.006	.11	.011	.017	.030	97	3	.04
AUG								
02...	<.003	.08	.029	.021	.034	68	3	.03
SEP								
07...	.005	.14	.012	.017	.025	71	1	<.01

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.5	7.5	8.5	1.0	.0	.5	.5	.0	.5	.5	.0	.0
2	10.5	7.5	8.5	2.0	.5	1.0	.5	.0	.5	.5	.0	.0
3	10.0	7.5	8.5	2.5	1.0	1.5	.5	.0	.5	.5	.0	.0
4	9.5	7.0	8.0	1.5	.5	1.0	.5	.0	.5	.5	.0	.0
5	9.0	6.5	7.5	2.5	.5	1.5	.5	.0	.5	.5	.0	.0
6	9.0	6.5	7.5	2.5	1.0	1.5	.5	.0	.5	.5	.0	.0
7	8.5	6.0	7.0	1.5	.5	1.0	1.0	.5	.5	.5	.0	.0
8	8.5	6.0	7.0	2.0	.5	1.0	1.5	.5	1.0	.5	.0	.5
9	7.5	6.0	7.0	1.5	.0	1.0	1.5	.5	1.0	.5	.0	.0
10	6.5	4.0	5.5	.5	.0	.0	1.5	.5	1.0	.0	.0	.0
11	4.5	3.5	4.0	.5	.0	.0	1.0	.0	.5	.0	.0	.0
12	5.0	2.5	3.5	.5	.0	.0	.5	.0	.0	.0	.0	.0
13	5.5	2.5	4.0	.5	.0	.0	.5	.0	.0	.0	.0	.0
14	6.0	4.0	5.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
15	6.0	4.0	5.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
16	6.0	3.5	4.5	.0	.0	.0	.5	.0	.0	.0	.0	.0
17	6.0	3.5	4.5	.0	.0	.0	.5	.0	.5	.0	.0	.0
18	6.5	4.0	5.0	.5	.0	.0	.5	.0	.0	.0	.0	.0
19	6.0	4.0	5.0	.5	.0	.0	.5	.0	.0	.0	.0	.0
20	6.0	4.0	5.0	.5	.0	.0	.5	.0	.5	.0	.0	.0
21	5.5	4.0	5.0	.5	.0	.5	.5	.5	.5	.0	.0	.0
22	4.0	1.5	2.5	.5	.5	.5	.5	.5	.5	.5	.0	.5
23	3.5	1.0	2.0	.5	.0	.5	.5	.0	.5	.5	.0	.5
24	4.0	2.0	3.0	1.0	.5	.5	.5	.0	.5	.5	.0	.0
25	4.0	3.0	3.5	1.0	.5	.5	.5	.0	.0	.5	.0	.0
26	4.0	2.5	3.0	1.5	.5	.5	.5	.0	.0	.5	.0	.0
27	4.0	2.0	3.0	1.5	.5	1.0	.5	.0	.5	.5	.0	.0
28	3.5	2.0	3.0	1.5	.5	1.0	.5	.0	.0	.0	.0	.0
29	3.0	.5	1.0	1.0	.0	.5	.5	.0	.0	.0	.0	.0
30	1.5	1.0	1.0	.5	.0	.5	.5	.0	.0	.0	.0	.0
31	1.5	.5	.5	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	10.5	.5	4.8	2.5	.0	.5	1.5	.0	.3	.5	.0	.0

< Actual value is known to be less than value shown.

10336580 UPPER TRUCKEE RIVER AT SOUTH UPPER TRUCKEE ROAD, NEAR MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.5	4.5	1.0	2.0	6.0	1.5	3.0
2	.5	.0	.0	.5	.0	.5	2.5	.5	1.5	4.5	1.0	2.5
3	.5	.0	.5	.5	.0	.5	2.5	.0	1.0	5.0	.5	2.5
4	.5	.0	.5	1.0	.5	.5	2.0	.0	1.0	6.5	1.0	3.0
5	.5	.0	.5	.5	.0	.5	2.5	.0	1.0	6.5	2.0	3.5
6	.5	.0	.5	1.5	.5	.5	2.0	.5	1.0	6.5	1.5	3.5
7	.5	.0	.0	1.5	.5	1.0	.5	.0	.0	7.0	2.0	4.0
8	.5	.0	.0	1.5	.5	1.0	.0	.0	.0	7.5	2.5	4.5
9	.0	.0	.0	1.5	.0	.5	.0	.0	.0	7.5	2.5	4.5
10	.0	.0	.0	1.0	.0	.5	.5	.0	.0	8.0	2.5	4.5
11	.0	.0	.0	1.5	.0	.5	.5	.0	.0	9.0	3.0	5.0
12	.0	.0	.0	1.5	.0	.5	1.0	.0	.5	7.5	3.5	5.0
13	.0	.0	.0	2.0	.0	.5	2.0	.0	1.0	8.5	3.5	5.5
14	.0	.0	.0	1.5	.0	.5	2.5	.0	1.0	7.0	3.5	5.0
15	.0	.0	.0	1.5	.0	.5	3.5	.0	1.5	6.0	4.0	5.0
16	.0	.0	.0	2.0	.0	1.0	4.5	.5	2.5	9.5	3.5	6.0
17	.5	.0	.0	2.5	.5	1.0	5.0	1.0	3.0	10.0	3.5	6.5
18	.5	.0	.5	2.0	.5	1.0	4.0	.5	2.0	10.0	4.0	7.0
19	.5	.0	.5	1.5	.5	.5	1.5	.5	1.0	10.5	5.0	7.5
20	.5	.0	.5	1.5	.5	.5	.5	.0	.5	11.5	5.0	8.0
21	1.0	.0	.5	2.0	.5	1.0	2.0	.0	1.0	11.0	6.0	8.5
22	.5	.0	.0	1.5	.5	1.0	4.5	.0	2.0	12.0	6.0	8.5
23	.5	.0	.0	2.5	.5	1.0	5.0	1.0	2.5	12.5	6.5	9.0
24	.0	.0	.0	2.5	.5	1.0	5.5	1.0	2.5	12.5	6.0	9.0
25	.5	.0	.5	2.5	.5	1.5	5.5	1.0	2.5	12.0	6.5	9.0
26	1.0	.5	.5	3.0	.5	1.5	5.5	1.5	2.5	11.5	7.0	9.0
27	1.0	.0	.5	3.5	.5	2.0	5.5	1.0	2.5	11.0	6.5	9.0
28	1.0	.0	.5	3.5	.5	1.5	5.0	1.5	3.0	11.0	6.0	9.0
29	---	---	---	4.0	.5	2.0	6.0	1.0	3.0	12.0	6.0	9.5
30	---	---	---	4.5	.5	2.0	6.5	1.5	3.0	12.5	7.5	10.0
31	---	---	---	4.5	1.0	2.0	---	---	---	13.5	7.5	10.5
MONTH	1.0	.0	.2	4.5	.0	.9	6.5	.0	1.5	13.5	.5	6.4

		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.5	8.5	10.5	16.0	10.5	13.0	14.5	10.5	12.5	13.5	11.0	12.0
2	10.5	7.0	9.0	17.0	11.5	14.0	14.5	10.5	12.5	13.5	10.5	12.0
3	10.0	5.5	8.0	17.0	12.5	14.5	15.0	11.5	13.0	14.0	11.0	12.5
4	10.0	5.5	8.0	15.0	13.5	14.0	14.0	11.0	12.5	13.5	11.0	12.5
5	11.0	6.5	8.5	15.0	12.5	13.5	14.0	10.0	12.0	13.5	11.0	12.0
6	12.5	7.0	9.5	13.5	12.0	13.0	14.0	10.5	12.5	12.0	9.5	11.0
7	12.5	7.5	10.0	13.5	11.5	12.5	14.0	11.5	12.5	11.5	9.0	10.5
8	12.5	8.0	10.0	14.0	10.5	12.0	14.0	12.0	13.0	11.5	9.0	10.5
9	12.0	7.5	10.0	12.5	11.0	11.5	15.5	12.0	13.5	12.0	9.0	10.5
10	11.0	7.5	9.0	13.5	9.5	11.5	15.5	12.0	14.0	12.0	9.0	10.5
11	11.5	6.5	9.5	15.0	10.5	12.0	14.5	11.0	13.0	11.5	10.5	11.0
12	12.0	8.0	9.5	14.0	9.0	11.5	15.0	11.5	13.5	12.0	10.0	10.5
13	11.0	6.5	8.5	14.5	9.5	11.5	15.0	11.5	13.5	11.5	9.0	10.0
14	12.0	6.0	9.0	14.0	9.5	11.5	15.0	11.5	13.0	11.0	8.5	10.0
15	13.0	7.0	10.0	13.5	9.0	11.0	14.5	11.0	12.5	11.0	8.5	9.5
16	13.5	7.5	10.5	12.5	9.0	10.5	14.0	11.0	12.5	11.0	9.0	10.0
17	13.5	8.5	11.0	13.5	8.5	11.0	15.0	11.0	13.0	11.5	9.0	10.0
18	13.5	8.0	11.0	13.5	9.0	11.0	15.0	11.5	13.0	11.5	9.0	10.0
19	13.5	8.0	11.0	13.5	9.5	11.0	14.0	11.5	13.0	11.5	9.0	10.0
20	14.5	9.5	12.0	13.5	9.5	11.0	13.5	11.0	12.5	11.5	9.0	10.5
21	15.5	10.5	13.0	13.5	9.0	11.0	12.5	10.0	11.5	11.5	9.0	10.0
22	15.5	10.5	13.0	13.5	9.0	11.0	12.5	9.5	11.0	11.0	9.0	10.0
23	15.0	11.0	13.0	13.0	9.5	11.5	12.0	9.0	11.0	10.5	9.0	10.0
24	14.0	9.5	11.5	14.0	10.0	12.0	13.0	9.5	11.5	11.0	9.0	10.0
25	13.0	10.0	11.0	16.0	11.0	13.0	13.5	10.0	11.5	11.0	9.5	10.5
26	13.5	10.0	11.5	16.0	11.5	13.5	14.0	10.5	12.5	11.0	9.0	10.0
27	12.0	10.5	11.0	15.0	10.5	12.5	14.0	11.0	12.5	11.0	8.5	9.5
28	14.5	8.5	11.5	15.0	10.5	12.5	14.0	11.0	13.0	10.5	8.5	9.5
29	15.0	9.5	12.0	14.5	10.5	12.5	13.5	11.0	12.5	10.0	8.0	9.0
30	15.5	11.0	13.0	14.0	10.5	12.0	13.5	11.0	12.5	10.0	8.0	9.0
31	---	---	---	14.5	10.0	12.0	13.5	11.0	12.5	---	---	---
MONTH	15.5	5.5	10.5	17.0	8.5	12.1	15.5	9.0	12.6	14.0	8.0	10.4

10336593 GRASS LAKE CREEK NEAR MEYERS, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°48'07", long 120°00'54", in SE 1/4 NW 1/4 sec.17, T.11 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on right bank, 50 ft upstream of Grass Lake Way, about 0.1 mi upstream from Upper Truckee River, and about 0.4 mi downstream of State Highway 89.

DRAINAGE AREA.—6.4 mi^2.

PERIOD OF RECORD.—September 1997 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to September 2001 (discontinued).

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In September 1996, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor water temperature within the Upper Truckee River—Trout Creek watershed. Records represent water temperature at probe within 0.5°C. Water temperature data for September 1997 were not published but are available from U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 15.5°C, July 3, 2001; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 15.5°C, July 3; minimum, freezing point on many days in November to April.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	7.0	8.0	1.5	.0	1.0	1.0	.5	.5	.0	.0	.0
2	9.5	7.5	8.5	2.5	1.5	2.0	1.0	.5	.5	.0	.0	.0
3	9.0	7.0	8.0	2.5	1.5	2.0	.5	.0	.5	.0	.0	.0
4	8.5	6.5	7.5	2.5	1.0	2.0	1.5	.5	1.0	.0	.0	.0
5	8.5	6.0	7.5	3.5	1.5	2.5	1.0	.5	.5	.5	.0	.0
6	8.0	6.0	7.0	3.0	1.5	2.0	1.0	.5	.5	.0	.0	.0
7	8.0	6.0	7.0	2.0	1.0	1.5	2.0	1.0	1.5	.5	.0	.0
8	8.0	5.5	6.5	2.5	1.0	2.0	2.5	1.5	2.0	1.0	.5	.5
9	7.5	6.0	6.5	2.0	.5	1.0	2.0	1.0	1.5	.5	.0	.5
10	6.0	4.0	5.0	.5	.0	.5	2.0	.5	1.5	.0	.0	.0
11	4.5	3.5	4.0	.5	.0	.0	1.0	.5	.5	.0	.0	.0
12	4.5	3.0	3.5	.0	.0	.0	.5	.0	.0	.0	.0	.0
13	5.5	3.0	4.0	.5	.0	.0	.5	.0	.0	.0	.0	.0
14	6.0	4.0	5.0	.5	.0	.0	.5	.0	.0	.0	.0	.0
15	6.0	3.5	5.0	.5	.0	.0	.5	.5	.5	.0	.0	.0
16	5.5	3.5	4.5	.5	.0	.0	.5	.0	.5	.0	.0	.0
17	6.0	4.0	5.0	.5	.0	.0	1.0	.5	.5	.0	.0	.0
18	6.0	4.5	5.0	.5	.0	.5	.5	.0	.0	.0	.0	.0
19	6.0	4.0	5.0	.5	.5	.5	.5	.0	.5	.0	.0	.0
20	6.0	4.5	5.0	1.0	.5	.5	1.0	.5	.5	.0	.0	.0
21	5.5	3.5	4.5	1.0	.5	.5	1.0	.5	1.0	.5	.0	.5
22	3.5	2.0	2.5	1.0	.5	1.0	1.0	.5	.5	1.0	.5	.5
23	3.5	1.5	2.5	1.0	.5	.5	.5	.0	.5	1.0	.5	.5
24	4.5	2.5	3.0	1.5	1.0	1.0	.5	.0	.5	.5	.0	.5
25	4.5	3.0	4.0	1.5	1.0	1.5	.0	.0	.0	.0	.0	.0
26	4.0	3.0	3.5	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
27	3.5	2.5	3.0	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
28	4.0	2.5	3.0	2.5	1.5	2.0	.5	.0	.0	.0	.0	.0
29	3.0	1.0	1.5	2.0	.5	1.5	.5	.0	.0	.0	.0	.0
30	2.0	1.5	2.0	.5	.5	.5	.5	.0	.0	.0	.0	.0
31	2.0	.5	1.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	9.5	.5	4.8	3.5	.0	1.0	2.5	.0	.5	1.0	.0	.1

10336593 GRASS LAKE CREEK NEAR MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.5	4.0	1.5	2.5	8.0	4.0	5.5
2	.0	.0	.0	1.0	.5	.5	2.5	1.0	1.5	6.0	3.0	4.5
3	.5	.0	.5	.5	.0	.5	2.0	.5	1.0	6.0	2.0	4.0
4	1.0	.5	.5	1.0	.5	1.0	2.0	.0	1.0	7.5	2.5	5.0
5	1.0	.5	.5	1.0	.5	1.0	2.5	.5	1.5	8.5	4.0	6.0
6	1.0	.0	.5	1.5	1.0	1.0	2.0	1.0	1.5	8.5	4.0	6.5
7	.0	.0	.0	1.5	1.0	1.0	1.0	.0	.0	9.5	4.5	7.0
8	.0	.0	.0	1.5	1.0	1.5	.5	.0	.0	9.5	5.0	7.5
9	.0	.0	.0	1.5	.5	1.0	.5	.0	.0	9.5	5.0	7.5
10	.0	.0	.0	1.5	.5	1.0	1.0	.0	.5	10.0	5.0	7.5
11	.0	.0	.0	1.5	.5	1.0	1.0	.5	1.0	11.0	6.0	8.5
12	.0	.0	.0	1.5	.5	1.0	1.5	.0	.5	9.5	7.0	8.5
13	.0	.0	.0	1.5	.5	1.0	2.5	.5	1.5	10.5	7.0	8.5
14	.0	.0	.0	1.5	.5	1.0	2.5	.0	1.5	9.0	6.0	8.0
15	.0	.0	.0	1.5	1.0	1.0	3.5	.5	2.0	9.0	7.5	8.0
16	.5	.0	.5	2.0	1.0	1.5	4.5	1.0	2.5	10.5	6.5	8.5
17	.5	.5	.5	2.0	1.0	1.5	5.0	1.5	3.0	11.0	6.5	8.5
18	.5	.5	.5	2.5	1.5	1.5	4.0	1.0	2.5	11.0	6.5	9.0
19	1.0	.5	.5	2.5	1.0	2.0	2.0	1.0	1.5	11.5	7.0	9.5
20	.5	.5	.5	2.5	1.5	2.0	1.0	.0	.5	11.5	7.0	9.5
21	1.0	.5	1.0	3.0	1.5	2.0	1.5	.0	.5	11.5	8.0	10.0
22	.5	.0	.5	3.0	2.0	2.0	4.0	.5	2.0	12.0	8.0	9.5
23	.5	.0	.0	3.5	1.5	2.0	5.0	1.0	3.0	12.5	7.0	9.5
24	.5	.0	.5	4.0	1.5	2.5	6.0	2.0	4.0	12.5	8.0	10.5
25	1.0	.5	.5	3.5	1.5	2.5	7.0	3.0	5.0	12.5	8.5	10.5
26	1.0	.5	1.0	3.5	1.0	2.0	7.0	3.0	5.0	12.0	8.5	10.5
27	1.0	.5	.5	4.0	1.0	2.5	7.0	2.5	4.5	11.5	8.0	10.0
28	.5	.0	.5	4.5	2.0	3.0	6.0	3.0	4.5	11.5	8.0	9.5
29	---	---	---	4.5	2.0	3.0	7.0	2.0	4.5	12.0	7.5	10.0
30	---	---	---	5.0	2.0	3.0	8.5	3.5	5.5	12.5	9.0	10.5
31	---	---	---	4.0	2.0	2.5	---	---	---	13.0	9.5	11.0
MONTH	1.0	.0	.3	5.0	.0	1.6	8.5	.0	2.2	13.0	2.0	8.4
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.0	10.0	11.0	14.0	10.0	12.0	13.0	9.0	11.0	13.5	9.5	11.0
2	11.0	8.5	9.5	14.5	10.5	12.5	13.5	9.0	11.0	13.0	9.5	11.0
3	10.5	6.5	8.5	15.5	12.0	13.5	13.5	10.5	12.0	13.0	10.0	11.5
4	10.0	6.5	8.0	14.0	12.5	13.5	13.0	10.0	11.5	12.5	10.0	11.5
5	10.5	7.5	9.0	14.0	12.0	13.0	13.0	8.5	10.5	12.5	10.0	11.0
6	11.5	7.5	9.5	13.0	11.5	12.5	13.5	9.5	11.0	11.0	8.5	9.5
7	12.0	8.0	10.0	13.0	11.5	12.0	13.5	10.5	11.5	11.0	8.0	9.5
8	12.0	8.5	10.0	13.0	10.5	11.5	13.5	11.0	12.0	11.5	8.5	9.5
9	11.5	7.5	9.5	12.0	11.0	11.5	15.0	11.0	12.5	11.5	8.0	9.5
10	11.0	8.0	9.5	12.5	10.0	11.0	15.0	11.0	12.5	11.5	8.5	10.0
11	10.5	7.5	9.0	13.5	10.0	11.5	14.0	9.5	11.5	11.0	9.5	10.5
12	11.0	8.5	9.5	12.5	8.5	10.5	14.5	10.5	12.0	11.0	9.0	10.0
13	10.0	6.5	8.5	13.0	9.0	11.0	14.5	10.5	12.0	10.5	7.5	9.0
14	11.0	6.5	8.5	12.5	8.5	10.5	14.5	10.0	11.5	10.5	7.5	9.0
15	11.5	7.5	9.5	12.0	8.0	10.0	14.0	9.0	11.0	10.0	7.5	9.0
16	12.5	8.0	10.0	11.5	9.0	10.0	13.5	9.5	11.5	10.5	8.0	9.0
17	12.0	9.0	10.5	12.0	8.0	10.0	14.0	10.0	11.5	10.5	8.0	9.0
18	12.0	8.0	10.0	12.0	8.0	10.0	14.0	10.5	12.0	11.0	8.0	9.5
19	12.5	8.5	10.5	12.0	8.5	10.0	13.5	10.0	11.5	11.0	8.0	9.5
20	13.0	9.0	11.0	12.0	9.0	10.5	13.0	10.0	11.0	11.0	8.5	9.5
21	14.0	10.5	12.0	12.0	8.5	10.5	11.5	8.5	10.0	10.5	7.5	9.0
22	14.0	10.5	12.0	12.5	8.0	10.0	11.5	8.0	9.5	10.5	7.5	9.0
23	13.5	10.5	12.0	12.0	9.0	10.5	11.5	8.0	9.5	10.0	8.0	9.0
24	12.0	9.5	10.5	13.0	9.0	11.0	12.0	8.5	10.0	10.5	8.0	9.0
25	12.0	9.5	10.5	13.5	10.0	12.0	13.0	9.0	10.5	10.5	9.0	9.5
26	12.0	9.5	10.5	14.0	10.5	12.0	13.5	9.5	11.0	10.0	7.5	9.0
27	11.0	9.5	10.0	13.0	9.5	11.5	13.5	9.5	11.5	10.0	7.5	8.5
28	12.5	8.5	10.5	13.0	10.0	11.5	14.0	10.5	12.0	10.0	8.0	8.5
29	13.0	9.0	11.0	13.0	9.5	11.0	13.5	9.5	11.0	9.5	7.0	8.0
30	13.5	10.0	12.0	12.5	9.5	11.0	13.5	9.5	11.0	10.0	7.0	8.5
31	---	---	---	12.5	9.0	10.5	13.5	10.0	11.5	---	---	---
MONTH	14.0	6.5	10.1	15.5	8.0	11.2	15.0	8.0	11.2	13.5	7.0	9.5
YEAR	15.5	.0	5.1									

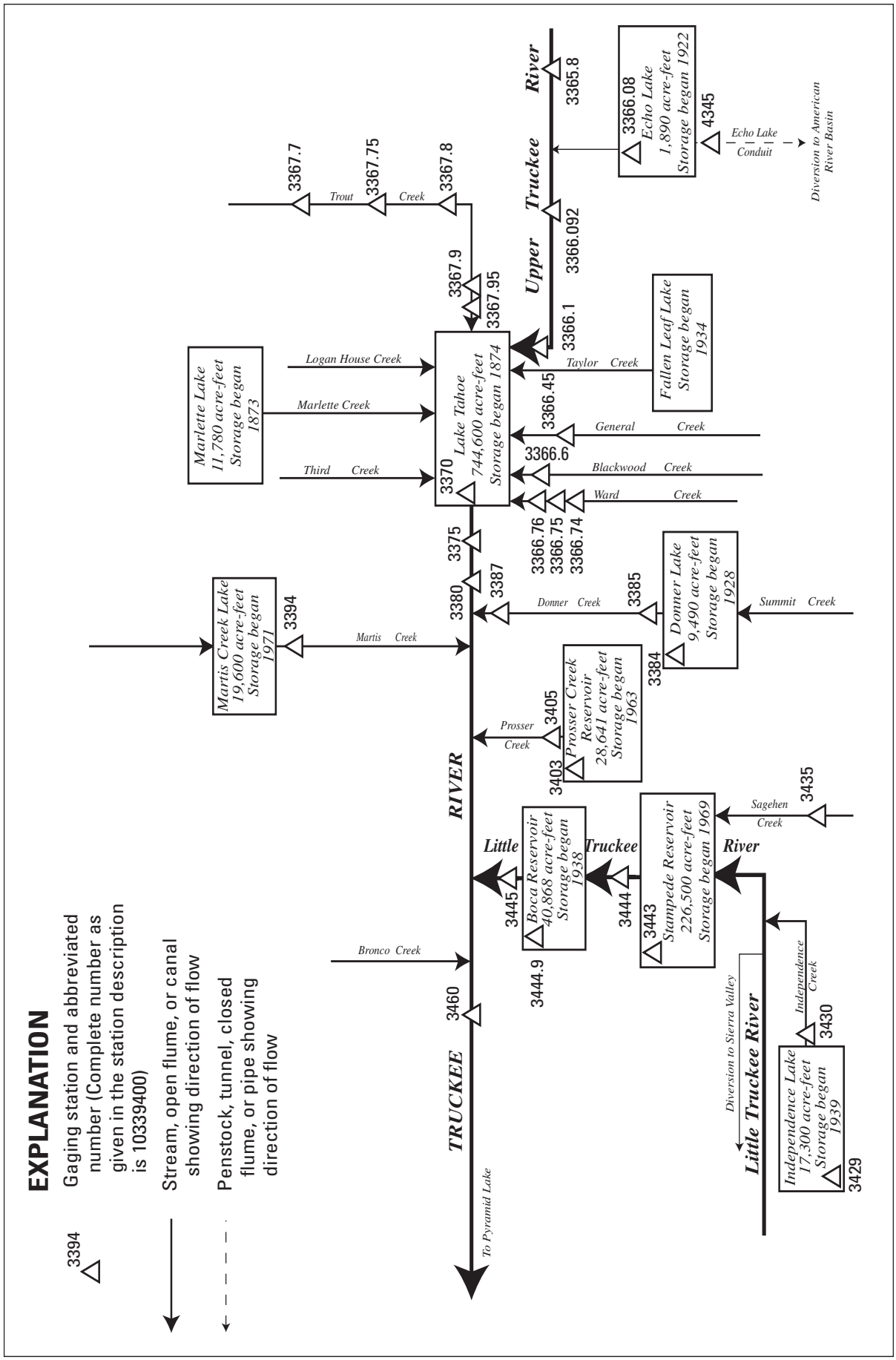

Figure 22. Diversions and storage in Truckee River Basin.

10336608 ECHO LAKE NEAR PHILLIPS, CA

LOCATION.—Lat 38°50'05", long 120°02'36", in NE 1/4 NE 1/4 sec.1, T.11 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, Eldorado National Forest, at right end of dam on Lower Echo Lake, near valve outlet to Echo Lake Conduit, and 2.0 mi northeast of Phillips.

DRAINAGE AREA.—4.84 mi^2.

PERIOD OF RECORD.—October 1991 to current year. Unpublished records for 1981–91 water years are available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder. Prior to Dec. 3, 1991, nonrecording gage read periodically. Elevation of gage is 7,414 ft above sea level, from topographic map.

REMARKS.—Record not computed for the winter months. Reservoir is formed by concrete dam completed in 1922 and rebuilt in 1992; storage began in 1922. Usable capacity, 1,890 acre-ft, between gage heights 0.0 ft, spillway crest, and 6.0 ft, top of flashboards. Water is released via Echo Lake Conduit (station 11434500) to the South Fork American River for power and domestic use. Records from Dec. 3, 1991, including extremes, represent usable contents at 2400 hours. See schematic diagram of Truckee River Basin.

COOPERATION.—Records were collected by El Dorado Irrigation District, 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 (gage height, in feet, and contents, in acre-feet)
(Based on survey by El Dorado Irrigation District in 2000)

0	0	2	631	4	1,279	6	1,943
1	315	3	955	5	1,611		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	366	---	---	---	---	---	290	1920	1900	1710	1500
2	1410	315	---	---	---	---	---	280	1960	1890	1700	1490
3	1440	274	---	---	---	---	---	252	1950	1890	1700	1480
4	1430	246	---	---	---	---	---	237	1950	1890	1680	1480
5	1410	224	---	---	---	---	---	227	1940	1890	1680	1450
6	1360	193	---	---	---	---	---	240	1950	1890	1680	1420
7	1310	164	---	---	---	---	---	255	1970	1890	1680	1380
8	1270	145	---	---	---	---	---	296	1980	1880	1670	1340
9	1230	120	---	---	---	---	---	328	1980	1870	1670	1280
10	1200	101	---	---	---	---	---	362	1970	1870	1660	1230
11	1150	85	---	---	---	---	---	489	1970	1870	1660	1190
12	1080	69	---	---	---	---	---	612	1970	1870	1650	1160
13	1010	63	---	---	---	---	---	663	1970	1860	1640	1130
14	958	---	---	---	---	---	---	709	1970	1850	1630	1090
15	916	---	---	---	---	---	---	787	1970	1840	1630	1040
16	851	---	---	---	---	---	---	936	1970	1830	1620	997
17	819	---	---	---	---	---	---	1100	1960	1830	1600	965
18	790	---	---	---	---	---	---	1210	1970	1820	1590	926
19	770	---	---	---	---	---	---	1280	1960	1800	1580	890
20	731	---	---	---	---	---	---	1350	1960	1800	1570	851
21	696	---	---	---	---	---	---	1420	1960	1790	1560	816
22	644	---	---	---	---	---	---	1520	1950	1790	1550	780
23	637	---	---	---	---	---	---	1600	1940	1790	1540	735
24	599	---	---	---	---	---	---	1670	1920	1780	1540	692
25	561	---	---	---	---	---	---	1730	1920	1780	1530	683
26	533	---	---	---	---	---	---	1780	1910	1770	1520	667
27	495	---	---	---	---	---	---	1820	1910	1750	1520	647
28	530	---	---	---	---	---	---	1830	1910	1740	1510	606
29	514	---	---	---	---	---	252	1870	1900	1720	1510	577
30	476	---	---	---	---	---	265	1900	1900	1720	1510	549
31	419	---	---	---	---	---	---	1930	---	1720	1500	---
MAX	1460	---	---	---	---	---	---	1930	1980	1900	1710	1500
MIN	419	---	---	---	---	---	---	227	1900	1720	1500	549
a	1.33						0.84	5.97	5.88	5.34	4.68	1.74
b	-1053							+1665	-30	-180	-220	-951
c	460	0	0	0	0	0	0	0	0	0	0	754

WTR YR 2001 b -923 c 1210

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.
c Release, in acre-feet, through Echo Lake Conduit (station 11434500), provided by El Dorado Irrigation District.

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°50'55", long 120°01'34", in NE 1/4 NE 1/4 sec.31, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 500 ft downstream of U.S. Highway 50 bridge, 1 mi southwest of Meyers, and 7.5 mi upstream of Lake Tahoe.

DRAINAGE AREA.—39.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—June 1990 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,310 ft above sea level, from topographic map. June 1990 to Sept. 5, 1997 at present site, datum 3.00 ft higher.

REMARKS.—Records fair. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,120 ft^3/s, Jan. 2, 1997, gage height, 8.95 ft; minimum daily, 1.2 ft^3/s, Dec. 22, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	2115	*352	*6.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	17	9.5	9.6	7.3	12	104	e175	55	11	5.3	3.2
2	7.5	17	9.4	9.0	7.2	13	91	e170	53	9.9	5.4	3.7
3	7.6	14	9.2	8.0	7.2	12	75	e130	47	9.6	5.3	4.2
4	7.7	12	9.2	7.2	7.4	13	66	e110	45	9.5	5.2	4.2
5	7.8	11	9.0	6.9	7.8	14	60	e130	42	9.7	5.1	4.3
6	7.9	12	8.9	6.7	7.9	14	57	e165	39	9.5	5.1	4.4
7	7.9	13	9.0	6.9	7.3	14	66	e180	36	9.1	5.2	5.7
8	8.0	14	9.1	7.2	7.5	14	54	e228	35	8.7	5.3	6.1
9	8.1	14	9.1	7.3	9.0	15	49	e210	33	8.2	5.4	6.1
10	9.1	14	9.5	7.7	13	15	47	e190	32	8.2	5.2	7.0
11	17	12	9.4	11	16	14	46	172	30	7.8	5.1	7.6
12	30	11	10	11	17	14	46	189	29	7.5	5.1	8.1
13	31	11	10	10	16	14	44	206	26	7.3	5.1	6.0
14	27	11	e10	10	14	14	42	183	25	7.0	5.1	4.6
15	22	10	e10	9.7	13	15	43	220	24	6.8	5.1	3.5
16	25	9.7	e10	9.7	13	14	50	230	23	6.7	4.7	3.2
17	18	9.2	e10	9.6	12	16	58	157	22	6.5	4.3	3.2
18	10	9.0	e10	9.5	12	19	65	138	20	6.4	4.1	3.0
19	9.2	9.0	e10	9.0	12	23	68	128	19	6.3	4.2	3.0
20	8.6	8.8	11	8.5	13	31	63	119	18	6.1	3.9	2.9
21	8.4	8.7	11	8.0	13	37	63	116	18	6.1	3.3	2.7
22	7.9	8.7	10	7.9	14	44	60	118	17	5.9	3.0	2.9
23	8.2	8.5	10	7.9	14	45	66	129	16	5.9	2.9	2.7
24	8.9	8.7	10	9.0	15	51	82	109	15	5.9	2.8	2.7
25	11	8.6	9.6	9.0	15	60	111	97	14	6.0	2.9	3.0
26	13	8.6	9.6	9.4	14	59	140	87	14	5.6	2.9	3.4
27	13	8.6	9.7	8.9	13	60	143	78	14	5.5	2.8	2.9
28	13	8.7	9.8	8.1	12	73	137	74	14	5.3	2.7	3.1
29	15	10	9.9	8.5	---	82	e130	69	12	5.2	2.9	3.4
30	16	9.8	9.8	7.9	---	85	e150	67	11	5.2	3.2	3.2
31	18	---	9.6	7.7	---	99	---	59	---	5.4	3.4	---
TOTAL	409.4	327.6	301.3	266.8	329.6	1005	2276	4433	798	223.8	132.0	124.0
MEAN	13.2	10.9	9.72	8.61	11.8	32.4	75.9	143	26.6	7.22	4.26	4.13
MAX	31	17	11	11	17	99	150	230	55	11	5.4	8.1
MIN	7.5	8.5	8.9	6.7	7.2	12	42	59	11	5.2	2.7	2.7
AC-FT	812	650	598	529	654	1990	4510	8790	1580	444	262	246

e Estimated.

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.90	17.0	21.6	51.5	39.3	64.6	118	285	239	90.4	18.8	11.2
MAX	22.6	78.5	96.4	328	125	132	206	569	709	452	78.6	37.5
(WY)	1996	1997	1997	1997	1996	1995	1997	1993	1995	1995	1995	1995
MIN	3.39	3.33	3.15	4.37	6.69	28.2	47.2	85.0	20.4	4.81	2.28	2.50
(WY)	1995	1991	1991	1991	1991	1994	1991	1992	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	22394.0		10626.5			
ANNUAL MEAN	61.2		29.1		82.7	
HIGHEST ANNUAL MEAN					169	1995
LOWEST ANNUAL MEAN					26.1	1994
HIGHEST DAILY MEAN	670	May 8	230	May 16	2000	Jan 2 1997
LOWEST DAILY MEAN	3.4	Sep 15	2.7	Aug 28	1.2	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	3.9	Sep 12	2.8	Aug 23	1.8	Dec 20 1990
MAXIMUM PEAK FLOW			352	May 15	5120	Jan 2 1997
MAXIMUM PEAK STAGE			6.27	May 15	8.95	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	44420		21080		59910	
10 PERCENT EXCEEDS	181		83		229	
50 PERCENT EXCEEDS	20		10		23	
90 PERCENT EXCEEDS	5.7		4.4		4.9	

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1990 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunctions. Water temperature data for September 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 20.5°C, July 31, Aug. 6, 2000; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 16.5°C, June 15, but presumably higher during instrument malfunction; minimum, freezing point, many days from December to April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
06...	1235	7.9	86	--	19.5	10.2	--	--	--
17...	1245	12	52	--	17.5	9.1	--	--	--
NOV									
13...	1340	13	64	--	.0	1.5	--	--	--
DEC									
08...	1340	9.1	76	7.5	3.5	3.0	601	102	10.8
JAN									
05...	1320	8.6	80	--	6.0	.5	--	--	--
FEB									
12...	1535	18	47	--	-1.5	.2	--	--	--
MAR									
08...	1330	14	60	7.2	5.5	3.8	603	101	10.5
20...	1345	30	52	--	12.0	5.5	--	--	--
30...	1620	80	35	--	11.0	5.5	--	--	--
APR									
03...	1220	75	34	--	.0	1.4	--	--	--
18...	1510	62	40	--	10.5	6.4	--	--	--
25...	1450	90	37	--	19.5	7.5	--	--	--
MAY									
03...	1440	e130	27	--	12.0	6.0	--	--	--
07...	1450	e180	27	--	22.5	8.4	--	--	--
10...	1315	e190	23	--	21.5	7.9	--	--	--
15...	0840	155	24	--	11.0	6.2	--	--	--
21...	1405	100	30	--	21.0	11.4	--	--	--
29...	1530	66	38	--	23.0	--	--	--	--
JUN									
08...	1400	34	47	7.5	22.0	14.9	605	105	8.4
JUL									
02...	1330	10	76	--	26.5	19.6	--	--	--
AUG									
02...	1510	5.2	100	--	27.0	19.6	--	--	--
SEP									
07...	1345	5.7	123	7.4	22.0	17.3	605	115	8.7

e Estimated.

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
06...	<.003	.08	.009	.004	.016	147	2	.04
17...	<.003	.04	.008	.002	.011	86	2	.06
NOV								
13...	<.003	.06	.008	.004	.009	133	1	.04
DEC								
08...	<.003	.04	.009	.004	.008	110	2	.05
JAN								
05...	<.003	.06	.016	.003	.016	124	2	.05
FEB								
12...	<.003	.04	.017	.003	.009	103	2	.10
MAR								
08...	<.003	.07	.015	.003	.011	112	3	.11
20...	<.003	.13	.025	.003	.012	176	3	.24
30...	<.003	.10	.020	.003	.015	222	6	1.3
APR								
03...	<.003	.15	.021	.003	.013	174	2	.41
18...	<.003	.08	.014	.002	.010	170	2	.33
25...	<.003	.08	.009	.002	.012	202	5	1.2
MAY								
03...	<.003	.10	.008	.002	.011	142	4	e1.4
07...	.004	.10	.004	.002	.013	185	5	e2.4
10...	.004	.30	.005	.002	.013	160	13	e6.7
15...	<.003	.08	.008	.003	.013	136	4	1.7
21...	.007	.10	.006	.004	.017	145	4	1.1
29...	.006	.11	.007	.005	.018	155	3	.53
JUN								
08...	.007	.09	.011	.006	.016	132	3	.28
JUL								
02...	.003	.09	.006	.006	.019	162	2	.05
AUG								
02...	<.003	.07	.006	.005	.019	169	3	.04
SEP								
07...	.005	.09	.015	.004	.012	168	1	.02

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

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	8.5	11.0	6.0	3.0	4.5	2.5	.5	1.5	.5	.0	---
2	13.5	9.5	11.0	6.5	4.5	5.0	2.5	.5	1.5	.5	.0	---
3	13.0	8.5	10.5	6.0	4.0	4.5	2.0	.5	1.0	.5	.0	---
4	12.5	8.0	10.0	5.5	3.0	4.0	2.5	.5	1.5	.5	.0	---
5	12.0	7.5	9.5	6.0	3.5	4.5	2.0	.5	1.0	.5	.0	---
6	11.5	7.0	9.5	5.5	3.5	4.5	1.5	.0	1.0	.5	.0	---
7	11.5	7.0	9.0	5.0	3.0	3.5	3.5	1.0	2.0	1.0	.0	---
8	11.5	6.5	9.0	4.5	3.0	4.0	4.0	2.0	3.0	1.5	.5	1.0
9	11.0	7.5	8.5	4.0	2.0	3.0	3.0	1.5	2.5	1.5	.0	.5
10	9.0	6.0	7.5	3.0	1.5	2.0	3.0	1.5	2.0	.5	.0	---
11	8.0	6.0	7.0	2.0	.5	1.5	3.0	.5	1.5	.5	.0	.0
12	10.0	7.0	8.5	1.5	.5	1.0	1.5	.0	.5	.5	.0	.0
13	11.0	8.0	9.5	1.5	.5	1.0	1.0	.0	.5	.5	.0	.5
14	10.5	8.5	9.5	2.5	.5	1.0	.5	.0	.0	.5	.0	.5
15	10.5	8.0	9.0	1.5	.5	1.0	1.0	.0	.5	.5	.0	.5
16	11.0	7.5	9.0	2.0	.5	1.0	1.0	.0	.5	.5	.0	.0
17	10.0	8.0	9.0	1.0	.5	.5	1.5	.5	1.0	.5	.0	.0
18	10.0	6.5	8.0	1.5	.5	.5	.5	.0	.5	.5	.0	.5
19	9.5	6.0	7.5	2.5	.5	1.5	1.0	.0	.5	1.0	.0	.5
20	9.0	6.0	7.5	2.5	.5	1.0	2.0	.5	1.0	.5	.0	.5
21	8.0	5.0	7.0	2.0	.5	1.5	2.5	1.0	1.5	1.0	.0	.5
22	6.0	3.5	4.5	3.0	1.0	1.5	2.5	.5	1.5	1.5	.5	.5
23	6.5	3.0	4.5	2.0	.5	1.5	1.5	.0	1.0	1.5	.0	.5
24	7.5	4.0	5.5	3.5	1.5	2.0	2.0	.0	1.0	.5	.0	.5
25	7.5	5.0	6.0	3.5	1.0	2.0	1.0	.0	---	.5	.0	.5
26	6.5	5.0	6.0	4.0	2.0	2.5	.5	.0	---	1.0	.0	.5
27	7.0	4.5	5.5	4.5	2.5	3.5	1.0	.0	---	1.0	.0	.5
28	6.0	5.0	5.5	4.5	2.0	3.0	1.0	.0	---	.5	.0	.0
29	5.0	1.5	3.0	3.0	.5	2.0	1.0	.0	---	.5	.0	.0
30	5.0	3.0	4.0	2.5	1.0	1.5	.5	.0	---	.5	.0	.0
31	5.5	3.0	4.0	---	---	---	.5	.0	---	.5	.0	.0
MONTH	13.5	1.5	7.6	6.5	.5	2.3	4.0	.0	---	1.5	.0	---

		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.5	1.0	.0	.5	6.0	2.0	3.5	7.5	2.5	5.0
2	1.5	.0	.5	1.5	.0	.5	3.5	1.5	2.5	6.0	2.0	4.0
3	2.0	.5	1.0	1.0	.0	.5	3.5	.5	1.5	6.5	1.5	3.5
4	2.5	.0	1.0	2.5	1.0	1.5	4.0	.5	2.0	7.5	2.0	4.5
5	2.0	.0	1.0	1.5	.5	1.0	4.0	1.0	2.5	8.5	3.0	5.5
6	2.0	.0	1.0	3.0	1.0	1.5	2.5	1.5	2.0	8.5	2.5	5.5
7	1.5	.0	.5	4.0	1.0	2.0	1.5	.0	.5	8.5	3.0	5.5
8	.5	.0	---	4.0	1.5	2.5	1.0	.0	.5	9.0	4.0	6.0
9	1.0	.0	.5	3.5	.5	1.5	1.5	.0	.5	9.0	4.0	6.0
10	.0	.0	.0	3.5	.5	1.5	4.0	.0	1.5	9.5	4.0	6.5
11	.0	.0	.0	4.0	.5	2.0	2.0	.5	1.0	10.5	4.5	7.0
12	.0	.0	.0	4.0	.5	2.0	4.5	.0	2.0	9.0	4.5	6.5
13	.0	.0	.0	5.0	1.0	2.5	5.5	1.0	3.0	10.0	5.5	7.5
14	.5	.0	.0	5.0	1.0	3.0	6.0	.5	3.0	8.5	5.0	7.0
15	.5	.0	.0	4.5	1.5	3.0	7.0	1.0	4.0	7.5	5.5	6.5
16	1.0	.0	.5	5.5	1.5	3.0	7.0	2.0	4.5	10.0	5.5	7.5
17	1.0	.0	.5	6.0	2.5	4.0	7.5	2.5	5.0	10.5	4.5	7.5
18	1.5	.5	.5	6.0	2.0	4.0	6.5	2.0	4.0	11.0	5.5	8.0
19	1.0	.0	.5	5.5	2.0	3.5	3.0	1.0	2.0	11.5	6.0	9.0
20	1.0	.0	.5	5.0	2.0	3.0	1.5	.5	1.0	12.0	6.5	9.0
21	1.5	.0	.5	5.0	1.5	3.0	4.0	.0	1.5	12.0	7.0	9.5
22	.5	.0	.5	3.5	1.5	2.5	6.5	1.0	3.5	11.5	7.0	9.5
23	.5	.0	.5	5.0	1.0	3.0	7.5	2.0	4.5	13.0	7.0	10.0
24	.5	.0	.5	5.0	1.5	3.0	8.0	2.0	4.5	13.0	7.5	10.5
25	2.0	.0	1.0	4.5	2.0	3.0	8.0	2.0	4.5	12.5	8.0	10.5
26	1.5	.5	1.0	5.0	1.0	3.0	7.0	2.5	4.5	13.5	8.5	11.0
27	1.5	.5	1.0	5.5	1.5	3.5	7.0	2.0	4.0	12.5	8.0	10.0
28	1.0	.0	.5	6.0	2.5	4.0	6.5	2.5	4.0	13.0	8.0	10.5
29	---	---	---	5.5	1.5	3.5	7.0	2.0	4.0	13.5	8.0	10.5
30	---	---	---	6.0	1.5	3.5	8.0	2.5	5.0	14.5	9.0	11.5
31	---	---	---	6.5	2.0	4.0	---	---	---	15.5	9.0	12.0
MONTH	2.5	.0	---	6.5	.0	2.5	8.0	.0	2.9	15.5	1.5	7.8

103366092 UPPER TRUCKEE RIVER AT HIGHWAY 50, ABOVE MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.5	10.0	12.5	---	---	---	---	---	---	---	---	---
2	14.0	9.0	11.0	---	---	---	---	---	---	---	---	---
3	13.0	7.5	10.0	---	---	---	---	---	---	---	---	---
4	13.0	7.0	10.0	---	---	---	---	---	---	---	---	---
5	14.0	8.0	10.5	---	---	---	---	---	---	---	---	---
6	15.0	8.5	11.5	---	---	---	---	---	---	---	---	---
7	16.0	9.0	12.5	---	---	---	---	---	---	---	---	---
8	16.0	9.5	12.5	---	---	---	---	---	---	---	---	---
9	15.5	9.0	12.0	---	---	---	---	---	---	---	---	---
10	13.0	9.5	11.0	---	---	---	---	---	---	---	---	---
11	14.0	8.5	11.0	---	---	---	---	---	---	---	---	---
12	15.5	9.5	12.0	---	---	---	---	---	---	---	---	---
13	15.0	8.5	11.5	---	---	---	---	---	---	---	---	---
14	15.0	7.5	11.5	---	---	---	---	---	---	---	---	---
15	16.5	9.0	12.5	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

103366098 UPPER TRUCKEE RIVER AT HIGHWAY 50 BRIDGE, BELOW MEYERS, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION:—Lat 38°52'32", long 120°00'16", in SE 1/4 NE 1/4 sec.20, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, at U.S. Highway 50 Bridge, 1.5 mi northeast of Meyers, and 5.2 mi southwest of South Lake Tahoe.

PERIOD OF RECORD.—September 1997 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In September 1997, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor water temperature within the Upper Truckee River—Trout Creek watershed. Records represent water temperature at probe within 0.5°C. Water temperature data for September 1997 were not published but are available for th eU.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 26.0°C, July 3, 2001; minimum, freezing point on many days in winter months.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 26.0°C, July 3; minimum, freezing point, many days from November through April.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	9.5	12.5	6.0	2.0	4.0	3.0	.5	1.5	1.0	.0	.5
2	16.5	10.5	13.0	7.5	3.5	5.0	3.5	.5	2.0	1.0	.0	.5
3	15.5	9.5	12.5	7.0	3.0	5.0	3.0	.0	1.5	1.0	.0	.5
4	15.5	8.5	12.0	6.5	2.5	4.5	2.5	.5	1.5	1.0	.0	.5
5	15.0	8.0	11.5	6.5	3.0	4.5	3.0	.0	1.5	1.0	.0	.5
6	14.5	8.0	11.0	6.5	3.0	4.5	2.0	.0	1.0	1.0	.0	.5
7	14.5	7.5	11.0	6.0	2.0	3.5	3.5	1.0	2.0	1.0	.0	.5
8	14.5	7.5	10.5	5.5	2.0	3.5	4.5	2.0	3.0	2.0	.5	1.0
9	13.0	8.0	10.0	4.0	2.0	3.0	3.0	1.0	2.0	1.0	.0	.5
10	11.5	7.0	8.5	4.0	1.0	2.0	4.0	2.0	3.0	.5	.0	.0
11	8.0	6.5	7.0	2.5	.5	1.0	3.0	.5	1.5	.0	.0	.0
12	10.0	5.5	7.5	1.5	.0	.5	2.0	.0	1.0	.5	.0	.0
13	11.0	6.5	8.5	1.0	.0	.5	2.0	.0	.5	.5	.0	.0
14	12.5	7.5	9.5	2.0	.0	1.0	.5	.0	.0	.5	.0	.0
15	12.5	6.5	9.5	1.5	.0	.5	2.0	.0	1.0	.0	.0	.0
16	12.0	6.0	9.0	3.0	.0	1.5	1.0	.0	.5	.5	.0	.0
17	12.5	7.0	9.5	1.5	.0	.5	2.5	.0	1.0	.5	.0	.0
18	11.5	6.5	9.0	1.5	.0	.5	1.0	.0	.5	.5	.0	.0
19	11.0	5.5	8.5	2.5	.0	1.0	1.0	.0	.5	.5	.0	.0
20	10.0	6.0	8.0	3.0	.0	1.5	2.5	.0	1.0	.5	.0	.0
21	8.5	5.5	7.0	2.5	.0	1.0	3.0	.5	1.5	.5	.0	.0
22	7.0	2.5	4.5	3.5	.5	2.0	2.5	.0	1.5	1.0	.0	.5
23	8.5	3.0	5.5	2.0	.0	1.0	1.5	.0	1.0	1.0	.0	.5
24	9.0	4.0	6.5	4.0	1.0	2.0	2.0	.0	1.0	.5	.0	.0
25	8.0	5.0	6.5	3.5	.5	2.0	1.0	.0	.5	.5	.0	.0
26	6.5	4.5	5.5	4.0	1.5	2.5	1.0	.0	.5	.5	.0	.0
27	8.0	4.0	6.0	5.5	2.0	3.5	1.0	.0	.5	.5	.0	.0
28	6.5	4.5	5.5	5.0	1.5	3.0	1.0	.0	.5	.5	.0	.0
29	5.0	1.5	3.0	3.5	.5	1.5	1.0	.0	.5	.5	.0	.0
30	6.0	2.5	4.0	3.0	.0	1.5	1.0	.0	.5	.5	.0	.0
31	6.5	2.0	4.0	---	---	---	1.0	.0	.5	.5	.0	.0
MONTH	16.5	1.5	8.3	7.5	.0	2.3	4.5	.0	1.1	2.0	.0	.2

103366098 UPPER TRUCKEE RIVER AT HIGHWAY 50 BRIDGE, BELOW MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	1.5	.0	.5	7.5	1.5	4.0	9.0	3.5	6.0
2	1.0	.0	.5	2.5	.5	1.0	5.0	1.0	3.0	7.5	3.0	5.0
3	3.0	.0	1.5	2.0	.0	1.0	5.0	.5	2.0	8.0	2.0	5.0
4	3.5	.0	1.5	3.5	1.0	2.0	4.5	.5	2.5	9.0	3.0	6.0
5	3.0	.0	1.5	2.0	.5	1.0	5.5	1.0	3.0	10.0	4.0	7.0
6	2.5	.0	1.0	4.0	.5	2.0	4.0	1.5	2.5	10.0	3.5	6.5
7	2.5	.0	1.0	6.0	.5	3.0	1.5	.0	.5	10.0	4.0	7.0
8	1.0	.0	.5	6.0	1.0	3.5	3.5	.0	1.0	10.5	4.5	7.0
9	1.0	.0	.0	5.0	1.0	2.5	3.0	.0	1.0	10.0	4.5	7.0
10	.0	.0	.0	5.0	.5	2.5	5.5	.0	2.5	11.0	4.5	7.5
11	.0	.0	.0	6.0	.5	3.0	3.0	.5	2.0	11.5	5.0	8.0
12	.0	.0	.0	6.5	.5	3.0	7.0	.0	2.5	9.5	5.0	7.5
13	.0	.0	.0	7.0	.5	3.5	8.0	1.0	4.0	11.0	6.0	8.0
14	.5	.0	.0	7.0	1.0	3.5	8.5	1.0	4.5	9.0	5.5	7.5
15	.5	.0	.0	6.5	1.0	3.5	10.0	1.5	5.5	8.5	6.5	7.5
16	.5	.0	.0	7.5	1.5	4.0	10.0	2.5	6.0	11.0	5.5	8.0
17	.5	.0	.0	8.5	2.5	5.0	10.0	3.0	6.0	11.5	5.5	8.5
18	.5	.0	.5	8.0	2.0	5.0	9.0	3.0	5.5	12.0	6.0	9.0
19	1.0	.0	.5	8.0	2.0	4.5	4.5	1.5	3.0	13.0	6.5	9.5
20	.5	.0	.5	7.0	2.0	4.0	2.0	.5	1.5	13.5	7.0	10.0
21	1.5	.0	.5	7.0	1.5	4.0	6.0	.0	2.5	13.5	8.0	10.5
22	.5	.0	.0	4.5	2.0	3.0	9.0	1.0	4.5	13.0	8.0	10.0
23	.5	.0	.0	7.0	1.0	3.5	10.5	2.5	6.0	14.5	8.0	11.0
24	.0	.0	.0	7.0	1.5	3.5	10.5	3.0	6.5	14.5	8.5	11.5
25	.5	.0	.5	6.5	2.0	4.0	10.5	3.0	6.0	14.5	9.0	11.5
26	1.5	.0	.5	7.0	1.0	3.5	9.5	3.0	6.0	15.0	9.5	12.0
27	3.0	.0	1.5	8.0	1.5	4.5	9.0	2.5	5.5	14.5	8.5	11.5
28	2.5	.0	1.0	8.5	3.0	5.5	8.0	3.0	5.5	14.5	8.5	11.5
29	---	---	---	8.0	1.5	4.5	8.5	2.5	5.5	16.0	8.5	12.0
30	---	---	---	8.0	1.5	4.5	10.0	3.5	6.5	17.0	9.5	13.0
31	---	---	---	8.0	2.0	4.5	---	---	---	17.5	9.5	13.5
MONTH	3.5	.0	.5	8.5	.0	3.3	10.5	.0	3.9	17.5	2.0	8.9

		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	10.5	13.5	25.0	13.5	19.0	24.0	13.0	18.5	22.5	14.0	18.0
2	16.0	9.5	12.0	25.5	15.0	20.0	25.0	13.5	18.5	22.5	14.0	18.0
3	15.5	8.0	11.5	26.0	16.0	20.5	25.0	14.5	19.0	23.0	14.0	18.0
4	15.5	7.5	11.0	21.5	17.0	19.0	23.5	13.0	18.0	22.5	14.5	18.5
5	16.0	8.0	11.5	22.5	16.0	19.0	24.5	12.5	18.0	21.0	15.0	17.5
6	17.5	8.5	12.5	20.0	15.5	17.5	24.0	13.0	18.5	20.0	12.0	16.0
7	18.5	9.5	13.5	20.0	15.5	17.0	22.5	14.5	18.5	20.0	11.5	15.5
8	18.5	10.0	14.0	23.0	13.0	18.0	22.5	15.0	19.0	19.5	12.0	16.0
9	18.5	10.0	14.0	18.5	14.5	16.5	25.0	14.5	19.5	19.5	12.0	15.5
10	16.0	10.0	12.5	21.5	12.5	16.5	25.5	15.0	20.0	19.0	12.5	16.0
11	16.5	9.0	12.5	23.0	14.0	18.0	24.5	13.5	19.0	17.0	14.5	15.5
12	18.5	10.0	13.5	23.5	13.0	18.0	25.0	15.5	19.5	17.5	12.5	15.0
13	18.0	9.0	13.0	24.5	14.0	19.0	24.5	14.5	19.0	19.0	10.5	14.5
14	18.5	8.5	13.5	23.5	13.5	18.5	25.0	14.5	19.5	19.0	11.0	15.0
15	20.0	10.0	14.5	23.5	13.0	18.0	23.5	13.5	18.5	19.0	12.0	15.0
16	20.5	10.5	15.0	19.0	14.0	16.0	25.0	14.0	19.0	19.5	12.5	15.5
17	20.5	11.5	15.5	22.5	12.0	17.0	24.5	14.5	19.0	19.0	12.0	15.5
18	21.0	10.5	15.5	23.5	13.0	17.5	23.0	15.0	18.5	19.0	12.0	15.5
19	21.5	11.0	16.0	23.5	13.0	18.0	23.0	13.5	18.0	18.5	12.5	15.5
20	22.5	12.0	17.0	23.5	13.5	18.0	20.5	14.5	17.5	18.5	12.5	15.5
21	23.5	13.0	18.0	23.5	13.0	18.0	21.5	12.0	16.5	18.5	12.0	15.5
22	23.5	13.5	18.0	24.0	13.0	18.0	21.5	12.0	16.5	18.5	11.5	15.0
23	23.0	14.5	18.0	23.0	13.5	18.0	21.0	11.5	16.5	16.0	12.0	14.0
24	21.5	12.0	16.5	24.5	13.5	18.5	22.5	13.0	17.5	18.0	10.5	14.0
25	20.5	12.5	16.0	25.0	14.5	19.5	23.0	13.0	17.5	18.5	12.0	15.0
26	22.0	13.0	17.0	25.5	15.0	20.0	23.0	13.5	18.0	18.5	11.0	14.5
27	17.0	13.0	15.0	24.5	13.5	19.0	23.5	13.5	18.5	18.0	11.0	14.5
28	22.5	10.5	16.0	24.0	13.5	18.5	23.5	14.5	18.5	17.5	11.5	14.5
29	23.5	12.5	18.0	23.5	13.0	18.0	23.0	13.5	18.0	17.5	11.0	14.0
30	24.5	14.0	18.5	22.0	13.0	17.5	22.0	13.5	17.5	17.5	10.5	14.0
31	---	---	---	24.0	12.5	18.0	22.5	14.0	18.0	---	---	---
MONTH	24.5	7.5	14.8	26.0	12.0	18.2	25.5	11.5	18.3	23.0	10.5	15.6
YEAR	26.0	.0	8.0									

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA

LOCATION.—Lat 38°55'21", long 119°59'26", in NW 1/4 SE 1/4 sec.4, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 200 ft downstream from U.S. Highway 50 Bridge, 1.0 mi northeast of South Lake Tahoe Post Office, and 1.4 mi upstream from Lake Tahoe.

DRAINAGE AREA.—54.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1971 to September 1974, October 1976 to June 1977, October 1977 to June 1978, March 1980 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,229.04 ft above sea level. Prior to Apr. 26, 1984, at datum 2.00 ft higher. Prior to Oct. 19, 1993, at site 200 ft upstream at same datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Two small dams may cause slight regulation at times. Some small diversions for domestic use upstream from station. Echo Lake conduit (station 11434500) diverts from Echo Lake (station 10336608), to South Fork American River Basin. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,480 ft^3/s, Jan. 2, 1997, gage height, 9.95 ft; minimum daily, 0.70 ft^3/s, Aug. 22 to Sept. 5, 1994.

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)
May 8	2400	322	3.67	May 16	0030	*340	*3.77

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	22	15	e12	e13	e17	137	214	71	10	2.1	.14
2	6.5	23	14	e12	e13	17	125	216	70	11	1.6	.64
3	6.2	19	13	e12	12	e18	101	159	60	9.4	1.6	.11
4	6.7	16	13	e12	e13	19	86	135	57	8.9	1.4	.12
5	6.8	14	14	e12	e14	20	76	145	55	9.1	1.9	.04
6	6.7	13	14	e12	e15	20	70	171	50	9.0	.42	.01
7	6.6	e13	12	e11	e16	23	74	189	46	9.1	.56	.44
8	6.6	e13	12	11	e18	22	73	225	43	8.9	.63	.09
9	7.0	e13	12	e12	19	23	64	233	41	8.0	1.2	.02
10	9.0	e13	13	e13	e19	23	61	226	37	7.7	.63	.10
11	11	e12	13	e14	e20	21	57	208	37	6.6	.29	.06
12	31	e12	e13	e15	e21	21	62	204	32	5.1	.24	.79
13	36	e12	e13	e15	e22	21	57	213	32	4.6	.13	.44
14	33	e12	e13	e16	e23	23	57	212	29	4.0	.13	.35
15	27	e11	e13	e17	e23	24	59	216	25	3.4	.16	.29
16	27	e11	e13	e18	e22	24	65	262	23	2.9	.11	.30
17	27	e11	e13	e19	e21	26	74	194	22	3.0	.20	.37
18	11	e11	e13	e19	20	33	86	179	20	2.8	.26	.41
19	9.5	e10	e13	e18	19	40	97	168	19	2.8	.15	.35
20	8.2	e10	e13	e18	19	54	90	154	17	2.9	.11	.27
21	8.6	e10	13	e18	e19	67	92	148	16	3.1	.07	.18
22	7.8	9.6	13	e17	e19	75	88	143	17	3.0	.07	.43
23	7.3	9.8	13	17	e19	78	95	167	16	2.9	.25	.38
24	8.8	9.0	14	17	e19	85	110	145	15	2.9	.27	.57
25	9.6	9.0	e13	e16	e19	105	137	129	14	2.8	.28	1.4
26	17	9.1	e13	e15	20	96	175	116	13	2.5	.27	2.4
27	16	9.4	e13	e14	e19	90	189	80	12	2.1	.15	1.8
28	15	10	e13	e14	e18	103	188	93	13	1.9	.20	1.4
29	21	12	e13	e14	---	119	170	86	12	1.7	.18	1.2
30	19	17	e12	e14	---	115	178	81	11	1.7	.14	1.4
31	24	---	e12	e13	---	124	---	74	---	1.9	.10	---
TOTAL	443.4	375.9	404	457	514	1546	2993	5185	925	155.7	15.80	16.50
MEAN	14.3	12.5	13.0	14.7	18.4	49.9	99.8	167	30.8	5.02	.51	.55
MAX	36	23	15	19	23	124	189	262	71	11	2.1	2.4
MIN	6.2	9.0	12	11	12	17	57	74	11	1.7	.07	.01
AC-FT	879	746	801	906	1020	3070	5940	10280	1830	309	31	33

e Estimated.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.6	39.8	49.6	66.7	69.0	108	165	307	258	89.5	21.0	13.0
MAX	72.1	225	218	484	307	305	300	567	795	448	102	55.3
(WY)	1983	1984	1982	1997	1986	1986	1982	1982	1983	1995	1983	1983
MIN	2.60	7.36	8.07	8.00	10.5	21.2	64.0	55.3	23.5	4.65	.51	.55
(WY)	1989	1991	1991	1991	1991	1977	1977	1977	1992	1994	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1972 - 2001	
ANNUAL TOTAL	28286.1		13031.30			
ANNUAL MEAN	77.3		35.7		102	
HIGHEST ANNUAL MEAN					203	1983
LOWEST ANNUAL MEAN					29.2	1988
HIGHEST DAILY MEAN	727	May 8	262	May 16	3150	Jan 2 1997
LOWEST DAILY MEAN	5.5	Aug 26	.01	Sep 6	.01	Sep 6 2001
ANNUAL SEVEN-DAY MINIMUM	5.7	Sep 17	.11	Sep 5	.11	Sep 5 2001
MAXIMUM PEAK FLOW			340	May 16	5480	Jan 2 1997
MAXIMUM PEAK STAGE			3.77	May 16	9.95	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	56110		25850		74190	
10 PERCENT EXCEEDS	226		115		283	
50 PERCENT EXCEEDS	28		14		38	
90 PERCENT EXCEEDS	6.7		.36		7.6	

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1972–74, 1978, 1980 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: March 1981 to September 1983.
WATER TEMPERATURE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to September 1992, September 1997 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to September 1992.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Interruptions in water temperature record due to loss of communication between stream and sensor. Water temperature records represent water temperature at probe within 0.5°C. Water temperature data for September 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 26.5°C, July 26, Aug. 10, 2001; minimum, freezing point on many days.
SEDIMENT CONCENTRATION: Maximum daily mean, 416 mg/L, Mar. 4, 1991; minimum daily mean, 0 mg/L, several days during most years.
SEDIMENT LOAD: Maximum daily, 781 tons, Mar. 8, 1986; minimum daily, 0 ton, several days during most years.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 26.5°C, July 26, Aug. 10, but may have been higher during periods of missing record; minimum, freezing point, many days November to March.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
06...	1005	6.4	100	--	13.0	10.4	--	--	--
17...	1050	32	33	--	11.5	7.2	--	--	--
NOV									
13...	1115	21	69	--	6.5	.3	--	--	--
DEC									
08...	1040	12	88	7.5	5.5	2.5	603	100	10.8
JAN									
05...	1045	e12	89	--	3.5	.2	--	--	--
FEB									
12...	1210	e21	64	--	-3.5	.0	--	--	--
MAR									
08...	1025	21	71	6.9	6.5	2.5	607	94	10.2
20...	1205	49	71	--	12.0	6.0	--	--	--
29...	1745	110	41	--	9.5	8.5	--	--	--
APR									
03...	1000	103	41	--	-1.5	1.0	--	--	--
18...	1320	85	50	--	12.5	8.0	--	--	--
25...	1735	127	43	--	17.5	10.4	--	--	--
27...	1155	185	33	--	16.5	5.2	--	--	--
MAY									
03...	1220	156	30	--	11.0	5.0	--	--	--
07...	1735	163	28	--	19.0	10.9	--	--	--
10...	1120	217	23	--	14.5	6.6	--	--	--
15...	0645	191	25	--	9.5	6.8	--	--	--
16...	1415	227	24	--	18.5	10.2	--	--	--
21...	1215	138	32	--	21.0	11.6	--	--	--
29...	1300	86	40	--	19.0	14.2	--	--	--
JUN									
08...	1145	46	53	7.5	21.5	14.4	606	102	8.3
JUL									
02...	1040	11	85	--	22.5	17.9	--	--	--
AUG									
02...	1225	1.7	113	--	25.0	18.0	--	--	--
SEP									
07...	1055	.13	123	8.0	17.5	--	606	--	7.8

e Estimated.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
06...	<.003	.06	.021	.004	.021	324	3	.05
17...	<.003	.10	.008	.002	.011	148	4	.35
NOV								
13...	<.003	.06	.022	.005	.033	250	3	.17
DEC								
08...	<.003	.06	.018	.004	.010	235	2	.06
JAN								
05...	<.003	.05	.035	.004	.021	257	13	e.42
FEB								
12...	<.003	.07	.017	.003	.012	198	3	e.17
MAR								
08...	<.003	.07	.012	.003	.020	326	5	.28
20...	<.003	.20	.011	.004	.027	518	11	1.5
29...	<.003	.21	.018	.004	.030	543	20	5.9
APR								
03...	<.003	.15	.022	.003	.019	322	16	4.5
18...	.005	.12	.015	.003	.017	293	6	1.4
25...	.003	.08	.011	.002	.025	443	14	4.8
27...	<.003	.50	.015	.003	.049	59	36	18
MAY								
03...	.003	.15	.013	.003	.017	326	11	4.6
07...	.003	.15	.006	.003	.025	382	13	5.7
10...	<.003	.15	.009	.003	.030	546	42	25
15...	<.003	.12	.008	.004	.025	291	15	7.7
16...	<.003	.22	.010	.003	.037	519	23	14
21...	<.003	.11	.012	.004	.024	266	9	3.4
29...	.006	.14	.015	.005	.019	188	4	.93
JUN								
08...	.007	.07	.013	.005	.016	198	2	.25
JUL								
02...	<.003	.12	.023	.006	.024	372	6	.18
AUG								
02...	<.003	.16	.126	.005	.027	469	9	.04
SEP								
07...	.010	.33	.081	.003	.022	307	14	<.01

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

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	11.0	14.0	6.0	2.0	4.0	3.0	.0	1.0	1.0	.0	.5
2	17.5	11.5	14.0	7.5	3.5	5.5	3.5	1.0	2.0	.5	.0	.0
3	17.0	10.5	13.5	7.5	4.5	5.5	3.0	.5	1.5	1.0	.0	.5
4	16.5	10.0	13.0	7.0	2.5	4.5	2.5	.5	1.5	1.0	.0	.5
5	16.0	9.5	13.0	7.5	3.0	5.0	3.0	.0	1.0	1.0	.0	.5
6	16.0	9.5	12.5	7.0	3.5	5.0	2.0	.0	1.0	1.0	.0	.5
7	15.5	9.5	12.0	5.5	1.5	3.5	3.5	.5	2.0	1.0	.0	.5
8	15.0	9.0	12.0	5.5	2.5	4.0	4.5	2.0	3.0	2.0	.0	.5
9	14.0	9.5	11.0	4.0	2.0	3.0	3.0	1.0	2.0	1.0	.0	.5
10	11.0	7.5	9.0	2.5	1.0	1.5	4.5	1.5	2.5	.5	.0	.0
11	8.5	6.5	7.5	2.0	.0	1.0	2.5	.5	1.5	.5	.0	.0
12	9.0	4.5	6.5	1.0	.0	.5	2.5	.0	1.0	.5	.0	.0
13	11.5	6.0	8.5	.5	.0	.0	1.0	.0	.5	.5	.0	.0
14	12.0	7.0	9.5	1.0	.0	.5	.5	.0	.0	.5	.0	.0
15	12.0	7.0	9.5	1.0	.0	.5	2.0	.0	.5	.0	.0	.0
16	12.0	6.5	9.5	2.0	.0	.5	1.5	.0	.5	.5	.0	.0
17	12.0	6.5	9.5	1.0	.0	.5	1.5	.0	.5	.5	.0	.0
18	13.0	7.0	10.0	1.0	.0	.5	1.0	.0	.5	.5	.0	.0
19	12.5	6.5	9.5	2.0	.0	.5	1.0	.0	.5	.5	.0	.0
20	11.5	7.0	9.0	2.5	.0	1.0	2.0	.0	1.0	.5	.0	.0
21	9.5	6.0	8.0	2.5	.0	1.0	3.0	.5	1.5	.5	.0	.0
22	8.5	3.5	5.5	3.5	.0	1.5	2.5	.0	1.0	1.0	.0	.5
23	8.5	3.0	5.5	2.0	.0	1.0	1.5	.0	.5	1.0	.0	.0
24	10.0	4.0	6.5	4.0	.0	2.0	1.5	.0	.5	.5	.0	.0
25	8.5	5.5	7.0	4.0	.5	2.0	1.0	.0	.5	.5	.0	.0
26	7.0	5.0	6.0	4.0	1.0	2.5	.5	.0	.0	.5	.0	.0
27	8.5	3.5	6.0	5.5	1.5	3.0	.5	.0	.0	.5	.0	.0
28	7.0	4.5	5.5	5.5	1.5	3.5	1.0	.0	.5	.5	.0	.0
29	5.0	2.0	3.0	3.5	.0	1.5	1.0	.0	.5	.5	.0	.0
30	6.5	2.0	4.0	2.0	.0	1.0	1.0	.0	.5	.5	.0	.0
31	6.0	2.5	4.0	---	---	---	1.0	.0	.5	.5	.0	.0
MONTH	17.5	2.0	8.8	7.5	.0	2.2	4.5	.0	1.0	2.0	.0	.1

		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	.5	.0	.0	8.5	2.5	5.5	10.0	4.0	7.0
2	.5	.0	.0	1.0	.0	.5	6.5	1.5	4.0	8.5	3.0	5.5
3	1.0	.0	.5	.5	.0	.0	5.0	1.0	3.0	9.0	2.0	5.5
4	1.5	.0	.5	1.0	.0	.5	5.5	1.0	3.0	10.0	2.5	6.5
5	1.5	.0	.5	.5	.0	.0	7.0	1.0	4.0	11.0	4.5	7.5
6	1.0	.0	.5	1.0	.0	.5	6.0	1.5	3.5	10.5	3.5	7.5
7	.5	.0	.0	2.5	.0	1.0	2.0	.0	1.0	11.0	4.0	7.5
8	.5	.0	.0	5.5	1.5	3.0	4.0	.0	1.5	11.5	4.5	8.0
9	.5	.0	.0	5.0	1.5	3.0	4.0	.0	1.5	11.0	4.5	8.0
10	.0	.0	.0	5.5	.5	2.5	7.0	.0	3.0	11.5	5.0	8.0
11	.0	.0	.0	6.5	1.0	3.5	4.5	1.0	2.5	12.5	5.5	9.0
12	.0	.0	.0	7.0	1.0	4.0	7.5	.0	3.0	10.5	5.5	8.0
13	.0	.0	.0	7.5	1.5	4.5	8.5	1.5	5.0	12.5	6.0	9.0
14	.5	.0	.0	8.0	2.0	5.0	9.5	2.0	5.5	10.0	6.0	8.0
15	.5	.0	.0	6.5	2.5	4.5	11.0	2.5	6.5	9.5	6.5	8.0
16	.5	.0	.0	8.5	2.5	5.5	11.0	3.5	7.0	12.0	6.0	8.5
17	.5	.0	.0	9.5	4.0	6.5	11.0	4.0	7.5	12.5	6.5	9.5
18	.5	.0	.0	9.5	4.0	6.5	10.0	3.5	7.0	13.0	7.0	10.0
19	.5	.0	.0	9.5	3.0	6.0	6.5	2.0	4.0	14.0	7.5	11.0
20	.5	.0	.0	9.0	3.0	6.0	2.5	.0	1.5	14.5	8.0	11.5
21	1.0	.0	.0	8.0	2.5	5.0	7.0	.0	2.5	15.0	9.0	12.0
22	.0	.0	.0	5.5	3.0	4.0	9.5	1.0	5.0	15.0	8.5	11.5
23	.5	.0	.0	8.5	1.5	4.5	10.5	3.0	6.5	15.5	9.0	12.0
24	.5	.0	.0	8.5	2.5	5.5	11.0	3.5	7.0	16.5	10.0	13.0
25	.5	.0	.0	8.0	3.0	5.5	10.5	3.0	7.0	16.0	10.0	13.0
26	.5	.0	.0	8.0	2.0	5.0	10.0	3.0	6.5	17.0	10.0	13.0
27	1.0	.0	.5	8.5	2.5	5.5	9.5	2.5	6.0	16.5	9.5	13.0
28	1.0	.0	.0	10.0	4.5	7.0	8.5	3.5	6.0	17.0	9.5	13.0
29	---	---	---	9.0	3.0	6.0	9.5	2.5	6.0	17.5	9.5	13.5
30	---	---	---	8.5	2.5	5.5	11.0	4.0	7.0	18.5	10.5	14.5
31	---	---	---	9.0	3.0	6.0	---	---	---	19.5	11.0	15.0
MONTH	1.5	.0	.1	10.0	.0	4.0	11.0	.0	4.6	19.5	2.0	9.9

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	11.5	15.5	24.5	15.5	20.0	---	---	---	22.5	15.5	18.5
2	17.0	10.0	13.5	26.0	16.5	21.0	24.5	---	---	20.5	14.5	17.5
3	17.0	8.5	13.0	25.5	18.0	21.5	24.5	15.0	19.5	21.5	15.5	18.0
4	16.0	8.5	12.5	23.5	18.5	20.5	23.0	13.0	18.0	20.5	15.0	18.0
5	17.0	9.5	13.0	23.5	17.5	20.0	24.0	12.0	18.0	19.0	15.0	17.0
6	19.0	9.5	14.0	20.5	16.5	18.5	24.0	14.0	19.0	17.5	13.0	15.5
7	19.5	10.5	15.0	21.0	16.5	18.0	22.5	15.0	19.0	18.5	12.5	15.5
8	19.5	11.5	15.5	23.5	14.5	19.0	22.0	16.0	19.5	20.0	12.5	15.5
9	19.5	11.0	15.5	19.5	15.5	18.0	26.0	16.0	20.5	17.5	12.0	15.0
10	17.0	11.0	14.0	20.5	14.0	17.0	26.5	17.0	21.0	17.5	12.0	15.0
11	17.0	10.0	13.5	23.0	15.0	18.5	24.5	14.5	19.5	17.0	14.5	15.5
12	19.5	10.5	14.5	23.0	14.5	18.5	24.0	15.5	20.0	16.5	12.5	14.5
13	18.5	10.5	14.0	24.0	15.0	19.0	24.5	15.5	20.0	18.5	11.0	14.5
14	19.5	10.0	14.5	23.5	14.5	19.0	24.0	15.5	19.5	19.5	10.5	15.0
15	20.5	11.5	16.0	23.5	14.0	18.5	23.5	13.5	19.0	18.5	11.5	15.5
16	21.0	11.5	16.5	19.5	14.5	17.0	24.0	15.0	19.0	19.0	12.0	15.5
17	21.0	13.0	17.0	22.0	12.0	17.0	23.0	14.0	19.0	20.0	11.5	15.5
18	21.5	12.0	17.0	23.0	13.5	18.0	20.0	14.5	17.5	19.5	12.0	16.0
19	22.0	12.5	17.5	23.5	14.0	18.5	20.0	14.0	17.0	19.5	12.0	16.0
20	23.0	14.0	18.5	23.0	13.5	18.0	20.0	15.0	17.0	20.0	12.5	16.0
21	23.5	15.0	19.5	23.5	14.0	18.0	19.0	12.5	16.0	19.0	12.0	15.5
22	23.5	15.0	19.5	24.5	13.5	18.5	19.0	13.5	16.0	19.5	11.5	15.0
23	22.0	15.5	18.5	25.0	14.5	19.0	19.0	12.0	16.0	16.0	11.0	14.0
24	21.0	13.5	17.0	26.0	15.5	20.0	22.0	13.0	17.5	17.5	10.5	14.0
25	18.0	14.0	15.5	26.0	15.5	20.5	22.0	14.0	18.0	17.5	11.5	14.5
26	22.0	13.0	17.0	26.5	15.5	20.5	22.5	14.5	18.5	20.0	9.5	14.0
27	18.5	14.0	16.0	---	---	---	23.5	15.0	19.0	19.0	10.0	14.0
28	22.0	11.5	16.5	---	---	---	23.5	16.0	19.0	18.0	10.5	14.0
29	23.5	14.0	19.0	---	---	---	21.5	14.5	18.0	17.5	9.5	13.5
30	24.0	15.5	19.5	---	---	---	21.5	15.0	18.0	18.5	9.0	14.0
31	---	---	---	---	---	---	21.0	15.5	18.0	---	---	---
MONTH	24.0	8.5	15.9	---	---	---	---	---	---	22.5	9.0	15.4

10336612 UPPER TRUCKEE RIVER AT MOUTH, NEAR VENICE DRIVE, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°56'04", long 119°59'57", in NW 1/4 NW 1/4 sec.04, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 0.25 mi upstream of mouth, and 1.0 mi west of South Lake Tahoe.

DRAINAGE AREA.—56.5 mi^2.

PERIOD OF RECORD.—September 1997 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to September 2001 (discontinued).

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In September 1997, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor water temperature within the Upper Truckee River—Trout Creek watershed. Records represent water temperature at probe within 0.5°C. Interruptions in record due to loss of hydrologic communication with stream and sensor or instrument malfunction. Water temperature data for September 1997 were not published but are available from U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 25.5°C, July 3, 2001; minimum, freezing point, on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 25.5°C, July 3; minimum, freezing point, many days December to April.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	2.5	.5	2.5	---	---	---
2	---	---	---	---	---	---	3.0	1.5	3.0	---	---	---
3	---	---	---	---	---	---	2.5	1.0	2.5	---	---	---
4	---	---	---	---	---	---	2.5	1.0	2.5	---	---	---
5	---	---	---	---	---	---	2.5	.5	2.5	---	---	---
6	---	---	---	---	---	---	1.5	.5	1.5	1.0	.5	1.0
7	---	---	---	---	---	---	3.0	.5	3.0	1.0	.5	1.0
8	---	---	---	---	---	---	4.5	2.5	4.5	1.5	.5	1.5
9	---	---	---	---	---	---	3.0	1.5	3.0	1.0	.5	1.0
10	---	---	---	---	---	---	4.0	2.0	4.0	.5	.5	.5
11	---	---	---	---	---	---	2.5	.5	2.5	.5	.0	.5
12	---	---	---	---	---	---	2.0	.5	2.0	.5	.0	.5
13	---	---	---	---	---	---	1.0	.0	1.0	.5	.0	.5
14	---	---	---	1.0	.5	1.0	.5	.0	.5	.5	.0	.5
15	---	---	---	1.5	.5	1.5	1.5	.0	1.5	.5	.0	.5
16	---	---	---	1.5	.5	1.5	1.5	.0	1.5	.5	.0	.5
17	---	---	---	1.5	.5	1.5	1.5	.0	1.5	1.0	.0	1.0
18	---	---	---	1.5	.5	1.5	1.0	.0	1.0	1.0	.0	1.0
19	---	---	---	1.5	.5	1.5	1.0	.0	1.0	.5	.0	.5
20	---	---	---	2.0	.5	2.0	1.5	.0	1.5	1.0	.0	1.0
21	---	---	---	2.0	.5	2.0	3.0	.5	3.0	1.0	.0	1.0
22	---	---	---	3.0	.5	3.0	2.5	.0	2.5	1.0	.0	1.0
23	---	---	---	1.5	.5	1.5	1.5	.5	1.5	1.0	.5	1.0
24	---	---	---	3.5	.5	3.5	1.5	.0	1.5	1.0	.0	1.0
25	---	---	---	3.5	1.0	3.5	1.0	.0	1.0	.5	.0	.5
26	---	---	---	3.5	1.5	3.5	1.0	.0	1.0	.5	.0	.5
27	---	---	---	5.0	1.5	5.0	1.0	.0	1.0	.5	.0	.5
28	---	---	---	5.0	2.0	5.0	1.0	.0	1.0	1.0	.0	1.0
29	---	---	---	3.5	.5	3.5	1.0	.0	1.0	.5	.0	.5
30	---	---	---	2.0	.5	2.0	1.0	.0	1.0	1.0	.0	1.0
31	---	---	---	---	---	---	---	---	---	1.0	.5	1.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

10336612 UPPER TRUCKEE RIVER AT MOUTH, NEAR VENICE DRIVE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	1.0	.0	.0	.0	8.0	3.0	8.0	10.0	3.5	10.0
2	.5	.5	.5	.0	.0	.0	6.5	2.0	6.5	8.0	3.0	8.0
3	1.0	.5	1.0	.0	.0	.0	5.5	1.0	5.5	8.5	2.0	8.5
4	1.0	.5	1.0	.0	.0	.0	5.5	1.0	5.5	10.0	3.0	10.0
5	1.0	.5	1.0	.0	.0	.0	7.0	1.5	7.0	11.0	4.5	11.0
6	1.0	.5	1.0	.0	.0	.0	6.0	1.5	6.0	10.5	4.0	10.5
7	1.5	.5	1.5	2.0	.0	2.0	3.0	.0	3.0	11.0	4.5	11.0
8	1.5	.5	1.5	4.5	.5	4.5	4.0	.0	4.0	11.5	5.0	11.5
9	1.0	.5	1.0	4.5	1.5	4.5	3.5	.0	3.5	10.5	5.0	10.5
10	.5	.0	.5	4.0	.0	4.0	6.5	.0	6.5	11.5	5.0	11.5
11	.5	.0	.5	6.0	.5	6.0	4.5	1.5	4.5	12.5	6.0	12.5
12	.5	.0	.5	6.5	1.0	6.5	7.0	.0	7.0	11.0	6.0	11.0
13	.0	.0	.0	7.5	1.5	7.5	8.0	2.0	8.0	12.0	6.0	12.0
14	.0	.0	.0	7.0	1.5	7.0	9.5	2.0	9.5	9.5	6.0	9.5
15	.0	.0	.0	6.5	2.0	6.5	10.5	3.0	10.5	9.5	6.5	9.5
16	.0	.0	.0	7.5	2.0	7.5	11.0	4.0	11.0	11.5	6.0	11.5
17	.0	.0	.0	9.0	3.5	9.0	11.0	4.0	11.0	12.5	6.5	12.5
18	.0	.0	.0	8.5	4.0	8.5	10.0	4.0	10.0	13.0	7.5	13.0
19	.0	.0	.0	8.5	3.0	8.5	7.0	2.5	7.0	14.0	8.0	14.0
20	.0	.0	.0	8.5	3.0	8.5	3.0	.0	3.0	14.5	8.5	14.5
21	.0	.0	.0	7.5	2.0	7.5	7.0	.0	7.0	15.0	9.5	15.0
22	.0	.0	.0	5.5	3.0	5.5	9.5	1.5	9.5	15.0	9.0	15.0
23	.0	.0	.0	8.0	1.0	8.0	11.0	3.5	11.0	15.5	9.0	15.5
24	.0	.0	.0	8.0	2.0	8.0	11.0	4.5	11.0	16.0	10.0	16.0
25	.0	.0	.0	8.0	3.0	8.0	11.0	4.0	11.0	16.0	10.0	16.0
26	.0	.0	.0	7.5	2.0	7.5	10.0	3.5	10.0	16.5	10.5	16.5
27	.0	.0	.0	8.5	2.5	8.5	9.5	3.0	9.5	16.0	9.5	16.0
28	.0	.0	.0	9.5	4.5	9.5	8.5	3.5	8.5	16.5	9.5	16.5
29	---	---	---	8.5	3.0	8.5	9.5	3.0	9.5	17.5	9.5	17.5
30	---	---	---	8.5	2.5	8.5	10.5	4.0	10.5	18.5	10.5	18.5
31	---	---	---	9.0	3.0	9.0	---	---	---	19.0	11.0	19.0
MONTH	1.5	.0	.4	9.5	.0	5.8	11.0	.0	7.8	19.0	2.0	13.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	12.5	19.0	---	---	---	22.0	14.0	22.0	---	---	---
2	17.0	11.0	17.0	---	---	---	23.0	14.5	23.0	---	---	---
3	17.0	9.5	17.0	25.5	17.5	25.5	22.5	17.0	22.5	---	---	---
4	16.0	9.0	16.0	22.0	17.5	22.0	21.0	16.0	21.0	---	---	---
5	17.0	10.0	17.0	23.5	17.0	23.5	22.5	15.0	22.5	---	---	---
6	19.0	10.5	19.0	20.0	16.5	20.0	23.0	15.5	23.0	---	---	---
7	20.0	11.5	20.0	19.5	16.0	19.5	22.5	17.0	22.5	---	---	---
8	20.0	12.5	20.0	23.5	14.0	23.5	22.5	18.0	22.5	---	---	---
9	---	---	---	20.0	15.5	20.0	23.5	17.0	23.5	---	---	---
10	---	---	---	20.0	13.0	20.0	23.5	17.5	23.5	---	---	---
11	---	---	---	23.0	14.0	23.0	---	---	---	---	---	---
12	---	---	---	22.5	13.5	22.5	---	---	---	---	---	---
13	---	---	---	24.0	14.5	24.0	---	---	---	---	---	---
14	---	---	---	23.5	14.0	23.5	---	---	---	---	---	---
15	---	---	---	23.0	14.0	23.0	---	---	---	---	---	---
16	---	---	---	19.5	14.0	19.5	---	---	---	---	---	---
17	---	---	---	22.0	12.0	22.0	---	---	---	---	---	---
18	---	---	---	23.0	13.5	23.0	---	---	---	---	---	---
19	---	---	---	23.0	14.0	23.0	---	---	---	---	---	---
20	---	---	---	22.5	13.5	22.5	---	---	---	---	---	---
21	---	---	---	22.5	13.5	22.5	---	---	---	---	---	---
22	---	---	---	23.5	13.5	23.5	---	---	---	---	---	---
23	---	---	---	24.0	14.5	24.0	---	---	---	---	---	---
24	---	---	---	24.5	15.0	24.5	---	---	---	---	---	---
25	---	---	---	25.0	17.0	25.0	---	---	---	---	---	---
26	---	---	---	24.5	17.5	24.5	---	---	---	---	---	---
27	---	---	---	22.5	16.5	22.5	---	---	---	---	---	---
28	---	---	---	22.0	16.0	22.0	---	---	---	---	---	---
29	---	---	---	21.0	15.5	21.0	---	---	---	---	---	---
30	---	---	---	18.5	14.0	18.5	---	---	---	---	---	---
31	---	---	---	22.5	13.0	22.5	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

10336645 GENERAL CREEK NEAR MEEKS BAY, CA

LOCATION.—Lat 39°03'07", long 120°07'03", in NE 1/4 NE 1/4 sec.20, T.14 N., R.17 E., El Dorado County, Hydrologic Unit 16050101, on right bank, 200 ft upstream from State Highway 89, 0.4 mi upstream from Lake Tahoe, and 1.1 mi north of Meeks Bay.

DRAINAGE AREA.—7.44 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1980 to current year.

GAGE.—Water-stage recorder. Datum of gage is 6,250.38 ft above sea level.

REMARKS.—Records good except for estimated daily discharges and Aug. 1 to Sept. 30, which are fair. No known diversion or regulation upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 797 ft^3/s, Jan. 2, 1997, gage height, 7.86 ft (backwater from plugged culvert), from rating curve extended above 180 ft^3/s on basis of computation of flow through culvert; minimum daily, 0.29 ft^3/s, July 28, Aug. 15, 1994.

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)
May 8	2100	114	2.12

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.4	1.5	e1.6	e1.8	e2.2	32	72	3.7	1.0	.87	.68
2	.85	1.4	1.4	e1.6	e1.7	e2.2	28	59	3.4	1.0	.83	.68
3	.81	1.5	1.3	e1.6	e1.8	e2.3	18	36	2.8	.95	.81	.68
4	.82	1.4	e1.3	e1.7	e1.9	e2.3	14	34	2.2	.89	.80	.63
5	.82	1.4	e1.3	e1.7	e1.9	e2.3	12	45	2.1	.93	.65	.61
6	.77	1.3	e1.3	e1.8	e1.9	e2.3	10	56	2.0	.91	.67	.61
7	.75	1.2	e1.4	1.9	e1.9	e2.7	10	63	1.9	.92	.58	.66
8	.76	1.3	e1.4	1.9	e1.9	e3.3	10	77	1.7	.92	.63	.70
9	.78	1.5	e1.4	1.9	e1.9	e3.2	9.8	70	1.7	.96	.62	.66
10	1.1	1.4	e1.4	2.1	e2.0	e2.8	8.7	60	1.5	.99	.66	.64
11	.99	1.3	e1.4	2.3	e1.9	e2.8	7.9	59	1.5	.96	.66	.63
12	.96	1.3	e1.5	2.3	e1.9	e2.9	8.4	55	1.5	.95	.67	.65
13	.87	1.3	e1.5	2.2	e2.0	e3.1	7.6	47	1.5	.94	.71	.62
14	.84	1.3	e1.5	2.1	e2.1	e3.6	7.7	39	1.4	.94	.81	.58
15	.82	1.3	e1.5	2.1	e2.1	e3.9	8.3	42	1.4	.94	.85	.50
16	.79	1.3	e1.5	2.1	e2.1	e4.2	11	44	1.3	.98	.86	.47
17	.75	1.3	e1.6	2.1	e2.1	5.3	18	32	1.3	.96	.83	.44
18	.77	1.2	e1.6	2.1	e2.1	6.3	23	26	1.3	.90	.82	.41
19	.78	1.3	e1.6	2.0	e2.1	7.8	22	23	1.3	.87	.84	.38
20	.74	1.4	e1.6	1.9	e2.1	10	17	21	1.2	.87	.54	.37
21	.73	1.4	e1.6	1.9	e2.1	12	15	18	1.3	.85	.49	.43
22	1.1	1.3	e1.6	1.9	e2.1	12	14	16	1.2	.86	.73	.39
23	1.2	1.3	e1.6	1.9	e2.1	11	18	14	1.2	.84	.73	.37
24	1.1	1.4	e1.6	1.8	e2.1	13	28	12	1.2	.83	.67	.62
25	1.2	1.4	e1.6	1.8	e2.1	18	46	9.8	1.2	.88	.63	1.0
26	1.4	1.3	e1.6	1.8	e2.1	17	62	8.0	1.3	.95	.63	.97
27	1.7	1.4	e1.7	2.0	e2.1	18	64	7.3	1.3	.92	.65	.94
28	1.7	1.4	e1.7	2.1	e2.1	26	55	6.3	1.2	.89	.64	.93
29	2.3	1.7	e1.7	1.9	---	31	44	5.4	1.2	.83	.64	.90
30	1.5	1.5	e1.6	e1.9	---	27	57	4.7	1.1	.88	.65	.85
31	1.4	---	e1.6	e1.8	---	30	---	4.2	---	.93	.68	---
TOTAL	31.97	40.9	46.9	59.8	56.0	290.5	686.4	1065.7	48.9	28.44	21.85	19.00
MEAN	1.03	1.36	1.51	1.93	2.00	9.37	22.9	34.4	1.63	.92	.70	.63
MAX	2.3	1.7	1.7	2.3	2.1	31	64	77	3.7	1.0	.87	1.0
MIN	.73	1.2	1.3	1.6	1.7	2.2	7.6	4.2	1.1	.83	.49	.37
AC-FT	63	81	93	119	111	576	1360	2110	97	56	43	38

e Estimated.

10336645 GENERAL CREEK NEAR MEEKS BAY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.16	6.79	8.90	9.74	12.6	18.3	38.1	63.1	36.2	6.85	1.36	1.36
MAX	15.5	45.4	58.7	68.9	64.2	60.1	70.4	114	158	49.6	4.72	4.36
(WY)	1983	1982	1982	1997	1986	1986	1989	1999	1983	1983	1983	1983
MIN	.73	.84	.89	.90	.99	5.86	15.9	7.18	1.63	.49	.35	.39
(WY)	1993	1993	1991	1991	1991	1994	1991	1992	2001	1994	1994	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	5067.59		2396.36			
ANNUAL MEAN	13.8		6.57		17.1	
HIGHEST ANNUAL MEAN					34.7	1982
LOWEST ANNUAL MEAN					4.96	1988
HIGHEST DAILY MEAN	162	May 8	77	May 8	600	Jan 1 1997
LOWEST DAILY MEAN	.73	Oct 21	.37	Sep 20	.29	Jul 28 1994
ANNUAL SEVEN-DAY MINIMUM	.77	Oct 15	.40	Sep 17	.31	Aug 15 1994
MAXIMUM PEAK FLOW			114	May 8	797	Jan 2 1997
MAXIMUM PEAK STAGE			2.12	May 8	7.86	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	10050		4750		12400	
10 PERCENT EXCEEDS	49		18		51	
50 PERCENT EXCEEDS	2.1		1.5		3.1	
90 PERCENT EXCEEDS	1.1		.67		.83	

10336645 GENERAL CREEK NEAR MEEKS BAY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1981 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1980 to September 1983.
WATER TEMPERATURE: October 1980 to September 1992.
SUSPENDED-SEDIMENT DISCHARGE: October 1980 to September 1992.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT								
18...	1055	.78	63	10.5	5.7	611	96	9.6
NOV								
27...	1550	1.4	60	5.0	3.1	608	99	10.6
DEC								
26...	1515	e1.6	58	2.0	.2	612	98	11.4
JAN								
26...	1425	1.8	55	--	.1	600	100	11.5
FEB								
27...	1505	e2.1	53	3.7	1.7	--	--	--
MAR								
27...	1540	18	25	12.9	4.3	608	--	--
30...	2025	29	19	2.1	2.2	607	101	11.1
APR								
17...	2120	22	22	4.0	4.0	607	103	10.7
26...	2130	78	14	4.0	2.0	608	103	11.4
27...	0810	63	14	2.2	1.0	606	--	--
MAY								
01...	2315	95	12	2.8	2.8	--	--	--
09...	2020	78	11	9.8	6.5	607	--	--
15...	0830	34	14	10.5	6.0	609	--	--
15...	1925	57	13	9.5	7.2	--	--	--
23...	1640	13	21	23.8	15.5	610	102	8.1
JUN								
29...	1640	1.1	52	23.5	18.2	--	--	--
JUL								
30...	1645	.84	59	17.2	17.9	606	87	6.5
AUG								
30...	1815	.62	64	20.2	17.0	606	89	6.8
SEP								
20...	1035	.41	63	15.5	10.8	609	92	8.1

e Estimated.

10336645 GENERAL CREEK NEAR MEEKS BAY, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
18...	<.003	<.04	.005	.011	.021	131	<1	<.01
NOV								
27...	<.003	.31	.004	.008	.020	139	1	<.01
DEC								
26...	.003	.04	.003	.007	.021	114	2	E.01
JAN								
26...	<.003	.05	.005	.010	.022	162	1	<.01
FEB								
27...	<.003	.05	.006	.007	.018	101	1	E.01
MAR								
27...	<.003	.11	.021	.004	.013	96	3	.14
30...	.003	.13	.014	.003	.014	124	5	.39
APR								
17...	.003	.32	.006	.003	.013	110	2	.12
26...	<.003	.22	.010	.003	.043	628	39	8.2
27...	.003	.17	.009	.002	.013	102	9	1.5
MAY								
01...	.004	.14	.005	.002	.016	172	16	4.1
09...	<.003	.08	.003	.001	.010	119	10	2.1
15...	<.003	.05	.003	.001	.008	45	2	.18
15...	<.003	.09	.003	.002	.010	94	5	.77
23...	<.003	.09	.006	.002	.012	52	2	.07
JUN								
29...	<.003	.08	.007	.014	.025	87	<1	<.01
JUL								
30...	<.003	.05	.003	.018	.028	197	<1	<.01
AUG								
30...	.005	.09	.007	.023	.031	152	<1	<.01
SEP								
20...	<.003	.16	.003	.011	.026	120	<1	<.01

< Actual value is known to be less than value shown.

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA

LOCATION.—Lat 39°06'27", long 120°09'40", in NW 1/4 NE 1/4 sec.36, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, on right bank, 300 ft upstream from bridge on State Highway 89, 1,000 ft upstream from Lake Tahoe, and 4.6 mi south of Tahoe City.

DRAINAGE AREA.—11.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 6,234.59 ft above sea level. Oct. 1, 1960, to Sept. 30, 1964, at datum 10.25 ft lower and Oct. 1, 1964, to Aug. 27, 1970, at datum 12 ft lower, at site 400 ft downstream.

REMARKS.—Records fair, including estimated daily discharges. No known diversion or regulation upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,940 ft^3/s, Jan. 1, 1997, gage height, 9.82 ft; maximum gage height, 9.90 ft, site and datum then in use, Dec. 22, 1964; minimum daily, 0.50 ft^3/s, Sept. 24, 1968.

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)
May 15	1645	163	2.20

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.5	2.8	e3.9	e3.2	e4.0	50	96	27	3.6	1.9	1.0
2	2.0	2.6	2.8	e3.9	3.0	4.6	40	86	22	3.6	2.0	.95
3	1.9	2.7	3.0	e3.8	3.2	e5.0	31	68	18	3.6	2.0	.95
4	1.8	2.7	2.9	e3.8	3.2	5.5	27	63	16	3.5	2.1	.93
5	1.8	2.7	3.0	e3.8	3.2	5.9	25	73	15	3.5	2.1	.94
6	1.8	2.7	2.9	e3.8	3.2	6.0	24	80	14	3.3	1.8	.89
7	1.7	2.7	3.0	e3.8	e3.2	6.7	24	90	13	3.5	1.2	.93
8	1.8	2.9	3.0	e3.9	e3.2	7.5	20	110	13	3.2	1.1	.91
9	1.9	2.9	3.0	e4.0	e3.2	8.0	19	110	12	3.2	1.1	1.0
10	2.4	2.8	e3.1	e3.9	e3.4	8.2	19	106	11	3.2	1.1	1.0
11	2.3	2.8	3.1	e3.9	e3.3	8.8	17	110	11	3.0	1.1	1.2
12	2.2	e2.8	e3.3	e3.9	e3.3	9.4	18	106	10	2.9	1.1	1.2
13	2.2	e2.9	e3.4	e3.8	e3.4	10	17	98	9.7	2.7	1.1	1.1
14	2.1	e3.1	e3.6	e3.7	e3.4	11	17	87	9.2	2.6	1.1	.98
15	2.0	e3.1	e3.6	e3.7	e3.4	12	18	115	8.8	2.6	1.1	.95
16	1.9	3.0	e3.6	e3.6	e3.4	13	21	122	8.1	2.5	1.1	.96
17	1.8	e3.0	e3.7	e3.5	e3.4	15	28	98	7.4	2.5	1.2	.93
18	1.9	e2.9	e3.7	e3.5	e3.4	18	32	87	7.0	2.4	1.3	.86
19	1.9	2.8	e3.7	e3.4	e3.4	21	32	80	6.7	2.4	1.3	.83
20	2.0	2.7	e3.8	e3.3	e3.4	25	27	76	6.3	2.5	1.1	.87
21	2.0	2.8	e3.9	e3.2	e3.5	29	25	74	5.8	2.3	1.1	.84
22	1.8	2.8	e3.9	e3.2	e3.5	30	24	69	5.5	2.3	1.1	.83
23	1.8	2.8	e3.9	e3.2	e3.6	29	28	69	5.2	2.4	1.2	.85
24	1.7	2.8	e3.9	3.1	e3.6	32	38	63	5.0	2.4	1.2	.91
25	1.9	2.8	e3.9	e3.2	e3.6	40	57	57	4.9	2.4	1.2	1.4
26	2.4	2.8	e3.9	e3.1	3.8	33	75	49	4.4	2.6	1.2	1.1
27	2.7	2.8	e3.9	e3.3	3.8	32	83	42	3.8	2.5	1.2	1.1
28	3.1	2.5	e4.0	e3.4	3.7	51	77	37	4.2	2.1	1.2	1.2
29	3.0	3.0	e4.0	e3.2	---	54	67	33	4.1	1.9	1.1	1.1
30	2.5	2.7	e3.7	e3.3	---	42	79	30	3.7	2.2	1.1	1.2
31	2.5	---	e3.9	e3.3	---	48	---	28	---	2.2	1.1	---
TOTAL	64.7	84.1	107.9	110.4	94.9	624.6	1059	2412	291.8	85.6	40.6	29.91
MEAN	2.09	2.80	3.48	3.56	3.39	20.1	35.3	77.8	9.73	2.76	1.31	1.00
MAX	3.1	3.1	4.0	4.0	3.8	54	83	122	27	3.6	2.1	1.4
MIN	1.7	2.5	2.8	3.1	3.0	4.0	17	28	3.7	1.9	1.1	.83
AC-FT	128	167	214	219	188	1240	2100	4780	579	170	81	59

e Estimated.

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.82	12.5	19.7	25.2	21.3	30.5	60.7	128	101	29.2	5.73	2.85
MAX	28.1	94.8	157	201	116	122	124	312	320	149	36.1	10.3
(WY)	1963	1984	1965	1997	1986	1986	1989	1969	1983	1983	1983	1982
MIN	1.31	1.68	1.90	2.00	2.27	3.82	13.6	29.7	7.20	2.76	1.31	1.00
(WY)	1978	1978	1977	1991	1991	1977	1975	1977	1992	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	11039.9		5005.51			
ANNUAL MEAN	30.2		13.7		36.8	
HIGHEST ANNUAL MEAN					73.4	1982
LOWEST ANNUAL MEAN					8.71	1977
HIGHEST DAILY MEAN	325	May 8	122	May 16	2000	Jan 1 1997
LOWEST DAILY MEAN	1.7	Oct 7	.83	Sep 19	.50	Sep 24 1968
ANNUAL SEVEN-DAY MINIMUM	1.8	Oct 3	.86	Sep 18	.54	Sep 23 1968
MAXIMUM PEAK FLOW			163	May 15	2940	Jan 1 1997
MAXIMUM PEAK STAGE			2.20	May 15	9.90	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	21900		9930		26670	
10 PERCENT EXCEEDS	97		44		107	
50 PERCENT EXCEEDS	7.2		3.4		10	
90 PERCENT EXCEEDS	2.2		1.1		2.1	

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1975–78, 1980 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: December 1980 to September 1983.
WATER TEMPERATURE: October 1974 to June 1978 (1977–78 storm season only), October 1979 to September 1992.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to June 1978 (1977–78 storm season only), October 1979 to September 1992.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT								
18...	1205	2.1	74	14.5	7.5	610	99	9.5
NOV								
27...	1450	2.9	71	5.0	4.8	608	98	10.0
DEC								
27...	1530	e3.9	68	1.0	1.0	612	100	11.4
JAN								
26...	1550	e3.1	67	-3.5	.0	600	100	11.5
FEB								
27...	1630	3.9	68	-1.0	3.0	--	--	--
MAR								
27...	1430	30	45	10.8	8.0	610	103	9.7
30...	1920	49	40	4.5	4.0	607	100	10.4
APR								
17...	2015	35	45	4.5	5.8	608	--	--
26...	2025	96	34	5.0	2.9	607	102	10.9
27...	0710	77	37	-1.2	1.2	606	102	11.5
MAY								
01...	2220	121	31	2.2	2.8	--	--	--
09...	1920	132	29	13.8	5.8	607	103	10.2
15...	0725	81	32	7.0	4.0	609	--	--
15...	1445	145	28	11.0	6.0	--	--	--
15...	2015	155	27	9.5	5.0	--	--	--
16...	1255	108	29	15.1	8.3	609	100	9.4
23...	1535	66	32	24.0	14.0	612	--	--
JUN								
01...	1515	26	39	21.1	15.9	--	--	--
29...	1535	4.4	59	23.5	21.0	--	--	--
JUL								
30...	1530	2.5	69	17.5	17.0	607	98	7.5
AUG								
30...	1700	1.1	77	21.5	17.8	606	98	7.4
SEP								
20...	1140	1.0	79	17.5	11.8	609	97	8.4

e Estimated.

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
18...	<.003	.04	.002	.007	.019	72	1	.01
NOV								
27...	<.003	.05	.004	.007	.014	73	2	.02
DEC								
27...	<.003	<.04	.005	.005	.021	86	3	E.03
JAN								
26...	<.003	<.04	.008	.007	.019	97	3	E.03
FEB								
27...	<.003	<.04	.010	.008	.016	106	2	.02
MAR								
27...	<.003	.04	.052	.005	.016	102	5	.40
30...	<.003	.09	.071	.004	.020	193	10	1.3
APR								
17...	.004	.30	.032	.004	.022	238	14	1.3
26...	<.003	.16	.058	.004	.077	1020	74	19
27...	<.003	.20	.071	.003	.019	276	12	2.5
MAY								
01...	.004	.14	.065	.003	.044	581	56	18
09...	.003	.11	.055	.001	.041	446	43	15
15...	.003	.04	.051	.001	.014	86	7	1.5
15...	.003	.23	.019	.002	.065	875	74	29
15...	<.003	.17	.032	.002	.058	772	77	32
16...	<.003	.08	.026	.001	.018	145	9	2.6
23...	<.003	.09	.009	.001	.015	72	2	.36
JUN								
01...	<.003	.06	.006	.004	.016	75	<1	<.07
29...	.006	.06	.007	.008	.018	97	<1	<.01
JUL								
30...	<.003	.07	.002	.009	.019	170	<1	<.01
AUG								
30...	.006	.10	.004	.011	.019	93	<1	<.01
SEP								
20...	<.003	.15	.002	.005	.018	100	<1	<.01

< Actual value is known to be less than value shown.

10336674 WARD CREEK BELOW CONFLUENCE, NEAR TAHOE CITY, CA

LOCATION.—Lat 39°08'27", long 120°12'40", in SE 1/4 SE 1/4 sec.16, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on left bank, 0.1 mi downstream from confluence with unnamed tributary, 3.2 mi west of William Kent Campground, and 4.8 mi southwest of Tahoe City.

DRAINAGE AREA.—4.96 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1991 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,600 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. No storage or diversion upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,220 ft^3/s, Jan. 1, 1997, gage height, 8.85 ft, from crest stage gage; no flow for some days in most years.

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)
May 8	1700	128	4.97	May 15	1500	200	5.29

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	1.9	1.5	1.5	1.2	1.2	27	60	18	2.3	e.54	.20
2	.41	2.4	1.6	1.4	1.3	1.4	22	43	16	2.2	e.52	.18
3	.45	2.0	1.6	1.4	e1.4	1.3	16	33	15	2.0	e.51	.18
4	.44	2.0	1.4	1.5	e1.5	1.4	14	34	13	1.9	e.50	.18
5	.41	1.9	1.3	1.6	e1.6	1.3	12	42	12	1.9	e.49	.17
6	.39	1.6	e1.3	1.7	e1.7	1.4	11	46	11	1.9	e.45	.17
7	.36	1.2	1.3	1.6	1.7	1.9	10	55	11	1.9	e.40	.17
8	.34	1.1	1.3	1.6	1.8	2.5	8.7	71	10	1.7	e.39	.16
9	.54	1.2	1.3	1.5	1.6	2.3	8.3	68	9.7	1.6	e.37	.15
10	1.3	1.2	1.4	1.7	e1.7	1.9	8.1	67	8.7	1.4	e.36	.13
11	1.2	1.1	1.2	1.8	e1.6	2.0	7.7	72	8.1	1.4	e.34	.18
12	1.5	.99	1.3	1.6	e1.6	2.2	7.2	61	7.6	1.3	e.33	.33
13	1.4	.95	1.2	1.6	1.7	2.8	7.0	58	7.0	1.2	e.32	.31
14	1.2	.96	1.8	1.5	1.6	3.4	7.6	49	6.3	1.1	e.30	.28
15	1.0	.93	1.4	1.4	1.5	3.3	8.9	103	5.8	1.0	e.26	.25
16	.89	.90	1.3	1.4	1.5	3.3	12	84	5.5	e1.0	.24	.21
17	.85	.88	1.3	1.4	1.5	4.4	17	56	5.1	e.94	.22	.23
18	.81	1.0	e1.3	1.5	1.5	6.2	19	48	4.8	e.94	.19	.23
19	.77	1.1	e1.3	1.4	1.6	8.3	17	45	4.4	e.94	.20	.20
20	1.0	1.1	e1.3	1.4	1.6	13	14	49	4.1	e.88	.20	.17
21	1.2	1.1	e1.3	1.3	1.6	16	13	43	3.8	e.81	.22	.16
22	.88	1.1	e1.3	1.4	1.6	16	13	43	3.6	e.81	.25	.15
23	.88	1.0	e1.3	1.5	1.4	16	17	41	3.5	e.81	.26	.15
24	.87	1.2	e1.3	1.4	1.5	17	25	37	3.3	e.80	.23	.14
25	.97	1.2	e1.3	1.4	1.5	21	37	36	3.1	e.71	.21	.95
26	1.2	1.1	e1.3	1.4	1.4	18	48	32	3.1	e.68	.19	.44
27	1.4	1.2	1.3	1.3	1.3	19	47	30	3.2	e.65	.17	.38
28	1.7	1.6	1.4	1.2	1.3	28	40	24	2.9	e.61	.17	.39
29	1.5	1.5	1.5	1.3	---	27	39	21	2.7	e.59	.16	.39
30	1.9	1.7	1.6	1.2	---	25	51	19	2.6	e.59	.20	.38
31	1.7	---	1.5	1.2	---	27	---	18	---	e.60	.21	---
TOTAL	29.85	39.11	42.5	45.1	42.8	295.5	584.5	1488	214.9	37.16	9.40	7.61
MEAN	.96	1.30	1.37	1.45	1.53	9.53	19.5	48.0	7.16	1.20	.30	.25
MAX	1.9	2.4	1.8	1.8	1.8	28	51	103	18	2.3	.54	.95
MIN	.34	.88	1.2	1.2	1.2	1.2	7.0	18	2.6	.59	.16	.13
AC-FT	59	78	84	89	85	586	1160	2950	426	74	19	15

e Estimated.

10336674 WARD CREEK BELOW CONFLUENCE, NEAR TAHOE CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.69	1.98	5.00	10.9	7.25	12.2	26.1	61.1	52.8	21.3	3.03	.68
MAX	1.43	9.82	27.2	68.8	32.5	26.9	43.1	93.5	127	88.7	16.0	1.94
(WY)	1999	1997	1997	1997	1996	1995	1997	1996	1998	1995	1995	1995
MIN	.11	.45	.69	.82	.95	5.85	16.2	20.5	3.67	.81	.025	.008
(WY)	1993	1996	1995	1992	1994	1994	1998	1992	1992	1994	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	5394.68		2836.43			
ANNUAL MEAN	14.7		7.77		16.3	
HIGHEST ANNUAL MEAN					29.0	1995
LOWEST ANNUAL MEAN					5.56	1992
HIGHEST DAILY MEAN	188	May 8	103	May 15	720	Jan 2 1997
LOWEST DAILY MEAN	.34	Oct 8	.13	Sep 10	.00	Aug 21 1992
ANNUAL SEVEN-DAY MINIMUM	.40	Oct 2	.16	Sep 4	.00	Sep 9 1992
MAXIMUM PEAK FLOW			200	May 15	1220	Jan 1 1997
MAXIMUM PEAK STAGE			5.29	May 15	8.85	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	10700		5630		11840	
10 PERCENT EXCEEDS	46		27		53	
50 PERCENT EXCEEDS	3.5		1.4		3.4	
90 PERCENT EXCEEDS	.71		.26		.40	

10336674 WARD CREEK BELOW CONFLUENCE, NEAR TAHOE CITY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1993 to current year.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)
OCT					
18...	1410	.66	46	15.2	7.8
NOV					
27...	1030	1.1	45	4.0	2.5
DEC					
27...	1040	1.3	42	-2.0	.0
JAN					
25...	1020	1.5	41	-5.0	.3
FEB					
26...	1020	1.4	41	-1.0	.7
MAR					
23...	1340	13	37	--	2.2
30...	1615	29	30	12.5	1.8
APR					
17...	1555	21	29	9.5	2.5
27...	0955	36	30	--	2.0
MAY					
01...	1915	84	25	5.9	2.0
09...	1555	92	23	18.3	4.0
15...	1040	77	25	9.5	4.0
23...	1145	36	26	22.5	7.7
JUN					
01...	0845	17	29	16.0	6.0
28...	1520	2.6	39	19.1	16.2
JUL					
30...	1035	e.59	44	10.0	12.5
AUG					
30...	1320	.27	48	22.0	16.0
SEP					
20...	1330	.20	47	19.5	16.0

e Estimated value.

10336674 WARD CREEK BELOW CONFLUENCE, NEAR TAHOE CITY, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
18...	<.003	<.04	.002	.004	.012	11	<1	<.18
NOV								
27...	<.003	.05	.009	.002	.013	7	1	<.01
DEC								
27...	<.003	<.04	.010	.003	.012	5	2	.01
JAN								
25...	<.003	.04	.015	.001	.014	10	2	.01
FEB								
26...	.003	<.04	.040	.003	.011	11	1	<.01
MAR								
23...	.003	.06	.043	.004	.011	21	1	.04
30...	.003	.08	.027	.004	.015	73	5	.39
APR								
17...	.005	.07	.030	.004	.025	168	13	.75
27...	<.003	.09	.033	.003	.012	28	4	.39
MAY								
01...	.007	.12	.035	.004	.025	214	21	4.8
09...	<.003	.08	.035	.002	.028	231	29	7.2
15...	<.003	.05	.026	.002	.040	338	34	7.1
23...	.004	.05	.021	.009	.014	39	1	.10
JUN								
01...	.005	.06	.008	.003	.015	18	<1	<.05
28...	.005	.06	.003	.003	.015	10	1	.01
JUL								
30...	.003	.05	.009	.005	.014	10	<1	<.01
AUG								
30...	.009	.06	.008	.005	.011	12	<1	<.01
SEP								
20...	<.003	.17	.002	.002	.008	9	<1	<.01

< Actual value is known to be less than value shown.

10336675 WARD CREEK AT STANFORD ROCK TRAIL CROSSING, NEAR TAHOE CITY, CA

LOCATION.—Lat 39°08'13", long 120°10'48", in NE 1/4 NW 1/4 sec.23, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on left bank, 1.5 mi west of William Kent Campground, 1.7 mi upstream from mouth, and 3.6 mi southwest of Tahoe City.

DRAINAGE AREA.—8.97 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1991 to current year (discontinued).

GAGE.—Water-stage recorder. Elevation of gage is 6,450 ft above sea level, from topographic map.

REMARKS.—Records fair. No storage or diversion upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,370 ft^3/s, Jan. 1, 1997, gage height, 7.58 ft; maximum gage height, 8.23 ft, Jan. 10, 1995, backwater from ice; minimum daily, 0.30 ft^3/s, Sept. 22, 1994.

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 1	1800	114	5.05	May 15	1700	175	5.25

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.4	e2.4	e2.3	2.2	2.3	39	78	22	2.5	.88	.49
2	1.3	2.6	e2.4	e2.3	2.0	2.1	31	60	20	2.4	.85	.49
3	1.3	2.7	e2.4	e2.3	2.1	2.2	24	45	18	2.2	.82	.50
4	1.3	2.6	e2.4	e2.4	2.4	2.1	19	46	16	2.2	.81	.49
5	1.3	2.7	e2.2	e2.4	e2.5	2.1	17	53	14	2.2	.80	.49
6	1.3	2.6	e2.2	e2.4	e2.5	2.1	16	59	13	2.1	.78	.51
7	1.3	2.3	e2.2	e2.4	e2.5	2.3	19	66	13	2.1	.75	.52
8	1.3	e2.3	e2.2	e2.4	e2.5	2.8	e14	82	12	1.9	.73	.52
9	1.4	e2.4	e2.2	e2.4	e2.6	2.7	e12	83	11	1.9	.71	.53
10	2.0	2.4	e2.5	e2.5	e2.6	2.5	e13	81	10	1.8	.70	.52
11	2.0	2.3	e2.3	e2.4	e2.6	2.4	11	85	9.3	1.7	.68	.58
12	2.1	e2.3	e2.3	e2.3	e2.6	2.5	e11	79	8.7	1.6	.65	.61
13	2.1	e2.3	e2.3	e2.3	e2.5	2.8	e9.6	75	8.2	1.5	.64	.57
14	2.2	2.3	e2.3	e2.3	2.3	3.4	e10	65	7.5	1.4	.64	.57
15	2.1	2.3	e2.3	2.4	2.3	3.5	e11	106	6.8	1.4	.64	.57
16	2.0	2.1	e2.3	e2.2	2.3	3.3	e15	102	6.3	1.4	.66	.56
17	1.9	e2.1	e2.3	e2.2	2.2	4.2	23	76	5.8	1.3	.63	.56
18	1.8	e2.1	e2.3	e2.2	2.2	6.5	27	65	5.4	1.3	.60	.56
19	1.8	e2.1	e2.3	e2.1	2.2	9.1	25	58	5.1	1.2	.60	.56
20	1.9	e2.0	e2.4	e2.2	2.3	16	20	55	4.7	1.2	.61	.59
21	2.1	e2.0	e2.4	e2.2	2.3	20	18	52	4.3	1.1	.62	.60
22	1.9	e1.9	e2.4	e2.2	2.3	21	18	50	4.0	1.1	.63	.59
23	1.9	e1.9	e2.3	e2.3	2.2	21	24	50	3.7	1.1	.62	.58
24	1.9	e1.8	e2.3	e2.3	2.2	23	34	45	3.4	.98	.61	.58
25	1.9	e1.9	e2.3	e2.2	2.3	30	50	40	3.3	.95	.59	.87
26	2.2	e1.9	e2.3	e2.2	2.1	25	65	35	3.3	.89	.56	.67
27	2.3	e1.9	e2.3	2.1	2.1	25	66	32	3.5	.84	.55	.66
28	2.9	e2.2	e2.3	e2.1	2.1	38	57	28	3.1	.81	.56	.69
29	3.2	e2.1	e2.3	e2.0	---	38	52	25	2.9	.77	.55	.66
30	2.6	e2.2	e2.3	e2.2	---	35	66	24	2.6	.85	.55	.60
31	2.4	---	e2.3	e2.2	---	38	---	23	---	.93	.50	---
TOTAL	59.0	66.7	71.7	70.4	65.0	390.9	816.6	1823	250.9	45.62	20.52	17.29
MEAN	1.90	2.22	2.31	2.27	2.32	12.6	27.2	58.8	8.36	1.47	.66	.58
MAX	3.2	2.7	2.5	2.5	2.6	38	66	106	22	2.5	.88	.87
MIN	1.3	1.8	2.2	2.0	2.0	2.1	9.6	23	2.6	.77	.50	.49
AC-FT	117	132	142	140	129	775	1620	3620	498	90	41	34

e Estimated.

10336675 WARD CREEK AT STANFORD ROCK TRAIL CROSSING, NEAR TAHOE CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.72	3.54	8.65	20.4	12.9	21.3	43.4	95.1	75.9	25.0	4.50	1.63
MAX	2.52	14.5	47.5	135	51.2	52.1	70.0	168	182	107	20.1	3.36
(WY)	1994	1997	1997	1997	1996	1995	1997	1996	1995	1995	1995	1995
MIN	.73	1.59	1.47	2.26	2.19	9.10	26.2	22.7	4.60	1.41	.44	.36
(WY)	1995	1998	1995	1992	1994	1994	1994	1992	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	7667.5		3697.63			
ANNUAL MEAN	20.9		10.1		26.2	
HIGHEST ANNUAL MEAN					47.5	1995
LOWEST ANNUAL MEAN					7.69	1994
HIGHEST DAILY MEAN	301	May 8	106	May 15	1300	Jan 1 1997
LOWEST DAILY MEAN	1.3	Sep 19	.49	Sep 1	.30	Sep 22 1994
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 1	.50	Aug 31	.31	Sep 17 1994
MAXIMUM PEAK FLOW			175	May 15	2370	Jan 1 1997
MAXIMUM PEAK STAGE			5.25	May 15	8.23	Jan 10 1995
ANNUAL RUNOFF (AC-FT)	15210		7330		18990	
10 PERCENT EXCEEDS	62		35		80	
50 PERCENT EXCEEDS	4.7		2.3		5.0	
90 PERCENT EXCEEDS	1.5		.62		1.3	

10336675 WARD CREEK AT STANFORD ROCK TRAIL CROSSING, NEAR TAHOE CITY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1993 to current year.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)
OCT					
18...	1540	1.9	72	16.0	9.2
NOV					
27...	1215	e1.9	65	5.0	2.8
DEC					
27...	1225	e2.3	64	5.2	.0
JAN					
25...	1225	e2.2	62	-2.1	.2
FEB					
26...	1240	2.4	61	1.1	.7
MAR					
23...	1620	22	44	--	3.1
30...	1740	43	37	4.9	2.8
APR					
17...	1720	30	40	8.0	5.5
27...	1115	49	36	13.5	5.0
MAY					
01...	2035	102	31	3.5	2.8
09...	1720	102	29	18.9	6.0
15...	1215	117	29	10.7	5.2
23...	1305	46	31	24.0	11.0
JUN					
01...	1020	22	35	20.9	9.5
28...	1645	2.8	52	--	19.5
JUL					
30...	1210	.88	76	14.5	15.0
AUG					
30...	1505	.45	88	23.5	18.2
SEP					
20...	1440	.58	89	--	17.5

e Estimated.

10336675 WARD CREEK AT STANFORD ROCK TRAIL CROSSING, NEAR TAHOE CITY, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
18...	<.003	.05	.003	.015	.026	49	1	.01
NOV								
27...	<.003	.04	.005	.013	.021	34	2	e.01
DEC								
27...	<.003	.06	.004	.012	.022	28	3	e.02
JAN								
25...	<.003	.08	.008	.013	.027	33	1	e.01
FEB								
26...	.003	.05	.020	.011	.020	37	1	.01
MAR								
23...	<.003	.06	.017	.007	.015	70	3	.18
30...	.003	.12	.029	.005	.016	84	5	.58
APR								
17...	.004	.11	.013	.006	.019	112	10	.81
27...	<.003	.11	.026	.004	.014	59	4	.53
MAY								
01...	<.003	.17	.024	.005	.029	227	23	6.3
09...	<.003	.10	.026	.002	.026	250	25	6.9
15...	.004	.16	.019	.002	.064	705	52	16
23...	<.003	.08	.017	.001	.014	43	2	.25
JUN								
01...	.008	.08	.006	.004	.013	24	<1	<.06
28...	.005	.06	.002	.010	.021	24	<1	<.01
JUL								
30...	<.003	.05	.002	.013	.024	50	<1	<.01
AUG								
30...	.008	.07	.005	.017	.025	43	<1	<.01
SEP								
20...	<.003	.20	.002	.013	.025	63	<1	<.01

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

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA

LOCATION.—Lat 39°07'56", long 120°09'24", in NW 1/4 SE 1/4 sec.24, T.15 N., R.16 E., Placer County, Hydrologic Unit 16050101, Tahoe National Forest, on right bank, 165 ft downstream from State Highway 89 Bridge, 2.1 mi north of Tahoe Pines, and 2.6 mi southwest of Tahoe City.

DRAINAGE AREA.—9.70 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1972 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,230 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. Minor diversion for local water supply upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,530 ft^3/s, Jan. 1, 1997, gage height, 9.36 ft; no flow for many days during several 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)
May 1	1930	115	5.38	May 15	1630	202	5.72

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	2.0	e2.2	e2.2	e2.2	e2.4	45	81	25	2.1	.42	.00
2	.57	2.2	2.2	e2.2	2.2	2.3	36	65	23	1.9	.35	.00
3	.60	2.5	2.2	e2.2	e2.2	e2.4	26	50	20	1.8	.29	.00
4	.69	2.2	2.2	e2.3	e2.5	2.4	20	50	17	1.8	.26	.00
5	.69	2.3	2.0	e2.3	e2.6	2.4	17	57	16	1.7	.22	.00
6	.68	2.3	e2.0	e2.3	e2.6	2.4	16	62	14	1.6	.17	.00
7	.69	1.8	2.0	e2.3	e2.6	2.8	20	69	13	1.5	.12	.00
8	.69	1.9	2.0	e2.3	e2.6	3.7	14	83	12	1.4	.10	.00
9	.79	1.9	2.0	e2.3	e2.7	3.4	13	83	12	1.3	.07	.00
10	1.4	1.9	2.3	e2.4	e2.7	2.8	13	81	10	1.3	.06	.00
11	1.3	e1.9	e2.2	e2.4	e2.7	2.8	11	85	9.6	1.2	.04	.00
12	1.3	e1.9	e2.2	e2.3	e2.7	2.9	11	79	9.0	1.1	.01	.00
13	1.4	e1.9	e2.2	e2.3	e2.6	3.4	10	75	8.3	1.0	.00	.00
14	1.5	e1.9	e2.2	e2.3	e2.4	4.1	11	67	7.5	.95	.00	.00
15	1.4	e1.9	e2.2	e2.2	e2.4	4.5	12	109	6.7	.90	.00	.00
16	1.2	e1.8	e2.2	e2.2	e2.4	4.2	16	101	6.0	.90	.00	.00
17	1.2	e1.9	e2.2	e2.2	e2.3	5.3	24	79	5.5	.86	.00	.00
18	1.1	e1.9	e2.2	e2.2	e2.3	8.3	29	69	5.0	.83	.00	.00
19	1.1	e1.9	e2.2	e2.1	e2.3	12	27	63	4.6	.78	.00	.00
20	1.2	e1.9	e2.2	e2.2	e2.4	19	21	59	4.2	.72	.00	.00
21	1.5	e1.9	e2.2	2.2	e2.4	23	18	58	3.9	.65	.00	.00
22	1.4	1.8	e2.2	2.2	e2.4	24	18	55	3.6	.64	.00	.00
23	1.3	e1.8	e2.2	2.3	e2.3	24	24	56	3.3	.60	.00	.00
24	1.3	1.7	e2.2	2.3	e2.3	27	36	51	3.1	.55	.00	.00
25	1.4	1.8	e2.2	2.2	e2.5	36	53	46	2.9	.50	.00	.20
26	1.9	1.8	e2.2	e2.2	2.4	30	69	41	2.9	.45	.00	.01
27	2.1	1.8	e2.2	e2.1	2.3	29	72	37	3.1	.40	.00	.01
28	2.9	2.1	e2.2	2.1	2.3	43	63	32	2.8	.36	.00	.09
29	3.2	e2.0	e2.2	e2.0	---	44	58	29	2.5	.32	.00	.12
30	2.3	e2.0	e2.2	e2.2	---	41	71	28	2.3	.38	.00	.12
31	2.0	---	e2.2	e2.2	---	43	---	26	---	.47	.00	---
TOTAL	41.39	58.6	67.3	69.2	68.3	457.5	874	1926	258.8	30.96	2.11	0.55
MEAN	1.34	1.95	2.17	2.23	2.44	14.8	29.1	62.1	8.63	1.00	.068	.018
MAX	3.2	2.5	2.3	2.4	2.7	44	72	109	25	2.1	.42	.20
MIN	.57	1.7	2.0	2.0	2.2	2.3	10	26	2.3	.32	.00	.00
AC-FT	82	116	133	137	135	907	1730	3820	513	61	4.2	1.1

e Estimated.

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.12	10.5	12.2	17.1	14.9	21.3	42.3	91.8	74.9	22.4	3.90	1.77
MAX	22.4	73.9	92.5	144	77.7	80.3	89.2	177	265	123	26.9	7.93
(WY)	1983	1982	1982	1997	1982	1986	1989	1996	1983	1983	1983	1983
MIN	.15	1.06	.80	1.10	1.24	2.52	8.06	18.7	4.59	1.00	.003	.005
(WY)	1978	1978	1977	1991	1991	1977	1975	1977	1992	2001	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1973 - 2001	
ANNUAL TOTAL	8174.47		3854.71			
ANNUAL MEAN	22.3		10.6		26.4	
HIGHEST ANNUAL MEAN					59.0	1983
LOWEST ANNUAL MEAN					5.29	1977
HIGHEST DAILY MEAN	315	May 8	109	May 15	1390	Jan 1 1997
LOWEST DAILY MEAN	.57	Oct 2	.00	Aug 13	.00	Aug 4 1977
ANNUAL SEVEN-DAY MINIMUM	.64	Oct 1	.00	Aug 13	.00	Aug 4 1977
MAXIMUM PEAK FLOW			202	May 15	2530	Jan 1 1997
MAXIMUM PEAK STAGE			5.72	May 15	9.36	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	16210		7650		19090	
10 PERCENT EXCEEDS	67		41		76	
50 PERCENT EXCEEDS	4.9		2.2		6.6	
90 PERCENT EXCEEDS	1.0		.00		.94	

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1973–78, 1980 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1980 to September 1983.
WATER TEMPERATURE: October 1972 to June 1978 (storm season only for water years 1977–78), October 1979 to September 1992.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to June 1978 (storm season only for water years 1977–78), October 1979 to September 1992.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT								
18...	1630	1.1	75	15.0	7.7	609	99	9.4
NOV								
27...	1300	1.8	68	4.9	1.7	608	101	11.2
DEC								
27...	1320	e2.2	68	2.3	.0	613	100	11.8
JAN								
25...	1350	2.2	65	-1.0	.1	603	--	--
FEB								
26...	1520	2.4	65	--	.0	--	--	--
MAR								
23...	1715	25	47	4.0	3.0	613	112	12.1
30...	1825	51	39	4.5	3.5	607	102	10.8
APR								
17...	1925	34	41	6.5	5.2	608	--	--
26...	1915	102	33	8.5	3.0	608	--	--
27...	0610	66	36	-1.0	1.0	606	101	11.4
MAY								
01...	2130	103	32	5.2	3.0	--	--	--
09...	1820	104	30	17.8	6.5	607	100	9.8
15...	0620	64	33	6.0	4.0	608	103	10.8
15...	1330	138	29	12.0	5.9	--	--	--
15...	1815	174	26	10.5	5.0	--	--	--
16...	1145	90	30	15.9	7.0	609	100	9.7
23...	1440	54	32	25.5	13.0	611	100	8.4
JUN								
01...	1105	25	37	21.7	11.0	--	--	--
28...	1815	2.5	55	--	--	--	--	--
JUL								
30...	1315	.49	71	17.3	15.5	607	106	8.4
AUG								
30...	1600	.00	--	--	--	--	--	--
SEP								
20...	1530	.00	--	--	--	--	--	--

e Estimated.

10336676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
18...	<.003	.05	.002	.010	.021	41	2	.01
NOV								
27...	<.003	.04	.004	.010	.021	36	1	<.01
DEC								
27...	<.003	.04	.004	.009	.021	49	2	E.01
JAN								
25...	<.003	.04	.011	.010	.026	38	1	.01
FEB								
26...	<.003	.06	.016	.009	.020	33	2	.01
MAR								
23...	<.003	.09	.017	.008	.018	103	3	.20
30...	.003	.10	.028	.006	.026	107	8	1.1
APR								
17...	.003	.13	.009	.007	.025	131	9	.82
26...	.004	.29	.028	.005	.063	654	48	13
27...	<.003	.18	.036	.004	.017	89	9	1.6
MAY								
01...	.003	.14	.024	.004	.027	226	19	5.3
09...	<.003	.09	.020	.002	.029	230	19	5.3
15...	.003	.06	.027	.002	.016	44	4	.69
15...	.007	.43	.009	.002	.126	1470	109	41
15...	.006	.29	.023	.004	.132	1480	119	56
16...	<.003	.10	.023	.002	.020	155	12	2.9
23...	<.003	.10	.004	.002	.016	38	3	.43
JUN								
01...	.004	.08	.003	.004	.013	30	3	.20
28...	.004	.08	.002	.009	.021	34	<1	<.01
JUL								
30...	.005	.08	.005	.008	.019	34	<1	<.01
AUG								
30...	--	--	--	--	--	--	--	--
SEP								
20...	--	--	--	--	--	--	--	--

e Estimated.

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01, NEAR MEYERS, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°51'48", long 119°57'26", in NE 1/4 NW 1/4 sec.26, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on right bank, 50 ft downstream from U.S. Forest Service Road 12N01, about 2.2 mi upstream from confluence of Saxon Creek, and 2.6 mi northeast of Meyers.

DRAINAGE AREA.—7.41 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1990 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,850 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, 166 ft^3/s, June 27, 1995, gage height, 6.19 ft; minimum daily, 1.9 ft^3/s, Dec. 21, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 12	daily	*18	—	May 16	daily	*18	—

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.1	4.4	4.2	3.7	5.2	7.5	13	7.7	3.6	3.1	2.8
2	3.3	4.2	4.3	4.2	3.8	4.1	6.2	11	7.5	3.6	3.1	2.8
3	3.2	4.2	4.3	4.1	4.0	4.7	5.3	8.3	7.1	3.6	3.0	2.9
4	e3.3	4.3	4.3	4.1	4.1	4.2	5.5	9.7	6.8	3.7	3.0	2.9
5	e3.3	4.4	4.3	4.1	4.0	4.2	4.7	10	6.5	3.7	3.0	2.9
6	3.3	4.5	4.5	4.1	3.9	4.2	4.5	11	6.3	3.6	3.0	2.9
7	3.2	4.4	4.5	4.0	4.5	4.4	e4.4	12	6.0	3.7	3.0	2.9
8	3.2	4.5	4.5	4.1	e4.5	4.3	e4.3	e14	5.8	3.6	3.2	2.9
9	3.2	4.4	4.5	4.0	e4.2	4.2	e4.2	e16	5.7	3.7	3.2	2.9
10	3.6	4.6	4.3	4.2	4.0	4.1	e4.2	e16	5.5	3.7	3.1	2.9
11	3.7	e4.6	4.4	e4.2	4.0	4.0	4.1	e16	5.4	3.6	3.0	3.0
12	3.6	e4.6	4.2	4.3	4.5	4.1	4.2	e18	5.3	3.5	3.0	3.0
13	3.6	e4.6	4.4	4.7	3.8	4.5	4.2	e16	5.2	3.4	3.0	3.0
14	3.6	e4.6	4.3	4.2	4.0	4.6	4.4	e15	5.0	3.4	2.9	3.0
15	3.5	e4.2	4.4	4.3	4.0	4.5	4.8	e14	4.9	3.4	2.9	3.0
16	3.5	4.2	4.4	e4.3	4.0	4.4	5.0	e18	4.7	3.4	2.9	3.0
17	3.4	e4.2	4.5	e4.3	4.0	4.9	5.4	e15	4.6	3.4	2.9	3.0
18	3.4	4.3	e4.5	e4.3	4.1	5.2	5.5	15	4.4	3.4	2.8	3.0
19	3.4	4.1	4.5	4.3	4.1	5.7	5.1	16	4.4	3.4	2.8	3.0
20	3.5	4.1	4.4	4.2	4.1	6.3	4.6	17	4.2	3.3	2.8	3.0
21	3.6	4.1	4.2	4.2	4.1	6.0	5.1	15	4.2	3.3	2.9	3.0
22	3.4	4.1	4.1	4.3	4.1	5.6	4.9	13	4.1	3.3	2.9	3.0
23	3.5	4.1	4.2	4.2	4.8	5.6	5.8	15	4.0	3.3	2.9	3.0
24	3.7	4.1	4.1	4.4	4.3	5.9	6.9	15	3.9	3.2	2.9	3.0
25	3.8	4.1	e4.1	4.5	4.2	5.9	8.2	12	3.9	3.2	2.8	3.9
26	4.0	4.3	4.1	4.5	4.2	6.1	9.5	12	3.9	3.2	2.8	3.2
27	4.2	4.4	4.1	4.5	4.1	6.1	11	14	4.0	3.1	2.8	3.2
28	4.2	4.4	4.3	e4.5	4.1	7.1	10	14	3.9	3.1	2.8	3.2
29	4.3	4.5	4.2	4.5	---	7.2	10	12	3.8	3.0	2.8	3.2
30	4.1	4.5	4.3	e4.5	---	7.1	13	8.9	3.7	3.1	2.8	3.2
31	4.1	---	4.2	e4.5	---	7.5	---	7.7	---	3.2	2.8	---
TOTAL	111.0	129.7	133.8	132.8	115.2	161.9	182.5	419.6	152.4	105.7	90.9	90.7
MEAN	3.58	4.32	4.32	4.28	4.11	5.22	6.08	13.5	5.08	3.41	2.93	3.02
MAX	4.3	4.6	4.5	4.7	4.8	7.5	13	18	7.7	3.7	3.2	3.9
MIN	3.2	4.1	4.1	4.0	3.7	4.0	4.1	7.7	3.7	3.0	2.8	2.8
AC-FT	220	257	265	263	228	321	362	832	302	210	180	180

e Estimated.

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01, NEAR MEYERS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.16	5.42	5.84	6.82	5.46	6.76	10.4	25.7	31.0	16.2	7.51	5.68
MAX	7.87	8.20	14.2	24.9	11.4	14.2	22.3	48.1	84.9	62.1	20.0	10.7
(WY)	1999	1997	1997	1997	1997	1997	1997	1997	1995	1995	1995	1998
MIN	2.91	2.93	2.63	2.59	2.65	3.25	5.18	8.81	4.10	3.41	2.93	3.02
(WY)	1993	1993	1993	1991	1991	1991	1991	1992	1992	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	3106.3		1826.2			
ANNUAL MEAN	8.49		5.00		11.3	
HIGHEST ANNUAL MEAN					19.8	1995
LOWEST ANNUAL MEAN					4.48	1992
HIGHEST DAILY MEAN	40	May 24	18	May 12	130	Jun 28 1995
LOWEST DAILY MEAN	3.2	Oct 3	2.8	Aug 18	1.9	Dec 21 1990
ANNUAL SEVEN-DAY MINIMUM	3.2	Oct 3	2.8	Aug 25	2.4	Dec 17 1990
MAXIMUM PEAK FLOW			18	May 12	166	Jun 27 1995
MAXIMUM PEAK STAGE			5.16	Jan 17	6.19	Jun 27 1995
ANNUAL RUNOFF (AC-FT)	6160		3620		8200	
10 PERCENT EXCEEDS	20		7.9		24	
50 PERCENT EXCEEDS	5.9		4.2		6.0	
90 PERCENT EXCEEDS	4.1		3.0		3.2	

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01, NEAR MEYERS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1990 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature monitor records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction. Water temperature records for September 1997 were not published but are available from the U.S. Geological Survey, in Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 13.0°C, July 12–14, 1999, June 14, 15, July 31, 2000, May 31, June 21, 22, July 2, 3, 2001; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 13.0°C, May 31, June 21, 22, July 2, 3; minimum, freezing point, many days November, December, and February to April..

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
06...	1600	2.9	54	--	18.5	6.3	--	--	--
NOV									
08...	1535	4.5	53	--	3.5	2.3	--	--	--
DEC									
20...	1200	4.2	51	7.3	2.0	1.3	--	--	--
JAN									
31...	1205	e4.5	52	--	-1.5	.1	--	--	--
MAR									
26...	1140	5.9	46	--	8.5	2.5	--	--	--
MAY									
07...	1140	11	33	--	17.0	4.6	--	--	--
10...	1705	e16	29	--	18.5	8.5	--	--	--
15...	1235	e14	28	--	12.5	7.6	--	--	--
22...	1205	13	29	--	21.0	8.7	--	--	--
30...	1540	7.8	37	--	18.5	11.4	--	--	--
JUN									
07...	1145	6.7	42	7.6	20.5	8.1	593	100	9.1
JUL									
03...	1605	3.4	52	--	24.5	12.8	--	--	--
AUG									
06...	1525	2.9	55	--	23.0	10.7	--	--	--
SEP									
13...	1630	2.9	57	7.2	16.5	7.7	589	102	9.4

e Estimated.

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01, NEAR MEYERS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
06...	<.003	.05	.003	.009	.017	61	2	.02
NOV								
08...	<.003	.05	.002	.009	.018	59	1	.01
DEC								
20...	<.003	.04	.009	.011	.017	54	2	.02
JAN								
31...	<.003	.06	.013	.009	.021	138	3	.04
MAR								
26...	<.003	.11	.006	.007	.017	120	2	.03
MAY								
07...	.005	.68	.007	.006	.018	180	6	.19
10...	.008	.26	.005	.006	.027	311	6	e.26
15...	<.003	.08	.004	.006	.019	154	3	e.11
22...	<.003	.10	.003	.006	.024	134	2	.07
30...	.004	.12	.004	.008	.020	108	3	.06
JUN								
07...	.009	.05	.005	.008	.016	73	3	.05
JUL								
03...	<.003	.07	.002	.010	.020	62	6	.06
AUG								
06...	<.003	.10	.007	.011	.019	75	3	.02
SEP								
13...	<.003	.16	.004	.009	.016	61	2	.02

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.0	5.5	7.0	2.0	.0	1.0	1.5	.5	1.0	---	---	---
2	8.0	6.0	7.0	2.5	1.0	2.0	1.5	.5	1.0	---	---	---
3	8.0	5.5	6.5	2.5	1.5	2.0	1.0	.0	.5	---	---	---
4	7.5	4.5	6.0	2.0	.5	1.5	2.0	.5	1.5	---	---	---
5	7.5	4.5	6.0	3.0	1.0	2.0	---	---	---	---	---	---
6	7.0	4.5	6.0	2.5	1.0	2.0	---	---	---	---	---	---
7	7.0	4.5	6.0	1.5	.5	1.0	---	---	---	---	---	---
8	7.0	4.0	5.5	2.5	1.0	1.5	---	---	---	---	---	---
9	6.5	4.5	5.5	1.5	.0	1.0	---	---	---	---	---	---
10	5.0	3.5	4.0	.5	.0	.0	---	---	---	---	---	---
11	3.5	2.5	3.0	.0	.0	.0	---	---	---	---	---	---
12	3.5	1.5	2.5	.0	.0	.0	---	---	---	---	---	---
13	4.5	2.0	3.0	.0	.0	.0	---	---	---	---	---	---
14	5.0	3.0	4.0	.5	.0	.0	---	---	---	---	---	---
15	5.0	2.5	4.0	.5	.0	.0	---	---	---	---	---	---
16	4.5	2.0	3.5	.5	.0	.5	---	---	---	---	---	---
17	5.0	2.5	4.0	.0	.0	.0	---	---	---	---	---	---
18	5.0	3.0	4.0	1.0	.0	.5	---	---	---	---	---	---
19	5.0	2.5	4.0	1.5	.5	1.0	---	---	---	---	---	---
20	5.5	3.0	4.0	1.5	.5	1.0	---	---	---	---	---	---
21	5.0	2.5	3.5	1.5	.5	1.0	---	---	---	---	---	---
22	2.5	1.0	1.5	1.5	1.0	1.0	---	---	---	---	---	---
23	3.0	1.0	2.0	1.5	.5	1.0	---	---	---	---	---	---
24	3.5	1.5	2.5	2.0	1.5	1.5	---	---	---	---	---	---
25	3.5	2.5	3.0	2.0	1.0	1.5	---	---	---	---	---	---
26	3.0	2.5	2.5	2.0	1.5	1.5	---	---	---	---	---	---
27	3.0	1.0	2.0	2.5	1.5	2.0	---	---	---	---	---	---
28	3.0	2.0	2.5	2.5	1.5	2.0	---	---	---	---	---	---
29	2.0	.5	1.5	2.0	.0	1.0	---	---	---	---	---	---
30	2.0	1.0	1.5	1.0	.0	.5	---	---	---	---	---	---
31	1.5	.5	1.0	---	---	---	---	---	---	---	---	---
MONTH	8.0	.5	3.8	3.0	.0	1.0	---	---	---	---	---	---

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

10336770 TROUT CREEK AT U.S. FOREST SERVICE ROAD 12N01, NEAR MEYERS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.0	.5	1.0	.0	.5	4.5	1.5	3.0	7.0	2.5	4.0
2	1.5	.5	1.0	1.5	.5	1.0	3.0	.5	2.0	4.5	1.0	3.0
3	2.0	1.5	1.5	1.0	.0	.5	1.5	.0	1.0	5.0	.5	2.5
4	2.0	1.5	1.5	1.5	1.0	1.0	1.5	.0	.5	7.0	1.0	3.5
5	1.5	.5	1.5	1.5	1.0	1.0	2.5	.0	1.0	7.5	2.5	4.5
6	1.5	.0	1.0	2.0	1.5	1.5	2.5	.5	1.5	8.0	2.0	5.0
7	.0	.0	.0	2.5	1.5	2.0	1.0	.0	.0	8.5	2.5	5.0
8	.0	.0	.0	2.5	1.5	2.0	.0	.0	.0	8.5	3.0	5.5
9	.5	.0	.0	2.0	1.0	1.5	.0	.0	.0	8.0	2.5	5.0
10	.0	.0	.0	2.0	1.0	1.5	1.5	.0	.5	8.5	2.5	5.0
11	.5	.0	.0	---	.5	---	1.5	.0	1.0	9.0	3.5	6.0
12	.5	.0	.0	2.0	.5	1.5	2.0	.0	1.0	7.5	4.0	6.0
13	.5	.0	.5	2.5	.5	1.5	2.5	.5	1.5	8.5	4.5	6.5
14	1.0	.0	.5	2.5	.5	1.5	3.0	.0	1.5	7.5	4.0	6.0
15	1.0	.0	.5	2.5	1.0	1.5	3.5	.0	2.0	8.0	5.5	7.0
16	1.0	.5	1.0	2.5	1.0	2.0	4.5	1.0	2.5	9.0	4.5	7.0
17	1.5	.5	1.0	3.0	1.5	2.5	5.0	1.5	3.0	10.0	4.5	7.0
18	1.5	1.0	1.5	3.0	2.0	2.5	4.5	1.0	3.0	10.0	5.0	7.5
19	1.5	1.0	1.5	3.5	1.5	2.5	2.0	1.0	1.5	10.5	5.5	8.0
20	1.5	.5	1.0	3.5	2.0	2.5	1.0	.0	.5	11.0	5.5	8.5
21	1.5	1.0	1.0	3.5	1.5	2.5	2.5	.0	1.0	11.0	6.5	8.5
22	1.0	.0	.5	3.5	2.0	2.5	4.0	.0	2.0	11.5	6.0	8.5
23	.5	.0	.0	3.5	1.5	2.5	5.0	1.5	3.0	12.0	6.5	9.5
24	1.0	.0	.5	3.5	1.5	2.5	6.0	2.0	3.5	12.0	6.5	9.5
25	1.5	.5	1.0	4.0	2.0	3.0	6.5	2.0	4.0	11.5	7.0	9.0
26	1.5	1.0	1.5	3.5	1.0	2.5	6.5	2.0	4.0	11.5	7.0	9.0
27	1.5	.5	1.0	4.0	1.0	2.5	6.5	1.5	3.5	10.5	6.5	8.5
28	.5	.0	.5	4.5	2.5	3.5	5.5	2.5	3.5	10.5	6.0	8.5
29	---	---	---	4.0	2.0	3.0	6.5	1.0	3.5	11.5	5.5	8.5
30	---	---	---	4.5	1.5	3.0	7.5	2.5	4.5	12.0	7.0	9.5
31	---	---	---	5.0	1.5	3.0	---	---	---	13.0	7.5	10.0
MONTH	2.0	.0	.7	---	.0	---	7.5	.0	2.0	13.0	.5	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.5	8.0	10.0	12.5	7.5	10.5	11.5	7.0	9.5	10.5	7.5	9.5
2	10.5	7.0	8.5	13.0	9.0	11.0	11.5	7.5	10.0	10.5	7.5	9.5
3	9.5	5.0	7.5	13.0	10.0	11.5	12.0	9.0	10.5	10.5	8.0	9.5
4	9.5	4.0	7.0	12.0	10.0	11.0	11.0	8.5	10.0	10.0	7.5	9.0
5	10.0	6.0	8.0	12.0	10.0	11.0	11.5	7.0	9.5	---	8.0	---
6	11.5	5.5	8.5	11.5	9.0	10.0	11.5	7.5	10.0	9.0	6.0	7.5
7	11.5	6.0	9.0	10.5	9.5	10.0	11.5	9.0	10.5	9.0	5.5	7.5
8	11.5	6.0	9.0	11.5	8.0	10.0	11.5	9.5	10.5	9.0	6.5	8.0
9	11.0	6.0	9.0	10.5	8.5	9.5	12.0	9.0	10.5	9.5	6.5	8.0
10	9.5	6.5	8.0	11.5	8.0	9.5	12.0	9.0	10.5	9.5	7.0	8.5
11	10.5	5.5	8.0	11.5	8.0	10.0	11.5	7.0	9.5	9.5	8.5	9.0
12	10.5	6.5	8.5	11.0	6.0	9.0	12.0	9.0	10.5	9.0	7.0	8.5
13	9.5	5.0	7.5	11.5	7.0	9.5	12.0	8.5	10.5	8.5	5.5	7.5
14	10.5	4.5	7.5	11.0	6.5	9.0	11.5	8.0	10.0	8.5	5.5	7.0
15	11.0	5.5	8.5	10.5	6.0	8.5	11.5	7.0	9.5	8.5	5.5	7.5
16	11.5	5.5	9.0	---	---	---	11.5	7.5	10.0	8.5	6.5	7.5
17	11.5	7.0	9.5	10.5	6.0	8.5	11.5	8.5	10.0	9.0	6.0	7.5
18	11.5	6.0	9.0	10.5	6.0	8.5	11.5	9.0	10.5	9.5	7.0	8.0
19	11.5	6.0	9.0	10.5	6.5	9.0	11.5	8.0	10.0	9.5	6.5	8.0
20	12.5	7.0	10.0	10.5	6.5	9.0	10.5	8.5	10.0	9.0	7.0	8.0
21	13.0	8.0	10.5	10.5	6.5	9.0	10.0	6.5	8.5	8.5	6.0	7.5
22	13.0	8.0	10.5	10.5	6.5	9.0	9.5	6.5	8.0	9.0	6.0	7.5
23	12.0	9.0	10.5	11.0	7.0	9.5	10.0	6.5	8.5	8.5	6.5	7.5
24	---	7.5	---	11.5	7.5	10.0	10.0	7.0	9.0	9.0	6.0	7.5
25	10.0	8.0	9.0	12.5	8.5	10.5	11.0	7.0	9.0	---	8.0	---
26	11.0	8.0	9.5	12.5	8.5	10.5	11.5	8.0	10.0	8.5	6.0	7.5
27	10.0	8.5	9.0	11.5	7.5	10.0	11.0	8.0	10.0	8.0	6.0	7.5
28	11.5	6.5	9.5	11.5	8.5	10.0	11.5	8.5	10.0	8.0	6.0	7.0
29	12.5	7.5	10.0	11.0	7.5	9.5	11.0	7.5	9.5	7.5	5.0	6.5
30	12.5	8.0	10.5	11.0	8.0	9.5	10.5	7.5	9.5	8.0	5.5	7.0
31	---	---	---	11.5	7.0	9.5	11.0	8.0	9.5	---	---	---
MONTH	---	4.0	---	---	---	---	12.0	6.5	9.8	---	5.0	---

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°54'13", long 119°58'04", in SE 1/4 NE 1/4 sec.10, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 200 ft upstream of Pioneer Trail Road, 0.6 mi upstream of confluence of Cold Creek, and 2.8 mi south of South Lake Tahoe.

DRAINAGE AREA.—23.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—June 1990 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,270 ft above sea level, from topographic map. Prior to May 1, 1992, at datum 0.12 ft higher.

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, 525 ft^3/s, Jan. 2, 1997, gage height, 7.59 ft; minimum daily, 2.0 ft^3/s, Dec. 22, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 12	0115	*33	*2.08

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	9.5	e8.2	9.6	e10	10	16	23	14	5.9	4.6	3.9
2	7.4	8.6	8.2	9.9	11	8.5	15	21	14	6.1	4.4	3.9
3	7.4	8.6	e8.2	10	10	9.3	13	19	13	6.8	4.4	3.9
4	7.5	8.4	e8.2	10	9.7	8.5	12	18	13	e6.7	4.4	4.0
5	7.5	8.4	e8.2	10	9.3	8.3	12	19	12	6.6	4.4	4.0
6	7.4	8.5	e8.2	10	8.7	8.2	11	20	12	6.5	4.2	3.9
7	7.4	8.5	e8.2	10	8.8	8.4	10	22	11	6.6	4.2	3.9
8	7.4	8.4	8.6	9.7	e10	8.6	e10	24	11	6.5	4.5	3.9
9	7.5	8.5	8.5	9.6	9.6	8.3	e10	26	10	6.3	4.9	3.9
10	7.9	8.1	8.6	9.2	e10	8.0	e10	26	10	6.6	4.4	3.9
11	8.2	e8.1	e8.4	11	e10	8.5	10	26	10	6.2	4.2	3.9
12	8.3	e8.1	8.4	11	e10	9.1	12	28	10	6.1	4.1	4.2
13	8.3	e8.1	12	11	e10	8.7	12	26	9.7	5.9	4.1	4.1
14	8.3	e8.1	8.8	10	e10	8.9	12	25	9.7	5.7	4.0	4.0
15	8.1	e8.1	8.8	9.8	e10	8.2	12	25	9.5	5.6	4.0	4.0
16	8.0	e8.1	e8.8	9.3	10	8.1	13	28	9.2	5.6	4.0	4.0
17	7.9	e8.1	e8.8	8.5	9.6	8.6	14	26	8.9	5.6	3.9	4.1
18	7.9	e8.1	e8.8	e9.0	9.2	9.7	14	24	8.7	5.6	3.9	4.2
19	7.8	e8.1	e8.8	10	8.9	11	14	23	8.6	5.4	3.8	4.1
20	7.8	e8.1	e8.8	e10	9.2	12	13	23	8.4	5.3	3.9	4.3
21	8.0	e8.1	e8.8	11	8.8	13	13	22	8.3	5.1	4.0	4.3
22	7.9	e8.1	8.8	10	8.7	13	14	21	8.1	5.1	4.0	4.4
23	8.1	e8.1	e8.8	10	11	13	15	22	7.9	5.1	4.1	4.4
24	8.1	8.5	e8.8	10	9.8	14	17	21	7.2	5.1	4.0	4.3
25	8.2	e8.5	e8.8	9.8	10	16	19	19	6.2	4.9	4.0	5.9
26	8.6	8.5	e8.8	9.8	9.2	14	21	18	6.2	4.8	3.9	5.0
27	8.8	8.6	e8.8	9.6	8.5	14	22	17	6.3	4.7	3.9	4.8
28	8.8	8.3	9.7	9.9	9.3	15	21	16	6.8	4.6	3.8	4.7
29	9.7	8.5	9.5	e9.7	---	16	20	15	6.2	4.5	3.8	4.9
30	8.9	e8.5	9.5	9.6	---	16	21	15	5.9	4.6	3.8	4.6
31	8.8	---	9.8	10	---	16	---	14	---	4.7	3.9	---
TOTAL	249.4	250.2	273.6	307.0	269.3	338.9	428	672	281.8	174.8	127.5	127.4
MEAN	8.05	8.34	8.83	9.90	9.62	10.9	14.3	21.7	9.39	5.64	4.11	4.25
MAX	9.7	9.5	12	11	11	16	22	28	14	6.8	4.9	5.9
MIN	7.4	8.1	8.2	8.5	8.5	8.0	10	14	5.9	4.5	3.8	3.9
AC-FT	495	496	543	609	534	672	849	1330	559	347	253	253

e Estimated.

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.53	10.3	12.0	18.5	15.6	21.6	30.4	57.4	61.7	33.8	13.4	9.55
MAX	15.4	18.7	34.2	87.8	38.2	42.0	54.9	107	158	142	35.8	19.0
(WY)	1999	1997	1997	1997	1997	1997	1996	1996	1995	1995	1995	1995
MIN	4.49	5.03	4.05	4.70	5.49	7.85	12.2	14.2	7.66	5.64	4.11	4.08
(WY)	1991	1991	1991	1991	1993	1992	1991	1992	1992	2001	2001	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	6273.6		3499.9			
ANNUAL MEAN	17.1		9.59		25.2	
HIGHEST ANNUAL MEAN					46.9	1995
LOWEST ANNUAL MEAN					7.71	1992
HIGHEST DAILY MEAN	65	May 24	28	May 12	457	Jan 2 1997
LOWEST DAILY MEAN	7.3	Sep 21	3.8	Aug 19	2.0	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	7.4	Oct 2	3.9	Aug 26	2.8	Dec 21 1990
MAXIMUM PEAK FLOW			33	May 12	525	Jan 2 1997
MAXIMUM PEAK STAGE			2.08	May 12	7.59	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	12440		6940		18230	
10 PERCENT EXCEEDS	34		16		60	
50 PERCENT EXCEEDS	14		8.6		13	
90 PERCENT EXCEEDS	7.8		4.1		5.0	

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1990 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In November 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature records represent water temperature at probe within 0.5°C. Interruptions in water temperature record due to instrument malfunction and loss of communication between stream and sensor. Water temperature data for September 1997 were not published but are available for the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 22.0°C, July 2, 2001; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 22.0°C, July 2; minimum, freezing point, many days October to April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
05...	1530	7.7	58	--	20.0	10.6	--	--	--
NOV									
08...	1400	8.6	56	--	6.0	3.2	--	--	--
DEC									
07...	1305	e8.2	55	7.3	7.0	2.0	603	98	10.7
JAN									
04...	1145	13	53	--	6.0	.3	--	--	--
FEB									
07...	1140	10	55	--	-7.0	.0	--	--	--
MAR									
06...	1240	8.3	53	7.4	8.0	1.7	602	96	10.6
20...	1305	11	53	--	13.5	4.8	--	--	--
29...	1500	15	49	--	12.0	8.0	--	--	--
APR									
04...	1250	14	42	--	2.0	3.5	--	--	--
16...	1810	13	49	--	6.0	7.2	--	--	--
25...	1310	17	48	--	18.5	8.1	--	--	--
MAY									
04...	1320	18	45	--	14.0	7.0	--	--	--
07...	1900	21	40	--	16.5	10.5	--	--	--
15...	1415	24	34	--	14.0	9.8	--	--	--
22...	1345	21	34	--	23.5	12.9	--	--	--
30...	1345	15	39	--	22.5	14.9	--	--	--
JUN									
07...	1335	11	44	7.6	25.0	15.6	606	96	7.5
JUL									
03...	1400	6.9	56	--	33.0	19.4	--	--	--
03...	1830	E7.0	64	--	18.0	19.5	--	--	--
AUG									
06...	1510	4.4	58	--	28.5	19.4	--	--	--
SEP									
13...	1435	4.3	61	7.8	21.0	14.3	604	106	8.6

e Estimated.

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
05...	<.003	<.04	.003	.010	.019	154	1	.02
NOV								
08...	<.003	.05	.003	.007	.015	150	1	.02
DEC								
07...	<.003	.04	.005	.008	.013	122	1	E.02
JAN								
04...	<.003	.07	.011	.007	.032	399	63	2.2
FEB								
07...	<.003	.06	.016	.008	.037	1020	3	.08
MAR								
06...	.003	.10	.015	.009	.032	542	26	.58
20...	<.003	.19	.013	.009	.021	281	2	.06
29...	.003	.12	.018	.009	.022	312	7	.28
APR								
04...	<.003	.06	.013	.008	.021	329	4	.15
16...	.003	.13	.009	.008	.017	280	3	.11
25...	<.003	.09	.013	.007	.021	346	4	.18
MAY								
04...	.005	.09	.013	.006	.015	219	2	.10
07...	<.003	.09	.006	.006	.019	252	16	.91
15...	.005	.09	.005	.006	.020	259	4	.26
22...	.005	.07	.003	.006	.018	228	3	.17
30...	.007	.05	.003	.007	.020	193	3	.12
JUN								
07...	.006	.06	.006	.007	.018	158	3	.09
JUL								
03...	<.003	.08	.004	.009	.020	180	2	.04
03...	.008	.66	.037	.014	.103	1450	55	e1.0
AUG								
06...	<.003	.04	.006	.010	.018	190	1	.01
SEP								
13...	<.003	.14	.003	.010	.016	175	1	.01

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

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	6.0	9.5	2.5	.0	1.0	1.0	.0	.5	.0	.0	.0
2	13.5	7.0	10.0	4.0	.5	2.0	2.0	.0	1.0	.0	.0	.0
3	12.5	6.5	9.5	4.5	1.0	2.5	1.0	.0	.5	.0	.0	.0
4	12.0	6.0	9.0	3.5	.0	1.5	1.0	.0	.5	.0	.0	.0
5	12.0	5.5	8.5	4.0	.0	2.0	---	---	---	.0	.0	.0
6	11.5	5.5	8.5	4.0	.5	2.0	.5	.0	.5	.0	.0	.0
7	11.5	5.0	8.0	3.0	.0	1.0	2.5	.0	1.0	.0	.0	.0
8	11.0	5.0	8.0	3.0	.0	1.5	3.0	1.0	1.5	.5	.0	.0
9	10.5	5.0	7.5	2.5	.0	1.0	2.0	.5	1.0	.0	.0	.0
10	9.5	5.5	7.0	.5	.0	.0	3.0	.0	1.5	.0	.0	.0
11	6.0	4.0	5.0	.0	.0	.0	1.0	.0	.5	.0	.0	.0
12	5.5	2.0	4.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0
13	7.5	2.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	8.0	3.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	8.0	3.0	5.5	.0	.0	.0	1.0	.0	.5	.0	.0	.0
16	8.0	2.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	8.0	2.5	5.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
18	8.5	3.0	5.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
19	8.0	3.0	5.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
20	8.0	3.0	5.5	.5	.0	.0	.5	.0	.0	.0	.0	.0
21	7.0	4.0	5.0	.5	.0	.0	1.0	.0	.0	.0	.0	.0
22	5.0	2.0	3.0	.5	.0	.0	1.5	.0	.5	.0	.0	.0
23	5.0	.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	6.0	1.0	3.5	1.0	.0	.0	.5	.0	.0	.0	.0	.0
25	5.5	2.0	4.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0
26	4.5	2.5	3.5	1.0	.0	.5	.0	.0	.0	.0	.0	.0
27	5.0	1.5	3.0	2.0	.0	1.0	.0	.0	.0	.0	.0	.0
28	4.5	2.0	3.0	2.5	.5	1.0	.0	.0	.0	.0	.0	.0
29	3.0	.0	1.5	1.0	.0	.5	.0	.0	.0	.0	.0	.0
30	4.0	1.0	2.0	.5	.0	.5	.0	.0	.0	.0	.0	.0
31	3.5	.0	1.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	13.5	.0	5.5	4.5	.0	.6	---	---	---	.5	.0	.0

		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	8.0	2.5	5.0	10.0	4.0	7.0
2	.0	.0	.0	.5	.0	.0	5.5	1.5	3.5	8.5	3.0	5.5
3	.0	.0	.0	.0	.0	.0	5.5	.5	2.0	8.5	1.5	4.5
4	.0	.0	.0	.5	.0	.0	4.0	.0	1.5	10.0	2.0	5.5
5	.5	.0	.0	.0	.0	.0	5.5	.0	2.0	11.0	3.5	7.0
6	.5	.0	.0	1.5	.0	.5	5.0	.5	2.0	11.0	4.0	7.0
7	.0	.0	.0	2.5	.0	1.0	1.0	.0	.0	11.5	4.5	8.0
8	.0	.0	.0	3.5	.0	1.5	.5	.0	.0	12.0	5.0	8.5
9	.0	.0	.0	3.5	.0	1.0	.5	.0	.0	11.0	5.0	8.0
10	.0	.0	.0	4.0	.0	1.5	2.0	.0	.5	11.5	4.5	8.0
11	.0	.0	.0	4.0	.0	1.5	1.0	.0	.5	12.0	5.0	8.5
12	.0	.0	.0	4.0	.0	1.5	4.0	.0	1.0	10.0	6.0	8.0
13	.0	.0	.0	4.5	.0	2.0	5.5	.0	2.0	12.0	6.0	8.5
14	.0	.0	.0	4.5	.0	2.0	6.5	.0	2.5	9.5	5.5	7.5
15	.0	.0	.0	3.5	.0	1.5	8.0	.0	3.5	10.0	6.5	8.0
16	.0	.0	.0	5.5	.5	2.5	8.5	1.0	4.0	12.0	6.0	8.5
17	.0	.0	.0	6.0	1.0	3.0	9.5	2.0	5.5	12.5	6.0	9.0
18	.0	.0	.0	6.0	1.0	3.0	8.5	1.5	5.0	12.5	6.0	9.0
19	.0	.0	.0	6.0	.5	3.0	4.0	1.5	3.0	13.0	6.5	9.5
20	.0	.0	.0	6.5	1.0	3.0	2.0	.0	1.0	14.0	6.5	10.0
21	.0	.0	.0	6.0	1.0	3.0	3.5	.0	1.0	14.5	8.0	10.5
22	.0	.0	.0	5.0	1.5	3.0	7.5	.0	3.0	14.0	7.0	10.0
23	.0	.0	.0	7.0	1.0	3.5	9.5	1.5	5.0	15.0	8.0	11.0
24	.0	.0	.0	7.0	1.5	3.5	10.0	2.5	6.0	15.5	8.0	11.5
25	.0	.0	.0	6.5	2.5	4.0	10.5	3.0	6.5	14.5	8.0	11.0
26	.0	.0	.0	6.5	1.0	3.5	10.0	3.5	6.5	15.5	8.5	11.5
27	.0	.0	.0	7.5	1.5	4.0	10.0	3.0	6.0	14.0	7.5	10.5
28	.0	.0	.0	8.0	3.0	5.0	8.0	3.5	5.5	14.5	7.0	10.5
29	---	---	---	8.0	2.5	4.5	9.5	2.0	5.5	15.0	7.0	10.5
30	---	---	---	8.0	1.5	4.5	11.0	3.5	7.0	16.5	8.0	12.0
31	---	---	---	8.5	2.0	5.0	---	---	---	17.5	8.5	12.5
MONTH	.5	.0	.0	8.5	.0	2.3	11.0	.0	3.2	17.5	1.5	8.9

10336775 TROUT CREEK AT PIONEER TRAIL, NEAR SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	9.5	13.0	21.0	9.5	15.0	20.0	9.0	14.0	---	---	---
2	16.0	9.0	11.5	22.0	10.5	16.0	20.0	9.0	14.5	---	---	---
3	15.0	6.5	10.5	21.5	12.0	16.5	20.5	10.5	15.0	---	---	---
4	14.5	6.0	9.5	18.5	13.0	15.5	20.0	10.5	14.5	---	---	---
5	15.5	6.5	10.5	19.5	12.5	15.5	20.0	8.5	14.0	---	---	---
6	17.0	7.0	11.5	16.0	12.0	14.0	19.5	9.5	14.5	---	---	---
7	17.5	7.5	12.0	16.5	12.5	14.0	17.0	10.5	14.0	---	---	---
8	17.5	8.0	12.5	20.0	10.0	14.5	18.0	11.0	14.5	---	---	---
9	17.5	7.5	12.0	15.0	11.0	12.5	20.5	10.5	15.0	---	---	---
10	14.5	8.0	10.5	16.5	9.5	13.0	21.5	11.0	16.0	---	---	---
11	15.0	7.0	11.0	19.0	10.0	14.0	20.5	9.5	14.5	---	---	---
12	17.0	8.0	12.0	19.5	8.5	13.5	21.0	11.0	15.5	---	---	---
13	16.0	6.5	10.5	20.5	9.5	14.5	21.0	10.5	15.0	---	---	---
14	16.5	5.5	10.5	20.0	9.0	14.0	20.5	10.0	15.0	15.0	5.5	10.0
15	18.0	7.0	12.0	19.5	8.5	13.5	20.0	9.0	14.0	15.0	6.0	10.0
16	18.5	7.0	12.5	15.5	8.5	12.0	20.5	9.5	14.5	15.5	7.0	10.5
17	18.5	8.5	13.0	19.0	7.5	13.0	20.5	10.0	14.5	15.0	6.0	10.5
18	18.5	7.5	13.0	19.5	8.0	13.5	18.5	10.0	14.0	15.5	6.5	10.5
19	19.0	8.0	13.0	19.0	8.5	13.5	19.0	9.0	13.5	15.5	6.5	10.5
20	19.5	9.0	14.0	19.0	8.5	13.5	18.0	9.5	13.5	15.5	7.0	11.0
21	20.5	10.0	15.0	19.5	8.0	13.5	17.5	7.5	12.0	15.5	6.0	10.0
22	21.0	10.0	15.0	19.5	8.0	13.5	17.0	7.5	12.0	14.5	6.0	10.0
23	19.5	10.5	14.5	19.5	9.0	14.0	16.0	7.0	11.5	12.5	6.5	9.5
24	18.5	9.0	13.5	20.5	9.5	14.5	18.5	8.0	13.0	13.5	5.5	9.5
25	14.5	10.0	12.0	21.0	10.5	15.5	19.0	8.0	13.0	14.5	9.0	11.0
26	17.0	10.0	13.0	21.5	11.0	15.5	---	---	---	14.5	6.0	10.0
27	15.5	10.5	12.5	20.5	9.5	14.5	---	---	---	14.0	6.0	9.5
28	19.5	7.5	13.0	20.0	9.5	14.5	---	---	---	14.0	6.0	9.5
29	20.5	9.0	14.5	20.0	9.0	14.0	---	---	---	13.5	5.5	9.0
30	20.5	10.0	15.0	18.5	10.0	13.5	---	---	---	13.5	5.0	9.0
31	---	---	---	19.5	8.5	14.0	---	---	---	---	---	---
MONTH	21.0	5.5	12.4	22.0	7.5	14.1	---	---	---	---	---	---

10336779 COLD CREEK AT MOUTH, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°54'44", long 119°58'06", in SE 1/4 SE 1/4 sec.03, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 600 ft upstream of mouth, about 0.5 mi downstream from Pioneer Trail Road, and 1.7 mi south of South Lake Tahoe.

DRAINAGE AREA.—12.8 mi^2.

PERIOD OF RECORD.—September 1997 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to current year.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS.—In September 1997, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor streamflows and water temperature within the Upper Truckee River–Trout Creek watershed. Records represent water temperature at probe within 0.5°C. Interruptions in record due to instrument malfunction. Water temperature data for September 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 18.5°C, July 26, Aug. 10, 2001; minimum, freezing point on many days.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 18.5°C, July 26, Aug. 10; minimum, freezing point, many days December to April, but presumably occured during period of instrument malfunction.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	1.5	.0	.5
2	---	---	---	---	---	---	---	---	---	1.5	.0	.5
3	---	---	---	---	---	---	---	---	---	1.5	.0	.5
4	---	---	---	---	---	---	---	---	---	1.5	.0	.5
5	---	---	---	---	---	---	---	---	---	1.5	.0	.5
6	---	---	---	---	---	---	---	---	---	2.0	.0	.5
7	---	---	---	---	---	---	---	---	---	2.0	.0	1.0
8	---	---	---	---	---	---	---	---	---	3.5	1.5	2.0
9	---	---	---	---	---	---	---	---	---	2.0	.0	1.0
10	---	---	---	---	---	---	---	---	---	1.5	.0	.5
11	---	---	---	---	---	---	---	---	---	1.0	.0	.5
12	---	---	---	---	---	---	---	---	---	1.0	.0	.5
13	---	---	---	---	---	---	---	---	---	2.0	.0	1.0
14	---	---	---	---	---	---	---	---	---	1.0	.0	.5
15	---	---	---	---	---	---	---	---	---	.0	.0	.0
16	---	---	---	---	---	---	1.5	.0	.5	.0	.0	.0
17	---	---	---	---	---	---	2.0	.5	1.0	.0	.0	.0
18	---	---	---	---	---	---	.5	.0	.0	.0	.0	.0
19	---	---	---	---	---	---	2.0	.0	1.0	1.5	.0	.5
20	---	---	---	---	---	---	2.5	1.0	1.5	1.0	.0	.5
21	---	---	---	---	---	---	3.0	1.0	2.0	2.5	.5	1.5
22	---	---	---	---	---	---	2.5	1.0	1.5	3.0	1.5	2.0
23	---	---	---	---	---	---	2.0	.0	1.0	2.5	1.0	1.5
24	---	---	---	---	---	---	2.0	.5	1.0	2.0	.5	1.0
25	---	---	---	---	---	---	1.5	.0	.5	1.5	.0	.5
26	---	---	---	---	---	---	1.0	.0	.5	1.5	.5	1.0
27	---	---	---	---	---	---	1.5	.0	.5	1.5	.0	.5
28	---	---	---	---	---	---	1.5	.0	1.0	.5	.0	.0
29	---	---	---	---	---	---	2.0	.0	1.0	1.5	.0	.5
30	---	---	---	---	---	---	1.5	.0	.5	.0	.0	.0
31	---	---	---	---	---	---	1.5	.0	.5	.0	.0	.0
MONTH	---	---	---	---	---	---	---	---	---	3.5	.0	.6

10336779 COLD CREEK AT MOUTH, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.0	.0	1.5	.0	.5	9.0	2.5	5.5	11.5	4.5	7.5
2	2.5	.5	1.5	3.0	.5	2.0	6.5	2.0	4.0	9.0	3.5	6.0
3	4.0	1.5	2.5	2.0	.0	1.0	6.5	.5	2.5	9.0	1.5	5.0
4	4.0	1.0	2.5	3.5	1.0	2.0	5.5	.0	2.5	10.5	2.0	5.5
5	3.5	.5	2.0	2.0	1.0	2.0	7.0	.5	3.0	12.0	4.0	7.5
6	3.0	.0	1.5	5.5	1.5	3.0	6.5	1.5	3.0	12.5	4.0	8.0
7	.5	.0	.0	6.0	2.0	3.5	1.5	.0	.5	13.0	5.0	9.0
8	.0	.0	.0	5.5	1.5	3.0	3.0	.0	1.0	14.0	6.0	10.0
9	.5	.0	.0	5.0	1.0	2.0	2.5	.0	.5	13.5	6.0	9.5
10	.0	.0	.0	4.5	1.0	2.5	5.0	.0	---	13.5	5.5	9.5
11	1.0	.0	.0	5.0	.5	2.0	3.0	.0	1.5	14.5	6.5	10.0
12	.0	.0	.0	5.5	.5	2.5	6.0	.0	2.5	12.0	7.5	9.5
13	1.0	.0	.5	6.0	1.0	3.0	7.0	.5	3.0	14.0	7.0	10.0
14	1.5	.0	.5	6.0	1.0	3.0	7.0	.0	3.0	12.0	6.5	8.5
15	1.0	.0	.5	5.5	1.0	3.0	8.5	.5	4.0	11.5	7.5	9.0
16	2.5	.5	1.0	6.0	1.5	3.0	9.5	1.5	5.0	14.0	7.0	10.0
17	2.5	.5	1.5	7.0	2.0	4.0	10.0	2.5	5.5	14.0	6.5	10.0
18	3.0	1.5	2.0	7.0	2.0	4.0	9.5	2.0	5.0	14.0	6.5	10.0
19	3.5	1.0	2.0	7.0	2.0	4.0	4.0	2.0	3.0	14.0	7.0	10.5
20	3.5	1.0	2.0	7.5	2.5	4.5	3.0	.0	---	14.5	7.0	10.5
21	3.5	.5	2.0	7.5	2.0	4.5	6.0	.0	---	15.0	8.0	11.0
22	1.0	.0	.5	6.5	3.0	4.0	8.0	.5	4.0	14.5	7.5	11.0
23	1.5	.0	.5	8.0	2.0	4.5	9.5	1.5	5.0	15.5	8.5	11.5
24	1.0	.0	.5	8.5	2.5	5.0	10.5	2.5	6.0	15.0	8.5	11.5
25	2.0	.0	1.0	8.5	3.5	5.0	11.5	3.0	7.0	14.0	8.0	11.0
26	2.5	1.0	1.5	8.0	2.0	4.5	10.5	3.5	7.0	15.0	9.0	11.5
27	3.0	.5	1.5	8.5	2.0	5.0	10.5	3.0	6.5	14.0	8.0	10.5
28	2.0	.0	.5	9.5	3.5	6.0	9.5	4.0	6.0	14.0	7.5	10.5
29	---	---	---	8.5	3.0	5.0	10.0	2.5	6.0	14.0	7.0	10.5
30	---	---	---	9.0	2.5	5.0	12.5	3.5	7.5	15.5	9.0	11.5
31	---	---	---	9.5	2.5	5.5	---	---	---	16.0	9.0	12.0
MONTH	4.0	.0	1.0	9.5	.0	3.5	12.5	.0	---	16.0	1.5	9.6

		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	9.5	12.5	17.5	8.5	12.5	17.0	8.5	12.5	15.5	8.5	11.5
2	14.5	8.5	11.0	18.0	9.5	13.5	17.0	8.5	13.0	15.5	8.5	11.5
3	13.0	6.5	9.5	18.0	10.5	14.0	17.5	10.0	13.5	15.5	9.0	12.0
4	13.0	6.5	9.0	15.5	11.0	13.0	17.0	9.5	13.0	16.0	9.0	12.0
5	14.0	7.0	10.0	16.5	11.0	13.5	16.5	8.0	12.5	15.5	9.0	12.0
6	14.5	7.0	10.5	13.5	10.5	12.0	17.0	8.5	12.5	13.5	7.0	10.0
7	15.0	7.5	11.0	14.0	10.5	12.0	15.5	10.0	12.5	13.5	6.5	10.0
8	15.5	8.0	11.5	17.0	9.0	12.5	16.0	10.5	13.0	14.0	8.0	10.5
9	15.0	8.0	11.0	13.0	10.0	11.5	18.0	10.0	13.5	14.0	7.0	10.5
10	13.5	8.0	10.0	14.0	9.5	11.5	18.5	10.5	14.0	14.5	7.5	11.0
11	14.0	7.0	10.0	16.0	9.0	12.0	17.0	9.0	13.0	12.0	9.5	10.5
12	14.5	8.0	10.5	16.0	8.0	12.0	18.0	10.5	13.5	12.5	8.5	10.5
13	13.0	6.5	9.0	17.0	9.0	13.0	18.0	9.5	13.5	13.0	6.5	9.5
14	14.0	5.5	9.5	16.5	8.5	12.5	17.5	9.5	13.0	13.0	6.5	9.5
15	15.0	7.0	10.5	16.5	8.0	12.0	17.0	8.5	12.5	13.0	6.5	9.5
16	15.5	7.0	11.0	13.5	8.0	11.0	17.5	9.0	12.5	13.0	7.5	10.0
17	15.5	8.5	11.5	16.0	7.5	11.5	17.5	9.0	12.5	13.5	7.0	10.0
18	15.5	7.5	11.0	16.0	7.5	12.0	15.5	9.0	12.0	13.5	7.5	10.0
19	15.5	7.5	11.0	16.5	8.0	12.0	16.0	8.5	11.5	13.5	7.5	10.0
20	16.5	8.5	12.0	16.0	8.0	12.0	15.5	8.5	11.5	13.5	7.5	10.5
21	17.0	9.5	13.0	16.0	7.5	11.5	15.0	7.0	10.5	13.0	7.0	10.0
22	17.5	9.5	13.0	16.0	7.5	12.0	14.5	6.5	10.0	13.0	7.0	9.5
23	16.5	10.0	12.5	16.5	8.5	12.5	14.5	6.5	10.0	11.5	7.5	9.5
24	16.0	8.0	11.0	17.0	9.0	13.0	15.0	7.5	11.0	12.5	7.0	9.5
25	12.0	8.5	10.0	17.5	9.5	13.5	16.0	7.5	11.0	13.0	9.0	10.5
26	15.0	8.5	11.0	18.5	10.0	14.0	16.5	8.5	12.0	12.5	7.0	9.5
27	14.0	9.5	11.0	17.5	9.0	13.0	16.5	8.5	12.0	12.5	7.0	9.5
28	16.0	7.0	11.0	17.5	9.0	13.0	16.5	9.0	12.5	12.5	7.0	9.0
29	17.0	8.0	12.0	17.0	8.5	13.0	16.5	8.0	12.0	12.0	6.0	9.0
30	17.5	9.0	12.5	16.5	9.5	12.5	15.5	8.0	11.5	12.5	6.5	9.0
31	---	---	---	16.5	8.5	12.5	16.0	9.0	12.0	---	---	---
MONTH	17.5	5.5	11.0	18.5	7.5	12.5	18.5	6.5	12.3	16.0	6.0	10.2

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°55'12", long 119°58'17", in NW 1/4 SE 1/4 sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 5 ft upstream from Martin Avenue Bridge, 500 ft upstream from Heavenly Valley Creek, and 1.8 mi east of Tahoe Valley.

DRAINAGE AREA.—36.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,241.57 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are poor. Minor diversions for local water supply upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 535 ft^3/s, Feb. 1, 1963, gage height, 11.14 ft, and Jan. 2, 1997, gage height, 9.33 ft, from rating curve extended above 250 ft^3/s, on basis of computation of peak flow (weir formula); minimum daily, 2.5 ft^3/s, Sept. 7, 1988.

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)
May 12	0330	44	5.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	15	e14	e13	e12	24	32	19	11	8.6	6.8
2	14	16	15	e14	14	e13	22	30	18	10	8.0	6.8
3	14	16	14	e14	12	e12	19	26	17	10	8.3	6.7
4	14	15	14	e14	13	10	17	25	17	10	8.1	6.8
5	13	16	14	e14	13	10	17	26	16	9.4	8.1	6.8
6	13	16	16	e13	12	11	16	28	16	8.7	7.6	6.8
7	13	14	14	e13	15	12	15	29	15	12	7.9	6.9
8	13	15	14	13	e14	13	e15	32	15	12	7.7	6.8
9	13	15	14	14	e14	12	e15	33	14	12	9.1	6.7
10	13	14	14	16	e14	12	e14	33	14	13	8.3	6.5
11	13	e15	15	15	e14	11	14	33	14	12	8.2	7.0
12	13	e15	14	e15	e14	12	17	39	14	11	8.0	7.3
13	14	e15	19	e15	e14	13	16	37	13	11	8.0	7.2
14	14	e15	14	15	e14	13	17	36	13	11	7.9	7.2
15	14	e15	14	e15	e14	12	19	35	14	11	7.8	7.2
16	14	15	15	e15	e14	13	21	39	13	11	7.5	7.1
17	14	e15	15	e15	14	14	22	36	13	11	7.2	7.1
18	14	e15	e14	e16	e12	17	22	33	13	9.8	7.6	7.2
19	14	e15	e14	16	e12	19	23	29	13	9.4	7.5	7.2
20	13	e14	14	e16	e12	21	20	29	12	10	7.3	7.2
21	13	e14	14	16	e13	22	22	28	11	9.3	7.5	7.6
22	13	14	14	12	e12	22	21	27	12	9.2	7.7	7.7
23	14	e14	15	12	e13	22	23	27	11	9.1	7.4	7.6
24	14	14	14	11	e14	22	25	26	11	9.0	7.3	7.2
25	14	15	e14	15	e13	24	28	25	11	7.9	7.2	9.6
26	14	14	e14	12	e12	23	30	24	11	8.2	6.9	8.4
27	15	15	e14	13	e12	22	30	23	9.6	8.4	6.7	8.0
28	15	15	e14	e13	e11	24	30	22	11	8.3	6.7	7.8
29	16	14	e14	e13	---	25	28	21	12	8.2	5.9	7.8
30	15	16	e14	e13	---	23	29	20	11	8.3	7.1	7.7
31	15	---	e14	e13	---	24	---	19	---	8.6	7.1	---
TOTAL	429	446	447	435	368	515	631	902	403.6	309.8	236.2	218.7
MEAN	13.8	14.9	14.4	14.0	13.1	16.6	21.0	29.1	13.5	9.99	7.62	7.29
MAX	16	16	19	16	15	25	30	39	19	13	9.1	9.6
MIN	13	14	14	11	11	10	14	19	9.6	7.9	5.9	6.5
AC-FT	851	885	887	863	730	1020	1250	1790	801	614	469	434

e Estimated.

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.4	19.7	21.2	24.6	25.2	30.2	43.6	78.5	92.7	49.9	24.3	17.4
MAX	37.6	61.1	64.0	115	68.7	85.0	81.9	184	286	188	88.7	49.6
(WY)	1983	1984	1984	1997	1986	1986	1982	1969	1983	1995	1983	1983
MIN	5.19	7.43	8.18	8.00	8.02	11.0	15.7	14.2	10.9	5.21	3.43	3.71
(WY)	1989	1978	1991	1991	1991	1977	1988	1988	1988	1988	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	10057		5341.3			
ANNUAL MEAN	27.5		14.6		37.1	
HIGHEST ANNUAL MEAN					85.3	1983
LOWEST ANNUAL MEAN					10.2	1977
HIGHEST DAILY MEAN	80	Feb 14	39	May 12	501	Jan 2 1997
LOWEST DAILY MEAN	13	Oct 5	5.9	Aug 29	2.5	Sep 7 1988
ANNUAL SEVEN-DAY MINIMUM	13	Oct 5	6.7	Aug 27	3.0	Sep 9 1977
MAXIMUM PEAK FLOW			44	May 12	535	Feb 1 1963
MAXIMUM PEAK STAGE			5.50	Feb 8	11.14	Feb 1 1963
ANNUAL RUNOFF (AC-FT)	19950		10590		26870	
10 PERCENT EXCEEDS	49		24		83	
50 PERCENT EXCEEDS	22		14		23	
90 PERCENT EXCEEDS	14		7.6		9.0	

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1974, 1978, 1980–85, 1988, 1997 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: March 1981 to September 1983.
WATER TEMPERATURE: September 1997 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1977 to June 1978, March 1980 to September 1985, October 1987 to September 1988.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS.—In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Water temperature records represent water temperature probe within 0.5°C. Interruptions in record due to loss of communication between stream and sensor, instrument malfunction or sensor being buried in sand. Water temperature data for September 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 160 microsiemens, Aug. 24, 1981; minimum recorded 14 microsiemens, May 28, 1982.
WATER TEMPERATURE: Maximum, 21.5°C, Aug. 10, 12, 13, 17, 29, 2001; minimum, freezing point on many days during winter months.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 162 tons, Feb. 16, 1982; minimum daily, 0 ton, Oct. 15, 16, 1973.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 21.5°C, Aug. 10, 12, 13, 17, 29, but presumably higher during instrument malfunction; minimum, freezing point, many days November to April.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	6.0	9.0	3.5	.0	---	1.5	.0	.5	1.0	.0	---
2	14.0	6.5	9.5	6.0	1.0	3.0	2.5	.0	1.0	2.0	.0	---
3	13.0	5.5	8.5	6.5	2.0	3.5	2.0	.0	---	1.0	.0	---
4	13.0	5.0	8.5	5.5	.5	2.5	1.5	.0	---	1.5	.0	---
5	12.5	4.5	8.0	5.5	1.0	3.0	2.0	.0	---	1.5	.0	---
6	12.5	4.5	8.0	5.5	1.5	3.0	1.0	.0	---	1.5	.0	---
7	12.0	4.5	7.5	5.0	.0	2.0	3.0	.0	1.5	1.0	.0	---
8	12.0	4.0	7.5	5.0	.5	2.5	4.0	.5	2.0	2.0	.0	1.0
9	10.5	4.5	7.0	4.0	1.0	2.0	2.5	.0	---	1.0	.0	---
10	10.0	4.5	6.5	2.0	.0	1.0	4.0	.0	1.5	.0	.0	.0
11	5.5	3.0	4.0	1.0	.0	.5	1.0	.0	---	.0	.0	.0
12	6.0	1.5	3.5	1.0	.0	.5	1.5	.0	---	.5	.0	.0
13	8.5	1.0	4.0	.5	.0	.0	.5	.0	---	.5	.0	.0
14	9.0	2.5	5.0	.5	.0	.5	.5	.0	.5	.5	.0	.0
15	9.0	2.5	5.0	.5	.0	.0	2.5	.0	---	.0	.0	.0
16	9.0	2.0	5.0	2.0	.0	.5	1.0	.0	---	.0	.0	.0
17	9.5	2.5	5.0	.5	.0	.0	1.5	.0	---	.0	.0	.0
18	9.5	3.0	5.5	.5	.0	.0	.0	.0	---	.0	.0	.0
19	9.0	2.5	5.0	2.0	.0	.5	1.0	.0	---	.0	.0	.0
20	9.0	3.0	5.5	2.0	.0	.5	1.5	.0	---	.0	.0	.0
21	7.5	3.5	5.0	1.5	.0	.5	2.0	.0	.5	.0	.0	.0
22	6.5	1.5	3.5	2.5	.0	---	2.0	.0	---	1.5	.0	.5
23	7.0	.5	3.0	1.5	.0	.5	1.0	.0	---	1.5	.0	.5
24	7.0	1.0	3.5	3.0	.0	1.0	1.0	.0	---	1.0	.0	.5
25	6.5	2.0	4.0	2.5	.0	1.0	.5	.0	---	.5	.0	.0
26	4.5	3.0	3.5	3.0	.0	---	.5	.0	---	1.0	.0	.0
27	6.0	1.5	3.5	4.0	1.0	2.0	.5	.0	---	1.0	.0	.0
28	4.5	2.0	3.0	4.0	.5	1.5	1.0	.0	---	.0	.0	.0
29	4.0	.5	2.0	1.5	.0	1.0	1.0	.0	---	.0	.0	.0
30	5.0	1.0	2.5	1.5	.0	.5	1.5	.0	---	.0	.0	.0
31	5.0	.5	2.0	---	---	---	1.5	.0	---	.0	.0	.0
MONTH	14.0	.5	5.3	6.5	.0	---	4.0	.0	---	2.0	.0	---

10336780 TROUT CREEK NEAR TAHOE VALLEY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.0	10.0	2.5	5.5	11.0	5.5	8.0
2	.5	.0	.5	1.5	.0	---	7.0	2.0	4.0	9.5	4.5	6.5
3	2.0	.5	1.0	1.0	.0	---	7.0	.5	3.0	9.5	2.5	5.5
4	2.5	.0	1.0	2.0	.0	1.0	6.0	.0	2.0	11.5	3.0	6.5
5	2.0	.0	.5	1.0	.0	.5	7.0	.0	3.0	13.0	4.5	8.0
6	2.5	.0	.5	4.0	.5	2.0	6.0	.5	3.0	13.0	4.5	8.5
7	.0	.0	.0	6.0	.0	2.0	1.5	.0	.5	14.0	5.5	9.0
8	.0	.0	.0	5.5	.0	2.5	2.5	.0	---	14.5	6.5	10.0
9	.0	.0	.0	4.5	.5	2.0	1.5	.0	---	13.0	6.0	9.0
10	.0	.0	.0	5.0	.5	2.0	4.5	.0	1.5	13.5	6.0	9.0
11	.0	.0	.0	5.5	.0	---	2.5	.0	1.0	14.0	6.0	10.0
12	.0	.0	.0	5.5	.0	---	6.0	.0	2.0	11.0	7.5	9.0
13	.0	.0	.0	6.5	.0	---	7.5	.0	---	13.5	7.0	9.5
14	.0	.0	.0	6.5	.0	2.5	8.0	.0	---	---	---	---
15	.0	.0	.0	6.0	.5	2.5	9.5	.0	4.0	---	---	---
16	.5	.0	.0	7.5	1.0	3.5	10.0	1.0	5.0	---	---	---
17	1.0	.0	.5	8.0	2.0	4.5	11.0	2.5	6.0	---	---	---
18	1.5	.0	1.0	7.5	2.0	4.5	10.0	2.0	5.5	---	---	---
19	2.0	.0	.5	8.0	1.5	4.5	5.0	2.0	3.5	---	---	---
20	2.0	.0	.5	8.5	2.5	4.5	3.0	.0	1.5	---	---	---
21	2.0	.0	.5	8.5	1.5	4.5	5.5	.0	2.0	---	---	---
22	.0	.0	.0	6.0	2.5	4.0	9.0	.5	4.0	15.5	8.0	11.0
23	.5	.0	.0	9.5	1.5	4.5	11.0	2.0	6.0	17.0	8.5	12.0
24	.0	.0	.0	9.5	2.0	5.0	12.0	3.0	7.0	16.5	9.0	12.5
25	1.0	.0	.5	9.0	3.0	5.0	12.5	4.0	7.5	16.0	9.0	12.0
26	1.0	.0	.5	9.0	1.5	4.5	11.0	4.5	7.5	17.0	9.5	12.5
27	2.0	.0	---	9.5	2.0	5.0	11.0	4.0	7.0	15.5	8.5	11.5
28	1.0	.0	.0	10.5	3.5	6.0	9.5	4.5	7.0	16.0	8.0	12.0
29	---	---	---	9.5	3.0	5.5	10.5	3.5	6.5	16.5	8.0	12.0
30	---	---	---	10.0	2.0	5.5	12.0	4.5	8.0	18.0	9.5	13.0
31	---	---	---	10.5	2.5	6.0	---	---	---	18.5	9.5	13.5
MONTH	2.5	.0	---	10.5	.0	---	12.5	.0	---	---	---	---

		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	10.0	14.0	---	---	---	---	---	---	19.0	12.5	15.5
2	17.0	9.5	12.5	---	---	---	---	---	---	19.0	12.5	15.0
3	16.0	7.5	11.0	---	---	---	---	---	---	18.5	12.5	15.0
4	15.0	6.5	10.5	---	---	---	---	---	---	19.0	12.5	15.5
5	16.0	7.5	11.0	---	---	---	---	---	---	18.5	13.0	15.0
6	17.5	7.5	12.0	---	---	---	---	---	---	17.0	11.0	13.5
7	17.5	8.0	12.5	---	---	---	---	---	---	16.5	10.5	13.0
8	17.5	8.5	12.5	---	---	---	---	---	---	18.0	11.0	13.5
9	17.5	8.0	12.5	---	---	---	---	---	---	17.5	11.0	13.5
10	15.0	8.0	11.0	---	---	---	21.5	13.0	17.0	17.5	11.0	13.5
11	15.0	7.5	11.0	---	---	---	20.5	11.5	16.0	14.5	12.5	13.5
12	17.0	8.5	12.0	---	---	---	21.5	13.0	16.5	15.0	11.0	13.0
13	---	---	---	---	---	---	21.5	12.5	16.5	16.5	10.0	12.5
14	---	---	---	---	---	---	21.0	12.5	16.5	17.0	9.5	12.5
15	---	---	---	---	---	---	20.5	11.5	15.5	16.5	10.0	12.5
16	---	---	---	---	---	---	21.0	12.0	15.5	17.0	10.5	13.0
17	---	---	---	---	---	---	21.5	12.0	16.0	17.5	10.0	13.0
18	---	---	---	---	---	---	19.5	12.5	15.5	17.0	10.5	13.0
19	---	---	---	---	---	---	20.0	11.5	15.0	17.0	10.5	13.0
20	---	---	---	---	---	---	18.0	12.0	14.5	17.5	10.5	13.0
21	---	---	---	---	---	---	18.0	10.5	14.0	17.0	10.0	13.0
22	---	---	---	---	---	---	18.0	10.5	13.5	16.5	10.0	12.5
23	---	---	---	---	---	---	17.0	10.0	13.5	13.5	10.0	11.5
24	---	---	---	---	---	---	19.0	11.0	14.5	14.5	9.0	11.5
25	---	---	---	---	---	---	19.5	11.0	14.5	15.0	11.0	12.5
26	---	---	---	---	---	---	20.0	12.0	15.5	15.0	9.0	12.0
27	---	---	---	---	---	---	20.5	12.0	15.5	14.5	9.0	11.5
28	---	---	---	---	---	---	20.0	12.5	15.5	14.5	9.5	11.5
29	---	---	---	---	---	---	21.5	12.0	15.0	14.5	8.5	11.0
30	---	---	---	---	---	---	18.5	12.5	15.0	14.5	8.5	11.0
31	---	---	---	---	---	---	19.0	12.5	15.5	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	19.0	8.5	13.0

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°55'56", long 119°58'40", in SE 1/4 NW 1/4 sec.3, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on right bank, downstream side of U.S. Highway 50 bridge, 1.2 mi upstream from Lake Tahoe, and 1.4 mi southwest of South Lake Tahoe Post Office.

DRAINAGE AREA.—40.4 mi^2.

PERIOD OF RECORD.—Water years 1972–74, 1989 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Instantaneous: October 1971 to June 1974, October 1988 to September 1992. Continuous: September 1997 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to June 1974, October 1988 to September 1992.

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In October 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature records represent water temperature within 0.5°C. Interruptions in record due to instrument malfuction. Water temperature data for September 1997 were not published but are available from the U.S. Geological Survey in Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 22.0°C, July 8, 1990, Aug. 2, 2001; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATION: Maximum daily mean, 300 mg/L, Jan. 15, 1974; minimum daily mean, 0 mg/L, at times in most years.
SEDIMENT LOAD: Maximum daily, 52 tons, Jan. 15, 1974; minimum daily, 0 ton, at times in most years.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 22.0°C, Aug. 2, but may have been higher during instrument malfunction; minimum, freezing point, many days November to April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT									
05...	1230	14	55	--	17.5	8.3	--	--	--
NOV									
08...	1125	15	55	--	8.0	2.3	--	--	--
DEC									
07...	1040	14	55	6.9	7.0	1.4	604	97	10.8
JAN									
04...	1040	14	53	--	4.5	.1	--	--	--
FEB									
07...	1030	22	55	--	-7.0	.0	--	--	--
MAR									
06...	1010	10	57	7.0	5.5	1.4	603	99	11.0
20...	1045	20	53	--	9.5	3.7	--	--	--
29...	1820	24	52	--	4.5	4.0	--	--	--
APR									
04...	1105	14	52	--	2.0	2.3	--	--	--
18...	1205	22	51	--	12.5	6.3	--	--	--
25...	1840	26	53	--	16.0	12.5	--	--	--
27...	1315	30	48	--	16.0	8.3	--	--	--
MAY									
04...	1145	26	46	--	12.0	5.9	--	--	--
07...	1620	28	42	--	24.0	13.7	--	--	--
10...	1845	30	39	--	19.5	13.5	--	--	--
15...	1550	34	40	--	12.5	11.7	--	--	--
16...	1245	40	37	--	17.5	10.9	--	--	--
22...	1015	28	37	--	17.0	9.4	--	--	--
30...	1105	22	42	--	19.0	12.2	--	--	--
JUN									
08...	0955	16	46	7.5	18.0	9.9	605	97	8.7
JUL									
03...	1035	10	54	--	23.5	15.5	--	--	--
AUG									
06...	1220	7.8	61	--	24.0	15.7	--	--	--
SEP									
13...	1125	7.5	61	7.5	19.5	10.9	607	105	9.2

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, BIO. REACTIVE TOTAL (UG/L AS FE) (46568)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT								
05...	<.003	.04	.003	.009	.020	238	4	.15
NOV								
08...	<.003	.06	.003	.006	.017	244	3	.12
DEC								
07...	<.003	.04	.010	.007	.015	165	5	.19
JAN								
04...	<.003	.05	.008	.003	.020	177	6	.23
FEB								
07...	<.003	.08	.016	.007	.023	508	14	.83
MAR								
06...	<.003	.07	.021	.007	.019	311	5	.14
20...	.003	.18	.020	.008	.022	469	8	.43
29...	<.003	.22	.017	.009	.027	>535	20	1.3
APR								
04...	<.003	.06	.021	.007	.022	424	6	.23
18...	.004	.13	.011	.007	.020	376	3	.18
25...	.003	.18	.013	.008	.028	526	9	.63
27...	.005	.22	.021	.007	.030	614	12	.97
MAY								
04...	.004	.14	.014	.006	.021	456	8	.56
07...	<.003	.31	.008	.007	.024	437	6	.45
10...	.006	.14	.008	.007	.035	606	15	1.2
15...	<.003	.12	.007	.007	.024	358	7	.64
16...	<.003	.22	.007	.007	.031	478	10	1.1
22...	.008	.38	.006	.005	.025	331	8	.60
30...	.004	.11	.010	.007	.031	332	5	.30
JUN								
08...	.006	.09	.009	.008	.022	272	3	.13
JUL								
03...	<.003	.10	.004	.008	.027	542	15	.41
AUG								
06...	<.003	.10	.008	.008	.024	370	8	.17
SEP								
13...	.003	.17	.003	.010	.022	780	2	.04

< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	7.0	10.0	4.0	.0	2.0	2.0	.0	.5	.5	.0	.0
2	13.5	7.5	10.5	5.5	1.0	3.0	2.5	.0	1.0	.0	.0	.0
3	12.5	7.0	10.0	6.0	2.0	3.5	2.0	.0	.5	.0	.0	.0
4	12.5	6.5	9.5	5.0	.5	2.5	2.0	.0	.5	.5	.0	.0
5	12.0	6.0	9.0	5.5	1.0	3.0	2.5	.0	.5	.5	.0	.0
6	11.5	5.5	9.0	5.0	1.5	3.0	1.0	.0	---	.5	.0	.0
7	11.5	5.5	8.5	3.5	.0	2.0	3.0	.0	1.5	.5	.0	.0
8	11.0	5.0	8.0	4.0	.5	2.0	3.5	1.0	2.0	2.5	.0	1.0
9	10.0	5.5	8.0	3.5	.5	2.0	2.5	.0	1.5	1.0	.0	.0
10	9.0	5.5	7.0	1.5	.0	.5	4.0	.0	2.0	.0	.0	.0
11	6.0	3.5	5.0	.5	.0	.0	1.5	.0	---	.0	.0	.0
12	6.0	2.0	4.0	.0	.0	.0	2.0	.0	.5	.0	.0	.0
13	8.0	1.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	8.5	3.0	6.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
15	8.5	3.0	6.0	.0	.0	.0	2.5	.0	1.0	.0	.0	.0
16	8.0	3.0	5.5	1.0	.0	.0	1.0	.0	.0	.0	.0	.0
17	8.5	3.0	5.5	.0	.0	.0	2.0	.0	.5	.0	.0	.0
18	9.0	3.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19	8.5	3.0	6.0	1.0	.0	.0	.5	.0	.0	.0	.0	.0
20	8.0	3.5	6.0	2.0	.0	.5	2.0	.0	.5	.0	.0	.0
21	6.5	4.0	5.5	2.0	.0	.5	2.5	.0	1.0	.0	.0	.0
22	5.5	2.0	4.0	3.0	.0	1.0	2.5	.0	.5	.0	.0	.0
23	6.0	1.0	3.5	1.0	.0	.5	1.5	.0	---	.0	.0	.0
24	6.5	1.5	4.0	3.5	.0	1.0	2.0	.0	---	.5	.0	.0
25	6.0	3.0	4.5	2.5	.0	1.0	.0	.0	.0	.0	.0	.0
26	5.0	3.0	4.0	2.5	.0	1.0	.0	.0	.0	.5	.0	.0
27	5.5	2.0	3.5	4.5	.5	2.0	.0	.0	.0	.0	.0	.0
28	4.5	2.5	3.5	4.0	.0	1.5	.0	.0	.0	.0	.0	.0
29	3.5	.5	2.0	1.5	.0	.5	.5	.0	.0	.0	.0	.0
30	4.5	1.0	2.5	2.5	.0	.5	.5	.0	.0	.0	.0	.0
31	5.0	.5	2.5	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	13.5	.5	5.9	6.0	.0	1.1	4.0	.0	---	2.5	.0	.0

		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.0	10.0	2.5	6.0	12.5	5.0	8.5
2	.0	.0	.0	3.0	.0	1.0	7.5	1.5	4.0	10.0	4.0	6.5
3	2.5	.0	.5	1.0	.0	.5	7.0	.5	3.0	10.0	1.5	5.5
4	4.0	.0	1.0	3.0	.0	1.0	6.0	.0	---	11.5	2.0	6.5
5	3.0	.0	1.0	1.5	.0	1.0	7.0	.0	---	13.0	4.0	8.0
6	3.0	.0	.5	5.0	.5	2.0	6.5	.5	3.0	13.5	4.5	8.5
7	.0	.0	.0	7.0	.5	2.5	1.5	.0	---	14.0	5.5	9.5
8	.0	.0	.0	6.5	.0	2.5	3.5	.0	---	14.5	6.5	10.0
9	.0	.0	.0	4.5	.0	2.0	2.0	.0	---	13.5	6.0	9.5
10	.0	.0	.0	5.0	.0	2.0	4.5	.0	---	13.5	6.0	9.5
11	.0	.0	.0	5.5	.0	2.0	2.5	.0	---	14.5	6.5	10.0
12	.0	.0	.0	5.0	.0	---	6.0	.0	---	11.5	7.5	9.5
13	.0	.0	.0	6.5	.0	---	7.0	.0	---	14.0	7.0	10.0
14	.0	.0	.0	6.5	.0	---	8.0	.0	---	11.5	6.5	9.0
15	.0	.0	.0	5.5	.0	2.5	10.0	.0	4.5	11.5	7.5	9.0
16	.0	.0	.0	7.5	.0	3.5	10.5	1.0	5.5	14.0	7.0	10.0
17	.0	.0	.0	8.0	1.5	4.5	11.0	2.5	6.5	14.5	7.0	10.5
18	.0	.0	.0	8.5	1.0	4.5	10.5	2.0	6.0	14.5	7.0	10.5
19	1.0	.0	.0	8.5	1.0	4.5	5.5	2.0	3.5	15.5	7.0	11.0
20	3.0	.0	1.0	8.5	2.0	4.5	3.0	.0	---	16.0	7.5	11.5
21	3.0	.0	1.0	8.5	1.5	4.5	6.5	.0	---	16.5	8.5	12.0
22	.0	.0	.0	6.0	2.5	4.0	9.5	.0	4.5	16.0	8.0	11.5
23	.0	.0	.0	9.0	1.5	4.5	11.5	2.0	6.5	17.0	9.0	12.5
24	.0	.0	.0	9.5	1.5	5.0	12.0	3.0	7.0	17.0	9.0	13.0
25	.5	.0	.0	9.0	3.0	5.5	13.0	3.5	8.0	16.5	9.0	12.5
26	1.5	.0	.5	9.0	1.5	5.0	11.5	4.5	8.0	17.0	9.5	12.5
27	3.5	.0	1.0	9.5	1.5	5.5	11.5	3.5	7.5	16.0	8.5	12.0
28	1.5	.0	.5	10.5	3.5	6.5	10.5	4.0	7.0	16.5	8.0	12.0
29	---	---	---	9.5	2.5	5.5	11.5	3.0	6.5	17.0	8.0	12.0
30	---	---	---	10.0	2.0	5.5	13.0	4.0	8.0	18.0	8.5	13.0
31	---	---	---	10.5	2.5	6.0	---	---	---	19.0	9.0	13.5
MONTH	4.0	.0	.2	10.5	.0	---	13.0	.0	---	19.0	1.5	10.3

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	10.0	14.0	21.5	11.5	16.5	---	---	---	---	---	---
2	17.0	9.5	13.0	22.0	13.0	17.5	---	---	---	---	---	---
3	16.0	7.0	11.5	21.0	14.0	18.0	---	---	---	---	---	---
4	15.5	6.5	10.5	---	---	---	---	---	---	---	---	---
5	16.5	7.0	11.5	---	---	---	---	---	---	---	---	---
6	18.0	7.5	12.5	---	---	---	---	---	---	---	---	---
7	18.0	8.0	13.0	---	---	---	---	---	---	---	---	---
8	18.0	8.5	13.0	---	---	---	---	---	---	---	---	---
9	18.0	8.0	13.0	---	---	---	---	---	---	---	---	---
10	15.0	8.5	11.5	---	---	---	---	---	---	---	---	---
11	15.5	7.5	11.5	---	---	---	---	---	---	---	---	---
12	17.5	8.5	12.5	---	---	---	---	---	---	---	---	---
13	16.5	7.5	11.5	---	---	---	---	---	---	---	---	---
14	17.5	6.5	11.5	---	---	---	---	---	---	---	---	---
15	18.0	8.0	13.0	---	---	---	---	---	---	---	---	---
16	19.0	8.5	13.5	---	---	---	---	---	---	---	---	---
17	19.0	9.5	14.0	---	---	---	---	---	---	---	---	---
18	19.0	9.0	13.5	---	---	---	---	---	---	---	---	---
19	19.5	9.0	14.0	---	---	---	---	---	---	---	---	---
20	20.5	10.0	15.0	---	---	---	---	---	---	---	---	---
21	21.5	11.0	16.0	---	---	---	---	---	---	---	---	---
22	21.0	11.5	16.5	---	---	---	---	---	---	---	---	---
23	19.0	12.0	15.5	---	---	---	---	---	---	---	---	---
24	18.5	10.0	14.0	---	---	---	---	---	---	---	---	---
25	15.5	10.5	13.0	---	---	---	---	---	---	---	---	---
26	18.5	10.5	14.0	---	---	---	---	---	---	---	---	---
27	16.5	11.5	14.0	---	---	---	---	---	---	---	---	---
28	20.0	9.0	14.0	---	---	---	---	---	---	---	---	---
29	20.5	10.5	15.5	---	---	---	---	---	---	---	---	---
30	21.0	11.5	16.5	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	21.5	6.5	13.4	---	---	---	---	---	---	---	---	---

10336795 TROUT CREEK NEAR MOUTH EAST, NEAR BELLEVUE/ELDORADO AVENUE, CA

(Lake Tahoe Interagency Monitoring Program)

LOCATION.—Lat 38°56'12", long 119°59'23", in NE 1/4 NE 1/4 sec.04, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on right bank, east channel, about 0.4 mi upstream from Lake Tahoe, and about 0.8 mi downstream of U.S. Highway 50.

DRAINAGE AREA.—41 mi^2.

PERIOD OF RECORD.—September 1997 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: September 1997 to September 2001 (discontinued).

INSTRUMENTATION.—Water temperature recorder since September 1997, two times per hour.

REMARKS. In September 1997, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor water temperature within the Upper Truckee River—Trout Creek watershed. Records represent water temperature at probe within 0.5°C. Interuption in record due to vandalism. Water temperature records for September 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum, 23.5°C, July 26, 2001; minimum, freezing point during winter months.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum, 23.5°C, July 26; minimum, freezing point, many days November to April.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	6.5	10.5	4.5	.0	2.5	2.5	.0	.5	.5	.0	.0
2	13.5	7.5	10.5	6.0	1.0	3.5	3.0	.0	1.0	.5	.0	.0
3	13.0	6.5	10.0	7.0	2.0	4.0	2.5	.0	.5	.5	.0	.0
4	12.5	6.0	9.5	5.5	.5	3.0	2.0	.0	---	.5	.0	.0
5	12.5	5.5	9.0	5.5	1.0	3.5	3.0	.0	---	.5	.0	.0
6	12.0	5.5	9.0	6.0	2.0	3.5	1.0	.0	.0	.5	.0	.0
7	11.5	5.0	8.5	4.5	.5	2.5	3.0	.0	1.5	.5	.0	.0
8	11.5	5.0	8.5	5.0	1.0	3.0	4.5	1.0	2.5	2.5	.0	1.0
9	11.0	5.0	8.0	4.5	1.0	2.5	2.5	.0	1.5	1.0	.0	.5
10	9.5	5.0	7.0	2.0	.0	1.0	4.5	.0	2.0	.5	.0	.0
11	6.0	3.5	4.5	1.5	.0	.5	1.5	.0	.5	.0	.0	.0
12	6.5	1.5	4.0	.5	.0	.5	2.5	.0	.5	.0	.0	.0
13	8.0	1.5	5.0	.5	.0	.5	.0	.0	.0	.0	.0	.0
14	8.5	3.0	6.0	.5	.0	.5	.5	.0	.0	.0	.0	.0
15	8.5	3.0	6.0	.5	.0	.5	3.0	.0	1.0	.0	.0	.0
16	8.5	2.5	5.5	1.0	.5	.5	1.0	.0	.0	.0	.0	.0
17	9.0	2.5	6.0	.5	.5	.5	2.0	.0	.5	.0	.0	.0
18	9.0	3.5	6.5	.5	.5	.5	.5	.0	.0	.0	.0	.0
19	8.5	3.0	6.0	1.0	.0	.5	.5	.0	.0	.0	.0	.0
20	9.0	3.5	6.0	1.5	.0	.5	2.0	.0	.5	.0	.0	.0
21	7.0	4.5	5.5	2.0	.0	.5	3.0	.0	1.0	.0	.0	.0
22	6.5	2.0	4.0	3.5	.0	1.0	2.5	.0	1.0	.0	.0	.0
23	6.0	.5	3.5	1.0	.0	.5	1.5	.0	.5	.0	.0	.0
24	7.0	1.5	4.5	4.0	.0	1.5	2.0	.0	.5	.0	.0	.0
25	6.5	2.5	4.5	3.0	.0	1.0	.5	.0	.0	.0	.0	.0
26	5.0	3.0	4.0	3.0	.0	1.0	.5	.0	.0	.0	.0	.0
27	6.0	2.0	4.0	4.5	.5	2.0	.0	.0	.0	.0	.0	.0
28	5.0	2.5	3.5	4.5	.0	2.0	.5	.0	.0	.0	.0	.0
29	4.0	1.0	2.5	1.5	.0	.5	.5	.0	.0	.0	.0	.0
30	5.0	1.0	3.0	2.5	.0	.5	.5	.0	.0	.0	.0	.0
31	5.5	.5	2.5	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	13.5	.5	6.0	7.0	.0	1.5	4.5	.0	---	2.5	.0	.0

10336795 TROUT CREEK NEAR MOUTH EAST, NEAR BELLEVUE/ELDORADO AVENUE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	1.0	.0	.0	10.5	2.5	6.5	12.5	5.5	8.5
2	.0	.0	.0	3.0	.0	1.0	8.0	2.0	4.5	10.5	4.0	7.0
3	.5	.0	.0	2.0	.0	.5	6.5	.0	3.0	10.5	1.5	6.0
4	3.5	.0	1.0	3.0	.0	1.5	6.0	.0	3.0	11.5	2.0	7.0
5	3.5	.0	1.0	1.5	.0	1.0	7.5	.0	3.5	13.0	4.0	8.5
6	3.5	.0	1.0	6.0	.0	2.5	7.0	.5	3.5	13.5	4.5	9.0
7	.5	.0	.0	7.5	.5	3.0	3.0	.0	1.0	14.0	5.5	9.5
8	.5	.0	.0	7.0	.0	3.0	4.0	.0	1.0	14.5	6.5	10.5
9	.0	.0	.0	4.5	.0	2.0	2.5	.0	.5	13.5	6.5	10.0
10	.0	.0	.0	5.5	.0	2.0	5.0	.0	2.0	14.0	6.0	9.5
11	.0	.0	.0	6.5	.0	2.5	2.5	.0	1.0	14.5	6.5	10.5
12	.0	.0	.0	6.0	.0	2.5	7.0	.0	2.5	11.0	7.5	9.5
13	.0	.0	.0	7.0	.0	3.0	7.5	.0	3.5	14.0	7.0	10.0
14	.0	.0	.0	7.0	.0	3.0	9.0	.0	4.0	11.0	6.5	9.0
15	.0	.0	.0	6.0	.0	3.0	10.5	.5	5.0	11.5	7.0	9.0
16	.0	.0	.0	8.0	.5	4.0	11.0	1.5	6.0	14.0	7.0	10.5
17	.0	.0	.0	9.0	1.5	5.0	11.5	2.5	7.0	14.5	6.5	10.5
18	.0	.0	.0	8.5	1.5	5.0	11.0	2.5	6.5	15.0	7.0	10.5
19	.0	.0	.0	9.0	1.0	5.0	6.0	2.5	4.0	15.5	7.0	11.0
20	1.0	.0	.5	9.0	1.5	5.0	3.5	.0	1.5	16.0	7.5	11.5
21	3.5	.0	1.0	8.5	1.5	4.5	6.5	.0	2.5	16.5	8.5	12.0
22	.0	.0	.0	6.5	2.5	4.5	9.5	.0	4.5	16.5	7.5	12.0
23	.0	.0	.0	9.5	1.5	5.0	11.5	2.0	6.5	17.5	8.5	13.0
24	.0	.0	.0	9.5	2.0	5.5	12.5	3.0	7.5	17.5	9.0	13.0
25	.0	.0	.0	9.5	3.0	6.0	13.0	3.5	8.5	16.5	8.5	12.5
26	2.0	.0	.5	9.5	1.5	5.0	12.0	4.5	8.0	17.0	9.0	13.0
27	4.0	.0	1.0	10.0	1.5	5.5	11.5	3.5	7.5	16.5	8.0	12.0
28	2.5	.0	.5	11.0	4.0	7.0	11.0	4.0	7.0	16.5	8.0	12.0
29	---	---	---	9.5	3.0	6.0	11.5	2.5	7.0	17.0	7.5	12.5
30	---	---	---	10.5	2.0	6.0	13.5	4.0	8.5	18.0	8.5	13.5
31	---	---	---	11.0	2.5	6.5	---	---	---	19.0	9.0	14.0
MONTH	4.0	.0	.2	11.0	.0	3.7	13.5	.0	4.6	19.0	1.5	10.5

		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	10.0	14.5	21.0	11.5	17.0	20.5	12.5	16.5	---	---	---
2	17.0	9.0	13.0	22.0	12.5	18.0	21.5	12.5	17.0	---	---	---
3	16.5	7.0	11.5	22.0	14.0	18.0	21.0	14.0	17.5	---	---	---
4	15.5	6.5	11.0	19.0	14.0	16.5	20.5	14.0	17.0	---	---	---
5	17.0	7.0	11.5	20.0	13.5	16.5	20.5	12.0	16.5	---	---	---
6	18.0	7.5	13.0	17.5	13.0	15.5	---	---	---	---	---	---
7	19.0	8.0	13.5	17.0	13.0	14.5	---	---	---	---	---	---
8	18.5	9.0	13.5	19.5	11.0	15.5	---	---	---	---	---	---
9	18.5	8.5	13.5	17.5	12.0	14.5	---	---	---	---	---	---
10	15.5	9.0	12.0	17.5	10.0	14.0	---	---	---	---	---	---
11	16.0	8.0	12.0	19.5	11.0	15.0	---	---	---	---	---	---
12	18.0	8.5	13.0	19.5	10.5	15.5	---	---	---	---	---	---
13	17.0	7.5	12.0	19.5	11.5	16.0	---	---	---	---	---	---
14	18.5	6.5	12.5	19.0	11.0	15.5	---	---	---	---	---	---
15	18.5	8.0	13.5	18.5	10.5	15.5	---	---	---	---	---	---
16	19.5	8.5	14.0	15.5	11.5	13.5	---	---	---	---	---	---
17	19.5	10.0	14.5	17.5	9.5	14.0	---	---	---	---	---	---
18	19.5	9.0	14.5	19.0	11.0	15.0	---	---	---	---	---	---
19	20.0	9.5	15.0	20.5	11.0	16.0	---	---	---	---	---	---
20	21.0	10.5	16.0	19.5	11.0	15.5	---	---	---	---	---	---
21	22.5	11.5	17.0	19.5	11.0	15.5	---	---	---	---	---	---
22	21.5	12.0	17.0	19.5	11.0	15.5	---	---	---	---	---	---
23	20.0	12.5	16.0	20.0	11.5	16.0	---	---	---	---	---	---
24	19.0	10.0	14.5	20.5	12.0	17.0	---	---	---	---	---	---
25	15.5	11.0	13.5	22.5	13.0	17.5	---	---	---	---	---	---
26	19.5	10.5	14.5	23.5	13.5	18.5	---	---	---	---	---	---
27	18.0	11.5	14.0	20.5	12.5	17.0	---	---	---	---	---	---
28	20.0	9.0	14.5	20.5	13.0	16.5	---	---	---	---	---	---
29	21.0	11.0	16.0	20.5	12.5	16.0	---	---	---	---	---	---
30	21.0	11.5	16.5	19.0	12.5	15.0	---	---	---	---	---	---
31	---	---	---	20.0	12.0	16.0	---	---	---	---	---	---
MONTH	22.5	6.5	13.9	23.5	9.5	15.9	---	---	---	---	---	---

10337000 LAKE TAHOE AT TAHOE CITY, CA

LOCATION.—Lat 39°10'51", long 120°07'06", in NE 1/4 NE 1/4 sec.5, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050101, on U.S. Coast Guard pier at Lake Forest, 1.1 mi northeast of Tahoe City, and 1.8 mi northeast of Lake Tahoe outlet dam on Truckee River, at Tahoe City.

DRAINAGE AREA.—506 mi^2, at lake outlet.

PERIOD OF RECORD.—April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."
CHEMICAL DATA: Water year 1969, bimonthly; 1978, biannually; 1979, annually.

REVISED RECORDS.—WDR CA-78-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 6,220.00 ft above U.S. Bureau of Reclamation datum, 6,218.86 ft above sea level. Prior to Oct. 1, 1957, nonrecording gages at several sites near outlet of lake at same datum except for water years 1907 and 1908, which were at a datum 5.5 ft higher. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft east of dam at lake outlet.

REMARKS.—Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Monthly figures given represent usable contents. Usable capacity, 744,600 acre-ft, between elevations 6,223 ft, natural rim of lake, and 6,229.1 ft, maximum permissible elevation by Federal Court decree. Lake elevations referred to U.S. Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. There are minor diversions for domestic purposes, irrigation, and power. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 6,231.26 ft, July 14, 15, 17, 18, 1907; minimum, 6,220.26 ft, Nov. 30, 1992.

EXTREMES FOR CURRENT YEAR.—Maximum elevation, 6,227.51 ft, Oct. 1; minimum, 6,224.52 ft, Sept. 30.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on topographic information available in April 1959)

6,223	0	6,225	243,000	6,227	486,800	6,229.1	744,600
6,224	121,400	6,226	364,800	6,228	609,300		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.51	7.08	6.78	6.55	6.30	6.25	6.28	6.36	6.49	6.12	5.66	5.11
2	7.49	7.07	6.76	6.54	6.31	6.25	6.25	6.38	6.49	6.12	5.63	5.08
3	7.46	7.04	6.77	6.53	6.30	6.24	6.24	6.34	6.46	6.11	5.61	5.07
4	7.47	7.02	6.76	6.53	6.30	6.26	6.24	6.35	6.45	6.12	5.60	5.04
5	7.45	7.02	6.76	6.52	6.29	6.29	6.23	6.36	6.41	6.09	5.55	5.02
6	7.43	7.00	6.75	6.52	6.28	6.28	6.24	6.36	6.43	6.08	5.57	4.98
7	7.43	6.97	6.75	6.52	6.26	6.27	6.27	6.38	6.43	6.06	5.55	4.97
8	7.41	6.99	6.74	6.49	6.24	6.26	6.27	6.39	6.40	6.06	5.55	4.94
9	7.39	6.96	6.73	6.48	6.27	6.27	6.27	6.41	6.41	6.05	5.53	4.91
10	7.34	6.95	6.72	6.51	6.29	6.25	6.25	6.42	6.39	6.07	5.52	4.90
11	7.37	6.95	6.70	6.52	6.31	6.25	6.25	6.43	6.37	6.04	5.51	4.89
12	7.33	6.92	6.71	6.50	6.31	6.24	6.25	6.45	6.37	6.03	5.49	4.87
13	7.32	6.90	6.70	6.49	6.29	6.23	6.24	6.46	6.35	6.01	5.47	4.84
14	7.29	6.89	6.74	6.48	6.28	6.23	6.24	6.47	6.33	5.99	5.46	4.83
15	7.28	6.86	6.71	6.47	6.27	6.22	6.24	6.49	6.34	5.95	5.43	4.80
16	7.27	6.84	6.72	6.44	6.27	6.22	6.22	6.51	6.33	5.95	5.42	4.79
17	7.26	6.83	6.69	6.40	6.25	6.22	6.22	6.52	6.30	5.91	5.39	4.78
18	7.26	6.82	6.68	6.42	6.25	6.21	6.24	6.52	6.31	5.91	5.37	4.76
19	7.25	6.82	6.68	6.42	6.26	6.21	6.26	6.53	6.30	5.86	5.35	4.74
20	7.22	6.82	6.68	6.40	6.25	6.21	6.29	6.54	6.30	5.86	5.31	4.73
21	7.21	6.80	6.65	6.41	6.28	6.22	6.31	6.54	6.28	5.83	5.28	4.71
22	7.14	6.79	6.65	6.39	6.29	6.23	6.30	6.54	6.26	5.82	5.26	4.69
23	7.12	6.78	6.63	6.40	6.28	6.23	6.31	6.55	6.24	5.81	5.22	4.67
24	7.10	6.76	6.62	6.38	6.29	6.22	6.31	6.55	6.20	5.81	5.22	4.65
25	7.11	6.78	6.61	6.38	6.31	6.24	6.31	6.55	6.17	5.80	5.20	4.67
26	7.10	6.77	6.59	6.38	6.30	6.24	6.32	6.55	6.18	5.78	5.19	4.60
27	7.11	6.74	6.58	6.37	6.28	6.25	6.33	6.53	6.18	5.76	5.19	4.59
28	7.13	6.74	6.58	6.35	6.26	6.26	6.33	6.54	6.15	5.74	5.17	4.58
29	7.12	6.78	6.56	6.34	---	6.25	6.34	6.54	6.14	5.68	5.15	4.56
30	7.10	6.80	6.56	6.32	---	6.27	6.34	6.53	6.14	5.70	5.13	4.52
31	7.08	---	6.55	6.31	---	6.27	---	6.53	---	5.64	5.12	---
MEAN	7.28	6.88	6.68	6.44	6.28	6.24	6.27	6.47	6.32	5.93	5.39	4.81
MAX	7.51	7.08	6.78	6.55	6.31	6.29	6.34	6.55	6.49	6.12	5.66	5.11
MIN	7.08	6.74	6.55	6.31	6.24	6.21	6.22	6.34	6.14	5.64	5.12	4.52
a	496,400	462,000	431,700	402,100	396,000	397,200	405,800	429,400	381,400	320,400	256,900	184,400
b	-54,000	-34,400	-30,300	-29,600	-6,100	+1,200	+8,600	+23,600	-48,000	-61,000	-63,500	-72,500

CAL YR 2000 MEAN 7.91 MAX 9.06 MIN 6.55 b -65,900
WTR YR 2001 MEAN 6.25 MAX 7.51 MIN 4.52 b -366,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10337500 TRUCKEE RIVER AT TAHOE CITY, CA

LOCATION.—Lat 39°09'59", long 120°08'36", in NE 1/4 NW 1/4 sec.7, T.15 N., R.17 E., Placer County, Hydrologic Unit 16050102, on left bank, 510 ft downstream from dam at outlet of Lake Tahoe, at Tahoe City.

DRAINAGE AREA.—507 mi^2.

PERIOD OF RECORD.—July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."
CHEMICAL DATA: Water years 1978–81.
WATER TEMPERATURE: June 1993 to September 1994.

REVISED RECORDS.—WDR CA-78-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 6,216.59 ft above sea level. Prior to Nov. 12, 1912, nonrecording gage at site 370 ft upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, nonrecording gage; Oct. 1, 1937, to Aug. 21, 1957, water-stage recorder at datum 2.26 ft higher; and Aug. 22, 1957, to July 10, 1960, at datum 2.42 ft higher; all at site 270 ft upstream.

REMARKS.—Records good. Flow completely regulated by dam at outlet of Lake Tahoe (station 10337000), 510 ft upstream. There are several diversions for irrigation, power, and domestic water supply. In addition, sewer effluent is pumped from the Lake Tahoe Basin. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,690 ft^3/s, Jan. 2, 1997, gage height, 9.59 ft; no flow for parts of many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	207	241	321	234	278	79	76	175	337	387	423
2	246	207	241	320	234	278	77	75	173	344	409	422
3	245	205	240	320	233	278	76	73	198	347	409	420
4	245	204	241	320	233	279	75	74	211	347	407	420
5	245	205	241	319	233	279	76	74	210	345	406	413
6	245	204	247	319	233	279	76	74	224	344	414	406
7	245	203	267	319	232	279	76	75	232	345	418	383
8	245	203	273	318	231	278	75	75	231	345	418	371
9	244	204	272	318	231	279	116	76	231	344	417	370
10	244	204	270	317	231	278	191	76	231	343	417	370
11	243	203	269	319	231	278	230	76	250	343	418	370
12	245	203	269	320	231	277	231	76	261	343	417	370
13	244	202	268	319	229	277	215	76	260	342	416	369
14	243	202	269	319	229	277	187	76	259	341	415	375
15	243	202	269	319	228	277	187	76	273	339	414	381
16	243	201	268	317	228	276	187	76	279	337	414	380
17	243	201	268	316	227	277	186	76	278	346	420	379
18	243	200	268	315	226	254	232	76	288	376	423	378
19	243	200	267	314	226	202	215	76	332	373	422	377
20	243	200	267	313	227	137	207	76	332	372	420	358
21	242	211	267	313	227	81	209	76	331	371	418	344
22	238	241	266	295	227	79	207	76	331	370	416	344
23	236	241	266	287	227	79	190	76	331	376	418	343
24	237	241	266	287	227	80	147	76	338	392	419	357
25	238	241	265	287	227	80	87	76	352	391	418	370
26	239	241	301	288	226	80	79	76	343	391	417	369
27	240	241	321	287	226	80	79	95	339	390	416	375
28	239	241	321	287	239	81	78	120	339	388	416	376
29	241	241	321	286	---	80	76	142	338	384	415	373
30	240	242	321	255	---	80	76	149	338	383	419	339
31	227	---	320	236	---	79	---	165	---	382	424	---
TOTAL	7501	6441	8450	9470	6433	6196	4222	2635	8308	11171	12877	11325
MEAN	242	215	273	305	230	200	141	85.0	277	360	415	378
MAX	247	242	321	321	239	279	232	165	352	392	424	423
MIN	227	200	240	236	226	79	75	73	173	337	387	339
AC-FT	14880	12780	16760	18780	12760	12290	8370	5230	16480	22160	25540	22460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2001, BY WATER YEAR (WY)

MEAN	181	196	234	242	298	263	179	168	238	275	313	268
MAX	413	1575	2209	2561	2375	2235	1806	1746	1673	1071	638	687
(WY)	1910	1983	1984	1997	1997	1986	1983	1958	1969	1983	1918	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1932	1927	1925	1925	1925	1925	1919	1919	1921	1931	1931	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1909 - 2001	
ANNUAL TOTAL	71520		95029			
ANNUAL MEAN	195		260		236	
HIGHEST ANNUAL MEAN					1150	1983
LOWEST ANNUAL MEAN					.15	1994
HIGHEST DAILY MEAN	499	May 29	424	Aug 31	2630	Jan 3 1997
LOWEST DAILY MEAN	53	Jan 27	73	May 3	.00	Jan 4 1914
ANNUAL SEVEN-DAY MINIMUM	53	Feb 18	74	May 2	.00	Jan 23 1914
MAXIMUM PEAK FLOW			456	Aug 9	2690	Jan 2 1997
MAXIMUM PEAK STAGE			4.67	Aug 9	9.59	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	141900		188500		170700	
10 PERCENT EXCEEDS	306		398		480	
50 PERCENT EXCEEDS	220		255		146	
90 PERCENT EXCEEDS	60		79		.00	

10338000 TRUCKEE RIVER NEAR TRUCKEE, CA

LOCATION (REVISED).—Lat 39°17'47", long 120°12'16", in SW 1/4 NE 1/4 sec.28, T.17 N., R.16 E., Placer County, Hydrologic Unit 16050102, Tahoe National Forest, on left bank, 1.4 mi downstream from Cabin Creek, and 2.5 mi southwest of Truckee.

DRAINAGE AREA.—553 mi^2.

PERIOD OF RECORD.—December 1944 to September 1961, June 1977 to September 1982, October 1992 to September 1995, October 1996 to current year. Monthly discharge only for some periods, published in WSP 1314.
CHEMICAL DATA: Water years 1951–66.
SPECIFIC CONDUCTANCE: July 1977 to September 1982.
WATER TEMPERATURE: July 1977 to September 1982, March 1993 to September 1994.

REVISED RECORDS.—WDR CA-77-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 5,857.66 ft above sea level.

REMARKS.—Records good. Flow regulated by Lake Tahoe (station 10337000), operating capacity, 744,600 acre-ft. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,900 ft^3/s, Jan. 2, 1997, gage height, 9.97 ft, from rating curve extended above 3,100 ft^3/s, on basis of slope-area measurements at gage heights 7.62 ft and 7.92 ft; minimum daily, 3.4 ft^3/s, several days in August 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	217	254	330	254	295	225	314	241	345	396	444
2	258	218	250	329	254	300	204	281	234	347	422	442
3	258	218	249	329	254	300	172	228	239	352	424	440
4	257	216	249	329	254	308	156	218	254	354	421	439
5	255	217	249	329	257	310	148	237	252	354	421	434
6	254	219	251	330	256	307	142	256	256	351	426	423
7	254	217	272	330	254	309	142	276	265	350	432	398
8	254	217	278	330	254	311	134	317	264	350	432	380
9	255	221	281	330	255	315	145	326	261	350	431	378
10	259	219	280	331	256	314	230	314	259	350	435	377
11	256	216	277	331	257	310	279	318	267	350	442	377
12	254	214	278	330	256	312	279	308	281	350	438	377
13	254	214	277	330	254	316	274	294	281	349	438	377
14	254	214	282	329	254	321	240	268	280	347	438	379
15	254	212	278	325	254	326	244	342	288	346	438	383
16	254	212	276	327	253	324	253	364	297	345	437	382
17	254	212	276	330	250	329	267	288	295	346	441	382
18	254	212	276	328	251	334	317	249	295	376	444	382
19	252	212	277	325	251	305	327	243	333	378	444	382
20	249	212	276	325	253	274	296	234	335	377	442	370
21	249	215	276	325	253	212	288	230	335	377	439	350
22	249	245	276	314	254	205	289	221	335	377	438	350
23	246	249	276	300	249	200	298	221	337	377	439	350
24	245	249	276	301	252	204	298	207	342	397	439	355
25	246	249	276	301	254	253	269	191	355	399	438	375
26	249	249	296	301	253	216	296	178	352	398	438	374
27	250	249	330	300	251	201	300	175	351	397	438	376
28	257	249	330	300	255	241	268	193	350	396	438	377
29	263	257	330	300	---	244	242	210	349	394	438	377
30	251	252	330	282	---	222	277	219	346	393	440	353
31	244	---	330	254	---	224	---	226	---	393	444	---
TOTAL	7846	6772	8712	9855	7102	8642	7299	7946	8929	11365	13471	11583
MEAN	253	226	281	318	254	279	243	256	298	367	435	386
MAX	263	257	330	331	257	334	327	364	355	399	444	444
MIN	244	212	249	254	249	200	134	175	234	345	396	350
AC-FT	15560	13430	17280	19550	14090	17140	14480	15760	17710	22540	26720	22970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

MEAN	199	207	292	345	374	352	410	571	494	306	288	262
MAX	387	551	1483	3190	2537	1421	1734	2403	1843	635	492	453
(WY)	1948	1951	1997	1997	1997	1952	1958	1958	1998	1998	1959	1954
MIN	7.27	11.3	14.2	8.82	12.2	58.1	98.3	122	34.5	6.40	3.56	4.72
(WY)	1995	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	102127		109522			
ANNUAL MEAN	279		300		347	
HIGHEST ANNUAL MEAN					941	1997
LOWEST ANNUAL MEAN					32.4	1994
HIGHEST DAILY MEAN	805	May 29	444	Aug 18	8900	Jan 1 1997
LOWEST DAILY MEAN	100	Feb 7	134	Apr 8	3.4	Aug 18 1994
ANNUAL SEVEN-DAY MINIMUM	103	Feb 3	148	Apr 3	3.4	Aug 22 1994
MAXIMUM PEAK FLOW			468	May 15	11900	Jan 2 1997
MAXIMUM PEAK STAGE			2.24	May 15	9.97	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	202600		217200		251200	
10 PERCENT EXCEEDS	385		408		578	
50 PERCENT EXCEEDS	272		282		248	
90 PERCENT EXCEEDS	158		218		50	

10338400 DONNER LAKE NEAR TRUCKEE, CA

LOCATION.—Lat 39°19'30", long 120°16'53", in SE 1/4 NW 1/4 sec.14, T.17 N., R.15 E., Nevada County, Hydrologic Unit 16050102, on north shore, 2.5 mi upstream from outlet gates, and 4.9 mi west of Truckee.

DRAINAGE AREA.—14.0 mi^2.

PERIOD OF RECORD.—January 1989 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Westpac Utilities).

REMARKS.—Lake levels regulated by a concrete dam at the outlet constructed in 1928. Usable capacity, 9,490 acre-ft, between elevations 5,923.8 ft and 5,935.8 ft, maximum storage level. Water is used for irrigation and power development downstream. Records, including extremes, represent usable contents. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 12,800 acre-ft, Jan. 2, 1997, elevation, 5,938.64 ft; minimum, 2,510 acre-ft, Jan. 24, 28–31, 1991, elevation, 5,927.23 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 9,500 acre-ft, May 18, 19, elevation, 5,935.81 ft; minimum, 3,060 acre-ft, Jan. 5, elevation, 5,927.93 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Westpac Utilities, dated Aug. 22, 1980)

5,923.8	0	5,930.0	4,690	5,934	7,970	5,938	12,000
5,926.0	1,600	5,932	6,310	5,936	9,670	5,940	14,700
5,928.0	3,120						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6880	4340	3180	e3080	3100	3180	4370	7420	9380	8930	8370	7800
2	6820	4260	3170	3080	3100	3190	4520	7510	9370	8910	8330	7770
3	6750	4120	3160	3080	3100	3180	4610	7630	9370	8910	8320	7760
4	6690	4030	3160	3080	3100	3230	4660	7740	9350	8900	8300	e7740
5	6620	4000	3150	3060	3090	3240	4690	7860	9340	8880	8280	7710
6	6560	3870	3150	3080	3090	3250	4740	7990	9340	8860	8270	7650
7	6480	3820	3150	3080	3080	3240	4840	8160	9340	8840	8250	7580
8	6400	3720	3140	3080	3090	3240	4870	8320	9320	8810	8250	7460
9	6360	3660	3150	3080	3140	3250	4900	8480	9320	8830	8220	7350
10	6280	3600	3150	3110	3170	3250	4930	8620	9310	8800	8190	7250
11	6200	3550	3150	3150	3200	3230	4960	8770	9300	8780	8170	7160
12	6100	3500	3150	3150	3210	3250	5000	8890	9280	8770	8150	7050
13	6030	3470	3140	3140	3190	3230	5030	8990	9250	8750	8130	6940
14	5940	3420	3150	3120	3180	3250	5060	9090	9240	8710	8120	6840
15	5860	3390	3150	3120	3180	3260	5110	9260	9230	8700	8100	6740
16	5770	3350	3160	3100	3180	3270	5100	9370	9210	8660	8080	6650
17	5740	3330	3150	3100	3170	3280	5210	9480	9180	8640	8070	6560
18	5650	3310	3140	3120	3170	3320	5390	9500	9170	8620	8040	6460
19	5550	3310	3150	3090	3170	3380	5520	9500	9150	8600	8030	6370
20	5490	3280	3140	3090	3180	3450	5650	9490	9150	8570	8000	6240
21	5340	3240	3100	3090	3210	3530	5710	9470	9120	8560	7990	6080
22	5250	3260	3110	3090	3230	3590	5790	9450	9100	8530	7950	5930
23	5130	3230	3130	3090	3220	3650	5900	9400	9070	8530	7940	5770
24	5000	3260	3120	3100	3230	3720	6040	9390	9040	8520	7920	5620
25	4940	3210	3110	3130	3230	3880	6260	9390	9010	8500	7900	5550
26	4850	3180	3100	3120	3210	3920	6500	9390	8990	8480	7890	5410
27	4770	3190	3110	3120	3190	3950	6670	9390	8990	8460	7870	5270
28	4730	3140	3110	3120	3190	4030	6830	9390	8980	8430	7860	5150
29	4710	e3160	3120	3100	---	4100	6980	9400	8960	8420	7860	5040
30	4610	3180	e3110	3110	---	4160	7190	9400	8940	8400	7820	4930
31	4490	---	e3090	3100	---	4260	---	9410	---	8380	7810	---
MAX	6880	4340	3180	3150	3230	4260	7190	9500	9380	8930	8370	7800
MIN	4490	3140	3090	3060	3080	3180	4370	7420	8940	8380	7810	4930
a	5929.76	5928.08		5927.98	5928.10	5929.48	5933.08	5935.71	5935.16	5934.50	5933.82	5930.31
b	-2380	-1310	-90	+10	+90	+1070	+2930	+2220	-470	-560	-570	-2880

CAL YR 2000 MAX 9710 MIN 3090 b -110
WTR YR 2001 MAX 9500 MIN 3060 b -1940

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10338500 DONNER CREEK AT DONNER LAKE, NEAR TRUCKEE, CA

LOCATION.—Lat 39°19'25", long 120°14'00", in SW 1/4 NW 1/4 sec.17, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, in Donner Memorial State Park, on left bank, 10 ft downstream from bridge on Donner Memorial State Park road, 0.2 mi downstream from outlet of Donner Lake, 0.7 mi upstream from Cold Creek, and 2.5 mi west of Truckee.

DRAINAGE AREA.—14.3 mi^2.

PERIOD OF RECORD.—November 1909 to August 1910, January 1929 to October 1935, January 1936 to March 1938, July to October 1938, January 1939 to February 1943, June 1943 to December 1953, May 1955 to December 1957, October 1958 to current year. Monthly discharge only prior to October 1958, published in WSP 1314 and 1734.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder and concrete control, completed Oct. 3, 1989. Datum of gage is 5,924.40 ft above sea level. Nov. 1, 1909, to Aug. 31, 1910, nonrecording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

REMARKS.—Records good. Flow completely regulated at dam at outlet of Donner Lake (station 10338400) since 1928. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 863 ft^3/s, Jan. 2, 1997, gage height, 6.69 ft; no flow at times in many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	64	9.1	3.5	5.2	8.8	4.9	3.0	2.2	3.5	2.5	3.3
2	22	59	8.7	3.2	4.9	8.5	4.5	2.9	2.0	3.2	2.5	3.1
3	31	53	8.2	3.1	4.7	8.5	4.4	2.9	1.5	3.8	2.7	2.9
4	31	49	7.7	3.0	4.7	9.7	4.4	2.9	4.5	4.5	2.9	4.6
5	32	45	7.0	3.0	4.7	11	4.4	2.9	6.3	4.2	3.0	8.2
6	32	40	6.5	2.9	5.1	11	4.4	2.9	2.6	3.6	3.1	16
7	32	35	6.5	2.9	4.9	10	4.4	3.1	2.6	3.7	3.1	34
8	31	32	6.3	4.3	4.7	10	4.4	3.3	2.1	3.5	3.0	49
9	31	30	6.1	4.4	5.4	10	4.3	3.3	1.3	3.0	3.0	49
10	34	28	6.6	5.0	6.8	11	4.0	3.3	1.1	2.7	2.8	47
11	37	25	6.7	6.9	9.0	11	4.0	3.2	1.0	2.6	2.5	46
12	37	23	7.1	7.1	11	10	4.0	3.1	4.1	2.5	2.7	46
13	37	21	6.6	6.9	9.6	11	4.0	3.2	6.1	2.4	2.3	46
14	37	20	7.6	6.5	9.2	11	4.0	3.3	5.9	2.9	2.1	43
15	36	18	7.8	6.1	8.3	11	4.0	2.9	5.5	2.6	2.0	43
16	34	17	7.2	6.1	8.0	11	4.0	2.5	5.4	2.5	2.1	43
17	32	16	7.1	5.9	7.9	11	4.0	2.7	5.2	2.6	2.1	42
18	32	15	6.7	5.6	7.6	12	4.0	15	5.2	2.8	2.8	41
19	40	13	6.2	5.2	7.7	13	4.0	31	5.2	2.6	4.5	40
20	44	13	6.1	5.1	8.0	16	4.0	32	4.6	2.5	4.7	62
21	42	12	5.8	4.7	9.1	20	4.0	32	4.0	2.1	4.4	77
22	40	11	5.8	4.7	10	23	3.9	32	3.8	1.9	4.4	75
23	52	10	5.6	4.8	10	26	3.9	32	3.7	1.9	4.7	72
24	60	10	5.2	5.4	10	28	3.9	22	3.3	2.2	5.2	69
25	56	8.6	4.7	5.5	10	37	3.8	9.0	3.3	2.1	4.2	67
26	54	6.4	4.7	6.1	10	44	3.8	4.9	3.1	2.1	3.8	66
27	53	5.2	4.7	6.0	9.5	47	3.9	4.6	3.1	2.0	3.4	64
28	51	4.5	4.3	5.6	9.1	51	3.6	4.4	3.2	1.8	3.5	62
29	48	9.0	3.8	5.8	---	56	3.2	4.4	3.3	2.3	3.4	60
30	44	9.6	3.8	5.5	---	39	3.1	3.8	3.3	2.7	3.5	57
31	57	---	3.7	5.2	---	11	---	2.7	---	2.6	3.3	---
TOTAL	1217	702.3	193.9	156.0	215.1	597.5	121.2	281.2	108.5	85.4	100.2	1338.1
MEAN	39.3	23.4	6.25	5.03	7.68	19.3	4.04	9.07	3.62	2.75	3.23	44.6
MAX	60	64	9.1	7.1	11	56	4.9	32	6.3	4.5	5.2	77
MIN	18	4.5	3.7	2.9	4.7	8.5	3.1	2.5	1.0	1.8	2.0	2.9
AC-FT	2410	1390	385	309	427	1190	240	558	215	169	199	2650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

MEAN	29.9	27.3	30.5	33.1	32.8	37.4	52.6	85.8	46.7	12.3	7.87	25.2
MAX	85.7	195	214	284	198	182	144	243	244	67.2	52.7	99.1
(WY)	1973	1951	1951	1997	1986	1986	1940	1952	1983	1934	1932	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1929	1929	1929	1929	1929	1929	1937	1936	1930

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1929 - 2001	
ANNUAL TOTAL	11532.3		5116.4			
ANNUAL MEAN	31.5		14.0		36.0	
HIGHEST ANNUAL MEAN					83.3	1982
LOWEST ANNUAL MEAN					7.71	1977
HIGHEST DAILY MEAN	170	May 26	77	Sep 21	820	Jan 2 1997
LOWEST DAILY MEAN	2.1	Aug 12	1.0	Jun 11	.00	Jan 1 1929
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 10	2.0	Jul 22	.00	Jan 1 1929
MAXIMUM PEAK FLOW			80	Sep 20	863	Jan 2 1997
MAXIMUM PEAK STAGE			3.72	Sep 20	6.69	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	22870		10150		26070	
10 PERCENT EXCEEDS	70		43		98	
50 PERCENT EXCEEDS	17		5.5		13	
90 PERCENT EXCEEDS	4.4		2.7		.00	

10338700 DONNER CREEK AT HIGHWAY 89, NEAR TRUCKEE, CA

LOCATION.—Lat 39°19'16", long 120°12'25", in NE 1/4 SW 1/4 sec.16, T.17 N., R.16 E., Nevada County, Hydrologic Unit 16050102, on right bank, 50 ft upstream from State Highway 89 bridge, 0.5 mi upstream from mouth, and 1.4 mi southwest of Truckee.

DRAINAGE AREA.—29.1 mi^2.

PERIOD OF RECORD.—March 1993 to current year.
WATER TEMPERATURE: August 1993 to September 1994.

GAGE.—Water-stage recorder. Elevation of gage is 5,870 ft above sea level, from topographic map.

REMARKS.—Records good. About half the drainage area is regulated at dam at outlet of Donner Lake (station 10338400) 2.0 mi upstream. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, about 2,500 ft^3/s, Jan. 2, 1997, gage height, 12.76 ft, backwater from debris, on the basis of the flood routing the peak discharge between Truckee River near Truckee and Truckee River above Prosser Creek; minimum daily, 2.3 ft^3/s, Aug. 21, 22, 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	67	12	6.7	e8.7	14	57	108	28	5.6	3.8	2.9
2	26	62	12	e6.5	8.6	14	50	86	24	5.5	4.0	2.8
3	36	56	11	e6.5	8.7	13	38	68	21	5.0	3.9	2.8
4	36	51	10	e6.5	9.0	16	33	68	21	4.9	4.1	4.6
5	35	47	10	e6.4	8.9	18	30	77	22	5.1	4.5	8.5
6	35	43	9.9	6.4	9.1	18	28	84	17	5.5	4.8	16
7	35	38	9.7	6.4	e9.0	18	28	94	16	5.8	5.2	33
8	34	35	9.5	7.7	e9.0	18	25	113	14	5.4	5.3	46
9	34	33	9.5	7.8	e9.0	18	24	115	13	4.9	5.3	45
10	38	30	10	8.5	e10	18	23	108	12	4.7	5.0	45
11	41	28	10	10	e12	18	23	111	11	4.5	4.6	44
12	41	26	10	10	e13	18	22	105	13	4.4	4.6	44
13	40	24	10	10	e12	19	22	99	14	4.4	4.1	43
14	40	22	12	9.9	e12	19	22	86	13	4.6	3.8	41
15	38	21	12	9.5	e11	20	23	115	12	4.6	3.5	41
16	36	19	11	e9.0	12	20	26	121	11	4.5	3.5	40
17	35	18	11	e8.5	12	22	34	94	11	4.6	3.4	39
18	35	17	10	e8.5	12	25	41	95	11	4.7	3.5	38
19	42	16	10	8.7	12	31	42	106	10	4.6	3.5	37
20	47	15	10	e8.5	13	41	35	102	9.6	4.4	3.3	53
21	45	14	10	8.3	14	52	32	100	8.7	4.1	2.9	66
22	43	14	10	8.3	15	58	32	95	7.9	3.9	2.8	64
23	55	13	9.4	8.3	15	61	37	e95	7.2	3.8	2.9	62
24	62	12	9.1	8.9	15	64	49	e80	6.7	4.0	3.2	60
25	59	11	8.6	8.9	15	92	71	e60	6.6	3.9	2.9	61
26	58	8.7	8.4	9.4	15	84	90	48	6.2	3.9	3.1	58
27	56	7.9	8.3	9.1	14	81	88	43	6.1	3.7	2.9	57
28	55	7.3	7.8	e9.0	14	99	78	38	6.2	3.3	2.9	55
29	52	12	7.3	9.2	---	107	71	e35	6.0	3.1	2.9	54
30	47	13	7.4	e9.2	---	86	90	e33	5.7	3.7	2.9	52
31	59	---	7.2	e8.9	---	61	---	30	---	3.9	2.8	---
TOTAL	1316	780.9	303.1	259.5	328.0	1243	1264	2612	370.9	139.0	115.9	1215.6
MEAN	42.5	26.0	9.78	8.37	11.7	40.1	42.1	84.3	12.4	4.48	3.74	40.5
MAX	62	67	12	10	15	107	90	121	28	5.8	5.3	66
MIN	21	7.3	7.2	6.4	8.6	13	22	30	5.7	3.1	2.8	2.8
AC-FT	2610	1550	601	515	651	2470	2510	5180	736	276	230	2410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

MEAN	34.3	23.8	45.0	92.8	78.4	108	145	243	166	52.6	11.4	41.8
MAX	49.0	45.5	201	438	200	251	220	379	398	180	38.1	60.2
(WY)	2000	1999	1997	1997	1996	1995	1993	1995	1995	1995	1995	1993
MIN	15.8	8.35	9.73	8.37	11.6	30.9	39.8	64.8	12.4	4.48	3.24	11.6
(WY)	1995	1994	2000	2001	1994	1994	1994	1994	2001	2001	1994	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1993 - 2001	
ANNUAL TOTAL	23071.1		9947.9			
ANNUAL MEAN	63.0		27.3		84.0	
HIGHEST ANNUAL MEAN					142	1995
LOWEST ANNUAL MEAN					25.9	1994
HIGHEST DAILY MEAN	335	May 25	121	May 16	2380	Jan 2 1997
LOWEST DAILY MEAN	4.4	Aug 15	2.8	Aug 22	2.3	Aug 21 1994
ANNUAL SEVEN-DAY MINIMUM	4.7	Aug 10	2.9	Aug 28	2.5	Aug 19 1994
MAXIMUM PEAK FLOW			162	May 15	2500	Jan 2 1997
MAXIMUM PEAK STAGE			5.01	May 15	12.76	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	45760		19730		60850	
10 PERCENT EXCEEDS	172		67		230	
50 PERCENT EXCEEDS	35		14		46	
90 PERCENT EXCEEDS	7.3		4.1		7.8	

e Estimated.

10339400 MARTIS CREEK NEAR TRUCKEE, CA

LOCATION.—Lat 39°19'44", long 120°07'00", in NE 1/4 NW 1/4 sec.17, T.17 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 0.2 mi downstream from Martis Creek Lake Dam, 1.8 mi upstream from mouth, and 3.5 mi east of Truckee.

DRAINAGE AREA.—39.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1958 to November 1990, June 1993 to current year.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 5,730 ft above sea level, from topographic map. Prior to July 10, 1972, at site 1.0 mi downstream at different datum.

REMARKS.—Records good. Flow is completely regulated by Martis Creek Lake since Oct. 7, 1971. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,880 ft^3/s, Feb. 1, 1963, gage height, 6.16 ft, site and datum then in use; minimum, 1.3 ft^3/s, July 30, 1961. Maximum discharge since construction of Martis Creek Lake Dam in 1971, 663 ft^3/s, Feb. 28, 1986, gage height, 5.66 ft, maximum gage height, 6.01 ft, Apr. 2, 1974; minimum daily, 0.20 ft^3/s, Nov. 9–14, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	10	11	9.7	8.9	9.5	19	18	5.3	4.8	3.5	4.1
2	7.7	10	11	9.3	9.3	10	18	16	4.7	4.4	3.5	4.0
3	7.8	10	11	9.0	10	9.9	16	14	4.7	4.3	3.5	4.0
4	7.9	10	10	9.4	12	12	14	13	4.8	4.2	3.4	4.0
5	7.9	10	9.9	9.2	12	17	13	13	4.8	4.3	3.4	4.1
6	8.0	10	9.8	9.5	11	15	13	13	4.7	4.3	3.4	4.0
7	8.0	10	10	9.5	10	16	14	12	4.7	4.2	2.8	4.1
8	7.9	10	10	9.8	8.8	23	13	12	4.9	4.4	2.9	4.1
9	7.9	10	10	10	9.7	25	12	11	4.6	4.5	4.5	4.1
10	8.3	10	10	10	10	17	13	11	4.4	4.9	4.2	4.1
11	8.9	10	10	12	9.9	15	15	11	4.4	5.3	3.9	4.2
12	9.0	9.5	10	11	9.5	17	14	10	4.5	4.9	3.7	4.6
13	9.0	9.8	10	9.9	9.8	20	14	10	4.6	4.6	3.6	4.9
14	9.0	10	11	9.9	9.9	21	13	9.5	4.6	4.3	3.6	4.8
15	9.0	10	11	9.3	9.7	20	12	9.7	4.7	4.1	3.5	4.7
16	9.0	9.7	10	9.5	9.8	19	13	10	4.6	4.1	3.5	4.5
17	8.9	9.3	10	8.4	9.9	21	13	9.5	4.6	4.1	3.5	4.4
18	8.8	9.5	9.4	8.9	10	26	14	9.3	4.4	4.1	3.5	4.4
19	8.5	9.8	9.8	10	10	26	18	8.7	4.5	4.1	3.3	4.4
20	8.6	9.9	10	9.5	10	28	18	7.9	4.6	4.0	3.4	4.4
21	8.6	9.9	10	9.4	10	27	19	7.9	4.6	3.8	3.4	4.4
22	8.3	10	10	9.4	11	30	20	7.7	4.5	3.8	3.5	4.4
23	8.5	9.8	10	9.3	9.8	30	20	8.1	4.4	3.8	3.6	4.4
24	8.6	10	10	9.5	10	27	19	6.9	4.3	4.0	3.7	4.4
25	8.9	10	9.8	9.7	10	29	20	6.4	4.1	3.9	3.8	5.9
26	9.6	9.7	9.3	9.9	10	27	21	6.0	3.6	3.8	3.8	5.5
27	11	9.9	9.5	9.5	9.4	22	21	5.6	.89	3.6	3.8	5.1
28	11	10	9.7	8.9	9.3	22	20	5.5	4.2	3.5	3.8	4.9
29	15	12	9.6	9.3	---	23	18	5.4	8.5	3.3	3.9	5.1
30	12	12	9.8	9.0	---	22	18	5.5	5.6	3.3	4.0	5.1
31	11	---	9.5	8.8	---	20	---	5.3	---	3.4	4.0	---
TOTAL	280.3	300.8	311.1	296.5	279.7	646.4	485	298.9	137.79	128.1	111.9	135.1
MEAN	9.04	10.0	10.0	9.56	9.99	20.9	16.2	9.64	4.59	4.13	3.61	4.50
MAX	15	12	11	12	12	30	21	18	8.5	5.3	4.5	5.9
MIN	7.7	9.3	9.3	8.4	8.8	9.5	12	5.3	.89	3.3	2.8	4.0
AC-FT	556	597	617	588	555	1280	962	593	273	254	222	268

10339400 MARTIS CREEK NEAR TRUCKEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1971, BY WATER YEAR (WY)

MEAN	8.05	12.0	18.5	30.6	28.0	36.5	60.2	59.5	22.6	6.40	4.90	5.51
MAX	16.4	18.0	86.5	116	83.4	78.8	148	202	96.6	18.0	10.8	10.1
(WY)	1963	1971	1965	1970	1963	1967	1969	1967	1967	1967	1967	1967
MIN	3.73	4.81	5.38	4.28	9.60	11.1	15.4	9.80	3.21	1.79	1.81	2.37
(WY)	1962	1962	1962	1962	1964	1961	1961	1961	1960	1961	1964	1960

SUMMARY STATISTICS	WATER YEARS 1959 - 1971		
ANNUAL MEAN	24.4		
HIGHEST ANNUAL MEAN	47.2		1969
LOWEST ANNUAL MEAN	6.89		1961
HIGHEST DAILY MEAN	903	Jan 31	1963
LOWEST DAILY MEAN	1.3	Jul 30	1961
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 29	1961
MAXIMUM PEAK FLOW	1880	Feb 1	1963
MAXIMUM PEAK STAGE	6.16	Feb 1	1963
ANNUAL RUNOFF (AC-FT)	17650		
10 PERCENT EXCEEDS	57		
50 PERCENT EXCEEDS	11		
90 PERCENT EXCEEDS	2.7		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

MEAN	9.24	16.6	20.9	30.2	36.2	47.4	52.6	57.6	35.6	14.6	10.2	9.12
MAX	20.8	80.0	95.5	214	149	181	139	219	169	75.0	76.0	40.2
(WY)	1983	1984	1982	1997	1986	1986	1982	1983	1983	1986	1995	1995
MIN	3.09	1.57	1.25	6.42	8.10	8.35	8.52	7.40	3.96	2.67	2.01	2.40
(WY)	1972	1978	1978	1978	1994	1974	1980	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1972 - 2001	
ANNUAL TOTAL	8271.6		3411.59			
ANNUAL MEAN	22.6		9.35		28.3	
HIGHEST ANNUAL MEAN					74.5	1983
LOWEST ANNUAL MEAN					6.90	1977
HIGHEST DAILY MEAN	83	Feb 14	30	Mar 22	626	Mar 1 1986
LOWEST DAILY MEAN	6.2	Aug 9	.89	Jun 27	.20	Nov 9 1977
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 23	3.3	Aug 2	.21	Nov 9 1977
MAXIMUM PEAK FLOW			35	Mar 22	663	Feb 28 1986
MAXIMUM PEAK STAGE			2.60	Mar 22	6.01	Apr 2 1974
ANNUAL RUNOFF (AC-FT)	16410		6770		20530	
10 PERCENT EXCEEDS	63		17		70	
50 PERCENT EXCEEDS	10		9.4		12	
90 PERCENT EXCEEDS	7.2		3.9		4.5	

10339400 MARTIS CREEK NEAR TRUCKEE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1975 to current year.
CHEMICAL DATA: Water years 1975–95.
WATER TEMPERATURE: Water years 1975 to current year.
SEDIMENT DATA: Water years 1975–95.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1974 to current year.

INSTRUMENTATION.—Digital water-temperature recorder since October 1974.

REMARKS.—Records good. Interruption in the record was due to recording equipment failure. Water temperature is affected by regulation from Martis Creek Lake Dam (station 10339380). Unpublished chemical, water-temperature, and sediment data prior to October 1974, available at the U.S. Geological Survey office in Carson City, NV.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 25.5°C, July 11, 12, 1993; minimum recorded, 0.0°C, Feb. 16, 17, 1982, Jan. 11–13, 16, 1995, Feb. 10, 1999.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 25.0°C, Aug. 8; minimum recorded, 2.5°C, several days in February and March.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	13.5	8.0	6.5	4.5	4.0	5.0	4.0	4.5	3.0	4.5	2.5
2	16.0	13.5	8.0	6.5	5.0	4.0	5.0	4.0	4.5	3.5	4.5	2.5
3	16.0	13.5	7.5	6.0	5.0	4.0	5.5	4.0	4.5	3.5	4.5	2.5
4	15.5	13.0	7.5	6.0	5.0	4.0	5.0	4.0	4.5	3.5	3.5	2.5
5	15.5	13.0	7.5	6.5	5.0	4.0	5.0	4.0	4.5	3.5	3.5	2.5
6	15.0	12.5	7.5	6.0	5.5	4.0	5.0	4.0	4.5	3.5	3.5	2.5
7	15.0	12.5	7.5	6.0	5.0	4.0	5.0	4.0	4.5	3.5	4.0	2.5
8	15.0	12.0	7.0	5.5	5.5	4.5	5.0	4.5	5.0	3.5	3.5	2.5
9	15.0	12.5	7.0	5.0	5.0	4.0	5.0	4.0	4.5	3.5	3.0	2.5
10	14.0	12.0	6.0	5.5	5.5	4.5	4.5	3.5	4.5	3.5	4.0	2.5
11	12.5	11.0	6.0	4.5	5.0	4.0	4.5	3.5	4.5	3.0	4.0	2.5
12	13.0	10.5	6.0	4.5	5.0	4.0	4.5	3.5	4.0	3.0	4.0	2.5
13	12.5	10.5	5.5	4.0	4.5	3.5	4.5	3.5	4.0	3.0	4.0	3.0
14	12.0	10.5	5.0	4.0	4.0	3.0	4.5	3.5	4.5	3.0	4.5	3.0
15	12.5	10.5	5.0	4.0	4.0	3.5	4.5	3.5	4.5	3.0	4.5	3.5
16	12.0	10.0	5.0	3.5	4.5	3.0	4.5	3.5	4.5	3.0	5.0	3.5
17	12.0	10.0	5.0	3.0	4.5	3.5	4.5	3.5	4.0	3.0	5.0	4.0
18	12.0	10.0	5.0	3.5	4.5	3.5	4.5	3.5	4.5	3.0	5.0	4.0
19	12.0	10.0	5.5	4.0	5.0	3.5	4.5	3.5	4.0	3.0	5.5	4.0
20	11.5	10.0	5.5	4.0	5.0	4.0	4.5	3.5	4.0	3.0	5.0	4.5
21	11.0	9.5	5.5	4.0	5.0	4.0	4.5	3.5	4.5	3.0	5.5	4.5
22	10.0	8.5	5.5	4.0	5.0	4.0	4.5	3.5	3.5	3.0	6.0	4.5
23	10.0	8.0	5.0	4.0	4.5	4.0	4.5	3.5	4.5	3.0	7.5	4.5
24	10.0	8.0	5.5	4.0	5.0	4.0	4.5	3.5	3.5	3.0	8.0	5.5
25	9.5	8.0	5.5	4.0	4.5	4.0	4.5	3.5	4.5	3.0	8.0	6.0
26	8.5	7.5	5.0	4.0	5.0	4.0	4.5	3.5	3.5	3.0	7.5	6.0
27	9.0	8.0	5.0	4.0	5.0	4.0	4.5	3.5	4.5	2.5	8.0	6.0
28	8.5	7.5	5.5	4.0	5.0	4.0	4.5	3.0	4.5	3.0	8.0	6.5
29	8.5	7.0	5.0	3.5	5.0	4.0	4.5	3.5	---	---	8.5	7.5
30	8.0	7.0	4.5	3.5	5.0	4.0	4.5	3.0	---	---	9.5	7.5
31	8.0	6.5	---	---	5.0	4.0	4.5	3.0	---	---	10.5	8.0
MONTH	16.0	6.5	8.0	3.0	5.5	3.0	5.5	3.0	5.0	2.5	10.5	2.5

10339400 MARTIS CREEK NEAR TRUCKEE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	9.0	13.5	12.0	20.5	17.0	20.5	16.0	20.5	16.5	19.0	15.5
2	10.5	9.5	13.5	11.5	20.0	17.0	21.0	16.0	21.0	16.5	19.0	15.5
3	10.5	9.0	13.5	11.0	19.5	16.0	21.0	16.5	21.0	16.5	19.0	15.5
4	9.5	8.5	13.5	11.0	19.5	16.0	20.5	16.5	21.0	16.5	20.0	15.5
5	10.0	8.0	13.5	11.5	19.0	16.0	21.0	17.0	21.0	16.5	19.5	15.5
6	9.5	7.5	15.0	12.0	19.5	16.0	21.0	16.5	21.0	16.5	19.0	15.0
7	8.5	7.5	16.0	12.5	19.5	15.5	20.5	17.0	21.0	17.0	18.5	15.0
8	9.0	7.0	16.5	13.5	20.0	16.0	21.0	16.5	25.0	16.5	18.0	14.5
9	8.5	7.0	17.0	14.0	20.0	16.0	21.0	17.0	21.5	17.0	18.0	14.5
10	8.5	6.5	17.5	14.5	20.0	16.0	21.0	17.0	21.0	17.0	17.5	14.5
11	8.5	7.0	18.0	15.0	20.0	16.0	20.5	17.5	21.0	16.5	16.5	15.0
12	8.5	6.5	18.0	15.5	20.0	16.0	21.0	17.0	21.0	17.0	17.0	14.5
13	9.0	7.0	18.0	15.5	19.0	15.5	21.0	17.0	21.0	16.5	17.0	14.5
14	9.5	7.0	18.0	15.5	19.5	15.5	21.0	17.0	21.5	16.5	17.5	14.5
15	10.5	7.5	16.5	15.5	19.5	15.5	21.0	16.5	21.5	16.0	17.0	14.0
16	10.5	8.5	17.0	15.0	20.0	15.5	20.5	17.0	21.5	16.5	17.0	14.5
17	11.0	8.5	17.0	14.5	20.0	16.0	21.0	16.5	21.0	16.5	17.0	14.0
18	11.0	9.0	17.5	15.0	20.0	16.0	21.0	16.5	20.5	16.5	17.0	14.0
19	10.0	9.5	17.5	14.5	20.5	16.0	21.0	16.5	21.0	16.5	17.0	14.0
20	9.5	8.5	18.0	15.0	20.5	16.5	21.0	16.5	21.0	16.5	---	14.0
21	9.5	8.0	18.5	15.0	21.0	16.5	21.0	16.5	20.5	16.5	---	14.0
22	10.0	8.0	19.0	15.5	21.0	16.5	21.0	16.5	20.0	16.0	---	14.0
23	10.5	8.5	19.0	16.0	21.0	17.0	20.5	16.5	20.0	16.0	---	14.0
24	11.5	9.5	19.5	16.0	21.0	17.0	21.0	16.5	20.0	16.0	---	14.0
25	12.0	10.5	19.5	16.5	18.5	17.0	21.0	16.5	20.0	16.0	---	14.5
26	13.0	11.0	19.5	16.5	19.0	16.0	21.0	17.0	20.0	16.0	---	14.0
27	13.5	11.5	20.0	16.5	20.5	---	21.0	16.5	20.0	16.0	---	14.0
28	13.5	12.0	20.0	16.5	21.5	---	21.0	17.0	19.0	16.0	---	14.0
29	13.5	11.5	20.0	16.5	20.0	16.5	21.0	17.0	19.0	16.0	---	14.0
30	13.5	11.5	19.5	16.5	20.0	16.0	20.5	17.0	19.0	15.5	---	13.5
31	---	---	20.5	16.5	---	---	20.5	16.5	19.0	16.0	---	---
MONTH	13.5	6.5	20.5	11.0	21.5	---	21.0	16.0	25.0	15.5	---	13.5

10340300 PROSSER CREEK RESERVOIR NEAR TRUCKEE, CA

LOCATION.—Lat 39°22'46", long 120°08'12", in NW 1/4 SW 1/4 sec.30, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house on Prosser Creek Dam on Prosser Creek, 1.4 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.—50.3 mi^2.

PERIOD OF RECORD.—January 1963 to current year. January 1963 to September 1987 (monthend elevations and contents only). Prior to October 1976, published as "near Boca."

REVISED RECORDS.—WDR CA-76-3: 1975. WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation).

REMARKS.—Records good. Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,641 acre-ft, between elevations 5,660.6 ft, top of inactive contents, and 5,741.2 ft, crest of spillway. Inactive contents, 1,201 acre-ft, includes 83 acre-ft dead contents below elevation 5,637.0 ft. Figures given represent total contents at 0800 hours. Reservoir is used for flood control, enhancement of fishery, and recreation. See schematic diagram of Truckee River Basin.

EXTREMES (at 0800 hours) FOR PERIOD OF RECORD.—Maximum contents, 33,719 acre-ft, May 19, 1996, elevation, 5,746.11 ft; minimum since reservoir first filled, 66 acre-ft, Oct. 10–12, 1983, elevation, 5,635.75 ft.

EXTREMES (at 0800 hours) FOR CURRENT YEAR.—Maximum contents, 12,900 acre-ft, Oct. 1, elevation, 5,711.77 ft; minimum, 8,200 acre-ft, Sept. 30, elevation, 5,698.58 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated August 1962)

5,630	17	5,670	2,230	5,700	8,636	5,730	22,220
5,640	143	5,680	3,791	5,710	12,147	5,740	28,949
5,650	491	5,690	5,901	5,720	16,643	5,750	37,046
5,660	1,148						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12900	9930	9930	9920	9690	9840	9780	10500	12400	12000	10900	9330
2	12700	9900	9910	9930	9680	9840	9770	10700	12400	11900	10800	9280
3	12500	9860	9880	9940	9710	9820	9690	10800	12400	11900	10800	9230
4	12400	9850	9860	9950	9720	9830	9610	10800	12400	11900	10700	9190
5	12100	9840	9830	9960	9750	9840	9600	10700	12400	11900	10700	9140
6	12100	9820	9800	9960	9780	9850	9610	10700	12400	11900	10600	9090
7	11900	9810	9770	9980	9810	9850	9630	10700	12400	11800	10600	9040
8	11800	9790	9750	9990	9820	9850	9640	10800	12300	11800	10500	9000
9	11700	9780	9730	9980	9850	9880	9640	11000	12300	11800	10500	8940
10	11500	9770	9700	9980	9880	9900	9640	11300	12300	11700	10400	8900
11	11400	9750	9680	9970	9920	9920	9600	11500	12300	e11700	10400	e8840
12	11300	9730	9660	9960	9940	9920	9590	11700	12300	11700	10300	e8770
13	11200	9700	9630	9950	9960	9940	9580	11900	12200	11700	10300	8770
14	11100	9710	9660	9940	9960	9960	9570	12100	e12200	11600	10200	8730
15	11000	9720	9680	9920	9950	9950	9560	12200	12200	11600	10200	8690
16	10900	9730	9700	9910	9940	9920	9550	12300	e12200	11600	10100	8650
17	10800	9740	9720	9890	9940	9900	9600	12500	12200	11600	10100	8600
18	10700	9740	9730	9880	9920	9900	9680	12500	12200	11500	10000	8560
19	10600	9750	9740	9860	9910	9930	9810	12500	12200	11500	9980	8510
20	10600	9760	9760	9840	9910	9960	9920	12400	12200	11400	9930	8460
21	10500	9770	9780	9830	9900	9980	9940	12300	12200	11400	9880	8420
22	10400	9780	9800	9820	9900	9950	9910	12300	12100	11300	9820	8370
23	10300	9790	9810	9800	9900	9930	9900	12300	12100	11300	9770	8330
24	10200	9800	9830	9800	9890	9900	9920	12300	e12100	11200	9720	8280
25	10100	9810	9840	9780	9890	9920	9940	12300	12100	11200	9680	8250
26	10100	9820	9850	9780	9880	10000	10000	12300	12100	11200	9630	8240
27	10000	9840	9850	9770	9870	9880	10200	12300	12000	11100	9580	8230
28	9990	9850	9870	9750	9860	9750	10300	12300	12000	11100	9530	8220
29	10000	9860	9880	9740	---	9780	10300	12300	12000	11000	9480	8210
30	9990	9910	9900	9730	---	9800	10300	12300	12000	11000	9430	8200
31	9960	---	9910	9710	---	9780	---	12300	---	10900	9380	---
MEAN	11056	9797	9788	9878	9862	9886	9793	11771	12220	11523	10126	8682
MAX	12900	9930	9930	9990	9960	10000	10300	12500	12400	12000	10900	9330
MIN	9960	9700	9630	9710	9680	9750	9550	10500	12000	10900	9380	8200
a	5704.10	5703.94	5703.94	5703.37	5703.81	5703.58	5705.13	5710.43	5709.59	5706.77	5702.36	5698.58
b	-3040	-50	0	-200	+150	-80	+520	+2000	-300	-1100	-1520	-1180

CAL YR 2000 MEAN 15878 MAX 30000 MIN 9620 b +20
WTR YR 2001 MEAN 10372 MAX 12900 MIN 8200 b -4800

e Estimated.
a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

10340500 PROSSER CREEK BELOW PROSSER CREEK DAM, NEAR TRUCKEE, CA

LOCATION.—Lat 39°22'24", long 120°07'50", in NW 1/4 NE 1/4 sec.31, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 300 ft downstream from Station Creek, 0.5 mi downstream from Prosser Creek Dam, 0.9 mi upstream from mouth, and 4.2 mi northeast of Truckee.

DRAINAGE AREA.—52.9 mi^2.

PERIOD OF RECORD.—October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Prior to October 1976, published as "near Boca." Monthly discharge only for October 1942 to December 1950 published in WSP 1734; daily discharge in files of U.S. Geological Survey. Records for April 1889 to November 1890, published in the 11th and 12th Annual Reports, Part 2, have been found to be unreliable and should not be used.

WATER TEMPERATURE: Water years 1993–98.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 5,602.31 ft above sea level (levels by U.S. Bureau of Reclamation). See WSP 2127 for history of changes prior to September 1956. October 1956 to May 1976, water-stage recorder at site 0.8 mi downstream at datum 29.69 ft lower.

REMARKS.—Records good. Flow regulated by Prosser Creek Reservoir (station 10340300) since Jan. 30, 1963. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Water years 1943–63, prior to construction of Prosser Creek Dam, maximum discharge, 4,560 ft^3/s, Dec. 23, 1955, gage height, 10.13 ft, present datum, from rating curve extended above 910 ft^3/s, on basis of slope-area measurement of peak flow, maximum gage height, 11.0 ft, from floodmarks, present datum, Nov. 20, 1950; minimum discharge, 0.4 ft^3/s, July 18, 1961, result of work on dam upstream. Maximum discharge since construction of Prosser Creek Dam in 1963, 2,030 ft^3/s, Jan. 3, 1997, gage height, 6.72 ft, from rating curve extended above 880 ft^3/s, on basis of valve setting at Prosser Creek Dam; minimum daily, 0.02 ft^3/s, Jan. 2, 1975, result of temporary closing of Prosser Creek Dam for spillway maintenance.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	33	22	12	22	23	131	76	34	17	23	24
2	81	33	29	12	14	23	130	75	39	17	22	24
3	81	27	29	12	11	23	118	92	39	17	22	24
4	82	24	29	11	11	23	85	112	40	17	22	24
5	74	23	29	11	10	24	53	120	40	17	23	22
6	70	23	29	11	10	24	53	120	40	17	23	22
7	70	23	29	11	10	24	54	96	40	16	23	22
8	70	23	29	18	10	25	54	64	39	16	23	23
9	70	23	29	22	10	24	54	56	39	16	23	23
10	70	23	29	22	10	23	55	56	39	16	24	23
11	61	23	28	22	10	23	55	56	35	16	24	23
12	53	24	28	22	10	24	55	56	23	17	24	23
13	53	17	19	22	19	25	54	57	23	16	25	24
14	54	11	12	22	23	36	54	72	23	16	25	23
15	54	11	12	22	23	45	54	96	23	16	25	22
16	54	11	12	22	23	45	46	105	23	16	25	23
17	53	12	12	22	23	46	41	121	22	19	25	e23
18	53	12	12	22	23	46	39	133	19	22	25	23
19	54	12	12	22	23	58	38	133	17	22	25	23
20	54	12	12	22	23	84	61	133	17	22	25	23
21	54	12	12	22	23	111	79	120	17	22	24	23
22	54	12	12	22	23	120	79	104	17	22	24	23
23	48	12	12	22	23	120	79	99	17	22	23	24
24	43	12	12	21	23	120	88	100	16	22	24	24
25	42	12	12	22	23	121	102	90	16	22	24	18
26	42	12	12	21	23	148	101	67	16	22	24	10
27	35	12	12	22	23	164	101	56	16	22	24	10
28	32	12	12	22	23	143	101	57	16	22	24	10
29	33	12	12	22	---	131	102	57	16	23	24	9.8
30	33	12	12	22	---	131	88	58	16	23	24	9.5
31	33	---	12	22	---	131	---	47	---	23	25	---
TOTAL	1742	520	574	602	502	2108	2204	2684	777	593	740	622.3
MEAN	56.2	17.3	18.5	19.4	17.9	68.0	73.5	86.6	25.9	19.1	23.9	20.7
MAX	82	33	29	22	23	164	131	133	40	23	25	24
MIN	32	11	12	11	10	23	38	47	16	16	22	9.5
AC-FT	3460	1030	1140	1190	996	4180	4370	5320	1540	1180	1470	1230

e Estimated.

10340500 PROSSER CREEK BELOW PROSSER CREEK DAM, NEAR TRUCKEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1962, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.1	34.5	47.9	36.1	45.1	75.4	203	261	157	48.5	12.1	8.45
MAX	22.4	268	321	155	89.7	175	406	669	395	176	44.5	19.6
(WY)	1946	1951	1956	1956	1943	1943	1952	1952	1952	1952	1952	1952
MIN	6.63	8.62	9.81	10.0	11.0	20.0	94.5	106	55.9	10.0	3.79	3.90
(WY)	1961	1960	1960	1948	1948	1948	1955	1959	1947	1961	1961	1947

SUMMARY STATISTICS	WATER YEARS 1943 - 1962	
ANNUAL MEAN	76.8	
HIGHEST ANNUAL MEAN	162	1952
LOWEST ANNUAL MEAN	38.1	1961
HIGHEST DAILY MEAN	3490	Dec 23 1955
LOWEST DAILY MEAN	2.7	Aug 24 1961
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 19 1947
MAXIMUM PEAK FLOW	4560	Dec 23 1955
MAXIMUM PEAK STAGE	11.00	Nov 20 1950
ANNUAL RUNOFF (AC-FT)	55620	
10 PERCENT EXCEEDS	212	
50 PERCENT EXCEEDS	27	
90 PERCENT EXCEEDS	7.0	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

MEAN	92.4	39.8	55.4	78.0	74.3	117	123	211	110	59.1	49.1	107
MAX	282	214	361	564	397	371	372	545	494	167	151	477
(WY)	1983	1982	1965	1997	1986	1986	1969	1983	1983	1985	1995	1983
MIN	5.41	6.84	5.32	7.96	17.5	27.1	21.7	17.2	8.39	6.33	2.55	1.96
(WY)	1989	1989	1989	1989	1991	1977	1977	1985	1966	1966	1994	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL TOTAL	25733		13668.3			
ANNUAL MEAN	70.3		37.4		93.2	
HIGHEST ANNUAL MEAN					214	1983
LOWEST ANNUAL MEAN					24.4	1977
HIGHEST DAILY MEAN	221	Mar 28	164	Mar 27	1790	Feb 21 1986
LOWEST DAILY MEAN	11	Nov 14	9.5	Sep 30	.02	Jan 2 1975
ANNUAL SEVEN-DAY MINIMUM	12	Nov 14	10	Feb 5	.30	Apr 13 1977
MAXIMUM PEAK FLOW			169	Mar 27	2030	Jan 3 1997
MAXIMUM PEAK STAGE			3.52	Mar 27	6.72	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	51040		27110		67510	
10 PERCENT EXCEEDS	152		88		215	
50 PERCENT EXCEEDS	73		23		49	
90 PERCENT EXCEEDS	12		12		9.5	

10342900 INDEPENDENCE LAKE NEAR TRUCKEE, CA

LOCATION.—Lat 39°27'07", long 120°17'23", in NW 1/4 SW 1/4 sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, on right bank of outlet channel, 60 ft upstream from outlet gates, and 10.5 mi northwest of Truckee.

DRAINAGE AREA.—7.51 mi^2.

PERIOD OF RECORD.—November 1988 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Sierra Pacific Power Co.).

REMARKS.—Lake levels regulated by an earthfill dam at the outlet constructed in 1939. Usable capacity, 17,300 acre-ft, between elevations 6,921.0 ft, invert of outlet gate and 6,949.0 ft, normal maximum storage level. Water is used for irrigation and power development downstream. Records, including extremes, represent usable contents. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 17,700 acre-ft, Aug. 4, 1995, elevation, 6,949.51 ft; minimum, 4,750 acre-ft, Nov. 10, 11, 1988, elevation, 6,929.39 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 17,500 acre-ft, several days in May, maximum elevation, 6,949.31 ft, May 24, 25; minimum, 13,400 acre-ft, several days in December and January, minimum elevation, 6942.96 ft, Dec. 30

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Sierra Pacific Power Co., dated Nov. 5, 1941)

6,921	0	6,930	5,110	6,940	11,240	6,950	18,000
6,925	2,220	6,935	8,110	6,945	14,530		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13800	13600	13500	13400	13500	13800	14500	15700	17400	16900	16500	16000
2	13800	13600	13500	13400	13500	13800	14600	15800	17400	16900	16500	15900
3	13800	13600	13500	13400	13500	13800	14600	15900	17400	16900	16400	15900
4	13700	13700	13500	13400	13500	13800	14600	15900	17300	16900	16400	15900
5	13700	13700	13500	13400	13500	13900	14600	16000	17300	16900	16400	15900
6	13700	13600	13500	13400	13500	13900	14700	16100	17300	16900	16400	15900
7	13700	13600	13500	13400	13500	13900	14700	16200	17200	16900	16400	15900
8	13700	13600	13500	13400	13500	13900	14700	16300	17200	16900	16400	15900
9	13600	13600	13500	13400	13500	13900	14800	16400	17200	16900	16400	15700
10	13600	13600	13500	13500	13600	13900	14800	16500	17200	16900	16300	15700
11	13600	13600	13500	13500	13600	13900	14800	16700	17200	16800	16300	15700
12	13600	13600	13500	13500	13600	13900	14800	16800	17200	16800	16300	15600
13	13600	13600	13500	13500	13600	13900	14800	16900	17100	16800	16300	15600
14	13600	13600	13500	13500	13600	13900	14800	17000	17100	16800	16300	15500
15	13600	13600	13500	13500	13600	13900	14800	17100	17100	16800	16200	15500
16	13600	13600	13500	13500	13600	13900	14900	17200	17100	16700	16200	15400
17	13600	13600	13500	13500	13600	13900	14900	17300	17100	16700	16200	15400
18	13600	13600	13500	13500	13600	13900	15000	17300	17100	16700	16200	15300
19	13600	13600	13500	13500	13600	13900	15000	17400	17100	16700	16200	15300
20	13600	13600	13500	13500	13600	14000	15100	17400	17100	16700	16100	15200
21	13600	13500	13500	13400	13700	14000	15100	17400	17100	16700	16100	15200
22	13500	13500	13500	13400	13700	14000	15100	17500	17000	16700	16100	15100
23	13600	13500	13500	13400	13700	14100	15100	17500	17000	16700	16100	15100
24	13500	13500	13500	13400	13800	14100	15200	17500	17000	16600	e16100	15000
25	13500	13500	13500	13500	13800	14200	15300	17500	17000	16600	e16100	15000
26	13500	13500	13500	13500	13800	14200	15400	17500	17000	16600	e16100	15000
27	13600	13500	13500	13500	13800	14300	15500	17500	17000	16600	16100	14900
28	13600	13500	13500	13500	13800	14300	15500	17500	17000	16600	16000	14900
29	13600	13500	13400	13500	---	14400	15600	17500	17000	16500	16000	14800
30	13600	13500	e13400	13500	---	14400	15700	17500	16900	16500	16000	14800
31	13600	---	13400	13500	---	14500	---	17500	---	16500	16000	---
MAX	13800	13700	13500	13500	13800	14500	15700	17500	17400	16900	16500	16000
MIN	13500	13500	13400	13400	13500	13800	14500	15700	16900	16500	16000	14800
a	6943.65	6943.49	6943.29	6943.40	6943.83	6944.92	6946.68	6949.24	6948.49	6947.84	6947.14	6945.35
b	-300	-100	-100	+100	+300	+700	+1200	+1800	-600	-400	-500	-1200

CAL YR 2000 MAX 17200 MIN 13400 b -400
WTR YR 2001 MAX 17500 MIN 13400 b +900

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CA

LOCATION.—Lat 39°27'24", long 120°17'10", in SW 1/4 NW 1/4 sec.35, T.19 N., R.15 E., Sierra County, Hydrologic Unit 16050102, on left bank, 0.4 mi downstream from Independence Lake outlet, and 10.5 mi northwest of Truckee.

DRAINAGE AREA.—8.10 mi^2.

PERIOD OF RECORD.—November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,920 ft above sea level, from topographic map. July 1, 1904, to June 30, 1910, nonrecording gage 75 ft downstream from Independence Lake outlet; prior to July 1, 1904, nonrecording gage 600 ft downstream at approximately same datum.

REMARKS.—Records good. Flow regulated by Independence Lake (station 10342900) since 1939. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 325 ft^3/s, Jan. 3, 1997, gage height, 6.17 ft; maximum gage height, 8.16 ft, Apr. 16, 1993, backwater from snow and ice; no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	2.7	5.8	5.8	5.8	4.9	5.1	4.6	24	4.7	4.5	2.7
2	12	2.6	5.8	5.8	5.9	4.9	4.9	3.9	23	4.6	4.5	2.8
3	12	2.6	5.8	5.8	5.9	4.9	4.9	3.5	23	4.4	4.6	2.8
4	12	2.6	5.8	5.8	5.6	4.9	4.7	3.3	23	4.4	4.4	2.7
5	12	2.6	5.8	6.0	5.5	5.0	4.7	3.3	23	4.4	4.0	2.7
6	12	2.7	5.8	6.0	5.5	5.2	4.7	3.1	23	4.5	4.0	6.5
7	5.6	2.5	5.8	5.9	5.5	4.9	4.9	3.1	18	4.3	4.0	17
8	5.2	2.4	5.8	6.1	5.5	4.9	4.7	3.7	9.7	4.0	4.0	22
9	4.9	2.4	5.8	6.2	5.5	4.9	4.7	7.2	9.7	4.0	3.7	22
10	4.7	2.4	5.8	6.2	5.5	5.0	4.7	7.0	9.5	4.0	3.5	22
11	4.4	2.3	5.8	6.2	5.5	5.1	4.7	6.1	9.2	4.0	3.4	22
12	4.2	2.3	5.8	6.1	5.5	5.1	4.7	5.3	8.8	4.0	3.5	22
13	4.1	2.1	5.8	5.6	5.5	5.1	4.7	4.9	8.8	3.9	3.5	22
14	3.8	4.5	5.8	5.5	5.5	4.9	4.7	4.7	7.1	3.8	3.5	21
15	3.5	7.2	5.8	5.5	5.5	4.7	4.5	4.5	5.5	3.5	3.4	21
16	3.5	7.2	5.8	5.5	5.5	4.5	4.6	4.5	5.5	3.7	3.4	21
17	3.5	7.2	5.8	5.5	5.5	4.5	4.8	4.7	5.5	3.6	3.2	21
18	3.1	7.1	5.8	5.5	5.3	4.7	5.2	16	5.5	2.6	3.2	21
19	3.0	6.9	5.8	5.6	4.9	4.7	5.0	26	5.5	2.5	3.2	21
20	2.8	6.9	5.8	5.8	4.9	4.5	4.9	26	5.5	2.4	3.3	21
21	2.6	6.9	5.8	5.8	4.9	4.5	4.9	26	5.3	2.2	3.3	21
22	2.7	6.8	5.8	5.9	5.0	4.5	4.9	26	5.0	2.1	3.2	21
23	2.6	6.0	5.8	6.0	4.9	4.5	5.2	25	4.9	2.1	3.1	21
24	3.7	5.8	5.8	5.8	4.9	4.6	5.3	25	4.9	1.9	3.2	21
25	4.0	5.8	5.8	5.8	4.9	4.7	5.5	25	4.9	3.6	3.1	21
26	3.5	5.8	5.7	5.8	4.9	4.7	5.6	25	4.9	4.9	2.8	21
27	3.5	5.8	5.8	5.8	4.9	4.7	5.5	24	4.9	4.7	2.8	21
28	3.5	5.8	5.8	5.8	4.9	5.4	5.1	24	4.9	4.7	2.7	21
29	3.1	5.8	5.8	5.8	---	5.5	5.0	24	4.7	4.7	2.6	20
30	2.9	5.8	5.7	5.8	---	5.5	5.2	24	4.7	4.7	2.7	20
31	2.8	---	5.6	5.8	---	5.3	---	24	---	4.7	2.6	---
TOTAL	164.2	139.5	179.4	180.5	149.1	151.2	148.0	417.4	301.9	117.6	106.9	524.2
MEAN	5.30	4.65	5.79	5.82	5.33	4.88	4.93	13.5	10.1	3.79	3.45	17.5
MAX	13	7.2	5.8	6.2	5.9	5.5	5.6	26	24	4.9	4.6	22
MIN	2.6	2.1	5.6	5.5	4.9	4.5	4.5	3.1	4.7	1.9	2.6	2.7
AC-FT	326	277	356	358	296	300	294	828	599	233	212	1040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

MEAN	15.4	20.8	12.1	13.2	11.9	15.2	19.8	43.5	55.2	26.5	19.6	20.9
MAX	45.8	97.6	58.2	161	58.0	94.5	72.9	112	188	89.2	114	133
(WY)	1976	1984	1982	1997	1986	1996	1986	1982	1983	1983	1988	1973
MIN	.47	1.36	.70	1.04	1.07	1.45	1.50	1.51	2.09	1.78	2.05	.58
(WY)	1980	1989	1993	1993	1974	1977	1977	1977	1977	1977	1976	1979

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	7104.1		2579.9			
ANNUAL MEAN	19.4		7.07		22.8	
HIGHEST ANNUAL MEAN					46.7	1983
LOWEST ANNUAL MEAN					7.07	2001
HIGHEST DAILY MEAN	75	May 28	26	May 19	295	Jan 4 1997
LOWEST DAILY MEAN	2.1	Nov 13	1.9	Jul 24	.02	Sep 26 1973
ANNUAL SEVEN-DAY MINIMUM	2.3	Nov 7	2.3	Jul 18	.02	Sep 26 1973
MAXIMUM PEAK FLOW			108	Oct 6	325	Jan 3 1997
MAXIMUM PEAK STAGE			4.00	Oct 6	8.16	Apr 16 1993
ANNUAL RUNOFF (AC-FT)	14090		5120		16540	
10 PERCENT EXCEEDS	49		21		61	
50 PERCENT EXCEEDS	13		5.1		11	
90 PERCENT EXCEEDS	4.8		2.9		2.1	

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA
(Hydrologic Benchmark Station)

LOCATION.—Lat 39°25'54", long 120°14'13", in NE 1/4 NE 1/4 sec.7, T.18 N., R.16 E., Nevada County, Hydrologic Unit 16050102, on left bank, 2.2 mi upstream from bridge on State Highway 89, and 7.5 mi north of Truckee.

DRAINAGE AREA.—10.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1953 to current year.
PRECIPITATION DATA: Water years 1990–96.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 6,320 ft above sea level, from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft upstream at different datum.

REMARKS.—Records good, including estimated daily discharges. No storage or diversion upstream from station. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,230 ft^3/s, Jan. 1, 1997, gage height, 5.20 ft, from poor high-water mark on gage house. Rating curve extended above 160 ft^3/s on basis of slope-area measurement at gage height 4.28 ft; minimum daily, 1.0 ft^3/s, Sept. 13, 1960.

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)
Apr. 26	1815	20	2.18

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.4	3.3	3.2	3.3	e3.4	13	15	3.0	1.8	1.7	1.7
2	2.4	3.5	3.3	3.2	3.4	3.4	11	13	2.9	1.8	1.7	1.7
3	2.4	3.5	3.3	3.1	3.5	3.4	8.6	11	2.9	1.8	1.6	1.7
4	2.4	3.4	3.3	3.2	3.9	3.8	7.5	11	2.8	1.8	1.6	1.7
5	2.4	3.4	3.3	3.1	3.9	3.9	6.9	11	2.8	1.9	1.6	1.7
6	2.4	3.4	3.3	3.1	3.8	3.9	6.6	11	2.7	1.8	1.6	1.7
7	2.4	3.2	3.3	3.2	3.6	4.2	6.5	11	2.6	1.8	1.6	1.7
8	2.4	3.2	3.3	3.3	3.5	4.6	6.0	11	2.5	1.8	1.6	1.7
9	2.8	3.3	3.3	3.3	3.5	4.7	5.7	11	2.4	1.8	1.6	1.7
10	3.3	3.1	3.4	3.3	3.7	4.2	e5.6	10	2.4	1.9	1.6	1.7
11	3.0	3.1	3.4	3.4	3.7	4.2	5.5	9.6	2.4	1.8	1.6	1.8
12	2.9	3.0	3.4	3.3	3.5	4.2	5.8	9.3	2.4	1.8	1.6	1.9
13	2.9	3.0	3.4	3.3	3.4	4.4	6.0	8.7	2.4	1.7	1.6	1.8
14	2.9	3.1	3.4	3.3	e3.5	4.6	6.0	7.9	2.4	1.7	1.6	1.8
15	2.8	3.1	3.4	3.4	e3.5	4.5	6.6	8.5	2.3	1.7	1.6	1.8
16	2.8	3.1	3.3	3.3	3.4	4.5	8.0	8.5	2.2	1.8	1.6	1.8
17	2.6	3.0	3.4	e3.4	3.4	5.1	9.4	7.4	2.1	1.8	1.6	1.8
18	2.6	3.0	3.4	e3.4	3.4	6.4	11	6.8	2.1	1.8	1.6	1.8
19	2.6	3.1	3.3	3.3	3.4	7.7	11	6.2	2.1	1.8	1.6	1.8
20	2.8	3.1	3.3	e3.4	3.4	8.9	8.7	5.8	2.1	1.7	1.6	1.8
21	3.0	3.1	3.4	3.3	3.4	9.5	8.4	5.5	2.0	1.7	1.6	1.8
22	2.9	3.0	3.4	3.3	3.6	9.4	9.2	5.1	2.0	1.7	1.7	1.8
23	2.8	3.0	3.3	3.3	3.4	9.8	11	4.9	2.0	1.7	1.7	1.8
24	2.8	3.1	3.3	3.3	3.6	11	12	4.5	2.0	1.7	1.7	1.8
25	2.9	3.1	3.3	3.3	3.4	15	14	4.3	2.0	1.7	1.7	2.3
26	3.3	3.2	e3.3	3.4	3.4	11	16	4.0	2.0	1.7	1.7	1.9
27	3.5	3.3	3.3	3.3	3.4	10	16	3.8	2.1	1.6	1.7	1.9
28	4.3	3.3	3.2	3.3	3.4	14	14	3.6	2.1	1.6	1.7	1.9
29	4.3	3.3	3.3	3.3	---	13	13	3.4	2.0	1.6	1.7	1.9
30	3.5	3.4	3.3	3.4	---	13	15	3.2	1.9	1.7	1.7	1.9
31	3.4	---	3.3	3.4	---	13	---	3.1	---	1.7	1.7	---
TOTAL	89.9	95.8	103.2	102.1	98.3	222.7	284.0	239.1	69.6	54.2	50.8	54.1
MEAN	2.90	3.19	3.33	3.29	3.51	7.18	9.47	7.71	2.32	1.75	1.64	1.80
MAX	4.3	3.5	3.4	3.4	3.9	15	16	15	3.0	1.9	1.7	2.3
MIN	2.4	3.0	3.2	3.1	3.3	3.4	5.5	3.1	1.9	1.6	1.6	1.7
AC-FT	178	190	205	203	195	442	563	474	138	108	101	107

e Estimated.

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA—Continued
(Hydrologic Benchmark Station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.48	5.10	7.17	8.61	8.22	10.8	24.5	43.9	25.6	7.31	3.16	2.76
MAX	11.9	27.7	44.0	87.3	51.0	50.1	51.6	117	142	37.4	11.8	7.56
(WY)	1963	1984	1965	1997	1963	1986	1986	1969	1983	1983	1983	1983
MIN	1.46	1.83	2.03	1.81	2.54	2.74	6.13	3.45	1.82	1.36	1.20	1.11
(WY)	1995	1993	1977	1962	1994	1962	1975	1988	1992	1994	1994	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001	
ANNUAL TOTAL	3781.9		1463.8			
ANNUAL MEAN	10.3		4.01		12.6	
HIGHEST ANNUAL MEAN					30.0	1983
LOWEST ANNUAL MEAN					2.65	1977
HIGHEST DAILY MEAN	60	Apr 13	16	Apr 26	800	Jan 1 1997
LOWEST DAILY MEAN	2.3	Sep 16	1.6	Jul 27	1.0	Sep 13 1960
ANNUAL SEVEN-DAY MINIMUM	2.4	Sep 15	1.6	Aug 3	1.1	Sep 9 1960
MAXIMUM PEAK FLOW			20	Apr 26	1230	Jan 1 1997
MAXIMUM PEAK STAGE			2.18	Apr 26	5.20	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	7500		2900		9100	
10 PERCENT EXCEEDS	34		9.2		33	
50 PERCENT EXCEEDS	4.3		3.3		4.5	
90 PERCENT EXCEEDS	2.6		1.7		1.9	

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—
CHEMICAL DATA: Water years 1968–72, 1986–96.
SPECIFIC CONDUCTANCE: November 2000 to September 2001.
WATER TEMPERATURE: Water years 1970–1974, November 2000 to September 2001.
SEDIMENT DATA: Water years 1968–75, 1981–96.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: November 2000 to September 2001.
WATER TEMPERATURE: October 1970 to September 1974, November 2000 to September 2001.

INSTRUMENTATION.—Water-temperature and specific conductance recorder since November 2000.

REMARKS.—Specific conductance records rated fair, except February 18 to March 30 which is poor. Temperature records are excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 188 microsiemens, July 17, 2001; minimum recorded, 57 microsiemens, April 30, May 1, 2001.
WATER TEMPERATURE: Maximum recorded, 20.5°C, June 28, 30, 1973; minimum recorded, –0.5°C, many days in November 2000 through March 2001.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 188 microsiemens, July 17; minimum recorded, 57 microsiemens, Apr. 30, May 1.
WATER TEMPERATURE: Maximum recorded, 20.0°C, July 3; minimum recorded, –0.5°C, many days during November–March.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	124	122	117	116	117	116	124	111	120	106
2	---	---	124	122	118	116	118	116	123	120	120	118
3	---	---	124	122	117	116	122	116	123	121	121	111
4	---	---	126	122	117	115	123	117	122	120	120	114
5	---	---	123	122	119	117	125	123	121	119	118	115
6	---	---	123	121	120	117	125	123	121	120	118	116
7	---	---	125	123	121	118	125	123	123	119	117	112
8	---	---	125	123	119	118	125	122	120	110	114	111
9	---	---	124	121	120	118	125	123	121	117	116	111
10	---	---	125	123	119	118	124	120	119	116	117	115
11	---	---	124	121	120	118	124	120	119	115	118	116
12	---	---	124	118	121	118	127	123	125	117	118	115
13	---	---	124	119	121	115	128	125	120	118	115	112
14	---	---	123	120	119	115	128	119	119	110	113	112
15	---	---	122	120	120	118	130	126	120	114	117	112
16	---	---	122	120	121	118	130	127	121	118	116	112
17	---	---	123	118	119	118	128	119	123	120	114	105
18	---	---	125	120	122	118	127	116	123	119	108	100
19	---	---	122	119	120	116	128	126	121	118	105	93
20	---	---	121	118	118	116	129	126	121	119	99	90
21	---	---	121	119	118	115	129	126	121	116	96	88
22	---	---	121	119	117	115	128	127	120	116	94	88
23	---	---	123	121	118	116	128	126	121	117	94	83
24	---	---	122	119	118	116	128	126	118	116	89	80
25	---	---	121	118	118	116	127	123	121	116	80	75
26	---	---	120	117	120	116	125	124	121	118	84	78
27	---	---	120	115	119	115	125	123	121	114	85	78
28	---	---	118	116	117	115	126	114	121	117	80	73
29	---	---	118	111	116	115	124	122	---	---	79	72
30	---	---	117	116	117	114	124	114	---	---	81	73
31	---	---	---	---	117	114	123	112	---	---	79	70
MONTH	---	---	126	111	122	114	130	112	125	110	121	70

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	77	71	65	57	120	115	139	137	138	136	137	135
2	80	73	65	59	121	116	139	136	138	136	137	135
3	85	80	69	65	121	117	140	137	139	136	137	135
4	88	84	70	65	122	117	140	137	140	137	137	135
5	90	88	70	64	123	118	140	138	140	138	138	135
6	91	89	70	63	124	120	140	137	140	137	137	135
7	93	89	70	64	126	122	141	138	140	136	137	134
8	98	92	69	63	127	123	142	138	141	137	137	135
9	99	95	69	64	128	124	140	138	142	136	137	134
10	103	94	71	67	133	125	146	137	138	136	137	134
11	98	95	73	69	129	124	151	137	138	136	138	135
12	104	94	73	70	129	125	157	138	138	135	138	135
13	99	94	77	72	129	125	151	138	138	135	137	134
14	99	94	81	74	130	126	146	137	138	135	137	135
15	97	89	82	72	131	127	165	137	137	135	137	134
16	94	80	77	72	133	129	174	136	138	135	137	134
17	87	76	81	76	134	130	188	137	138	135	137	135
18	83	72	84	80	134	130	175	137	138	135	137	135
19	81	74	90	84	134	131	139	137	138	135	137	135
20	83	81	92	87	135	131	169	137	137	135	137	135
21	86	81	92	89	136	132	154	137	137	135	137	135
22	88	76	95	91	137	134	168	137	137	135	137	134
23	82	74	98	94	137	133	174	136	137	134	137	133
24	78	71	101	96	137	134	139	137	137	135	137	134
25	75	65	109	99	137	132	139	136	137	135	152	135
26	69	61	128	102	137	133	139	137	138	135	141	137
27	67	61	109	104	137	133	139	137	138	135	139	136
28	67	62	121	106	136	134	139	137	138	135	138	136
29	69	63	113	108	139	135	139	137	138	134	137	135
30	68	57	115	110	140	137	139	135	138	135	137	135
31	---	---	119	112	---	---	138	136	137	135	---	---
MONTH	104	57	128	57	140	115	188	135	142	134	152	133

10343500 SAGEHEN CREEK NEAR TRUCKEE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	3.5	1.0	2.0	.5	1.5	.0	2.0	-.5	2.5	-.5
2	---	---	4.5	2.0	1.5	.0	1.5	-.5	3.5	1.5	3.5	1.5
3	---	---	4.0	2.5	1.5	.0	1.5	-.5	3.5	2.0	3.0	-.5
4	---	---	4.0	1.5	2.5	.5	1.5	-.5	3.5	1.5	2.0	.5
5	---	---	5.0	2.0	1.5	.0	1.5	.0	3.0	.0	2.5	1.5
6	---	---	4.0	2.5	2.0	.0	2.0	.0	2.0	.5	4.0	2.0
7	---	---	3.5	1.5	3.5	1.5	2.5	.0	1.5	-.5	4.0	1.5
8	---	---	4.0	2.0	3.0	1.5	3.0	2.0	1.0	-.5	4.5	1.5
9	---	---	2.5	1.0	3.5	1.0	2.5	1.0	1.5	.0	2.5	1.0
10	---	---	2.0	-.5	3.0	1.0	1.5	.0	1.5	.0	4.0	1.0
11	---	---	2.0	.0	2.5	.0	2.0	.0	.5	.0	4.0	1.0
12	---	---	1.0	-.5	2.5	.5	2.5	.5	1.0	.0	4.5	1.0
13	---	---	1.0	-.5	1.5	.0	2.0	.0	2.0	.5	4.5	1.0
14	---	---	2.5	.5	2.5	-.5	1.5	-.5	1.5	-.5	4.5	1.0
15	---	---	2.0	.0	2.0	1.0	1.0	-.5	2.0	.0	4.5	1.5
16	---	---	1.5	.0	1.5	.0	1.0	.0	3.0	1.5	4.5	1.5
17	---	---	1.0	-.5	2.0	.0	.0	-.5	3.0	.5	5.0	2.0
18	---	---	1.5	-.5	.5	-.5	1.5	-.5	3.5	2.0	5.0	1.5
19	---	---	2.5	.5	2.0	.0	2.5	1.0	3.0	1.5	5.0	1.5
20	---	---	2.5	.0	2.5	1.0	2.0	.0	2.5	1.5	4.0	1.5
21	---	---	2.0	.0	2.0	1.0	3.0	.5	2.5	1.5	5.0	1.5
22	---	---	2.0	.5	2.5	1.0	3.0	2.0	1.5	.5	4.5	1.5
23	---	---	2.5	.0	2.5	.0	3.0	1.0	2.5	.0	5.5	1.5
24	---	---	3.0	1.5	2.0	.5	2.5	1.5	2.0	1.0	5.5	1.5
25	---	---	3.0	.5	1.5	-.5	2.0	.5	3.0	1.0	4.0	1.5
26	---	---	3.5	1.5	1.0	-.5	2.5	1.0	3.0	1.0	5.5	1.0
27	---	---	4.0	1.5	1.5	-.5	2.0	.0	2.5	-.5	6.0	1.0
28	---	---	3.0	1.5	1.5	-.5	1.0	-.5	2.5	.0	6.0	2.0
29	---	---	2.5	-.5	2.0	.0	2.0	.5	---	---	6.0	1.5
30	---	---	1.5	.5	1.5	-.5	1.0	-.5	---	---	6.5	1.0
31	---	---	---	---	1.5	-.5	.5	-.5	---	---	6.5	1.5
MONTH	---	---	5.0	-.5	3.5	-.5	3.0	-.5	3.5	-.5	6.5	-.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	1.5	10.5	3.0	17.5	8.5	18.5	8.5	16.5	7.0	14.5	7.5
2	4.5	1.0	8.5	2.0	16.0	7.5	19.5	8.5	17.0	7.5	14.5	8.0
3	5.0	.5	9.5	1.5	15.5	6.0	20.0	10.0	17.5	9.0	14.5	7.5
4	4.0	.5	10.5	2.0	15.5	5.5	16.0	11.0	16.5	9.0	14.5	7.5
5	5.0	.0	11.5	3.0	15.5	7.5	19.5	11.0	16.5	7.5	14.0	9.0
6	4.0	1.0	12.0	3.0	17.0	6.5	16.5	9.5	17.0	7.5	12.5	5.5
7	2.5	.5	13.0	4.0	17.0	7.0	15.5	11.0	16.0	9.0	13.0	5.5
8	3.5	.0	13.5	4.5	17.0	7.0	17.5	8.5	18.0	9.5	12.5	6.0
9	3.5	.0	13.0	4.5	17.0	7.5	14.5	9.5	18.0	9.5	12.5	5.5
10	5.0	.0	13.5	5.0	16.5	6.5	15.0	9.5	18.0	9.0	13.0	6.5
11	3.5	.5	14.5	5.5	14.5	7.0	18.0	9.0	16.5	7.5	11.0	8.0
12	5.5	.0	12.0	6.0	16.0	8.0	17.5	7.5	16.5	8.5	10.5	7.0
13	6.5	1.0	14.0	6.0	15.5	6.0	18.0	8.0	16.5	8.5	12.0	5.5
14	6.5	.5	10.0	5.5	16.5	5.5	17.0	7.5	16.5	8.0	12.5	6.0
15	7.5	1.0	12.0	6.5	17.0	7.0	17.0	7.0	16.0	6.5	12.0	6.0
16	8.5	1.5	14.0	6.0	18.0	7.0	14.5	9.0	16.0	7.0	13.0	6.5
17	8.5	2.5	14.5	5.5	18.0	8.5	16.5	7.0	16.5	7.5	12.5	6.0
18	8.5	1.5	15.0	6.0	17.5	7.0	17.0	7.0	17.5	10.0	12.5	6.5
19	4.0	2.0	15.5	6.0	18.0	7.5	16.5	7.5	16.0	8.0	12.5	6.0
20	4.0	.5	16.0	6.5	18.5	8.0	17.0	8.5	15.5	8.5	12.5	6.5
21	5.5	.5	16.0	7.0	19.0	9.0	17.0	8.5	14.5	6.5	12.0	6.0
22	8.0	.5	17.0	6.5	19.0	9.0	16.0	6.5	14.5	6.0	12.0	5.5
23	9.0	1.5	17.5	8.5	16.0	10.5	15.5	7.5	13.5	6.5	11.5	6.5
24	9.5	2.0	17.0	7.0	17.0	8.0	17.5	8.0	15.0	6.5	12.0	6.0
25	10.5	2.5	16.0	7.5	15.0	9.0	16.5	9.0	15.5	7.0	11.5	8.0
26	10.5	2.5	16.5	8.5	15.5	9.0	18.5	9.0	15.0	7.5	11.5	6.0
27	9.5	2.0	16.0	7.5	14.0	9.5	17.5	7.5	15.5	7.5	11.5	6.0
28	8.0	2.5	15.5	6.5	18.0	8.5	17.5	8.5	15.5	8.0	11.0	6.5
29	10.5	1.5	16.5	7.0	18.0	8.0	17.0	7.5	14.0	7.5	10.5	5.0
30	11.0	2.5	17.0	7.5	18.0	8.5	16.0	9.5	14.5	7.0	11.0	5.0
31	---	---	18.0	7.5	---	---	16.5	7.5	15.0	7.5	---	---
MONTH	11.0	.0	18.0	1.5	19.0	5.5	20.0	6.5	18.0	6.0	14.5	5.0

10344300 STAMPEDE RESERVOIR NEAR TRUCKEE, CA

LOCATION.—Lat 39°28'14", long 120°06'11", in SE 1/4 NE 1/4 sec.29, T.19 N., R.17 E., Sierra County, Hydrologic Unit 16050102, Tahoe National Forest, in control house near base of spillway of Stampede Dam, on Little Truckee River, 0.2 mi upstream from Worn Mill Canyon, and 11.0 mi northeast of Truckee.

DRAINAGE AREA.—136 mi^2.

PERIOD OF RECORD.—August 1969 to current year. August 1969 to September 1977, monthend elevations and contents only. October 1977 to September 1987, daily contents. Prior to October 1976, published as "near Boca."

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation).

REMARKS.—Records good. Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft, at elevation 5,948.7 ft, spillway crest. Inactive contents, 5,010 acre-ft, includes 660 acre-ft dead contents below elevation 5,798.3 ft. Figures given, including extremes, represent total contents at 0800 hours. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation. See schematic diagram of Truckee River Basin.

EXTREMES (at 0800 hours) FOR PERIOD OF RECORD.—Maximum contents, 254,493 acre-ft, June 1, 1983, elevation, 5,956.55 ft; minimum since reservoir first filled, 30,772 acre-ft, Jan. 31, Feb. 1, 1978, elevation, 5,853.60 ft.

EXTREMES (at 0800 hours) FOR CURRENT YEAR.—Maximum contents, 205,700 acre-ft, Oct. 1, 2, maximum elevation, 5,942.58 ft, Oct. 1; minimum, 160,300 acre-ft, Sept. 30, elevation, 5,927.56 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated July 1971)

5,850	27,915	5,880	60,185	5,910	115,865	5,940	197,630
5,860	36,470	5,890	76,008	5,920	140,141	5,950	231,005
5,870	47,090	5,900	94,535	5,930	167,355	5,960	267,386

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205700	203400	202800	200700	194100	190800	188900	189000	186900	180700	174100	166000
2	205700	203400	202900	200300	194100	190700	189100	189200	186600	180500	173900	165700
3	205500	203400	202800	200000	193900	190500	189200	189300	186400	180400	173700	165400
4	205400	203400	202800	199800	193800	190400	189300	189400	186100	180200	173400	165200
5	205300	203300	202700	199500	193600	190400	189300	189400	186000	180000	173100	164900
6	205200	203400	202700	199200	193600	190200	189200	189400	185700	179800	172800	164500
7	205100	203200	202800	198900	193400	190000	189400	189500	185600	179600	172600	164200
8	204900	203200	202800	198700	193300	189900	189300	189600	185400	179300	172300	164000
9	204900	203200	202800	198400	193200	189700	189300	189800	185300	179200	172200	163700
10	204700	203200	202900	198100	193200	189500	189200	189900	185100	179000	171900	163500
11	204600	203200	202700	198000	193100	189300	189200	190100	184800	179000	171600	163300
12	204500	203100	202900	197700	193000	189000	189100	190200	184700	178800	171400	163100
13	204400	203000	202700	197400	192900	188800	189100	190300	184400	178600	171100	162800
14	204200	203000	202900	197100	192700	188600	189000	190300	184200	178400	170900	162600
15	204200	203000	202900	196900	192500	188400	188900	190200	184000	178100	170500	162400
16	204000	202900	202700	196600	192400	188200	188900	190200	183900	177900	170300	162200
17	203900	202900	202800	196200	192300	188000	188800	190300	183700	177600	170100	162000
18	203900	202800	202700	196100	192100	187800	188800	190300	183500	177400	169800	161800
19	203800	202800	202700	196000	192100	187700	189000	190200	183200	177200	169500	161600
20	203800	202800	202800	195800	191900	187600	189000	190000	183100	176900	169200	161400
21	203800	202900	202700	195700	191900	187500	189000	189900	182900	176700	168900	161100
22	203700	202800	202500	195600	191700	187400	188700	189600	182700	176400	168600	160900
23	203500	202700	202400	195500	191600	187400	188600	189500	182500	176200	168300	160800
24	203500	202700	202300	195400	191600	187600	188400	189300	e182300	176000	168000	160700
25	203400	202700	202200	195200	191500	187700	188300	189000	182000	175800	167800	160800
26	203500	202700	202000	195100	191300	187800	188400	188700	181800	175600	167500	160600
27	203500	202700	201900	195000	191200	187900	188500	188300	181500	175300	167300	160600
28	203400	202700	201800	194800	191000	188000	188700	187900	181300	175100	167100	160500
29	203600	202700	201600	194700	---	188300	188700	187500	181100	174800	166800	160400
30	203500	202900	201300	194400	---	188500	188800	187200	180900	174600	166500	160300
31	203500	---	201000	194300	---	188700	---	187000	---	e174300	166200	---
MAX	205700	203400	202900	200700	194100	190800	189400	190300	186900	180700	174100	166000
MIN	203400	202700	201000	194300	191000	187400	188300	187000	180900	174300	166200	160300
a	5941.88	5941.67	5941.08	5938.97	5937.95	5937.21	5937.25	5936.68	5934.68		5929.62	5927.56
b	-2300	-600	-1900	-6700	-3300	-2300	+100	-1800	-6100	-6600	-8100	-5900

CAL YR 2000 MAX 222541 MIN 199457 b +1500
WTR YR 2001 MAX 205700 MIN 160300 b -45500

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR TRUCKEE, CA

LOCATION.—Lat 39°26'09", long 120°05'00", in SW 1/4 SW 1/4 sec.3, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 1 mi upstream from Boca Reservoir, 1.5 mi upstream from Dry Creek, 3.0 mi downstream from Stampede Dam, and 5.5 mi northeast of Truckee.

DRAINAGE AREA.—146 mi^2.

PERIOD OF RECORD.—June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station," June 1903 to December 1907, as "at Starr," January 1908 to October 1910, and as "near Boca," September 1939 to September 1976.

REVISED RECORDS.—WSP 1564: 1903–04, 1906–07, 1910, drainage area at site used in 1903–07.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft above sea level (U.S. Bureau of Reclamation Benchmark). June 1903 to October 1910, nonrecording gages at different sites and datums.

REMARKS.—Records good. Flow regulated by Independence Lake (station 10342900) since 1939 and Stampede Reservoir (station 10344300) since 1969. There is one transbasin diversion to Sierra Valley. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Water years 1939–68, prior to construction of Stampede Dam, maximum discharge, 13,300 ft^3/s, Feb. 1, 1963, gage height, 9.00 ft, from rating curve extended above 1,600 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 3.0 ft^3/s, Nov. 30, 1954. Maximum discharge since construction of Stampede Dam in 1969, 3,850 ft^3/s, Jan. 3, 1997, gage height, 5.26 ft; minimum daily, 0.30 ft^3/s, Sept. 16–21, 1969.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	31	31	176	98	113	77	147	124	99	104	122
2	61	31	31	176	99	122	77	148	124	99	102	122
3	61	31	31	176	99	121	77	147	124	99	113	122
4	61	31	31	176	100	123	77	147	111	99	123	121
5	61	31	31	176	100	123	77	147	100	99	123	121
6	61	31	31	176	100	123	77	147	100	99	123	122
7	61	31	31	176	99	123	78	176	100	99	123	122
8	62	31	31	176	100	138	78	197	100	100	120	122
9	63	31	31	176	100	148	77	223	100	100	122	122
10	63	31	31	176	100	147	77	242	100	100	122	120
11	63	31	31	176	100	147	77	245	100	104	122	121
12	63	31	31	160	100	148	75	245	100	104	121	121
13	63	31	31	147	100	148	77	245	100	104	122	121
14	63	31	31	147	100	147	76	246	100	104	122	120
15	63	31	31	147	100	147	76	246	100	104	121	120
16	55	31	31	147	102	147	76	246	100	104	121	120
17	47	31	31	131	102	147	64	246	99	104	121	120
18	40	31	31	108	102	147	55	246	100	104	121	120
19	33	31	31	100	102	147	77	245	99	104	121	120
20	32	31	59	100	102	147	127	245	99	103	121	120
21	32	31	82	100	102	147	148	245	99	103	121	120
22	32	31	83	100	102	131	147	246	99	104	123	93
23	32	31	83	100	102	105	147	245	99	104	123	61
24	32	31	83	100	102	94	147	245	99	103	123	56
25	33	31	83	100	102	94	147	245	100	103	123	53
26	33	31	83	100	102	85	147	245	100	103	123	53
27	33	31	83	99	102	77	147	245	99	103	123	53
28	33	31	106	99	102	77	147	245	99	103	123	57
29	33	32	153	100	---	77	147	209	99	103	123	57
30	31	31	175	98	---	77	147	144	99	104	123	57
31	31	---	175	98	---	77	---	124	---	104	123	---
TOTAL	1492	931	1837	4217	2821	3794	3023	6614	3072	3169	3739	3079
MEAN	48.1	31.0	59.3	136	101	122	101	213	102	102	121	103
MAX	63	32	175	176	102	148	148	246	124	104	123	122
MIN	31	31	31	98	98	77	55	124	99	99	102	53
AC-FT	2960	1850	3640	8360	5600	7530	6000	13120	6090	6290	7420	6110

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR TRUCKEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1968, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.0	83.5	123	87.3	131	170	399	543	310	78.1	29.8	25.8
MAX	394	630	725	264	835	374	855	1304	1045	433	180	76.5
(WY)	1963	1951	1965	1956	1963	1967	1952	1952	1967	1967	1940	1959
MIN	13.5	13.0	11.6	9.45	22.0	39.0	106	171	45.7	6.06	4.45	5.93
(WY)	1962	1940	1960	1962	1948	1948	1961	1961	1954	1949	1949	1948

SUMMARY STATISTICS	WATER YEARS 1939 - 1968		
ANNUAL MEAN	170		
HIGHEST ANNUAL MEAN	321		1952
LOWEST ANNUAL MEAN	58.9		1961
HIGHEST DAILY MEAN	8810	Feb 1	1963
LOWEST DAILY MEAN	3.0	Nov 30	1954
ANNUAL SEVEN-DAY MINIMUM	4.0	Jul 17	1949
MAXIMUM PEAK FLOW	13300	Feb 1	1963
MAXIMUM PEAK STAGE	9.00	Feb 1	1963
ANNUAL RUNOFF (AC-FT)	123200		
10 PERCENT EXCEEDS	454		
50 PERCENT EXCEEDS	70		
90 PERCENT EXCEEDS	13		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	73.1	42.0	72.9	107	87.2	140	303	545	332	172	118	58.6
MAX	503	132	711	1089	400	418	923	1371	1733	1301	573	359
(WY)	1974	1975	1984	1997	1996	1996	1986	1969	1983	1983	1975	1971
MIN	.56	.75	2.85	16.7	10.6	13.8	25.6	30.6	28.1	24.1	1.65	.47
(WY)	1970	1970	1970	1980	1970	1970	1970	1988	1988	1981	1969	1969

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	46282		37788			
ANNUAL MEAN	126		104		171	
HIGHEST ANNUAL MEAN					427	1983
LOWEST ANNUAL MEAN					53.4	1992
HIGHEST DAILY MEAN	574	May 7	246	May 14	2590	Jan 12 1997
LOWEST DAILY MEAN	30	Jan 1	31	Oct 30	.30	Sep 16 1969
ANNUAL SEVEN-DAY MINIMUM	30	Jan 1	31	Oct 30	.31	Sep 15 1969
MAXIMUM PEAK FLOW			246	May 9	3850	Jan 3 1997
MAXIMUM PEAK STAGE			1.56	May 9	5.26	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	91800		74950		124100	
10 PERCENT EXCEEDS	255		166		471	
50 PERCENT EXCEEDS	90		100		51	
90 PERCENT EXCEEDS	31		31		28	

10344490 BOCA RESERVOIR NEAR TRUCKEE, CA

LOCATION.—Lat 39°23'20", long 120°05'43", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, in control house at Boca Dam, on Little Truckee River, 1,800 ft upstream from mouth, and 6.3 mi northeast of Truckee.

DRAINAGE AREA.—172 mi^2.

PERIOD OF RECORD.—December 1938 to current year. Prior to October 1976 published as "at Boca." Monthend contents only for December 1938 to September 1957, published in WSP 1734.

REVISED RECORDS.—WSP 1634: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation).

REMARKS.—Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,868 acre-ft, between elevations 5,521 ft, outlet sill, and 5,605 ft, top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft. Dead contents, 241 acre-ft. Records, including extremes, represent usable contents at 0800 hours. Water is used for irrigation in the State of Nevada and for power development. See schematic diagram of Truckee River Basin.

EXTREMES (at 0800 hours) FOR PERIOD OF RECORD.—Maximum contents, 41,440 acre-ft, Dec. 23, 1955, elevation, 5,605.55 ft; minimum, 37 acre-ft, Mar. 4–9, 1955, elevation, 5,521.65 ft.

EXTREMES (at 0800 hours) FOR CURRENT YEAR.—Maximum contents, 23,100 acre-ft, Oct. 1, elevation, 5,584.41 ft; minimum, 8,100 acre-ft, Sept. 21, 22, elevation, 5,558.51 ft.

Capacity table (elevation, in feet, and contents in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated November 1970)

5,540	2,356	5,555	6,725	5,580	20,002	5,600	36,128
5,545	3,513	5,560	8,778	5,590	27,488	5,605	40,868
5,550	4,970	5,570	13,768				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23100	21200	17800	11400	12800	10200	11300	12400	21100	13500	8440	8170
2	22900	21100	17500	11400	12700	10100	11400	12700	20900	13300	8340	8170
3	22700	21100	17200	11400	12600	9960	11500	13000	20700	13100	8290	8170
4	22600	21000	16800	11400	12400	9850	11400	13200	20500	12900	8280	8170
5	22400	20900	16500	11400	12300	9740	11100	13500	20200	12700	8270	8160
6	22300	20800	16100	11500	12200	9670	10800	13700	20000	12500	8260	8160
7	22200	20800	15800	11600	12100	9590	10500	14000	19700	12300	8260	8160
8	22000	20700	15500	11600	12000	9540	10300	14300	19400	12100	8260	8160
9	21900	20600	15200	11700	11900	9540	9970	14700	19100	11900	8250	8150
10	21800	20500	14900	11800	11800	9560	9690	15100	18800	11700	8250	8140
11	21700	20400	14500	12000	11700	9600	9490	15500	18500	11600	8240	8140
12	21500	20300	14200	12200	11600	9610	9430	15900	18200	e11400	8240	8140
13	21500	20200	13900	12300	11500	9620	9350	16300	17900	e11200	8240	8140
14	21500	20100	13500	12400	11400	9660	9280	16800	17600	e11000	8230	8140
15	21400	19900	13200	12500	11300	9750	9220	17200	17300	e10800	8220	8130
16	21400	19800	12800	12600	11200	9830	9140	17600	17000	e10600	8220	8130
17	21300	19600	12500	12700	11100	9920	9050	18000	16700	e10400	8210	8120
18	21300	19400	12200	12700	11100	10000	8990	18400	16400	10200	8210	8120
19	21200	19200	11900	12800	11000	10100	9080	18800	16100	10000	8200	8120
20	21200	19000	11500	12900	10900	10200	9270	19200	15900	9880	8190	8110
21	21200	18900	11300	12900	10800	10300	9560	19700	15700	9730	8180	8100
22	21200	18700	11200	13000	10700	10500	9850	20100	15500	9580	8180	8100
23	21200	18600	11100	13000	10700	10600	10100	20500	15200	9450	8170	8160
24	21200	18500	11100	13000	10600	10700	10400	20900	15000	9310	8170	8220
25	21100	18400	11100	13000	10500	10700	10700	21200	14800	9200	8170	8300
26	21200	18300	11000	13000	10400	10800	11100	21400	14600	9100	8170	8350
27	21200	18200	11000	13000	10400	10800	11300	21400	14400	8980	8170	8400
28	21100	18100	11000	13000	10300	10900	11600	21500	14200	8870	8180	8450
29	21200	18000	11100	13000	---	11000	11900	21500	14000	8750	8180	8520
30	21200	17900	11300	13000	---	11100	12200	21400	13800	8640	8170	8570
31	21200	---	11300	12900	---	11200	---	21200	---	8540	8170	---
MAX	23100	21200	17800	13000	12800	11200	12200	21500	21100	13500	8440	8570
MIN	21100	17900	11000	11400	10300	9540	8990	12400	13800	8540	8170	8100
a	5581.69	5576.95	5565.47	5568.50	5563.36	5565.27	5567.10	5581.81	5570.03	5559.52	5558.67	5559.59
b	-2100	-3300	-6600	+1600	-2600	+900	+1000	+9000	-7400	-5260	-370	+400

CAL YR 2000 MAX 39656 MIN 10419 b -400
WTR YR 2001 MAX 23100 MIN 8100 b -14700

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA

LOCATION.—Lat 39°23'13", long 120°05'40", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on right bank, 800 ft upstream from mouth, 1,000 ft downstream from Boca Dam, and 6.2 mi northeast of Truckee.

DRAINAGE AREA.—173 mi^2.

PERIOD OF RECORD.—April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Prior to October 1976 published as "at Boca." Monthly discharge only for January 1939 to September 1957, published in WSP 1734.
WATER TEMPERATURE: Water years 1993–98.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 5,500 ft above sea level, from topographic map. Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

REMARKS.—Records good. Flow regulated by Boca Reservoir (station 10344490) since 1938, Independence Lake (station 10342900) since 1939, and Stampede Reservoir (station 10344300) since 1969. There is one transmountain diversion to Sierra Valley of about 6,000 acre-ft per year. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,800 ft^3/s, Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow for many days in many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	43	150	178	149	176	26	11	221	203	155	127
2	156	48	194	177	156	192	26	11	221	202	137	127
3	156	64	210	176	160	192	103	17	221	201	127	127
4	137	73	210	176	160	192	182	22	221	201	127	127
5	127	72	209	160	160	179	220	22	220	200	127	127
6	127	72	208	151	160	172	227	22	220	199	127	127
7	127	72	189	151	160	172	225	22	237	199	127	127
8	127	72	180	139	160	172	223	27	252	197	127	126
9	127	72	201	126	160	164	223	30	252	196	127	126
10	127	72	211	114	160	145	200	30	251	197	127	126
11	127	72	210	103	160	152	139	30	250	196	127	126
12	97	72	210	103	159	158	113	31	250	196	127	126
13	81	96	208	103	152	153	113	31	250	202	127	126
14	81	110	206	103	147	135	113	31	249	204	127	126
15	81	110	205	103	147	120	112	32	248	203	127	126
16	81	110	205	104	147	120	112	32	247	203	127	126
17	81	124	205	89	147	116	94	32	246	203	127	126
18	69	130	203	74	147	110	43	32	243	190	127	126
19	49	130	203	74	146	110	4.5	32	218	180	127	126
20	39	129	203	74	146	111	.39	32	205	180	127	126
21	34	129	164	74	145	94	.38	32	205	180	127	126
22	34	98	105	82	145	75	.31	32	204	179	127	79
23	34	82	105	102	145	75	.27	32	203	178	127	22
24	34	82	104	102	145	75	.27	52	203	164	127	22
25	34	82	103	102	145	75	.25	139	203	156	127	22
26	34	82	103	102	145	67	.24	203	202	156	127	22
27	34	81	84	102	145	42	.24	222	201	156	127	22
28	34	81	72	102	145	13	6.7	222	201	156	127	22
29	34	82	72	102	---	16	11	222	200	156	127	22
30	34	110	141	111	---	26	11	222	202	156	127	32
31	34	---	178	147	---	26	---	222	---	156	127	---
TOTAL	2528	2652	5251	3606	4243	3625	2529.55	2129	6746	5745	3975	2918
MEAN	81.5	88.4	169	116	152	117	84.3	68.7	225	185	128	97.3
MAX	157	130	211	178	160	192	227	222	252	204	155	127
MIN	34	43	72	74	145	13	.24	11	200	156	127	22
AC-FT	5010	5260	10420	7150	8420	7190	5020	4220	13380	11400	7880	5790

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1915, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.8	38.1	29.2	83.4	75.5	196	721	790	582	169	36.5	26.3
MAX	34.2	58.4	39.3	283	173	558	1367	1260	1211	435	66.3	35.7
(WY)	1915	1913	1914	1914	1914	1914	1914	1911	1911	1911	1911	1912
MIN	14.1	28.4	23.2	20.5	28.4	56.3	106	379	212	50.7	20.1	14.4
(WY)	1914	1915	1912	1913	1912	1912	1912	1912	1913	1912	1915	1915

SUMMARY STATISTICS	WATER YEARS 1911 - 1915	
ANNUAL MEAN	193	
HIGHEST ANNUAL MEAN	387	1914
LOWEST ANNUAL MEAN	94.7	1912
HIGHEST DAILY MEAN	2360	Apr 15 1914
LOWEST DAILY MEAN	.00	Sep 26 1911
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 26 1911
ANNUAL RUNOFF (AC-FT)	140100	
10 PERCENT EXCEEDS	800	
50 PERCENT EXCEEDS	49	
90 PERCENT EXCEEDS	16	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1969, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.7	106	144	156	160	132	264	426	315	159	146	120
MAX	303	611	856	649	606	442	808	1647	974	389	408	414
(WY)	1968	1951	1951	1965	1963	1967	1952	1952	1967	1967	1958	1952
MIN	.000	.12	.20	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1940	1967	1960	1939	1939	1939	1939	1939	1939	1939	1939	1939

SUMMARY STATISTICS	WATER YEARS 1939 - 1969	
ANNUAL MEAN	190	
HIGHEST ANNUAL MEAN	435	1952
LOWEST ANNUAL MEAN	65.8	1961
HIGHEST DAILY MEAN	5520	Dec 24 1955
LOWEST DAILY MEAN	.00	Jan 1 1939
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1 1939
MAXIMUM PEAK FLOW	8800	Dec 24 1955
ANNUAL RUNOFF (AC-FT)	137700	
10 PERCENT EXCEEDS	430	
50 PERCENT EXCEEDS	107	
90 PERCENT EXCEEDS	.02	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	108	76.7	97.1	118	92.1	129	276	481	310	208	156	112
MAX	441	327	568	1296	433	522	975	1148	1788	1131	585	418
(WY)	1972	1984	1984	1997	1997	1996	1986	1985	1983	1983	1975	1971
MIN	.000	.020	.11	.001	1.60	.13	.39	.31	2.63	.75	13.6	.55
(WY)	1995	1991	1978	1995	1995	1995	1988	1988	1977	1981	1984	1970

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	48919.52		45947.55			
ANNUAL MEAN	134		126		181	
HIGHEST ANNUAL MEAN					470	1983
LOWEST ANNUAL MEAN					55.6	1992
HIGHEST DAILY MEAN	539	May 7	252	Jun 8	2530	Jan 9 1997
LOWEST DAILY MEAN	.44	Jan 21	.24	Apr 26	.00	Sep 13 1994
ANNUAL SEVEN-DAY MINIMUM	.70	Feb 18	.28	Apr 21	.00	Sep 13 1994
MAXIMUM PEAK FLOW			252	Jun 7	2720	Jan 8 1997
MAXIMUM PEAK STAGE			2.57	Jun 7	6.14	Jan 8 1997
ANNUAL RUNOFF (AC-FT)	97030		91140		131000	
10 PERCENT EXCEEDS	262		208		462	
50 PERCENT EXCEEDS	127		127		91	
90 PERCENT EXCEEDS	.78		31		.58	

10346000 TRUCKEE RIVER AT FARAD, CA

LOCATION.—Lat 39°25'41", long 120°01'59", in SE 1/4 NE 1/4 sec.12, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on left bank, 0.5 mi upstream from Mystic Canyon, 0.7 mi downstream from Farad Powerplant, 2.5 mi north of Floriston, and 3.5 mi upstream from California–Nevada State line.

DRAINAGE AREA.—932 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca," March to October 1890, "at or near Nevada–California State Line," September 1899 to August 1912, and as "at Iceland," August 1912 to December 1937.

CHEMICAL DATA: Water years 1951–61, 1964–81. Published as "Truckee River at Floriston" (station 10345900) January 1964 to September 1971.

BIOLOGICAL DATA: Water years 1975–77.

SPECIFIC CONDUCTANCE: Water years 1964–80, 1993–98.

WATER TEMPERATURE: Water years 1964–81, 1993–98.

SUSPENDED SEDIMENT: Water years 1974, 1978.

REVISED RECORDS.—WSP 1714: Drainage area. WDR CA-88-3: 1906–07 (monthly runoff).

GAGE.—Water-stage recorder. Datum of gage is 5,153.21 ft above sea level (U.S. Bureau of Reclamation benchmark). See WSP 2127 for history of changes prior to Aug. 26, 1957.

REMARKS.—Records good. Flow regulated by Lake Tahoe and Donner, Martis Creek, and Independence Lakes, and Prosser Creek, Stampede, and Boca Reservoirs (stations 10337000, 10338400, 10339380, 10342900, 10340300, 10344300, and 10344490, respectively), and by several powerplants. See schematic diagram of Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,500 ft^3/s, Nov. 21, 1950, gage height, 14.5 ft, present datum, from floodmarks, from slope-area measurement of peak flow; minimum, 37 ft^3/s, Sept. 15, 1933.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	562	412	478	552	473	537	537	598	551	587	588	582
2	565	408	527	551	474	572	514	582	550	588	592	583
3	577	411	545	552	476	568	504	490	540	594	583	582
4	562	413	542	552	480	584	529	489	561	592	581	582
5	544	408	537	540	485	590	515	520	559	593	578	586
6	538	405	535	529	482	573	516	553	551	589	579	585
7	537	399	538	530	479	573	522	565	577	592	588	592
8	537	393	537	528	472	586	504	584	592	592	588	586
9	532	395	555	522	480	594	492	622	587	589	588	587
10	541	387	564	518	487	557	541	603	583	607	585	584
11	539	383	559	518	488	558	556	593	580	590	588	584
12	507	374	562	514	478	569	530	607	591	583	586	585
13	485	387	554	508	484	574	528	563	593	584	584	582
14	485	398	556	507	482	575	497	555	589	585	582	580
15	482	392	551	506	480	575	492	599	587	583	580	589
16	479	387	545	505	481	574	497	713	598	583	579	589
17	475	393	544	489	482	577	498	624	593	585	579	586
18	467	402	535	474	484	593	507	588	586	603	587	586
19	446	404	535	478	485	583	515	588	594	599	585	585
20	446	403	534	475	487	595	475	569	593	597	585	588
21	435	403	509	474	490	573	490	554	592	598	584	586
22	426	406	447	473	492	550	482	522	587	599	582	554
23	429	398	447	476	486	551	499	515	583	597	582	485
24	430	401	445	479	490	554	516	504	583	604	585	481
25	424	399	440	479	491	621	526	533	597	599	583	509
26	428	398	442	481	488	620	573	547	602	598	582	490
27	429	396	478	477	484	581	600	541	590	595	582	486
28	418	397	463	474	483	574	569	548	587	593	580	487
29	454	422	462	476	---	600	515	556	592	591	576	485
30	422	437	511	472	---	573	526	569	588	591	574	481
31	417	---	553	474	---	534	---	555	---	593	582	---
TOTAL	15018	12011	16030	15583	13523	17838	15565	17549	17456	18373	18077	16747
MEAN	484	400	517	503	483	575	519	566	582	593	583	558
MAX	577	437	564	552	492	621	600	713	602	607	592	592
MIN	417	374	440	472	472	534	475	489	540	583	574	481
AC-FT	29790	23820	31800	30910	26820	35380	30870	34810	34620	36440	35860	33220

10346000 TRUCKEE RIVER AT FARAD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	386	422	537	601	665	807	1275	1729	1272	661	514	469
MAX	982	2469	3596	6115	3254	4073	3887	5674	5214	2921	1084	1482
(WY)	1972	1984	1984	1997	1997	1986	1952	1952	1983	1983	1975	1983
MIN	51.0	55.6	80.4	77.7	85.3	142	369	349	142	53.9	53.9	47.3
(WY)	1978	1991	1991	1991	1933	1933	1977	1934	1931	1931	1931	1933

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1909 - 2001	
ANNUAL TOTAL	235558		193770			
ANNUAL MEAN	644		531		771	
HIGHEST ANNUAL MEAN					2443	1983
LOWEST ANNUAL MEAN					184	1931
HIGHEST DAILY MEAN	1560	May 8	713	May 16	13400	Dec 23 1955
LOWEST DAILY MEAN	359	Jan 28	374	Nov 12	37	Sep 15 1933
ANNUAL SEVEN-DAY MINIMUM	383	Feb 3	387	Nov 10	40	Sep 9 1933
MAXIMUM PEAK FLOW			832	May 15	17500	Nov 21 1950
MAXIMUM PEAK STAGE			4.32	May 15	14.50	Nov 21 1950
ANNUAL RUNOFF (AC-FT)	467200		384300		558700	
10 PERCENT EXCEEDS	1100		593		1720	
50 PERCENT EXCEEDS	597		550		507	
90 PERCENT EXCEEDS	393		429		205	

10346000 TRUCKEE RIVER AT FARAD, CA—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.— April 1999 to current year.

INSTRUMENTATION.—Recording-weighing gage.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily precipitation, 1.97 in., Jan. 24, 2000; no precipitation for many days in each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily precipitation, 0.76 in., Nov. 29; no precipitation for many days.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
2	.00	.00	.04	.00	.00	.03	.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	.27	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.04	.23	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.06	.04	.08	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.06	.00	.31	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00
9	.00	.14	.00	.03	.18	.19	.03	.00	.00	.00	.04	.00
10	.03	.03	.00	.28	.18	.00	.00	.00	.00	.16	.03	.00
11	.03	.00	.00	.22	.23	.00	.30	.00	.00	.00	.00	.00
12	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.03	.27	.00	.04	.00	.04	.00	.00	.00	.00	.00
15	.03	.00	.00	.03	.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	.03	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00	.00
19	.00	.00	.00	.04	.07	.00	.12	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.03	.00	.25	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.25	.00	.35	.00	.00	.00	.00	.00
22	.04	.00	.00	.00	.10	.03	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.03	.13	.04	.00	.00	.00	.00	.00	.00
25	.10	.00	.00	.21	.07	.06	.00	.00	.00	.00	.00	.24
26	.14	.00	.00	.03	.00	.00	.03	.00	.00	.00	.00	.00
27	.07	.00	.00	.03	.00	.00	.00	.00	.03	.04	.00	.00
28	.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.19	.76	.00	.03	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.03	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.98	0.96	0.41	0.96	1.44	0.89	1.84	0.00	0.03	0.20	0.13	0.24

10356380 SUSAN RIVER ABOVE WILLARD CREEK, NEAR SUSANVILLE, CA

LOCATION.—Lat 40°23'45", long 120°46'51", in NE 1/4 NE 1/4 sec.7, T.29 N., R.11 E., Lassen County, Hydrologic Unit 1808003, 6.2 mi southwest of Susanville, and 7.1 mi southeast of Hogflat Reservoir at State Highway 36.

DRAINAGE AREA.—128.35 mi^2.

PERIOD OF RECORD.—June to September 2001.

CHEMICAL DATA.—June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)
JUN							
26...	1150	7.9	1.2	642	9.0	102	8.4
SEP							
26...	1105	7.7	.9	--	--	--	8.2

DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS PHORUS TOTAL (MG/L AS P) (00665)
JUN							
26..	166	13.0	.6	116	.20	.168	.080
SEP							
26..	162	9.0	.9	132	.15	.106	e.046

e Estimated.

10359040 SUSAN RIVER NEAR LITCHFIELD, CA

LOCATION.—Lat 40°22'40", long 120°23'38", in NW 1/4 NW 1/4 sec.15, T.29 N., R.14 E., Lassen County, Hydrologic Unit 1808003, 0.5 mi south of Litchfield, and 13.3 mi east of Susanville.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—June to September 2001.
CHEMICAL DATA.—June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBIDITY LAB HACH 2100AN (NTU) (99872)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)
JUN							
26...	1415	5.7	4.5	655	9.4	125	8.9
SEP							
26...	1400	4.8	7.5	--	--	--	9.4

DATE	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
JUN							
26...	382	22.0	7.9	232	.35	<.050	e.049
SEP							
26...	315	20.5	7.8	214	.30	<.050	e.032

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

10360401 MILL CREEK AT UPPER LAKE, NEAR LAKE CITY, CA

LOCATION.—Lat 41°38'44", long 120°12'45", in SE 1/4 NW 1/4 sec.36, T.44 N., R.15 E., Modoc County, Hydrologic Unit 1808001, 9.1 mi north of Cedarville, and 0.1 mi north of Lake City, on the Surprise Valley Road.

DRAINAGE AREA.—8.83 mi^2.

PERIOD OF RECORD.—June to September 2001.
CHEMICAL DATA.—June to September 2001.
SEDIMENT DATA.—September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JUN											
27...	1330	.56	2.9	646	8.2	95.6	8.2	102	14.5	.2	88
SEP											
27...	1100	.03	10	--	--	--	8.2	112	11.5	.5	92

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
SEP					
27...	1100	.03	11.5	6	<.01

< Actual value is known to be less than value shown.

10360900 BIDWELL CREEK BELOW MILL CREEK, NEAR FORT BIDWELL, CA

LOCATION.—Lat 41°52'57", long 120°10'26", in NE 1/4 SE 1/4 sec.6, T.46 N., R.16 E., Modoc County, Hydrologic Unit 18080001, 23.1 mi north of Cedarville, and 2.5 mi northwest of Fort Bidwell.

DRAINAGE AREA.—25.6 mi^2.

PERIOD OF RECORD.—Water years 1960–1982, June to September 2001.
WATER DISCHARGE.—Water years 1960–1982.
CHEMICAL DATA.—June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)
JUN							
27...	1115	7.8	1.5	640	8.6	96.7	8.1
SEP							
27...	0935	4.5	1.6	--	--	--	8.0

DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
JUN							
27...	73	12.5	.3	58	e.07	<.050	e.031
SEP							
27...	86	9.0	.6	76	.09	<.050	e.037

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

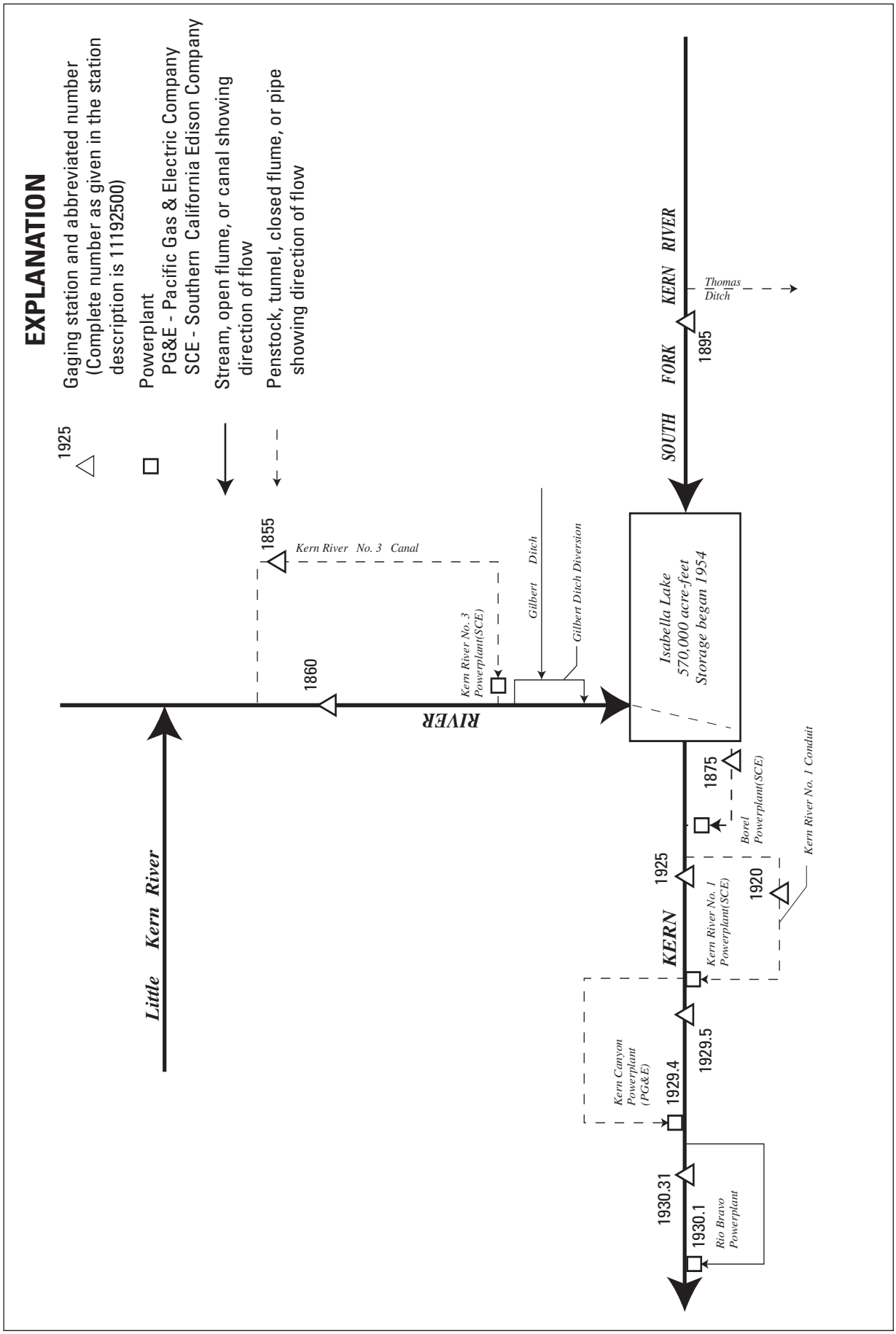

Figure 23. Diversions and storage in Kern River Basin.

BUENA VISTA LAKE BASIN

11186000 KERN RIVER NEAR KERNVILLE, CA

LOCATION.—Lat 35°56'43", long 118°28'36", unsurveyed, Tulare County, Hydrologic Unit 18030001, on left bank, at Packsaddle Canyon Creek, 100 ft downstream from diversion dam, and 13.4 mi north of Kernville.

DRAINAGE AREA.—846 mi^2.

PERIOD OF RECORD.—January 1912 to current year. Records for water year 1912 incomplete; yearly estimates published in WSP 1315-A. March 1921 to October 1953, records for river and canal published separately; combined flow only, October 1953 to September 1960.

REVISED RECORDS.—WSP 1445: 1912, 1916(M). WSP 1930: 1914(M), 1918(M).

GAGE.—Water-stage recorder on river; water-stage recorder and rectangular concrete-lined flume for canal diversion. Elevation of gage is 3,620 ft above sea level, from topographic map. Prior to Apr. 1, 1913, at site 1.4 mi downstream at different datum. Apr. 1 to Sept. 14, 1913, nonrecording gage, and Sept. 15, 1913, to Sept. 30, 1967, water-stage recorder, at site 1.2 mi downstream at different datum.

REMARKS.—Since 1921, Kern River No. 3 Canal (station 11185500) diverts up to 630 ft^3/s 100 ft upstream from station, from left bank of Kern River for power development; water is returned to river 15 mi downstream from station. For records of combined discharge of river and canal, see station 11186001. See schematic diagram of Kern River Basin.

COOPERATION.—Records were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2290.

EXTREMES FOR PERIOD OF RECORD.—River only: Maximum discharge, 60,000 ft^3/s, Dec. 6, 1966, gage height, 22.77 ft, site and datum then in use, from floodmarks, from rating curve extended above 6,000 ft^3/s, on basis of computed flow over dam at gage height 17.55 ft (basic data for computation provided by Southern California Edison Co.) and slope-area measurement of peak flow; no flow for many days in 1924 and 1925.

Combined river and diversion: Maximum discharge, 60,000 ft^3/s, Dec. 6, 1966; minimum daily, 76 ft^3/s, Dec. 22, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	73	54	53	45	82	329	886	897	136	153	90
2	93	56	54	52	45	83	306	1110	845	137	134	89
3	93	55	54	51	46	82	204	945	635	143	134	89
4	91	55	54	51	47	82	125	751	434	135	134	96
5	91	55	54	51	47	83	113	707	335	137	133	103
6	157	55	54	51	47	84	111	835	301	142	130	104
7	154	55	54	51	46	81	112	1100	318	306	129	102
8	116	55	54	51	47	81	112	1410	307	159	127	98
9	116	55	54	51	46	80	112	1670	265	136	126	92
10	115	55	54	51	46	81	112	1720	218	135	128	90
11	107	54	54	51	45	81	113	1870	168	136	129	90
12	91	54	54	51	43	82	112	1890	121	140	128	89
13	88	54	53	51	43	81	112	1420	116	137	130	89
14	88	54	53	51	43	81	113	1010	114	137	121	85
15	88	54	53	52	47	82	112	1070	114	136	113	84
16	86	54	53	51	44	81	113	1610	113	138	113	81
17	91	54	54	51	44	82	114	1960	114	138	112	82
18	91	53	53	51	44	81	113	1870	113	137	109	82
19	90	54	54	53	43	81	117	1450	108	136	106	83
20	94	54	53	52	44	81	113	1440	106	135	106	82
21	97	53	53	52	44	82	114	1510	122	135	104	81
22	96	54	53	52	47	82	116	1590	129	136	107	81
23	96	53	53	52	46	82	115	1490	118	135	106	80
24	96	53	53	51	46	82	148	1410	120	136	103	80
25	96	53	53	51	47	83	242	1450	114	136	97	82
26	96	53	53	48	46	84	355	1450	107	136	95	83
27	97	53	53	44	48	82	486	1310	106	135	94	82
28	97	53	53	44	51	103	598	1120	105	135	93	81
29	98	54	53	45	---	200	589	973	104	135	90	80
30	100	54	53	45	---	236	651	885	106	150	90	79
31	98	---	53	46	---	275	---	880	---	155	91	---
TOTAL	3105	1641	1657	1557	1277	3023	6182	40792	6873	4460	3565	2609
MEAN	100	54.7	53.5	50.2	45.6	97.5	206	1316	229	144	115	87.0
MAX	157	73	54	53	51	275	651	1960	897	306	153	104
MIN	86	53	53	44	43	80	111	707	104	135	90	79
AC-FT	6160	3250	3290	3090	2530	6000	12260	80910	13630	8850	7070	5170

BUENA VISTA LAKE BASIN

11186000 KERN RIVER NEAR KERNVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.2	54.2	126	178	152	270	599	1514	1628	753	218	111
MAX	197	197	2488	2619	967	1480	2631	5874	6819	3482	1583	538
(WY)	1983	1997	1967	1997	1986	1986	1969	1969	1983	1983	1983	1982
MIN	2.01	1.36	.98	2.01	1.51	1.84	1.93	6.68	7.22	2.66	12.5	2.70
(WY)	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1963

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	101046		76741			
ANNUAL MEAN	276		210		473	
HIGHEST ANNUAL MEAN					1727	1969
LOWEST ANNUAL MEAN					3.65	1961
HIGHEST DAILY MEAN	2490	May 24	1960	May 17	33600	Dec 6 1966
LOWEST DAILY MEAN	45	Feb 4	43	Feb 12	.20	Dec 16 1960
ANNUAL SEVEN-DAY MINIMUM	46	Feb 4	44	Feb 12	.26	Dec 12 1960
MAXIMUM PEAK FLOW			2320	May 17	60000	Dec 6 1966
MAXIMUM PEAK STAGE			6.82	May 17	22.77	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	200400		152200		342700	
10 PERCENT EXCEEDS	889		593		1510	
50 PERCENT EXCEEDS	108		91		82	
90 PERCENT EXCEEDS	53		51		28	

BUENA VISTA LAKE BASIN

11186001 KERN RIVER NEAR KERNVILLE, CA—Continued

KERN RIVER AND KERN RIVER NO. 3 CANAL NEAR KERNVILLE, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	200	165	153	170	222	913	1480	1480	318	194	133
2	144	201	167	149	177	227	888	1700	1430	311	190	132
3	144	201	166	143	187	222	789	1530	1220	376	188	134
4	142	195	164	147	208	233	686	1340	1020	417	184	159
5	144	189	165	149	225	234	605	1290	918	404	181	156
6	211	191	166	152	226	266	536	1420	885	529	175	145
7	207	190	165	150	211	279	558	1680	902	852	173	140
8	169	185	169	156	182	285	492	2000	892	733	173	133
9	169	182	168	161	188	301	504	2260	850	617	178	132
10	175	178	166	158	205	280	481	2310	803	573	191	128
11	196	169	163	169	204	269	478	2450	753	498	183	128
12	194	164	163	155	183	272	458	2470	706	436	176	127
13	194	167	163	172	216	276	472	2000	658	393	169	125
14	191	171	161	174	211	298	456	1590	596	364	168	124
15	188	168	167	176	206	319	475	1650	551	341	165	123
16	185	163	167	164	210	322	513	2190	533	320	161	121
17	184	163	167	145	211	336	551	2540	532	306	157	122
18	175	162	165	160	221	367	583	2450	524	291	155	122
19	173	166	163	191	227	442	582	2030	499	278	152	121
20	172	168	163	177	224	514	582	2020	480	269	150	120
21	171	166	164	172	217	560	610	2090	461	260	149	118
22	172	167	161	173	224	556	590	2170	449	250	150	118
23	174	164	159	175	210	569	647	2070	463	239	148	117
24	174	165	160	179	210	595	737	1990	461	234	144	116
25	172	166	160	177	196	606	830	2030	434	227	140	118
26	174	167	155	186	251	617	943	2030	406	219	137	121
27	189	167	153	184	245	637	1070	1890	387	215	133	120
28	192	168	156	170	242	689	1180	1700	369	208	132	120
29	220	168	156	169	---	787	1180	1560	348	204	131	120
30	253	167	156	175	---	820	1240	1470	335	198	131	120
31	209	---	150	172	---	860	---	1460	---	199	133	---
TOTAL	5603	5238	5033	5133	5887	13260	20629	58860	20345	11079	4991	3813
MEAN	181	175	162	166	210	428	688	1899	678	357	161	127
MAX	253	201	169	191	251	860	1240	2540	1480	852	194	159
MIN	142	162	150	143	170	222	456	1290	335	198	131	116
AC-FT	11110	10390	9980	10180	11680	26300	40920	116700	40350	21980	9900	7560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	246	266	358	462	514	703	1124	2082	2176	1166	506	307
MAX	634	715	2696	3161	1524	2075	3235	6475	7401	4059	2175	934
(WY)	1983	1984	1967	1997	1980	1986	1969	1969	1983	1983	1983	1978
MIN	106	112	109	121	120	181	333	373	303	133	114	100
(WY)	1962	1991	1991	1991	1991	1977	1976	1977	1976	1961	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	200550		159871			
ANNUAL MEAN	548		438		827	
HIGHEST ANNUAL MEAN					2264	1983
LOWEST ANNUAL MEAN					228	1961
HIGHEST DAILY MEAN	3070	May 24	2540	May 17	33600	Dec 6 1966
LOWEST DAILY MEAN	142	Oct 4	116	Sep 24	76	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	145	Sep 29	118	Sep 19	84	Sep 11 1990
ANNUAL RUNOFF (AC-FT)	397800		317100		598800	
10 PERCENT EXCEEDS	1470		1180		2100	
50 PERCENT EXCEEDS	252		196		385	
90 PERCENT EXCEEDS	156		144		157	

11187500 BOREL CANAL BELOW ISABELLA DAM, CA

LOCATION.—Lat 35°38'32", long 118°28'09", in SW 1/4 NE 1/4 sec.30, T.26 S., R.33 E., Kern County, Hydrologic Unit 18030001, on right bank, 500 ft downstream from Isabella Dam, and 3 mi upstream from point where canal crosses Erskine Creek.

PERIOD OF RECORD.—January 1910 to September 1914, October 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "Kern River Power Co.'s Canal" at or near Kernville, 1910–14. Published as "at Tillie Creek," 1925–51.

GAGE.—Water-stage recorder and concrete-lined channel with Ogee weir and AVM in syphon pipe 6 mi downstream. Elevation of gage is 2,540 ft above sea level, from topographic map. Prior to Apr. 29, 1952, at site 4 mi upstream at different datum.

REMARKS.—Canal diverts from right bank of Kern River 5.5 mi upstream from Isabella Dam and above South Fork Kern River. When contents of Isabella Reservoir are above 110,000 acre-ft, diversion is at the dam. Canal is used to supply Borel Powerplant of Southern California Edison Co., 6 mi downstream from station, at which point water is returned to the Kern River. See schematic diagram of Kern River Basin.

COOPERATION.—Records were provided by Southern California Edison Co., under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 382.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 634 ft^3/s, Mar. 13, 14, 1952; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	212	177	147	218	309	572	584	547	584	597	395
2	339	212	193	147	218	290	591	579	550	585	597	375
3	361	212	240	146	231	291	574	580	550	586	597	377
4	419	212	303	146	256	310	543	577	550	588	598	368
5	457	212	308	145	285	349	554	573	547	591	598	367
6	422	198	324	145	323	378	537	573	550	589	597	364
7	379	188	336	153	347	377	477	570	550	589	597	338
8	420	188	326	175	288	384	417	568	548	588	599	283
9	382	188	327	175	247	394	412	569	546	586	600	295
10	386	188	343	175	239	394	408	568	548	586	599	357
11	407	188	371	199	239	387	407	568	548	584	597	341
12	396	188	379	217	285	380	406	568	549	583	598	310
13	336	49	360	216	319	372	406	567	549	583	599	306
14	266	.00	339	215	289	377	403	561	551	588	597	309
15	265	.00	310	215	265	398	404	558	557	596	594	293
16	295	.00	273	215	265	407	403	557	557	594	594	317
17	294	.00	255	204	280	407	402	558	556	596	592	375
18	318	125	240	186	305	408	399	558	557	597	568	395
19	351	207	233	179	299	427	401	559	557	594	538	339
20	296	223	222	202	290	514	402	558	557	596	561	261
21	228	223	185	232	289	551	403	560	559	598	588	247
22	252	196	162	238	290	504	400	556	557	596	584	292
23	292	164	162	230	290	428	443	551	563	596	565	304
24	331	164	163	229	291	406	441	550	570	598	528	312
25	352	164	163	229	310	408	464	549	570	597	473	341
26	296	164	164	240	325	409	526	548	572	599	451	332
27	226	164	164	268	340	409	554	550	576	597	491	318
28	212	164	165	255	346	407	552	550	577	597	437	292
29	212	165	154	233	---	452	552	550	578	596	380	235
30	212	165	147	226	---	487	566	551	582	595	390	263
31	212	---	147	218	---	531	---	547	---	596	401	---
TOTAL	9924	4723.00	7635	6200	7969	12545	14019	17415	16728	18348	17105	9701
MEAN	320	157	246	200	285	405	467	562	558	592	552	323
MAX	457	223	379	268	347	551	591	584	582	599	600	395
MIN	212	.00	147	145	218	290	399	547	546	583	380	235
AC-FT	19680	9370	15140	12300	15810	24880	27810	34540	33180	36390	33930	19240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2001, BY WATER YEAR (WY)

MEAN	246	239	267	304	385	462	508	521	537	489	400	303
MAX	588	584	576	584	590	611	605	607	614	605	607	586
(WY)	1979	1984	1951	1984	1984	1985	1984	1989	1989	1985	1952	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	9.23	2.25	.000	.000
(WY)	1973	1946	1973	1952	1951	1973	1990	1914	1914	1990	1972	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1910 - 2001	
ANNUAL TOTAL	157016.00		142312.00			
ANNUAL MEAN	429		390		388	
HIGHEST ANNUAL MEAN					585	1984
LOWEST ANNUAL MEAN					106	1990
HIGHEST DAILY MEAN	615	Apr 10	600	Aug 9	634	Mar 13 1952
LOWEST DAILY MEAN	.00	Nov 14	.00	Nov 14	.00	Oct 23 1910
ANNUAL SEVEN-DAY MINIMUM	52	Nov 12	52	Nov 12	.00	May 24 1912
ANNUAL RUNOFF (AC-FT)	311400		282300		280800	
10 PERCENT EXCEEDS	608		590		587	
50 PERCENT EXCEEDS	422		382		445	
90 PERCENT EXCEEDS	183		183		127	

11189500 SOUTH FORK KERN RIVER NEAR ONYX, CA

LOCATION.—Lat 35°44'15", long 118°10'22", unsurveyed, T.25 S., R.35 E., Kern County, Hydrologic Unit 18030002, on left bank, 0.8 mi north of State Highway 178, 1.6 mi upstream from Canebrake Creek, and 5 mi northeast of Onyx.

DRAINAGE AREA.—530 mi^2.

PERIOD OF RECORD.—September 1911 to August 1914, January 1919 to September 1942, October 1947 to June 1994, July 1995 to current year. Yearly estimate for water year 1927 (incomplete) and monthly discharges for incomplete water years 1914, 1919, 1926, 1928, 1929, published in WSP 1315-A.

REVISED RECORDS.—WSP 1151: 1948(M). WSP 1445: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 2,900 ft above sea level, from topographic map. Sept. 12, 1911, to Aug. 31, 1914, nonrecording gage, and Jan. 23, 1919, to Apr. 17, 1936, water-stage recorder, 140 ft upstream at datum 2.88 ft lower. Apr. 18, 1936, to September 1942, and October 1947 to Feb. 8, 1967, at datum 6.88 ft higher. Feb. 9, 1967, to May 31, 1972, at datum 2.00 ft higher.

REMARKS.—Records fair. Lowell and Thomas Ditches divert upstream from station for irrigation downstream of station, combined capacity, 15 ft^3/s. See schematic diagram of Kern River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,700 ft^3/s, Dec. 6, 1966, gage height, 18.9 ft, from floodmarks, present datum, from rating curve extended above 3,000 ft^3/s, on basis of slope-area measurement of peak flow; no flow for several days in 1929, 1934, 1960–61.

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)
Mar. 30	1430	352	5.44	Apr. 28	2000	471	5.77
Apr. 3	1045	492	5.82	May 13	2045	267	5.15
Apr. 25	2315	471	5.77				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	30	27	22	26	39	393	342	72	14	3.2	8.7
2	16	28	26	22	30	40	413	353	65	13	2.1	9.0
3	16	27	25	22	31	42	381	334	62	14	1.8	9.1
4	16	23	26	22	34	42	313	296	61	17	1.6	11
5	16	20	25	22	37	45	254	267	56	18	1.7	12
6	16	17	23	23	38	56	218	253	51	24	1.7	12
7	16	17	20	22	35	69	221	244	52	57	1.7	12
8	17	17	21	24	29	74	183	240	52	105	4.4	7.6
9	17	23	22	26	29	78	175	236	51	72	7.5	5.5
10	18	28	20	26	34	69	173	224	48	59	7.4	5.2
11	19	26	20	29	33	63	174	223	46	45	7.6	5.3
12	19	25	19	28	34	63	157	216	44	37	7.8	5.2
13	20	23	18	25	37	61	158	239	43	31	8.4	5.0
14	19	23	17	25	27	66	162	238	43	28	8.5	4.9
15	19	20	23	26	34	73	162	212	41	25	8.0	4.7
16	18	17	26	23	34	77	175	203	39	24	4.8	4.3
17	18	17	26	20	35	82	192	192	37	22	1.7	3.1
18	17	17	25	25	38	88	208	184	31	23	1.7	1.1
19	17	18	24	31	39	103	224	183	26	24	1.7	1.1
20	18	18	23	28	37	115	224	168	25	24	1.6	2.0
21	21	18	25	26	37	122	227	155	25	23	1.6	3.5
22	21	20	26	30	41	125	213	144	21	22	1.4	3.6
23	23	20	26	28	38	130	228	135	16	21	1.4	3.5
24	23	20	24	29	38	137	255	130	16	20	1.4	3.5
25	24	21	24	27	32	142	308	122	17	19	1.4	3.5
26	24	21	24	31	46	154	363	118	16	13	1.5	3.6
27	26	22	22	30	43	175	391	109	17	8.5	1.6	3.7
28	27	22	21	26	44	207	388	95	16	8.5	1.6	3.9
29	28	26	22	25	---	242	387	86	15	7.7	1.6	4.2
30	31	28	23	26	---	289	353	81	14	6.3	4.9	4.3
31	30	---	22	28	---	330	---	77	---	4.6	8.5	---
TOTAL	626	652	715	797	990	3398	7673	6099	1118	829.6	111.8	166.1
MEAN	20.2	21.7	23.1	25.7	35.4	110	256	197	37.3	26.8	3.61	5.54
MAX	31	30	27	31	46	330	413	353	72	105	8.5	12
MIN	16	17	17	20	26	39	157	77	14	4.6	1.4	1.1
AC-FT	1240	1290	1420	1580	1960	6740	15220	12100	2220	1650	222	329

11189500 SOUTH FORK KERN RIVER NEAR ONYX, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.5	36.2	57.4	66.0	95.7	163	353	434	174	50.2	23.9	19.1
MAX	98.9	143	942	500	448	686	1583	2896	1311	349	184	90.2
(WY)	1984	1984	1967	1997	1980	1978	1969	1969	1983	1983	1983	1978
MIN	1.00	8.92	12.4	14.0	17.3	24.1	23.4	9.52	1.00	.19	.20	.10
(WY)	1962	1930	1949	1931	1961	1961	1961	1961	1924	1961	1934	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	17323.8		23175.5			
ANNUAL MEAN	47.3		63.5		126	
HIGHEST ANNUAL MEAN					605	1969
LOWEST ANNUAL MEAN					11.5	1961
HIGHEST DAILY MEAN	211	Apr 6	413	Apr 2	14000	Dec 6 1966
LOWEST DAILY MEAN	1.9	Aug 18	1.1	Sep 18	.00	Sep 1 1934
ANNUAL SEVEN-DAY MINIMUM	2.0	Aug 18	1.5	Aug 20	.00	Jul 23 1961
MAXIMUM PEAK FLOW			492	Apr 3	28700	Dec 6 1966
MAXIMUM PEAK STAGE			5.82	Apr 3	18.90	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	34360		45970		90960	
10 PERCENT EXCEEDS	133		212		291	
50 PERCENT EXCEEDS	25		26		41	
90 PERCENT EXCEEDS	3.6		4.5		7.3	

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CA

LOCATION.—Lat 35°31'15", long 118°40'34", in NE 1/4 SE 1/4 sec.6, T.28 S., R.31 E., Kern County, Hydrologic Unit 18030003, on left bank, 1.0 mi southwest of Democrat Springs, and 2.1 mi upstream from Cow Creek.

DRAINAGE AREA.—2,258 mi^2.

PERIOD OF RECORD.—July 1950 to current year. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder on river; water-stage recorder for conduit diversion. Datum of gage is 1,837.7 ft above sea level.

REMARKS.—Kern River No. 1 Conduit (station 11192000) diverts up to about 420 ft^3/s from left bank of Kern River 0.4 mi upstream from station in sec.13, T.28 S., R.30 E., for power development; water is returned to river 10 mi downstream from station. Flow regulated by Isabella Lake 22 mi upstream beginning in 1954. Many diversions upstream from station for irrigation. For records of combined discharge of river and conduit, see station 11192501. See schematic diagram of Kern River Basin.

COOPERATION.—Records were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2290.

EXTREMES FOR PERIOD OF RECORD.—River only, prior to regulation by Isabella Lake in 1954: Maximum discharge, 40,000 ft^3/s, Nov. 19, 1950, gage height, 30.7 ft, from rating curve extended above 8,700 ft^3/s, on basis of computation of peak flow over dam (basic data for computation provided by Southern California Edison Co.); minimum daily, 0.7 ft^3/s, Nov. 17–19, 1951. Since regulation by Isabella Lake: Maximum discharge, 10,100 ft^3/s, Dec. 6, 1966, gage height, 18.55 ft; no flow May 26–28, 1977.

Combined flow, prior to regulation by Isabella Lake: Maximum discharge, 40,000 ft^3/s, Nov. 19, 1950; minimum daily, 123 ft^3/s, Sept. 22, 1951. Since regulation by Isabella Lake: Maximum discharge, 10,100 ft^3/s, Dec. 6, 1966; minimum daily, 10 ft^3/s, Dec. 17, 1968.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	212	191	160	21	33	92	184	563	992	577	88
2	354	213	205	160	22	29	137	183	655	968	536	61
3	375	212	255	166	23	26	157	189	762	1040	516	62
4	435	212	315	166	24	26	119	191	871	1000	356	60
5	472	212	319	166	25	24	107	188	902	993	317	59
6	437	198	336	166	26	27	104	189	876	1080	303	59
7	393	189	346	170	27	28	97	191	853	1080	302	59
8	434	189	337	190	23	31	39	212	887	934	325	59
9	397	196	338	191	20	40	27	222	905	836	564	58
10	400	199	356	190	19	42	23	219	907	722	335	58
11	421	200	382	120	19	38	22	207	921	619	362	58
12	411	200	388	24	19	39	24	204	1000	552	388	58
13	346	165	369	23	19	44	27	226	1010	563	388	58
14	269	183	348	23	20	52	27	270	1020	477	379	58
15	267	215	319	23	20	57	28	288	1040	401	455	58
16	298	229	283	23	21	62	29	254	1020	432	522	57
17	297	219	265	23	21	66	31	249	1020	439	323	56
18	310	231	251	23	23	72	31	272	1100	510	304	77
19	352	218	244	25	24	72	33	273	1130	421	255	56
20	295	236	232	24	23	87	40	235	1150	417	216	55
21	227	235	196	24	21	172	53	261	1070	390	250	54
22	251	207	175	24	21	182	44	355	1030	336	392	54
23	291	177	176	23	22	123	49	438	943	419	483	54
24	488	178	176	24	22	75	87	471	752	357	235	54
25	400	177	177	23	23	48	65	460	608	399	195	54
26	300	178	177	21	23	33	118	423	685	452	140	54
27	280	178	176	20	25	21	150	443	628	495	156	54
28	220	178	178	20	27	15	152	454	637	471	158	54
29	213	178	167	20	---	16	156	478	1100	467	68	53
30	213	177	160	20	---	43	160	536	1090	572	88	53
31	212	---	160	20	---	70	---	591	---	577	76	---
TOTAL	10394	5991	7997	2295	623	1693	2228	9356	27135	19411	9964	1752
MEAN	335	200	258	74.0	22.2	54.6	74.3	302	904	626	321	58.4
MAX	488	236	388	191	27	182	160	591	1150	1080	577	88
MIN	212	165	160	20	19	15	22	183	563	336	68	53
AC-FT	20620	11880	15860	4550	1240	3360	4420	18560	53820	38500	19760	3480

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	332	250	147	177	302	514	758	1022	1534	1488	1066	467
MAX	1455	1298	1052	1967	2046	3289	5306	5512	6446	5712	3435	2115
(WY)	1984	1983	1984	1967	1997	1969	1969	1983	1983	1983	1967	1983
MIN	.53	.18	.13	.16	2.19	2.37	1.94	1.69	50.5	57.6	53.1	50.4
(WY)	1978	1977	1977	1977	1977	1961	1961	1977	1961	1961	1961	1981

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	138029		98839			
ANNUAL MEAN	377		271		673	
HIGHEST ANNUAL MEAN					2837	1983
LOWEST ANNUAL MEAN					23.7	1961
HIGHEST DAILY MEAN	1230	Jul 1	1150	Jun 20	6640	Jun 7 1969
LOWEST DAILY MEAN	18	Feb 10	15	Mar 28	.00	May 26 1977
ANNUAL SEVEN-DAY MINIMUM	19	Jan 4	19	Feb 9	.01	May 16 1977
MAXIMUM PEAK FLOW			1160	Jun 20	10100	Dec 6 1966
MAXIMUM PEAK STAGE			9.08	Jun 20	18.55	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	273800		196000		487800	
10 PERCENT EXCEEDS	894		644		1920	
50 PERCENT EXCEEDS	288		191		254	
90 PERCENT EXCEEDS	28		23		2.1	

11192501 KERN RIVER NEAR DEMOCRAT SPRINGS, CA—Continued

KERN RIVER AND KERN RIVER NO. 1 CONDUIT NEAR DEMOCRAT SPRINGS, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	212	191	160	239	348	513	605	967	1370	962	477
2	354	213	205	160	240	320	548	604	1070	1350	921	434
3	375	212	255	166	244	317	546	610	1180	1420	901	450
4	435	212	315	166	270	323	507	612	1290	1380	734	432
5	472	212	319	166	299	345	498	609	1320	1370	692	426
6	437	198	336	166	326	382	512	610	1280	1460	679	428
7	393	189	346	170	368	392	506	610	1230	1460	680	411
8	434	189	337	190	332	385	448	612	1280	1310	709	352
9	397	196	338	191	271	405	447	609	1300	1210	944	308
10	400	199	356	190	259	419	444	606	1300	1100	711	406
11	421	200	382	215	261	416	443	592	1310	993	741	404
12	411	200	388	249	283	407	430	589	1400	930	766	359
13	346	165	369	240	362	410	420	613	1410	951	766	342
14	269	183	348	237	334	409	419	660	1420	861	758	361
15	267	215	319	238	285	436	420	679	1440	781	836	337
16	298	229	283	236	286	455	420	641	1420	813	904	340
17	297	219	265	232	286	462	422	635	1420	819	708	397
18	310	231	251	212	325	468	421	660	1500	893	691	469
19	352	218	244	203	326	461	424	661	1520	802	642	435
20	295	236	232	207	311	507	434	620	1540	797	604	329
21	227	235	196	244	309	591	450	648	1460	768	634	276
22	251	207	175	263	310	591	437	749	1420	710	775	324
23	291	177	176	249	312	530	451	839	1330	798	865	353
24	488	178	176	253	320	479	502	873	1140	733	620	338
25	400	177	177	255	331	446	461	849	1000	779	579	378
26	300	178	177	259	355	430	528	802	1080	837	524	379
27	280	178	176	277	355	427	568	822	1020	882	539	359
28	220	178	178	294	371	430	572	833	1040	856	541	358
29	213	178	167	253	---	428	576	858	1490	854	436	285
30	213	177	160	254	---	464	581	920	1470	961	457	281
31	212	---	160	239	---	491	---	987	---	964	459	---
TOTAL	10394	5991	7997	6834	8570	13374	14348	21617	39047	31212	21778	11228
MEAN	335	200	258	220	306	431	478	697	1302	1007	703	374
MAX	488	236	388	294	371	591	581	987	1540	1460	962	477
MIN	212	165	160	160	239	317	419	589	967	710	436	276
AC-FT	20620	11880	15860	13560	17000	26530	28460	42880	77450	61910	43200	22270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

MEAN	570	474	402	465	622	837	1079	1365	1897	1809	1374	730
MAX	1835	1689	1432	2338	2439	3644	5695	5922	6850	6110	3824	2501
(WY)	1984	1983	1984	1967	1997	1969	1969	1983	1983	1983	1967	1983
MIN	116	127	131	154	152	221	260	256	311	400	334	127
(WY)	1962	1991	1991	1991	1991	1961	1961	1961	1961	1961	1961	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	233509		192390			
ANNUAL MEAN	638		527		970	
HIGHEST ANNUAL MEAN					3173	1983
LOWEST ANNUAL MEAN					246	1961
HIGHEST DAILY MEAN	1620	Jul 1	1540	Jun 20	7030	Jun 7 1969
LOWEST DAILY MEAN	160	Dec 30	160	Dec 30	10	Dec 17 1968
ANNUAL SEVEN-DAY MINIMUM	171	Dec 25	163	Dec 30	12	Dec 11 1968
ANNUAL RUNOFF (AC-FT)	463200		381600		702900	
10 PERCENT EXCEEDS	1280		1050		2170	
50 PERCENT EXCEEDS	466		420		607	
90 PERCENT EXCEEDS	200		199		204	

11192950 KERN RIVER BELOW KERN CANYON POWERHOUSE DIVERSION DAM, NEAR BAKERSFIELD, CA

LOCATION.—Lat 35°27'37", long 118°46'43", in SE 1/4 SE 1/4 sec.29, T.28 S., R.30 E., Kern County, Hydrologic Unit 18030003, Sequoia National Forest, on right bank, 100 ft downstream of diversion dam, and 16.4 mi northeast of Bakersfield.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—October 1987 to June 1995, October 1995 to September 1996 (low-flow records only to 35 ft^3/s), October 1996 to current year. Prior to October 1996 published as "Kern River Fishwater Release at Kern County Powerhouse Dam, near Bakersfield". Prior to Oct. 1, 1993, at site 100 ft upstream and did not include leakage through diversion dam radial gates. Bypass flow would enter the main channel immediately downstream from the gage. Water is diverted upstream of gage to Kern Canyon Powerplant (station 11192940) and returned to the river approximately 5 mi downstream.

GAGE.—Water-stage recorder. Elevation of gage is 975 ft above sea level, from topographic map.

REMARKS.—Flow regulated at diversion dam 100 ft upstream from gage. See schematic diagram of Kern River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 178.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,770 ft^3/s, July 3, 1998, gage height, 7.61 ft; minimum daily, 6 ft^3/s, Dec. 18, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	34	35	34	35	359	26	26	206	666	423	27
2	30	34	35	34	36	317	30	26	292	623	379	27
3	31	34	35	34	36	315	25	26	377	720	355	27
4	32	34	35	35	36	320	25	26	477	690	205	27
5	32	34	34	35	36	347	25	82	651	664	111	27
6	31	34	35	35	36	407	25	25	706	770	117	27
7	31	34	34	34	36	404	25	25	665	790	120	27
8	31	34	34	35	36	316	25	25	682	608	120	27
9	31	34	34	35	36	93	26	28	690	501	400	27
10	31	34	35	34	36	35	26	25	695	391	165	28
11	31	34	35	47	38	26	26	25	709	299	178	27
12	31	34	34	34	100	34	26	26	719	235	207	27
13	31	34	34	35	36	32	26	26	651	264	212	27
14	31	34	34	35	36	36	26	37	640	184	198	27
15	31	35	34	35	36	32	26	26	687	101	257	27
16	33	34	34	35	36	31	26	26	657	126	384	27
17	33	34	34	35	36	29	26	26	664	130	157	27
18	34	35	34	35	38	29	26	26	785	216	121	27
19	34	35	34	35	92	28	26	26	903	130	50	27
20	33	35	34	35	53	26	26	26	1040	121	39	27
21	34	35	34	35	36	60	26	52	953	93	106	27
22	34	35	34	35	42	109	26	294	985	32	201	27
23	34	35	34	35	37	25	26	163	721	120	325	27
24	246	35	35	35	36	26	26	159	413	69	60	27
25	195	35	35	35	216	25	26	131	270	103	27	27
26	33	35	34	35	358	26	27	76	362	232	27	27
27	42	35	34	35	359	26	26	102	319	334	28	27
28	33	35	34	35	381	25	26	113	295	309	27	27
29	34	35	34	35	---	26	26	135	792	291	27	27
30	34	35	34	36	---	31	26	187	790	413	27	28
31	34	---	34	35	---	26	---	247	---	420	27	---
TOTAL	1385	1034	1063	1092	2325	3621	779	2243	18796	10645	5080	812
MEAN	44.7	34.5	34.3	35.2	83.0	117	26.0	72.4	627	343	164	27.1
MAX	246	35	35	47	381	407	30	294	1040	790	423	28
MIN	30	34	34	34	35	25	25	25	206	32	27	27
AC-FT	2750	2050	2110	2170	4610	7180	1550	4450	37280	21110	10080	1610
a	14860	7250	11240	8690	10060	15930	25040	33900	33600	37460	30820	17970

a Diversion, in acre-feet, to Kern Canyon Powerplant (station 11192940), provided by Pacific Gas and Electric Co.

11192950 KERN RIVER BELOW KERN CANYON POWERHOUSE DIVERSION DAM, NEAR BAKERSFIELD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	133	120	129	136	250	242	220	385	622	596	389	166
MAX	1134	1093	1212	630	1234	1634	1543	3378	4191	3375	2667	1442
(WY)	1999	1999	1997	1998	1998	1997	1998	1998	1998	1998	1998	1998
MIN	11.5	12.3	14.6	15.6	12.3	12.4	11.2	9.87	10.5	11.2	12.8	12.0
(WY)	1989	1988	1989	1991	1988	1988	1988	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	77256		48875		315500	
ANNUAL MEAN	211		134		544	
HIGHEST ANNUAL MEAN					1631	1998
LOWEST ANNUAL MEAN					24.8	1994
HIGHEST DAILY MEAN	1280	Jul 14	1040	Jun 20	4520	Jul 5 1998
LOWEST DAILY MEAN	28	Jan 29	25	Mar 23	6.0	Dec 18 1988
ANNUAL SEVEN-DAY MINIMUM	28	Mar 20	25	Apr 3	9.5	May 20 1988
MAXIMUM PEAK FLOW			1130	Jun 22	4770	Jul 3 1998
MAXIMUM PEAK STAGE			4.34	Jun 22	7.61	Jul 3 1998
ANNUAL RUNOFF (AC-FT)	153200		96940		393800	
ANNUAL DIVERSION (AC-FT) a	272640		246800			
10 PERCENT EXCEEDS	572		405		900	
50 PERCENT EXCEEDS	35		35		30	
90 PERCENT EXCEEDS	29		26		14	

a Diversion, in acre-feet, to Kern Canyon Powerplant (station 11192940), provided by Pacific Gas and Electric Co.

11193031 KERN RIVER AT RIO BRAVO POWERPLANT, NEAR BAKERSFIELD, CA

LOCATION.—Lat 35°25'49", long 118°49'18", in NE 1/4 SW 1/4 SW 1/4 sec.1, T.29 S., R.29 E., Kern County, Hydrologic Unit 18030012, on left bank, at diversion to Rio Bravo Powerplant, and 15.5 mi northeast of Bakersfield.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—October 1989 to current year.

GAGE.—Water-stage recorder and broad-crested weir; water-stage recorder, Parshall flume and drain gate. Elevation of gage is 678.17 ft above sea level.

REMARKS.—Flow regulated by Isabella Lake, capacity, 570,000 acre-ft. Flow at this station has three components which are combined for publication: flow over a broad-crested weir (station 11193020), flow through a Parshall flume (station 11193030) and bypass flow through a sand ejector and drain gate in dam (station 11193032). Water is diverted upstream from weir through a channel to Rio Bravo Powerplant (station 11193010), returning to Kern River about 1 mi downstream. See schematic diagram of Kern River Basin.

COOPERATION.—Records provided by Rio Bravo Hydro Project, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 4129.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge (combined), 5,160 ft^3/s, Feb. 23, 1998; minimum daily, 46 ft^3/s, Feb. 22, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	354	207	175	166	232	102	66	65	53	54	53	54
2	322	198	179	165	231	287	78	59	53	60	53	54
3	385	186	185	164	230	285	68	63	59	92	53	54
4	415	187	258	165	255	254	64	63	61	86	58	54
5	469	188	287	162	285	120	62	70	66	73	58	54
6	467	186	288	162	313	62	63	73	67	90	54	54
7	421	164	297	162	358	60	66	60	67	78	54	54
8	422	163	297	180	327	62	69	57	67	77	54	54
9	319	165	329	193	239	65	70	61	66	71	73	155
10	83	166	282	193	230	62	64	60	61	62	56	54
11	85	170	98	290	230	63	63	60	60	67	54	54
12	76	167	83	253	246	67	69	60	73	62	54	54
13	137	164	80	235	345	66	74	61	150	63	54	56
14	292	129	65	232	322	72	69	67	75	70	54	54
15	249	164	62	232	261	63	68	63	74	65	54	54
16	275	196	208	230	265	58	70	63	62	80	57	54
17	272	201	290	230	264	59	71	63	61	63	59	55
18	288	195	315	211	302	62	66	65	75	68	55	53
19	318	209	259	201	298	63	71	66	66	70	56	53
20	349	199	257	202	299	63	73	63	79	69	55	99
21	230	211	238	240	290	63	77	64	65	66	55	204
22	214	204	203	260	292	58	72	67	68	83	56	194
23	248	169	195	246	295	60	75	67	72	75	65	55
24	320	152	196	252	294	66	78	59	69	64	54	55
25	407	157	197	253	263	66	77	57	77	63	54	56
26	347	162	196	253	54	65	72	58	72	74	54	55
27	225	164	195	271	58	65	68	58	65	77	54	54
28	142	171	195	289	57	65	76	58	64	71	54	122
29	213	175	201	248	---	66	77	57	69	66	56	223
30	211	175	170	249	---	65	77	58	65	81	54	170
31	209	---	167	234	---	65	---	58	---	59	54	---
TOTAL	8764	5344	6447	6823	7135	2699	2113	1923	2081	2199	1728	2415
MEAN	283	178	208	220	255	87.1	70.4	62.0	69.4	70.9	55.7	80.5
MAX	469	211	329	290	358	287	78	73	150	92	73	223
MIN	76	129	62	162	54	58	62	57	53	54	53	53
AC-FT	17380	10600	12790	13530	14150	5350	4190	3810	4130	4360	3430	4790
a	2920	0	3350	0	1830	18600	23310	36490	66960	57030	39200	16340

a Diversion, in acre-feet, through Rio Bravo Powerplant (station 11193010), provided by Rio Bravo Hydro Project.

11193031 KERN RIVER AT RIO BRAVO POWERPLANT, NEAR BAKERSFIELD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	144	188	228	175	344	336	350	499	675	549	574	216
MAX	283	407	759	348	1762	1639	2014	2009	2705	1943	2665	586
(WY)	2001	1999	1997	1995	1997	1997	1995	1998	1998	1998	1995	1998
MIN	60.5	63.1	57.8	58.8	59.2	59.8	49.5	51.5	51.6	52.1	55.7	61.0
(WY)	1994	1996	1998	1998	1994	1994	1991	1991	1991	1991	2001	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	47641		49671			
ANNUAL MEAN	130		136		364	
HIGHEST ANNUAL MEAN					1056	1995
LOWEST ANNUAL MEAN					106	1994
HIGHEST DAILY MEAN	483	Jun 7	469	Oct 5	3870	Aug 17 1995
LOWEST DAILY MEAN	51	May 21	53	Jun 1	46	Feb 22 1996
ANNUAL SEVEN-DAY MINIMUM	54	May 12	54	Aug 30	47	Jun 14 1991
MAXIMUM PEAK FLOW			707	Jun 13	5160	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	94500		98520		264000	
ANNUAL DIVERSION (AC-FT) a	360600		266000			
10 PERCENT EXCEEDS	294		287		1240	
50 PERCENT EXCEEDS	73		74		103	
90 PERCENT EXCEEDS	55		54		55	

a Diversion, in acre-feet, through Rio Bravo Powerplant (station 11193010), provided by Rio Bravo Hydro Project.

11199500 WHITE RIVER NEAR DUCOR, CA

LOCATION.—Lat 35°48'36", long 118°55'03", in NW 1/4 SE 1/4 sec.26, T.24 S., R.28 E., Tulare County, Hydrologic Unit 18030012, on left bank, 0.6 mi upstream from Tyler Gulch, and 9.0 mi southeast of Ducor.

DRAINAGE AREA.—90.6 mi^2.

PERIOD OF RECORD.—October 1942 to September 1953, February 1971 to current year. Monthly discharge only for October 1942 to September 1944, published in WSP 1315-A.

GAGE.—Water-stage recorder. Elevation of gage is 715 ft above sea level, from topographic map. October 1942 to September 1946, at site 3,800 ft downstream; October 1946 to September 1953, at site 4,300 ft downstream; and October 1971 to November 1978, at site 4,000 ft downstream, all at different datums. December 1978 to current year at datum 5.00 ft higher.

REMARKS.—Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,720 ft^3/s, Feb. 23, 1998, gage height, 4.53 ft, from rating curve extended above 646 ft^3/s, on basis of slope-area measurement, maximum gage height, 7.49 ft, Feb. 14, 2000; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 30 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0115	90	5.76	Feb. 28	2100	36	5.60
Jan. 27	0730	60	5.67	Apr. 8	0030	86	5.73
Feb. 12	1000	109	5.79	Apr. 21	1645	90	5.74
Feb. 25	0645	82	5.72				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	3.0	12	17	21	5.3	12	.00	.00	.00	.00
2	.00	.00	2.7	11	15	14	5.0	12	.00	.00	.00	.00
3	.00	.02	2.7	11	15	12	5.1	11	.00	.00	.00	.00
4	.00	.42	2.7	11	15	11	4.3	8.1	.00	.00	.00	.00
5	.00	.71	2.4	12	18	9.9	3.5	6.4	.00	.00	.00	.00
6	.00	1.0	2.4	12	20	12	3.4	4.9	.00	.00	.00	.00
7	.00	1.2	2.3	12	19	14	24	4.0	.00	.00	.00	.00
8	.00	1.5	2.1	11	16	11	52	3.5	.00	.00	.00	.00
9	.00	1.7	2.3	16	9.4	8.1	19	2.6	.00	.00	.00	.00
10	.00	2.2	2.4	25	8.0	9.2	14	2.3	.00	.00	.00	.00
11	.00	2.6	2.7	37	18	8.0	12	1.9	.00	.00	.00	.00
12	.00	2.5	3.6	53	73	6.6	12	1.6	.00	.00	.00	.00
13	.00	2.4	5.3	40	45	6.0	12	2.3	.00	.00	.00	.00
14	.00	2.2	6.3	27	25	5.5	11	2.1	.00	.00	.00	.00
15	.00	2.4	6.1	25	14	5.7	9.2	1.7	.00	.00	.00	.00
16	.00	3.2	6.3	24	9.5	6.4	8.5	1.4	.00	.00	.00	.00
17	.00	3.0	7.2	22	7.7	6.1	8.0	1.2	.00	.00	.00	.00
18	.00	2.9	7.8	21	6.7	5.1	7.8	.84	.00	.00	.00	.00
19	.00	2.7	8.7	18	7.5	6.5	8.5	.57	.00	.00	.00	.00
20	.00	2.7	8.7	17	8.1	9.1	19	.44	.00	.00	.00	.00
21	.00	2.5	8.6	16	6.6	10	51	.19	.00	.00	.00	.00
22	.00	2.4	8.6	16	6.2	10	37	.04	.00	.00	.00	.00
23	.00	2.6	9.0	17	9.1	9.4	27	.00	.00	.00	.00	.00
24	.00	3.1	9.6	21	11	8.5	24	.00	.00	.00	.00	.00
25	.00	3.9	10	36	60	8.6	23	.00	.00	.00	.00	.00
26	.00	3.6	11	37	36	10	20	.00	.00	.00	.00	.00
27	.00	3.3	11	48	23	10	18	.00	.00	.00	.00	.00
28	.00	3.3	11	46	26	7.8	17	.00	.00	.00	.00	.00
29	.00	3.0	12	31	---	5.9	17	.00	.00	.00	.00	.00
30	.00	3.0	12	27	---	6.4	14	.00	.00	.00	.00	.00
31	.00	---	12	20	---	5.3	---	.00	---	.00	.00	---
TOTAL	0.00	66.05	202.5	732	544.8	279.1	491.6	81.08	0.00	0.00	0.00	0.00
MEAN	.000	2.20	6.53	23.6	19.5	9.00	16.4	2.62	.000	.000	.000	.000
MAX	.00	3.9	12	53	73	21	52	12	.00	.00	.00	.00
MIN	.00	.00	2.1	11	6.2	5.1	3.4	.00	.00	.00	.00	.00
AC-FT	.00	131	402	1450	1080	554	975	161	.00	.00	.00	.00

11199500 WHITE RIVER NEAR DUCOR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.55	2.49	6.06	14.3	21.4	34.1	23.9	12.6	5.25	1.28	.38	.31
MAX	8.05	20.6	36.5	97.0	155	260	165	87.9	58.8	20.6	8.30	5.36
(WY)	1984	1984	1984	1997	1998	1943	1998	1998	1998	1998	1983	1998
MIN	.000	.000	.000	.084	.76	1.79	.85	.19	.000	.000	.000	.000
(WY)	1943	1943	1948	1949	1991	1977	1977	1992	1950	1947	1943	1943

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1943 - 2001	
ANNUAL TOTAL	2589.73		2397.13			
ANNUAL MEAN	7.08		6.57		10.3	
HIGHEST ANNUAL MEAN					52.0	1998
LOWEST ANNUAL MEAN					.58	1977
HIGHEST DAILY MEAN	130	Feb 14	73	Feb 12	1320	Mar 9 1943
LOWEST DAILY MEAN	.00	Jun 22	.00	Oct 1	.00	Oct 1 1942
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 22	.00	Oct 1	.00	Oct 1 1942
MAXIMUM PEAK FLOW			109	Feb 12	2720	Feb 23 1998
MAXIMUM PEAK STAGE			5.79	Feb 12	7.49	Feb 14 2000
ANNUAL RUNOFF (AC-FT)	5140		4750		7460	
10 PERCENT EXCEEDS	18		19		23	
50 PERCENT EXCEEDS	3.2		2.1		2.2	
90 PERCENT EXCEEDS	.00		.00		.00	

11200800 DEER CREEK NEAR FOUNTAIN SPRINGS, CA

LOCATION.—Lat 35°56'30", long 118°49'19", in SE 1/4 NE 1/4 sec.10, T.23 S., R.29 E., Tulare County, Hydrologic Unit 18030005, on left bank, 1.0 mi upstream from Pothole Creek, 6.3 mi northeast of Fountain Springs, and 12 mi east of Terra Bella.

DRAINAGE AREA.—83.3 mi^2.

PERIOD OF RECORD.—August 1968 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 980 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,790 ft^3/s, Jan. 3, 1997, gage height, 10.32 ft, from rating curve extended above 600 ft^3/s on basis of slope-area measurements at gage heights 8.83 ft in gage well, 9.18 ft from floodmarks, and 12.54 ft from floodmarks; no flow for periods in several years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 6, 1966, reached a stage of 12.54 ft, from floodmarks, discharge, 5,330 ft^3/s.

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)
Apr. 21	0900	59	3.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	9.3	8.5	8.0	12	24	16	22	4.5	.76	.05	.00
2	1.7	8.7	8.3	8.3	12	22	17	21	4.1	.53	.41	.00
3	1.9	8.3	8.5	8.5	12	22	16	20	3.2	.65	.71	.00
4	2.4	8.1	7.6	7.8	14	20	16	18	3.1	1.0	.70	.00
5	2.6	8.7	8.0	8.2	18	20	15	17	4.9	.74	.61	.00
6	2.7	7.7	8.0	8.2	18	24	15	14	4.3	1.1	.24	.00
7	2.6	8.6	8.0	8.0	16	25	30	16	4.3	2.6	.06	.00
8	2.1	8.6	8.1	8.5	14	23	27	15	3.5	2.5	.00	.00
9	2.3	8.5	8.6	11	13	24	22	14	3.3	1.3	.15	.00
10	6.7	8.8	8.3	11	16	25	21	13	1.9	1.1	.16	.00
11	18	9.3	8.6	33	20	22	20	13	1.7	1.4	.44	.00
12	10	9.0	8.9	18	27	20	20	12	3.4	1.2	.51	.00
13	8.0	8.9	9.4	13	24	18	21	10	3.0	1.3	.19	.00
14	7.2	8.8	9.0	12	21	18	21	11	3.3	1.5	.03	.00
15	6.4	8.9	8.9	13	17	20	22	11	2.6	.77	.00	.14
16	6.4	8.8	9.3	11	17	21	25	10	2.5	.56	.00	.47
17	6.1	8.9	8.7	11	16	21	27	10	1.2	.59	.00	.42
18	5.8	8.7	8.9	11	17	21	26	9.8	1.1	1.3	.00	.33
19	5.6	9.3	8.7	11	20	24	25	9.2	2.0	1.3	.00	.27
20	5.5	8.3	8.6	11	21	27	29	7.3	2.0	1.1	.00	.21
21	5.5	8.7	8.5	10	19	28	43	6.8	1.9	1.2	.00	.11
22	6.8	8.6	8.4	10	18	26	30	6.8	1.8	.73	.00	.03
23	5.0	8.5	8.8	11	20	25	37	7.0	1.5	.44	.00	.06
24	5.4	9.2	8.3	13	24	23	36	5.8	.74	.50	.00	.27
25	5.8	8.9	8.7	17	41	23	35	5.9	.60	.93	.00	.25
26	6.6	8.7	8.7	19	30	22	31	6.0	1.4	.73	.00	.46
27	8.0	8.7	8.5	19	26	21	29	4.9	1.2	.78	.00	.69
28	7.9	8.2	8.4	15	27	20	26	5.1	1.5	.73	.00	.88
29	8.5	8.4	8.4	14	---	19	25	5.0	1.4	.49	.00	1.0
30	17	7.9	8.3	13	---	19	23	6.0	1.7	.20	.00	1.1
31	11	---	8.2	13	---	18	---	5.4	---	.13	.00	---
TOTAL	193.5	260.0	264.1	385.5	550	685	746	338.0	73.64	30.16	4.26	6.69
MEAN	6.24	8.67	8.52	12.4	19.6	22.1	24.9	10.9	2.45	.97	.14	.22
MAX	18	9.3	9.4	33	41	28	43	22	4.9	2.6	.71	1.1
MIN	1.7	7.7	7.6	7.8	12	18	15	4.9	.60	.13	.00	.00
AC-FT	384	516	524	765	1090	1360	1480	670	146	60	8.4	13

11200800 DEER CREEK NEAR FOUNTAIN SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.15	13.5	23.6	54.9	75.8	81.8	68.5	43.2	23.7	9.72	4.33	3.63
MAX	23.5	62.8	145	440	364	443	318	211	153	66.9	32.1	20.1
(WY)	1984	1984	1997	1997	1998	1983	1998	1998	1998	1998	1983	1998
MIN	.77	3.35	4.88	6.69	4.65	8.38	4.12	2.96	.71	.000	.000	.000
(WY)	1978	1991	1991	1991	1991	1977	1977	1992	1992	1972	1972	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	7696.53		3536.85			
ANNUAL MEAN	21.0		9.69		33.8	
HIGHEST ANNUAL MEAN					143	1983
LOWEST ANNUAL MEAN					4.29	1977
HIGHEST DAILY MEAN	437	Feb 14	43	Apr 21	2080	Jan 3 1997
LOWEST DAILY MEAN	.76	Aug 7	.00	Aug 8	.00	Jun 24 1972
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 1	.00	Aug 15	.00	Jun 30 1972
MAXIMUM PEAK FLOW			59	Apr 21	3790	Jan 3 1997
MAXIMUM PEAK STAGE			3.37	Apr 21	10.32	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	15270		7020		24520	
10 PERCENT EXCEEDS	54		23		76	
50 PERCENT EXCEEDS	8.9		8.4		11	
90 PERCENT EXCEEDS	1.6		.06		.95	

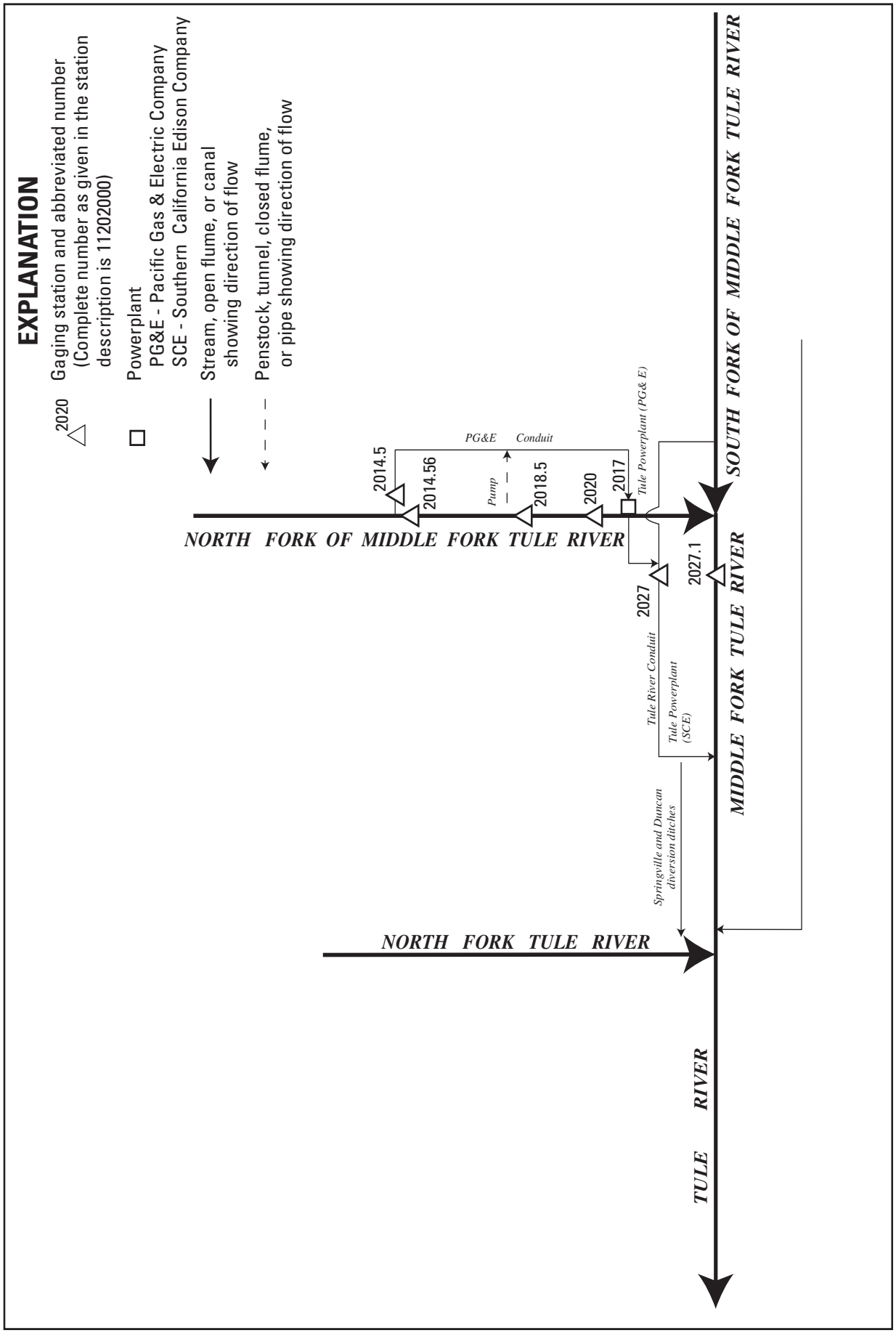

Figure 24. Diversions and storage in Tule River Basin.

11201450 PACIFIC GAS & ELECTRIC CO. TULE RIVER CONDUIT BELOW DIVERSION DAM, NEAR SPRINGVILLE, CA

LOCATION.—Lat 36°11'32", long 118°39'24", in SW 1/4 SE 1/4 sec.7, T.20 S., R.31 E., Tulare County, Hydrologic Unit 18030006, on left bank, 75 ft downstream from diversion dam, and 11 mi east of Springville.

PERIOD OF RECORD.—October 1994 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 4,040 ft above sea level, from topographic map.

REMARKS.—Water is returned to river 3.6 mi downstream after passing through Tule River Powerplant (station 11201700). See schematic diagram of Tule River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 66 ft^3/s, Apr. 28, May 1, 2; minimum daily, 0.10 ft^3/s, Oct. 10, 1999.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	8.8	5.9	4.8	7.4	10	61	e66	e27	6.3	2.6	.58
2	2.0	8.8	5.8	4.7	8.3	11	59	e66	e25	6.1	2.4	.57
3	2.0	8.3	5.7	4.8	11	10	50	e65	e24	5.9	2.4	.77
4	2.1	7.9	5.6	4.6	15	11	41	e64	e22	5.8	2.3	.93
5	1.3	7.5	5.5	4.6	17	12	35	e63	21	5.9	2.4	.74
6	1.3	7.4	5.5	4.6	15	14	32	e64	20	10	2.2	.68
7	1.3	7.2	5.6	4.6	12	14	33	e64	18	11	2.1	.66
8	1.3	6.8	5.6	5.2	11	16	30	e65	17	12	1.9	.62
9	1.3	6.6	5.6	5.3	9.7	17	26	e65	16	7.8	1.8	.57
10	1.4	7.2	5.6	6.2	10	14	25	e65	15	6.9	1.7	.59
11	1.3	7.1	5.6	8.9	8.8	13	23	e64	15	6.1	1.7	.59
12	1.4	6.8	6.4	7.8	10	12	23	e64	14	5.6	1.6	.57
13	1.4	6.7	5.8	6.9	10	14	24	e62	14	5.3	1.5	.64
14	1.4	6.5	5.7	6.8	9.0	17	26	e61	14	5.1	1.4	.60
15	1.4	6.2	5.7	6.7	8.8	20	30	e63	13	4.9	1.2	.49
16	1.4	6.1	5.7	6.0	9.2	20	39	e64	12	4.8	1.0	2.0
17	4.4	5.9	5.6	5.9	9.7	22	47	e65	12	4.8	.87	2.9
18	6.4	6.0	5.4	6.5	11	33	e52	e64	11	4.7	.81	2.9
19	3.0	6.0	5.3	6.9	12	48	e50	e62	10	4.5	.81	2.8
20	4.1	6.1	5.3	7.0	11	56	e47	e61	10	4.3	.80	2.8
21	5.8	6.2	5.2	7.3	11	56	e45	e61	9.7	4.2	.87	2.8
22	5.8	6.5	5.2	7.5	11	53	e42	e61	9.3	4.0	.99	2.8
23	5.6	6.3	5.1	7.6	9.7	53	e52	e58	8.9	3.8	1.1	2.7
24	4.0	6.2	5.1	8.4	10	56	e61	e55	8.7	3.6	1.1	2.6
25	4.5	6.1	5.1	7.7	12	54	e63	e52	8.4	3.3	.96	2.7
26	8.2	6.1	5.0	8.2	11	50	e63	e46	8.2	3.2	.84	2.8
27	8.3	6.0	4.9	7.2	11	53	e65	e41	7.8	3.0	.83	2.8
28	7.3	6.0	4.9	7.1	11	56	e66	e38	7.4	2.7	.81	2.8
29	16	6.0	4.8	7.1	---	57	e65	e35	7.1	2.6	.79	2.9
30	15	6.0	4.8	6.8	---	58	e65	e33	6.6	2.6	.68	2.8
31	10	---	4.8	7.1	---	60	---	e30	---	2.7	.58	---
TOTAL	133.9	201.3	167.8	200.8	302.6	990	1340	1787	412.1	163.5	43.04	50.70
MEAN	4.32	6.71	5.41	6.48	10.8	31.9	44.7	57.6	13.7	5.27	1.39	1.69
MAX	16	8.8	6.4	8.9	17	60	66	66	27	12	2.6	2.9
MIN	1.3	5.9	4.8	4.6	7.4	10	23	30	6.6	2.6	.58	.49
AC-FT	266	399	333	398	600	1960	2660	3540	817	324	85	101

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

MEAN	5.60	9.54	15.1	22.7	36.5	45.9	54.3	59.2	39.7	25.7	11.9	8.56
MAX	13.5	20.0	50.0	55.0	58.5	59.8	61.1	62.4	62.8	59.3	31.7	19.2
(WY)	1999	1997	1997	1997	1997	1997	1996	1995	1995	1995	1998	1998
MIN	1.68	4.05	4.93	6.48	10.8	22.7	38.9	53.8	13.7	5.27	1.39	1.69
(WY)	2000	1995	2000	2001	2001	1999	1999	1999	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	7503.2		5792.74			
ANNUAL MEAN	20.5		15.9		27.8	
HIGHEST ANNUAL MEAN					37.8	1997
LOWEST ANNUAL MEAN					15.9	2001
HIGHEST DAILY MEAN	62	Apr 27	66	Apr 28	66	Apr 28 2001
LOWEST DAILY MEAN	1.1	Sep 17	.49	Sep 15	.10	Oct 10 1999
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 11	.58	Sep 9	.21	Oct 4 1995
ANNUAL RUNOFF (AC-FT)	14880		11490		20160	
10 PERCENT EXCEEDS	59		56		61	
50 PERCENT EXCEEDS	8.3		6.9		19	
90 PERCENT EXCEEDS	1.9		1.3		2.9	

e Estimated.

11201456 NORTH FORK OF MIDDLE FORK TULE RIVER BELOW DIVERSION DAM, NEAR SPRINGVILLE, CA

LOCATION.—Lat 36°11'33", long 118°39'25", in SW 1/4 SE 1/4 sec.7, T.20 S., R.31 E., Tulare County, Hydrologic Unit 18030006, on left bank, 375 ft downstream from diversion dam, 0.3 mi upstream from Hossack Creek, and 11 mi east of Springville.

DRAINAGE AREA.—30.9 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only).

GAGE.—Water-stage recorder and sharp-crested V-notch weir in concrete control. Elevation of gage is 4,000 ft above sea level, from topographic map.

REMARKS.—No records computed above 80 ft^3/s. Most of the flow is diverted at the diversion dam to Pacific Gas and Electric Co. Tule River Conduit (station 11201450). Water is returned to river 3.6 mi downstream after passing through Tule River Powerplant (station 11201700). See schematic diagram of Tule River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	5.0	4.5	4.4	4.7	4.9	15	49	8.1	7.2	7.6	7.3
2	6.3	4.9	4.5	4.4	4.8	5.0	10	56	8.3	7.2	7.4	7.2
3	5.8	4.9	4.5	4.4	4.8	4.9	5.5	48	8.1	7.2	7.4	7.4
4	5.8	4.9	4.5	4.4	5.0	5.0	5.1	34	7.9	7.2	7.3	7.5
5	6.9	4.9	4.5	4.4	5.0	5.1	5.0	30	7.6	7.3	7.3	7.3
6	6.9	4.9	4.5	4.5	5.0	5.1	4.9	33	7.3	8.4	7.1	7.3
7	6.9	4.8	4.5	4.5	5.0	5.2	5.0	40	8.3	8.9	7.0	7.3
8	6.9	4.8	4.5	4.5	4.8	5.3	4.9	50	8.6	9.0	7.1	7.2
9	7.0	4.8	4.5	4.5	4.8	5.4	4.8	54	8.7	8.2	7.1	7.1
10	16	4.8	4.5	4.6	4.8	5.3	4.7	54	8.6	8.0	7.1	7.0
11	13	4.8	4.5	4.7	4.8	5.3	4.7	52	8.5	8.1	7.2	7.1
12	13	4.8	4.5	4.6	4.8	5.2	4.7	48	8.4	8.1	7.1	7.2
13	11	4.8	4.5	4.6	4.8	5.3	4.7	37	8.2	7.9	7.0	7.1
14	11	4.8	4.5	4.6	4.8	5.5	4.8	31	7.9	7.8	7.0	7.1
15	10	4.8	4.5	4.6	4.8	5.6	4.9	29	7.7	7.8	7.2	7.1
16	9.8	4.8	4.5	4.5	4.8	5.4	5.1	33	7.7	7.7	7.2	5.9
17	6.9	4.8	4.5	4.5	4.8	5.3	5.7	38	7.7	7.7	7.3	5.1
18	4.8	4.8	4.5	4.6	4.9	6.3	6.3	32	7.4	7.7	7.4	5.1
19	7.3	4.7	4.5	4.7	4.9	9.5	5.9	25	7.6	7.6	7.3	5.1
20	6.2	4.7	4.5	4.7	4.9	13	5.7	19	7.6	7.5	7.2	5.1
21	4.9	4.6	4.5	4.7	4.9	9.0	5.6	17	7.6	7.5	7.2	5.1
22	4.9	4.5	4.5	4.7	4.9	6.5	5.5	15	7.5	7.5	7.3	5.0
23	4.9	4.5	4.5	4.7	4.9	7.5	6.6	9.7	7.5	7.5	7.4	5.0
24	5.9	4.5	4.5	4.8	5.0	9.0	15	8.1	7.4	7.5	7.4	5.0
25	5.4	4.5	4.5	4.7	5.0	6.9	33	7.6	7.3	7.6	7.3	5.0
26	4.8	4.5	4.5	4.8	5.0	5.8	44	10	7.3	7.5	7.2	5.0
27	4.7	4.5	4.5	4.7	5.0	6.8	46	10	7.4	7.5	7.1	5.0
28	4.6	4.5	4.5	4.7	5.0	7.1	46	9.7	7.4	7.4	7.1	5.0
29	17	4.5	4.5	4.7	---	7.5	40	9.2	7.4	7.4	7.0	5.0
30	4.8	4.5	4.5	4.7	---	8.5	41	8.2	7.3	7.5	7.2	4.9
31	4.8	---	4.4	4.7	---	12	---	7.5	---	7.6	7.3	---
TOTAL	233.6	141.6	139.4	142.6	136.7	204.2	400.1	904.0	234.3	239.0	223.8	184.5
MEAN	7.54	4.72	4.50	4.60	4.88	6.59	13.3	29.2	7.81	7.71	7.22	6.15
MAX	17	5.0	4.5	4.8	5.0	13	46	56	8.7	9.0	7.6	7.5
MIN	4.6	4.5	4.4	4.4	4.7	4.9	4.7	7.5	7.3	7.2	7.0	4.9
AC-FT	463	281	276	283	271	405	794	1790	465	474	444	366

11201850 NORTH FORK OF MIDDLE FORK TULE RIVER BELOW DOYLE SPRINGS DIVERSION, NEAR SPRINGVILLE, CA

LOCATION.—Lat 36°11'19", long 118°40'01", unsurveyed, in T.20 S., R.31 E., Tulare County, Hydrologic Unit 18030006, on right bank, 600 ft downstream from diversion, 0.2 mi upstream from Meadow Creek, and 10 mi east of Springville.

DRAINAGE AREA.—34.1 mi^2.

PERIOD OF RECORD.—October 1994 to current year (low-flow records only).

GAGE.—Water-stage recorder and broad-crested weir in concrete control. Elevation of gage is 3,740 ft above sea level, from topographic map.

REMARKS.—No records computed above 5 ft^3/s. Pacific Gas and Electric Co. pumps up to 5 ft^3/s from river at Doyle Springs Diversion to Tule River Conduit (station 11201450); water is returned to river 2.6 mi downstream after passing through Tule River Powerplant (station 11201700). See schematic diagram of Tule River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	4.0	3.9	4.2	---	---	---	---	---	---	---
2	---	---	3.9	3.9	4.3	---	---	---	---	---	---	---
3	---	---	3.9	3.9	4.4	4.8	---	---	---	---	---	---
4	---	---	3.9	3.9	4.7	4.9	---	---	---	---	---	---
5	---	---	---	3.9	4.8	---	---	---	---	---	---	---
6	---	---	3.9	3.9	4.7	---	---	---	---	---	---	---
7	---	---	3.9	3.9	4.6	---	---	---	---	---	---	---
8	---	---	3.9	4.0	4.5	---	---	---	---	---	---	---
9	---	---	3.9	4.0	4.4	---	---	---	---	---	---	---
10	---	---	3.9	---	4.5	---	4.7	---	---	---	---	---
11	---	---	3.9	---	4.4	---	4.7	---	---	---	---	---
12	---	---	4.1	4.3	4.5	---	4.6	---	---	---	---	---
13	---	---	3.9	4.2	4.6	---	4.7	---	---	---	---	---
14	---	4.6	3.9	4.2	4.5	---	---	---	---	---	---	---
15	---	---	3.9	4.2	4.4	---	---	---	---	---	---	---
16	---	4.7	3.9	4.1	---	---	---	---	---	---	---	---
17	---	---	3.9	4.0	4.5	---	---	---	---	---	---	---
18	---	4.5	4.0	4.1	4.7	---	---	---	---	---	---	---
19	---	4.4	4.0	4.2	---	---	---	---	---	---	---	---
20	---	---	4.0	4.1	4.8	---	---	---	---	---	---	---
21	---	4.2	4.0	4.2	4.7	---	---	---	---	---	---	---
22	---	---	4.0	4.2	---	---	---	---	---	---	---	---
23	---	4.1	4.0	4.2	---	---	---	---	---	---	---	---
24	---	4.1	4.0	4.4	---	---	---	---	---	---	---	---
25	---	4.1	4.0	4.3	---	---	---	---	---	---	---	---
26	---	4.1	3.9	4.4	---	---	---	---	---	---	---	---
27	---	---	3.9	4.3	---	---	---	---	---	---	---	---
28	4.4	4.0	3.9	4.2	---	---	---	---	---	---	---	---
29	---	4.0	3.9	4.2	---	---	---	---	---	---	---	---
30	---	4.0	3.9	4.2	---	---	---	---	---	---	---	---
31	---	---	3.9	4.2	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER, NEAR SPRINGVILLE, CA

LOCATION.—Lat 36°10'29", long 118°41'41", unsurveyed, in T.20 S., R.30 E., Tulare County, Hydrologic Unit 18030006, on right bank, 1.2 mi upstream from mouth, 2.2 mi downstream from Hossack Creek, and 7.4 mi northeast of Springville.

DRAINAGE AREA.—39.3 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A. January 1909 to December 1912 at site 2 mi upstream, records not equivalent. Prior to October 1954, records for river and Pacific Gas & Electric Co. Conduit published separately; combined flow only, October 1954 to September 1960. Prior to October 1982, combined flow consisted of river and conduit. October 1982 to present, combined flow consists of river and Pacific Gas & Electric Co. Tule River Powerplant near Springville (station 11201700).

REVISED RECORDS.—WSP 1445: 1951. WSP 1930: Drainage area. WDR CA-91-3: Adjusted data for 1990.

GAGE.—Water-stage recorder. Concrete control on river since Aug. 6, 1958. Rectangular weir and concrete control on river since July 10, 1991. Elevation of gage is 2,920 ft above sea level, from topographic map.

REMARKS.—Pacific Gas and Electric Co. Conduit diverts 2.5 mi upstream from station; water is returned to river 1.1 mi downstream after passing through Tule River Powerplant (station 11201700). For records of combined discharge of river and powerplant, see station 11202001. See schematic diagram of Tule River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—River only, maximum discharge, 16,900 ft^3/s, Dec. 6, 1966, gage height, 13.83 ft, from floodmarks, from rating curve extended above 1,820 ft^3/s, on basis of critical-depth determinations at gage heights 9.67 and 12.47 ft; minimum daily, 0.06 ft^3/s, Nov. 2, 1979.

Combined flow: Maximum discharge, 16,900 ft^3/s, Dec. 6, 1966; minimum daily, 4.9 ft^3/s, Dec. 24, 26, 1999.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	6.6	5.8	5.3	6.2	7.9	18	62	8.9	7.5	7.4	11
2	10	6.5	5.8	5.3	6.2	7.9	15	70	8.8	7.5	7.3	10
3	11	6.5	5.8	5.2	6.3	7.6	8.3	56	8.6	7.5	8.3	11
4	9.7	6.6	5.8	5.3	6.6	7.6	7.4	39	8.4	7.6	11	11
5	11	7.1	5.6	5.3	6.6	7.9	7.1	37	8.1	8.3	11	11
6	11	6.3	5.6	5.2	6.6	7.5	6.9	42	8.2	9.2	11	11
7	11	6.4	5.7	5.3	6.6	7.5	12	53	9.1	8.8	11	11
8	11	6.4	5.8	5.3	6.3	7.5	8.6	64	9.0	8.7	11	11
9	11	7.2	5.8	5.5	6.2	7.9	7.8	67	8.9	8.1	11	10
10	21	7.4	5.8	5.8	6.8	8.0	7.5	66	8.8	7.9	11	10
11	18	7.2	5.8	9.9	7.0	7.5	7.5	62	8.8	7.9	11	11
12	18	8.7	6.2	6.8	7.3	7.4	7.5	55	8.7	7.9	11	11
13	15	7.5	6.0	6.4	7.5	7.3	7.4	41	8.4	7.8	11	10
14	15	6.2	5.9	6.2	7.6	8.3	7.6	32	8.2	7.6	11	11
15	15	6.2	5.8	6.3	7.3	7.7	7.9	31	8.2	7.6	11	10
16	14	6.2	5.8	6.0	7.1	7.6	8.3	39	8.0	7.6	11	9.5
17	12	6.1	5.8	5.8	7.2	7.2	8.7	39	7.9	7.6	11	9.2
18	9.1	6.0	5.6	5.8	7.9	7.7	9.2	30	7.9	7.6	11	9.2
19	11	6.0	5.4	5.9	8.7	9.6	9.4	22	7.9	7.6	11	9.2
20	11	6.0	5.4	5.9	8.6	15	11	18	7.9	7.5	11	9.2
21	9.2	5.8	5.4	6.0	7.8	14	13	17	7.8	7.5	11	8.8
22	9.2	6.0	5.5	6.0	7.8	9.1	12	15	7.7	7.4	11	8.8
23	9.2	5.8	5.4	6.0	7.5	9.0	14	10	7.7	7.4	11	8.8
24	9.9	5.9	5.3	6.9	15	11	24	9.2	7.7	7.4	11	8.9
25	8.3	5.8	5.4	6.5	14	11	42	9.5	7.7	7.4	11	8.9
26	8.0	5.8	5.3	7.2	9.6	8.3	53	11	7.7	7.4	11	8.9
27	7.5	5.7	5.3	6.6	8.6	8.4	56	10	7.7	7.4	11	8.6
28	5.9	5.5	5.3	6.4	8.4	9.6	55	10	7.7	7.2	10	8.3
29	21	5.6	5.3	6.4	---	9.6	47	9.4	7.7	7.2	10	8.4
30	12	5.8	5.3	6.2	---	10	51	8.6	7.6	7.3	10	8.4
31	8.1	---	5.3	6.2	---	12	---	8.4	---	7.5	11	---
TOTAL	362.6	190.8	174.0	188.9	219.3	274.6	550.1	1043.1	245.7	238.9	328.0	293.1
MEAN	11.7	6.36	5.61	6.09	7.83	8.86	18.3	33.6	8.19	7.71	10.6	9.77
MAX	21	8.7	6.2	9.9	15	15	56	70	9.1	9.2	11	11
MIN	5.9	5.5	5.3	5.2	6.2	7.2	6.9	8.4	7.6	7.2	7.3	8.3
AC-FT	719	378	345	375	435	545	1090	2070	487	474	651	581

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER, NEAR SPRINGVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.67	12.4	26.1	29.2	27.4	33.8	49.8	81.4	48.3	12.6	4.90	4.01
MAX	19.1	362	786	353	182	337	229	381	316	136	16.2	22.7
(WY)	1953	1951	1967	1997	1986	1943	1969	1969	1983	1998	1996	1952
MIN	.53	.76	.73	.81	.80	1.21	1.13	1.03	.61	.34	.32	.31
(WY)	1965	1963	1991	1991	1991	1977	1977	1992	1992	1961	1964	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	5021.7		4109.1			
ANNUAL MEAN	13.7		11.3		27.5	
HIGHEST ANNUAL MEAN					129	1967
LOWEST ANNUAL MEAN					1.25	1961
HIGHEST DAILY MEAN	160	Feb 14	70	May 2	13300	Dec 6 1966
LOWEST DAILY MEAN	5.0	Jan 15	5.2	Jan 3	.06	Nov 2 1979
ANNUAL SEVEN-DAY MINIMUM	5.2	Jan 10	5.3	Dec 31	.20	Aug 24 1964
MAXIMUM PEAK FLOW			83	May 8	16900	Dec 6 1966
MAXIMUM PEAK STAGE			3.68	May 8	13.83	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	9960		8150		19960	
10 PERCENT EXCEEDS	28		15		77	
50 PERCENT EXCEEDS	9.4		8.0		5.5	
90 PERCENT EXCEEDS	5.6		5.8		.80	

11202001 NORTH FORK OF MIDDLE FORK TULE RIVER, NEAR SPRINGVILLE, CA—Continued

NORTH FORK OF MIDDLE FORK TULE RIVER AND
PACIFIC GAS & ELECTRIC CO. TULE RIVER POWERPLANT, NEAR SPRINGVILLE, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	20	15	14	17	24	75	128	38	18	14	11
2	10	20	16	14	18	24	62	136	39	18	14	10
3	11	19	15	14	18	22	68	122	36	18	13	11
4	9.7	18	16	13	19	24	60	105	36	18	11	11
5	11	17	16	13	31	25	60	102	35	19	11	11
6	11	16	15	13	32	28	48	107	34	21	11	11
7	11	15	15	13	32	27	50	118	33	21	11	11
8	11	21	15	14	31	24	49	129	31	26	11	11
9	11	22	16	15	22	31	41	134	30	20	11	10
10	21	13	16	16	22	34	39	133	28	19	11	10
11	18	21	16	19	22	26	37	127	28	18	11	11
12	18	16	16	20	21	26	39	120	27	18	11	11
13	15	18	16	17	23	25	37	104	27	18	11	10
14	15	16	16	16	22	27	39	96	28	18	11	11
15	15	16	16	17	20	36	42	96	23	18	11	10
16	14	16	16	17	22	37	48	104	23	18	11	9.5
17	12	17	16	16	21	36	56	105	23	17	11	9.2
18	9.1	19	14	15	23	40	67	95	24	17	11	9.2
19	11	18	14	17	24	60	70	87	23	16	11	9.2
20	11	16	14	17	24	83	67	82	21	16	11	9.2
21	9.2	17	14	17	25	74	70	81	21	16	11	8.8
22	9.2	17	14	18	24	70	69	79	20	15	11	8.8
23	9.2	17	14	18	24	70	72	72	21	15	11	8.8
24	9.9	17	14	20	27	70	88	68	20	16	11	8.9
25	14	16	14	19	32	74	111	66	20	16	11	8.9
26	16	16	15	19	26	71	119	64	20	15	11	8.9
27	19	16	15	19	25	67	121	60	20	14	11	8.6
28	17	16	14	18	24	69	120	51	20	14	10	8.3
29	40	16	14	17	---	73	113	48	19	14	10	8.4
30	29	16	14	18	---	72	117	46	19	14	10	8.4
31	22	---	14	17	---	77	---	45	---	15	11	---
TOTAL	448.8	518	465	510	671	1446	2054	2910	787	536	346	293.1
MEAN	14.5	17.3	15.0	16.5	24.0	46.6	68.5	93.9	26.2	17.3	11.2	9.77
MAX	40	22	16	20	32	83	121	136	39	26	14	11
MIN	9.1	13	14	13	17	22	37	45	19	14	10	8.3
AC-FT	890	1030	922	1010	1330	2870	4070	5770	1560	1060	686	581

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	17.7	27.8	48.6	54.4	60.8	75.0	104	140	93.3	40.6	21.8	17.9
MAX	44.3	375	794	417	241	381	296	445	384	202	72.3	42.6
(WY)	1983	1951	1967	1997	1980	1943	1969	1969	1983	1998	1983	1983
MIN	8.66	10.5	11.9	13.3	12.5	16.7	21.8	25.1	16.4	10.1	8.99	8.63
(WY)	1962	1962	1991	1961	1991	1977	1977	1977	1992	1961	1977	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	13151.4		10984.9			
ANNUAL MEAN	35.9		30.1		58.4	
HIGHEST ANNUAL MEAN					157	1983
LOWEST ANNUAL MEAN					15.1	1977
HIGHEST DAILY MEAN	209	Feb 14	136	May 2	13300	Dec 6 1966
LOWEST DAILY MEAN	5.3	Jan 1	8.3	Sep 28	4.9	Dec 24 1999
ANNUAL SEVEN-DAY MINIMUM	9.0	Sep 19	8.6	Sep 24	5.2	Oct 1 1987
MAXIMUM PEAK FLOW			150	May 9	16900	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	26090		21790		42340	
10 PERCENT EXCEEDS	91		72		134	
50 PERCENT EXCEEDS	18		18		28	
90 PERCENT EXCEEDS	11		11		13	

11202710 MIDDLE FORK TULE RIVER BELOW INTAKE, ABOVE SPRINGVILLE, CA

LOCATION.—Lat 36°09'41", long 118°42'31", unsurveyed, T.20 S., R.30 E., Tulare County, Hydrologic Unit 18030006, Sequoia National Forest, on right bank, 700 ft downstream from confluence of North Fork Middle Fork Tule River and South Fork Middle Fork Tule River, and 6.5 mi northeast of Springville.

DRAINAGE AREA.—85.3 mi^2.

PERIOD OF RECORD.—October 1988 to September 1990, October 1991 to current year.

REVISED RECORD.—WDR CA-95-3: 1993(M).

GAGE.—Water-stage recorder and V-notch sharp-crested weir in concrete control on river; water-stage recorder and metal flume for conduit diversion. Elevation of gage is 2,370 ft above sea level, from topographic map.

REMARKS.—Southern California Edison Co.'s Tule River Conduit (station 11202700) diverts from the right bank of Middle Fork Tule River upstream from station. Flow from this conduit passes through Tule River Powerplant of Southern California Edison Co. Diversions are made from powerplant tailrace ditch to Springville Diversion and Duncan Diversion Ditches. Remaining water is returned to the Tule River 1.5 mi upstream from confluence of Middle and North Forks. For records of combined discharge of river and conduit, see station 11202711. See schematic diagram of Tule River 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.—River only; maximum discharge, 19,400 ft^3/s, Jan. 2, 1997, gage height, 11.82 ft; minimum daily, 4.8 ft^3/s, Oct. 3, 1996.

Combined flow: Maximum daily discharge, 6,030 ft^3/s, Jan. 3, 1997; minimum daily, 6.5 ft^3/s, Dec. 12, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	6.4	5.7	5.4	13	10	104	e147	e31	e12	e11	e11
2	10	6.1	5.7	5.4	7.3	10	101	e154	e27	e12	e11	e11
3	6.0	5.9	5.7	5.4	8.6	8.8	81	e136	e24	e12	e11	e11
4	6.1	5.8	5.6	5.4	15	11	62	e121	e22	e11	e11	e11
5	6.2	5.8	5.6	5.3	19	16	51	e120	e21	e11	e10	e11
6	6.2	5.8	5.6	5.3	16	19	44	e122	e19	e20	e11	e11
7	6.1	5.9	5.6	5.3	10	19	61	e126	e17	e27	e11	e11
8	6.0	5.9	5.6	5.3	7.4	19	48	e138	e13	e13	e12	e11
9	6.0	5.8	5.7	5.4	7.1	23	42	e141	e13	e12	e12	e11
10	17	5.8	5.6	7.0	8.7	19	38	e133	e13	e14	e11	e11
11	13	5.8	5.6	33	8.8	15	37	e126	e12	e13	e13	e11
12	11	5.7	5.6	13	9.9	12	e39	e126	e12	e12	e13	e12
13	7.5	5.7	5.5	10	11	13	e38	e111	e12	e12	e11	e11
14	7.0	5.7	5.5	9.0	9.9	18	e43	e102	e12	e12	e11	e11
15	6.0	5.6	5.5	13	7.4	22	e49	e100	e12	e12	e11	e12
16	5.8	5.6	5.5	15	7.1	25	e61	105	e12	e12	e11	e12
17	5.7	5.6	5.5	13	7.3	25	e71	106	e12	e12	e11	e12
18	5.7	5.6	5.4	11	11	44	74	98	e12	e12	e11	e12
19	5.7	5.5	5.4	6.5	16	65	76	91	e12	e12	e11	e12
20	5.7	5.5	5.4	6.6	17	85	78	85	e12	e11	e11	11
21	5.7	5.5	5.4	7.4	12	87	86	82	e12	e12	e11	11
22	5.7	5.6	5.4	12	13	76	81	80	e12	e12	e11	11
23	5.8	5.6	5.4	16	11	74	101	72	e12	e12	e11	11
24	5.8	5.6	5.5	22	27	79	119	68	e12	e11	e11	11
25	6.0	5.6	5.3	18	34	80	139	64	e12	e11	e11	12
26	8.1	5.6	5.3	13	19	73	e141	60	e11	e11	e11	12
27	10	5.7	5.3	7.5	14	76	e136	e53	e12	e11	e11	12
28	6.8	5.6	5.4	6.6	13	80	e138	e48	e12	e11	e11	13
29	46	5.6	5.4	12	---	86	e135	e43	e12	e12	e11	13
30	32	5.6	5.4	16	---	86	e138	e38	e12	e12	e11	13
31	11	---	5.4	16	---	92	---	e35	---	e11	e11	---
TOTAL	298.6	171.5	170.5	331.8	360.5	1367.8	2412	3031	439	390	346	345
MEAN	9.63	5.72	5.50	10.7	12.9	44.1	80.4	97.8	14.6	12.6	11.2	11.5
MAX	46	6.4	5.7	33	34	92	141	154	31	27	13	13
MIN	5.7	5.5	5.3	5.3	7.1	8.8	37	35	11	11	10	11
AC-FT	592	340	338	658	715	2710	4780	6010	871	774	686	684

e Estimated.

11202710 MIDDLE FORK TULE RIVER BELOW INTAKE, ABOVE SPRINGVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.6	21.3	32.7	114	83.8	100	122	153	116	50.8	17.8	15.3
MAX	40.9	94.4	236	976	241	239	303	390	614	303	69.7	41.8
(WY)	1998	1997	1997	1997	1998	1995	1998	1998	1998	1998	1998	1998
MIN	6.25	5.72	5.50	6.41	8.21	15.5	32.9	22.6	12.1	11.0	10.8	10.4
(WY)	2000	2001	2001	1994	1990	1992	1990	1992	1992	2000	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	14254.6		9663.7			
ANNUAL MEAN	38.9		26.5		70.4	
HIGHEST ANNUAL MEAN					199	1998
LOWEST ANNUAL MEAN					15.6	1990
HIGHEST DAILY MEAN	445	Feb 14	154	May 2	6030	Jan 3 1997
LOWEST DAILY MEAN	5.3	Dec 25	5.3	Dec 25	4.8	Oct 3 1996
ANNUAL SEVEN-DAY MINIMUM	5.4	Dec 25	5.3	Jan 2	5.1	Oct 2 1996
MAXIMUM PEAK FLOW			181	May 1	19400	Jan 2 1997
MAXIMUM PEAK STAGE			3.44	May 1	11.82	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	28270		19170		50990	
10 PERCENT EXCEEDS	105		83		182	
50 PERCENT EXCEEDS	12		12		19	
90 PERCENT EXCEEDS	5.6		5.6		6.4	

11202711 MIDDLE FORK TULE RIVER BELOW INTAKE, ABOVE SPRINGVILLE, CA—Continued

MIDDLE FORK TULE RIVER BELOW INTAKE AND
SOUTHERN CALIFORNIA EDISON CO.'S TULE RIVER CONDUIT ABOVE SPRINGVILLE, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	39	31	27	32	47	143	e184	e66	e31	e24	e19
2	23	39	31	27	34	47	139	e191	e62	e30	e23	e19
3	24	37	30	27	38	46	120	e173	e59	e30	e21	e20
4	23	35	30	27	47	48	100	e158	e57	e28	e22	e21
5	24	35	30	27	52	53	89	e157	e56	e29	e21	e20
6	24	34	30	27	50	56	82	e159	e54	e39	e22	e20
7	23	35	30	27	44	57	99	e162	e52	e48	e21	e20
8	24	33	31	28	40	56	85	e174	e48	e34	e21	e20
9	24	32	31	30	39	60	79	e177	e47	e33	e21	e19
10	43	34	31	32	43	56	75	e169	e47	e35	e19	e19
11	41	34	31	57	44	51	74	e162	e45	e33	e21	e20
12	38	33	34	39	44	48	e76	e162	e45	e31	e21	e21
13	34	34	32	37	47	49	e75	e147	e45	e31	e20	e20
14	34	33	32	36	46	55	e80	e138	e43	e30	e20	e19
15	33	32	32	34	43	60	e86	e136	e41	e29	e19	e20
16	32	32	32	30	42	63	e98	141	e40	e29	e19	e20
17	31	32	32	28	43	63	e108	142	e39	e29	e19	e20
18	30	32	30	30	48	82	111	133	e38	e29	e19	e20
19	29	30	30	30	53	103	113	126	e37	e29	e19	e20
20	29	32	30	31	54	123	115	120	e37	e27	e19	19
21	29	30	29	31	49	125	123	117	e36	e28	e19	19
22	30	32	29	31	50	114	118	115	e35	e28	e19	19
23	29	32	29	31	48	112	138	107	e35	e27	e20	19
24	28	32	30	37	64	117	156	103	e34	e26	e20	18
25	29	32	29	35	71	118	176	99	e34	e25	e20	19
26	34	32	28	40	56	111	e179	95	e33	e25	e19	20
27	37	31	28	38	52	114	e174	e88	e33	e25	e19	19
28	34	31	28	35	51	119	e175	e83	e33	e23	e19	20
29	74	31	28	33	---	125	e172	e78	e32	e24	e19	20
30	64	31	28	32	---	125	e175	e73	e32	e24	e19	19
31	45	---	28	32	---	131	---	e69	---	e24	e19	---
TOTAL	1019	991	934	1006	1324	2534	3533	4138	1295	913	623	588
MEAN	32.9	33.0	30.1	32.5	47.3	81.7	118	133	43.2	29.5	20.1	19.6
MAX	74	39	34	57	71	131	179	191	66	48	24	21
MIN	23	30	28	27	32	46	74	69	32	23	19	18
AC-FT	2020	1970	1850	2000	2630	5030	7010	8210	2570	1810	1240	1170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	30.6	40.7	55.4	141	117	137	159	188	148	74.0	35.1	28.9
MAX	62.5	121	266	999	275	276	337	420	650	340	106	77.8
(WY)	1999	1997	1997	1997	1997	1995	1998	1998	1998	1998	1998	1998
MIN	18.2	22.7	21.4	28.5	34.7	48.2	69.6	53.3	26.6	19.2	15.8	14.8
(WY)	1989	1990	1990	1992	1990	1992	1990	1992	1992	1990	1990	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	24601		18898			
ANNUAL MEAN	67.2		51.8		96.1	
HIGHEST ANNUAL MEAN					224	1998
LOWEST ANNUAL MEAN					34.0	1990
HIGHEST DAILY MEAN	475	Feb 14	191	May 2	6030	Jan 3 1997
LOWEST DAILY MEAN	22	Aug 24	18	Sep 24	6.5	Dec 12 1991
ANNUAL SEVEN-DAY MINIMUM	23	Aug 23	19	Aug 15	13	Oct 5 1992
ANNUAL RUNOFF (AC-FT)	48800		37480		69600	
10 PERCENT EXCEEDS	143		120		218	
50 PERCENT EXCEEDS	38		33		47	
90 PERCENT EXCEEDS	25		20		20	

e Estimated.

11203580 SOUTH FORK TULE RIVER NEAR CHOLOLLO CAMPGROUND, NEAR PORTERVILLE, CA

LOCATION.—Lat 36°02'54", long 118°39'12", unsurveyed, T.22 S., R.31 E., Tulare County, Hydrologic Unit 18030005, Tule River Indian Reservation, on right bank at bridge, 20 mi southeast of Porterville, and 0.5 mi south of Chololo Campground.

DRAINAGE AREA.—20.04 mi^2.

PERIOD OF RECORD.—January 2000 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 3,700 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 60 ft^3/s, Apr. 17, 2000, gage height, 4.26 ft; minimum daily, 1.7 ft^3/s, Sept. 4, 2001.

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)
Apr. 24	2115	49	4.14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	5.0	4.3	3.8	6.1	9.7	24	34	11	4.5	3.3	2.2
2	2.9	4.7	4.1	3.7	6.6	9.8	22	33	10	4.3	3.0	2.1
3	2.9	4.3	3.8	3.6	7.9	9.3	18	31	10	4.2	3.0	2.2
4	3.0	3.9	3.8	3.6	10	10	16	28	10	4.1	3.1	2.4
5	2.9	3.9	3.8	3.6	11	13	15	27	10	4.0	3.4	2.3
6	2.7	4.2	3.7	3.6	10	14	14	26	9.6	10	3.1	2.2
7	2.8	4.1	3.8	3.6	8.7	14	16	26	9.3	7.7	2.7	2.3
8	2.9	3.8	4.2	4.6	7.6	14	16	25	9.0	5.8	2.6	2.1
9	2.9	3.8	4.2	4.8	7.6	15	14	24	8.7	5.2	2.6	1.9
10	10	4.4	4.2	5.2	7.8	13	14	23	8.5	4.8	2.5	1.9
11	7.0	4.6	4.2	8.5	7.5	11	13	22	8.3	4.5	2.5	2.0
12	7.4	4.5	5.4	6.5	8.4	11	13	22	8.5	4.4	2.5	2.1
13	5.6	4.6	4.9	5.8	9.0	12	14	21	8.4	4.2	2.5	2.1
14	5.3	4.7	4.7	5.3	8.3	14	16	20	7.8	4.0	2.5	2.1
15	5.0	4.5	4.7	5.6	8.2	16	19	19	7.4	3.9	2.5	2.0
16	4.7	4.4	4.6	4.6	8.6	17	22	19	7.1	3.9	2.5	2.1
17	4.4	4.3	4.7	4.6	8.8	17	24	18	6.8	4.0	2.3	2.2
18	4.3	4.4	4.5	5.2	9.8	21	25	17	6.5	3.8	2.2	2.4
19	4.2	4.4	4.4	5.5	10	27	25	17	6.2	3.7	2.2	2.2
20	4.0	4.7	4.2	5.4	9.8	33	28	16	6.0	3.6	2.3	1.9
21	4.3	4.8	4.1	5.4	9.4	32	27	15	5.8	3.5	2.4	1.8
22	4.6	4.8	4.3	5.8	9.8	30	30	15	5.6	3.5	2.7	1.8
23	4.4	4.6	4.3	5.7	8.9	29	34	14	5.4	3.5	2.9	1.8
24	4.3	4.6	4.3	6.3	11	28	39	14	5.4	3.4	3.0	1.7
25	4.4	4.5	4.3	6.5	12	27	43	14	5.3	3.2	2.6	1.8
26	6.6	4.4	4.1	6.9	12	27	42	13	5.3	3.1	2.3	1.9
27	6.5	4.4	4.0	6.0	11	26	40	13	5.2	2.9	2.3	2.0
28	6.0	4.4	4.0	6.0	10	25	38	12	5.2	2.7	2.3	2.1
29	17	4.5	3.9	6.1	---	25	35	12	5.1	2.8	2.3	2.3
30	8.6	4.4	3.9	6.1	---	24	34	11	4.8	2.9	2.3	2.1
31	5.8	---	3.8	6.1	---	24	---	11	---	3.3	2.4	---
TOTAL	160.2	132.6	131.2	164.0	255.8	597.8	730	612	222.2	129.4	80.8	62.0
MEAN	5.17	4.42	4.23	5.29	9.14	19.3	24.3	19.7	7.41	4.17	2.61	2.07
MAX	17	5.0	5.4	8.5	12	33	43	34	11	10	3.4	2.4
MIN	2.7	3.8	3.7	3.6	6.1	9.3	13	11	4.8	2.7	2.2	1.7
AC-FT	318	263	260	325	507	1190	1450	1210	441	257	160	123

11204100 SOUTH FORK TULE RIVER NEAR RESERVATION BOUNDARY, NEAR PORTERVILLE, CA

LOCATION.—Lat 36°01'27", long 118°48'45", unsurveyed, T.22 S., R.29 E., Tulare County, Hydrologic Unit 18030006, Tule River Indian Reservation, on left bank, 0.5 mi east of Reservation Boundary, and 12 mi southeast of Porterville.

DRAINAGE AREA.—95.78 mi^2.

PERIOD OF RECORD.—September 2000 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 970 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 192 ft^3/s, Apr. 21, 2001, gage height, 6.77 ft; minimum daily, 0.77 ft^3/s, Aug. 21, 2001.

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. 24	2030	79	6.19	Apr. 21	0315	192	6.77
Apr. 7	1230	77	6.18				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	11	9.0	7.7	13	e20	40	57	11	e3.7	1.9	2.1
2	2.4	10	8.8	7.5	13	e22	38	57	11	e3.6	1.8	2.2
3	2.6	9.6	8.8	6.9	13	e21	32	52	11	e3.5	1.7	1.9
4	3.3	8.8	8.7	6.6	17	e23	27	47	11	e3.5	1.6	1.5
5	3.6	8.2	8.7	6.6	22	e25	26	43	10	e3.6	1.7	2.2
6	3.6	8.4	8.7	6.7	21	e29	25	42	9.5	e13	2.0	2.2
7	3.5	8.7	8.8	6.6	18	e30	48	40	9.3	e19	1.8	2.1
8	3.6	8.3	9.1	7.0	15	e31	36	38	8.9	e9.0	1.5	1.7
9	3.7	8.2	9.2	9.9	15	e34	30	36	8.5	e7.0	1.3	1.6
10	11	8.7	9.2	9.3	21	e27	29	34	7.8	e6.5	1.0	2.1
11	16	9.2	9.4	36	26	e23	29	32	7.0	e6.0	1.2	2.1
12	11	9.1	11	16	27	e21	27	30	7.0	e5.5	1.3	2.3
13	9.9	8.8	11	13	29	e25	29	29	7.4	e5.1	1.4	2.2
14	8.4	8.8	9.4	11	27	e28	30	27	6.7	e4.6	1.3	2.2
15	7.6	9.1	9.3	15	21	30	35	26	6.0	e4.2	.93	2.1
16	7.0	9.4	9.4	11	20	31	41	25	5.8	e3.8	1.1	2.0
17	6.5	9.3	9.5	9.9	20	32	47	26	5.4	e3.6	.96	2.1
18	6.2	9.2	9.3	10	21	34	49	24	5.1	e3.3	.81	1.6
19	6.0	8.9	8.8	10	25	44	49	23	4.8	3.4	1.0	2.2
20	6.0	9.0	8.6	11	28	55	67	20	4.6	3.1	.80	2.2
21	6.1	9.1	8.6	10	23	58	98	20	4.4	3.0	.77	2.4
22	6.8	9.3	8.5	e11	23	53	64	19	4.3	3.2	1.4	2.0
23	6.5	9.7	8.5	11	24	50	81	17	4.1	3.0	2.1	1.6
24	6.1	9.4	8.5	17	40	48	84	16	4.1	2.7	2.7	2.2
25	6.0	9.4	8.6	17	52	48	88	15	4.1	2.5	2.3	2.1
26	7.9	9.1	8.4	17	41	46	82	14	4.2	2.5	2.2	2.2
27	11	9.1	8.1	e15	34	44	75	14	4.3	2.2	1.8	2.6
28	8.8	9.1	8.1	14	22	42	69	13	e4.0	1.9	1.5	2.8
29	19	9.1	8.1	14	---	44	63	13	e4.0	1.5	1.7	2.8
30	25	9.1	8.0	14	---	42	59	14	e3.9	1.5	1.6	2.9
31	14	---	7.9	13	---	40	---	12	---	1.6	2.0	---
TOTAL	241.9	273.1	276.0	370.7	671	1100	1497	875	199.2	140.6	47.17	64.2
MEAN	7.80	9.10	8.90	12.0	24.0	35.5	49.9	28.2	6.64	4.54	1.52	2.14
MAX	25	11	11	36	52	58	98	57	11	19	2.7	2.9
MIN	2.4	8.2	7.9	6.6	13	20	25	12	3.9	1.5	.77	1.5
AC-FT	480	542	547	735	1330	2180	2970	1740	395	279	94	127

e Estimated.

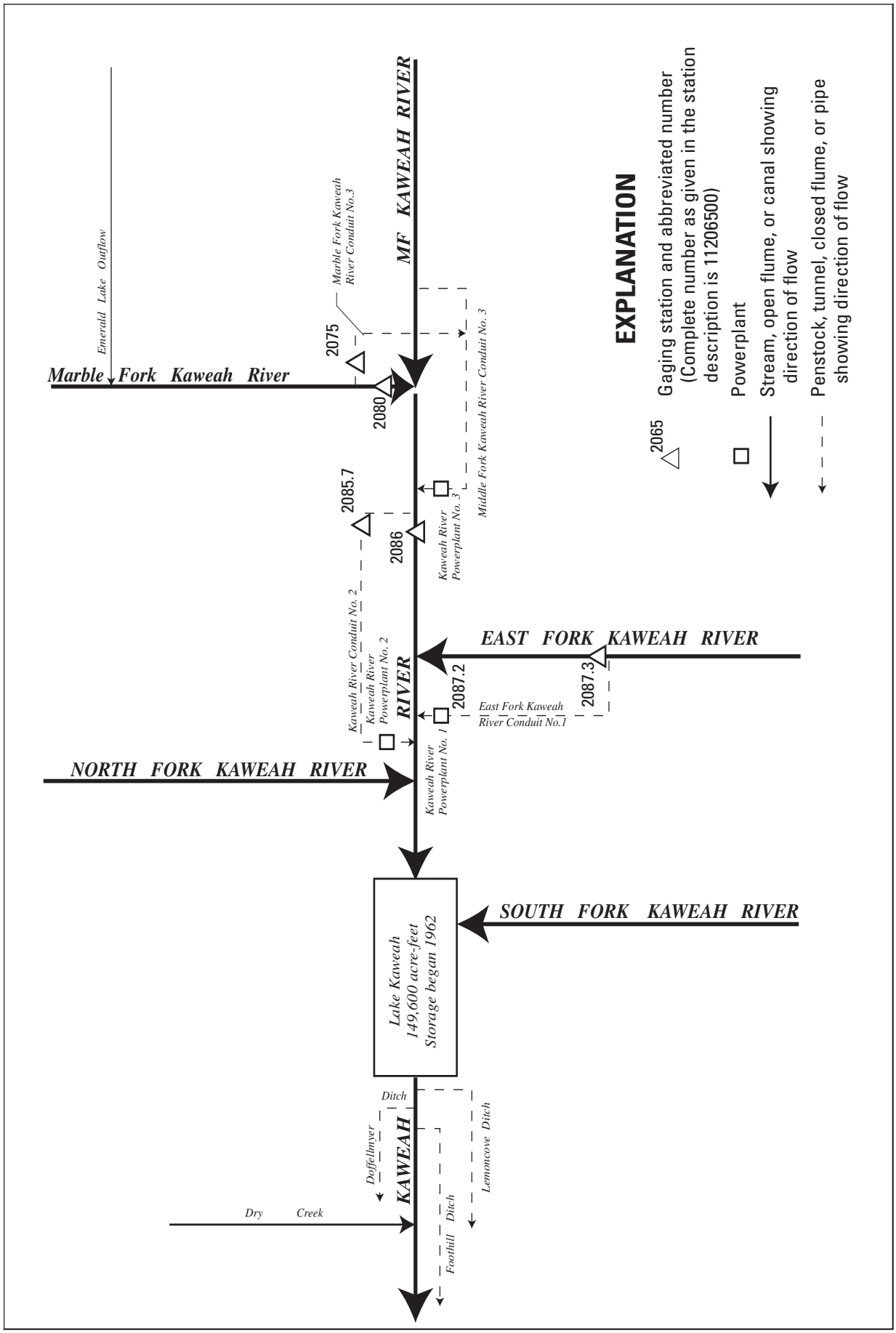

Figure 25. Diversions and storage in Kaweah River Basin.

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CA

LOCATION.—Lat 36°30'48", long 118°47'27", unsurveyed, T.16 S., R.29 E., Tulare County, Hydrologic Unit 18030007, Sequoia National Park, on right bank, 0.5 mi southeast of Potwisha Camp, and 0.7 mi upstream from confluence with Marble Fork Kaweah River.

DRAINAGE AREA.—102 mi^2.

PERIOD OF RECORD.—July 1949 to current year. Monthly discharge only for water years 1956–57, published in WSP 1735. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.
CHEMICAL ANALYSES: June to September 1980.
SPECIFIC CONDUCTANCE: October 1979 to September 1981.
WATER TEMPERATURE: October 1979 to September 1981.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder and rectangular flume on river; water-stage recorder and concrete-lined channel for conduit diversion. Elevation of gage is 2,100 ft above sea level, from topographic map. Prior to October 1955, at datum 0.70 ft higher.

REMARKS.—Middle Fork Kaweah River No. 3 Conduit (station 11206000) diverts from left bank of Middle Fork Kaweah River, 0.1 mi upstream from station. Flow from this conduit joins with that of Marble Fork Kaweah River No. 3 Conduit, and passes through Kaweah River No. 3 Powerplant of Southern California Edison Co. Water is returned to Kaweah River 2.7 mi downstream from confluence of Marble and Middle Forks. For records of combined discharge of river and diversion to Middle Fork Kaweah No. 3 Conduit, see station 11206501. See schematic diagram of Kaweah 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.—River only, maximum discharge, 46,800 ft^3/s, Dec. 23, 1955, gage height, 29.0 ft, from floodmarks, datum then in use, on basis of slope-area measurement of peak flow; minimum daily, 0.1 ft^3/s, Nov. 12–15, 1949.
Combined flow, maximum discharge, 46,800 ft^3/s, Dec. 23, 1955; minimum daily, 7.0 ft^3/s, Sept. 16, 17, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e15	11	e15	e16	23	291	521	269	e22	16	14
2	13	e15	11	e15	e16	23	256	512	247	e19	16	14
3	14	e14	11	e15	e16	22	207	387	193	e18	16	14
4	13	e13	11	e15	e16	28	153	340	160	e18	16	16
5	13	e12	e11	e15	e20	28	122	367	148	e18	16	13
6	13	e12	e11	e15	e23	29	101	433	147	e40	15	13
7	13	e12	e11	e15	19	31	120	524	152	e85	16	13
8	13	e12	e11	e15	17	42	103	589	142	e65	16	13
9	13	e12	e11	e15	16	56	92	590	135	e40	16	12
10	46	e12	e11	e16	16	39	87	587	120	e32	16	12
11	e32	e12	e11	e16	16	31	82	610	111	e20	17	12
12	e30	e12	e11	e16	18	29	75	535	98	e19	17	12
13	e31	e12	e11	e15	21	33	81	410	84	e17	17	12
14	e36	e11	e11	e15	21	49	96	366	70	e17	16	12
15	e38	e11	e11	e15	21	62	127	447	65	e17	16	12
16	e40	e11	e11	e15	20	61	166	523	65	e17	16	12
17	e32	11	e11	e16	19	69	192	512	66	e17	16	12
18	e55	11	e11	e16	21	105	199	474	62	e17	16	12
19	e45	11	e11	e16	31	159	195	430	e55	17	15	12
20	e40	11	e11	e16	31	198	191	446	e52	17	15	12
21	e30	11	e11	e16	20	201	192	474	e49	17	15	12
22	e35	11	e11	e16	20	192	188	455	e47	17	15	12
23	e34	11	e11	e16	17	185	232	421	e45	17	16	11
24	e33	11	e11	e16	34	190	299	412	e41	17	16	11
25	e36	11	e11	e16	34	186	370	406	e36	17	15	11
26	e41	11	e12	e16	28	183	415	383	e33	17	14	11
27	e32	11	e12	e16	23	204	436	337	e31	17	14	11
28	e35	11	e15	e16	25	225	433	300	e27	16	14	11
29	e69	11	e15	e16	---	251	410	278	e23	16	14	11
30	e40	11	e15	e16	---	262	453	271	e22	15	14	11
31	e18	---	e15	e16	---	291	---	276	---	16	14	---
TOTAL	947	352	359	483	595	3487	6364	13616	2795	714	481	366
MEAN	30.5	11.7	11.6	15.6	21.2	112	212	439	93.2	23.0	15.5	12.2
MAX	69	15	15	16	34	291	453	610	269	85	17	16
MIN	13	11	11	15	16	22	75	271	22	15	14	11
AC-FT	1880	698	712	958	1180	6920	12620	27010	5540	1420	954	726

e Estimated.

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.6	26.0	55.0	92.3	104	139	238	437	393	176	48.2	22.8
MAX	125	145	732	743	489	504	630	1178	1271	786	354	157
(WY)	1983	1983	1967	1997	1986	1986	1982	1969	1983	1983	1983	1982
MIN	.92	1.07	1.08	.36	.60	12.8	64.3	78.6	27.1	1.07	2.43	1.56
(WY)	1962	1962	1962	1961	1961	1961	1976	1977	1976	1961	1962	1962

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	42496		30559			
ANNUAL MEAN	116		83.7		146	
HIGHEST ANNUAL MEAN					417	1983
LOWEST ANNUAL MEAN					25.2	1961
HIGHEST DAILY MEAN	745	May 24	610	May 11	10500	Dec 6 1966
LOWEST DAILY MEAN	11	Nov 14	11	Nov 14	.30	Dec 27 1960
ANNUAL SEVEN-DAY MINIMUM	11	Nov 14	11	Nov 14	.30	Dec 27 1960
MAXIMUM PEAK FLOW			773	May 8	46800	Dec 23 1955
MAXIMUM PEAK STAGE			6.63	May 8	29.00	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	84290		60610		105600	
10 PERCENT EXCEEDS	353		291		428	
50 PERCENT EXCEEDS	28		17		33	
90 PERCENT EXCEEDS	11		11		10	

11206501 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CA—Continued

MIDDLE FORK KAWEAH RIVER AND MIDDLE FORK KAWEAH RIVER NO. 3 CONDUIT NEAR POTWISHA CAMP, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e67	28	e20	e40	67	354	580	326	e54	25	14
2	13	e70	28	e19	e45	68	319	571	303	e53	24	14
3	14	e68	27	e19	e55	63	270	445	249	e69	24	14
4	13	e62	27	e19	e71	78	215	398	215	e70	24	18
5	13	e57	e26	e19	e76	79	184	424	202	e70	23	15
6	13	e55	e26	e19	e79	81	162	490	201	e100	22	15
7	13	e51	e26	e18	72	84	181	582	206	e146	22	15
8	13	e47	e27	e19	62	98	164	647	197	e125	20	15
9	13	e47	e26	e23	59	114	153	648	191	e100	20	14
10	67	e47	e26	e24	61	95	148	645	175	e91	20	13
11	e44	e44	e25	e50	60	85	142	668	167	e75	20	13
12	e42	e43	e30	e37	63	81	135	593	155	e67	19	13
13	e43	e44	e27	e32	75	87	141	467	140	e57	19	13
14	e48	e41	e27	e31	75	106	156	422	125	e52	18	13
15	e49	e38	e27	e32	75	121	187	504	120	e48	17	13
16	e51	e37	e28	e29	73	119	226	580	120	e46	17	13
17	e40	35	e27	e30	72	128	253	569	121	e44	17	13
18	e59	34	e27	e32	75	165	259	531	117	e42	17	13
19	e49	34	e26	e34	87	220	255	488	e110	40	16	13
20	e44	34	e26	e33	88	260	251	504	e106	38	16	13
21	e32	33	e25	e37	74	263	252	532	e102	36	16	13
22	e35	33	e25	e37	74	253	248	513	e99	35	16	13
23	e34	31	e24	e39	67	247	292	479	e97	33	17	12
24	e33	31	e24	e45	86	252	358	470	e92	32	17	11
25	e36	31	e24	e41	92	248	429	464	e84	31	15	11
26	e42	30	e24	e49	86	245	474	441	e78	30	14	11
27	e47	30	e23	e42	79	266	495	394	e74	29	14	11
28	e64	30	e24	e41	76	287	492	357	e69	27	14	11
29	e101	30	e21	e42	---	313	469	335	e62	27	14	11
30	e72	29	e21	e39	---	324	512	328	e57	26	14	11
31	e56	---	e20	e40	---	354	---	333	---	26	14	---
TOTAL	1207	1263	792	991	1997	5251	8176	15402	4360	1719	565	392
MEAN	38.9	42.1	25.5	32.0	71.3	169	273	497	145	55.5	18.2	13.1
MAX	101	70	30	50	92	354	512	668	326	146	25	18
MIN	13	29	20	18	40	63	135	328	57	26	14	11
AC-FT	2390	2510	1570	1970	3960	10420	16220	30550	8650	3410	1120	778

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

MEAN	32.6	49.8	94.8	123	143	182	285	483	440	208	71.0	39.6
MAX	177	201	743	746	540	556	683	1225	1318	839	395	202
(WY)	1983	1983	1956	1997	1986	1986	1982	1969	1983	1998	1983	1982
MIN	9.58	11.1	12.2	18.9	17.2	40.4	124	139	75.6	25.1	13.7	8.93
(WY)	1991	1960	1991	1991	1991	1977	1976	1977	1976	1961	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	54866		42115			
ANNUAL MEAN	150		115		179	
HIGHEST ANNUAL MEAN					468	1983
LOWEST ANNUAL MEAN					53.5	1977
HIGHEST DAILY MEAN	802	May 24	668	May 11	10500	Dec 6 1966
LOWEST DAILY MEAN	13	Oct 2	11	Sep 24	7.0	Sep 16 1990
ANNUAL SEVEN-DAY MINIMUM	13	Oct 2	11	Sep 24	7.1	Sep 11 1990
MAXIMUM PEAK FLOW					46800	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	108800		83540		130000	
10 PERCENT EXCEEDS	409		354		477	
50 PERCENT EXCEEDS	58		47		85	
90 PERCENT EXCEEDS	17		14		17	

e Estimated.

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CA

LOCATION.—Lat 36°31'08", long 118°48'03", in NE 1/4 SW 1/4 sec.23, T.16 S., R.29 E., Tulare County, Hydrologic Unit 18030007, Sequoia National Park, on left bank, 0.1 mi north of Potwisha Camp, 0.3 mi upstream from confluence with Middle Fork Kaweah River, and 7.9 mi northeast of Three Rivers.

DRAINAGE AREA.—51.4 mi^2.

PERIOD OF RECORD.—March 1950 to current year. Monthly discharge only for March 1950, published in WSP 1315-A. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.
CHEMICAL ANALYSES: June to September 1980.
SPECIFIC CONDUCTANCE: October 1979 to September 1981.
WATER TEMPERATURE: October 1979 to September 1981.

REVISED RECORDS.—WP 1930: Drainage area.

GAGE.—Water-stage recorder on river; water-stage recorder and concrete control for conduit diversion. Elevation of gage is 2,150 ft above sea level, from topographic map.

REMARKS.—Marble Fork Kaweah River No. 3 Conduit (station 11207500) diverts from left bank of Marble Fork 0.3 mi upstream from station. Water is returned to Kaweah River 2.7 mi downstream from confluence of Marble and Middle Forks. For records of combined discharge of river and conduit, see station 11208001. See schematic diagram of Kaweah 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.—River only, maximum discharge, 12,500 ft^3/s, Dec. 23, 1955, gage height, 13.4 ft, from rating curve extended above 1,100 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 0.10 ft^3/s, at times in 1961–64.
Combined flow, maximum discharge, 12,500 ft^3/s, Dec. 23, 1955; minimum daily, 0.82 ft^3/s, Oct. 4, 5, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.5	2.3	6.9	7.1	10	207	382	186	9.2	7.4	2.8
2	1.5	1.4	2.3	6.8	7.1	11	178	372	155	7.0	7.8	2.6
3	1.5	1.4	2.2	6.7	7.1	11	140	263	113	9.0	8.0	2.8
4	1.5	1.4	2.2	6.9	6.8	11	99	227	98	9.1	7.9	4.1
5	1.5	1.4	2.2	6.9	5.7	11	76	262	93	9.0	7.8	4.7
6	1.5	1.4	2.1	6.9	6.0	11	62	336	95	12	7.2	4.9
7	1.4	1.5	2.0	6.9	6.5	11	61	424	92	19	6.7	5.0
8	1.5	1.5	2.0	7.1	6.9	12	60	489	81	8.4	6.6	3.8
9	1.5	1.5	2.0	7.1	6.8	11	e50	495	71	8.4	6.2	3.9
10	13	1.6	2.0	7.3	7.1	11	e42	489	61	8.6	5.9	3.9
11	8.4	1.6	2.0	7.1	7.3	11	33	507	56	8.8	5.8	3.9
12	5.9	1.7	2.2	6.3	7.5	11	29	415	47	9.1	5.4	3.9
13	7.8	1.7	2.2	7.0	7.0	11	30	290	39	8.9	4.9	4.0
14	9.4	1.9	2.2	7.1	7.1	11	34	300	29	8.7	4.6	3.8
15	11	1.9	2.2	7.1	7.1	13	47	400	25	8.4	4.4	3.6
16	11	2.0	2.2	7.1	7.1	18	74	485	24	8.0	4.3	3.7
17	13	1.9	2.2	7.0	7.1	21	95	449	23	8.0	4.0	3.9
18	14	1.9	2.2	6.7	7.1	39	104	400	19	8.0	3.9	4.0
19	13	1.9	2.2	6.4	7.2	74	94	371	14	8.7	3.8	4.0
20	12	1.9	2.2	6.4	7.1	100	77	378	14	11	3.6	3.9
21	11	1.9	2.2	6.4	7.1	110	68	426	13	11	3.6	3.8
22	9.9	2.1	2.2	6.4	7.2	103	63	393	11	10	4.0	3.6
23	7.8	2.1	2.2	6.4	7.1	101	87	361	11	9.8	3.9	3.5
24	6.3	2.2	2.2	6.7	7.2	117	132	363	11	10	3.8	3.2
25	5.5	2.3	2.1	6.7	7.1	112	190	341	11	9.4	3.4	3.2
26	8.0	2.3	2.0	6.7	7.1	105	237	302	11	9.1	3.1	3.5
27	7.1	2.3	2.0	6.7	6.7	127	256	252	12	8.6	3.0	3.6
28	2.4	2.2	5.2	6.7	7.9	149	261	223	13	7.4	3.0	3.5
29	35	2.2	7.6	6.7	---	169	256	207	13	7.0	3.0	e3.5
30	20	2.3	7.5	6.9	---	172	312	203	11	7.1	3.0	e3.5
31	8.5	---	6.9	7.1	---	202	---	204	---	7.3	3.0	---
TOTAL	253.4	54.9	85.2	211.1	196.1	1886	3454	11009	1452	284.0	153.0	112.1
MEAN	8.17	1.83	2.75	6.81	7.00	60.8	115	355	48.4	9.16	4.94	3.74
MAX	35	2.3	7.6	7.3	7.9	202	312	507	186	19	8.0	5.0
MIN	1.4	1.4	2.0	6.3	5.7	10	29	203	11	7.0	3.0	2.6
AC-FT	503	109	169	419	389	3740	6850	21840	2880	563	303	222

e Estimated.

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.15	9.84	29.1	42.2	46.0	64.2	139	289	251	97.6	19.5	9.27
MAX	60.5	72.5	385	417	259	278	396	812	799	578	135	103
(WY)	1983	1983	1956	1997	1986	1986	1982	1969	1998	1998	1983	1978
MIN	.38	.39	.44	.15	.17	.92	32.7	46.5	9.58	.57	.83	.38
(WY)	1963	1963	1962	1961	1961	1961	1975	1977	1976	1961	1962	1962

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	24564.2		19150.8			
ANNUAL MEAN	67.1		52.5		83.7	
HIGHEST ANNUAL MEAN					235	1969
LOWEST ANNUAL MEAN					10.9	1961
HIGHEST DAILY MEAN	591	May 24	507	May 11	5700	Dec 23 1955
LOWEST DAILY MEAN	1.4	Oct 7	1.4	Oct 7	.10	Jan 10 1961
ANNUAL SEVEN-DAY MINIMUM	1.4	Nov 1	1.4	Nov 1	.10	Jan 10 1961
MAXIMUM PEAK FLOW			755	May 8	12500	Dec 23 1955
MAXIMUM PEAK STAGE			5.71	May 8	13.40	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	48720		37990		60620	
10 PERCENT EXCEEDS	229		203		254	
50 PERCENT EXCEEDS	9.4		7.1		12	
90 PERCENT EXCEEDS	1.9		2.0		1.7	

11208001 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CA—Continued

MARBLE FORK KAWEAH RIVER AND MARBLE FORK KAWEAH RIVER CONDUIT NO. 3 AT POTWISHA CAMP, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	30	13	9.2	16	25	246	422	227	22	8.5	e2.8
2	2.0	30	13	8.8	17	26	215	409	195	21	8.5	e2.6
3	2.0	30	12	8.9	21	24	177	298	153	22	8.4	e2.8
4	2.0	25	12	9.3	29	26	135	263	137	22	8.2	e4.1
5	2.0	23	12	8.9	39	27	111	304	133	24	8.0	e4.7
6	1.9	23	12	8.8	40	28	98	377	137	42	7.4	e4.9
7	1.8	22	12	8.6	32	28	96	464	135	63	6.8	e5.0
8	1.9	20	12	9.0	26	35	95	525	123	39	6.7	e3.9
9	1.9	20	12	9.8	26	43	e85	529	112	34	6.3	e4.1
10	13	19	12	9.8	25	33	e78	527	101	35	6.0	e4.1
11	8.8	18	12	16	25	30	69	550	97	28	5.8	e4.0
12	6.3	17	13	12	28	29	65	454	96	24	5.4	4.0
13	8.2	17	12	12	34	33	66	328	92	22	4.9	4.0
14	9.7	16	12	13	27	44	70	340	84	20	4.6	3.8
15	11	14	12	14	25	54	86	442	78	18	4.4	3.6
16	11	14	12	12	24	51	116	528	65	16	4.3	3.7
17	13	14	12	12	25	55	138	492	64	16	4.0	3.9
18	14	14	12	13	26	79	142	443	59	15	3.9	4.1
19	13	14	12	13	29	115	132	414	55	15	3.8	4.1
20	12	14	12	13	28	140	114	419	51	17	3.6	4.0
21	11	14	12	14	28	148	105	467	49	16	e3.6	3.9
22	10	14	11	14	29	139	100	433	44	15	e4.0	3.6
23	8.2	13	11	15	28	137	126	400	43	14	e3.9	3.5
24	6.8	13	11	17	31	153	173	402	38	14	e3.8	3.2
25	5.9	13	11	15	30	147	230	381	35	12	e3.4	3.2
26	8.4	13	10	18	31	141	279	344	32	12	e3.1	3.5
27	17	13	10	16	29	166	297	293	30	10	e3.0	3.7
28	21	13	10	16	28	190	301	264	29	8.8	e3.0	3.6
29	57	13	10	16	---	210	296	248	28	8.2	e3.0	e3.6
30	44	13	10	15	---	212	352	243	25	8.2	e3.0	e3.6
31	34	---	9.0	16	---	242	---	245	---	8.4	e3.0	---
TOTAL	360.8	526	358.0	393.1	776	2810	4593	12248	2547	641.6	156.3	113.6
MEAN	11.6	17.5	11.5	12.7	27.7	90.6	153	395	84.9	20.7	5.04	3.79
MAX	57	30	13	18	40	242	352	550	227	63	8.5	5.0
MIN	1.8	13	9.0	8.6	16	24	65	243	25	8.2	3.0	2.6
AC-FT	716	1040	710	780	1540	5570	9110	24290	5050	1270	310	225

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

MEAN	13.0	21.6	43.0	57.7	68.0	91.3	168	319	279	117	30.4	17.0
MAX	88.8	103	385	419	295	315	426	840	840	621	184	134
(WY)	1983	1983	1956	1997	1986	1986	1982	1969	1983	1998	1983	1978
MIN	2.02	2.77	2.61	5.25	6.67	16.9	57.2	78.4	24.9	4.09	2.43	1.40
(WY)	1962	1991	1991	1991	1991	1977	1975	1977	1976	1961	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	32362.1		25523.4			
ANNUAL MEAN	88.4		69.9		102	
HIGHEST ANNUAL MEAN					257	1969
LOWEST ANNUAL MEAN					24.7	1977
HIGHEST DAILY MEAN	637	May 24	550	May 11	5700	Dec 23 1955
LOWEST DAILY MEAN	1.8	Oct 7	1.8	Oct 7	.82	Oct 4 1977
ANNUAL SEVEN-DAY MINIMUM	1.9	Oct 3	1.9	Oct 3	1.0	Sep 2 1977
ANNUAL RUNOFF (AC-FT)	64190		50630		74060	
10 PERCENT EXCEEDS	268		244		285	
50 PERCENT EXCEEDS	21		17		34	
90 PERCENT EXCEEDS	6.0		3.9		5.2	

e Estimated.

11208600 KAWEAH RIVER BELOW CONDUIT NO. 2, NEAR HAMMOND, CA

LOCATION.—Lat 36°29'04", long 118°50'06", in NW 1/4 NW 1/4 sec.37, T.17 S., R.29 E., Tulare County, Hydrologic Unit 18030007, on right bank, 0.4 mi upstream of confluence with East Fork Kaweah River, 1.9 mi northeast of Hammond, and 5.2 miles northeast of Three Rivers.

DRAINAGE AREA.—342 mi^2.

PERIOD OF RECORD.—October 1993 to current year.

GAGE.—Water-stage recorders on river and conduit diversion. Elevation of gage is 1,360 ft above sea level, from topographic map.

REMARKS.—Kaweah River conduit No. 2 (station 11208570) diverts up to 130 ft^3/s from right bank of river near diversion dam. Water is returned to Kaweah River 3.8 mi downstream of diversion and 1.9 mi upstream of confluence with North Fork Kaweah River. For records of combined discharges of river and conduit, see station 11208601. See schematic diagram of Kaweah 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.—River only, maximum discharge, 29,000 ft^3/s, Jan. 2, 1997, gage height, unknown; minimum daily, 5.5 ft^3/s, for several days in December 1994.

Combined flow, maximum daily discharge, 9,810 ft^3/s, Jan. 2, 1997; minimum daily, 12 ft^3/s, Oct. 23, 24, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	97	18	27	e29	35	516	934	500	25	26	15
2	20	106	18	27	e29	37	448	940	447	21	26	15
3	19	105	18	27	e29	35	354	702	335	21	27	15
4	18	94	18	27	e32	38	253	613	274	21	26	16
5	18	86	18	26	e64	37	200	675	256	22	26	16
6	18	83	17	26	e65	37	163	803	255	87	25	15
7	18	42	18	26	28	38	193	974	261	145	24	14
8	18	19	18	26	25	51	163	1110	239	83	24	14
9	18	19	18	26	25	75	143	1120	219	51	24	14
10	66	19	18	26	25	53	132	1100	191	34	24	14
11	60	19	18	55	25	42	126	1150	177	34	24	13
12	49	19	18	32	27	37	115	997	154	42	24	13
13	47	19	18	26	28	40	119	745	132	32	23	13
14	50	19	18	26	26	62	134	694	111	22	22	13
15	51	19	18	26	25	84	176	865	103	22	22	13
16	50	19	18	26	25	80	244	1030	100	23	21	13
17	53	19	18	26	28	84	297	990	100	23	20	13
18	53	18	18	26	28	134	313	916	92	23	20	12
19	51	18	18	26	34	223	302	836	78	23	19	12
20	47	18	18	25	41	290	281	849	68	23	19	12
21	46	18	18	25	30	310	288	915	63	23	18	12
22	45	18	18	25	29	288	260	894	55	23	18	13
23	41	18	18	26	27	276	328	820	52	23	18	13
24	37	18	18	29	43	299	446	815	42	23	18	12
25	35	18	18	26	43	295	581	798	34	23	18	12
26	42	18	18	27	33	275	684	753	32	23	18	12
27	56	18	18	26	27	325	734	654	32	23	17	12
28	64	18	17	26	28	369	736	577	32	23	16	12
29	157	18	17	26	---	431	708	532	32	26	15	12
30	133	18	18	25	---	440	801	517	33	28	15	13
31	106	---	23	e28	---	505	---	524	---	27	15	---
TOTAL	1506	1037	560	847	898	5325	10238	25842	4499	1042	652	398
MEAN	48.6	34.6	18.1	27.3	32.1	172	341	834	150	33.6	21.0	13.3
MAX	157	106	23	55	65	505	801	1150	500	145	27	16
MIN	18	18	17	25	25	35	115	517	32	21	15	12
AC-FT	2990	2060	1110	1680	1780	10560	20310	51260	8920	2070	1290	789

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

MEAN	25.6	34.7	54.9	211	194	270	437	820	729	390	80.5	26.0
MAX	62.2	152	271	1250	439	521	633	1051	2009	1571	254	90.1
(WY)	1999	1997	1997	1997	1996	1995	1996	1996	1998	1998	1998	1998
MIN	11.8	5.70	5.93	20.1	32.1	81.1	230	451	150	11.7	11.2	8.05
(WY)	1996	1995	1995	1994	2001	1999	1999	1994	2001	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	72982		52844			
ANNUAL MEAN	199		145		273	
HIGHEST ANNUAL MEAN					512	1998
LOWEST ANNUAL MEAN					99.2	1994
HIGHEST DAILY MEAN	1400	May 24	1150	May 11	9800	Jan 2 1997
LOWEST DAILY MEAN	12	Jan 29	12	Sep 18	5.5	Dec 21 1994
ANNUAL SEVEN-DAY MINIMUM	13	Jan 1	12	Sep 23	5.6	Dec 17 1994
MAXIMUM PEAK FLOW			1640	May 8	29000	Jan 2 1997
MAXIMUM PEAK STAGE			6.52	May 8	.00	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	144800		104800		197700	
10 PERCENT EXCEEDS	624		520		788	
50 PERCENT EXCEEDS	36		27		66	
90 PERCENT EXCEEDS	18		17		12	

e Estimated.

11208601 KAWEAH RIVER BELOW CONDUIT NO. 2, NEAR HAMMOND, CA—Continued

KAWEAH RIVER BELOW CONDUIT NO. 2 AND KAWEAH RIVER CONDUIT NO. 2, NEAR HAMMOND, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e21	e99	47	34	e66	92	605	1020	583	73	36	18
2	e20	e116	46	33	e71	93	535	1020	529	70	35	18
3	e20	107	45	33	e80	88	440	783	417	83	34	18
4	e19	97	44	33	e100	100	334	694	356	84	33	20
5	e20	90	44	32	e140	103	276	758	338	86	32	20
6	e20	87	42	33	e150	105	241	889	337	170	32	19
7	e20	74	43	32	107	107	274	1060	344	231	30	18
8	e20	66	45	34	86	123	246	1200	321	164	30	18
9	e20	65	45	39	86	150	226	1210	301	132	28	18
10	e69	65	44	38	87	125	215	1190	272	118	28	18
11	e62	62	43	82	91	112	209	1240	259	100	28	17
12	e51	60	50	57	90	105	197	1080	236	85	28	17
13	e49	63	46	52	110	115	201	824	215	76	27	17
14	e52	61	47	52	103	143	216	774	195	67	26	17
15	e53	57	46	54	97	169	259	948	187	63	25	17
16	e52	57	48	47	95	168	329	1120	184	61	24	17
17	e55	55	48	48	96	173	383	1070	184	59	24	17
18	e56	52	47	52	97	224	399	999	176	58	23	16
19	e53	53	44	54	107	313	387	920	161	56	22	16
20	e49	52	43	52	118	380	366	934	151	54	22	16
21	e48	51	43	56	99	400	372	1000	145	51	22	16
22	e47	52	42	56	98	377	343	979	137	49	22	16
23	e43	50	41	59	91	365	413	904	135	48	23	16
24	e39	49	40	70	113	389	532	898	124	47	23	15
25	e37	49	40	62	124	385	667	881	112	44	22	15
26	e44	49	38	73	115	363	767	836	99	43	21	15
27	e58	49	37	65	104	415	815	737	92	41	20	15
28	e66	49	33	64	103	458	816	661	85	38	20	15
29	e159	49	35	66	---	520	788	614	81	36	18	15
30	e135	48	36	61	---	528	883	599	78	36	18	16
31	e108	---	34	e65	---	594	---	606	---	36	18	---
TOTAL	1565	1933	1326	1588	2824	7782	12734	28448	6834	2359	794	506
MEAN	50.5	64.4	42.8	51.2	101	251	424	918	228	76.1	25.6	16.9
MAX	159	116	50	82	150	594	883	1240	583	231	36	20
MIN	19	48	33	32	66	88	197	599	78	36	18	15
AC-FT	3100	3830	2630	3150	5600	15440	25260	56430	13560	4680	1570	1000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

MEAN	41.0	67.8	99.3	257	264	348	514	900	807	456	115	51.7
MAX	70.6	192	341	1283	514	600	710	1124	2076	1649	334	162
(WY)	1999	1997	1997	1997	1996	1995	1996	1996	1998	1998	1998	1998
MIN	20.5	30.7	25.0	44.6	86.4	158	304	532	228	55.5	20.8	16.9
(WY)	2000	1994	2000	1994	1994	1999	1999	1994	2001	1994	1994	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	91592		68693			
ANNUAL MEAN	250		188		327	
HIGHEST ANNUAL MEAN					575	1998
LOWEST ANNUAL MEAN					142	1994
HIGHEST DAILY MEAN	1490	May 24	1240	May 11	9810	Jan 2 1997
LOWEST DAILY MEAN	19	Oct 4	15	Sep 24	12	Oct 23 1996
ANNUAL SEVEN-DAY MINIMUM	20	Oct 2	15	Sep 23	14	Sep 2 1994
ANNUAL RUNOFF (AC-FT)	181700		136300		236800	
10 PERCENT EXCEEDS	715		605		862	
50 PERCENT EXCEEDS	83		65		133	
90 PERCENT EXCEEDS	23		20		26	

e Estimated.

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CA

LOCATION.—Lat 36°27'06", long 118°47'18", in NW 1/4 sec.14, T.17 S., R.29 E., Tulare County, Hydrologic Unit 18030007, 1.9 mi downstream of Grunigen Creek confluence, and 8.2 mi east of Three Rivers.

DRAINAGE AREA.—85.8 mi^2.

PERIOD OF RECORD.—May 1952 to September 1955, October 1957 to September 1978, October 1993 to current year. Prior to October 1962, combined only.
CHEMICAL ANALYSES: July 1968 to September 1971.
WATER TEMPERATURE: August 1968 to September 1976.
SEDIMENT DATA: August 1968 to September 1971.

GAGE.—Water-stage recorder and acoustic-flow meter on river; water-stage recorder and Parshall flume for conduit diversion. Elevation of gage is 2,500 ft above sea level, from topographic map. May 15, 1952, to Sept. 30, 1955, at site 200 ft downstream at different datum.

REMARKS.—East Fork Kaweah River Conduit No. 1 (station 11208720) diverts up to 30 ft^3/s from left bank of river near diversion dam. Water is returned to Middle Fork Kaweah River, 1.9 mi downstream from mouth of East Fork. For records of combined discharges of river and conduit, see station 11208731. See schematic diagram of Kaweah 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.—River only, maximum discharge, 13,000 ft^3/s, Dec. 6, 1966, gage height, 21 ft, from floodmarks, from rating curve extended above 850 ft^3/s, on basis of critical-depth measurement of peak flow over diversion dam; minimum daily, no flow Jan. 22, Oct. 18–20, 1962.
Combined flow, maximum discharge, 13,000 ft^3/s, Dec. 6, 1966; minimum daily, 3.5 ft^3/s, Sept. 28, 29, 1960.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	20	8.7	8.4	7.7	29	194	337	234	16	8.3	6.3
2	8.6	12	8.6	8.4	8.0	27	176	353	217	15	6.3	6.3
3	8.9	11	8.5	8.4	9.3	25	141	312	189	19	6.3	6.3
4	9.1	10	8.4	8.4	17	26	112	285	169	15	6.3	6.3
5	9.3	9.8	8.4	8.4	22	33	92	297	156	19	6.3	6.3
6	9.9	9.8	8.4	8.4	19	31	78	335	151	36	6.3	6.3
7	9.9	9.5	8.4	8.4	15	30	97	377	144	59	6.3	6.3
8	9.9	9.5	8.4	8.4	11	31	79	412	133	34	6.3	6.3
9	9.5	9.7	8.4	8.4	12	36	67	421	119	29	6.3	6.3
10	27	10	8.4	8.8	13	30	62	426	102	28	6.3	6.3
11	21	10	8.4	23	13	28	58	431	96	23	6.3	6.3
12	22	10	8.5	9.6	13	23	56	396	87	18	6.3	6.3
13	20	10	8.4	8.8	15	22	58	337	76	16	6.3	6.3
14	21	10	8.4	8.4	13	28	63	317	66	14	6.3	6.3
15	21	10	8.4	8.4	12	33	77	360	59	13	6.3	6.3
16	22	10	8.4	8.4	13	33	103	414	56	13	6.3	6.3
17	21	9.9	8.4	8.5	14	35	127	401	52	12	6.3	6.3
18	22	9.9	8.4	8.4	17	53	134	373	48	12	6.3	6.3
19	21	9.9	8.4	8.4	22	84	140	344	43	12	6.3	6.3
20	21	9.8	8.5	8.4	26	110	146	349	39	12	6.3	6.3
21	21	9.8	8.4	8.4	24	117	154	357	36	12	6.3	6.3
22	22	9.9	8.4	8.4	24	110	139	354	34	12	6.3	6.3
23	19	9.9	8.4	8.4	22	107	161	336	32	12	6.3	6.3
24	18	9.9	8.4	9.4	36	114	186	319	31	12	6.3	6.3
25	17	9.9	8.4	8.1	38	116	230	307	28	12	6.3	6.3
26	22	9.3	8.4	10	36	112	253	293	26	12	6.3	6.3
27	25	8.8	8.4	8.3	32	123	265	279	24	12	6.3	6.3
28	23	8.7	8.4	8.1	32	139	275	268	21	12	6.3	6.3
29	51	8.4	8.4	8.2	---	162	269	253	19	12	6.3	6.3
30	37	8.7	8.4	7.8	---	173	294	245	18	12	6.3	5.8
31	27	---	8.4	8.0	---	184	---	244	---	12	6.3	---
TOTAL	604.8	304.1	261.2	277.8	536.0	2204	4286	10532	2505	547	197.3	188.5
MEAN	19.5	10.1	8.43	8.96	19.1	71.1	143	340	83.5	17.6	6.36	6.28
MAX	51	20	8.7	23	38	184	294	431	234	59	8.3	6.3
MIN	8.6	8.4	8.4	7.8	7.7	22	56	244	18	12	6.3	5.8
AC-FT	1200	603	518	551	1060	4370	8500	20890	4970	1080	391	374

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.34	9.74	37.8	61.8	56.9	74.7	152	355	350	131	26.5	10.5
MAX	22.4	83.9	594	674	219	251	350	944	1017	775	148	73.9
(WY)	1970	1997	1967	1997	1969	1995	1969	1969	1998	1998	1967	1978
MIN	.32	.48	.23	.55	.37	2.28	45.2	54.8	21.3	.85	.34	.23
(WY)	1959	1963	1959	1961	1961	1977	1977	1977	1976	1959	1955	1953

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	29818.3		22443.7			
ANNUAL MEAN	81.5		61.5		105	
HIGHEST ANNUAL MEAN					300	1969
LOWEST ANNUAL MEAN					15.9	1977
HIGHEST DAILY MEAN	544	May 23	431	May 11	8000	Dec 6 1966
LOWEST DAILY MEAN	6.2	Sep 19	5.8	Sep 30	.00	Jan 22 1962
ANNUAL SEVEN-DAY MINIMUM	7.0	Sep 18	6.2	Sep 24	.10	Sep 28 1953
MAXIMUM PEAK FLOW			544	May 10	13000	Dec 6 1966
MAXIMUM PEAK STAGE			5.42	May 10	21.00	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	59140		44520		76160	
10 PERCENT EXCEEDS	282		238		320	
50 PERCENT EXCEEDS	20		13		22	
90 PERCENT EXCEEDS	7.6		6.3		.70	

11208731 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CA—Continued

EAST FORK KAWEAH RIVER AND EAST FORK KAWEAH RIVER CONDUIT NO. 1 NEAR THREE RIVERS, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	28	22	18	24	45	218	360	257	38	18	11
2	12	29	22	17	25	44	200	375	241	37	17	10
3	12	28	22	17	28	41	165	334	213	42	16	11
4	12	26	20	18	39	42	135	307	192	37	16	16
5	13	27	20	17	44	50	115	320	179	42	16	17
6	14	27	20	17	40	47	102	358	174	60	16	19
7	14	26	21	17	35	47	120	400	168	83	15	18
8	14	24	21	18	29	48	102	435	157	58	15	18
9	13	25	21	19	31	54	90	444	143	53	14	17
10	32	26	20	20	33	47	85	449	126	51	14	16
11	26	26	20	42	32	44	81	454	119	46	14	16
12	26	25	24	29	33	41	78	419	110	40	14	16
13	23	26	21	25	36	42	80	360	99	37	13	16
14	24	25	21	23	33	47	85	340	89	34	13	15
15	24	23	21	24	32	52	99	383	82	32	13	15
16	25	24	21	20	32	52	122	437	79	31	12	14
17	25	23	21	20	33	54	143	424	75	30	12	14
18	26	23	20	22	36	72	150	396	71	29	12	14
19	24	24	20	23	42	103	156	367	66	28	12	14
20	24	24	20	23	43	129	162	372	62	27	12	13
21	24	24	20	23	38	136	170	380	59	26	11	13
22	26	25	19	24	38	129	155	377	57	25	12	12
23	22	24	19	23	38	127	178	360	55	24	12	12
24	22	23	19	27	54	134	208	343	54	23	12	11
25	20	24	19	24	55	135	254	331	51	22	12	11
26	25	23	18	29	53	131	277	317	49	21	11	11
27	28	24	18	25	48	143	288	303	47	20	11	11
28	26	24	18	24	48	159	298	291	44	19	11	10
29	55	22	18	25	---	182	292	277	42	18	10	11
30	41	23	18	23	---	193	317	269	40	18	10	9.8
31	31	---	18	24	---	208	---	267	---	19	11	---
TOTAL	716	745	622	700	1052	2778	4925	11249	3200	1070	407	411.8
MEAN	23.1	24.8	20.1	22.6	37.6	89.6	164	363	107	34.5	13.1	13.7
MAX	55	29	24	42	55	208	317	454	257	83	18	19
MIN	12	22	18	17	24	41	78	267	40	18	10	9.8
AC-FT	1420	1480	1230	1390	2090	5510	9770	22310	6350	2120	807	817

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

MEAN	21.4	27.0	55.2	79.1	78.3	96.7	175	378	375	154	46.3	27.7
MAX	42.2	98.2	597	674	223	270	368	966	1036	793	174	99.5
(WY)	1970	1997	1967	1997	1969	1995	1969	1969	1998	1998	1967	1978
MIN	10.2	9.37	10.2	14.5	17.8	22.9	68.1	79.5	47.4	18.4	10.8	10.2
(WY)	1960	1960	1960	1961	1961	1977	1977	1977	1976	1977	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	35647		27875.8			
ANNUAL MEAN	97.4		76.4		125	
HIGHEST ANNUAL MEAN					317	1969
LOWEST ANNUAL MEAN					34.0	1977
HIGHEST DAILY MEAN	568	May 23	454	May 11	8000	Dec 6 1966
LOWEST DAILY MEAN	12	Oct 2	9.8	Sep 30	3.5	Sep 28 1960
ANNUAL SEVEN-DAY MINIMUM	13	Sep 29	11	Aug 27	6.3	Sep 27 1960
ANNUAL RUNOFF (AC-FT)	70710		55290		90670	
10 PERCENT EXCEEDS	306		261		341	
50 PERCENT EXCEEDS	28		26		45	
90 PERCENT EXCEEDS	16		13		15	

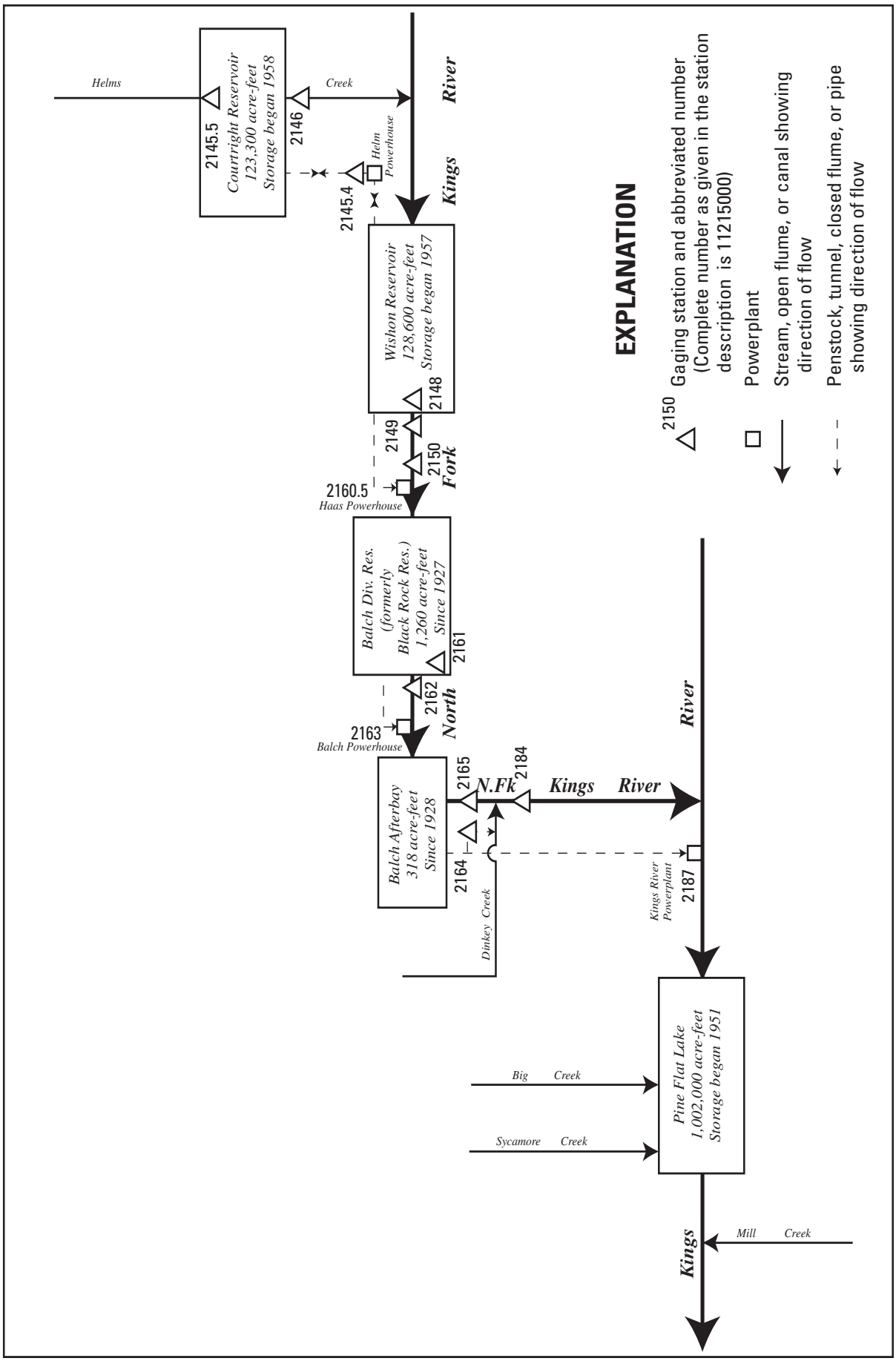

Figure 26. Diversions and storage in Kings River Basin.

11214540 HELMS POWERPLANT NEAR WISHON RESERVOIR, CA

LOCATION.—Lat 37°02'22", long 118°57'16", unsurveyed, T.10 S., R.28 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, underground facility, 2.4 mi north of Wishon Dam, and 2.8 mi south of Courtright Dam.

PERIOD OF RECORD.—October 1989 to current year.

GAGE.—Acoustic-velocity meter in penstock. Elevation of powerplant, approximately 1,000 ft below land surface, is 6,286.0 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Flow is diverted from Courtright Reservoir (station 11214550) through a tunnel to the powerplant which generates electricity during peak power demand, then to Wishon Reservoir (station 11214800). During periods of low power demand, reversible turbines pump water from Wishon Reservoir to Courtright Reservoir. Turbines draft up to 9,000 ft^3/s and pump up to 7,200 ft^3/s. Figures shown represent the net daily flow from Courtright Reservoir to Wishon Reservoir. Negative values represent net flow pumped to Courtright Reservoir. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 5,440 ft^3/s, Dec. 22, 1998; maximum daily pumpage, 6,860 ft^3/s, Jan. 5, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-211	869	574	1100	-116	2850	-1300	-2170	-406	-934	906	244
2	1580	718	208	1290	-1640	691	1660	47	-1550	270	1060	-23
3	1320	568	777	-645	-1130	-3520	1580	509	-1190	1630	833	-331
4	531	1260	1910	-440	918	576	682	-1350	714	405	-86	110
5	3.0	353	1520	315	-595	385	211	-2740	1.5	379	-174	304
6	-50	1210	1840	-68	-786	-621	233	-484	851	548	890	983
7	-567	639	1760	168	320	-2630	-362	1110	559	-979	1060	1220
8	-351	889	3100	1080	3230	-2180	597	1470	927	-1830	751	461
9	15	1500	2420	1970	417	-1370	-102	1240	-424	-539	967	103
10	266	2160	609	3060	-1490	-950	-604	-418	-599	71	1120	15
11	223	1340	2160	3950	-1170	678	-450	-977	-1110	871	-506	-79
12	220	1660	65	3430	2060	1320	-1530	-2440	-970	779	-1580	-66
13	253	2430	662	-1480	-447	391	-1010	-2230	164	338	651	259
14	-445	1750	-204	693	-1230	-1050	1650	-557	925	-135	-599	548
15	-157	1440	556	189	1320	2080	1650	-906	420	-425	-60	-190
16	633	830	-191	1610	-2430	846	-2950	-537	827	196	212	-414
17	633	296	-311	1850	-3300	-1200	-3000	30	-516	766	339	-170
18	1400	-1500	110	-985	-2720	-1800	-2000	292	104	859	236	398
19	1300	-2400	286	-370	-2320	1790	-3060	-220	382	604	291	367
20	1160	176	271	1610	35	2520	-2130	885	776	913	239	60
21	-144	233	-92	171	-794	1630	-3570	1260	744	-196	214	304
22	124	-67	-383	-1340	-1610	496	-2400	433	708	-116	351	-861
23	-317	-1930	-927	324	-625	138	-764	1010	-756	346	356	-158
24	763	-2330	-836	-178	2530	-2080	992	399	-1110	578	444	64
25	573	-2170	-3910	14	-972	-704	313	898	-416	834	297	220
26	1020	-1370	-3910	51	1230	-527	-972	-1280	-99	773	-304	313
27	1170	-1370	-2430	-2430	1690	704	-3200	-1050	-26	980	517	391
28	203	120	-3700	-1770	2620	696	-956	-1380	-96	-348	880	358
29	-760	1110	-3270	1000	---	-226	153	791	190	-325	641	-41
30	934	519	-329	1970	---	455	-1370	1330	-774	-821	730	-276
31	488	---	34	-625	---	-48	---	2140	---	852	728	---
TOTAL	11810.0	8933	-1631	15514	-7005	-660	-22009	-4895	-1749.5	6344	11404	4113
MEAN	381	298	-52.6	500	-250	-21.3	-734	-158	-58.3	205	368	137
MAX	1580	2430	3100	3950	3230	2850	1660	2140	927	1630	1120	1220
MIN	-760	-2400	-3910	-2430	-3300	-3520	-3570	-2740	-1550	-1830	-1580	-861
AC-FT	23430	17720	-3240	30770	-13890	-1310	-43650	-9710	-3470	12580	22620	8160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	147	-116	31.9	16.3	77.1	61.2	-35.1	-290	13.9	147	346	327
MAX	499	298	358	500	469	371	370	194	405	627	850	894
(WY)	1996	2001	1999	2001	1999	1995	1995	1995	2000	1989	1999	1991
MIN	-110	-734	-203	-844	-285	-315	-734	-722	-239	-209	177	-169
(WY)	1993	1992	1996	1997	2000	1989	2001	1992	1997	1997	1990	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	27821.00		20168.5			
ANNUAL MEAN	76.0		55.3		60.6	
HIGHEST ANNUAL MEAN					177	1995
LOWEST ANNUAL MEAN					-77.5	1997
HIGHEST DAILY MEAN	3240	Sep 20	3950	Jan 11	5440	Dec 22 1998
LOWEST DAILY MEAN	-3910	Dec 25	-3910	Dec 25	-6860	Jan 5 1997
ANNUAL SEVEN-DAY MINIMUM	-2710	Dec 23	-2730	Apr 16	-2730	Apr 16 2001
ANNUAL RUNOFF (AC-FT)	55180		40000		43880	
10 PERCENT EXCEEDS	1440		1510		1220	
50 PERCENT EXCEEDS	90		212		.00	
90 PERCENT EXCEEDS	-1360		-1560		-1030	

11214550 COURTRIGHT RESERVOIR NEAR NELSON MOUNTAIN, CA

LOCATION.—Lat 37°04'45", long 118°58'07", in NW 1/4 NW 1/4 sec.7, T.10 S., R.28 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, at left end of dam on Helms Creek, 2.5 mi upstream from mouth, 4.6 mi east of Nelson Mountain, and 9.7 mi west of Blackcap Mountain.

DRAINAGE AREA.—39.7 mi^2.

PERIOD OF RECORD.—October 1958 to September 1982 (monthend elevation and contents only), October 1982 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by rockfill dam completed in 1958. Usable capacity, 123,300 acre-ft, between elevations 7,902 ft, invert of tunnel, and 8,184 ft, elevation of spillway. Dead storage negligible. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988. Records not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 124,220 acre-ft, Sept. 26, 1982, elevation, 8,184.57 ft; no contents in 1961–62, 1968, 1970.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 121,613 acre-ft, May 28, elevation, 8,182.97 ft; minimum, 6,725 acre-ft, Dec. 20, elevation, 8,037.43 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated Apr. 13, 1959)

7,902	0	7,970	736	8,035	6,269	8,115	42,141
7,950	267	7,990	1,617	8,060	12,298	8,150	75,878
7,960	462	8,010	3,129	8,085	22,584	8,184	123,286

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92687	65034	43229	43404	12364	16536	29159	89080	114448	117897	94350	72741
2	89490	63629	42778	40917	15380	15042	26209	89830	117517	116038	92200	72718
3	86935	62460	41253	42143	17813	22007	23350	89530	119874	112933	90470	73409
4	85811	60001	37577	43134	15706	20943	22064	92770	118510	112150	90540	73145
5	85863	59260	34253	42487	16900	20414	22110	98870	118516	111370	90850	72501
6	85785	56875	30287	42652	18390	21536	21862	100790	116807	110277	89070	70519
7	86871	55587	26702	42237	17782	26545	22916	99754	115772	112150	86900	68098
8	87540	53807	19700	40129	10322	31068	21922	98096	113953	115709	85400	67137
9	87540	50801	15000	37128	9441	33889	22286	96720	114697	116795	83600	66900
10	87025	46572	13645	30653	12437	35990	23743	98530	115803	116623	81150	66836
11	86576	43844	9702	23093	14886	34572	24647	101534	117992	114870	82100	66943
12	86180	40582	9757	16157	10352	31947	27697	107142	119826	113300	85150	67018
13	85620	35124	8177	18886	11179	31068	29760	112062	119506	111523	83800	66441
14	86448	31615	8550	17627	11516	33331	26841	113937	117675	111737	84950	65307
15	86704	28812	7574	17539	8538	29283	28979	116461	116795	112457	85000	65634
16	85500	26707	7779	13843	13302	27607	34906	118469	115088	112043	84572	66398
17	82465	25419	8305	9276	19780	30006	40947	119154	116041	110504	83831	66686
18	79706	28396	7973	10779	25179	33575	45045	119314	115787	108771	83320	65856
19	77130	33095	7249	12130	29829	30127	51486	120372	115023	107511	83844	65097
20	74835	32521	6725	7605	29760	25202	55907	119314	113473	105662	83320	64919
21	75078	32151	6951	7568	31433	22044	63206	117343	111981	105974	82836	64271
22	74766	32223	7903	9720	34565	21161	68044	117122	110549	106152	82107	64230
23	75344	36198	9805	9076	35911	21097	69805	115522	111997	105396	81347	64490
24	73804	40438	11491	9300	30970	25323	68155	115179	114107	104208	80432	64302
25	72648	44914	19187	9305	32727	26789	67907	113700	114852	102525	79778	63835
26	70718	47615	26557	9219	30383	27979	70395	116446	115007	100910	80335	63165
27	68381	47700	31420	13850	27140	26958	77390	118707	114976	98950	79308	62348
28	67957	47512	38654	17344	22029	25674	80008	121613	115116	99000	77531	61608
29	69554	45382	44996	16577	---	26290	80202	120179	114697	99600	76227	61629
30	67740	45029	45655	10859	---	25875	83840	117694	116132	97950	74743	62104
31	66772	---	45448	13605	---	26157	---	113650	---	96200	73296	---
MAX	92687	65034	45655	43404	35911	35990	83840	121613	119874	117897	94350	73409
MIN	66772	25419	6725	7568	8538	15042	21862	89080	110549	96200	73296	61608
a	8141.82	8118.61	8119.12	8464.07	8083.93	8091.50	8156.61	8177.93	8179.53	8166.01	8147.75	8137.34
b	+42767	-21743	+419	-31843	+8424	+4128	+57683	+29810	+2482	-19932	-22904	-11192

CAL YR 2000 b -14455
WTR YR 2001 b -30140

a Elevation, in feet, in end of month.
b Change in contents, in acre-feet.

11214600 HELMS CREEK BELOW COURTRIGHT DAM, CA

LOCATION.—Lat 37°04'35", long 118°58'04", in SW 1/4 NW 1/4 sec.7, T.10 S., R.28 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on left bank, 500 ft downstream from Courtright Dam, 2.5 mi upstream from North Fork Kings River, and 17 mi southeast of town of Huntington Lake.

DRAINAGE AREA.—39.7 mi^2.

PERIOD OF RECORD.—October 1958 to February 1986, May 1986 to current year.

REVISED RECORDS.—WSP 1715: 1959. WSP 2130: 1959.

GAGE.—Water-stage recorder and broad-crested weir (with low-water 90° V-notch weir since Nov. 13, 1990). Elevation of gage is 7,836 ft above sea level, from photogrammetry survey.

REMARKS.—Flow regulated since October 1958 by Courtright Reservoir (station 11214550) 500 ft upstream. Water bypasses this gage through Helms Powerplant (station 11214540). See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,340 ft^3/s, Aug. 29, 1969, gage height, 5.81 ft, maximum gage height, 7.70 ft, Aug. 23, 1978; no flow on several days in 1970.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	28	19	18	6.1	7.6	22	35	40	43	37	31
2	33	28	19	17	3.7	7.7	23	36	42	43	36	31
3	33	27	19	16	4.0	9.4	23	35	43	43	36	31
4	32	26	18	17	5.0	10	25	35	43	42	36	31
5	32	26	15	16	4.7	10	26	34	43	42	35	31
6	32	26	11	14	3.7	9.4	26	35	42	42	35	31
7	32	25	6.3	11	3.6	9.3	27	36	42	42	35	30
8	33	25	3.9	8.5	4.0	9.0	27	36	42	43	34	30
9	33	24	2.6	5.5	7.2	8.9	29	35	42	43	34	30
10	33	23	3.0	5.0	10	9.0	30	34	43	44	34	30
11	32	22	3.0	5.4	12	7.6	30	33	41	43	34	30
12	32	21	3.1	4.8	13	6.6	30	33	41	43	34	30
13	32	20	2.8	3.4	11	6.6	30	34	42	42	34	30
14	32	17	3.0	3.4	8.0	6.6	30	34	43	42	34	30
15	32	15	2.9	3.6	6.1	6.9	30	34	42	42	34	30
16	32	13	2.8	3.5	6.8	6.7	31	34	42	42	34	30
17	32	11	2.7	3.5	8.6	6.7	33	34	42	42	34	30
18	31	11	2.7	3.6	10	7.1	34	34	42	42	34	30
19	30	14	2.7	3.8	11	7.7	34	33	42	42	34	30
20	30	15	2.8	3.8	12	8.3	34	34	42	41	34	30
21	30	15	3.1	3.7	11	8.1	34	34	41	41	34	29
22	30	14	4.3	5.2	11	8.7	34	34	41	41	34	29
23	30	15	7.3	7.0	11	11	34	34	40	41	34	29
24	30	17	9.9	5.6	11	14	34	35	41	40	34	29
25	30	19	13	4.6	11	15	34	37	41	40	34	29
26	29	20	16	4.2	14	17	34	37	42	40	34	29
27	29	20	18	5.4	12	18	34	38	42	39	34	29
28	28	20	19	6.5	8.6	20	34	39	42	39	33	28
29	29	20	20	6.0	---	20	35	39	42	39	33	28
30	29	20	19	6.5	---	21	35	39	42	39	32	28
31	28	---	18	6.7	---	21	---	39	---	38	32	---
TOTAL	963	597	292.9	228.2	240.1	334.9	916	1093	1255	1285	1060	893
MEAN	31.1	19.9	9.45	7.36	8.57	10.8	30.5	35.3	41.8	41.5	34.2	29.8
MAX	33	28	20	18	14	21	35	39	43	44	37	31
MIN	28	11	2.6	3.4	3.6	6.6	22	33	40	38	32	28
AC-FT	1910	1180	581	453	476	664	1820	2170	2490	2550	2100	1770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

MEAN	12.4	8.47	7.49	7.39	7.84	7.21	9.13	12.3	17.9	19.3	17.5	13.6
MAX	58.3	24.0	22.0	20.6	19.7	19.0	30.5	35.3	41.8	41.5	38.8	33.8
(WY)	1985	1999	1999	1999	1999	2000	2001	2001	2001	2001	1999	2000
MIN	5.32	4.15	2.92	3.47	3.30	3.48	3.24	5.15	6.80	6.82	6.07	5.71
(WY)	1991	1986	1987	1987	1991	1991	1998	1990	1990	1990	1992	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1985 - 2001	
ANNUAL TOTAL	9436.9		9158.1			
ANNUAL MEAN	25.8		25.1		11.9	
HIGHEST ANNUAL MEAN					25.1	2001
LOWEST ANNUAL MEAN					5.65	1987
HIGHEST DAILY MEAN	41	Jul 10	44	Jul 10	679	Oct 13 1984
LOWEST DAILY MEAN	2.6	Dec 9	2.6	Dec 9	.90	Apr 17 1998
ANNUAL SEVEN-DAY MINIMUM	2.8	Dec 13	2.8	Dec 13	1.5	Apr 16 1998
MAXIMUM PEAK FLOW			46	Jul 2	1340	Aug 29 1969
MAXIMUM PEAK STAGE			4.52	Jul 2	7.70	Aug 23 1978
ANNUAL RUNOFF (AC-FT)	18720		18170		8600	
10 PERCENT EXCEEDS	38		42		24	
50 PERCENT EXCEEDS	26		30		7.5	
90 PERCENT EXCEEDS	17		5.3		4.1	

11214800 WISHON RESERVOIR NEAR CLIFF CAMP, CA

LOCATION.—Lat 37°00'19", long 118°58'07", in NW 1/4 NW 1/4 sec.6, T.11 S., R.28 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on right end of dam on North Fork Kings River, 1.2 mi north of Cliff Camp, and 20 mi southeast of Big Creek.

DRAINAGE AREA.—177 mi^2.

PERIOD OF RECORD.—December 1957 to September 1982 (monthend elevation and contents only), October 1982 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by rockfill dam completed in 1957. Capacity, 128,600 acre-ft, between elevations 6,317 ft, bottom of slide gates, and 6,550 ft, operating crest of spillway gates. Dead storage negligible. Water is diverted to Haas Powerplant (station 11216050). Records, including extremes, represent contents at 2400 hours. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988. Records not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 129,700 acre-ft, July 29, 1958, elevation, 6,551.1 ft; no contents in 1960.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 102,092 acre-ft, May 31, elevation, 6,522.52 ft; minimum, 33,156 acre-ft, Dec. 31, elevation, 6,428.91 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated Apr. 13, 1959)

6,317	40	6,385	11,618	6,440	39,471	6,520	99,807
6,360	2,810	6,400	18,359	6,460	51,900	6,550	129,118
6,370	5,738	6,420	28,362	6,490	74,128	6,551.1	129,733

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37291	60658	58025	35219	64290	58332	62412	38365	101773	65155	59598	58346
2	39830	61669	58018	37522	61218	59900	66997	41400	99029	65805	60908	57789
3	42369	62271	59025	35935	58685	52776	71107	44560	96335	67547	61884	56709
4	42901	64638	62129	34695	61026	54101	73171	43570	97583	67214	61366	56074
5	42502	65018	64472	35163	59890	54706	73820	40310	96976	66793	60614	55852
6	41991	66951	67470	34940	58217	53583	74727	42180	97736	66750	61558	56968
7	40624	67679	70229	35365	58649	48614	74246	47597	97870	64320	62898	58548
8	39860	69021	76300	37516	65920	44090	75647	54048	98723	60211	63408	58959
9	39607	71369	80273	41156	66712	41384	75614	60189	96700	58238	64399	58577
10	40131	74933	80491	47332	63363	39343	74359	63228	94442	57498	65950	57940
11	40571	77242	83567	54946	61122	40839	73708	64741	91150	58245	64540	56975
12	40636	79971	82929	61981	65407	43539	70933	63100	88063	58726	60960	56179
13	41174	84623	82012	59017	64237	44589	68920	60872	87123	59395	61495	56005
14	40161	87200	79921	60636	63694	42264	72366	62077	87442	58353	59580	56611
15	39801	89089	79078	60688	66619	46684	70869	62868	86938	56772	58755	56005
16	41090	90120	78779	64487	61907	48601	65545	64790	87470	56067	58445	54658
17	44114	90020	77637	69045	55160	46428	60321	67827	85400	56499	58432	53536
18	46891	85640	77283	67415	49744	43228	57123	70996	84428	57137	58411	53590
19	49525	79444	77225	66503	45106	47105	51643	72660	83980	57298	57418	53718
20	51815	78513	77159	70545	45211	52776	48123	76880	83997	58260	57067	53260
21	51544	77950	76512	71171	43630	56646	41384	81719	83997	57277	56660	53267
22	51801	76872	75006	68427	40167	58281	37124	84572	84081	56464	56646	52952
23	51170	72302	72828	69170	38608	59141	36202	88778	81242	56192	56492	52592
24	52698	66959	70846	68795	43826	55616	39300	91376	77802	56241	56527	52212
25	53839	61810	62741	68639	42153	54932	41518	94637	75720	56765	56604	52226
26	55900	58577	54346	68717	44342	54502	41602	94079	74029	57186	55464	52412
27	58353	57481	48921	63829	47427	56625	37459	93382	72668	58346	55671	52785
28	58822	56646	41168	60211	52638	59257	37656	91789	71123	57898	56611	53012
29	57573	57841	34157	60761	---	60094	40173	94552	70466	56877	57052	52565
30	58959	57200	33283	66257	---	61951	39630	97497	67866	57707	57686	51643
31	59344	---	33156	63273	---	63581	---	102092	---	58620	58303	---
MAX	59344	90120	83567	71171	66712	63581	75647	102092	101773	67547	65950	58959
MIN	37291	56646	33156	34695	38608	39343	36202	38365	67866	56067	55464	51643
a	6470.78	6467.78	6428.91	6476.09	6461.11	6476.50	6440.27	6522.52	6482.10	6469.77	6469.33	6459.61
b	-21438	-2144	-24044	+30117	-10635	+10943	-23951	+62462	-34226	-9246	-317	-6660

CAL YR 2000 b -9593
WTR YR 2001 b +13737

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11214900 NORTH FORK KINGS RIVER BELOW WISHON RESERVOIR, CA

LOCATION.—Lat 37°00'05", long 118°58'20", in SE 1/4 NE 1/4 sec.1, T.11 S., R.27 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on right bank, 1,700 ft downstream from Wishon Dam, and 20 mi southeast of Big Creek.

DRAINAGE AREA.—178 mi^2.

PERIOD OF RECORD.—October 1986 to current year (since October 1990, low-flow records only).

GAGE.—Water-stage recorder and 90° V-notch steel weir and concrete control. Elevation of gage is 6,300 ft above sea level, from topographic map.

REMARKS.—No records computed above 25 ft^3/s. Flow regulated by Wishon Reservoir (station 11214800) and Courtright Reservoir (station 11214550). Water diverted for power from Wishon Reservoir by tunnel to Haas Powerplant (station 11216050). See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	23	23	18	---	24	---	20	---	---	23	22
2	18	23	23	19	---	---	---	20	---	---	23	22
3	19	23	23	19	24	24	---	20	---	---	24	22
4	19	24	24	18	---	23	---	21	---	---	24	22
5	19	24	24	18	---	24	---	20	---	---	23	22
6	19	24	---	18	---	24	---	20	---	---	---	22
7	19	24	---	18	24	24	---	21	---	---	---	22
8	18	24	---	18	---	23	---	22	---	24	24	22
9	18	---	---	19	---	22	---	23	---	24	24	22
10	19	---	---	20	---	21	---	24	---	23	24	22
11	19	---	---	22	---	21	---	24	---	23	24	22
12	19	---	---	24	---	21	---	24	---	24	24	22
13	19	---	---	24	---	22	---	24	---	24	23	22
14	19	---	---	24	---	22	---	24	---	23	23	22
15	18	---	---	24	---	23	---	24	---	23	23	22
16	18	---	---	24	---	23	---	24	---	23	23	22
17	19	---	---	---	24	24	---	---	---	23	23	22
18	20	---	---	---	23	24	---	---	---	23	23	22
19	20	---	---	---	22	---	---	---	---	23	23	22
20	21	---	---	---	21	---	24	---	---	23	23	22
21	21	---	---	---	21	---	23	---	---	23	22	22
22	21	---	---	---	21	---	22	---	---	23	22	21
23	21	---	---	---	20	---	21	---	---	23	22	21
24	21	---	---	---	21	---	21	---	---	23	22	21
25	22	---	---	---	21	---	21	---	---	23	22	21
26	22	24	24	---	21	---	21	---	---	23	22	21
27	23	24	23	---	21	---	21	---	---	23	22	21
28	23	23	21	---	23	---	20	---	---	23	22	21
29	---	23	19	24	---	---	20	---	---	23	22	21
30	23	23	18	---	---	---	20	---	---	23	22	21
31	23	---	18	---	---	---	---	---	---	23	22	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	651
MEAN	---	---	---	---	---	---	---	---	---	---	---	21.7
MAX	---	---	---	---	---	---	---	---	---	---	---	22
MIN	---	---	---	---	---	---	---	---	---	---	---	21
AC-FT	---	---	---	---	---	---	---	---	---	---	---	1290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1990, BY WATER YEAR (WY)

MEAN	17.7	18.2	16.5	16.5	16.6	17.3	16.7	19.5	20.0	15.3	13.5	13.6
MAX	22.9	23.5	22.8	22.0	21.5	22.5	20.3	25.6	28.3	19.5	17.0	17.1
(WY)	1987	1987	1987	1987	1987	1987	1989	1987	1987	1989	1989	1989
MIN	14.9	16.2	8.60	8.23	8.52	9.84	8.74	10.2	8.67	9.01	8.40	8.20
(WY)	1988	1988	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	WATER YEARS 1987 - 1990	
ANNUAL MEAN	16.8	
HIGHEST ANNUAL MEAN	20.9	1987
LOWEST ANNUAL MEAN	10.1	1990
HIGHEST DAILY MEAN	30	Mar 6 1987
LOWEST DAILY MEAN	7.2	Feb 18 1990
ANNUAL SEVEN-DAY MINIMUM	7.8	Jan 5 1990
MAXIMUM PEAK FLOW	35	Nov 23 1988
MAXIMUM PEAK STAGE	3.59	Nov 23 1988
ANNUAL RUNOFF (AC-FT)	12150	
10 PERCENT EXCEEDS	23	
50 PERCENT EXCEEDS	17	
90 PERCENT EXCEEDS	8.6	

11215000 NORTH FORK KINGS RIVER NEAR CLIFF CAMP, CA

LOCATION.—Lat 36°59'38", long 118°58'49", in NE 1/4 NW 1/4 sec.12, T.11 S., R.27 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on right bank, at Cliff Camp Bridge, 1 mi northwest of Cliff Camp, 1.2 mi downstream from Wishon Dam, and 2 mi downstream from Woodchuck Creek.

DRAINAGE AREA.—181 mi^2.

PERIOD OF RECORD.—August 1921 to current year (since October 1990, high-flow records only). Monthly discharge only for some periods, published in WSP 1315-A.

REVISED RECORDS.—WSP 1715: 1951, drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 6,143.95 ft above sea level (levels by San Joaquin Light and Power Corp.). Prior to Nov. 24, 1922, at site 1 mi upstream at different datum.

REMARKS.—No records computed below 25 ft^3/s. Flow regulated since Dec. 5, 1957, by Wishon Reservoir (station 11214800) 1.2 mi upstream, and since Oct. 17, 1958, by Courtright Reservoir (station 11214550). Water diverted for power from Wishon Reservoir by tunnel to Haas Powerplant (station 11216050) since Dec. 10, 1958. Monthly chemical, trace-element, biological, and sediment data are available in files of the U.S. Geological Survey and in U.S. Geological Survey Open-File Report 88-479. Also available in the same report are daily maximum, minimum, and mean specific-conductance and water-temperature values. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD (Prior to regulation by Wishon Reservoir).—Maximum discharge, 14,000 ft^3/s, Dec. 11, 1937, gage height, 18.0 ft, from floodmarks, from rating curve extended above 4,200 ft^3/s, on basis of velocity-area studies.
From 1957 to 1990.—Maximum discharge, 5,110 ft^3/s, Sept. 5, 1978, gage height, 11.96 ft.

EXTREME FOR CURRENT YEAR (Maximum only).—Maximum discharge, 75 ft^3/s, Mar. 22, gage height, 3.65 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	26	27	---	30	28	50	38	34	28	26	25
2	---	26	27	---	30	30	44	36	34	28	26	25
3	---	26	26	---	30	29	40	34	34	28	27	25
4	---	27	27	---	32	29	38	33	34	29	26	---
5	---	27	28	---	33	29	37	33	34	28	26	---
6	---	27	28	---	31	30	36	32	34	29	26	25
7	---	28	29	---	30	31	37	33	34	28	27	25
8	---	28	30	---	29	33	37	34	34	27	27	25
9	---	28	31	---	31	31	36	34	34	27	27	25
10	---	29	31	---	31	26	36	34	33	26	27	25
11	---	30	31	26	30	26	36	34	33	26	27	25
12	---	30	32	27	30	27	35	33	33	26	27	---
13	---	31	32	28	30	30	37	32	32	26	26	---
14	---	32	31	27	30	33	41	31	32	26	26	---
15	---	32	31	27	30	34	47	31	32	26	26	---
16	---	33	31	28	30	35	51	31	32	26	26	---
17	---	33	30	29	29	36	47	31	32	26	26	---
18	---	33	30	30	28	40	44	31	31	26	26	---
19	---	32	30	29	27	45	42	31	31	26	25	---
20	---	31	30	30	25	49	42	32	31	26	25	---
21	---	31	30	30	25	46	38	32	31	26	25	---
22	---	31	30	30	25	51	41	33	31	26	25	---
23	---	30	30	30	---	51	42	33	31	26	25	---
24	---	29	29	31	---	50	44	34	30	26	25	---
25	---	28	29	30	---	47	47	34	30	26	25	---
26	25	27	27	30	---	48	48	34	30	26	24	---
27	25	27	25	30	25	48	46	34	29	26	---	---
28	26	26	---	29	27	52	40	34	29	26	25	---
29	35	26	---	28	---	54	38	34	29	26	25	---
30	33	27	---	29	---	52	38	34	29	26	25	---
31	28	---	---	29	---	54	---	34	---	26	25	---
TOTAL	---	871	---	---	---	1204	1235	1028	957	824	---	---
MEAN	---	29.0	---	---	---	38.8	41.2	33.2	31.9	26.6	---	---
MAX	---	33	---	---	---	54	51	38	34	29	---	---
MIN	---	26	---	---	---	26	35	31	29	26	---	---
AC-FT	---	1730	---	---	---	2390	2450	2040	1900	1630	---	---
a	4620	23380	22180	2400	3670	694	1950	3720	37050	29380	21700	16350

a Diversion, in acre-feet, to Haas Powerplant (station 11216050), provided by Pacific Gas and Electric Co.

11215000 NORTH FORK KINGS RIVER NEAR CLIFF CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1957, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.3	49.3	84.9	62.2	93.6	197	709	1670	1177	211	27.7	9.45
MAX	121	550	605	300	212	402	1210	3232	3395	1161	131	37.4
(WY)	1946	1951	1956	1956	1945	1956	1926	1952	1938	1938	1938	1938
MIN	5.54	6.25	7.00	11.6	20.3	36.0	306	357	35.7	5.52	1.83	1.60
(WY)	1956	1930	1931	1924	1948	1924	1948	1934	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1922 - 1957	
ANNUAL MEAN	360	
HIGHEST ANNUAL MEAN	749	1938
LOWEST ANNUAL MEAN	80.2	1924
HIGHEST DAILY MEAN	7460	Dec 23 1955
LOWEST DAILY MEAN	1.3	Sep 9 1924
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 9 1924
INSTANTANEOUS PEAK FLOW	14000	Dec 11 1937
INSTANTANEOUS PEAK STATE	18.00	Dec 11 1937
ANNUAL RUNOFF (AC-FT)	260600	
10 PERCENT EXCEEDS	1240	
50 PERCENT EXCEEDS	63	
90 PERCENT EXCEEDS	6.5	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1990, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.3	17.5	15.8	17.8	18.4	20.7	36.1	96.1	173	97.3	17.9	19.1
MAX	24.5	29.4	41.0	49.8	66.9	49.2	298	1170	1339	918	27.0	84.1
(WY)	1987	1966	1967	1969	1986	1986	1986	1969	1983	1967	1986	1978
MIN	7.67	7.53	7.45	7.62	8.20	9.21	8.62	8.45	8.21	7.37	7.56	7.83
(WY)	1960	1960	1963	1964	1964	1961	1961	1961	1961	1964	1961	1964

SUMMARY STATISTICS	WATER YEARS 1960 - 1990		FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL MEAN	45.5			
HIGHEST ANNUAL MEAN	241	1969		
LOWEST ANNUAL MEAN	10.0	1964		
HIGHEST DAILY MEAN	3040	Jul 1 1967		
LOWEST DAILY MEAN	3.9	Dec 9 1967		
ANNUAL SEVEN-DAY MINIMUM	4.2	Dec 6 1967		
MAXIMUM PEAK FLOW	5110	Sep 5 1978		
MAXIMUM PEAK STAGE	11.96	Sep 5 1978		
ANNUAL RUNOFF (AC-FT)	32970			
ANNUAL DIVERSION (AC-FT) a			262200	167100
10 PERCENT EXCEEDS	29			
50 PERCENT EXCEEDS	17			
90 PERCENT EXCEEDS	8.6			

a Diversion, in acre-feet, to Haas Powerplant (station 11216050), provided by Pacific Gas and Electric Co.

11216100 BLACK ROCK RESERVOIR NEAR BALCH CAMP, CA

LOCATION.—Lat 36°55'13", long 119°01'20", in NW 1/4 NW 1/4 sec.6, T.12 S., R.27 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on right bank, at intake tower on North Fork Kings River, and 5.6 mi east-northeast of Balch Camp.

DRAINAGE AREA.—233 mi^2.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Water-stage recorder. Elevation of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete arch-type dam, completed to elevation 4,054 ft in 1927 and raised to 4,098 ft in 1958. Storage began in 1927. Spillway is ungated. Capacity, 1,260 acre-ft, between elevation 4,054 ft, fish release valve, and 4,098 ft, top of spillway crest. Water is diverted from reservoir through tunnel to Balch Powerplant 3.7 mi downstream and returns to the North Fork Kings River at Balch Afterbay. Flow is again diverted from Balch Afterbay in a closed conduit to Kings River Powerplant. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission projects 175 and 1988. Records not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 1,324 acre-ft, July 7, 1998, elevation, 4,099.81 ft; minimum, 359 acre-ft, Nov. 3, 1986, elevation 4,064.51 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 1,235 acre-ft, Sept. 2, elevation, 4,097.28 ft; minimum, 130 acre-ft, Oct. 19, elevation, 4,045.92 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas and Electric Co., dated Dec. 1, 1958)

4,050	165	4,065	367	4,080	706	4,095	1,157
4,055	219	4,070	465	4,085	846	4,100	1,331
4,060	286	4,075	579	4,090	996	4,108	1,635

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	512	1152	902	995	1017	1126	985	1122	800	1124	951	1187
2	517	1112	902	999	1111	1154	985	950	1041	1028	929	1235
3	484	815	808	1035	1217	1174	996	736	1029	943	913	1215
4	489	699	1002	964	1224	1125	921	990	948	1094	1048	1197
5	481	663	960	886	942	1089	787	1007	1008	1146	1168	1187
6	509	697	1033	950	845	987	661	1129	1128	1153	1172	1211
7	544	744	901	994	883	873	638	1067	1023	1157	1137	1208
8	518	772	1062	1052	894	955	856	980	1029	1170	1074	1164
9	488	869	954	1094	845	1070	846	891	1116	1097	1026	1214
10	510	841	1045	1143	815	1101	922	1059	1110	1027	1006	1171
11	551	791	1110	1191	942	1142	1031	1140	1003	1056	999	1175
12	522	803	968	1148	866	1109	1060	981	944	1034	1031	1182
13	569	909	980	1193	792	1068	1099	867	986	1035	1021	1137
14	605	1025	903	1178	734	1104	1091	790	1155	1057	1069	1093
15	517	997	879	1167	761	858	1162	990	1184	1119	1101	1049
16	321	972	873	1155	888	907	1073	1034	1065	1125	1124	1036
17	134	1003	997	1112	995	1092	1129	919	987	1144	1142	1067
18	134	868	869	1063	1013	1135	1124	767	962	1155	1146	1022
19	130	1007	821	970	1011	1024	1077	881	895	1132	1062	1124
20	137	1060	781	903	1002	861	937	956	980	1102	1006	1150
21	136	1109	865	806	997	853	851	952	1045	1060	1008	1194
22	139	1046	1039	824	937	1000	784	951	957	1014	1036	1039
23	147	984	1017	893	886	1067	1049	947	952	1043	1071	1099
24	145	896	859	911	913	778	1137	850	986	1065	1069	1133
25	145	861	857	976	964	1051	1181	765	961	1074	1092	1133
26	150	837	971	798	1101	1094	1150	838	990	1089	1106	1087
27	159	919	990	845	1128	1037	1234	814	1007	1067	1133	1066
28	210	1027	914	847	1171	944	1065	867	1018	1020	1137	1071
29	528	1005	906	922	---	801	875	820	775	938	1140	1045
30	876	961	892	975	---	717	946	823	956	938	1147	1064
31	1106	---	989	990	---	848	---	762	---	948	1167	---
MAX	1106	1152	1110	1193	1224	1174	1234	1140	1184	1170	1172	1235
MIN	130	663	781	798	734	717	638	736	775	938	913	1022
a	4093.45	4088.84	4089.76	4089.79	4095.41	4085.15	4088.35	4082.02	4088.68	4088.42	4095.29	4092.15
b	+552	-145	+28	+1	+181	-323	+98	-184	+194	-8	+219	-103

CAL YR 2000 b -38
WTR YR 2001 b +510

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11216200 NORTH FORK KINGS RIVER BELOW BALCH DIVERSION DAM, CA

LOCATION.—Lat 36°54'10", long 119°03'00", in NE 1/4 sec.8, T.12 S., R.27 E., Fresno County, Hydrologic Unit 18030010, on right bank, 2.0 mi downstream from Balch Diversion Dam (Black Rock Reservoir), 400 ft upstream from Weir Creek, and 4 mi east of Balch Camp.

DRAINAGE AREA.—238 mi^2.

PERIOD OF RECORD.—October 1983 to current year.

GAGE.—Water-stage recorder and sharp-crested rectangular weir. Elevation of gage is 2,890 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Courtright Reservoir (station 11214550), Wishon Reservoir (station 11214800), and Black Rock Reservoir (station 11216100). Water diverted past station from Black Rock Reservoir through tunnel to Balch Powerplant (station 11216300) 1.7 mi downstream and returns to the North Fork Kings River at Balch Afterbay. Flow is again diverted from Balch Afterbay in a closed conduit to Kings River Powerplant. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,690 ft^3/s, Jan. 2, 1997, gage height, 10.54 ft, from rating curve extended above 827 ft^3/s, on basis of computation of spill over Balch Diversion Dam; minimum daily, 0.62 ft^3/s, Oct. 19, 2000.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	8.1	5.8	4.3	5.2	7.7	5.3	8.2	6.4	6.6	6.4	7.2
2	9.1	6.6	5.8	4.3	5.2	8.1	5.4	8.1	7.1	7.1	6.4	7.3
3	9.2	6.5	5.8	4.3	5.2	7.7	5.2	7.4	7.5	6.7	6.3	7.4
4	8.9	6.5	5.8	4.4	5.3	11	5.1	6.7	7.4	6.5	6.3	7.4
5	9.1	6.5	5.8	4.2	5.4	12	5.0	7.0	7.2	7.1	6.8	7.3
6	8.8	6.5	5.8	4.1	5.4	9.6	5.4	6.9	7.4	7.3	7.2	7.3
7	9.3	6.4	5.7	4.3	5.4	9.0	9.8	6.7	7.3	7.4	7.2	7.3
8	9.4	6.4	5.7	4.5	5.4	8.5	7.6	5.8	7.1	7.4	7.0	7.3
9	9.5	6.4	5.7	4.5	5.4	9.7	7.3	5.5	7.3	7.3	6.8	7.2
10	10	6.4	5.7	5.9	5.4	8.9	7.2	5.3	7.5	6.9	6.6	7.4
11	9.6	6.4	5.7	12	5.4	8.1	7.8	5.4	7.2	6.8	6.6	7.3
12	9.6	6.4	5.7	7.0	5.5	7.5	8.3	5.4	7.0	6.9	6.6	7.3
13	9.4	6.4	5.7	5.7	5.5	7.2	7.9	5.2	6.8	6.8	6.7	7.4
14	9.5	6.3	5.6	5.4	5.5	7.0	8.2	5.0	7.1	6.8	6.7	7.1
15	9.7	6.2	5.5	5.4	5.6	7.0	8.4	4.9	7.6	6.9	6.8	6.9
16	9.4	6.2	5.5	5.0	6.2	6.6	8.4	5.1	7.2	7.1	6.9	6.8
17	5.2	6.2	5.5	5.0	6.9	6.5	8.3	5.0	6.8	7.2	7.0	6.8
18	1.2	6.2	5.5	5.0	7.6	6.5	8.1	4.8	6.6	7.2	7.1	6.8
19	.62	6.2	5.5	5.0	8.3	7.4	10	4.6	6.4	7.2	7.1	6.8
20	.82	6.2	5.5	5.0	9.1	8.2	12	4.6	6.5	7.2	6.8	7.1
21	.73	6.2	5.5	5.1	8.6	7.9	12	4.7	6.8	7.1	6.6	7.3
22	.64	6.1	5.4	5.1	8.5	7.6	10	4.6	6.8	6.9	6.6	7.3
23	.64	6.1	5.4	5.1	7.6	7.7	10	4.5	6.6	6.8	6.7	6.8
24	.82	6.1	5.4	5.1	8.7	7.6	10	4.5	6.6	6.7	6.8	7.0
25	.93	6.1	5.4	5.1	9.3	6.9	10	4.3	6.7	6.7	6.9	7.1
26	1.1	6.1	5.4	5.1	8.6	7.0	9.6	4.2	6.7	6.8	6.9	7.1
27	2.1	6.1	5.4	5.1	8.4	6.8	9.3	4.2	6.8	7.0	7.0	7.0
28	1.5	6.1	5.4	5.2	8.4	6.5	9.3	4.2	6.8	6.8	7.0	6.8
29	9.8	5.9	5.3	5.2	---	5.6	8.9	4.3	6.6	6.6	7.1	6.9
30	10	5.8	5.2	5.2	---	5.2	8.2	4.2	5.8	6.4	7.1	6.8
31	53	---	5.2	5.2	---	5.1	---	6.7	---	6.4	7.2	---
TOTAL	239.00	189.6	172.3	161.8	187.0	238.1	248.0	168.0	207.6	214.6	211.2	213.5
MEAN	7.71	6.32	5.56	5.22	6.68	7.68	8.27	5.42	6.92	6.92	6.81	7.12
MAX	53	8.1	5.8	12	9.3	12	12	8.2	7.6	7.4	7.2	7.4
MIN	.62	5.8	5.2	4.1	5.2	5.1	5.0	4.2	5.8	6.4	6.3	6.8
AC-FT	474	376	342	321	371	472	492	333	412	426	419	423
a	8740	25700	23900	5070	6360	8430	11550	18590	39820	30150	22650	17000

a Diversion, in acre-feet, to Balch Powerplant (station 11216300), provided by Pacific Gas and Electric Co.

11216200 NORTH FORK KINGS RIVER BELOW BALCH DIVERSION DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.68	8.40	7.60	32.9	34.0	49.1	80.3	182	320	143	7.37	6.59
MAX	10.9	26.4	23.5	440	201	441	541	1004	1792	1194	23.7	10.7
(WY)	2000	1984	1997	1997	1997	1986	1986	1995	1998	1998	1998	1998
MIN	3.48	3.54	3.18	3.16	4.69	4.61	3.59	3.25	2.84	3.10	3.14	3.06
(WY)	1988	1991	1987	1987	1985	1994	1987	1987	1987	1987	1987	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	19227.50		2450.70			
ANNUAL MEAN	52.5		6.71		73.1	
HIGHEST ANNUAL MEAN					353	1995
LOWEST ANNUAL MEAN					3.97	1987
HIGHEST DAILY MEAN	1860	Jun 15	53	Oct 31	4990	Jul 8 1998
LOWEST DAILY MEAN	.62	Oct 19	.62	Oct 19	.62	Oct 19 2000
ANNUAL SEVEN-DAY MINIMUM	.74	Oct 19	.74	Oct 19	.74	Oct 19 2000
MAXIMUM PEAK FLOW			784	Oct 31	7690	Jan 2 1997
MAXIMUM PEAK STAGE			3.93	Oct 31	10.54	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	38140		4860		52950	
ANNUAL DIVERSION (AC-FT) a	313840		214960			
10 PERCENT EXCEEDS	20		8.9		35	
50 PERCENT EXCEEDS	8.6		6.7		6.6	
90 PERCENT EXCEEDS	5.5		5.0		3.7	

a Diversion, in acre-feet, to Balch Powerplant (station 11216300), provided by Pacific Gas and Electric Co.

11216400 DINKEY CREEK SIPHON FISH RELEASE AT BALCH CAMP, CA

LOCATION.—Lat 36°54'29", long 119°07'27", in NW 1/4 NE 1/4 sec.10, T.12 S., R.26 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, in concrete vault, on right bank of Dinkey Creek, 200 ft downstream from Dinkey Creek Siphon, at invert of Kings River Powerplant Conduit, and 1,700 ft northwest of Balch Camp.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Ultrasonic flowmeter. Elevation of gage is 1,320 ft above sea level, from topographic map. Prior to August 1995, pressure-differential flowmeter at same site and datum.

REMARKS.—Water diverted from the North Fork Kings River is released into Dinkey Creek for fishery enhancement from June 1 to Sept. 30 when natural flow of Dinkey Creek is equal to or less than 60 ft^3/s. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission Projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 25 ft^3/s, several days in June and July 1997; no flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	.00	.00	.00	.00	.00	11	12	11	11	11	11
2	7.1	.00	.00	.00	.00	.00	11	12	11	11	11	12
3	7.1	.00	.00	.00	.00	.00	12	11	11	11	11	11
4	7.2	.00	.00	.00	.00	.00	11	11	11	11	11	11
5	7.2	.00	.00	.00	.00	.00	11	11	11	11	11	11
6	7.3	.00	.00	.00	.00	.00	11	11	11	11	11	11
7	7.4	.00	.00	.00	.00	.00	11	10	11	11	11	11
8	7.4	.00	.00	.00	.00	.00	11	13	11	11	11	11
9	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	11
10	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	11
11	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	12
12	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	12
13	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	11
14	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	12
15	7.4	.00	.00	.00	.00	.00	11	11	11	11	11	12
16	7.2	.00	.00	.00	.00	.00	11	11	11	11	12	11
17	6.3	.00	.00	.00	.00	.00	11	11	11	11	11	11
18	2.8	.00	.00	.00	.00	.00	11	11	11	11	11	11
19	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
20	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
21	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
22	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
23	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
24	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
25	.00	.00	.00	.00	.00	.00	12	11	11	11	11	11
26	.00	.00	.00	.00	.00	.00	12	11	11	11	11	11
27	.00	.00	.00	.00	.00	.00	11	11	11	11	12	11
28	.00	.00	.00	.00	.00	.00	11	11	11	11	11	11
29	.00	.00	.00	.00	---	.00	11	11	11	11	11	11
30	.00	.00	.00	.00	---	.00	11	11	11	11	11	11
31	.00	---	.00	.00	---	7.8	---	11	---	11	12	---
TOTAL	125.90	0.00	0.00	0.00	0.00	7.80	333	344	330	341	344	335
MEAN	4.06	.000	.000	.000	.000	.25	11.1	11.1	11.0	11.0	11.1	11.2
MAX	7.4	.00	.00	.00	.00	7.8	12	13	11	11	12	12
MIN	.00	.00	.00	.00	.00	.00	11	10	11	11	11	11
AC-FT	250	.00	.00	.00	.00	15	661	682	655	676	682	664

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	6.40	2.10	.82	.27	.093	.017	.74	.74	2.57	6.42	7.92	8.99
MAX	15.4	8.35	6.71	2.28	1.41	.25	11.1	11.1	11.0	16.6	14.4	15.0
(WY)	2000	2000	2000	2000	1991	2001	2001	2001	2001	1997	1994	1992
MIN	.15	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.09	5.33
(WY)	1996	1987	1987	1987	1987	1987	1987	1987	1991	1993	1998	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	764.50		2160.70			
ANNUAL MEAN	2.09		5.92		3.11	
HIGHEST ANNUAL MEAN					5.92	2001
LOWEST ANNUAL MEAN					.73	1995
HIGHEST DAILY MEAN	11	Jan 1	13	May 8	25	Jun 28 1997
LOWEST DAILY MEAN	.00	Jan 8	.00	Oct 19	.00	Oct 3 1986
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 8	.00	Oct 19	.00	Oct 3 1986
ANNUAL RUNOFF (AC-FT)	1520		4290		2250	
10 PERCENT EXCEEDS	6.8		11		11	
50 PERCENT EXCEEDS	.00		10		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CA

LOCATION.—Lat 36°54'12", long 119°07'14", in SE 1/4 NE 1/4 sec.10, T.12 S., R.26 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on left bank, 12 ft downstream from bridge at Balch Camp, 300 ft upstream from Dinkey Creek, and 9.3 mi east of Trimmer.

DRAINAGE AREA.—250 mi^2.

PERIOD OF RECORD.—October 1919 to September 1930 (published as "above Dinkey Creek"), March 1960 to current year. Records for water year 1920 incomplete; yearly estimate and monthly discharge only for some months, published in WSP 1315-A.
WATER TEMPERATURE: Water years 1968–79.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder and Cipolletti weir since May 9, 1988. Concrete control Apr. 15, 1966, to May 9, 1988. Elevation of gage is 1,240 ft above sea level, from river-profile map. October 1919 to Sept. 30, 1930, and Mar. 24, 1960, to Apr. 14, 1966, at site 100 ft downstream at different datum.

REMARKS.—Flow regulated by Courtright Reservoir (station 11214550), Wishon Reservoir (station 11214800), and Balch Diversion Reservoir (station 11216100); Balch Afterbay, capacity, 318 acre-ft; and Haas and Balch Powerplants. Water is diverted from Balch Afterbay to Kings River Powerplant, beginning Mar. 1, 1962. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD (prior to regulation by Wishon and Courtright Reservoirs).—Maximum discharge, 6,080 ft^3/s, June 4, 1922, gage height, 12.18 ft, site and datum then in use; minimum, 4.0 ft^3/s, Aug. 29 to Sept. 1, 1924.
From 1960 to current year: Maximum discharge, 14,000 ft^3/s, Feb. 1, 1963, gage height, 13.24 ft, site and datum then in use, backwater from Dinkey Creek, from rating curve extended above 890 ft^3/s; minimum daily, 0.30 ft^3/s, Nov. 3, 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	19	18	13	14	17	17	17	17	18	18
2	18	17	19	20	13	14	17	17	17	18	18	18
3	18	18	14	20	13	14	17	17	17	17	17	18
4	17	19	13	20	13	15	17	17	17	17	17	19
5	18	18	13	21	12	16	17	17	17	17	17	19
6	18	18	13	20	13	15	17	17	18	18	17	19
7	18	18	15	20	12	15	19	17	18	18	17	19
8	17	18	16	20	12	14	17	17	18	17	18	19
9	18	18	16	20	12	15	17	17	18	18	18	18
10	18	19	16	20	14	15	17	17	18	18	17	19
11	17	19	16	59	16	14	17	16	17	17	18	19
12	18	18	17	85	15	13	17	16	18	17	17	18
13	18	19	17	29	14	13	17	16	17	17	18	19
14	18	19	17	54	14	14	17	16	17	17	18	19
15	18	19	16	53	13	13	17	16	18	17	18	19
16	18	19	16	53	12	13	17	16	17	17	17	18
17	18	19	17	83	12	13	17	16	18	18	17	18
18	18	19	17	20	12	13	17	16	18	18	17	18
19	19	19	17	18	13	13	18	16	18	18	17	19
20	20	19	16	13	14	12	18	15	18	17	19	19
21	20	18	17	12	14	12	18	16	17	17	19	18
22	19	19	17	13	13	12	18	16	17	17	19	18
23	19	19	17	13	13	12	18	16	18	17	19	18
24	19	18	17	14	15	12	18	16	17	17	19	18
25	20	19	17	14	15	12	18	16	18	18	19	18
26	20	19	17	15	13	115	18	16	18	17	18	18
27	20	19	16	14	14	233	17	18	18	17	18	19
28	19	19	16	13	14	269	17	17	18	17	18	18
29	18	19	17	13	---	192	17	17	17	17	18	18
30	18	19	16	13	---	14	17	17	17	17	18	19
31	17	---	17	12	---	15	---	18	---	18	18	---
TOTAL	568	557	504	812	373	1176	520	512	526	537	553	554
MEAN	18.3	18.6	16.3	26.2	13.3	37.9	17.3	16.5	17.5	17.3	17.8	18.5
MAX	20	19	19	85	16	269	19	18	18	18	19	19
MIN	17	17	13	12	12	12	17	15	17	17	17	18
AC-FT	1130	1100	1000	1610	740	2330	1030	1020	1040	1070	1100	1100

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.7	20.1	26.1	58.6	50.3	44.7	67.4	214	315	170	45.0	27.8
MAX	60.5	92.3	332	499	239	405	490	1838	2042	1176	822	331
(WY)	1962	1962	1967	1997	1962	1986	1986	1969	1983	1967	1960	1960
MIN	5.80	5.42	5.87	8.07	7.32	7.29	7.18	4.54	6.81	7.34	8.86	8.72
(WY)	1978	1978	1978	1977	1964	1971	1971	1977	1977	1968	1976	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	17943		7192			
ANNUAL MEAN	49.0		19.7		85.1	
HIGHEST ANNUAL MEAN					406	1983
LOWEST ANNUAL MEAN					8.47	1977
HIGHEST DAILY MEAN	1230	Jun 15	269	Mar 28	7680	Dec 6 1966
LOWEST DAILY MEAN	12	Feb 9	12	Jan 21	.30	Nov 3 1964
ANNUAL SEVEN-DAY MINIMUM	13	Feb 5	12	Mar 19	4.3	May 30 1977
MAXIMUM PEAK FLOW			901	Mar 28	14000	Feb 1 1963
MAXIMUM PEAK STAGE			3.29	Mar 28	13.24	Feb 1 1963
ANNUAL RUNOFF (AC-FT)	35590		14270		61680	
10 PERCENT EXCEEDS	99		19		187	
50 PERCENT EXCEEDS	18		17		16	
90 PERCENT EXCEEDS	17		13		8.5	

11218400 NORTH FORK KINGS RIVER BELOW DINKEY CREEK, NEAR BALCH CAMP, CA

LOCATION.—Lat 36°52'47", long 119°07'40", in NE 1/4 NW 1/4 sec.22, T.12 S., R.26 E., Fresno County, Hydrologic Unit 18030010, Sierra National Forest, on right bank, 1.1 mi upstream from mouth, 1.7 mi south of Balch Camp, 2.1 mi downstream from Dinkey Creek, and 9 mi east of Trimmer.

DRAINAGE AREA.—387 mi^2.

PERIOD OF RECORD.—March 1960 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 1,035 ft above sea level, from river-profile map.

REMARKS.—Flow regulated by Courtright Reservoir (station 11214550), Wishon Reservoir (station 11214800), and Balch Diversion Reservoir (station 11216100); Balch Afterbay, capacity, 318 acre-ft; and Haas and Balch Powerplants. Water is diverted from Balch Afterbay to Kings River Powerplant (station 11218700), beginning Mar. 1, 1962. Some water diverted from Balch Afterbay returns upstream from station at a release to Dinkey Creek. See schematic diagram of Kings River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission projects 175 and 1988.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 27,400 ft^3/s, Feb. 1, 1963, gage height, 19.20 ft, from rating curve extended above 10,100 ft^3/s; minimum daily, 6.4 ft^3/s, Oct. 3, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	60	46	38	52	77	743	1090	216	64	46	38
2	38	60	46	40	57	80	619	1040	199	62	45	39
3	39	63	39	42	65	75	492	821	183	60	45	38
4	38	60	37	43	86	98	367	749	172	59	45	39
5	38	55	37	43	112	149	322	800	161	59	45	39
6	38	56	37	42	115	117	287	917	152	60	45	39
7	39	55	38	41	95	105	295	1040	142	68	45	39
8	38	51	42	43	67	117	269	1070	134	76	45	38
9	39	49	43	46	73	168	253	1050	128	69	45	37
10	56	54	43	49	74	133	238	1010	123	67	44	39
11	67	51	41	128	84	112	238	990	118	61	44	39
12	55	49	43	127	75	104	221	890	114	59	44	39
13	52	49	43	77	85	115	220	723	112	58	44	40
14	50	49	43	97	78	151	234	681	107	56	44	38
15	50	46	43	96	70	180	280	713	102	55	44	38
16	48	45	42	92	70	177	351	776	97	54	39	37
17	49	44	43	132	72	191	412	742	93	54	36	37
18	43	44	42	59	78	253	426	670	89	54	36	37
19	38	45	41	54	87	341	449	597	87	54	35	37
20	40	44	40	46	92	410	388	576	84	52	37	37
21	40	45	41	46	82	427	369	557	82	51	40	37
22	38	46	40	48	79	430	332	533	79	50	40	37
23	37	46	39	52	72	473	408	489	77	50	40	37
24	37	44	39	69	87	477	531	441	73	49	41	35
25	38	45	39	56	86	483	680	399	73	49	41	36
26	43	46	38	67	80	572	823	360	72	48	39	36
27	65	46	37	58	77	770	917	321	71	47	38	38
28	58	47	37	53	89	870	899	292	69	46	37	37
29	176	48	37	55	---	846	827	268	67	45	38	37
30	110	48	38	51	---	640	948	248	66	45	39	38
31	70	---	37	52	---	726	---	232	---	45	39	---
TOTAL	1605	1490	1251	1942	2239	9867	13838	21085	3342	1726	1285	1132
MEAN	51.8	49.7	40.4	62.6	80.0	318	461	680	111	55.7	41.5	37.7
MAX	176	63	46	132	115	870	948	1090	216	76	46	40
MIN	37	44	37	38	52	75	220	232	66	45	35	35
AC-FT	3180	2960	2480	3850	4440	19570	27450	41820	6630	3420	2550	2250
a	5030	26450	24920	3730	6110	6980	10620	17390	40620	31150	21390	15990

a Diversion, in acre-feet, to Kings River Powerplant (station 11218700), provided by Pacific Gas & Electric Co.

11218400 NORTH FORK KINGS RIVER BELOW DINKEY CREEK, NEAR BALCH CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	49.2	87.0	135	243	284	366	616	1027	861	310	60.4	49.1
MAX	288	347	920	1492	1269	1329	2163	4253	4210	1894	422	233
(WY)	1983	1984	1967	1997	1986	1986	1982	1969	1983	1983	1961	1978
MIN	10.6	17.6	19.3	26.3	30.0	48.1	111	129	47.3	21.9	16.2	14.1
(WY)	1978	1978	1977	1991	1991	1977	1977	1977	1976	1976	1968	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	100784		60802			
ANNUAL MEAN	275		167		340	
HIGHEST ANNUAL MEAN					1045	1983
LOWEST ANNUAL MEAN					49.2	1977
HIGHEST DAILY MEAN	1580	Feb 14	1090	May 1	14900	Dec 6 1966
LOWEST DAILY MEAN	37	Oct 23	35	Aug 19	6.4	Oct 3 1977
ANNUAL SEVEN-DAY MINIMUM	38	Dec 25	36	Sep 20	9.6	Oct 2 1977
MAXIMUM PEAK FLOW			1600	May 1	27400	Feb 1 1963
MAXIMUM PEAK STAGE			6.40	May 1	19.20	Feb 1 1963
ANNUAL RUNOFF (AC-FT)	199900		120600		246600	
ANNUAL DIVERSION (AC-FT) a	339900		210380			
10 PERCENT EXCEEDS	806		532		853	
50 PERCENT EXCEEDS	70		57		94	
90 PERCENT EXCEEDS	39		38		30	

a Diversion, in acre-feet, to Kings River Powerplant (station 11218700), provided by Pacific Gas & Electric Co.

11224500 LOS GATOS CREEK ABOVE NUNEZ CANYON, NEAR COALINGA, CA

LOCATION.—Lat 36°12'53", long 120°28'11", in NW 1/4 SE 1/4 sec.5, T.20 S., R.14 E., Fresno County, Hydrologic Unit 18030012, on left bank, 135 ft downstream from highway bridge, 1.1 mi upstream from Nunez Canyon, 3.0 mi downstream from White Creek, and 8.1 mi northwest of Coalinga.

DRAINAGE AREA.—95.8 mi^2.

PERIOD OF RECORD.—May 1945 to current year. Prior to October 1949, monthly discharge only published in WSP 1315-A.

REVISED RECORDS.—WSP 1215: 1950. WSP 1735: 1952(M), 1956(M). WSP 1930: Drainage area. WDR CA-72-2: 1971(P).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,065.2 ft above sea level. Aug. 2, 1959, to Jan. 11, 1985, at site on right bank at datum 2.00 ft higher. Prior to Aug. 2, 1959, at site 100 ft downstream on right bank at datum 2.00 ft higher.

REMARKS.—Records fair. Minor diversion for irrigation and stock ponds.

EXTREMES FOR PERIOD OF RECORD (SINCE 1950).—Maximum discharge, 5,700 ft^3/s, Mar. 10, 1995, gage height, 12.77 ft, present datum, in gage well, 13.41 ft from floodmarks, from rating curve extended above 3,000 ft^3/s, on basis of slope-area measurement at gage height 12.77 ft, maximum gage height, 13.95 ft, from floodmarks, Jan. 16, 1978; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1100	1480	7.98

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	.00	.89	5.8	2.4	1.3	.05	.00	.00	.00
2	e.00	.00	.00	.00	.82	5.3	2.4	1.1	.05	.00	.00	.00
3	e.00	.00	.00	.00	.78	4.8	2.6	1.1	.05	.00	.00	.00
4	e.00	.00	.00	.00	.76	54	2.8	1.0	.05	.00	.00	.00
5	e.00	.00	.00	.00	.74	622	2.8	.95	.05	.00	.00	.00
6	e.00	.00	.00	.00	.70	108	2.9	.84	.04	.00	.00	.00
7	e.00	.00	.00	.00	.67	58	5.8	.73	.04	.00	.00	.00
8	e.00	.00	.00	.00	.66	40	4.4	.63	.04	.00	.00	.00
9	e.00	.00	.00	.00	.73	32	5.0	.50	.04	.00	.00	.00
10	e.00	.00	.00	1.4	1.2	29	4.1	.46	.03	.00	.00	.00
11	e.00	.00	.00	7.6	8.6	23	3.4	.41	.03	.00	.00	.00
12	e.00	.00	.00	12	8.9	18	3.4	.39	.03	.00	.00	.00
13	e.00	.00	.00	6.0	5.2	15	2.8	.41	.02	.00	.00	.00
14	e.00	.00	.00	3.3	3.7	13	2.7	.39	.02	.00	.00	.00
15	e.00	.00	.00	2.5	2.8	13	2.4	.35	.01	.00	.00	.00
16	e.00	.00	.00	1.9	2.1	9.4	2.2	.34	.01	.00	.00	.00
17	e.00	.00	.00	1.4	1.8	5.2	2.0	.30	.00	.00	.00	.00
18	e.00	.00	.00	1.1	1.7	4.7	1.9	.26	.00	.00	.00	.00
19	e.00	.00	.00	.89	6.4	4.4	2.1	.21	.00	.00	.00	.00
20	e.00	.00	.00	.79	13	4.1	3.1	.16	.00	.00	.00	.00
21	e.00	.00	.00	.68	7.4	3.9	5.8	.13	.00	.00	.00	.00
22	e.00	.00	.00	.63	5.3	3.8	3.7	.09	.00	.00	.00	.00
23	e.00	.00	.00	.62	5.2	3.9	2.8	.08	.00	.00	.00	.00
24	e.00	.00	.00	.87	13	4.0	2.3	.07	.00	.00	.00	.00
25	e.00	.00	.00	.90	15	4.0	1.8	.07	.00	.00	.00	.00
26	.00	.00	.00	2.8	15	3.8	1.5	.07	.00	.00	.00	.00
27	.00	.00	.00	1.9	11	3.2	1.4	.07	.00	.00	.00	.00
28	.00	.00	.00	1.3	7.3	3.0	1.4	.07	.00	.00	.00	.00
29	.00	.00	.00	1.1	---	2.8	1.6	.06	.00	.00	.00	.00
30	.00	.00	.00	1.0	---	2.7	1.4	.06	.00	.00	.00	.00
31	.00	---	.00	.98	---	2.5	---	.06	---	.00	.00	---
TOTAL	0.00	0.00	0.00	51.66	141.35	1106.3	84.9	12.66	0.56	0.00	0.00	0.00
MEAN	.000	.000	.000	1.67	5.05	35.7	2.83	.41	.019	.000	.000	.000
MAX	.00	.00	.00	12	15	622	5.8	1.3	.05	.00	.00	.00
MIN	.00	.00	.00	.00	.66	2.5	1.4	.06	.00	.00	.00	.00
AC-FT	.00	.00	.00	102	280	2190	168	25	1.1	.00	.00	.00

e Estimated.

11224500 LOS GATOS CREEK ABOVE NUNEZ CANYON, NEAR COALINGA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.29	.92	3.65	13.6	24.5	21.1	9.11	3.22	1.11	.30	.10	.26
MAX	7.18	18.2	36.3	139	287	236	160	43.0	16.4	5.71	2.92	8.33
(WY)	1946	1966	1967	1969	1978	1995	1958	1998	1983	1983	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1947	1948	1948	1948	1948	1961	1949	1948	1948	1947	1945	1945

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	847.32		1397.43			
ANNUAL MEAN	2.32		3.83		6.42	
HIGHEST ANNUAL MEAN					48.5	1983
LOWEST ANNUAL MEAN					.000	1989
HIGHEST DAILY MEAN	125	Feb 14	622	Mar 5	2940	Mar 10 1995
LOWEST DAILY MEAN	.00	Jun 10	.00	Oct 1	.00	Jul 5 1945
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 10	.00	Oct 1	.00	Jul 5 1945
MAXIMUM PEAK FLOW			1480	Mar 5	5700	Mar 10 1995
MAXIMUM PEAK STAGE			7.98	Mar 5	13.95	Jan 16 1978
ANNUAL RUNOFF (AC-FT)	1680		2770		4650	
10 PERCENT EXCEEDS	4.8		4.7		6.9	
50 PERCENT EXCEEDS	.00		.00		.01	
90 PERCENT EXCEEDS	.00		.00		.00	

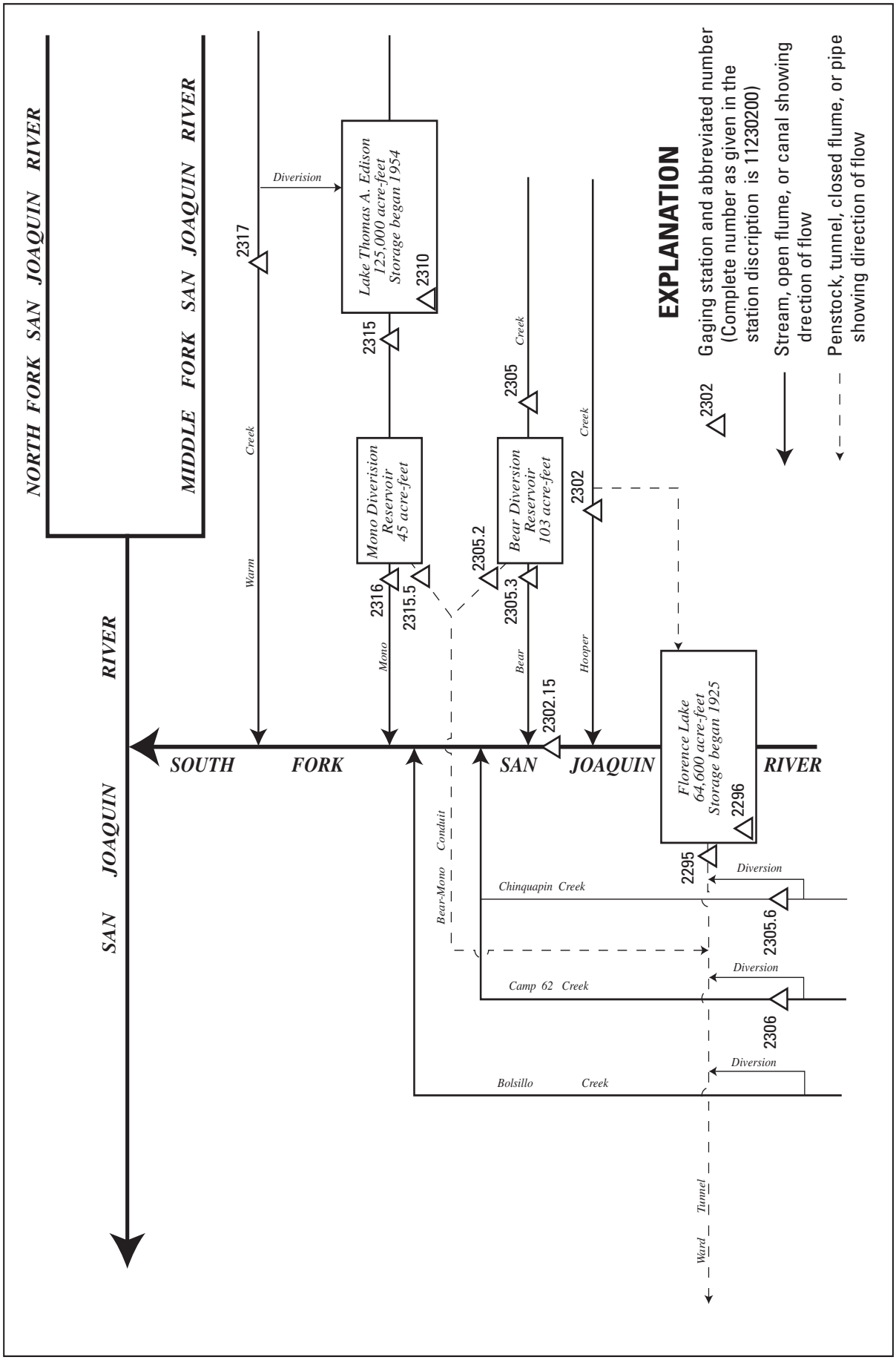

Figure 27. Diversions and storage in upper San Joaquin River Basin.

11229500 WARD TUNNEL INTAKE AT FLORENCE LAKE, CA

LOCATION.—Lat 37°16'20", long 118°58'17", unsurveyed, T.8 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in gatehouse at entrance of tunnel, 0.4 mi south of left abutment of Florence Lake Dam, and 16 mi northeast of town of Big Creek.

PERIOD OF RECORD.—April 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "Florence Lake Tunnel at Intake" 1925–36 and as "Ward Tunnel at Intake" 1937–60.

REVISED RECORDS.—WSP 1515: 1931.

GAGE.—Water-stage recorder, concrete control, and Venturi meter. Datum of gage is 7,213.89 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Ward Tunnel diverts from Florence Lake (station 11229600), a reservoir on South Fork San Joaquin River, to Huntington Lake (station 11236000) via Portal Powerplant (station 11235500). Water used again in Big Creek powerplants. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,990 ft^3/s, Apr. 30, 1926; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.4	417	.81	11	24	373	e433	902	232	244	403
2	2.9	2.4	408	.50	11	25	359	319	743	244	328	138
3	2.9	2.4	399	.38	12	24	266	248	747	201	279	15
4	2.9	2.4	389	.51	17	29	193	247	850	201	228	212
5	2.9	2.4	378	.87	22	31	152	249	1100	170	190	320
6	2.9	2.4	366	.87	24	39	129	259	1150	99	82	454
7	2.9	2.4	353	1.2	20	47	116	273	740	86	86	450
8	2.9	18	340	2.1	13	53	115	269	408	86	85	447
9	2.9	234	325	1.9	13	59	124	277	519	86	85	444
10	2.9	430	309	1.5	13	54	116	146	730	86	85	441
11	2.9	428	290	3.7	14	52	117	51	778	86	85	438
12	2.9	425	268	2.4	14	50	108	51	790	212	83	435
13	2.9	421	244	2.9	18	52	114	49	844	331	83	431
14	2.9	417	172	4.8	28	57	107	48	664	325	83	427
15	2.9	413	48	7.1	32	64	118	47	409	216	209	423
16	2.9	408	20	8.6	30	64	158	46	542	168	225	243
17	2.9	403	13	9.7	27	75	198	59	645	287	210	261
18	2.9	397	9.6	9.3	25	102	213	52	467	251	7.7	267
19	2.9	391	8.4	9.9	24	142	192	51	639	143	8.0	361
20	2.9	246	7.9	10	25	176	164	51	600	114	53	370
21	2.9	3.5	7.8	9.8	27	184	164	51	599	112	234	369
22	2.9	3.5	5.8	9.7	27	162	169	51	599	112	233	366
23	2.9	3.5	5.2	9.3	26	144	196	133	598	183	231	364
24	2.8	3.6	5.1	9.5	27	157	272	421	596	229	237	361
25	2.8	3.6	3.8	9.3	27	171	361	623	593	227	260	373
26	2.8	3.6	3.2	10	29	188	411	943	590	227	247	405
27	2.7	3.6	2.9	10	29	198	436	1210	587	227	233	401
28	2.5	220	2.8	11	28	232	e457	1210	536	227	210	402
29	2.4	429	2.8	11	---	290	e469	1220	463	175	202	429
30	2.4	424	2.2	11	---	291	e490	1220	388	148	235	424
31	2.4	---	1.1	11	---	331	---	1220	---	204	307	---
TOTAL	87.4	5745.7	4807.6	190.64	613	3567	6857	11527	19816	5695	5367.7	10874
MEAN	2.82	192	155	6.15	21.9	115	229	372	661	184	173	362
MAX	2.9	430	417	11	32	331	490	1220	1150	331	328	454
MIN	2.4	2.4	1.1	.38	11	24	107	46	388	86	7.7	15
AC-FT	173	11400	9540	378	1220	7080	13600	22860	39310	11300	10650	21570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001, BY WATER YEAR (WY)

MEAN	233	129	107	76.1	76.0	113	274	466	565	538	426	347
MAX	634	745	1064	546	240	297	588	949	1161	1199	856	897
(WY)	1996	1938	1946	1939	1986	1986	1997	1974	1974	1967	1995	1998
MIN	.000	.47	1.61	2.13	.64	22.5	35.4	.85	1.49	90.1	48.3	1.50
(WY)	1946	1965	2000	1991	1991	1977	1991	1939	1938	1931	1977	1949

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1925 - 2001	
ANNUAL TOTAL	115261.60		75148.04			
ANNUAL MEAN	315		206		281	
HIGHEST ANNUAL MEAN					460	1956
LOWEST ANNUAL MEAN					98.1	1977
HIGHEST DAILY MEAN	1570	Jun 18	1220	May 29	1990	Apr 30 1926
LOWEST DAILY MEAN	.11	Jan 13	.38	Jan 3	.00	Oct 7 1925
ANNUAL SEVEN-DAY MINIMUM	.15	Jan 11	.72	Dec 31	.00	Nov 5 1925
ANNUAL RUNOFF (AC-FT)	228600		149100		203600	
10 PERCENT EXCEEDS	870		459		677	
50 PERCENT EXCEEDS	203		124		163	
90 PERCENT EXCEEDS	2.8		2.9		11	

e Estimated.

11229600 FLORENCE LAKE NEAR BIG CREEK, CA

LOCATION.—Lat 37°16'20", long 118°58'17", unsurveyed, T.8 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in gatehouse of Ward Tunnel intake, 0.3 mi west of dam on South Fork San Joaquin River, and 16 mi northeast of town of Big Creek.

DRAINAGE AREA.—171 mi^2.

PERIOD OF RECORD.—November 1925 to current year. Prior to October 1931, published in WSP 721. Maximum and minimum daily contents (water years 1926–39) summarized in WSP 881. Prior to 1960, maximum and minimum daily contents were published.

REVISED RECORDS.—WDR CA-78-3: 1977.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,406 acre-ft, between elevations, 7,220.94 ft, throat of Venturi tube in Ward Tunnel intake (station 11229500), and 7,327.50 ft, top of spillway drum gates. Additional storage of 168 acre-ft is not available for diversion. Water is diverted through Ward Tunnel to Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) and used for further power development in Big Creek powerplants. Records, including extremes, represent contents at 2400 hours. See schematic diagram of upper San Joaquin River Basin.

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, 65,990 acre-ft, July 3, 1932, elevation, 7,329.14 ft; minimum occurred during period of no record, Oct. 2–4, 1926, or Nov. 30 to Dec. 2, 1927.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 61,473 acre-ft, June 3, elevation, 7,324.43 ft; minimum, 941 acre-ft, Jan. 12, elevation, 7,230.35.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Aug. 26, 1926)

7,220.80	0	7,235	1,774	7,255	8,950	7,290	31,966
7,222	63	7,240	2,976	7,260	11,608	7,310	48,284
7,225	281	7,245	4,666	7,270	17,755	7,330	66,826
7,230	887	7,250	6,648	7,280	24,588		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23057	23359	10322	947	952	1006	1509	4282	60668	47597	46053	36346
2	23043	23401	9449	944	952	1006	1375	5645	61369	47371	45472	36059
3	23029	23436	8599	943	958	1011	1280	6163	61473	47293	44986	36056
4	23008	23443	7772	943	971	1023	1225	6661	61150	47336	44596	35676
5	22988	23464	6973	944	986	1028	1188	7430	60243	47562	44274	35045
6	22966	23478	6199	943	985	1040	1173	8725	59301	47970	44300	34138
7	22945	23486	5451	946	975	1050	1147	10590	59132	48897	44206	33229
8	22924	23450	4696	947	969	1056	1175	12897	59556	49698	44122	32327
9	22924	22952	3945	944	969	1059	1159	15351	59727	50264	44045	31433
10	22960	22047	3216	949	972	1066	1157	18194	59417	50717	43961	30522
11	22973	21124	2578	946	977	1062	1153	21489	58967	51110	43886	29625
12	22994	20215	2030	941	977	1059	1153	24411	58379	51172	43793	28730
13	23008	19328	1526	946	988	1064	1153	26414	57541	50887	43692	27827
14	23022	18430	1112	964	1000	1066	1149	28354	56901	50558	43600	26932
15	23036	17541	1034	1023	1000	1066	1181	30919	56709	50398	43247	26044
16	23050	16664	1016	1036	997	1066	1226	34271	56252	50317	42826	25515
17	23064	15779	1005	967	994	1096	1253	37423	55603	49963	42440	24953
18	23078	14927	997	966	989	1122	1251	40169	55308	49654	42479	24363
19	23092	14092	991	966	989	1148	1225	42579	54674	49548	42526	23598
20	23099	13554	988	964	991	1174	1210	45352	54089	49495	42481	22805
21	23113	13543	985	961	1008	1200	1230	48381	53487	49416	42030	22017
22	23106	13530	977	960	1008	1226	1230	51431	52898	49337	41572	21231
23	23113	13513	975	955	1003	1253	1278	54464	52329	49098	41107	20439
24	23113	13507	971	955	1005	1280	1386	56766	51718	48757	40619	19655
25	23113	13494	963	955	1006	1308	1550	58767	51056	48398	40102	18845
26	23120	13489	961	957	1008	1335	1846	60007	50344	48032	39585	17980
27	23134	13476	960	957	1012	1362	2120	60290	49584	47675	39113	17113
28	23141	12998	960	955	1012	1389	2362	60243	48906	47302	38682	16247
29	23232	12085	960	955	---	1334	2500	60064	48310	47033	38275	15322
30	23274	11186	954	954	---	1361	3036	59941	47806	46809	37784	14416
31	23324	---	949	954	---	1458	---	59969	---	46473	37158	---
MAX	23324	23486	10322	1036	1012	1458	3036	60290	61473	51172	46053	36346
MIN	22924	11186	949	941	952	1006	1147	4282	47806	46473	37158	14416
a	7278.21	7259.24	7230.40	7230.43	7230.80	7233.36	7240.19	7322.84	7309.42	7307.91	7296.66	7264.73
b	+246	-12138	-10237	+5	+58	+446	+1578	+56933	-12163	-1333	-9315	-22742

CAL YR 2000 b +14
WTR YR 2001 b -8662

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11230200 HOOPER CREEK BELOW DIVERSION DAM, NEAR FLORENCE LAKE, CA

LOCATION.—Lat 37°18'21", long 118°56'59", unsurveyed, T.7 S., R.28 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 300 ft downstream from diversion dam, 0.7 mi upstream from mouth, 2.5 mi north of Florence Lake, and 17.6 mi northeast of town of Big Creek.

DRAINAGE AREA.—7.22 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Prior to October 1991, published as "Hooper Creek at diversion dam near Florence Lake."

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 7,440 ft above sea level, from topographic map.

REMARKS.—Flow regulated by diversion dam 300 ft upstream. Most of the water is diverted at the diversion dam to Florence Lake (station 11229600). See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 112 ft^3/s, July 17, 1995; minimum daily, 1.2 ft^3/s, Apr. 25, 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.5	2.1	2	2	2.1	9.5	5.3	3.6	4.1	3.3	2.2
2	2.5	2.4	2.1	2	1.9	1.9	8.3	5.3	3.8	4	3.3	2.2
3	2.5	2.3	2	1.9	2.1	2	6.9	5.2	3.8	4	3.2	2.3
4	2.4	2.3	2	1.9	2.1	2	5.4	5	3.8	4	3.1	2.3
5	2.4	2.3	2	1.9	2	2.3	4.7	5.1	3.8	4	3.1	2.3
6	2.4	2.3	2	1.9	1.9	2.3	4.3	5.1	3.8	4.1	3	2.2
7	2.3	2.3	2	1.9	2.0	2.3	4	5	3.9	4.2	3	2.2
8	2.3	2.3	2.1	2	e2.0	2.2	4.2	4.8	3.9	4.2	3	2.1
9	2.6	2.2	2.1	2	2.2	2.1	4.1	4.3	3.9	4.2	2.9	2.1
10	2.5	2.1	2	2	2	2.1	3.7	3.9	4	4.2	2.9	2.1
11	2.5	2.0	2	1.9	2	2.1	3.9	3.2	4	4.2	2.9	2.1
12	2.7	3.2	2	2	2.2	2.1	4.1	3.2	4	4.1	2.9	2
13	2.7	3.1	2.3	2.2	1.9	2.2	3.7	3.2	3.9	4.1	2.9	2
14	2.6	3	2	2.2	1.9	2.2	4	3.5	3.9	4.1	2.8	1.9
15	2.6	2.8	2.1	2.1	1.9	2.2	4.2	3.6	3.9	4	2.8	1.9
16	2.6	2.6	2	2.2	2	2.3	4.7	3.5	4	4.1	2.7	1.9
17	2.5	2.4	2	1.9	2	2.5	5	5.2	4	4	2.6	1.9
18	2.5	2.8	1.9	1.9	1.9	3	5	5.3	3.9	4	2.6	1.9
19	2.5	2.4	1.9	2.7	1.9	3.4	4.6	5.1	3.9	3.9	2.5	1.9
20	2.4	2.2	1.9	2.6	2	3.6	4.4	5	3.9	3.8	2.5	1.9
21	2.5	2.2	1.9	2.6	1.9	3.5	4.9	5	3.6	3.8	2.5	1.8
22	2.4	2.2	1.9	2.4	2	3.1	5	5.1	3.6	3.6	2.5	1.8
23	2.4	2.1	1.9	2.5	2.1	3.1	6.2	4.8	3.7	3.5	2.4	1.8
24	2.4	2.2	1.9	2.8	2	3.4	8.7	4.4	4	3.4	2.4	1.8
25	2.4	2.2	1.9	2.1	2	3.7	10	4	4	3.5	2.4	1.8
26	2.6	2.2	1.9	2.2	1.9	4.1	8.9	3.2	4.1	3.6	2.4	1.8
27	2.7	2.2	1.9	2	1.9	4.4	5.1	3.2	4.1	3.5	2.3	1.8
28	2.6	2.2	1.9	2.1	2	5.9	5.1	3.2	4.1	3.4	2.3	1.8
29	2.8	2.1	1.9	1.9	---	7.2	5.1	3.6	4.1	3.4	2.3	1.8
30	2.8	2.1	1.9	2	---	7.4	5.2	3.5	4	3.4	2.2	1.8
31	2.5	---	1.9	1.9	---	9.5	---	3.5	---	3.4	2.2	---
TOTAL	77.8	71.2	61.4	65.7	55.7	102.2	162.9	133.3	117.0	119.8	83.9	59.4
MEAN	2.51	2.37	1.98	2.12	1.99	3.30	5.43	4.30	3.90	3.86	2.71	1.98
MAX	2.8	3.2	2.3	2.8	2.2	9.5	10	5.3	4.1	4.2	3.3	2.3
MIN	2.2	2.0	1.9	1.9	1.9	1.9	3.7	3.2	3.6	3.4	2.2	1.8
AC-FT	154	141	122	130	110	203	323	264	232	238	166	118

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	2.76	2.63	2.41	2.80	2.65	3.78	6.78	11.2	13.7	12.9	4.89	2.83
MAX	4.75	4.54	3.57	10.2	5.14	8.03	18.8	60.9	45.7	68.3	18.8	4.76
(WY)	1996	1999	1999	1997	1997	1997	1997	1997	1998	1995	1995	1998
MIN	1.68	1.82	1.59	1.55	1.55	2.10	3.07	2.50	2.46	2.66	2.32	1.91
(WY)	1991	1991	1989	1991	1991	1990	1996	1991	1989	1989	1989	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	1993.3		1110.3			
ANNUAL MEAN	5.45		3.04		5.80	
HIGHEST ANNUAL MEAN					15.6	1995
LOWEST ANNUAL MEAN					2.42	1991
HIGHEST DAILY MEAN	55	May 24	10	Apr 25	112	Jul 17 1995
LOWEST DAILY MEAN	1.7	Jan 6	1.8	Sep 21	1.2	Apr 25 1989
ANNUAL SEVEN-DAY MINIMUM	1.7	Jan 5	1.8	Sep 21	1.3	Oct 10 1990
ANNUAL RUNOFF (AC-FT)	3950		2200		4200	
10 PERCENT EXCEEDS	8.7		4.7		7.5	
50 PERCENT EXCEEDS	2.9		2.5		3.0	
90 PERCENT EXCEEDS	2.0		1.9		1.9	

e Estimated.

11230215 SOUTH FORK SAN JOAQUIN RIVER BELOW HOOPER CREEK, NEAR FLORENCE LAKE, CA

LOCATION.—Lat 37°18'35", long 118°57'40", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 0.1 mi downstream from Hooper Creek, 3.5 mi downstream from Florence Lake Dam, and 17 mi northeast of town of Big Creek.

DRAINAGE AREA.—184 mi^2.

PERIOD OF RECORD.—October 1978 to September 1997, October 1998 to current year. October 1946 to September 1978, operated as a low-flow station only, in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder, Parshall flume, and concrete control. Datum of gage is 6,949.41 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Flow regulated by Florence Lake (station 11229600) 3.5 mi upstream, and Hooper Creek Diversion Dam (capacity less than 2 acre-ft) 0.7 mi upstream. Most of the water is diverted at Florence Lake to Ward Tunnel (station 11229500). See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 5,950 ft^3/s, Sept. 26, 1982, gage height, 11.42 ft; minimum daily, 3.9 ft^3/s, Oct. 24, 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	30	27	16	17	18	33	27	26	23	21	22
2	29	30	27	16	17	16	30	23	26	23	22	22
3	29	30	26	15	17	17	27	22	26	23	24	22
4	29	30	26	15	17	17	25	22	26	24	23	22
5	29	30	26	15	17	17	24	22	26	24	23	22
6	29	30	25	15	17	17	23	22	25	24	21	22
7	29	30	24	15	16	17	23	23	25	26	21	21
8	29	30	21	15	17	17	24	24	25	25	21	21
9	29	30	21	15	16	17	23	24	25	24	21	21
10	31	30	20	16	16	17	24	24	24	25	21	21
11	30	29	19	17	16	17	25	24	24	25	21	21
12	30	29	19	16	17	17	26	25	24	25	21	21
13	30	29	19	17	17	17	28	25	24	24	21	23
14	30	29	19	17	16	18	28	25	24	24	21	23
15	31	28	18	16	17	18	29	25	23	24	21	23
16	30	28	18	22	16	18	29	26	23	24	23	23
17	30	28	18	20	16	20	29	26	23	24	23	23
18	30	28	18	18	16	25	28	26	23	23	23	22
19	30	28	17	17	16	31	27	25	23	23	23	22
20	30	28	16	17	16	33	27	25	23	23	23	22
21	30	28	16	17	16	33	31	26	23	22	23	22
22	30	28	16	16	16	31	31	27	22	22	23	22
23	30	28	16	16	17	31	30	30	21	22	22	22
24	30	28	16	16	16	32	30	30	22	22	22	22
25	30	28	16	17	16	34	31	29	22	22	22	22
26	30	28	17	17	16	35	31	29	22	21	22	22
27	30	28	17	17	16	34	28	28	22	21	22	21
28	30	28	16	22	16	37	28	28	22	21	22	21
29	32	27	16	16	---	37	27	28	23	21	22	21
30	31	27	16	18	---	33	27	27	23	21	22	21
31	30	---	16	17	---	34	---	27	---	21	22	---
TOTAL	927	862	602	519	459	755	826	794	710	716	682	655
MEAN	29.9	28.7	19.4	16.7	16.4	24.4	27.5	25.6	23.7	23.1	22.0	21.8
MAX	32	30	27	22	17	37	33	30	26	26	24	23
MIN	29	27	16	15	16	16	23	22	21	21	21	21
AC-FT	1840	1710	1190	1030	910	1500	1640	1570	1410	1420	1350	1300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

MEAN	19.5	17.3	16.2	18.1	20.6	26.5	30.6	45.5	357	298	67.3	37.7
MAX	30.5	28.7	25.3	53.0	42.6	49.0	53.1	164	2429	1799	661	268
(WY)	1990	2001	1984	1997	1986	1995	1995	1983	1983	1995	1983	1982
MIN	7.87	11.8	8.93	11.9	12.2	17.8	18.4	20.9	20.5	21.4	13.1	7.19
(WY)	1980	1979	1979	1979	1991	1990	1990	1981	1981	1981	1979	1979

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	12664		8507			
ANNUAL MEAN	34.6		23.3		79.7	
HIGHEST ANNUAL MEAN					396	1983
LOWEST ANNUAL MEAN					18.5	1979
HIGHEST DAILY MEAN	371	Jun 17	37	Mar 28	5200	Sep 26 1982
LOWEST DAILY MEAN	11	Jan 7	15	Jan 3	3.9	Oct 24 1979
ANNUAL SEVEN-DAY MINIMUM	12	Jan 7	15	Jan 3	4.4	Oct 13 1979
MAXIMUM PEAK FLOW			46	Mar 28	5950	Sep 26 1982
MAXIMUM PEAK STAGE			4.19	Mar 28	11.42	Sep 26 1982
ANNUAL RUNOFF (AC-FT)	25120		16870		57730	
10 PERCENT EXCEEDS	48		30		49	
50 PERCENT EXCEEDS	30		23		23	
90 PERCENT EXCEEDS	19		16		14	

11230500 BEAR CREEK NEAR LAKE THOMAS A. EDISON, CA

LOCATION.—Lat 37°20'22", long 118°58'21", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 0.2 mi upstream from diversion dam, 1.7 mi upstream from mouth, 2.1 mi south of Lake Thomas A. Edison, and 2.4 mi northeast of Mono Hot Springs.

DRAINAGE AREA.—52.5 mi^2.

PERIOD OF RECORD.—October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

REVISED RECORDS.—WSP 611: 1922(M). WSP 1345: 1931–35. WSP 1515: 1922–30. WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 7,366.94 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—No storage or diversion upstream from station. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,660 ft^3/s, Sept. 26, 1982, gage height, 8.35 ft, from rating curve extended above 570 ft^3/s; minimum daily, 1.2 ft^3/s, Sept. 29 to Oct. 5, 1924.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	21	8.6	14	33	25	120	301	328	44	17	6.7
2	8.8	20	8.3	14	24	19	88	271	288	44	17	6.4
3	8.4	18	8.8	18	20	24	67	191	203	46	17	6.4
4	8.2	16	7.5	27	23	21	53	162	168	58	16	7.0
5	8.0	17	7.8	26	26	31	44	196	164	87	15	7.6
6	7.8	16	7.7	29	23	40	40	269	175	93	14	7.3
7	7.6	15	8.2	21	18	42	33	335	186	145	16	6.7
8	7.4	15	8.2	8.8	17	43	45	381	180	154	21	6.2
9	7.2	12	8.5	10	15	43	43	397	168	129	17	5.6
10	11	12	9.0	16	14	40	41	402	162	95	16	5.5
11	16	13	9.9	22	16	40	38	432	157	74	16	5.3
12	15	16	8.9	42	21	40	37	380	135	61	15	5.3
13	14	16	9.8	37	25	42	38	257	116	52	14	5.1
14	14	16	10	36	24	38	38	245	95	45	14	4.7
15	14	16	9.2	41	21	31	49	324	89	41	13	4.6
16	13	18	11	69	20	22	66	448	96	38	13	4.5
17	13	19	11	88	19	28	74	444	101	35	12	4.6
18	13	22	12	62	19	38	71	370	100	33	12	4.4
19	13	19	12	53	20	51	59	313	95	31	11	4.4
20	12	17	14	49	19	59	52	360	89	30	11	4.4
21	12	14	11	49	20	57	53	381	86	28	10	4.3
22	12	13	10	47	20	46	55	401	85	26	9.8	4.2
23	13	13	12	41	21	42	74	407	89	25	9.3	4.2
24	13	11	12	37	20	49	109	374	87	24	9.0	4.0
25	12	11	23	36	24	55	149	383	77	22	8.7	4.0
26	12	11	14	36	24	62	176	390	66	21	8.2	4.0
27	13	10	11	36	22	64	180	335	59	20	7.9	4.0
28	15	10	10	36	22	77	178	296	53	19	7.7	4.0
29	16	9.9	12	36	---	91	177	288	49	19	7.4	3.7
30	20	9.8	13	36	---	91	236	299	46	18	7.0	3.7
31	22	---	14	35	---	114	---	325	---	18	6.8	---
TOTAL	380.5	446.7	332.4	1107.8	590	1465	2483	10357	3792	1575	388.8	152.8
MEAN	12.3	14.9	10.7	35.7	21.1	47.3	82.8	334	126	50.8	12.5	5.09
MAX	22	22	23	88	33	114	236	448	328	154	21	7.6
MIN	7.2	9.8	7.5	8.8	14	19	33	162	46	18	6.8	3.7
AC-FT	755	886	659	2200	1170	2910	4930	20540	7520	3120	771	303

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2001, BY WATER YEAR (WY)

MEAN	15.0	15.4	19.5	22.6	23.8	33.4	87.1	255	347	203	66.1	28.4
MAX	62.2	56.1	71.2	107	61.0	79.8	172	586	740	747	349	260
(WY)	1983	1951	1956	1997	1986	1986	1926	1969	1983	1995	1983	1982
MIN	2.71	3.10	4.86	4.50	5.80	9.00	33.1	71.3	42.2	12.2	3.15	1.63
(WY)	1925	1930	1930	1924	1991	1924	1975	1977	1924	1924	1924	1924

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1922 - 2001	
ANNUAL TOTAL	34737.5		23071.0			
ANNUAL MEAN	94.9		63.2		93.3	
HIGHEST ANNUAL MEAN					201	1983
LOWEST ANNUAL MEAN					29.2	1924
HIGHEST DAILY MEAN	710	May 28	448	May 16	2610	Sep 26 1982
LOWEST DAILY MEAN	4.5	Jan 9	3.7	Sep 29	1.2	Sep 29 1924
ANNUAL SEVEN-DAY MINIMUM	4.8	Jan 8	3.9	Sep 24	1.2	Sep 29 1924
MAXIMUM PEAK FLOW			635	May 16	3660	Sep 26 1982
MAXIMUM PEAK STAGE			5.39	May 16	8.35	Sep 26 1982
ANNUAL RUNOFF (AC-FT)	68900		45760		67620	
10 PERCENT EXCEEDS	318		180		294	
50 PERCENT EXCEEDS	27		22		30	
90 PERCENT EXCEEDS	8.9		7.6		7.0	

11230520 BEAR CREEK CONDUIT NEAR LAKE THOMAS A. EDISON, CA

LOCATION.—Lat 37°20'10", long 118°58'28", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, at diversion dam, 2.2 mi northeast of Mono Hot Springs, and 2.5 mi south of Lake Thomas A. Edison.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Discharge computed as difference between flows at Bear Creek near Lake Thomas A. Edison (station 11230500) and Bear Creek below diversion dam (station 11230530). Datum of conduit invert is 7,340 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Conduit diverts at diversion dam on Bear Creek to Ward Tunnel and Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) for further power development in Big Creek powerplants. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 504 ft^3/s, May 24, 1999, May 27, 2000; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	e4.2	4.4	9.6	29	20	115	297	325	41	15	4.1
2	2.8	e.96	4.2	10	20	15	83	268	286	41	15	3.9
3	2.6	e.69	4.7	14	15	19	62	188	201	44	15	3.9
4	2.6	e4.7	3.4	23	18	16	48	160	166	56	14	4.4
5	2.5	e6.6	3.7	22	22	26	40	194	162	85	13	5.1
6	2.5	e5.6	3.6	25	18	35	35	266	172	91	12	4.7
7	2.4	e6.5	4.2	17	14	37	28	333	184	142	14	4.1
8	2.4	e10	4.1	4.8	13	38	41	374	177	151	18	3.7
9	2.3	7.9	4.4	6.1	11	38	38	389	166	127	15	3.1
10	3.4	8.5	4.9	12	9.9	35	36	393	160	93	14	3.0
11	6.7	9.0	5.9	18	11	35	33	412	154	72	13	2.7
12	6.0	12	4.8	38	16	35	33	371	132	58	12	2.7
13	5.8	12	5.7	33	20	37	34	255	114	49	12	2.6
14	5.6	12	5.9	32	20	33	34	243	93	43	11	2.2
15	5.1	11	5.1	37	17	26	45	320	87	39	11	2.1
16	4.9	14	6.5	65	15	17	61	422	93	36	10	2.0
17	4.8	15	7.1	84	14	23	70	425	99	33	9.7	2.0
18	4.8	17	7.5	58	15	33	67	365	98	30	9.4	1.8
19	5.0	15	8.2	49	16	46	54	310	92	29	8.7	1.8
20	4.7	12	9.8	45	15	54	47	357	87	27	8.0	1.8
21	4.4	10	6.7	45	15	51	48	377	83	26	7.6	1.8
22	4.9	8.7	6.1	43	15	41	51	394	82	23	7.2	1.6
23	e.00	9.1	7.5	36	17	37	69	401	86	22	6.8	1.7
24	e.00	7.0	7.9	32	15	44	104	371	85	21	6.4	1.5
25	e2.1	6.7	19	31	20	50	144	379	74	20	6.2	1.5
26	e7.3	6.5	10	31	20	57	171	383	64	19	5.6	1.5
27	e6.8	6.2	7.0	31	18	59	175	333	57	18	5.4	1.5
28	e7.0	6.0	6.2	31	17	72	173	294	51	17	5.2	1.5
29	e7.4	5.8	7.9	31	---	86	172	286	47	16	4.8	1.2
30	e6.6	5.7	9.4	31	---	86	231	296	44	16	4.5	1.2
31	e.00	---	9.7	30	---	109	---	322	---	15	4.3	---
TOTAL	126.30	256.35	205.5	974.5	465.9	1310	2342	10178	3721	1500	313.8	76.7
MEAN	4.07	8.55	6.63	31.4	16.6	42.3	78.1	328	124	48.4	10.1	2.56
MAX	7.4	17	19	84	29	109	231	425	325	151	18	5.1
MIN	.00	.69	3.4	4.8	9.9	15	28	160	44	15	4.3	1.2
AC-FT	251	508	408	1930	924	2600	4650	20190	7380	2980	622	152

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	13.2	12.3	11.7	18.2	18.6	33.0	88.9	217	180	73.9	47.5	21.5
MAX	45.3	26.5	32.5	50.8	41.3	52.4	138	345	343	168	181	84.1
(WY)	1995	1995	1997	1997	1996	1995	1989	1997	1999	1996	1995	1995
MIN	3.23	3.68	3.23	3.46	.000	.000	43.2	59.2	.000	.000	10.1	2.56
(WY)	1989	1991	1991	1991	1997	1997	1991	1995	1995	1995	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	27203.25		21470.05			
ANNUAL MEAN	74.3		58.8		61.3	
HIGHEST ANNUAL MEAN					82.4	1999
LOWEST ANNUAL MEAN					49.2	1990
HIGHEST DAILY MEAN	504	May 27	425	May 17	504	May 24 1999
LOWEST DAILY MEAN	.00	Oct 23	.00	Oct 23	.00	Oct 18 1988
ANNUAL SEVEN-DAY MINIMUM	1.5	Jan 1	1.4	Sep 24	.00	May 18 1995
ANNUAL RUNOFF (AC-FT)	53960		42590		44420	
10 PERCENT EXCEEDS	248		176		201	
50 PERCENT EXCEEDS	23		17		23	
90 PERCENT EXCEEDS	3.4		3.1		3.4	

e Estimated.

11230530 BEAR CREEK BELOW DIVERSION DAM, NEAR LAKE THOMAS A. EDISON, CA

LOCATION.—Lat 37°20'08", long 118°58'29", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 60 ft downstream from diversion dam, 2.5 mi south of Lake Thomas A. Edison, and 18.3 mi east of town of Big Creek.

DRAINAGE AREA.—52.8 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Prior to October 1991, published as "at Diversion Dam."

GAGE.—Water-stage recorder, Parshall flume, and concrete control. Datum of gage is 7,338.30 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Low and medium flow regulated at diversion dam. Most of the flow is diverted at the diversion dam to Bear Creek Conduit (station 11230520), then to Ward Tunnel and Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) for further power development in Big Creek powerplants. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,730 ft^3/s, July 9, 1995, gage height, 14.75 ft; minimum daily, 0.94 ft^3/s, Oct. 15, 1987.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	17	4.1	4.1	4.3	4.6	5.0	4.1	2.6	2.5	2.4	2.5
2	6.0	19	4.1	4.0	4.3	4.7	5.0	2.6	2.6	2.5	2.4	2.5
3	5.8	18	4.1	4.1	4.4	4.8	4.9	2.5	2.5	2.5	2.4	2.5
4	5.6	12	4.1	4.1	4.5	4.8	4.9	2.5	2.5	2.5	2.4	2.5
5	5.5	10	4.1	4.1	4.5	4.8	4.8	2.5	2.5	2.6	2.4	2.5
6	5.3	10	4.1	4.0	4.5	4.9	4.8	2.5	2.5	2.6	2.4	2.5
7	5.2	8.1	4.0	4.0	4.5	4.9	4.8	2.6	2.6	2.6	2.4	2.5
8	5.0	4.4	4.1	4.0	4.5	4.9	4.8	7.2	2.6	2.6	2.4	2.5
9	4.9	4.0	4.1	4.1	4.4	5.0	4.8	7.9	2.6	2.6	2.4	2.5
10	7.5	3.9	4.1	4.0	4.5	5.0	4.8	9.0	2.6	2.6	2.4	2.5
11	9.6	4.0	4.0	4.0	4.6	4.9	4.7	20	2.6	2.6	2.4	2.5
12	9.5	4.0	4.0	4.0	4.6	5.0	4.7	8.9	2.5	2.6	2.4	2.5
13	8.7	4.0	4.1	4.0	4.6	5.0	4.7	2.5	2.5	2.5	2.5	2.5
14	8.8	4.1	4.1	4.0	4.6	5.0	4.7	2.5	2.5	2.5	2.6	2.5
15	8.6	4.1	4.1	3.9	4.5	5.0	4.7	4.0	2.5	2.5	2.6	2.5
16	8.5	4.1	4.1	3.9	4.5	5.0	4.7	26	2.5	2.5	2.5	2.5
17	8.2	4.1	4.1	4.1	4.5	5.0	4.7	19	2.5	2.5	2.6	2.5
18	8.1	4.2	4.1	4.0	4.6	5.1	4.7	4.8	2.5	2.5	2.5	2.5
19	7.9	4.1	4.1	4.1	4.6	5.1	4.7	2.5	2.5	2.5	2.5	2.5
20	7.7	4.3	4.1	4.3	4.6	5.1	4.7	2.6	2.5	2.4	2.5	2.5
21	7.7	4.1	4.1	4.3	4.7	5.1	4.7	3.4	2.5	2.4	2.5	2.5
22	7.4	4.1	4.1	4.4	4.7	5.1	4.7	7.0	2.5	2.4	2.5	2.5
23	15	4.2	4.1	4.4	4.7	5.1	4.7	5.7	2.5	2.4	2.5	2.5
24	22	4.1	4.1	4.4	4.7	5.1	4.8	2.6	2.5	2.4	2.5	2.5
25	9.8	4.2	4.1	4.4	4.7	5.0	4.8	3.6	2.5	2.4	2.5	2.5
26	4.7	4.1	4.1	4.4	4.7	5.0	4.8	6.6	2.5	2.4	2.5	2.5
27	6.4	4.2	4.1	4.4	4.7	5.0	4.8	2.6	2.5	2.4	2.5	2.5
28	7.9	4.1	4.1	4.4	4.7	5.0	4.8	2.6	2.5	2.4	2.6	2.5
29	8.7	4.1	4.1	4.3	---	5.0	4.8	2.6	2.5	2.4	2.5	2.5
30	13	4.1	4.1	4.3	---	5.0	4.8	2.6	2.5	2.4	2.5	2.5
31	22	---	4.1	4.3	---	5.0	---	2.6	---	2.4	2.5	---
TOTAL	267.1	188.7	126.8	128.8	127.7	154.0	143.3	178.1	75.7	77.1	76.7	75.0
MEAN	8.62	6.29	4.09	4.15	4.56	4.97	4.78	5.75	2.52	2.49	2.47	2.50
MAX	22	19	4.1	4.4	4.7	5.1	5.0	26	2.6	2.6	2.6	2.5
MIN	4.7	3.9	4.0	3.9	4.3	4.6	4.7	2.5	2.5	2.4	2.4	2.5
AC-FT	530	374	252	255	253	305	284	353	150	153	152	149

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	2.89	2.55	2.87	5.86	3.51	6.21	8.33	25.5	116	109	13.8	3.97
MAX	8.62	6.29	12.5	55.8	20.4	59.8	67.1	121	555	747	109	11.1
(WY)	2001	2001	1996	1997	1997	1997	1997	1995	1995	1995	1995	1996
MIN	1.33	1.38	1.41	1.48	1.35	1.48	1.42	2.57	2.43	2.25	2.25	2.44
(WY)	1988	1990	1993	1995	1995	1988	1990	1991	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	7606.3		1619.0			
ANNUAL MEAN	20.8		4.44		25.3	
HIGHEST ANNUAL MEAN					131	1995
LOWEST ANNUAL MEAN					1.98	1990
HIGHEST DAILY MEAN	599	Jun 16	26	May 16	1420	Jul 9 1995
LOWEST DAILY MEAN	2.6	Apr 4	2.4	Jul 20	.94	Oct 15 1987
ANNUAL SEVEN-DAY MINIMUM	2.6	Apr 17	2.4	Jul 20	1.0	Nov 5 1992
MAXIMUM PEAK FLOW			150	May 16	1730	Jul 9 1995
MAXIMUM PEAK STAGE			1.79	May 16	14.75	Jul 9 1995
ANNUAL RUNOFF (AC-FT)	15090		3210		18320	
10 PERCENT EXCEEDS	18		6.5		8.3	
50 PERCENT EXCEEDS	4.4		4.1		2.6	
90 PERCENT EXCEEDS	3.0		2.5		1.5	

11230560 CHINQUAPIN CREEK BELOW DIVERSION DAM, NEAR BIG CREEK, CA

LOCATION.—Lat 37°18'26", long 119°01'08", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, 30 ft downstream from diversion dam to Ward Tunnel, 0.7 mi upstream from mouth, 1.7 mi south of Mono Hot Springs, and 14.0 mi northeast of town of Big Creek.

DRAINAGE AREA.—1.65 mi^2.

PERIOD OF RECORD.—October 1986 to September 1998, October 2000 to September 2001. Prior to October 1991 published as "at Diversion Dam."

GAGE.—Water-stage recorder and 90° V-notch weir control. Elevation of gage is 7,260 ft above sea level, from topographic map.

REMARKS.—Records of fishery release normally computed only during periods of diversion to Ward Tunnel. Diversion during the current water year occurred May 9 to June 9, June 12–14, and July 6–10, and were estimated June 4–14. See schematic diagram of upper San Joaquin River Basin.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	1.3	---	---	---
2	---	---	---	---	---	---	---	---	1.3	---	---	---
3	---	---	---	---	---	---	---	---	1.3	---	---	---
4	---	---	---	---	---	---	---	---	1.3	---	---	---
5	---	---	---	---	---	---	---	---	1.2	---	---	---
6	---	---	---	---	---	---	---	---	1.2	.33	---	---
7	---	---	---	---	---	---	---	---	1.2	1.0	---	---
8	---	---	---	---	---	---	---	---	1.2	.72	---	---
9	---	---	---	---	---	---	---	e1.7	1.2	.55	---	---
10	---	---	---	---	---	---	---	e1.5	1.2	.48	---	---
11	---	---	---	---	---	---	---	e1.4	1.2	---	---	---
12	---	---	---	---	---	---	---	1.4	1.2	---	---	---
13	---	---	---	---	---	---	---	1.4	1.2	---	---	---
14	---	---	---	---	---	---	---	1.2	1.2	---	---	---
15	---	---	---	---	---	---	---	1.2	---	---	---	---
16	---	---	---	---	---	---	---	1.1	---	---	---	---
17	---	---	---	---	---	---	---	1.1	---	---	---	---
18	---	---	---	---	---	---	---	1.1	---	---	---	---
19	---	---	---	---	---	---	---	1.1	---	---	---	---
20	---	---	---	---	---	---	---	1.1	---	---	---	---
21	---	---	---	---	---	---	---	1.1	---	---	---	---
22	---	---	---	---	---	---	---	1.1	---	---	---	---
23	---	---	---	---	---	---	---	1.1	---	---	---	---
24	---	---	---	---	---	---	---	1.0	---	---	---	---
25	---	---	---	---	---	---	---	1.0	---	---	---	---
26	---	---	---	---	---	---	---	1.0	---	---	---	---
27	---	---	---	---	---	---	---	1.0	---	---	---	---
28	---	---	---	---	---	---	---	1.0	---	---	---	---
29	---	---	---	---	---	---	---	1.1	---	---	---	---
30	---	---	---	---	---	---	---	1.3	---	---	---	---
31	---	---	---	---	---	---	---	1.3	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

11230600 CAMP 62 CREEK BELOW DIVERSION DAM, NEAR BIG CREEK, CA

LOCATION.—Lat 37°18'32", long 119°01'37", unsurveyed, T.7 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 30 ft downstream from diversion dam, 1.4 mi southwest of Mono Hot Springs, and 13.5 mi northeast of town of Big Creek.

DRAINAGE AREA.—1.97 mi^2.

PERIOD OF RECORD.—October 1986 to September 1998, October 2000 to September 2001. Prior to October 1991 published as "at Diversion Dam."

GAGE.—Water-stage recorder and 90° V-notch weir control. Elevation of gage is 7,320 ft above sea level, from topographic map.

REMARKS.—Records of fishery release normally computed only during periods of diversion to Ward Tunnel. Diversion during the current water year occurred May 12 to June 29 and July 4–18. Flow over spillway bypasses this station. Discharge represents the combined flow of spill and or release from diversion dam. See schematic diagram of upper San Joaquin River Basin.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.52	---	---	---
2	---	---	---	---	---	---	---	---	.51	---	---	---
3	---	---	---	---	---	---	---	---	.51	---	---	---
4	---	---	---	---	---	---	---	---	.51	.36	---	---
5	---	---	---	---	---	---	---	---	.51	.36	---	---
6	---	---	---	---	---	---	---	---	.51	.36	---	---
7	---	---	---	---	---	---	---	---	.51	e.36	---	---
8	---	---	---	---	---	---	---	---	.51	e.36	---	---
9	---	---	---	---	---	---	---	---	.51	e.36	---	---
10	---	---	---	---	---	---	---	---	.51	e.36	---	---
11	---	---	---	---	---	---	---	---	.51	e.37	---	---
12	---	---	---	---	---	---	---	.54	.51	.38	---	---
13	---	---	---	---	---	---	---	.54	.51	.38	---	---
14	---	---	---	---	---	---	---	.54	.51	.38	---	---
15	---	---	---	---	---	---	---	.53	.51	.37	---	---
16	---	---	---	---	---	---	---	.53	.51	.37	---	---
17	---	---	---	---	---	---	---	.53	.51	.37	---	---
18	---	---	---	---	---	---	---	.53	.46	.37	---	---
19	---	---	---	---	---	---	---	.53	.38	---	---	---
20	---	---	---	---	---	---	---	.53	.38	---	---	---
21	---	---	---	---	---	---	---	.53	.38	---	---	---
22	---	---	---	---	---	---	---	.53	.38	---	---	---
23	---	---	---	---	---	---	---	.53	.38	---	---	---
24	---	---	---	---	---	---	---	.52	.38	---	---	---
25	---	---	---	---	---	---	---	.52	.37	---	---	---
26	---	---	---	---	---	---	---	.52	.36	---	---	---
27	---	---	---	---	---	---	---	.52	.36	---	---	---
28	---	---	---	---	---	---	---	.52	.36	---	---	---
29	---	---	---	---	---	---	---	.52	.36	---	---	---
30	---	---	---	---	---	---	---	.52	---	---	---	---
31	---	---	---	---	---	---	---	.52	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

11231000 LAKE THOMAS A. EDISON NEAR BIG CREEK, CA

LOCATION.—Lat 37°22'09", long 118°59'17", unsurveyed, T.6 1/2 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in outlet works of Vermillion Valley Dam, on Mono Creek, and 18.1 mi northeast of town of Big Creek.

DRAINAGE AREA.—90.0 mi^2.

PERIOD OF RECORD.—October 1954 to current year. Prior to 1960, maximum and minimum daily contents were published.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Lake is formed by earthfill dam; dam completed and storage began Oct. 12, 1954. Usable capacity, 125,035 acre-ft, between elevations 7,508.9 ft, invert of outlet works, and 7,642.50 ft, top of gates in service spillway. Water is diverted at times into lake from Warm Creek (station 11231700). Water is released for diversion to Ward Tunnel via Mono Creek Conduit (station 11231550). Records, including extremes, represent contents at 2400 hours. See schematic diagram of upper San Joaquin River Basin.

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, 125,983 acre-ft, Sept. 26, 1982, elevation, 7,643.55 ft; minimum since appreciable storage was attained, 4,553 acre-ft, Dec. 27, 1987, elevation, 7,552.07 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 84,702 acre-ft, June 30, elevation, 7,619.82 ft; minimum, 39,459 acre-ft, Mar. 23, elevation, 7,589.21 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated July 22, 1955)

7,550	3,567	7,570	18,137	7,600	53,769	7,630	102,367
7,555	6,147	7,580	28,515	7,610	68,616	7,640	120,424
7,560	9,521	7,590	40,454	7,620	85,006	7,644	127,820

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79294	78831	78432	58224	46097	40733	41281	48889	77228	84599	77969	55594
2	79195	78831	78432	57443	45620	40658	41510	49781	78019	84396	77607	54743
3	79195	78831	78432	57097	45227	40581	41739	50272	78315	84092	76816	53981
4	79195	78831	78432	56321	44990	40963	41971	50763	78714	83788	76031	53225
5	79195	78831	78233	55551	44754	40963	42124	51340	79012	83889	75246	52806
6	79294	78730	78035	54870	44361	40810	42356	52084	79411	83889	74564	52640
7	79294	78730	77640	54108	44049	40733	42510	53002	79810	84092	74078	52472
8	79294	78730	77048	53434	43737	40658	42587	54009	79909	84193	73301	52472
9	79294	78730	76555	52680	43427	40581	42741	55110	80310	84295	72529	52222
10	79294	78730	75769	52016	43192	40505	42895	56307	80511	84295	71949	51974
11	79294	78730	74986	51519	42959	40429	42972	57515	80811	84193	71183	51808
12	79294	78631	74111	51271	42496	40278	43050	58647	81598	83889	70418	51561
13	79294	78631	73333	50940	42266	40202	43206	59434	81900	83585	69563	51395
14	79247	78631	72561	50613	42189	40202	43206	60140	82103	83281	68924	51229
15	79123	78831	71789	50204	42035	40127	43439	60936	82203	83179	68294	50982
16	79046	78730	71023	50040	41957	40051	43517	62099	82305	82675	67667	50818
17	79046	78730	70164	50040	41802	39976	43751	63362	82505	82675	67039	e48156
18	79046	78730	69405	49959	41650	39976	43907	64454	82809	82675	66419	e47776
19	79046	78730	68647	49876	41573	39899	44140	65371	83112	82472	65799	e47396
20	79046	78730	67709	49712	41497	39976	44296	66389	83314	82170	65156	46984
21	79046	78730	66961	49631	41420	39976	44532	67506	83415	81968	64333	46904
22	78946	78730	66127	49388	41420	39534	44689	68631	83517	81766	63422	46825
23	78946	78730	65386	49064	41268	39459	45004	69674	83991	81464	62607	46745
24	78946	78730	64561	48822	41268	39534	45240	70721	84092	81063	61801	46745
25	78946	78631	63739	48497	41192	39534	45555	71773	84193	80762	60996	46666
26	79046	78531	63016	48174	41039	39686	46030	72737	84295	80460	60199	46587
27	79046	78432	62204	47853	40963	39762	46507	73607	84396	80160	59404	46587
28	79046	78432	61309	47452	40810	39988	46904	74288	84499	79560	58617	46507
29	79046	78432	60598	47212	---	40214	47465	75067	84599	79062	57832	46441
30	79046	78432	59802	46891	---	40594	48026	75754	84702	78664	57053	46361
31	78831	---	59011	46414	---	40899	---	76537	---	78365	56364	---
MAX	79294	78831	78432	58224	46097	40963	48026	76537	84702	84599	77969	55594
MIN	78831	78432	59011	46414	40810	39459	41281	48889	77228	78365	56364	46361
a	7616.32	7616.08	7603.66	7594.60	7590.28	7590.35	7595.81	7614.81	7617.82	7616.04	7601.89	7594.56
b	-564	-399	-19421	-12597	-5604	+89	+7127	+28511	+8165	-6337	-22001	-10003

CAL YR 2000 b +9053
WTR YR 2001 b -33034

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11231500 MONO CREEK BELOW LAKE THOMAS A. EDISON, CA

LOCATION.—Lat 37°21'41", long 118°59'28", unsurveyed, T.6 1/2 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 0.5 mi upstream from diversion dam, 0.9 mi downstream from Vermilion Valley Dam, and 1.0 mi south of Lake Thomas A. Edison.

DRAINAGE AREA.—92.5 mi^2.

PERIOD OF RECORD.—October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

REVISED RECORDS.—WSP 1011: 1943. WSP 1515: 1956. WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 7,380 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Lake Thomas A. Edison (station 11231000) 1 mi upstream beginning Oct. 12, 1954. Water is diverted at times into the basin from Warm Creek (station 11231700) to Lake Thomas A. Edison. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,160 ft^3/s, Sept. 26, 1982, gage height, 8.87 ft; minimum daily, 0.3 ft^3/s, Nov. 11, 12, 1954.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	31	21	398	180	82	17	19	19	114	201	407
2	22	28	21	398	180	82	17	19	19	164	238	407
3	22	28	21	394	180	82	17	19	19	247	378	404
4	22	28	21	394	180	82	17	19	19	247	426	403
5	22	28	21	394	180	82	17	19	19	247	426	242
6	22	23	103	392	180	82	17	19	19	247	426	97
7	22	17	250	389	180	82	17	19	19	151	291	98
8	22	20	294	389	180	82	17	19	19	125	426	99
9	22	21	297	389	180	82	17	19	19	125	426	99
10	22	21	335	389	180	82	17	19	19	124	426	99
11	22	21	375	297	180	82	17	19	19	193	426	99
12	22	21	398	198	149	82	17	19	19	231	426	99
13	22	21	398	198	99	82	17	19	19	230	426	99
14	22	21	397	198	88	82	17	19	19	226	394	99
15	22	21	405	147	82	82	17	19	19	229	416	99
16	22	21	412	86	82	82	17	19	19	115	416	99
17	22	21	412	85	82	82	17	19	19	20	416	99
18	22	21	412	85	82	82	17	19	19	70	416	53
19	22	21	411	85	82	82	17	19	19	162	178	29
20	24	21	407	85	82	82	18	19	19	201	125	29
21	25	21	407	85	82	82	18	19	19	201	412	29
22	25	22	407	126	82	82	18	19	19	201	412	29
23	31	21	405	183	82	82	18	19	19	201	412	29
24	20	21	403	183	82	82	19	19	19	201	412	30
25	21	21	403	183	82	82	19	19	19	201	412	31
26	27	21	403	183	82	82	19	19	19	201	412	31
27	24	21	403	183	82	65	19	19	19	201	412	31
28	24	21	402	183	82	17	19	19	19	201	412	31
29	28	21	398	183	---	17	19	19	19	201	410	31
30	28	21	398	183	---	17	19	19	19	201	407	31
31	31	---	398	181	---	17	---	19	---	201	407	---
TOTAL	726	666	9838	7246	3464	2265	528	589	570	5679	11823	3462
MEAN	23.4	22.2	317	234	124	73.1	17.6	19.0	19.0	183	381	115
MAX	31	31	412	398	180	82	19	19	19	247	426	407
MIN	20	17	21	85	82	17	17	19	19	20	125	29
AC-FT	1440	1320	19510	14370	6870	4490	1050	1170	1130	11260	23450	6870

11231500 MONO CREEK BELOW LAKE THOMAS A. EDISON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.4	29.4	31.4	33.3	39.8	59.4	170	457	548	270	79.6	31.3
MAX	60.8	124	127	76.8	74.4	94.8	282	714	1135	672	233	86.6
(WY)	1946	1951	1951	1951	1951	1934	1926	1952	1938	1938	1938	1938
MIN	11.3	10.5	12.0	14.0	17.0	25.0	77.8	197	79.6	36.6	17.6	11.5
(WY)	1925	1930	1931	1949	1949	1924	1948	1933	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1922 - 1954		
ANNUAL MEAN	148		
HIGHEST ANNUAL MEAN	268		1938
LOWEST ANNUAL MEAN	52.8		1924
HIGHEST DAILY MEAN	1550	Jun 3	1938
LOWEST DAILY MEAN	8.0	Sep 29	1924
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 28	1924
MAXIMUM PEAK FLOW	1760	Jun 2	1938
MAXIMUM PEAK STAGE	8.62	Jun 2	1938
ANNUAL RUNOFF (AC-FT)	107300		
10 PERCENT EXCEEDS	470		
50 PERCENT EXCEEDS	48		
90 PERCENT EXCEEDS	18		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

MEAN	100	164	202	212	205	185	125	67.4	83.4	210	237	179
MAX	324	436	437	467	472	479	647	515	577	684	424	450
(WY)	1998	1999	1968	1984	1973	1973	1983	1983	1969	1995	1999	1994
MIN	11.0	12.1	9.05	9.95	10.4	13.8	12.7	12.7	11.5	12.1	12.2	14.0
(WY)	1972	1982	1991	1991	1991	1990	1966	1966	1977	1977	1981	1966

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001	
ANNUAL TOTAL	48460		46856			
ANNUAL MEAN	132		128		164	
HIGHEST ANNUAL MEAN					366	1983
LOWEST ANNUAL MEAN					53.2	1977
HIGHEST DAILY MEAN	430	Aug 3	426	Aug 4	2080	Sep 26 1982
LOWEST DAILY MEAN	16	Jan 1	17	Nov 7	4.1	Dec 12 1990
ANNUAL SEVEN-DAY MINIMUM	16	Jan 1	17	Mar 28	4.2	Dec 12 1990
MAXIMUM PEAK FLOW			426	Aug 3	2160	Sep 26 1982
MAXIMUM PEAK STAGE			6.40	Aug 3	8.87	Sep 26 1982
ANNUAL RUNOFF (AC-FT)	96120		92940		118900	
10 PERCENT EXCEEDS	398		403		426	
50 PERCENT EXCEEDS	29		82		99	
90 PERCENT EXCEEDS	17		19		14	

11231550 MONO CREEK CONDUIT NEAR MONO HOT SPRINGS, CA

LOCATION.—Lat 37°21'36", long 118°59'51", unsurveyed, T.6 1/2 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 40 ft upstream from diversion dam, 1.0 mi southwest of Lake Thomas A. Edison, and 2.5 mi northeast of Mono Hot Springs.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Discharge computed as difference between flow at Mono Creek below Lake Thomas A. Edison (station 11231500) and Mono Creek below diversion dam (station 11231600). Datum of conduit invert is 7,338 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Conduit diverts at diversion dam on Mono Creek to Ward Tunnel and Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) for further power development in Big Creek powerplants. See schematic diagram of upper San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 499 ft^3/s, Apr. 7, 1995; minimum daily, −18 ft^3/s, June 11, 1993 (reverse flow from Bear Creek Conduit).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1	384	167	70	5	6	6	99	190	397
2	.00	1	1	384	167	70	5	6	6	152	227	397
3	.00	1	1	380	167	70	5	6	6	237	368	394
4	.00	2	1	380	167	70	6	6	6	237	416	393
5	.00	2	1	380	167	70	6	6	6	237	416	232
6	1	1	81	378	167	70	5	6	6	237	416	86
7	1	.00	229	375	167	70	5	6	6	141	281	87
8	1	.00	271	375	167	70	5	6	6	115	416	88
9	1	.00	274	375	167	70	5	6	6	115	416	88
10	1	.00	313	375	167	70	5	6	6	114	416	88
11	1	.00	353	283	167	70	5	6	6	181	416	88
12	1	.00	376	185	136	70	5	6	6	220	416	88
13	.00	.00	376	185	87	70	5	6	6	219	416	89
14	.00	.00	375	185	76	70	5	6	6	218	384	90
15	1	.00	392	134	70	70	5	6	6	105	406	90
16	1	.00	398	74	70	70	5	6	6	9	406	90
17	1	.00	398	73	70	70	5	6	6	59	406	90
18	1	.00	398	73	70	70	5	6	6	151	406	44
19	1	.00	397	73	70	70	5	6	6	190	167	20
20	1	.00	393	73	70	70	6	6	6	190	114	20
21	.00	.00	393	73	70	70	6	6	6	190	402	20
22	.00	.00	393	114	70	70	6	6	6	190	402	20
23	.00	.00	391	170	70	70	6	6	6	190	402	20
24	.00	.00	389	170	70	70	7	6	6	190	402	19
25	.00	.00	389	170	70	70	6	6	6	190	402	17
26	4	.00	389	170	70	70	6	6	6	190	402	17
27	1	.00	389	170	70	53	6	6	6	190	402	17
28	1	.00	388	170	70	6	6	6	6	190	402	17
29	4	.00	384	170	---	6	6	6	6	190	402	17
30	1	1	384	170	---	6	6	6	6	190	397	17
31	1	---	384	168	---	6	---	6	---	190	397	---
TOTAL	25.00	8.00	9302	6839	3116	1897	164	186	180	5316	11511	3140
MEAN	.81	.27	300	221	111	61.2	5.47	6.00	6.00	171	371	105
MAX	4.0	2.0	398	384	167	70	7.0	6.0	6.0	237	416	397
MIN	.00	.00	1.0	73	70	6.0	5.0	6.0	6.0	9.0	114	17
AC-FT	50	16	18450	13570	6180	3760	325	369	357	10540	22830	6230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	103	149	141	102	94.8	160	120	61.1	65.6	176	276	196
MAX	311	426	421	364	395	464	400	207	203	417	409	440
(WY)	1998	1999	1987	1999	1996	1996	1996	1995	1997	1989	1999	1994
MIN	.81	.27	1.39	4.08	.000	8.00	5.47	6.00	6.00	.000	93.0	11.8
(WY)	2001	2001	1991	1991	1997	1990	2001	2001	2001	1995	1996	1989

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	42863.20		41684.00			
ANNUAL MEAN	117		114		137	
HIGHEST ANNUAL MEAN					227	1997
LOWEST ANNUAL MEAN					50.5	1990
HIGHEST DAILY MEAN	414	Aug 8	416	Aug 4	499	Apr 7 1995
LOWEST DAILY MEAN	.00	Sep 24	.00	Oct 1	-18	Jun 11 1993
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 24	.00	Nov 7	.00	Dec 5 1990
ANNUAL RUNOFF (AC-FT)	85020		82680		99560	
10 PERCENT EXCEEDS	384		391		408	
50 PERCENT EXCEEDS	12		70		68	
90 PERCENT EXCEEDS	.00		.60		6.0	

11231600 MONO CREEK BELOW DIVERSION DAM, NEAR MONO HOT SPRINGS, CA

LOCATION.—Lat 37°21'36", long 118°59'51", unsurveyed, T.6 1/2 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 20 ft downstream from diversion dam, 1.0 mi southwest of Lake Thomas A. Edison, and 2.5 mi northeast of Mono Hot Springs.

DRAINAGE AREA.—92.8 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Prior to October 1991, published as "at Diversion Dam."

GAGE.—Acoustic-velocity meter on low-flow discharge, and water-stage recorder on diversion reservoir. Elevation of gage is 7,340 ft above sea level, from topographic map. Prior to Oct. 1, 1991, at datum 10 ft higher.

REMARKS.—Flow regulated by diversion reservoir and Lake Thomas A. Edison (station 11231000). Most of the flow is diverted at the diversion dam to Mono Creek Conduit (station 11231550), then to Ward Tunnel and Huntington Lake (station 11236000) via Portal Powerplant (station 11235500) for further power development in Big Creek powerplants. Discharge, including extremes, represents the combined flow at Mono Creek and spill at diversion dam. See schematic diagram of upper San Joaquin River 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, 1,300 ft^3/s, July 11, 12, 1995; minimum daily, 4.1 ft^3/s, Dec. 12–16, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	31	20	14	13	12	12	13	13	15	11	10
2	23	27	20	14	13	12	12	13	13	12	11	10
3	22	27	20	14	13	12	12	13	13	9.8	9.9	10
4	22	26	20	14	13	12	11	13	13	10	9.8	10
5	22	26	20	14	13	12	11	13	13	9.9	9.7	10
6	21	22	22	14	13	12	12	13	13	9.8	10	11
7	21	20	21	14	13	12	12	13	13	9.8	10	11
8	21	21	23	14	13	12	12	13	13	9.8	10	11
9	21	21	23	14	13	12	12	13	13	9.9	10	11
10	21	21	22	14	13	12	12	13	13	10	10	11
11	21	21	22	14	13	12	12	13	13	12	10	11
12	21	21	22	13	13	12	12	13	13	11	10	11
13	22	21	22	13	12	12	12	13	13	11	10	10
14	22	21	21	13	12	12	12	13	13	11	10	9.3
15	21	21	13	13	12	12	12	13	13	11	10	9.2
16	21	21	14	12	12	12	12	13	13	10	10	9.2
17	21	21	14	12	12	12	12	13	13	11	10	9.2
18	21	21	14	12	12	12	12	13	13	11	10	9.2
19	21	21	14	12	12	12	12	13	13	11	11	9.2
20	23	21	14	12	12	12	12	13	13	11	11	9.2
21	25	21	14	12	12	12	12	13	13	11	10	9.2
22	25	21	14	12	12	12	12	13	13	11	10	9.1
23	32	21	14	13	12	12	12	13	13	11	10	9.2
24	23	21	14	13	12	12	13	13	13	11	10	11
25	23	21	14	13	12	12	13	13	13	11	10	14
26	23	21	14	13	12	12	13	13	13	11	10	14
27	23	21	14	13	12	12	13	13	13	11	10	14
28	23	21	14	13	12	11	13	13	13	11	10	14
29	24	21	14	13	---	11	13	13	13	11	10	14
30	27	20	14	13	---	11	13	13	13	11	10	14
31	30	---	14	13	---	11	---	13	---	11	10	---
TOTAL	709	661	535	407	348	368	365	403	390	337.0	313.4	324.0
MEAN	22.9	22.0	17.3	13.1	12.4	11.9	12.2	13.0	13.0	10.9	10.1	10.8
MAX	32	31	23	14	13	12	13	13	13	15	11	14
MIN	21	20	13	12	12	11	11	13	13	9.8	9.7	9.1
AC-FT	1410	1310	1060	807	690	730	724	799	774	668	622	643

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	10.3	9.98	9.55	8.72	8.97	8.72	9.66	12.9	43.2	73.5	22.6	12.8
MAX	22.9	23.1	27.0	20.9	25.5	17.7	18.5	18.6	336	684	141	16.9
(WY)	2001	1996	1996	1997	1997	1997	1995	1995	1997	1995	1995	1998
MIN	6.72	5.62	5.69	5.66	5.69	5.84	5.88	9.45	9.98	9.91	9.85	9.67
(WY)	1995	1992	1993	1993	1993	1990	1992	1994	1990	1991	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	5610.8		5160.4			
ANNUAL MEAN	15.3		14.1		19.3	
HIGHEST ANNUAL MEAN					79.4	1995
LOWEST ANNUAL MEAN					7.83	1992
HIGHEST DAILY MEAN	32	Oct 23	32	Oct 23	1300	Jul 11 1995
LOWEST DAILY MEAN	9.7	Jan 10	9.1	Sep 22	4.1	Dec 12 1990
ANNUAL SEVEN-DAY MINIMUM	9.7	Feb 11	9.2	Sep 16	4.2	Dec 12 1990
ANNUAL RUNOFF (AC-FT)	11130		10240		14000	
10 PERCENT EXCEEDS	22		21		17	
50 PERCENT EXCEEDS	14		13		10	
90 PERCENT EXCEEDS	9.8		10		5.9	

11231700 WARM CREEK BELOW DIVERSION DAM, NEAR LAKE THOMAS A. EDISON, CA

LOCATION.—Lat 37°23'31", long 119°01'39", unsurveyed, T.6 S., R.27 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 40 ft downstream from diversion dam, 1.5 mi northwest of Lake Thomas A. Edison, and 17.4 mi northeast of town of Big Creek.

DRAINAGE AREA.—2.14 mi^2.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Water-stage recorder and 90° V-notch weir control. Elevation of gage is 8,030 ft above sea level, from topographic map.

REMARKS.—Records normally computed only in summer months or during periods of diversion to Lake Thomas A. Edison. Diversion occurred May 15 to June 12. See schematic diagram of upper San Joaquin River Basin.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.40	---	---	---
2	---	---	---	---	---	---	---	---	.38	---	---	---
3	---	---	---	---	---	---	---	---	.38	---	---	---
4	---	---	---	---	---	---	---	---	.38	---	---	---
5	---	---	---	---	---	---	---	---	.38	---	---	---
6	---	---	---	---	---	---	---	---	.38	---	---	---
7	---	---	---	---	---	---	---	---	.38	---	---	---
8	---	---	---	---	---	---	---	---	.38	---	---	---
9	---	---	---	---	---	---	---	---	.38	---	---	---
10	---	---	---	---	---	---	---	---	.38	---	---	---
11	---	---	---	---	---	---	---	---	.38	---	---	---
12	---	---	---	---	---	---	---	---	.53	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	.49	---	---	---	---
16	---	---	---	---	---	---	---	.49	---	---	---	---
17	---	---	---	---	---	---	---	.49	---	---	---	---
18	---	---	---	---	---	---	---	.49	---	---	---	---
19	---	---	---	---	---	---	---	.47	---	---	---	---
20	---	---	---	---	---	---	---	.46	---	---	---	---
21	---	---	---	---	---	---	---	.45	---	---	---	---
22	---	---	---	---	---	---	---	.44	---	---	---	---
23	---	---	---	---	---	---	---	.44	---	---	---	---
24	---	---	---	---	---	---	---	.43	---	---	---	---
25	---	---	---	---	---	---	---	.42	---	---	---	---
26	---	---	---	---	---	---	---	.42	---	---	---	---
27	---	---	---	---	---	---	---	.42	---	---	---	---
28	---	---	---	---	---	---	---	.41	---	---	---	---
29	---	---	---	---	---	---	---	.40	---	---	---	---
30	---	---	---	---	---	---	---	.40	---	---	---	---
31	---	---	---	---	---	---	---	.40	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

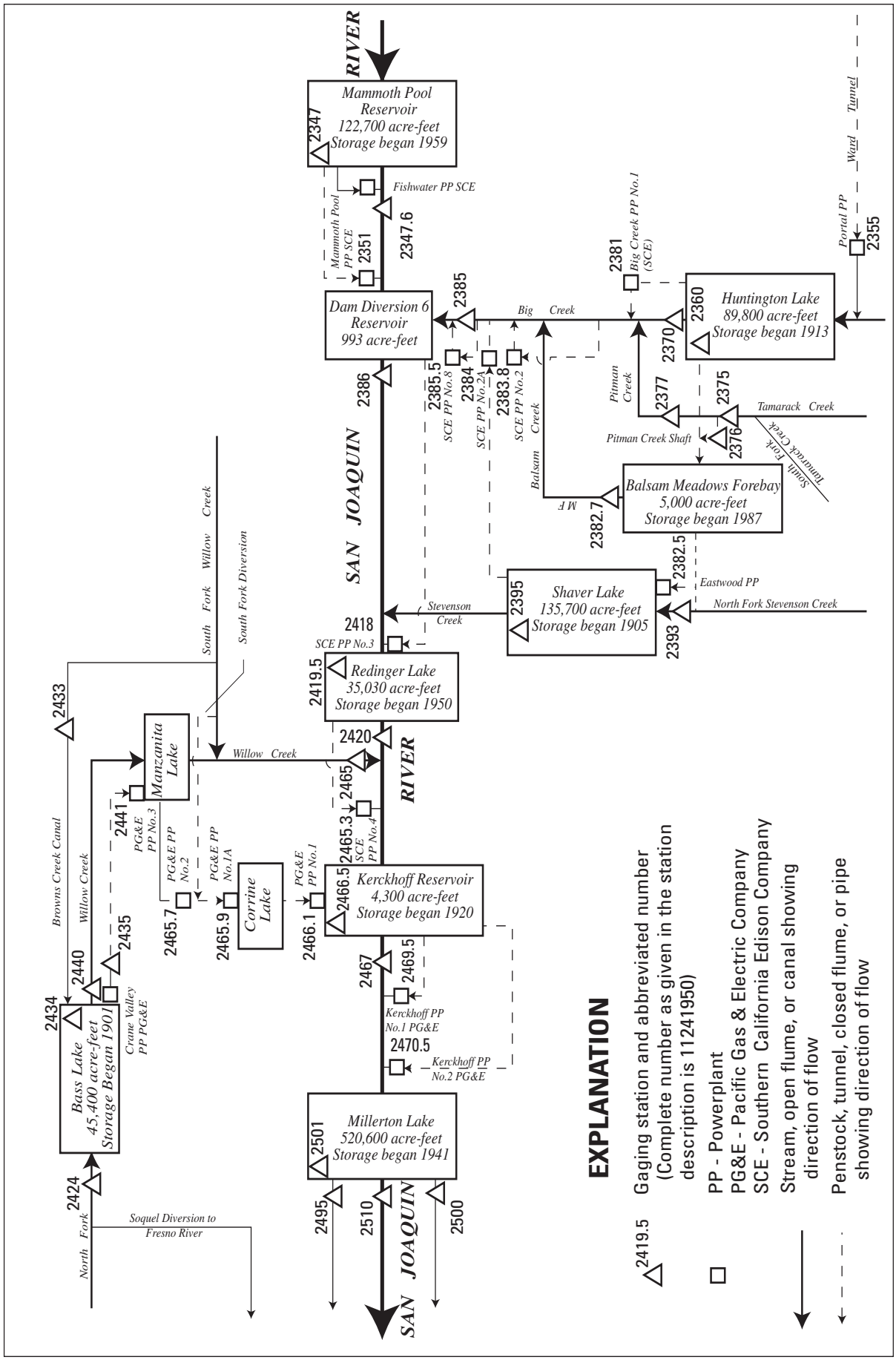

Figure 28. Diversions and storage in lower San Joaquin River Basin.

11234700 MAMMOTH POOL RESERVOIR NEAR BIG CREEK, CA

LOCATION.—Lat 37°19'40", long 119°19'38", in SE 1/4 SE 1/4 sec.10, T.7 S., R.24 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, in gatehouse of power tunnel intake, 0.7 mi northwest of dam on San Joaquin River, and 9.0 mi northwest of town of Big Creek.

DRAINAGE AREA.—995 mi^2.

PERIOD OF RECORD.—October 1959 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed by an earthfill dam; storage began Oct. 8, 1959. Usable capacity, 119,940 acre-ft, between elevations 3,100.00 ft, invert of power tunnel, and 3,330.00 ft, crest of spillway. Additional storage of 2,780 acre-ft is not available for release. Water is diverted from basin through Ward Tunnel (stations 11229500 and 11235500). Water is diverted from Mammoth Pool through tunnel for power development and returned to river 8.5 mi downstream from dam. Records, including extremes, represent usable contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

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. Records not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 128,944 acre-ft, Jan. 2, 1997, elevation, 3,338.00 ft; minimum contents since appreciable storage was attained, 1,134 acre-ft, Sept. 25, 1992, elevation, 3,112.82 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 120,228 acre-ft, May 26, elevation, 3,330.26 ft; minimum, 12,510 acre-ft, Apr. 15, elevation, 3,174.79 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Nov. 6, 1959)

3,100	0	3,130	3,114	3,180	14,060	3,260	56,381
3,105	417	3,140	4,605	3,190	17,414	3,280	72,109
3,110	861	3,150	6,402	3,200	21,400	3,300	89,781
3,115	1,355	3,160	8,618	3,220	31,109	3,320	109,336
3,120	1,900	3,170	11,165	3,240	42,787	3,340	131,255

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26180	20632	20626	16747	17327	19857	34024	39287	119547	103169	87620	45565
2	24793	21038	19589	16903	17569	19861	34432	43684	119023	102600	86328	44530
3	23463	21473	18700	17016	17863	19398	33868	44988	117799	102071	85055	43575
4	22545	21917	18998	17164	18222	19817	32181	45584	116005	101812	84132	42712
5	21720	22365	19247	17251	18786	20015	30414	46915	115082	101941	83400	41797
6	21392	22819	17966	17399	19322	20185	28150	49907	114130	102071	82161	40775
7	21129	23278	17493	17482	19589	19342	25966	54527	113750	102430	80840	39846
8	20859	23704	16991	17659	19712	18594	23948	59919	113718	102430	79562	39804
9	20218	24134	16581	17463	19621	17989	21759	65206	113623	101623	78108	39093
10	19688	24545	15629	17523	19449	17009	19489	70032	113127	100730	76955	37939
11	19752	24938	14547	17787	19442	16273	17814	74977	112654	100166	76260	37154
12	19744	25298	13777	17947	19203	15251	15483	79160	111992	99359	74500	36460
13	19223	25681	13470	18191	19092	14528	14110	81650	111605	98045	72992	35807
14	19136	26090	13844	18447	19116	14299	13211	84593	111041	98017	71667	35168
15	18993	26463	14107	18610	18731	14646	12510	87225	110477	97949	70008	34493
16	18381	26844	14202	18551	18766	15005	13377	91800	110124	97544	68718	34611
17	18027	27207	14394	18497	18700	15536	15126	96412	109408	97111	66823	34740
18	17207	27588	14464	17901	18700	16471	15887	100720	108277	96507	65014	34102
19	15552	27965	14736	17602	18891	17058	16667	103981	107468	95878	63397	33389
20	15901	28345	14707	17178	19132	17997	17538	106531	107121	95467	60979	32450
21	15901	28484	14788	17131	19279	19748	17883	109233	106531	95268	59609	31744
22	15716	27981	14898	17084	19354	20688	17761	112076	105934	95059	58257	31050
23	16242	26279	15159	17009	19346	23921	17301	114828	105742	94357	57030	30707
24	16266	25734	15416	17098	19469	27328	17997	117072	105792	93494	55587	30196
25	16571	24933	15589	17058	19497	30334	20108	118990	105600	92542	54678	29699
26	16906	24495	15639	16920	19597	29826	23386	120228	105358	91584	53500	29196
27	17051	24130	15854	16938	19656	29505	26653	120084	105056	90620	51929	28686
28	17742	23260	16062	16853	19740	29489	29626	119842	104694	90517	50625	28191
29	18696	23057	16303	16772	---	30568	31559	119580	104272	90461	49242	27685
30	19302	21764	16474	16903	---	31239	34560	119601	103741	89633	48492	27106
31	20190	---	16684	17138	---	32384	---	119623	---	88808	47170	---
MAX	26180	28484	20626	18610	19740	32384	34560	120228	119547	103169	87620	45565
MIN	15552	20632	13470	16747	17327	14299	12510	39287	103741	88808	47170	27106
a	3197.10	3200.84	3187.96	3189.24	3195.99	3222.34	3226.26	3329.71	3314.49	3298.95	3246.79	3212.32
b	-5756	+1574	-5080	+454	+2602	+12644	+2176	+85063	-15882	-14933	-41638	-20064

CAL YR 2000 b +2689
WTR YR 2001 b +1160

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11234760 SAN JOAQUIN RIVER ABOVE SHAKEFLAT CREEK, NEAR BIG CREEK, CA

LOCATION.—Lat 37°19'00", long 119°19'43", in NE 1/4 SE 1/4 sec.15, T.7 S., R.24 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 1,500 ft upstream from Shakeflat Creek, 4,900 ft downstream from Mammoth Pool Dam, and 9.0 mi northwest of town of Big Creek.

DRAINAGE AREA.—1,003 mi^2.

PERIOD OF RECORD.—October 1959 to current year.

GAGE.—Water-stage recorder. Datum of gage is 2,865.50 ft above sea level (levels by Southern California Edison Co.). Since 1961, supplementary water-stage recorder and sharp-crested weir at different datum at outlet of dam 4,900 ft upstream, used for low flows of 60 ft^3/s or less.

REMARKS.—Flow regulated by Mammoth Pool Reservoir (station 11234700) 4,900 ft upstream. Diversions upstream through Ward Tunnel (see stations 11229500 and 11235500). Since March 1960, most of the water is diverted past this station to Mammoth Pool Powerplant (station 11235100). See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 80,000 ft^3/s, Jan. 2, 1997, gage height, 32.00 ft, from floodmarks, from rating curve extended above 20,300 ft^3/s; minimum daily, 0.3 ft^3/s, Oct. 14, Dec. 5, 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	18	14	14	14	12	14	26	59	37	36	33
2	31	13	14	14	14	13	14	27	59	37	36	33
3	23	14	14	14	14	13	14	34	59	37	35	33
4	23	14	14	14	14	13	14	52	38	37	35	34
5	23	14	14	14	14	13	14	52	16	37	35	35
6	23	14	14	14	14	13	14	52	16	37	35	35
7	23	14	14	14	14	14	14	53	16	37	35	35
8	23	14	14	14	14	15	13	54	16	37	34	35
9	23	14	14	14	14	14	13	54	16	e38	34	35
10	23	14	14	14	14	13	13	54	16	e42	34	35
11	23	14	14	14	16	13	19	55	16	e40	34	35
12	23	14	14	14	23	13	27	56	16	e38	34	35
13	23	14	14	14	23	13	27	56	16	e37	34	35
14	23	14	14	14	23	13	27	55	16	e37	34	35
15	23	14	14	14	19	13	27	56	16	e37	34	35
16	23	14	14	14	15	13	27	56	16	e37	34	34
17	23	14	14	14	15	13	27	57	16	e36	33	34
18	23	14	14	14	15	13	27	61	16	e36	33	34
19	23	14	14	14	15	13	27	61	16	e36	33	34
20	22	14	14	14	15	13	27	61	16	36	33	34
21	23	14	14	14	15	13	27	62	16	36	33	34
22	23	14	14	14	15	13	27	62	16	36	33	34
23	23	14	14	14	15	13	27	62	16	36	32	33
24	23	14	14	18	15	13	27	62	16	36	33	33
25	23	14	14	17	15	14	27	63	16	36	32	23
26	23	14	14	14	15	14	28	148	16	36	33	13
27	23	14	14	14	15	14	28	416	16	36	33	13
28	23	14	14	14	14	14	29	227	25	36	33	13
29	23	14	14	14	---	14	29	87	37	36	33	13
30	23	14	14	14	---	14	27	59	37	36	33	13
31	23	---	14	14	---	14	---	59	---	36	33	---
TOTAL	731	423	434	441	438	413	675	2339	682	1142	1046	910
MEAN	23.6	14.1	14.0	14.2	15.6	13.3	22.5	75.5	22.7	36.8	33.7	30.3
MAX	34	18	14	18	23	15	29	416	59	42	36	35
MIN	22	13	14	14	14	12	13	26	16	36	32	13
AC-FT	1450	839	861	875	869	819	1340	4640	1350	2270	2070	1800
a	16110	10270	16470	12740	16520	66020	110500	148100	70640	35090	50570	26130

e Estimated.
a Diversion, in acre-feet, to Mammoth Pool Powerplant (station 11235100), provided by Southern California Edison Co.

11234760 SAN JOAQUIN RIVER ABOVE SHAKEFLAT CREEK, NEAR BIG CREEK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.5	13.0	15.0	94.6	66.1	94.8	203	1393	2108	935	75.5	23.8
MAX	61.9	20.1	66.3	2872	754	1111	2489	9681	12400	7169	1184	45.3
(WY)	1960	1974	1967	1997	1980	1995	1995	1969	1983	1995	1983	1978
MIN	12.6	.82	3.06	10.2	10.8	10.9	12.3	12.9	11.8	12.4	12.8	12.4
(WY)	1961	1960	1960	1986	1985	1960	1964	1961	1961	1961	1972	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	84729		9674			
ANNUAL MEAN	232		26.5		421	
HIGHEST ANNUAL MEAN					2022	1983
LOWEST ANNUAL MEAN					13.2	1961
HIGHEST DAILY MEAN	4730	May 28	416	May 27	26000	Jan 3 1997
LOWEST DAILY MEAN	11	Jan 1	12	Mar 1	.30	Oct 14 1959
ANNUAL SEVEN-DAY MINIMUM	11	Jan 1	13	Feb 28	.57	Dec 1 1959
MAXIMUM PEAK FLOW			552	May 27	80000	Jan 2 1997
MAXIMUM PEAK STAGE			5.74	May 27	32.00	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	168100		19190		305200	
TOTAL DIVERSION (AC-FT) a	762300		579200			
10 PERCENT EXCEEDS	771		37		494	
50 PERCENT EXCEEDS	23		17		15	
90 PERCENT EXCEEDS	12		14		12	

a Diversion, in acre-feet, to Mammoth Pool Powerplant (station 11235100), provided by Southern California Edison Co.

11235500 PORTAL POWERPLANT AT HUNTINGTON LAKE, CA

LOCATION.—Lat 37°15'25", long 119°09'30", in SE 1/4 SW 1/4 sec.5, T.8 S., R.26 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in powerplant at tunnel outlet, at east end of Huntington Lake, 0.9 mi east of Lakeshore Post Office, and 6 mi northeast of town of Big Creek.

PERIOD OF RECORD.—October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1960, published as Ward Tunnel at Outlet. October 1960 to September 1991, published as Ward Tunnel Outlet at Huntington Lake.

GAGE.—Acoustic-velocity meter in tunnel since Dec. 1, 1987. Elevation of gage is 6,980 ft above sea level, from topographic map. Oct. 1, 1968, to Nov. 30, 1987, pressure-differential recorder recorded discharge through penstock. November 1927 to May 23, 1956, water-stage recorder at datum 6,999.00 ft above sea level (levels by Southern California Edison Co.). May 24, 1956, to Sept. 30, 1968, no recorder, see REMARKS below.

REMARKS.—Daily discharge for the period May 24, 1956, to Sept. 30, 1968, computed as the sum of Ward Tunnel at Intake, Mono–Bear Conduit, Camp Creek Conduit, and corrected for change in contents of Portal Forebay. Powerplant receives water from Florence Lake (station 11229600) via Ward Tunnel, receives diversions from Bear and Mono Creeks (stations 11230520 and 11231550), and at times from several other small tributaries to South Fork San Joaquin River. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,080 ft^3/s, June 21, 1935; no flow at times many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	465	397	199	114	613	873	1320	292	514	936
2	.00	.00	473	464	200	113	487	745	1140	489	643	605
3	.00	.00	463	371	200	66	346	548	1070	521	712	447
4	.00	.00	459	412	226	56	293	506	1010	520	661	670
5	.00	.00	413	414	193	138	268	504	1310	551	661	649
6	.00	.00	484	411	207	137	126	558	1390	478	545	592
7	.00	.00	628	410	204	138	144	763	1020	424	460	591
8	.00	187	688	404	241	167	173	755	639	426	551	614
9	.00	268	726	418	208	167	237	851	746	372	531	626
10	.00	559	724	418	207	149	199	637	954	374	476	503
11	.00	470	730	314	207	150	152	603	1020	378	546	621
12	.00	502	709	176	184	149	168	639	958	508	542	579
13	.00	472	622	207	89	149	169	369	984	656	554	571
14	.00	413	732	188	55	155	169	356	829	649	502	571
15	.00	444	479	250	139	205	161	470	542	557	651	559
16	.00	445	481	36	112	182	265	581	660	365	664	376
17	.00	461	471	160	102	153	315	623	800	373	656	285
18	.00	457	447	71	102	215	324	595	594	374	420	410
19	.00	464	415	62	109	380	332	482	792	374	306	355
20	28	362	481	122	109	267	218	506	734	374	149	487
21	30	12	403	92	109	395	233	470	673	375	697	406
22	29	12	395	104	170	267	271	552	674	374	710	410
23	77	26	445	209	116	327	298	719	715	406	707	427
24	104	7.6	430	201	105	299	428	848	741	508	704	410
25	93	21	464	202	106	337	571	1150	712	509	707	433
26	205	13	427	187	106	312	665	1450	659	506	710	504
27	.00	13	402	229	184	340	731	1680	669	479	708	387
28	.00	254	433	223	137	321	727	1610	590	481	678	523
29	.00	422	439	205	---	446	728	1600	559	479	652	415
30	.00	453	390	204	---	451	747	1610	488	309	680	493
31	.00	---	400	213	---	489	---	1640	---	462	779	---
TOTAL	566.00	6737.60	15718	7774	4326	7234	10558	25293	24992	13943	18476	15455
MEAN	18.3	225	507	251	154	233	352	816	833	450	596	515
MAX	205	559	732	464	241	489	747	1680	1390	656	779	936
MIN	.00	.00	390	36	55	56	126	356	488	292	149	285
AC-FT	1120	13360	31180	15420	8580	14350	20940	50170	49570	27660	36650	30650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

MEAN	329	267	274	254	256	296	521	857	922	835	666	505
MAX	757	908	1102	793	806	815	953	1459	1665	1321	1386	1104
(WY)	1996	1983	1946	1985	1985	1985	1936	1946	1974	1956	1995	1983
MIN	.82	.81	5.29	13.4	10.3	78.8	98.9	119	3.93	150	147	2.00
(WY)	1946	1946	1991	1991	1991	1976	1991	1983	1938	1931	1934	1949

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	200142.70		151072.60			
ANNUAL MEAN	547		414		500	
HIGHEST ANNUAL MEAN					748	1997
LOWEST ANNUAL MEAN					196	1977
HIGHEST DAILY MEAN	1690	Jun 4	1680	May 27	2080	Jun 21 1935
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Sep 18 1961
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Dec 2 1969
ANNUAL RUNOFF (AC-FT)	397000		299700		362100	
10 PERCENT EXCEEDS	1250		729		1090	
50 PERCENT EXCEEDS	481		412		465	
90 PERCENT EXCEEDS	.00		18		63	

11236000 HUNTINGTON LAKE NEAR BIG CREEK, CA

LOCATION.—Lat 37°14'04", long 119°12'44", in SW 1/4 sec.14, T.8 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in gate tower of dam No. 1 on Big Creek, and 2.7 mi northeast of town of Big Creek.

DRAINAGE AREA.—80.5 mi^2.

PERIOD OF RECORD.—April 1913 to current year. Prior to October 1926, monthly contents only, published in WSP 1315-A; 1926–31, published in WSP 721. Maximum and minimum daily contents (water years 1913–39) were summarized in WSP 881. Prior to 1960, maximum and minimum daily contents were published.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.). Prior to June 19, 1920, nonrecording gage at same site and datum.

REMARKS.—Lake is formed by four dams; storage began Apr. 11, 1913. Dams were raised in 1914 and again in 1917. Usable capacity, 89,166 acre-ft, between elevations 6,819.90 ft, invert of Outlet Tunnel No. 1, and 6,950.00 ft, spillway crest at Dam 1. Additional storage of 600 acre-ft is not available for release. Lake receives water from South Fork San Joaquin River Basin via Ward Tunnel through Portal Powerplant (station 11235500). Water is diverted from lake through Huntington–Shaver Conduit and Eastwood Powerplant (station 11238250) to Shaver Lake (station 11239500) since Apr. 21, 1928. Water is also diverted to Big Creek Powerplant No. 1 (station 11238100) on Big Creek. Records, including extremes, represent contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

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. Records not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 90,491 acre-ft, May 31, 1926, elevation, 6,950.92 ft; minimum, 2,103 acre-ft, Nov. 6, 1937, elevation, 6,838.53 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 88,737 acre-ft, July 16, elevation, 6,949.70 ft; minimum, 32,581 acre-ft, Dec. 6, elevation, 6,901.95 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Sept. 24, 1964)

6,835	1,552	6,860	7,427	6,900	30,862	6,940	75,344
6,840	2,354	6,870	11,294	6,910	40,217	6,950	89,166
6,845	3,324	6,880	16,371	6,920	50,813	6,951	90,606
6,850	4,480	6,890	22,883	6,930	62,555		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85022	59146	33904	39609	36299	36336	48250	70881	87922	88279	87523	88394
2	84336	57892	34408	39749	36223	36365	49446	73033	88380	88322	87353	88694
3	83581	56605	33949	39679	36518	36251	50379	74429	88022	88366	87438	88423
4	82651	54995	33285	39700	36871	36081	51160	75451	87538	88494	88079	88308
5	81766	53932	33383	39649	37158	35921	51835	76626	87894	88666	88723	88050
6	81009	53084	32581	39649	37476	35723	52265	78080	88308	88551	88408	87807
7	80447	52198	32806	39669	37815	35525	52526	80105	88394	88479	88050	87438
8	79709	51621	33275	39768	38086	35563	52561	81173	87936	88508	87908	87126
9	78622	51217	34087	39928	38437	35638	52766	82624	87622	88066	87595	87097
10	77917	51486	34806	40266	38771	35638	52959	84071	87254	87636	87736	87013
11	77029	51734	35525	40197	39095	35855	53267	85585	87211	86927	88093	86899
12	76118	52004	36565	39958	39065	36043	53611	86402	87168	86999	87723	86658
13	75238	52095	37226	39609	38908	36289	53921	86317	87609	87281	87609	86402
14	74125	51329	37844	39332	38741	36461	54242	85937	87794	88121	87154	85669
15	73336	49359	37980	39095	38145	36776	54590	86105	87666	88708	87338	85093
16	72325	48918	38212	38467	37931	37091	55134	87027	87538	88737	87466	85317
17	71192	47240	38417	38145	37941	37360	55821	87452	87807	88536	87679	85196
18	70351	46017	38565	37496	37999	37728	56184	88479	87894	88380	88222	84127
19	69360	44575	38634	37082	37903	38251	56430	88151	87851	88194	88651	83401
20	68413	44010	38555	36661	37728	38535	56994	87951	87878	87922	88408	82730
21	67611	41751	38339	35732	37554	39164	57408	87566	87878	88093	88121	82864
22	66776	39937	38535	35337	37476	39738	57821	87409	88350	88279	87993	82977
23	65870	39134	38614	35225	37235	40448	58012	87154	88394	87865	87495	82929
24	64894	37641	38604	34779	37235	40980	58596	85992	88222	88008	87466	82664
25	64049	37034	38702	34964	36910	41021	59554	85656	88008	87993	87736	81738
26	63442	36384	38683	35132	36680	41792	60908	85922	87723	87993	87993	81228
27	62764	35836	39046	35384	36651	42518	62826	86191	87965	87936	88222	80283
28	62114	35412	39213	35610	36680	43302	64571	86501	88151	88236	87878	79872
29	61614	34658	39381	35741	---	44375	66347	87027	88279	88579	87438	79804
30	61296	34316	39272	35921	---	45472	68376	87353	88350	88208	87240	79804
31	60385	---	39332	36025	---	46734	---	88079	---	87851	87424	---
MAX	85022	59146	39381	40266	39095	46734	68376	88479	88394	88737	88723	88694
MIN	60385	34316	32581	34779	36223	35525	48250	70881	87168	86927	87154	79804
a	6928.22	6903.86	6909.11	6905.69	6906.38	6916.28	6934.65	6949.24	6949.43	6949.08	6948.78	6943.31
b	-24989	-26069	+5016	-3307	+655	+10054	+21642	+19703	+271	-499	-427	-7620

CAL YR 2000 b +4107
WTR YR 2001 b -5570

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11237000 BIG CREEK BELOW HUNTINGTON LAKE, CA

LOCATION.—Lat 37°13'17", long 119°12'42", in SE 1/4 NW 1/4 sec.23, T.8 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 800 ft upstream from Grouse Creek, 1.0 mi south of main dam of Huntington Lake, and 2.1 mi northeast of town of Big Creek.

DRAINAGE AREA.—81.1 mi^2.

PERIOD OF RECORD.—June 1925 to September 1970, October 1986 to current year.
WATER TEMPERATURE: Water years 1961–70.

REVISED RECORDS.—WSP 1315-A: 1943(M). WSP 1635: 1925–29. WSP 1930: Drainage area.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 6,630 ft above sea level, from topographic map. Prior to Oct. 1, 1942, at datum 1.00 ft lower and Oct. 1, 1942, to Sept. 30, 1948, at datum 1.00 ft higher.

REMARKS.—Flow regulated by Huntington Lake (station 11236000). Diversions to Big Creek Powerplant No. 1 (station 11238100) and Eastwood Powerplant (station 11238250) bypass this station. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,040 ft^3/s, June 23, 1925, gage height, 11.3 ft, present datum; minimum daily, 0.1 ft^3/s, many days in 1931.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	2.8	3.8	4.2	2.2	2.2	3.8	5.0	5.9	5.1	4.9	6.1
2	3.9	2.8	3.8	3.8	2.2	2.2	3.6	4.9	6.1	5.1	4.8	6.6
3	3.9	2.7	3.8	2.3	2.2	2.2	3.4	4.7	6.1	5.1	4.8	6.7
4	3.8	2.7	3.8	2.3	2.3	2.2	3.2	4.6	6.0	5.2	4.9	6.3
5	3.5	2.7	3.8	2.3	2.4	2.1	3.2	4.6	5.9	5.2	5.0	6.1
6	3.2	2.6	3.7	2.3	2.5	2.1	3.1	4.6	5.9	5.3	6.8	6.1
7	3.1	2.6	3.7	2.3	2.4	2.1	3.1	4.7	5.9	5.3	7.5	6.0
8	3.1	2.6	3.7	2.3	2.4	2.1	3.0	4.7	6.0	5.2	7.2	5.9
9	3.1	2.6	3.7	2.3	2.4	2.1	3.0	4.6	5.7	5.2	7.0	6.0
10	3.3	2.6	3.8	2.3	2.4	2.1	3.0	7.9	5.5	5.1	6.9	5.9
11	3.1	2.6	3.8	2.4	2.4	2.0	3.0	8.7	5.5	5.0	6.7	5.9
12	3.1	2.5	3.9	2.3	2.4	2.0	3.0	8.7	5.4	4.9	6.7	5.8
13	3.1	2.5	3.9	2.3	2.4	2.1	3.0	8.5	5.4	4.9	6.6	5.6
14	3.0	2.5	4.0	2.3	2.4	2.1	3.1	7.6	5.4	5.0	6.4	5.6
15	3.0	2.5	4.0	2.3	2.4	2.1	3.3	7.5	5.4	5.2	6.3	5.5
16	3.0	2.5	4.1	2.3	2.4	2.2	3.5	8.3	5.3	5.3	6.4	5.4
17	2.9	2.5	4.1	2.3	2.4	2.3	3.5	8.6	5.3	5.2	6.3	5.4
18	2.9	2.4	4.1	2.3	2.4	2.5	3.6	8.7	5.4	5.2	6.3	5.3
19	2.8	2.4	4.1	2.3	2.4	2.7	3.7	8.6	5.4	5.1	6.4	4.9
20	2.8	2.4	4.1	2.2	2.3	2.8	3.5	8.2	5.4	5.1	6.4	4.6
21	2.8	2.4	4.1	2.2	2.3	2.8	3.5	7.2	5.3	5.1	6.4	4.5
22	2.8	2.3	4.1	2.2	2.3	3.0	3.6	6.9	5.3	5.1	6.4	4.6
23	2.8	2.2	4.1	2.2	2.3	3.1	3.9	6.5	5.4	5.1	6.4	4.6
24	2.8	2.2	4.2	2.2	2.3	3.2	4.3	5.8	5.3	5.1	6.4	4.7
25	2.8	2.1	4.2	2.2	2.3	3.2	4.6	5.4	5.2	5.1	6.4	4.1
26	2.9	2.1	4.2	2.2	2.3	3.3	4.8	5.3	5.1	5.1	6.4	3.5
27	2.9	2.1	4.2	2.2	2.2	3.4	4.9	5.3	5.1	5.0	6.4	3.4
28	2.8	2.1	4.2	2.2	2.2	3.4	4.7	5.3	5.1	5.1	6.4	3.4
29	3.2	2.7	4.2	2.2	---	3.6	4.7	5.4	5.2	5.2	6.3	3.4
30	2.9	3.8	4.2	2.2	---	3.7	4.8	5.5	5.1	5.1	6.1	3.4
31	2.8	---	4.2	2.2	---	3.8	---	5.6	---	5.0	6.1	---
TOTAL	96.0	75.5	123.6	73.6	65.5	80.7	109.4	197.9	165.0	158.7	194.0	155.3
MEAN	3.10	2.52	3.99	2.37	2.34	2.60	3.65	6.38	5.50	5.12	6.26	5.18
MAX	3.9	3.8	4.2	4.2	2.5	3.8	4.9	8.7	6.1	5.3	7.5	6.7
MIN	2.8	2.1	3.7	2.2	2.2	2.0	3.0	4.6	5.1	4.9	4.8	3.4
AC-FT	190	150	245	146	130	160	217	393	327	315	385	308
a	23970	22660	10150	8310	1270	3150	3950	28890	28680	17790	23400	22980

a Diversion, in acre-feet, to Big Creek Powerplant No. 1, provided by Southern California Edison Co.

11237000 BIG CREEK BELOW HUNTINGTON LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001, BY WATER YEAR (WY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.51	1.53	1.57	1.38	1.38	1.74	2.80	8.98	9.00	9.92	2.11	1.65
MAX	4.79	4.55	4.70	6.45	3.53	5.90	7.09	297	242	293	8.34	5.18
(WY)	1994	1994	1956	1997	1995	1995	1995	1926	1926	1925	1969	2001
MIN	.16	.23	.18	.20	.30	.38	.47	.46	.43	.31	.16	.12
(WY)	1932	1932	1932	1932	1931	1948	1934	1934	1931	1931	1931	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1925 - 2001	
ANNUAL TOTAL	1354.2		1495.2			
ANNUAL MEAN	3.70		4.10		3.24	
HIGHEST ANNUAL MEAN					45.9	1926
LOWEST ANNUAL MEAN					.35	1931
HIGHEST DAILY MEAN	7.8	Jun 14	8.7	May 11	1160	May 23 1926
LOWEST DAILY MEAN	1.7	Jan 6	2.0	Mar 11	.10	Jan 18 1931
ANNUAL SEVEN-DAY MINIMUM	1.7	Jan 5	2.1	Mar 6	.10	Aug 21 1931
MAXIMUM PEAK FLOW			8.7	May 10	2040	Jun 23 1925
MAXIMUM PEAK STAGE			2.70	May 10	11.30	Jun 23 1925
ANNUAL RUNOFF (AC-FT)	2690		2970		2350	
TOTAL DIVERSION (AC-FT) a	264200		195200		285700	
10 PERCENT EXCEEDS	4.7		6.3		4.2	
50 PERCENT EXCEEDS	4.0		3.8		1.6	
90 PERCENT EXCEEDS	2.3		2.2		.40	

a Diversion, in acre-feet, to Big Creek Powerplant No. 1, provided by Southern California Edison Co.

11237500 PITMAN CREEK BELOW TAMARACK CREEK, CA

LOCATION.—Lat 37°11'55", long 119°12'46", in NW 1/4 NW 1/4 sec.35, T.8 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 250 ft upstream from Huntington–Shaver Conduit Tunnel, 0.8 mi downstream from confluence of Tamarack and South Fork Tamarack Creeks, 1.4 mi upstream from mouth, and 1.9 mi east of town of Big Creek.

DRAINAGE AREA.—22.9 mi^2.

PERIOD OF RECORD.—October 1927 to current year. Records for water year 1928 incomplete, yearly estimate published in WSP 1315-A.

REVISED RECORDS.—WSP 931: 1940. WSP 1315-A: 1944. WSP 1395: 1928–29, 1938. WSP 1515: 1929. WSP 1930: Drainage area.

GAGE.—Water-stage recorder, Parshall flume and concrete control. Elevation of gage is 7,020 ft above sea level, from topographic map. Prior to Sept. 28, 1940, at site 10 ft downstream at same datum.

REMARKS.—No diversion upstream from station; practically all flow is diverted downstream from station to Huntington–Shaver Conduit. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,500 ft^3/s, Jan. 2, 1997, gage height, 12.65 ft, from rating curve extended above 1,100 ft^3/s, on basis of slope-area measurement at gage height 10.77 ft; no flow, Oct. 15–18, 1931.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	1.1	.87	.56	e7.0	e2.0	126	273	45	3.8	.71	e.18
2	.22	1.3	.88	.63	e10	e2.0	111	259	40	3.3	.63	e.18
3	.22	1.3	.84	.72	e20	e3.0	86	205	34	2.9	.58	e.18
4	.22	1.2	.85	.74	e24	e2.0	68	198	31	2.7	.53	e.17
5	.22	1.1	.86	.76	e20	e2.0	56	231	29	2.8	.49	e.17
6	.22	1.2	.84	.85	e10	e3.0	47	275	26	3.4	.45	e.17
7	.22	1.1	.92	.81	e6.0	e4.0	41	322	23	9.4	.42	e.17
8	.22	1	1	.89	e6.0	e4.0	42	333	21	7.9	.4	e.17
9	.26	1.1	1	.91	e4.0	e2.5	43	330	20	8.4	.36	e.17
10	.94	1	.92	.87	e3.0	2.6	38	320	18	5.4	.34	e.17
11	.66	.93	.88	e.90	e2.5	3	35	326	17	4.7	.32	e.17
12	.64	.78	.84	e1.0	e2.0	3.2	32	273	16	3.6	.3	e.17
13	.75	.77	.87	e1.5	e3.0	3.3	32	233	15	3	.28	e.17
14	.79	.83	.88	e1.5	e2.0	3.5	32	228	14	2.6	.27	e.17
15	.75	.73	.92	e1.0	e3.0	4.3	35	248	13	2.4	.25	e.17
16	.71	.69	.94	e.80	e5.0	5.1	45	271	12	2.2	.23	e.17
17	.64	.63	.94	e1.0	e5.0	7	58	252	11	2.1	.22	e.16
18	.56	.65	.86	e3.0	e4.0	10	65	215	9.8	2	.22	e.16
19	.52	.73	.84	e2.5	e2.5	17	65	191	9.2	1.9	.22	e.16
20	.49	.76	.87	e7.0	e2.0	22	54	184	8.5	1.8	.2	e.16
21	.47	.82	.93	e10	e3.0	24	48	179	7.6	1.6	.2	e.16
22	.54	.89	.83	e7.0	e2.0	25	46	167	6.9	1.5	.2	e.16
23	.53	.83	.79	e5.0	e1.5	74	55	150	6.2	1.4	.2	e.16
24	.52	.88	.81	e4.0	e1.0	101	82	132	5.9	1.3	.2	e.16
25	.54	.93	.76	e5.0	e2.0	70	121	116	5.6	1.2	.2	e.16
26	1.1	.92	.7	e3.0	e2.0	59	163	98	5.5	1.1	.19	e.16
27	1.4	.95	.55	e5.0	e3.0	59	194	82	5.3	1	.18	e.16
28	1.4	1	.65	e4.0	e2.0	72	190	70	5	.88	.17	e.16
29	2.3	.99	.75	e2.0	---	105	187	62	4.9	.79	.16	e.16
30	1.6	.92	.62	e3.0	---	104	229	55	4.4	.74	e.17	e.16
31	1.2	---	.61	e4.0	---	118	---	51	---	.73	e.18	---
TOTAL	21.09	28.03	25.82	79.94	157.5	916.5	2426	6329	469.8	88.54	9.47	4.99
MEAN	.68	.93	.83	2.58	5.62	29.6	80.9	204	15.7	2.86	.31	.17
MAX	2.3	1.3	1.0	10	24	118	229	333	45	9.4	.71	.18
MIN	.22	.63	.55	.56	1.0	2.0	32	51	4.4	.73	.16	.16
AC-FT	42	56	51	159	312	1820	4810	12550	932	176	19	9.9

e Estimated.

11237500 PITMAN CREEK BELOW TAMARACK CREEK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.87	5.38	10.5	11.8	14.1	27.8	93.4	200	118	20.5	2.38	1.37
MAX	42.0	110	135	194	91.1	136	264	550	648	180	21.4	18.9
(WY)	1983	1951	1951	1997	1986	1986	1982	1969	1983	1995	1983	1978
MIN	.13	.18	.20	.20	.20	.30	16.6	24.3	7.82	.67	.11	.10
(WY)	1989	1930	1932	1930	1949	1949	1975	1977	1976	1934	1931	1928

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	14802.96		10556.68			
ANNUAL MEAN	40.4		28.9		42.6	
HIGHEST ANNUAL MEAN					118	1983
LOWEST ANNUAL MEAN					6.16	1977
HIGHEST DAILY MEAN	469	May 8	333	May 8	2200	Jan 2 1997
LOWEST DAILY MEAN	.22	Oct 2	.16	Aug 29	.00	Oct 15 1931
ANNUAL SEVEN-DAY MINIMUM	.22	Oct 2	.16	Sep 17	.04	Oct 13 1931
MAXIMUM PEAK FLOW			468	May 8	5500	Jan 2 1997
MAXIMUM PEAK STAGE			6.42	May 8	12.65	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	29360		20940		30870	
10 PERCENT EXCEEDS	159		102		130	
50 PERCENT EXCEEDS	2.8		1.8		5.5	
90 PERCENT EXCEEDS	.35		.20		.30	

11237600 PITMAN CREEK SHAFT BELOW TAMARACK CREEK, CA

LOCATION.—Lat 37°11'54", long 119°12'48", in NW 1/4 NW 1/4 sec.35, T.8 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, at Huntington–Shaver Conduit Tunnel, 0.8 mi downstream from confluence of Tamarack and South Fork Tamarack Creeks, 1.4 mi upstream from mouth, and 1.9 mi east of town of Big Creek.

PERIOD OF RECORD.—October 1986 to February 1989, March 1989 to December 1995, April to November 1996, and March 1997 to current year.

GAGE.—Discharge computed as difference between Pitman Creek below Tamarack Creek (station 11237500) and Pitman Creek near Tamarack Mountain (station 11237700). Elevation of diversion point is 7,010 ft above sea level, from topographic map.

REMARKS.—Flow is diversion from Pitman Creek into Huntington–Shaver Conduit for power development in Big Creek powerplants. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, unknown, Jan. 2, 1997; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.33	e.07	e.00	e5.9	e1.1	e20	272	43	1.4	.00	e.00
2	.00	.58	e.08	e.03	e8.8	e1.1	e16	258	38	.90	.00	e.00
3	.00	.61	e.04	e.02	e19	e2.0	e16	205	32	.50	.00	e.00
4	.00	.54	e.05	e.04	e22	e1.1	e48	195	29	.30	.00	e.00
5	.00	.38	e.06	e.06	e19	e1.1	e51	225	26	.40	.00	e.00
6	.00	.00	e.04	e.05	e8.8	e2.0	e42	269	23	1.0	.00	e.00
7	.00	.00	e.02	e.01	e5.0	e2.9	e36	316	20	6.9	.00	e.00
8	.00	.00	e.00	e.00	e5.0	e2.9	e38	329	18	5.6	.00	e.00
9	.00	.00	e.00	e.01	e3.1	e1.5	e38	328	17	6.2	.00	e.00
10	.00	e.00	e.02	e.07	e2.1	e1.6	e34	318	15	3.2	.00	e.00
11	.00	e.00	e.08	e.00	e1.6	e2.0	e31	324	14	2.5	.00	e.00
12	.00	e.00	e.04	e.00	e1.1	e2.1	e28	271	13	1.5	.00	e.00
13	.00	e.00	e.07	e.50	e2.1	e2.2	e28	232	12	.90	.00	e.00
14	.00	e.00	e.08	e.50	e1.1	e2.4	e28	227	12	.50	.00	e.00
15	.00	e.00	e.02	e.10	e2.0	e3.1	e32	247	10	.40	.00	e.00
16	.00	e.00	e.04	e.00	e3.9	e3.9	e42	270	9.5	.20	.00	e.00
17	.00	e.03	e.04	e.10	e3.8	e5.8	e54	251	8.5	.20	.00	e.00
18	.00	e.05	e.06	e2.0	e2.8	e8.7	e62	214	7.3	.10	.00	e.00
19	.00	e.03	e.04	e1.5	e1.6	e16	e62	190	6.8	.00	.00	e.00
20	.00	e.06	e.07	e5.9	e1.1	e21	e51	183	6.1	.00	.00	e.00
21	.00	e.02	e.03	e8.8	e2.1	e23	e45	178	5.2	.00	.00	e.00
22	.00	e.00	e.03	e5.9	e1.1	e24	e42	166	4.5	.00	.00	e.00
23	.00	e.03	e.00	e4.0	e.60	e72	e51	149	3.8	.00	.00	e.00
24	.00	e.08	e.01	e3.1	e.10	e99	e78	130	3.5	.00	.00	e.00
25	.00	e.03	e.06	e4.1	e1.0	e68	e116	113	3.2	.00	.00	e.00
26	.27	e.02	e.00	e2.1	e1.0	e58	e162	96	3.1	.00	.00	e.00
27	.55	e.05	e.05	e4.1	e1.9	e36	e193	80	2.9	.00	.00	e.00
28	.57	e.00	e.05	e3.1	e1.1	e3.0	e189	68	2.6	.00	.00	e.00
29	1.5	e.09	e.05	e1.1	---	e15	e186	60	2.5	.00	.00	e.00
30	.77	e.02	e.02	e2.1	---	e16	e227	53	2.0	.00	e.00	e.00
31	.41	---	e.01	e3.1	---	e18	---	49	---	.00	e.00	---
TOTAL	4.07	2.95	1.23	52.39	128.70	516.5	2046	6266	393.5	32.70	0.00	0.00
MEAN	.13	.098	.040	1.69	4.60	16.7	68.2	202	13.1	1.05	.000	.000
MAX	1.5	.61	.08	8.8	22	99	227	329	43	6.9	.00	.00
MIN	.00	.00	.00	.00	.10	1.1	16	49	2.0	.00	.00	.00
AC-FT	8.1	5.9	2.4	104	255	1020	4060	12430	781	65	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	.49	.95	1.32	3.61	6.78	23.2	82.3	140	61.3	10.0	1.37	.14
MAX	3.22	6.24	7.33	22.5	25.6	78.5	157	440	365	76.0	13.7	.90
(WY)	1995	1995	1995	1995	1995	1995	2000	1993	1995	1995	1995	1995
MIN	.000	.000	.000	.000	.000	.000	40.7	53.3	9.14	.83	.000	.000
(WY)	1989	1989	1989	1987	1987	1992	1995	1997	1992	1994	1988	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	14338.23		9444.04			
ANNUAL MEAN	39.2		25.9		29.7	
HIGHEST ANNUAL MEAN					67.8	1993
LOWEST ANNUAL MEAN					13.5	1987
HIGHEST DAILY MEAN	458	May 8	329	May 8	888	May 16 1996
LOWEST DAILY MEAN	.00	Jan 18	.00	Oct 1	.00	Nov 12 1986
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 5	.00	Oct 1	.00	Dec 5 1986
ANNUAL RUNOFF (AC-FT)	28440		18730		21490	
10 PERCENT EXCEEDS	158		70		94	
50 PERCENT EXCEEDS	1.5		.50		1.4	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11237700 PITMAN CREEK NEAR TAMARACK MOUNTAIN, CA

LOCATION.—Lat 37°11'57", long 119°12'51", in NW 1/4 NW 1/4 sec.35, T.8 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 400 ft downstream from Huntington–Shaver Conduit Tunnel, 0.9 mi downstream from confluence of Tamarack and South Fork Tamarack Creeks, 1.3 mi upstream from mouth, and 1.8 mi east of town of Big Creek.

DRAINAGE AREA.—23.0 mi^2.

PERIOD OF RECORD.—October 1986 to February 1989, March 1989 to December 1995, April to November 1996, and March 1997 to current year.

GAGE.—Water-stage recorder and concrete control with V-notch sharp-crested weir. Elevation of gage is 7,000 ft above sea level, from topographic map.

REMARKS.—Most of flow is diverted upstream from station at Pitman Creek Shaft below Tamarack Creek (station 11237600) to Huntington–Shaver Conduit. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, unknown, Jan. 2, 1997; no flow Feb. 15 to Apr. 4, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.77	e.80	e.60	e1.1	e.90	e106	.68	2.0	2.4	.82	.20
2	.20	.72	e.80	e.60	e1.2	e.90	e95	.56	1.9	2.4	.75	.20
3	.21	.69	e.80	e.70	e1.4	e1.0	e70	.41	1.9	2.4	.69	.21
4	.21	.66	e.80	e.70	e1.5	e.90	e20	2.7	2.2	2.4	.63	.22
5	.21	.72	e.80	e.70	e1.4	e.90	e5.0	5.7	2.9	2.4	.58	.20
6	.21	1.3	e.80	e.80	e1.2	e1.0	e5.0	5.7	2.9	2.4	.54	.19
7	.21	1.2	e.90	e.80	e1.0	e1.1	e4.5	5.6	2.9	2.5	.48	.20
8	.21	1.1	e1.0	e.90	e1.0	e1.1	e4.5	4.2	2.8	2.3	.44	.19
9	.23	1.1	e1.0	e.90	e.90	e1.0	e4.5	2.1	2.7	2.2	.41	.18
10	1.0	e1.0	e.90	e.80	e.90	e1.0	e4.0	2.0	2.6	2.2	.38	.16
11	.68	e.90	e.80	e.90	e.90	e1.0	e4.0	2.2	2.6	2.2	.36	.16
12	.63	e.80	e.80	e1.0	e.90	e1.1	e4.0	1.7	2.6	2.1	.33	.16
13	.75	e.70	e.80	e1.0	e.90	e1.1	e4.0	1.5	2.6	2.1	.32	.17
14	.78	e.80	e.80	e1.0	e.90	e1.1	e3.5	1.4	2.5	2.1	.30	.17
15	.76	e.70	e.90	e.90	e1.0	e1.2	e3.5	1.3	2.5	2.0	.27	.17
16	.71	e.70	e.90	e.80	e1.1	e1.2	e3.5	1.3	2.5	2.0	.27	.16
17	.64	e.60	e.90	e.90	e1.2	e1.2	e3.5	1.3	2.5	1.9	.25	.16
18	.57	e.60	e.80	e1.0	e1.2	e1.3	e3.0	1.2	2.5	1.9	.25	.17
19	.52	e.70	e.80	e1.0	e.90	e1.3	e3.0	1.2	2.4	1.9	.24	.17
20	.49	e.70	e.80	e1.1	e.90	e1.3	e3.0	1.1	2.4	1.9	.23	.17
21	.47	e.80	e.90	e1.2	e.90	e1.4	e3.0	1.1	2.4	1.8	.25	.16
22	.52	e.90	e.80	e1.1	e.90	e1.4	e3.5	1.0	2.4	1.7	.25	.15
23	.52	e.80	e.80	e1.0	e.90	e1.7	e4.0	.98	2.4	1.6	.25	.15
24	.51	e.80	e.80	e.90	e.90	e1.8	e4.5	1.6	2.4	1.5	.25	.16
25	.53	e.90	e.70	e.90	e1.0	e1.6	e4.6	2.7	2.4	1.4	.25	.16
26	.83	e.90	e.70	e.90	e1.0	e1.5	e1.5	2.3	2.4	1.3	.24	.16
27	.85	e.90	e.50	e.90	e1.1	e23	e.70	2.2	2.4	1.2	.24	.16
28	.83	e1.0	e.60	e.90	e.90	e69	e.80	2.1	2.4	1.0	.22	.16
29	.84	e.90	e.70	e.90	---	e90	e.70	2.1	2.4	.92	.22	.16
30	.83	e.90	e.60	e.90	---	e88	e1.6	2.0	2.4	.85	.21	.16
31	.79	---	e.60	e.90	---	e100	---	2.0	---	.83	.21	---
TOTAL	16.95	25.26	24.60	27.60	29.10	401.00	378.40	63.93	73.9	57.80	11.13	5.19
MEAN	.55	.84	.79	.89	1.04	12.9	12.6	2.06	2.46	1.86	.36	.17
MAX	1.0	1.3	1.0	1.2	1.5	100	106	5.7	2.9	2.5	.82	.22
MIN	.20	.60	.50	.60	.90	.90	.70	.41	1.9	.83	.21	.15
AC-FT	34	50	49	55	58	795	751	127	147	115	22	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	.66	.90	.96	1.26	1.78	5.28	23.4	38.4	47.7	18.3	1.03	.62
MAX	1.61	1.74	1.50	2.17	5.19	24.8	126	265	506	132	6.17	2.92
(WY)	1999	1990	1990	1990	1992	1990	1997	1995	1998	1998	1998	1998
MIN	.13	.31	.41	.56	.35	.000	.99	1.22	.66	.52	.16	.13
(WY)	1989	1991	1991	1991	1991	1991	1999	1990	1990	1992	1994	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	450.52		1114.86			
ANNUAL MEAN	1.23		3.05		11.1	
HIGHEST ANNUAL MEAN					56.5	1998
LOWEST ANNUAL MEAN					.79	1991
HIGHEST DAILY MEAN	11	May 8	106	Apr 1	762	May 16 1996
LOWEST DAILY MEAN	.20	Oct 2	.15	Sep 22	.00	Feb 15 1991
ANNUAL SEVEN-DAY MINIMUM	.21	Oct 1	.16	Sep 21	.00	Feb 15 1991
ANNUAL RUNOFF (AC-FT)	894		2210		8050	
10 PERCENT EXCEEDS	2.3		2.9		3.8	
50 PERCENT EXCEEDS	1.1		.90		1.1	
90 PERCENT EXCEEDS	.31		.21		.27	

e Estimated.

11238250 EASTWOOD POWERPLANT ABOVE SHAVER LAKE, NEAR BIG CREEK, CA

LOCATION.—Lat 37°07'55", long 119°15'39", in NE 1/4 SW 1/4 sec.20, T.9 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, 0.25 mi upstream from Shaver Lake and 5.0 mi south of Big Creek.

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Acoustic-flow meter in powerplant penstock. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.—Flow is diverted from Huntington Lake (station 11236000) and Pitman Creek (station 11237600) to Balsam Meadows Forebay, then through a tunnel to the powerplant. Water is returned to Shaver Lake (station 11239500) 0.25 mi downstream for further power development in Big Creek powerplants. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,910 ft^3/s, May 24, 1993; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	313	434	397	299	340	.00	357	750	565	551	749
2	391	331	190	305	.00	292	.00	431	678	554	636	533
3	.00	260	568	285	.00	386	.00	448	689	555	552	609
4	186	.00	639	286	59	371	.00	308	618	680	468	637
5	150	.00	471	321	.00	370	6.6	301	653	571	372	640
6	191	132	573	170	91	376	.00	300	667	620	655	641
7	192	198	343	235	276	372	653	401	640	646	558	726
8	180	229	467	210	252	379	49	1110	581	535	551	583
9	408	180	199	198	319	381	189	877	680	650	646	534
10	336	.00	230	265	67	384	268	687	720	586	464	552
11	265	.00	405	361	181	126	402	615	602	576	460	291
12	166	.00	222	352	141	.00	175	824	648	565	471	224
13	371	.00	294	194	198	.00	198	831	666	608	592	368
14	195	199	420	196	406	.00	301	989	636	439	553	375
15	.00	709	343	214	418	.00	264	863	531	447	549	478
16	204	421	212	211	305	.00	289	681	526	461	551	.00
17	197	972	284	338	250	.00	201	791	399	579	552	368
18	.00	842	282	369	231	.00	270	751	478	555	.00	530
19	.00	673	351	370	329	.00	678	938	544	554	.00	423
20	.00	395	287	395	398	.00	377	928	559	617	516	25
21	.00	651	447	242	386	.00	278	943	512	461	777	.00
22	1.0	737	292	264	380	.00	250	991	638	462	833	.00
23	206	290	277	256	374	.00	206	911	667	553	776	32
24	259	413	282	198	386	.00	337	1310	819	556	682	616
25	49	204	295	48	401	.00	178	1200	821	555	607	370
26	.00	248	292	.00	379	.00	243	1210	789	554	612	368
27	111	298	289	100	316	.00	314	1140	612	546	583	460
28	57	302	273	.00	370	.00	450	1140	585	376	756	2.0
29	65	388	283	106	---	.00	355	920	564	459	805	457
30	.00	573	247	78	---	.00	346	866	561	639	728	403
31	87	---	434	56	---	.00	---	821	---	634	755	---
TOTAL	4267.00	9958.00	10625	7020.00	7212.00	3777.00	7277.60	24883	18833	17158	17611.00	11994.00
MEAN	138	332	343	226	258	122	243	803	628	553	568	400
MAX	408	972	639	397	418	386	678	1310	821	680	833	749
MIN	.00	.00	190	.00	.00	.00	.00	300	399	376	.00	.00
AC-FT	8460	19750	21070	13920	14310	7490	14440	49360	37360	34030	34930	23790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

MEAN	323	238	278	282	243	257	436	807	893	705	568	429
MAX	600	571	540	534	574	684	1081	1605	1502	1343	837	702
(WY)	1996	1996	1997	1997	1997	1997	1996	1993	1993	1995	1997	1996
MIN	.000	.000	21.4	6.19	.000	19.5	29.3	159	270	156	181	81.7
(WY)	1988	1988	1991	1990	1996	1991	1991	1991	1990	1992	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	154859.50		140615.60			
ANNUAL MEAN	423		385		456	
HIGHEST ANNUAL MEAN					720	1997
LOWEST ANNUAL MEAN					141	1990
HIGHEST DAILY MEAN	1610	Jun 5	1310	May 24	1910	May 24 1993
LOWEST DAILY MEAN	.00	Jan 2	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 2	.00	Mar 12	.00	Oct 1 1987
ANNUAL RUNOFF (AC-FT)	307200		278900		330400	
10 PERCENT EXCEEDS	1020		727		983	
50 PERCENT EXCEEDS	296		370		401	
90 PERCENT EXCEEDS	.00		.00		.00	

11238270 MIDDLE FORK BALSAM CREEK BELOW BALSAM MEADOWS FOREBAY, NEAR BIG CREEK, CA

LOCATION.—Lat 37°09'46", long 119°15'12", in NE 1/4 NW 1/4 sec.9, T.9 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 80 ft downstream from control house at base of Balsam Meadows Dam, and 2.6 mi south of Big Creek.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—January 1989 to current year.

GAGE.—Water-stage recorder, 90° V-notch weir and concrete control. Elevation of gage is 6,560 ft above sea level, from topographic map.

REMARKS.—Flow consists of fishery maintenance release and spill over Balsam Meadows Dam. No record of flow over spillway Apr. 15, 1989. Diversion from Balsam Meadows Dam through penstock to Eastwood Powerplant (station 11238250). See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, unknown, Apr. 15, 1989, as there was no record of flow over spillway; minimum daily, 0.31 ft^3/s, Feb. 4, 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.2	1.1	1.1	1.1	1.1
2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	.85	1.1	1.1	1.1	1.1
3	1.1	1.2	1.2	1.3	1.3	1.3	1.3	.79	1.1	1.1	1.1	1.1
4	1.2	1.2	1.3	1.3	1.3	1.3	1.3	.76	1.1	1.1	1.1	1.1
5	1.2	1.3	1.3	1.3	1.4	1.3	1.3	.76	1.1	1.1	1.1	1.1
6	1.2	1.3	1.2	1.3	1.3	1.3	1.3	.76	1.1	1.2	1.1	1.1
7	1.2	1.3	1.2	1.3	1.3	1.3	1.3	.76	1.1	1.1	1.1	1.1
8	1.2	1.2	1.3	1.3	1.2	1.3	1.2	.74	1.1	1.1	1.1	1.1
9	1.2	1.2	1.2	1.3	1.2	1.3	1.3	.74	1.1	1.1	1.1	1.1
10	1.3	1.2	1.2	1.3	1.2	1.3	1.3	.74	1.1	1.1	1.1	1.1
11	1.2	1.2	1.2	1.3	1.2	1.2	1.3	.74	1.1	1.1	1.1	1.1
12	1.3	1.2	1.2	1.3	1.2	1.2	1.3	.73	1.1	1.1	1.1	1.1
13	1.2	1.2	1.2	1.2	1.5	1.2	1.3	.73	1.1	1.2	1.1	1
14	1.2	1.2	1.2	1.2	1.3	1.2	1.3	.73	1.1	1.1	1.1	1
15	1.2	1.2	1.2	1.2	1.2	1.2	1.3	.73	1.1	1.1	1.1	1.1
16	1.2	1.3	1.3	1.2	1.3	1.2	1.3	.73	1.2	1.1	1.1	1.1
17	1.2	1.3	1.3	1.2	1.3	1.2	1.3	.73	1.1	1.1	1.1	1.1
18	1.2	1.2	1.2	1.2	1.3	1.2	1.3	.74	1.1	1.1	1.1	1.1
19	1.2	1.2	1.2	1.2	1.3	1.2	1.4	.73	1.1	1.1	1.2	1.1
20	1.3	1.2	1.2	1.2	1.3	1.2	1.3	.73	1.1	1.2	1.1	1.1
21	1.2	1.2	1.3	1.2	1.3	1.2	1.3	.73	1.1	1.1	1.1	1.2
22	1.3	1.2	1.3	1.3	1.3	1.2	1.3	.73	1.1	1.1	1.1	1.2
23	1.3	1.2	1.3	1.3	1.3	1.3	1.3	.73	1.1	1.1	1.1	1.2
24	1.2	1.2	1.3	1.3	1.3	1.3	1.3	.73	1.1	1.1	1.1	1.2
25	1.2	1.2	1.3	1.3	1.3	1.3	1.3	.72	1.1	1.1	1.1	1.1
26	1.2	1.2	1.3	1.3	1.3	1.3	1.4	.73	1.2	1.1	1.1	1.1
27	1.2	1.3	1.3	1.3	1.3	1.3	1.4	.71	1.2	1.2	1.1	1.1
28	1.2	1.2	1.2	1.3	1.3	1.3	1.4	.72	1.1	1.1	1.1	1.1
29	1.2	1.2	1.2	1.3	---	1.4	1.4	.72	1.2	1.1	1.1	1.1
30	1.2	1.2	1.2	1.3	---	1.4	1.4	.72	1.1	1.1	1.1	1.1
31	1.2	---	1.2	1.3	---	1.4	---	.83	---	1.1	1.1	---
TOTAL	37.6	36.6	38.4	39.2	36.1	39.4	39.6	23.49	33.4	34.5	34.2	33.2
MEAN	1.21	1.22	1.24	1.26	1.29	1.27	1.32	.76	1.11	1.11	1.10	1.11
MAX	1.3	1.3	1.3	1.3	1.5	1.4	1.4	1.2	1.2	1.2	1.2	1.2
MIN	1.1	1.2	1.2	1.2	1.2	1.2	1.2	.71	1.1	1.1	1.1	1.0
AC-FT	75	73	76	78	72	78	79	47	66	68	68	66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	.83	.75	.80	.79	.80	.93	1.02	.85	1.26	1.28	1.30	1.30
MAX	1.21	1.22	1.44	1.26	1.29	2.20	2.75	1.28	1.45	1.38	1.48	1.50
(WY)	2001	2001	1992	2001	2001	1992	1992	1995	1995	1990	1992	1992
MIN	.59	.57	.58	.56	.57	.56	.57	.60	1.10	1.11	1.10	1.11
(WY)	1998	1997	1998	1996	1996	1996	1996	1996	1998	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	375.12		425.69			
ANNUAL MEAN	1.02		1.17		.99	
HIGHEST ANNUAL MEAN					1.38	1992
LOWEST ANNUAL MEAN					.81	1996
HIGHEST DAILY MEAN	1.4	Jul 19	1.5	Feb 13	3.4	Apr 2 1992
LOWEST DAILY MEAN	.64	Apr 16	.71	May 27	.31	Feb 4 1989
ANNUAL SEVEN-DAY MINIMUM	.68	Apr 14	.72	May 24	.51	Nov 1 1996
MAXIMUM PEAK FLOW			1.8	Feb 13		
MAXIMUM PEAK STAGE			.91	Feb 13		
ANNUAL RUNOFF (AC-FT)	744		844		719	
10 PERCENT EXCEEDS	1.3		1.3		1.4	
50 PERCENT EXCEEDS	1.2		1.2		.88	
90 PERCENT EXCEEDS	.72		1.1		.61	

11238500 BIG CREEK NEAR MOUTH, NEAR BIG CREEK, CA

LOCATION.—Lat 37°12'28", long 119°19'13", in SE 1/4 NW 1/4 sec.26, T.8 S., R.24 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 0.6 mi upstream from mouth, and 3.9 mi west of town of Big Creek.

DRAINAGE AREA.—131 mi^2.

PERIOD OF RECORD.—June 1923 to May 1932, October 1986 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.—Water-stage recorder. Elevation of gage is 2,620 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Huntington Lake (station 11236000) and diversions for power development in Big Creek powerplants. Most of the water is diverted past this station to Big Creek Powerplant No. 8 (station 11238550). Big Creek Powerplant No. 2 (station 11238380) diverts water from Big Creek and then returns it between Big Creek below Huntington Lake (station 11237000) and this station. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records collected by the 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, 7,400 ft^3/s, Jan. 2, 1997, gage height, 10.34 ft, from rating curve extended above 900 ft^3/s; no flow several days in 1925 and 1931.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.6	3.9	3.9	3.9	4.4	3.9	4.1	2.9	3.0	2.5	2.6
2	4.1	4.2	3.8	3.9	3.9	4.4	3.9	4.1	2.9	2.9	2.5	2.5
3	4.1	4.2	3.9	3.9	3.9	4.2	3.8	4.0	2.9	2.9	3.3	2.5
4	4.2	4.2	3.9	3.9	3.9	6.7	3.8	3.9	2.9	3.0	2.5	2.6
5	4.2	4.2	3.9	3.9	4.0	15	3.8	3.9	2.9	3.0	2.5	2.6
6	4.2	4.1	3.9	3.9	4.0	6.6	4.0	3.9	2.9	3.0	2.5	2.5
7	4.2	4.2	3.9	3.9	4.0	5.4	4.8	3.9	2.9	3.1	2.5	2.5
8	4.2	4.2	4.0	3.9	3.9	4.9	4.1	3.9	2.9	3.0	2.5	2.5
9	4.3	4.2	4.0	3.9	4.0	5.3	4.1	3.4	2.9	2.9	2.5	2.5
10	4.3	4.2	3.8	4.8	4.1	4.9	4.1	2.8	2.8	2.9	2.5	2.5
11	4.3	4.2	3.8	5.3	4.3	4.6	4.1	2.8	2.8	2.9	2.5	2.5
12	4.2	4.1	4.0	4.1	4.2	4.5	4.0	2.8	2.8	2.9	3.5	2.5
13	4.2	4.1	3.9	4.1	4.3	4.4	3.9	6.7	2.8	2.9	2.8	2.5
14	4.2	4.1	4.0	4.0	4.2	4.2	3.9	2.8	2.8	2.9	3.9	2.5
15	4.2	4.1	3.9	4.1	4.1	4.2	3.9	2.9	2.8	2.9	2.5	2.4
16	4.2	4.1	3.9	4.1	4.1	4.2	3.9	2.9	2.8	2.9	2.5	2.5
17	4.2	4.1	4.0	3.8	4.1	4.2	3.9	2.9	2.8	2.9	2.5	2.4
18	4.2	3.9	3.9	3.9	4.2	4.2	3.9	2.9	3.0	2.9	2.5	2.5
19	4.2	3.9	3.9	3.9	4.8	6.4	4.4	2.9	2.9	2.9	2.5	2.5
20	4.2	3.9	3.9	3.9	5.1	4.1	4.8	2.9	2.9	2.9	2.6	3.5
21	4.2	3.9	4.0	3.9	4.6	4.0	5.6	2.9	3.0	2.9	2.6	2.5
22	4.1	3.9	3.9	3.9	4.8	3.9	5.0	2.9	3.0	2.9	2.6	2.8
23	4.1	3.9	3.9	3.9	4.4	3.9	4.6	2.9	3.0	2.8	2.7	2.5
24	4.1	3.9	3.9	5.0	4.9	3.9	4.4	2.9	3.0	2.6	2.6	2.5
25	4.3	3.9	4.0	4.2	4.9	3.9	4.3	2.9	3.0	3.2	2.6	2.5
26	4.6	3.9	3.9	4.4	4.7	3.9	4.2	2.9	3.0	2.5	2.6	2.5
27	4.2	3.9	3.9	4.2	4.5	4.0	4.1	2.9	3.0	2.5	2.6	2.5
28	4.2	3.9	3.9	4.1	4.6	3.9	4.1	2.9	3.0	2.5	2.6	2.5
29	5.1	3.9	3.9	4.1	---	3.9	4.1	3.0	2.9	2.4	2.6	2.5
30	4.2	3.9	3.9	4.0	---	3.9	4.1	2.9	2.9	2.4	2.6	2.5
31	4.2	---	3.9	3.9	---	3.9	---	2.9	---	2.5	2.6	---
TOTAL	131.3	121.8	121.3	126.7	120.4	149.9	125.5	102.4	87.1	87.9	82.3	76.4
MEAN	4.24	4.06	3.91	4.09	4.30	4.84	4.18	3.30	2.90	2.84	2.65	2.55
MAX	5.1	4.6	4.0	5.3	5.1	15	5.6	6.7	3.0	3.2	3.9	3.5
MIN	4.1	3.9	3.8	3.8	3.9	3.9	3.8	2.8	2.8	2.4	2.5	2.4
AC-FT	260	242	241	251	239	297	249	203	173	174	163	152
a	24190	22600	10210	8380	1320	3840	4690	27310	27390	17770	23340	22950
b	53710	46190	26170	18530	5580	7890	9670	55040	60430	35710	49890	45670

a Diversion, in acre-feet, to Big Creek Powerplant No. 2 (station 11238380), provided by Southern California Edison Co.

b Diversion, in acre-feet, to Big Creek Powerplant No. 8 (station 11238550), provided by Southern California Edison Co.

11238500 BIG CREEK NEAR MOUTH, NEAR BIG CREEK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.40	44.4	61.6	58.5	27.1	43.8	12.0	36.1	62.4	27.6	5.49	5.35
MAX	88.9	357	554	786	331	377	58.3	327	569	137	26.7	25.4
(WY)	1999	1999	1997	1997	1997	1995	1995	1995	1998	1998	1998	1998
MIN	2.44	1.97	1.28	1.61	1.69	2.03	2.35	2.23	2.23	2.20	2.27	2.33
(WY)	1988	1988	1995	1989	1988	1992	1989	1987	1987	1987	1988	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	4418.2		1333.0			
ANNUAL MEAN	12.1		3.65		32.9	
HIGHEST ANNUAL MEAN					171	1997
LOWEST ANNUAL MEAN					2.34	1988
HIGHEST DAILY MEAN	632	Jul 12	15	Mar 5	3540	Jan 2 1997
LOWEST DAILY MEAN	3.6	Jun 7	2.4	Jul 29	1.0	Dec 8 1994
ANNUAL SEVEN-DAY MINIMUM	3.8	Jun 4	2.5	Jul 26	1.1	Dec 4 1994
MAXIMUM PEAK FLOW			98	May 13	7400	Jan 2 1997
MAXIMUM PEAK STAGE			2.37	May 13	10.34	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	8760		2640		23810	
TOTAL DIVERSION (AC-FT) a	251200		194000			
TOTAL DIVERSION (AC-FT) b	560100		414500		494100	
10 PERCENT EXCEEDS	7.9		4.4		16	
50 PERCENT EXCEEDS	4.2		3.9		3.9	
90 PERCENT EXCEEDS	3.9		2.5		2.0	

a Diversion, in acre-feet, to Big Creek Powerplant No. 2 (station 11238380), provided by Southern California Edison Co.

b Diversion, in acre-feet, to Big Creek Powerplant No. 8 (station 11238550), provided by Southern California Edison Co.

11238600 SAN JOAQUIN RIVER ABOVE STEVENSON CREEK, NEAR BIG CREEK, CA

LOCATION.—Lat 37°12'28", long 119°19'44", unsurveyed, T.8 S., R.24 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, in intake structure near left bank, 300 ft upstream from Dam 6, 3.5 mi upstream from Stevenson Creek, and 4.4 mi west of town of Big Creek at mile 313.6.

DRAINAGE AREA.—1,197 mi^2.

PERIOD OF RECORD.—Water years 1987, 1993–94, October 1995 to current year. Records for water years 1951 to 1972 in files of Southern California Edison Co. Records for water years 1974 to 1986 in files of the U.S. Geological Survey.

GAGE.—Acoustic-velocity meter and water-stage recorder on Dam 6 since Oct. 1, 1992. Water-stage recorders at various sites downstream prior to 1992. Elevation of gage is 2,200 ft above sea level, from topographic map.

REMARKS.—Record consists of computed flow over spillway at Dam 6 and flow through fish-water release valve. At times the sluice valve leaks and this flow bypasses the station. Flow regulated by Mammoth Pool Reservoir and Huntington Lake (stations 11234700 and 11236000) and diversions for power development in Big Creek powerplants. Most of the water is diverted past this station to Big Creek Powerplant No. 3 (station 11241800). See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records collected by the 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, 72,500 ft^3/s, Jan. 2, 1997; minimum daily, 3.0 ft^3/s, at times in several years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.4	3.5	e3.5	3.5	3.5	3.4	3.5	199	e3.5	3.4	3.5
2	4.6	3.5	3.5	e3.5	3.5	3.5	3.4	3.4	241	e3.5	3.5	3.5
3	3.4	3.5	21	e3.5	3.5	3.5	3.4	7.8	217	e3.5	3.5	3.5
4	3.4	3.5	3.5	e3.5	8.8	3.4	3.4	254	182	e3.5	3.5	3.5
5	3.4	3.5	3.5	e3.5	3.5	3.2	3.5	251	136	e3.4	3.5	3.5
6	3.5	3.5	3.5	e3.5	3.5	3.2	3.4	237	3.4	e3.4	3.4	18
7	3.5	3.5	3.5	e3.5	3.5	3.5	3.4	167	3.4	e3.5	3.5	3.5
8	3.5	3.5	3.5	e3.5	3.5	3.5	3.4	211	3.4	e3.5	3.5	3.5
9	3.5	3.5	3.5	e3.5	3.5	3.5	3.5	160	3.4	e3.5	3.4	3.5
10	3.4	3.5	3.4	e3.5	3.5	3.5	3.4	149	3.4	e5.9	3.5	3.5
11	3.5	3.5	3.4	e3.5	3.5	3.4	3.5	213	e3.5	e3.5	3.5	3.5
12	3.5	3.5	e3.4	e3.5	3.5	3.2	3.4	248	e3.4	e3.4	3.5	3.5
13	3.5	3.5	e3.4	e3.5	3.5	3.2	3.5	226	e3.4	e3.4	3.5	3.5
14	3.5	3.5	e3.4	e3.5	3.5	3.4	3.5	61	e3.4	e3.5	3.5	3.5
15	3.5	3.5	e3.4	e3.5	3.5	3.5	3.5	30	e3.4	e3.5	3.5	3.5
16	3.5	3.5	e3.5	e3.5	3.5	3.5	3.5	4.2	e5.4	e3.5	3.5	3.5
17	3.5	3.5	e3.5	e3.5	3.5	3.5	3.5	3.3	e3.4	e3.5	3.5	3.5
18	3.5	3.4	e3.5	e3.5	3.5	3.5	3.5	3.2	e3.4	e3.5	3.5	3.5
19	3.5	3.4	e3.5	3.5	3.5	3.4	3.6	3.4	e3.4	e3.5	3.5	3.5
20	3.5	3.5	e3.4	3.5	3.5	3.5	3.5	3.4	e3.4	e3.4	3.5	3.5
21	3.5	3.5	e3.5	3.5	3.5	3.5	3.5	3.4	e3.4	e3.5	3.5	3.5
22	3.5	3.5	e3.4	3.5	3.5	3.5	3.5	3.3	e3.5	e3.5	3.5	3.5
23	3.5	3.5	e3.5	3.5	3.5	3.5	3.4	3.2	e3.5	e3.5	3.5	3.5
24	3.4	3.5	e3.5	3.5	3.5	3.4	3.4	213	e3.4	e3.5	3.5	3.5
25	3.4	3.5	e3.5	3.5	3.5	3.5	3.5	389	e3.4	3.5	3.5	3.5
26	3.5	3.5	e3.5	3.5	3.5	3.4	3.5	363	e3.4	3.5	3.5	3.5
27	3.5	3.5	e3.5	3.5	3.5	3.4	3.4	616	e3.5	3.5	3.5	3.5
28	3.5	3.5	e3.5	3.5	3.5	3.4	3.4	423	e3.4	3.5	3.5	3.5
29	3.5	3.5	e3.5	3.5	---	3.4	3.4	271	e3.4	3.5	3.5	3.5
30	3.5	3.5	e3.5	3.5	---	3.4	3.9	191	e3.4	3.5	3.5	3.5
31	3.5	---	e3.5	3.5	---	3.4	---	211	---	3.5	3.5	---
TOTAL	108.9	104.7	125.2	108.5	103.3	106.2	104.1	4926.1	1062.4	110.4	108.2	119.5
MEAN	3.51	3.49	4.04	3.50	3.69	3.43	3.47	159	35.4	3.56	3.49	3.98
MAX	4.6	3.5	21	3.5	8.8	3.5	3.9	616	241	5.9	3.5	18
MIN	3.4	3.4	3.4	3.5	3.5	3.2	3.4	3.2	3.4	3.4	3.4	3.5
AC-FT	216	208	248	215	205	211	206	9770	2110	219	215	237
a	71260	57140	42740	31920	22770	76280	122900	194400	130100	71450	100500	71760

e Estimated.
a Diversion, in acre-feet, to Big Creek Powerplant No. 3 (station 11241800), provided by Southern California Edison Co.

11238600 SAN JOAQUIN RIVER ABOVE STEVENSON CREEK, NEAR BIG CREEK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.87	3.41	25.4	737	324	240	194	1326	2009	593	39.8	4.77
MAX	34.5	3.95	200	6605	1841	954	621	3726	7614	3623	291	11.7
(WY)	1999	1987	1997	1997	1997	1996	1996	1993	1998	1998	1998	2000
MIN	3.14	3.20	3.25	3.26	3.30	3.20	3.25	3.39	3.60	3.29	3.30	3.29
(WY)	1993	1993	1993	1993	1993	1994	1994	1994	1994	1997	1997	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	91789.6		7087.5			
ANNUAL MEAN	251		19.4		459	
HIGHEST ANNUAL MEAN					1202	1997
LOWEST ANNUAL MEAN					3.38	1994
HIGHEST DAILY MEAN	4770	May 28	616	May 27	32000	Jan 3 1997
LOWEST DAILY MEAN	3.1	Jan 26	3.2	Mar 5	3.0	Dec 4 1993
ANNUAL SEVEN-DAY MINIMUM	3.1	Jan 25	3.3	May 17	3.1	Oct 6 1992
MAXIMUM PEAK FLOW			1260	May 4	72500	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	182100		14060		332200	
TOTAL DIVERSION (AC-FT) a	1292000		993200		1153000	
10 PERCENT EXCEEDS	832		3.5		1300	
50 PERCENT EXCEEDS	3.5		3.5		3.4	
90 PERCENT EXCEEDS	3.4		3.4		3.3	

a Diversion, in acre-feet, to Big Creek Powerplant No. 3 (station 11241800), provided by Southern California Edison Co.

11239300 NORTH FORK STEVENSON CREEK AT PERIMETER ROAD, NEAR BIG CREEK, CA

LOCATION.—Lat 37°08'13", long 119°15'13", in SE 1/4 NW 1/4 sec.21, T.9 S., R.25 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 100 ft upstream from Perimeter Road, and 4.8 mi south of town of Big Creek.

DRAINAGE AREA.—4.42 mi^2.

PERIOD OF RECORD.—January 1989 to current year.

GAGE.—Water-stage recorder, modified Parshall flume, and concrete control. Elevation of gage is 5,740 ft above sea level, from topographic map.

REMARKS.—Releases for fishery maintenance from Balsam Meadows Forebay on Balsam Creek enter creek upstream from station. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,220 ft^3/s, May 16, 1996, gage height, 9.58 ft; minimum daily, 1.6 ft^3/s, Feb. 14, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	7.7	12	7.7	7.6	9.4	19	30	11	7.6	8.2	5.2
2	167	8.8	6.8	7.6	11	7.7	16	27	7.1	8.3	8.8	5.2
3	11	8.9	10	7.8	7.4	7.9	14	22	8.6	8.7	8.0	6.6
4	11	10	13	7.8	7.6	8.5	13	20	8.6	8.4	7.2	7.0
5	11	7.9	7.8	7.8	7.6	8.9	12	22	8.6	8.3	7.2	7.6
6	17	11	13	7.8	7.5	9.0	12	25	8.6	9.5	8.3	7.1
7	17	3.6	11	7.7	7.4	8.4	13	27	7.4	10	7.5	7.4
8	15	3.3	9.2	7.7	9.8	8.5	11	31	6.1	7.7	7.4	7.0
9	7.0	3.2	7.9	7.6	7.3	8.6	12	31	7.7	8.9	8.4	5.7
10	7.7	3.2	7.5	7.7	7.6	8.2	11	28	12	8.7	7.2	5.8
11	7.2	3.0	8.8	7.4	7.3	7.8	11	27	10	10	7.0	6.9
12	7.1	2.9	7.9	8.0	9.3	7.9	10	26	10	8.0	11	7.2
13	7.1	2.9	8.3	8.4	10	8.0	10	26	9.5	8.8	8.2	7.0
14	9.1	6.6	7.7	8.1	10	8.3	11	26	7.9	7.2	8.7	8.1
15	7.0	17	7.7	7.7	15	8.4	12	25	6.5	7.2	7.2	9.0
16	7.2	8.3	7.6	11	8.1	8.4	14	24	6.7	7.2	8.6	6.8
17	8.7	17	7.5	12	7.6	8.8	15	24	5.7	8.3	7.6	7.0
18	7.0	16	7.6	9.4	7.6	9.8	16	19	5.3	8.1	7.0	11
19	6.9	16	7.6	8.4	8.2	11	18	20	7.1	8.3	5.6	8.4
20	6.9	7.4	9.3	7.6	9.3	12	15	20	7.4	8.5	4.8	10
21	7.0	14	8.5	13	9.1	12	15	19	6.1	7.2	8.1	6.4
22	7.0	14	7.4	8.7	9.3	13	15	17	5.1	7.1	7.0	6.9
23	7.0	8.2	8.0	8.2	9.2	13	16	16	5.9	8.7	12	6.8
24	6.9	11	8.0	16	8.5	14	18	18	7.0	7.8	12	6.4
25	7.1	7.1	8.0	8.4	8.3	14	23	15	7.5	8.3	7.1	5.6
26	7.8	7.1	7.8	7.3	8.4	14	26	14	8.7	8.1	6.7	6.3
27	7.5	6.7	7.3	7.2	7.9	15	28	14	9.0	7.8	6.5	6.7
28	7.3	8.3	7.6	7.7	7.9	16	27	13	8.2	7.2	8.1	6.4
29	9.6	10	7.7	7.2	---	16	27	12	7.9	7.1	8.4	5.8
30	7.5	12	8.9	8.6	---	17	30	12	8.4	8.0	8.2	5.7
31	7.5	---	8.7	8.0	---	19	---	11	---	9.7	8.2	---
TOTAL	457.1	263.1	266.1	265.5	241.8	338.5	490	661	235.6	254.7	246.2	209.0
MEAN	14.7	8.77	8.58	8.56	8.64	10.9	16.3	21.3	7.85	8.22	7.94	6.97
MAX	167	17	13	16	15	19	30	31	12	10	12	11
MIN	6.9	2.9	6.8	7.2	7.3	7.7	10	11	5.1	7.1	4.8	5.2
AC-FT	907	522	528	527	480	671	972	1310	467	505	488	415

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	5.81	7.65	6.92	12.4	11.3	15.8	27.9	30.3	26.3	9.19	6.15	5.88
MAX	14.7	22.1	14.1	71.8	52.2	40.7	59.6	108	178	36.2	11.3	11.5
(WY)	2001	1998	1992	1997	1996	1995	2000	1996	1995	1995	1996	2000
MIN	3.65	3.80	4.29	4.59	3.89	7.15	8.99	5.80	4.66	4.00	4.08	4.14
(WY)	1991	1993	1993	1992	1991	1991	1994	1990	1989	1989	1989	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	5190.6		3928.6			
ANNUAL MEAN	14.2		10.8		14.3	
HIGHEST ANNUAL MEAN					34.7	1995
LOWEST ANNUAL MEAN					5.57	1990
HIGHEST DAILY MEAN	190	Apr 12	167	Oct 2	1750	May 16 1996
LOWEST DAILY MEAN	2.9	Nov 12	2.9	Nov 12	1.6	Feb 14 1991
ANNUAL SEVEN-DAY MINIMUM	3.2	Nov 7	3.2	Nov 7	2.0	Feb 14 1991
MAXIMUM PEAK FLOW			1710	Oct 2	3220	May 16 1996
MAXIMUM PEAK STAGE			7.91	Oct 2	9.58	May 16 1996
ANNUAL RUNOFF (AC-FT)	10300		7790		10370	
10 PERCENT EXCEEDS	20		17		26	
50 PERCENT EXCEEDS	7.8		8.3		6.6	
90 PERCENT EXCEEDS	5.9		6.8		4.3	

11239500 SHAVER LAKE NEAR BIG CREEK, CA

LOCATION.—Lat 37°08'41", long 119°18'06", in SW 1/4 SE 1/4 sec.13, T.9 S., R.24 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, near center of dam on Stevenson Creek, and 5.2 mi southwest of town of Big Creek.

DRAINAGE AREA.—29.1 mi^2.

PERIOD OF RECORD.—November 1909 to current year. Prior to January 1927, monthly contents only, published in WSP 1315-A; January 1927 to September 1931, published in WSP 721. Maximum and minimum daily contents (water years 1928–39) summarized in WSP 881. Prior to 1960, maximum and minimum daily contents were published.

REVISED RECORDS.—WSP 1565: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.). Prior to Jan. 11, 1927, gage on rockfill dam a short distance upstream at different datum.

REMARKS.—Storage began prior to 1905. Original lake formed by rockfill dam, usable capacity, 5,500 acre-ft. Water diverted by Fresno Flume and Lumber Co.'s Flumes No. 1 and 2 beginning prior to 1907 and discontinued July 7, 1920. Present lake formed by concrete-arch dam; dam completed Nov. 18, 1927. Usable capacity of present lake, 135,568 acre-ft, between elevations 5,225 ft, trash-rack foundation, and 5,370.13 ft, crest of spillway. Additional storage of 92 acre-ft is not available for release. Water is received from Pitman Creek (since Feb. 22, 1928) and Huntington Lake (since Apr. 21, 1928) via Huntington–Shaver Conduit and Eastwood Powerplant (station 11238250). Water is released for power development in Big Creek powerplants. Records, including extremes, represent contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

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, 135,897 acre-ft, July 5, 1946, Aug. 4, 1978, maximum elevation, 5,370.28 ft, Aug. 4, 1978; minimum contents, 652 acre-ft, Mar. 7, 1942, elevation, 5,249.38 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 134,542 acre-ft, June 7, elevation, 5,369.66 ft; minimum, 77,348 acre-ft, Nov. 14, elevation, 5,340.36 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Oct. 1, 1967)

5,245	379	5,265	3,206	5,300	24,004	5,340	76,741
5,250	700	5,270	4,748	5,310	34,455	5,350	94,568
5,255	1,254	5,280	9,189	5,320	46,797	5,371	137,476
5,260	2,070	5,290	15,598	5,330	60,942		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109411	86554	83147	84202	88464	94587	98252	107591	134002	128109	121434	110173
2	109131	86140	83112	83934	88421	94797	98350	108049	134110	127877	121037	110173
3	108129	85477	83251	84105	88395	95102	98406	108550	134240	127622	120392	110173
4	106975	84397	83478	84275	88480	95807	98387	108448	134261	127728	119957	109932
5	105844	83321	83077	84534	88454	96339	98445	108368	134393	127578	119356	109210
6	105154	82465	83461	84528	88556	96721	98560	108268	134459	127728	119087	109290
7	104541	81683	83548	84628	89096	97105	100004	108389	134542	127898	118590	109090
8	103620	80976	83760	84903	89365	97467	100043	109893	134172	127387	118054	108188
9	102915	79841	83813	85110	89395	97927	100390	110900	133868	126900	117272	107253
10	102623	78767	83724	85798	89425	98273	100912	111546	133932	126393	117354	107234
11	102058	78478	83743	86151	89455	98445	101319	112251	133563	126414	116900	107234
12	101223	78156	83813	86323	89484	98445	101262	113247	133237	126055	117272	106874
13	100427	77667	83706	86514	89514	98234	101281	114222	132956	126075	116840	107008
14	100043	77348	83813	86739	90228	98176	101514	115407	132373	125822	116243	107153
15	99214	78375	83831	86948	90467	98252	101630	116470	131855	125591	115241	107418
16	98522	78614	83251	87121	90614	98273	101844	116922	131295	125230	115160	107303
17	97966	79875	83355	87203	90487	98368	101980	117601	130566	125104	114403	107787
18	96933	81148	83444	87233	90781	98406	101903	118655	130137	124914	113611	107892
19	95807	81942	83374	87245	91301	98292	102856	120103	129709	124745	113387	107948
20	94758	82048	83391	87274	91712	98022	103501	121811	128917	124640	113488	107253
21	93832	82728	83321	87504	92029	97966	103736	123528	129304	124451	113429	106558
22	92944	83654	83094	87769	92400	98004	103912	125448	129174	124283	113165	105705
23	92307	83654	83199	88017	92644	98062	103796	126936	128855	123988	112900	105034
24	91712	83777	83338	88483	93115	97966	104244	128326	128982	123715	112535	105370
25	90799	83531	83461	88347	93491	97181	104601	129206	128917	123463	112333	105192
26	90101	83060	83618	88123	93757	97181	105173	130269	129197	123233	111948	105015
27	89420	82378	83760	88080	93963	97277	105765	131255	128917	122897	111565	105094
28	88706	82378	83848	87856	94417	97430	106259	132226	128790	122414	111302	104244
29	88344	82361	83990	87776	---	97621	106616	132830	128620	122163	111181	104424
30	87908	83025	84060	87878	---	97832	106935	133305	128344	122102	111061	103834
31	87056	---	84219	87927	---	98043	---	133717	---	122019	110173	---
MAX	109411	86554	84219	88483	94417	98445	106935	133717	134542	128109	121434	110173
MIN	87056	77348	83077	83934	88395	94587	98252	107591	128344	122019	110173	103834
a	5345.94	5343.67	5344.35	5346.42	5349.92	5351.82	5356.38	5369.28	5366.78	5363.78	5358.00	5354.81
b	-24065	-4031	+1194	+3708	+6490	+3626	+8892	+26782	-5373	-6325	-11846	-6339

CAL YR 2000 b -8256
WTR YR 2001 b -7287

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11241500 STEVENSON CREEK AT SHAVER LAKE, CA

LOCATION.—Lat 37°08'41", long 119°18'27", in NE 1/4 SW 1/4 sec.13, T.9 S., R.24 E., Fresno County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 400 ft downstream from Highway 168, 1,600 ft downstream from Shaver Lake Dam, 2.6 mi north of town of Shaver Lake, and 5.1 mi southwest of town of Big Creek.

DRAINAGE AREA.—29.4 mi^2.

PERIOD OF RECORD.—October 1916 to August 1919, October 1919 to September 1920, May 1922 to September 1928, and October 1986 to current year. Prior to October 1986, published as "at Shaver."

GAGE.—Water-stage recorder, Parshall flume, and concrete control; auxiliary gage, accoustic-velocity meters on Shaver Lake Dam. Elevation of gage is 5,200 ft above sea level, from topographic map. See WSP 1315-A for history of changes prior to October 1986.

REMARKS.—Flow regulated by Shaver Lake (station 11239500). Flow diverted into basin through Eastwood Powerplant (station 11238250). Diversion to Big Creek Powerplant No. 2A (station 11238400) bypasses station and returns to Big Creek. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,390 ft^3/s, Nov. 27, 1926, gage height, 3.65 ft, site and datum then in use; maximum gage height, 7.64 ft, Apr. 26, 1993; no flow at times in 1924, 1925, 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.8	3.8	3.8	4.0	4.3	4.5	4.6	3.1	3.3	3.5	3.5
2	4.6	4.4	3.8	3.8	4.0	4.3	4.5	4.6	3.1	3.3	3.5	3.9
3	4.6	4.2	3.8	3.8	4.0	4.2	4.5	4.3	3.1	3.3	3.5	3.5
4	4.6	3.9	3.8	3.8	4.0	4.5	4.4	3.4	3.1	3.3	3.5	3.5
5	4.6	3.9	3.8	3.8	4.0	4.7	4.4	3.4	3.1	3.3	3.5	3.5
6	4.6	3.9	3.8	3.8	4.0	4.5	4.4	3.4	3.1	3.4	3.5	3.5
7	4.6	3.9	3.8	3.8	4.0	4.5	4.4	3.3	3.1	3.5	3.5	3.5
8	4.6	3.9	3.8	3.8	4.0	4.5	4.4	3.3	3.1	3.4	3.5	3.5
9	4.9	4.0	3.8	3.9	4.0	4.5	4.5	3.3	3.1	3.7	3.5	3.4
10	5.0	4.0	3.8	4.0	4.1	4.5	4.6	3.3	3.1	5.2	3.5	3.5
11	4.7	4.1	3.8	4.1	4.1	4.4	4.6	3.3	4.8	4.3	3.5	3.5
12	4.7	3.9	3.9	4.0	4.0	4.4	4.6	3.3	5.7	4.3	3.5	3.5
13	4.6	3.8	3.9	4.0	4.1	4.4	4.6	3.3	4.5	4.3	3.5	3.5
14	4.6	3.8	3.9	4.0	4.1	4.5	4.6	3.3	3.4	4.0	3.5	3.5
15	4.6	3.8	3.9	4.0	4.1	4.5	4.6	3.3	3.4	3.2	3.5	3.5
16	4.6	3.8	3.9	3.9	4.1	4.5	4.6	3.3	3.3	3.2	3.5	3.5
17	4.6	3.8	3.9	3.9	4.1	4.5	4.6	3.2	3.3	3.2	3.5	3.5
18	4.6	3.8	3.9	3.9	4.2	4.5	4.6	3.2	3.3	3.2	3.5	3.5
19	4.6	3.8	3.9	3.9	4.2	4.5	4.6	3.2	3.3	3.2	3.5	3.6
20	4.6	3.8	3.9	3.9	4.3	4.5	4.7	3.2	3.3	3.2	3.5	3.6
21	4.7	3.8	3.8	3.9	4.2	4.5	4.7	3.2	3.3	3.2	3.5	3.6
22	4.7	3.8	3.8	3.9	4.2	4.5	4.7	3.2	3.3	3.2	3.5	3.6
23	4.6	3.8	3.8	4.0	4.2	4.5	4.7	3.2	3.3	3.2	3.6	3.6
24	4.6	3.8	3.8	4.1	4.2	4.5	4.7	3.2	3.3	3.2	3.6	3.5
25	4.5	3.8	3.8	4.0	4.2	4.5	4.6	3.2	3.3	3.2	3.6	3.5
26	4.4	3.8	3.8	4.0	4.2	4.6	4.6	3.2	3.3	3.2	3.6	3.5
27	4.5	3.8	3.8	4.0	4.3	4.5	4.6	3.2	3.3	3.2	3.5	3.4
28	4.7	3.8	3.8	4.0	4.3	4.5	4.6	3.2	3.3	3.5	3.5	3.4
29	7.2	3.8	3.8	4.0	---	4.5	4.6	3.1	3.7	3.5	3.5	3.4
30	6.2	3.8	3.8	4.0	---	4.5	4.6	3.1	3.9	3.5	3.5	3.4
31	5.9	---	3.8	4.0	---	4.5	---	3.1	---	3.5	3.5	---
TOTAL	148.8	117.3	118.7	121.8	115.2	138.8	137.1	104.4	103.3	108.2	108.9	105.4
MEAN	4.80	3.91	3.83	3.93	4.11	4.48	4.57	3.37	3.44	3.49	3.51	3.51
MAX	7.2	4.8	3.9	4.1	4.3	4.7	4.7	4.6	5.7	5.2	3.6	3.9
MIN	4.4	3.8	3.8	3.8	4.0	4.2	4.4	3.1	3.1	3.2	3.5	3.4
AC-FT	295	233	235	242	228	275	272	207	205	215	216	209
a	29230	23360	15640	9750	3470	3100	4260	25530	31460	17680	26330	22510

a Diversion, in acre-feet, to Big Creek Powerplant No. 2A (station 11238400), provided by Southern California Edison Co.

11241500 STEVENSON CREEK AT SHAVER LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1928, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.54	8.14	7.53	5.13	12.9	38.7	66.8	59.8	20.3	5.73	4.76	3.51
MAX	9.76	45.5	33.5	15.1	40.7	147	245	203	61.3	16.5	12.7	10.9
(WY)	1917	1927	1927	1920	1927	1917	1917	1922	1922	1920	1927	1927
MIN	.48	.30	.13	.15	.25	.37	.46	.27	.070	.000	.000	.000
(WY)	1926	1928	1928	1928	1928	1924	1928	1928	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1917 - 1928	
ANNUAL TOTAL		
ANNUAL MEAN	19.6	
HIGHEST ANNUAL MEAN	61.9	1917
LOWEST ANNUAL MEAN	.76	1928
HIGHEST DAILY MEAN	854	Nov 27 1926
LOWEST DAILY MEAN	.00	Jun 11 1924
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 20 1924
ANNUAL RUNOFF (AC-FT)	14170	
10 PERCENT EXCEEDS	46	
50 PERCENT EXCEEDS	4.5	
90 PERCENT EXCEEDS	.20	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.2	3.32	2.78	19.5	28.7	44.7	47.1	80.6	128	83.3	14.8	3.59
MAX	147	3.91	3.83	253	280	304	289	382	556	495	98.4	4.90
(WY)	1999	2001	2001	1997	1997	1997	1997	1996	1995	1995	1995	1997
MIN	3.26	2.92	2.18	2.21	2.39	2.53	3.43	3.37	3.23	3.03	3.16	3.11
(WY)	1997	1993	2000	1996	1990	1996	1989	2001	1994	1997	1996	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	6703.6		1427.9			
ANNUAL MEAN	18.3		3.91		39.1	
HIGHEST ANNUAL MEAN					156	1995
LOWEST ANNUAL MEAN					3.06	1990
HIGHEST DAILY MEAN	362	Jun 14	7.2	Oct 29	688	Jun 25 1995
LOWEST DAILY MEAN	2.1	Jan 1	3.1	May 29	1.2	Dec 1 1991
ANNUAL SEVEN-DAY MINIMUM	2.1	Jan 1	3.1	May 29	1.9	Nov 26 1991
MAXIMUM PEAK FLOW			8.2	Oct 29	816	Jun 13 1995
MAXIMUM PEAK STAGE			3.91	Oct 29	7.64	Apr 26 1993
ANNUAL RUNOFF (AC-FT)	13300		2830		28350	
TOTAL DIVERSION (AC-FT) a	286400		212300		242900	
10 PERCENT EXCEEDS	4.7		4.6		202	
50 PERCENT EXCEEDS	4.1		3.8		3.5	
90 PERCENT EXCEEDS	2.9		3.2		2.5	

a Diversion, in acre-feet, to Big Creek Powerplant No. 2A (station 11238400), provided by Southern California Edison Co.

11241950 REDINGER LAKE NEAR AUBERRY, CA

LOCATION.—Lat 37°08'42", long 119°26'58", in NE 1/4 SW 1/4 sec.15, T.9 S., R.23 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, at intake structure on dam No. 7, on San Joaquin River, and 4.2 mi northeast of Auberry.

DRAINAGE AREA.—1,295 mi^2.

PERIOD OF RECORD.—November 1950 to current year. Prior to October 1965, monthend contents only, published in WSP 1930.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Lake is formed by a concrete dam; storage began Nov. 19, 1950. Usable capacity, 26,120 acre-ft, between elevations 1,320.00 ft, invert of tunnel, and 1,403.00 ft, top of radial gates. Additional storage of 8,914 acre-ft not available for release. Water is used for power development in Big Creek Powerplant No. 4 (station 11246530). Records, including extremes, represent contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

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, 26,586 acre-ft, Aug. 5, 1978, elevation, 1,404.00 ft; minimum since appreciable storage was attained, 5,985 acre-ft, Nov. 22, 1981, elevation, 1,346.85 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 25,809 acre-ft, May 17, elevation, 1,402.33 ft; minimum, 8,415 acre-ft, Nov. 26, elevation, 1,355.77 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Southern California Edison Co., dated Oct. 27, 1950)

1,340	4,282	1,360	9,651	1,380	16,455	1,400	24,748
1,350	6,809	1,370	12,858	1,390	20,427	1,405	27,058

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23268	25042	13133	24506	24291	24524	23658	24278	25708	24703	24623	23958
2	23483	25396	14924	24506	24136	24439	23940	23737	25745	24762	24717	23825
3	23980	25033	15205	24888	24029	23676	23936	23447	25566	24820	24784	24051
4	25276	24672	15602	25415	23971	23596	24185	22762	25588	24542	24640	24109
5	25500	24519	16334	25209	23927	22979	24122	23482	25442	24425	24533	24158
6	24878	24185	18254	25241	23158	23276	24358	23803	25323	24425	24416	24287
7	25509	23887	19397	24434	23101	24096	24060	24273	25616	24645	24676	24524
8	23823	22676	20382	24412	23403	24825	23843	24753	25396	24560	24654	24502
9	24551	21430	21303	23544	23702	25082	23878	25191	24667	24717	25246	24425
10	23904	20109	22810	24047	24016	24578	23689	25538	24762	24888	25028	23963
11	23383	17711	24109	24087	24233	24488	23346	25337	25046	24748	24924	23808
12	24205	16764	25164	24354	24528	24096	23508	25342	25010	24519	24372	23830
13	24646	14863	25314	24699	24340	23909	24906	25096	25195	25128	24582	24287
14	25377	15642	24884	24951	24260	23799	24906	25164	25055	25218	24600	24457
15	25136	16901	23923	25410	24118	23803	24452	25128	25078	24893	24582	24466
16	25042	18583	23517	24888	24167	23618	24884	25015	24816	24938	24296	23852
17	25109	20002	23101	24906	24318	23869	24838	25809	24902	25128	24345	23715
18	25306	16353	23579	24902	24403	24131	24605	24020	25155	25237	23772	24866
19	24932	13205	23856	24645	24528	24118	23949	23237	25114	25264	24180	25119
20	24180	12372	24627	24744	24897	23900	23698	23742	25006	25351	24816	25168
21	23884	12435	24820	24658	24376	24238	23923	24127	25155	25268	24838	25205
22	24490	12729	24591	24636	24376	24884	24448	23702	25246	25164	24587	25173
23	25584	12154	24167	24938	24475	23914	24390	23350	24997	24969	24457	24870
24	25207	9621	23698	23618	24038	23676	24202	23936	24739	24929	24448	24488
25	24631	8427	23852	23772	24273	23368	23728	24096	24730	24947	24443	23206
26	24691	8415	24287	24171	24479	25051	23671	24358	24771	24951	24816	21689
27	24569	9002	24282	24193	24766	24260	23980	25278	24897	25055	25323	19803
28	24669	9175	24264	24537	24811	24443	24198	25791	24938	25250	25392	17350
29	24930	9901	24162	24775	---	24560	24136	25740	24546	25064	24802	17350
30	24739	11716	24256	24569	---	24560	24372	25630	24636	24852	24802	18973
31	24802	---	24416	24434	---	24618	---	25731	---	24667	24198	---
MAX	25584	25396	25314	25415	24897	25082	24906	25809	25745	25351	25392	25205
MIN	23268	8415	13133	23544	23101	22979	23346	22762	24546	24425	23772	17350
a	1400.12	1366.58	1399.26	1399.30	1400.14	1399.71	1399.16	1402.16	1399.75	1399.82	1398.77	1386.44
b	+9	-13086	+12700	+18	+377	-193	-246	+1359	-1095	+31	-469	-5225

CAL YR 2000 b -386
WTR YR 2001 b -5820

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11242000 SAN JOAQUIN RIVER ABOVE WILLOW CREEK, NEAR AUBERRY, CA

LOCATION.—Lat 37°08'40", long 119°27'13", in SW 1/4 SW 1/4 sec.15, T.9 S., R.23 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 1,000 ft downstream from Redinger Lake Dam, 0.4 mi upstream from Willow Creek, and 4.2 mi northeast of Auberry.

DRAINAGE AREA.—1,295 mi^2.

PERIOD OF RECORD.—March 1951 to current year.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 1,175.54 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Flow regulated by Redinger Lake (station 11241950). Most of the flow, since June 1951, is diverted at Redinger Lake to Big Creek Powerplant No. 4 (station 11246530). See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 99,200 ft^3/s, Jan. 2, 1997, gage height, 65.17 ft, from floodmarks, from rating curve extended above 7,000 ft^3/s, on basis of computed flow over dam; no flow, Sept. 25, 1951.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e24	36	e35	e24	e23	24	24	23	23	23	23	23
2	e23	36	e36	e24	e24	24	24	23	23	23	23	23
3	e23	36	e36	e24	e23	24	24	23	23	23	23	23
4	e23	36	e36	e24	e23	24	24	24	23	23	23	23
5	e23	e37	e36	e23	e24	24	24	24	23	23	29	23
6	e23	e37	e36	e23	e24	23	24	24	23	23	36	23
7	e23	e37	e37	e23	e24	23	24	23	23	21	36	23
8	e23	e37	e37	e23	e24	24	24	23	23	23	36	23
9	e23	e37	e37	e23	e24	24	23	23	23	23	31	23
10	e81	e37	e37	e23	e24	24	23	24	23	23	25	23
11	e151	e36	e37	e23	e24	24	23	23	23	23	24	23
12	36	e36	e38	e23	e24	24	23	23	23	23	24	23
13	36	e36	e38	e23	e24	23	23	23	23	23	24	23
14	36	e36	e38	e23	e24	23	23	23	23	23	24	23
15	36	e36	e38	e23	24	23	23	23	23	23	24	23
16	36	e36	e37	e23	24	23	23	23	23	23	24	23
17	36	e37	e37	e23	24	23	23	274	23	23	24	23
18	36	e36	e37	e23	24	24	23	23	23	23	24	23
19	36	e36	e30	e23	24	24	23	24	23	23	24	23
20	36	e35	e24	e23	24	24	24	24	23	23	24	23
21	36	e35	e24	e24	24	24	23	24	23	23	24	23
22	36	e35	e24	e24	24	24	23	23	23	23	24	23
23	36	e35	e24	e24	24	24	23	23	23	23	24	23
24	774	e35	e24	e24	24	24	23	24	23	23	24	23
25	36	e34	e24	e24	24	23	23	24	23	23	24	23
26	36	e34	e24	e24	24	24	23	23	23	23	24	23
27	36	e35	e24	e24	24	24	23	23	59	23	24	23
28	36	e35	e24	e24	24	24	23	23	23	23	24	22
29	36	e35	e24	e23	---	24	23	115	23	23	24	22
30	36	e35	e24	e23	---	24	23	23	23	23	24	22
31	36	---	e24	e23	---	24	---	23	---	23	24	---
TOTAL	1898	1074	981	725	669	736	699	1065	726	711	789	687
MEAN	61.2	35.8	31.6	23.4	23.9	23.7	23.3	34.4	24.2	22.9	25.5	22.9
MAX	774	37	38	24	24	24	24	274	59	23	36	23
MIN	23	34	24	23	23	23	23	23	23	21	23	22
AC-FT	3760	2130	1950	1440	1330	1460	1390	2110	1440	1410	1560	1360
a	69330	69140	30430	32780	25520	81170	125900	204400	132900	72230	101700	77090

e Estimated.
a Diversion, in acre-feet, to Big Creek No. 4 Powerplant (station 11246530), provided by Southern California Edison Co.

11242000 SAN JOAQUIN RIVER ABOVE WILLOW CREEK, NEAR AUBERRY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.4	20.9	107	157	117	156	406	1627	2207	896	72.2	22.1
MAX	61.2	76.2	3501	4156	1255	1456	2739	10410	12700	7739	1343	46.9
(WY)	2001	1983	1956	1997	1986	1983	1951	1969	1983	1995	1983	1997
MIN	8.15	8.55	5.66	3.83	3.38	2.86	3.27	4.76	8.59	13.5	16.5	2.79
(WY)	1983	1985	1966	1965	1966	1968	1955	1971	1971	1979	1984	1951

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	116473		10760			
ANNUAL MEAN	318		29.5		479	
HIGHEST ANNUAL MEAN					2409	1983
LOWEST ANNUAL MEAN					11.4	1966
HIGHEST DAILY MEAN	5500	May 28	774	Oct 24	47700	Dec 23 1955
LOWEST DAILY MEAN	20	Feb 20	21	Jul 7	.00	Sep 25 1951
ANNUAL SEVEN-DAY MINIMUM	20	Feb 20	23	Sep 24	.38	Oct 17 1982
MAXIMUM PEAK FLOW			3040	Jun 27	99200	Jan 2 1997
MAXIMUM PEAK STAGE			11.55	Jun 27	65.17	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	231000		21340		347200	
TOTAL DIVERSION (AC-FT) a	1367000		1023000			
10 PERCENT EXCEEDS	918		36		1170	
50 PERCENT EXCEEDS	22		24		20	
90 PERCENT EXCEEDS	21		23		5.2	

a Diversion, in acre-feet, to Big Creek No. 4 Powerplant (station 11246530), provided by Southern California Edison Co.

11242400 NORTH FORK WILLOW CREEK NEAR SUGAR PINE, CA

LOCATION.—Lat 37°23'52", long 119°33'55", in SW 1/4 NE 1/4 sec.21, T.6 S., R.22 E., Madera County, Hydrologic Unit 18040006, on right bank at road bridge, 0.6 mi downstream from Soquel Campground, 3.0 mi upstream from Chilkoot Creek, and 4.7 mi southeast of Sugar Pine.

DRAINAGE AREA.—16.9 mi^2.

PERIOD OF RECORD.—August 1965 to current year.

REVISED RECORDS.—WDR CA-72-2: 1970, 1971. WDR CA-85-3: 1983, 1984(P). WDR CA-93-3: 1992.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 5,200 ft above sea level, from topographic map.

REMARKS.—Records good. No storage upstream from station. Madera Irrigation District has water rights to divert up to 50 ft^3/s from North Fork Willow Creek through Soquel Ditch into Nelder Creek (Fresno River Basin) from October through July each year. See schematic diagram of lower San Joaquin River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,750 ft^3/s, Jan. 13, 1980, gage height, 7.41 ft, from rating curve extended above 1,100 ft^3/s, on basis of a step-backwater survey; minimum daily, 0.27 ft^3/s, Oct. 4, 1987.

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. 12	1200	126	3.73	May 7	2015	144	3.81

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	7.6	6.0	4.5	8.7	7.4	55	105	26	7.3	3.7	2.1
2	3.5	7.5	5.6	4.4	8.4	7.2	46	95	25	7.1	3.6	2.1
3	3.6	7.2	5.4	4.4	8.7	6.8	37	83	24	6.8	3.5	2.0
4	3.6	6.6	5.4	4.3	11	11	30	82	23	6.3	3.5	2.0
5	3.6	6.4	5.2	4.3	10	26	27	88	22	5.7	3.4	2.0
6	3.5	6.4	5.1	4.3	9.2	19	25	98	20	6.3	3.3	2.0
7	3.5	6.2	5.3	4.2	14	14	38	110	19	9.4	3.2	1.9
8	3.6	6.0	5.5	4.6	10	14	27	113	18	8.0	3.1	1.9
9	3.7	6.2	5.6	4.6	8.9	15	23	108	17	7.1	2.9	1.9
10	5.8	6.5	5.4	6.0	34	12	23	105	17	6.4	2.8	1.8
11	5.7	6.3	5.4	21	54	11	20	105	16	6.1	2.8	1.9
12	5.3	6.0	5.9	16	101	11	19	97	16	5.8	2.8	1.9
13	5.0	6.1	5.3	8.6	81	12	20	88	15	5.6	2.7	1.8
14	4.9	6.4	5.7	6.9	50	14	22	84	15	5.4	2.7	1.8
15	4.6	6.5	6.3	7.1	31	15	25	82	14	5.2	2.6	1.9
16	4.4	6.1	5.8	8.8	20	15	29	83	13	5.1	2.6	1.8
17	4.2	5.9	5.7	8.5	14	16	34	78	12	5.3	2.5	1.8
18	4.1	5.9	5.4	8.6	11	21	37	74	11	5.4	2.5	1.9
19	4.0	5.9	5.2	7.6	9.7	28	44	69	11	5.2	2.5	1.9
20	4.0	6.0	5.1	7.0	12	33	40	66	11	5.1	2.4	1.8
21	4.2	5.8	5.1	6.6	10	35	41	63	10	5.1	2.5	1.9
22	4.8	5.8	4.9	6.3	11	38	34	60	9.6	4.9	2.5	1.9
23	4.4	5.6	4.9	6.1	9.7	39	41	55	9.1	4.7	2.4	1.9
24	4.3	5.6	4.8	18	10	39	52	51	8.8	4.6	2.4	1.9
25	4.4	5.7	4.8	22	11	40	65	46	8.6	4.5	2.4	2.0
26	8.1	5.7	4.7	21	8.5	40	76	41	8.4	4.4	2.3	2.0
27	13	5.6	4.6	16	7.8	42	85	38	8.3	4.3	2.2	2.0
28	9.0	5.5	4.6	12	7.7	45	81	35	8.0	4.0	2.2	2.0
29	36	7.2	4.6	10	---	49	78	33	7.9	3.8	2.2	2.0
30	11	6.8	4.5	9.2	---	50	94	30	7.6	3.8	2.2	1.9
31	8.3	---	4.5	9.0	---	55	---	28	---	3.8	2.1	---
TOTAL	191.6	187.0	162.3	281.9	582.3	780.4	1268	2293	431.3	172.5	84.5	57.7
MEAN	6.18	6.23	5.24	9.09	20.8	25.2	42.3	74.0	14.4	5.56	2.73	1.92
MAX	36	7.6	6.3	22	101	55	94	113	26	9.4	3.7	2.1
MIN	3.5	5.5	4.5	4.2	7.7	6.8	19	28	7.6	3.8	2.1	1.8
AC-FT	380	371	322	559	1150	1550	2520	4550	855	342	168	114

11242400 NORTH FORK WILLOW CREEK NEAR SUGAR PINE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.67	9.37	14.6	30.8	30.3	41.0	51.5	78.7	51.6	17.7	5.95	4.35
MAX	17.8	43.0	78.2	268	178	151	176	228	219	109	26.9	14.3
(WY)	1983	1984	1997	1997	1986	1986	1982	1995	1995	1983	1983	1978
MIN	.41	1.63	1.20	1.84	2.08	2.04	1.78	2.40	1.84	.99	.66	.38
(WY)	1978	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	9950.3		6492.5			
ANNUAL MEAN	27.2		17.8		28.3	
HIGHEST ANNUAL MEAN					82.7	1983
LOWEST ANNUAL MEAN					1.57	1977
HIGHEST DAILY MEAN	215	Jan 24	113	May 8	1600	Jan 2 1997
LOWEST DAILY MEAN	3.2	Sep 18	1.8	Sep 10	.27	Oct 4 1987
ANNUAL SEVEN-DAY MINIMUM	3.3	Sep 14	1.8	Sep 10	.29	Oct 11 1977
MAXIMUM PEAK FLOW			144	May 7	2750	Jan 13 1980
MAXIMUM PEAK STAGE			3.81	May 7	7.41	Jan 13 1980
ANNUAL RUNOFF (AC-FT)	19740		12880		20540	
10 PERCENT EXCEEDS	73		50		80	
50 PERCENT EXCEEDS	9.4		6.8		8.4	
90 PERCENT EXCEEDS	3.9		2.4		1.9	

11243300 BROWNS CREEK CANAL AT BASS LAKE, CA

LOCATION.—Lat 37°17'19", long 119°31'09", in SE 1/4 SW 1/4 sec.25, T.7 S., R.22 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 900 ft upstream from Bass Lake, and 3.0 mi southeast of town of Bass Lake.

PERIOD OF RECORD.—October 1986 to September 1998, October 2000 to September 2001.

GAGE.—Water-stage recorder and concrete canal. Elevation of gage is 3,440 ft above sea level, from topographic map.

REMARKS.—Canal diverts from South Fork Willow Creek at diversion dam 1.5 mi upstream from gage, in NW 1/4 NE 1/4 sec.30, T.7 S., R.23 E. Flow enters Bass Lake (station 11243400) for power development in San Joaquin River powerplants. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 86 ft^3/s, Mar. 8, 1989; no flow at times in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e4.6	e3.3	e7.4	e13	77	79	19	2.8	.00	.00
2	e.00	e.00	e4.3	e3.2	e9.1	e13	80	81	18	2.6	.00	.00
3	e.00	e.00	e4.1	e3.5	e13	e14	74	83	17	2.2	.00	.00
4	e.00	e.00	e3.9	e3.0	e20	e25	59	84	17	1.7	.00	.00
5	e.00	e.00	e3.9	e3.1	e22	e42	49	84	16	1.3	.00	.00
6	e.00	e.00	e3.6	e3.1	e20	e32	44	84	16	1.7	.00	.00
7	e.00	e.00	e3.9	e3.5	e17	e25	45	84	15	4.6	.00	.00
8	e.00	e.00	e3.9	e4.1	e11	e28	42	82	14	3.9	.00	.00
9	e.00	e.00	e3.9	e4.0	e10	e31	37	80	14	2.8	.00	.00
10	e.00	e.00	e4.1	e5.0	e7.6	e27	32	80	12	2.3	.00	.00
11	e.00	e.00	e4.2	e9.0	e7.6	e22	35	79	11	1.4	.00	.00
12	e.00	e.00	e5.0	e7.0	e7.9	e24	33	79	11	1.1	.00	.00
13	e.00	e.00	e4.7	e6.7	e8.2	e24	36	79	11	1.0	.00	.00
14	e.00	e3.2	e5.0	e6.1	e8.5	e31	46	77	9.9	.82	.00	.00
15	e.00	e5.1	e5.5	e6.3	e8.9	37	49	71	8.7	.41	.00	.00
16	e.00	e4.8	e5.9	e5.8	e9.3	39	63	64	8.3	.00	.00	.00
17	e.00	e4.8	e5.4	e4.7	e9.7	38	71	60	7.9	.00	.00	.00
18	e.00	e4.8	e4.8	e5.8	e10	52	72	54	7.5	.00	.00	.00
19	e.00	e5.1	e4.4	e6.8	e11	67	57	49	7.1	.00	.00	.00
20	e.00	e4.5	e4.3	e6.8	e11	81	e.01	44	6.8	.00	.00	.00
21	e.00	e4.5	e4.3	e6.7	e11	77	e.00	41	6.5	.00	.00	.00
22	e.00	e4.7	e4.3	e7.6	e12	75	e.00	37	6.1	.00	.00	.00
23	e.00	e4.8	e4.3	e7.5	e12	75	e36	34	5.7	.00	.00	.00
24	e.00	e4.6	e4.2	e7.8	e13	74	77	32	4.9	.00	.00	.00
25	e.00	e4.6	e4.0	e8.0	e13	75	79	28	4.5	.00	.00	.00
26	e.00	e4.9	e3.9	e8.0	e14	73	77	23	4.2	.00	.00	.00
27	e.00	e5.1	e3.6	e7.7	e14	74	77	20	3.8	.00	.00	.00
28	e.00	e4.4	e3.6	e7.4	e14	76	77	21	3.6	.00	.00	.00
29	e.00	e4.4	e3.6	e7.7	---	77	76	21	3.4	.00	.00	.00
30	e.00	e4.9	e3.6	e7.5	---	77	76	21	3.2	.00	.00	.00
31	e.00	---	e3.4	e7.3	---	77	---	20	---	.00	.00	---
TOTAL	0.00	79.20	132.2	184.0	332.2	1495	1576.01	1775	293.1	30.63	0.00	0.00
MEAN	.000	2.64	4.26	5.94	11.9	48.2	52.5	57.3	9.77	.99	.000	.000
MAX	.00	5.1	5.9	9.0	22	81	80	84	19	4.6	.00	.00
MIN	.00	.00	3.4	3.0	7.4	13	.00	20	3.2	.00	.00	.00
AC-FT	.00	157	262	365	659	2970	3130	3520	581	61	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	1.69	4.72	9.47	18.0	31.3	47.7	52.4	39.0	19.0	6.53	1.87	.87
MAX	6.53	22.7	56.0	53.5	73.3	74.5	77.2	76.3	76.4	37.4	12.1	4.50
(WY)	1990	1997	1997	1993	1997	1997	1993	1993	1995	1995	1995	1995
MIN	.000	.000	.88	3.01	.64	.45	.54	.27	.000	.000	.000	.000
(WY)	1989	1996	1998	1991	1998	1998	1998	1998	1998	1998	1987	1987

SUMMARY STATISTICS	FOR 2001 WATER YEAR			WATER YEARS 1987 - 2001		
ANNUAL TOTAL	5897.34					
ANNUAL MEAN	16.2			19.3		
HIGHEST ANNUAL MEAN				39.0		1995
LOWEST ANNUAL MEAN				1.58		1998
HIGHEST DAILY MEAN	84	May	4	86	Mar 8	1989
LOWEST DAILY MEAN	.00	Oct	1	.00	Jul 3	1987
ANNUAL SEVEN-DAY MINIMUM	.00	Oct	1	.00	Jul 3	1987
ANNUAL RUNOFF (AC-FT)	11700			13980		
10 PERCENT EXCEEDS	72			71		
50 PERCENT EXCEEDS	4.6			5.7		
90 PERCENT EXCEEDS	.00			.00		

e Estimated.

11243400 BASS LAKE NEAR BASS LAKE, CA

LOCATION.—Lat 37°17'33", long 119°31'43", in SE 1/4 NE 1/4 sec.26, T.7 S., R.22 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, at outlet tower at dam, on North Fork Willow Creek, 2.2 mi southeast of town of Bass Lake, and 5 mi north of North Fork.

DRAINAGE AREA.—50.4 mi^2.

PERIOD OF RECORD.—January 1911 to September 1982 (monthend contents only), October 1982 to current year. Bass Lake was formerly called Crane Valley Reservoir.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir formed by earthfill and rockfill dam; completed in 1901 and raised in 1910. Since 1910, usable contents, 45,100 acre-ft between elevations 3,280.22 ft, invert of outlet conduit No. 3, and 3,376.40 ft, top of spillway gates. Additional storage of 300 acre-ft not available for release. Water is released through Crane Valley Powerplant below dam for use in three small powerplants before being discharged into Kerckhoff Reservoir (station 11246650) at Wishon Powerplant. Water is diverted from South Fork Willow Creek via Browns Creek Ditch into Bass Lake near left end of dam. Madera Irrigation District has water rights to divert up to 50 ft^3/s from North Fork Willow Creek through Soquel Ditch into Nelder Creek (Fresno River Basin) from October through July each year. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 45,960 acre-ft, June 17, 1923, elevation, 3,376.8 ft; minimum, 35 acre-ft, Nov. 19, 1953, elevation, 3,270.2 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 44,911 acre-ft, May 19, elevation, 3,375.96 ft; minimum, 19,880 acre-ft, Nov. 16, elevation, 3,350.29 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated March 1937)

3,280	290	3,310	3,404	3,340	13,227	3,370	38,218
3,290	890	3,320	5,584	3,350	19,663	3,376.4	45,410
3,300	1,896	3,330	8,717	3,360	28,121		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31630	23764	20348	21283	22737	25648	31737	40321	43983	42447	40528	37617
2	31346	23501	20386	21307	22796	25809	32063	40789	44066	42201	40517	37312
3	31073	23231	20416	21331	22862	25889	32331	41083	44137	41933	40496	37052
4	30793	22963	20439	21347	22971	26266	32560	41477	44220	41666	40485	36900
5	30513	22679	20462	21371	23072	26978	32770	41899	44291	41411	40463	36597
6	30225	22413	20493	21387	23172	27242	33021	42346	44362	41203	40452	36295
7	29948	22132	20516	21403	23223	27426	33387	42731	44434	40974	40430	35995
8	29664	21855	20540	21467	23282	27601	33601	43069	44493	40713	40420	35738
9	29399	21588	20571	21500	23400	27814	33785	43383	44553	40626	40398	35441
10	29145	21323	20602	21774	23527	27953	33949	43676	44601	40626	40376	35144
11	28873	21054	20640	21847	23756	28102	34155	43935	44648	40626	40354	34892
12	28603	20765	20695	21766	23807	28130	34341	44149	44672	40658	40332	34882
13	28334	20501	20734	21806	23850	28065	34507	44327	44720	40680	40310	34736
14	28065	20226	20773	21855	23892	28046	34704	44470	44613	40691	40299	34455
15	27786	19963	20819	21928	23935	28028	34923	44613	44374	40702	40277	34155
16	27509	19880	20851	21968	23977	28009	35176	44708	44125	40713	40255	33877
17	27233	19918	20882	21863	24037	28000	35451	44804	44066	40713	40234	33631
18	26951	19948	20913	21790	24123	28139	35717	44887	44089	40702	40223	33397
19	26679	19985	20944	21806	24320	28417	36112	44911	44113	40691	40223	33112
20	26401	20008	20975	21863	24596	28733	36446	44899	44137	40680	40223	32830
21	26122	20038	20991	21904	24735	28939	36651	44899	44161	40669	40212	32550
22	25898	20068	21022	21952	24831	29060	36835	44875	44172	40658	40212	32251
23	25622	20083	21030	22001	24935	29192	37117	44827	44184	40647	40124	31983
24	25347	20113	21077	22215	25110	29324	37475	44744	44184	40637	39906	31708
25	25101	20143	21109	22322	25233	29465	37867	44648	44030	40637	39655	31434
26	24909	20174	21132	22413	25330	29692	38283	44529	43758	40626	39373	31161
27	24700	20204	21164	22463	25427	30015	38718	44386	43512	40615	39089	30899
28	24475	20234	21195	22529	25551	30350	39133	44220	43255	40604	38794	30638
29	24518	20279	21219	22579	---	30686	39525	44078	42964	40582	38489	30388
30	24277	20317	21235	22637	---	31025	39851	43924	42697	40550	38185	30111
31	24020	---	21259	22687	---	31385	---	43888	---	40539	37911	---
MAX	31630	23764	21259	22687	25551	31385	39851	44911	44720	42447	40528	37617
MIN	24020	19880	20348	21283	22737	25648	31737	40321	42697	40539	37911	30111
a	3355.41	3350.87	3352.08	3353.83	3357.28	3363.44	3371.50	3375.10	3374.10	3372.18	3369.79	3362.12
b	-7904	-3703	+942	+1428	+2864	+5834	+8466	+4037	-1191	-2158	-2628	-7800

CAL YR 2000 b -2209
WTR YR 2001 b -1813

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11243500 PACIFIC GAS & ELECTRIC CO. CONDUIT NO. 3 NEAR BASS LAKE, CA

LOCATION.—Lat 37°17'21", long 119°31'44", in NE 1/4 SE 1/4 sec.26, T.7 S., R.22 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 1,000 ft downstream from Crane Valley Powerplant and Dam, and 2.5 mi southeast of town of Bass Lake.

PERIOD OF RECORD.—October 1940 to current year. Prior to October 1954, published as "near Crane Valley Reservoir."

GAGE.—Water-stage recorder and concrete flume. Elevation of gage is 3,300 ft above sea level, from topographic map.

REMARKS.—Conduit diverts from Bass Lake in sec.26, T.7 S., R.22 E. Water passes through Crane Valley Powerplant, then to Powerplant No. 3 (station 11244100), and is stored temporarily at Manzanita Lake on North Fork Willow Creek; flow then diverts to Powerplants No. 2 and No. 1A (stations 11246570 and 11246590), before it enters San Joaquin River at Kerckhoff Reservoir through San Joaquin Powerplant No. 1 (station 11246610). See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 167 ft^3/s, June 23, 24, 1965; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	144	1.1	1.4	1.7	1.4	1.4	1.4	.91	142	.00	146
2	146	144	1.1	1.4	1.7	1.4	1.4	1.4	.91	143	.00	146
3	146	144	1.3	1.4	1.7	1.4	1.4	1.8	.91	144	.00	122
4	146	144	1.4	1.4	1.7	1.4	1.4	2.0	.91	144	.00	70
5	146	144	1.4	1.4	1.7	1.4	1.4	1.2	.91	145	.00	146
6	146	144	1.4	1.4	1.7	1.4	1.4	.58	.91	145	.00	146
7	147	145	1.4	1.4	1.7	1.4	1.4	60	.91	146	.00	147
8	59	145	1.5	1.4	1.6	1.4	1.4	97	.91	146	.00	147
9	93	144	1.5	1.4	1.4	1.3	1.4	96	1.5	70	.00	147
10	141	144	1.5	1.4	1.4	1.3	1.4	108	1.9	1.5	.00	147
11	145	145	1.5	73	1.4	1.3	1.4	119	1.9	2.9	.00	120
12	146	145	1.5	70	1.4	54	1.4	126	1.9	2.9	.00	.24
13	146	145	1.5	.74	1.4	104	1.4	130	1.9	2.9	.00	71
14	145	145	1.5	.74	1.4	104	1.4	134	77	2.9	.00	143
15	145	145	1.5	.74	1.4	104	1.4	141	144	.93	.00	144
16	146	59	1.5	.74	1.4	104	1.4	141	144	.00	.14	144
17	146	1.3	1.5	60	1.6	104	1.4	141	51	.00	2.0	144
18	146	1.4	1.5	61	1.8	39	1.4	141	1.3	.00	.24	144
19	146	1.4	1.5	1.5	1.8	.35	1.4	141	1.8	.00	.24	145
20	146	1.4	1.5	2.5	1.7	1.1	1.4	141	2.5	.00	.24	145
21	142	1.3	1.4	2.5	1.4	57	1.4	141	2.5	.00	.24	145
22	127	1.3	1.4	2.3	1.4	99	1.4	141	2.5	.00	.24	145
23	143	1.3	1.2	2.2	1.4	99	1.4	141	2.5	.00	52	145
24	139	1.3	.91	2.0	1.4	100	1.4	142	2.5	.00	104	144
25	135	1.3	.91	1.4	1.4	100	1.4	142	80	.00	126	144
26	146	1.2	.91	.35	1.4	38	1.4	142	143	.00	141	144
27	145	1.2	.91	.84	1.4	.29	1.4	142	143	.00	142	144
28	145	1.2	.91	1.3	1.4	.29	1.4	142	143	.00	143	144
29	145	1.2	.93	1.6	---	.95	1.4	142	144	.00	144	144
30	144	1.1	1.2	1.6	---	1.4	1.4	142	143	.00	146	144
31	144	---	1.4	1.6	---	1.4	---	78	---	.00	146	---
TOTAL	4328	2243.9	40.68	302.65	42.8	1126.88	42.0	3219.38	1243.98	1239.03	1147.34	4007.24
MEAN	140	74.8	1.31	9.76	1.53	36.4	1.40	104	41.5	40.0	37.0	134
MAX	147	145	1.5	73	1.8	104	1.4	142	144	146	146	147
MIN	59	1.1	.91	.35	1.4	.29	1.4	.58	.91	.00	.00	.24
AC-FT	8580	4450	81	600	85	2240	83	6390	2470	2460	2280	7950
a	7450	3870	.00	460	.00	1940	.00	5500	2120	2070	1900	6850
b	8510	4250	.00	623	271	2910	22	6180	2270	2290	2090	7400
c	8890	4700	.00	331	123	3020	.00	7500	2430	2550	2170	5900
d	9110	4980	535	1450	2000	4790	3150	8280	2750	2550	2290	7890

a Diversion, in acre-feet, to San Joaquin Powerplant No. 3 (station 11244100), provided by Pacific Gas & Electric Co.

b Diversion, in acre-feet, to San Joaquin Powerplant No. 2 (station 11246570), provided by Pacific Gas & Electric Co.

c Diversion, in acre-feet, to San Joaquin Powerplant No. 1A (station 11246590), provided by Pacific Gas & Electric Co.

d Diversion, in acre-feet, to San Joaquin Powerplant No. 1 (station 11246610), provided by Pacific Gas & Electric Co.

11243500 PACIFIC GAS & ELECTRIC CO. CONDUIT NO. 3 NEAR BASS LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.5	45.1	56.0	59.1	70.9	76.8	62.3	61.7	60.5	82.6	99.9	87.0
MAX	152	148	157	157	161	162	158	157	160	153	155	154
(WY)	1951	1984	1983	1956	1956	1956	1956	1958	1952	1983	1958	1980
MIN	.000	.000	.042	.19	.079	.12	.12	.090	.060	.52	9.43	.23
(WY)	1988	1968	1954	1954	1977	1947	1947	1977	1942	1977	1977	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	23765.12		18983.88			
ANNUAL MEAN	64.9		52.0		69.2	
HIGHEST ANNUAL MEAN					128	1983
LOWEST ANNUAL MEAN					14.4	1977
HIGHEST DAILY MEAN	156	Mar 9	147	Oct 7	167	Jun 23 1965
LOWEST DAILY MEAN	.00	Apr 24	.00	Jul 16	.00	Nov 6 1940
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 14	.00	Jul 16	.00	Feb 8 1941
ANNUAL RUNOFF (AC-FT)	47140		37650		50170	
TOTAL DIVERSION (AC-FT) a	39620		32160			
TOTAL DIVERSION (AC-FT) b	44440		36800			
TOTAL DIVERSION (AC-FT) c	63680		37610			
TOTAL DIVERSION (AC-FT) d	69120		49760			
10 PERCENT EXCEEDS	150		145		151	
50 PERCENT EXCEEDS	1.9		1.6		68	
90 PERCENT EXCEEDS	.00		.24		.03	

a Diversion, in acre-feet, to San Joaquin Powerplant No. 3 (station 11244100), provided by Pacific Gas & Electric Co.

b Diversion, in acre-feet, to San Joaquin Powerplant No. 2 (station 11246570), provided by Pacific Gas & Electric Co.

c Diversion, in acre-feet, to San Joaquin Powerplant No. 1A (station 11246590), provided by Pacific Gas & Electric Co.

d Diversion, in acre-feet, to San Joaquin Powerplant No. 1 (station 11246610), provided by Pacific Gas & Electric Co.

11244000 NORTH FORK WILLOW CREEK NEAR BASS LAKE, CA

LOCATION.—Lat 37°17'20", long 119°31'45", in SE 1/4 SE 1/4 sec.26, T.7 S., R.22 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on right bank, 1,500 ft downstream from Bass Lake Spillway, and 2.5 mi southeast of town of Bass Lake.

DRAINAGE AREA.—50.8 mi^2.

PERIOD OF RECORD.—May 1940 to current year. Prior to October 1944, published as "Willow Creek below Crane Valley Reservoir." October 1944 to September 1954, published as "below Crane Valley Reservoir."

GAGE.—Water-stage recorder. Broad-crested weir with V-notch Dec. 21, 1961, to Jan. 16, 1969, and since Mar. 26, 1971. Elevation of gage is 3,200 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Bass Lake (station 11243400), 1,500 ft upstream and by diversion into Pacific Gas & Electric Co. Conduit No. 3 near Bass Lake (station 11243500). Soquel ditch diverts up to 50 ft^3/s from North Fork Willow Creek into Nelder Creek in Fresno River Basin. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 3,770 ft^3/s, Jan. 2, 1997, gage height, 9.10 ft; minimum daily, 0.01 ft^3/s, Dec. 4, 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	1.5	1.5	1.7	2.4	1.9	3.0	1.3	1.5	1.2	e1.2
2	1.7	1.5	1.5	1.5	1.7	2.3	1.9	3.0	1.3	1.5	1.2	e1.2
3	1.7	1.5	1.5	1.5	1.7	2.2	1.8	3.1	1.3	1.5	e1.2	e1.1
4	1.6	1.5	1.5	1.5	1.7	2.3	1.9	3.1	1.3	1.5	e1.2	e1.1
5	1.6	1.5	1.5	1.5	1.7	4.7	1.9	2.9	1.4	1.5	e1.1	e1.1
6	1.6	1.5	1.5	1.5	1.6	3.5	1.9	3.1	1.3	1.5	e1.1	e1.1
7	1.6	1.5	1.5	1.5	1.7	2.6	1.7	3.1	1.3	1.5	e1.1	1.1
8	80	1.5	1.5	1.5	1.6	2.3	2.1	3.4	1.3	1.5	e1.0	1.2
9	61	1.5	1.5	1.5	1.6	2.2	1.7	3.6	1.2	1.5	e1.0	1.2
10	1.6	1.5	1.5	1.7	1.7	2.2	1.5	3.1	1.2	1.5	e1.0	1.2
11	1.6	1.4	1.5	2.6	1.8	2.1	1.9	3.1	1.3	1.5	e1.0	1.2
12	1.6	1.4	1.6	1.8	1.7	2.0	1.9	3.0	1.3	1.5	e1.1	1.2
13	1.6	1.4	1.6	1.7	1.7	1.9	1.6	2.9	1.3	1.5	e1.1	1.2
14	1.6	1.4	1.5	1.6	1.8	1.8	1.6	2.9	1.3	1.5	e1.1	1.1
15	1.5	1.4	1.5	1.6	1.8	1.8	2.1	2.7	1.3	1.4	e1.1	1.1
16	1.5	1.5	1.5	1.6	2.0	1.8	2.3	2.2	1.4	1.4	e1.1	1.1
17	1.5	1.5	1.5	1.6	2.0	1.8	2.4	2.3	1.5	1.4	e1.1	1.1
18	1.5	1.5	1.5	1.5	2.1	1.8	3.0	2.3	1.5	1.4	e1.1	1.1
19	1.5	1.5	1.5	1.5	2.4	1.8	3.4	2.4	1.3	1.4	e1.1	1.1
20	1.5	1.5	1.5	1.5	4.2	1.8	3.7	2.3	1.3	1.4	e1.1	1.2
21	1.5	1.5	1.5	1.5	2.7	1.8	3.3	2.2	1.3	1.3	e1.2	1.2
22	1.5	1.5	1.5	1.5	2.5	1.8	3.5	2.0	1.3	1.4	e1.2	1.1
23	1.5	1.5	1.5	1.5	2.3	1.7	3.5	1.7	1.3	1.4	e1.2	1.2
24	1.5	1.5	1.5	2.0	2.3	1.7	3.6	1.4	1.3	1.3	e1.2	1.3
25	1.5	1.5	1.5	1.8	2.7	1.7	3.8	1.4	1.3	1.3	e1.2	1.3
26	1.6	1.5	1.5	1.9	2.5	1.8	3.9	1.4	1.4	1.3	e1.2	1.3
27	1.6	1.5	1.5	1.9	2.4	1.8	3.3	1.4	1.4	1.3	e1.2	1.3
28	1.5	1.5	1.5	1.8	2.4	1.8	3.0	1.4	1.5	1.3	e1.3	1.3
29	2.3	1.5	1.5	1.8	---	1.8	2.9	1.7	1.5	1.3	e1.3	1.3
30	1.6	1.5	1.5	1.8	---	1.8	2.9	2.3	1.5	1.3	e1.2	1.2
31	1.5	---	1.5	1.7	---	1.8	---	1.3	---	1.3	e1.2	---
TOTAL	187.1	44.5	46.7	51.4	58.0	64.8	75.9	75.7	40.2	43.9	35.4	35.4
MEAN	6.04	1.48	1.51	1.66	2.07	2.09	2.53	2.44	1.34	1.42	1.14	1.18
MAX	80	1.5	1.6	2.6	4.2	4.7	3.9	3.6	1.5	1.5	1.3	1.3
MIN	1.5	1.4	1.5	1.5	1.6	1.7	1.5	1.3	1.2	1.3	1.0	1.1
AC-FT	371	88	93	102	115	129	151	150	80	87	70	70

e Estimated.

11244000 NORTH FORK WILLOW CREEK NEAR BASS LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.38	4.08	7.23	23.9	27.7	35.2	19.8	29.8	24.2	5.03	4.02	4.19
MAX	77.8	54.6	106	524	380	387	272	317	244	73.6	66.4	103
(WY)	1949	1958	1947	1997	1986	1995	1982	1995	1998	1983	1963	1963
MIN	.18	.26	.21	.22	.18	.24	.30	.23	.24	.21	.24	.26
(WY)	1991	1992	1987	1991	1991	1977	1977	1977	1977	1977	1977	1976

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	924.42		759.0			
ANNUAL MEAN	2.53		2.08		15.6	
HIGHEST ANNUAL MEAN					92.4	1995
LOWEST ANNUAL MEAN					.26	1977
HIGHEST DAILY MEAN	80	Oct 8	80	Oct 8	2880	Jan 2 1997
LOWEST DAILY MEAN	.89	Aug 5	1.0	Aug 8	.01	Dec 4 1989
ANNUAL SEVEN-DAY MINIMUM	.98	Jun 17	1.0	Aug 5	.11	Oct 1 1990
MAXIMUM PEAK FLOW			145	Oct 8	3770	Jan 2 1997
MAXIMUM PEAK STAGE			2.82	Oct 8	9.10	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	1830		1510		11340	
10 PERCENT EXCEEDS	3.1		2.6		22	
50 PERCENT EXCEEDS	1.5		1.5		.80	
90 PERCENT EXCEEDS	1.1		1.2		.30	

11246500 WILLOW CREEK AT MOUTH, NEAR AUBERRY, CA

LOCATION.—Lat 37°09'03", long 119°27'34", in SE 1/4 NE 1/4 sec.16, T.9 S., R.23 E., Madera County, Hydrologic Unit 18040006, Sierra National Forest, on left bank, 40 ft upstream from bridge, 0.4 mi upstream from mouth, 1.3 mi downstream from Whiskey Creek, and 4.3 mi northeast of Auberry.

DRAINAGE AREA.—130 mi^2.

PERIOD OF RECORD.—January 1952 to September 1988, October 1989 to current year.
WATER TEMPERATURE: Water years 1961–72.

GAGE.—Water-stage recorder. Concrete control since Oct. 22, 1964. Datum of gage is 1,174.69 ft above sea level (levels by Southern California Edison Co.).

REMARKS.—Flow regulated by Bass Lake (station 11243400) 10 mi upstream. Soquel Ditch diverts up to 50 ft^3/s from North Fork Willow Creek into Nelder Creek in Fresno River Basin. Flow diverted out of basin by Pacific Gas & Electric Co. Conduit No. 3. See schematic diagram of lower San Joaquin River Basin.

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.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,700 ft^3/s, Dec. 23, 1955, gage height, 28.5 ft, from floodmarks, from rating curve extended above 4,700 ft^3/s, maximum gage height, 31.65 ft, Jan. 2, 1997 (backwater from San Joaquin River); no flow at times some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	5.4	3.3	2.7	8.9	14	46	76	8.1	2.2	2.4	.15
2	.55	4.4	3.1	2.7	8.6	13	42	75	7.7	2.0	2.5	.13
3	.51	3.9	3.1	3.9	8.3	14	33	56	7.4	1.8	2.2	.12
4	.46	3.4	2.9	5.8	8.3	15	27	48	7.4	1.6	2.0	13
5	.46	3.1	2.8	5.8	7.9	139	26	49	7.3	1.6	2.0	1.5
6	.46	3.0	2.8	5.8	7.2	49	22	53	7.1	1.6	1.9	.52
7	.46	3.0	2.8	5.8	7.2	29	38	54	6.8	2.8	1.7	.32
8	.46	2.9	2.8	6.3	6.1	23	31	52	6.4	4.1	1.5	.24
9	.46	2.8	2.8	7.3	5.9	26	25	48	5.9	2.8	1.3	.19
10	1.0	2.8	2.8	8.3	7.2	23	22	43	5.6	2.2	1.1	.16
11	3.4	2.9	2.8	22	12	18	22	40	5.5	1.8	1.0	.16
12	2.8	2.9	4.1	13	14	16	25	36	5.3	1.7	.95	.16
13	2.3	2.8	4.4	11	13	15	24	33	5.5	1.6	.92	.15
14	1.8	3.0	3.8	9.6	12	15	24	30	5.2	1.5	.85	.12
15	1.7	3.4	3.9	9.7	10	16	23	28	4.9	1.4	.86	.12
16	1.5	3.1	3.9	9.1	9.7	16	28	26	4.6	1.3	.94	.10
17	1.4	4.6	4.0	8.5	10	16	34	25	4.3	2.3	.61	.08
18	1.3	3.3	3.8	8.4	9.8	17	36	22	4.0	4.9	.85	.08
19	1.2	3.7	3.4	8.3	15	21	41	20	3.8	5.1	.91	.08
20	1.2	3.4	3.2	8.4	32	25	60	19	3.6	4.8	.63	.08
21	1.2	3.1	3.1	8.2	21	29	63	19	3.4	4.6	.42	.07
22	5.0	3.0	3.1	8.3	16	29	49	15	3.2	4.4	.30	.05
23	8.0	3.0	3.1	8.3	15	30	44	14	3.0	4.3	.24	.04
24	3.1	3.0	3.0	21	25	32	49	13	2.8	3.8	.20	.03
25	1.8	3.0	3.0	17	42	33	57	12	2.7	3.8	.22	.05
26	6.3	3.0	3.0	17	23	34	69	11	2.7	3.6	.24	.06
27	5.3	3.0	2.8	15	17	35	75	11	2.7	3.3	.23	.08
28	4.8	3.0	2.8	12	16	35	75	10	2.6	2.9	.20	.18
29	39	3.0	2.8	11	---	37	58	10	2.5	2.6	.19	.19
30	57	3.0	2.8	10	---	38	61	9.6	2.5	2.3	.16	.16
31	9.4	---	2.8	9.4	---	41	---	8.7	---	2.2	.16	---
TOTAL	164.97	97.9	98.8	299.6	388.1	893	1229	966.3	144.5	86.9	29.68	18.37
MEAN	5.32	3.26	3.19	9.66	13.9	28.8	41.0	31.2	4.82	2.80	.96	.61
MAX	57	5.4	4.4	22	42	139	75	76	8.1	5.1	2.5	13
MIN	.46	2.8	2.8	2.7	5.9	13	22	8.7	2.5	1.3	.16	.03
AC-FT	327	194	196	594	770	1770	2440	1920	287	172	59	36

11246500 WILLOW CREEK AT MOUTH, NEAR AUBERRY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.56	16.2	54.9	123	136	149	142	150	62.0	10.4	2.55	2.86
MAX	24.6	150	652	1108	1255	1033	995	747	614	102	12.6	28.3
(WY)	1983	1997	1956	1997	1986	1983	1982	1967	1998	1998	1983	1982
MIN	.000	.54	1.13	2.13	1.89	2.63	2.36	3.61	1.93	.000	.000	.000
(WY)	1956	1978	1991	1991	1991	1977	1977	1977	1961	1961	1959	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	19750.16		4417.12			
ANNUAL MEAN	54.0		12.1		69.3	
HIGHEST ANNUAL MEAN					344	1983
LOWEST ANNUAL MEAN					1.71	1977
HIGHEST DAILY MEAN	1720	Feb 14	139	Mar 5	7500	Dec 23 1955
LOWEST DAILY MEAN	.46	Oct 4	.03	Sep 24	.00	Sep 4 1955
ANNUAL SEVEN-DAY MINIMUM	.47	Oct 3	.05	Sep 20	.00	Sep 4 1955
MAXIMUM PEAK FLOW			258	Mar 5	15700	Dec 23 1955
MAXIMUM PEAK STAGE			7.31	Mar 5	31.65	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	39170		8760		50180	
10 PERCENT EXCEEDS	176		35		177	
50 PERCENT EXCEEDS	5.4		4.3		8.3	
90 PERCENT EXCEEDS	1.4		.31		.40	

11246650 KERCKHOFF RESERVOIR NEAR AUBERRY, CA

LOCATION.—Lat 37°07'40", long 119°31'25", in SE 1/4 SW 1/4 sec.24, R.9 S., T.22 E., Fresno County, Hydrologic Unit 18040006, near center of Kerckhoff Dam, on San Joaquin River, 2.0 mi downstream from A.G. Wishon Powerplant, and 7.9 mi northwest of Auberry.

DRAINAGE AREA.—1,460 mi^2.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete-arch dam with spillway completed in 1920. Usable contents, 4,247 acre-ft, between elevations 900.14 ft, invert of sluice gates, and 985.68 ft, top of spillway gates. Water is released for use in Kerckhoff Powerplants No. 1 (station 11246950) and No. 2 (station 11247050) before being discharged into the San Joaquin River above Millerton Lake. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 5,700 acre-ft, Jan. 2, 1997, elevation, unknown; minimum, 2,104 acre-ft, Nov. 14–17, 1988, elevation, 970.10 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 4,151 acre-ft, Nov. 24, elevation, 985.07 ft; minimum, 3,251 acre-ft, Nov. 16, elevation, 979.05 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas and Electric Co., dated July 16, 1919)

960	1,090	970	2,092	980	3,387	990	4,964
965	1,549	975	2,703	985	4,140		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3728	3565	3704	4145	3765	3598	3658	3830	3870	3919	3731	3605
2	4030	3627	3651	3978	3766	3891	3801	3876	3899	3897	3815	3694
3	3962	3956	3953	3815	3883	3605	3769	3775	3819	3896	3877	3830
4	3661	4001	3862	3816	3908	3532	3719	3778	3934	3975	3841	3830
5	3951	4149	3604	3740	3890	3560	3673	3799	3606	3851	3685	3688
6	4009	4145	3953	3950	4046	3774	3694	3784	3673	3913	3634	3784
7	3996	4145	3728	3903	3876	3749	3860	3842	3891	3815	3841	3473
8	3927	4137	3595	3913	3511	3680	3853	3860	3891	3876	3740	3491
9	3933	4132	4004	3611	3710	3598	3755	3848	3989	3961	3751	3769
10	3880	4134	3707	3995	3584	3586	3623	3679	3871	3755	3777	3548
11	3948	4134	3940	3679	3602	3604	3730	3503	3716	3968	3725	3799
12	3822	4085	3639	3806	3771	3639	3660	3649	3498	3937	3812	3724
13	3917	4129	3830	3688	3748	3592	3596	3601	3786	3993	3784	3769
14	3968	4021	3939	3835	3845	3488	3548	3554	3688	3984	3709	3620
15	3905	3877	3657	3606	3754	3547	3835	3617	3922	3992	3620	3923
16	3781	3251	3769	3707	3914	3506	3663	3651	3608	3959	3694	3724
17	3914	3257	3877	4007	3856	3434	3522	3899	3799	4026	3743	3923
18	3877	4148	3815	3833	3839	3479	3510	3636	3774	4016	3860	3694
19	4026	3871	3783	3897	3841	3695	3838	3579	3793	3832	3972	3754
20	3864	3868	3673	3790	3936	3611	3645	3548	3906	3958	3727	3923
21	3754	3979	3954	3936	3911	3554	3871	3476	3731	3934	3692	3724
22	3799	3992	3882	3806	3882	3547	3920	3807	3848	4023	3579	3923
23	3689	4146	3908	3998	3766	3587	3867	3743	3911	3774	3790	3739
24	3890	4151	3816	3900	3775	3621	3724	3698	3908	3893	3819	3463
25	3806	3961	3893	3832	3728	3688	3754	3759	3911	3792	3545	3686
26	3626	3796	3755	3911	3730	3700	3724	4037	3771	3757	3639	3908
27	3652	3595	3920	3633	3698	3746	3874	3923	3691	3736	3554	3649
28	3542	3893	3936	3795	3716	3637	3548	3830	3754	3755	3716	3751
29	3678	3542	3816	3847	---	3561	3864	3845	3762	3927	3639	3612
30	3632	3466	3900	3424	---	3748	3661	3845	3920	3825	3669	3825
31	3649	---	4004	3604	---	3830	---	3953	---	3825	3724	---
MAX	4030	4151	4004	4145	4046	3891	3920	4037	3989	4026	3972	3923
MIN	3542	3251	3595	3424	3511	3434	3510	3476	3498	3736	3545	3463
a	981.23	982.17	985.03	982.57	983.40	981.86	983.00	983.26	983.58	982.35	981.50	982.70
b	-205	-183	+538	-400	+112	+114	-169	+292	-33	-95	-101	+101

CAL YR 2000 b +133
WTR YR 2001 b -29

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11246700 SAN JOAQUIN RIVER NEAR AUBERRY, CA

LOCATION.—Lat 37°07'56", long 119°31'50", in NW 1/4 SW 1/4 sec.24, T.9 S., R.22 E., Fresno County, Hydrologic Unit 18040006, on left bank, 2,300 ft downstream from Kerckhoff Dam, 2.8 mi northwest of Auberry, and 6.7 mi south of town of North Fork.

DRAINAGE AREA.—1,461 mi^2.

PERIOD OF RECORD.—October 1986 to current year.

GAGE.—Water-stage recorder. Datum of gage is 870.11 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Flow regulated by nine powerplants and eight reservoirs with combined capacity of about 609,300 acre-ft. Diversions to Kerckhoff Powerplants No. 1 and 2 (stations 11246950 and 11247050) bypass this station. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by Pacific Gas & Electric 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, 80,600 ft^3/s, Jan. 3, 1997, gage height, 35.62 ft; minimum daily, 16 ft^3/s, May 9–18, 1987, Sept. 29, 30, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	31	27	30	27	27	27	30	30	37	32	32
2	34	31	28	28	27	27	26	30	30	37	32	31
3	34	32	160	28	27	27	27	30	30	37	33	31
4	33	32	37	28	27	27	27	30	29	36	33	31
5	33	141	28	28	28	28	27	30	29	37	33	32
6	33	305	27	29	28	27	27	30	29	36	31	31
7	33	327	28	29	27	27	28	30	36	35	31	31
8	33	776	27	28	27	27	27	30	43	36	32	31
9	33	740	27	29	27	27	26	30	36	37	31	31
10	33	733	28	28	29	27	27	30	34	36	32	31
11	33	458	27	28	27	27	27	29	34	35	32	32
12	33	35	27	27	27	27	27	29	34	37	32	32
13	33	324	28	27	27	27	27	29	33	36	32	31
14	33	127	27	27	27	27	26	29	34	36	32	31
15	33	31	27	26	27	27	27	29	39	36	31	31
16	33	28	27	27	28	27	27	29	35	36	32	32
17	33	27	27	27	28	27	27	29	35	36	32	31
18	33	1010	27	27	28	27	28	30	36	36	32	30
19	33	835	26	27	28	27	28	29	35	36	32	31
20	33	31	27	28	27	27	28	29	35	35	32	31
21	32	31	27	27	27	27	28	29	35	35	31	31
22	32	84	27	28	27	27	28	29	34	35	31	31
23	33	378	27	28	28	27	28	29	38	35	31	31
24	32	889	27	28	27	27	28	29	35	34	31	31
25	32	388	27	28	27	27	28	30	35	34	31	31
26	32	29	27	27	27	27	28	29	36	34	31	31
27	32	28	27	26	27	27	33	29	33	33	31	31
28	32	28	27	27	27	27	30	29	42	32	30	31
29	32	28	27	26	---	27	30	29	36	32	31	30
30	32	27	28	26	---	27	30	28	36	33	31	31
31	32	---	29	26	---	27	---	29	---	33	31	---
TOTAL	1016	7964	987	853	765	838	832	910	1036	1093	979	933
MEAN	32.8	265	31.8	27.5	27.3	27.0	27.7	29.4	34.5	35.3	31.6	31.1
MAX	34	1010	160	30	29	28	33	30	43	37	33	32
MIN	32	27	26	26	27	27	26	28	29	32	30	30
AC-FT	2020	15800	1960	1690	1520	1660	1650	1800	2050	2170	1940	1850
a	143	52830	9650	.00	.00	34	.00	22200	.00	145	119	.00
b	71610	7880	18970	31410	25930	84190	123400	179300	120200	64380	95070	76260

a Discharge, in acre-feet, to Kerckhoff Powerplant No. 1 (station 11246950), provided by Pacific Gas & Electric Co.
b Discharge, in acre-feet, to Kerckhoff Powerplant No. 2 (station 11247050), provided by Pacific Gas & Electric Co.

11246700 SAN JOAQUIN RIVER NEAR AUBERRY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	38.6	65.5	32.3	238	39.8	93.7	78.2	441	893	629	36.5	32.1
MAX	167	265	51.1	2571	144	881	534	2683	5452	5217	89.3	45.6
(WY)	2000	2001	2000	1997	1996	1995	1995	1995	1995	1995	1995	1993
MIN	17.5	17.4	18.2	18.0	18.0	17.8	19.1	18.7	17.3	17.2	17.3	17.1
(WY)	1988	1988	1988	1989	1988	1988	1988	1988	1987	1987	1988	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	32817		18206			
ANNUAL MEAN	89.7		49.9		219	
HIGHEST ANNUAL MEAN					1263	1995
LOWEST ANNUAL MEAN					18.2	1988
HIGHEST DAILY MEAN	1980	May 25	1010	Nov 18	35200	Jan 3 1997
LOWEST DAILY MEAN	26	Dec 19	26	Dec 19	16	May 9 1987
ANNUAL SEVEN-DAY MINIMUM	27	Dec 14	26	Jan 26	16	May 9 1987
MAXIMUM PEAK FLOW			3570	Nov 23	80600	Jan 3 1997
MAXIMUM PEAK STAGE			10.49	Nov 23	35.62	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	65090		36110		158600	
TOTAL DIVERSION (AC-FT) a	168500		85120		147100	
TOTAL DIVERSION (AC-FT) b	1298000		898600		1279000	
10 PERCENT EXCEEDS	99		36		42	
50 PERCENT EXCEEDS	33		30		31	
90 PERCENT EXCEEDS	30		27		19	

a Discharge, in acre-feet, to Kerckhoff Powerplant No. 1 (station 11246950), provided by Pacific Gas & Electric Co.

b Discharge, in acre-feet, to Kerckhoff Powerplant No. 2 (station 11247050), provided by Pacific Gas & Electric Co.

11249500 MADERA CANAL AT FRIANT, CA

LOCATION.—Lat 37°00'10", long 119°42'21", in NW 1/4 SW 1/4 sec.5, T.11 S., R.21 E., Madera County, Hydrologic Unit 18040006, at Friant Dam, 0.9 mi northeast of Friant.

PERIOD OF RECORD.—October 1943 to current year. Monthly discharge only for October 1943 to September 1948 published in WSP 1315-A. October 1954 to September 1966 published as "Friant–Madera Canal at Friant."

REVISED RECORDS.—WSP 1151: 1944–48.

GAGE.—Discharge computed on basis of megawatt meter reading, efficiency of the generator coefficiant, and net head on the turbines. Prior to Oct. 1, 1948, water-stage recorder at several sites at various datums. Oct. 1, 1948, to Sept. 30, 1949, water-stage recorder at site 8.8 mi downstream.

REMARKS.—Canal diverts from Millerton Lake (station 11250100) at right end of Friant Dam for irrigation between San Joaquin and Chowchilla Rivers. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,330 ft^3/s, July 2, 3, 1973, May 21, 1983; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	.00	.00	.00	.00	.00	.00	299	846	722	597	282
2	230	.00	.00	.00	.00	.00	.00	343	837	751	705	233
3	230	.00	.00	.00	.00	.00	.00	348	738	806	763	257
4	230	.00	.00	.00	.00	.00	78	312	527	844	718	272
5	249	.00	.00	.00	.00	.00	191	297	624	815	569	340
6	259	.00	.00	.00	.00	.00	216	275	780	751	547	354
7	259	.00	.00	.00	.00	.00	232	319	792	705	551	354
8	239	.00	.00	.00	.00	.00	313	421	769	655	460	342
9	228	.00	.00	.00	.00	.00	291	479	796	651	474	322
10	229	.00	.00	.00	.00	.00	307	504	770	697	539	246
11	229	.00	.00	.00	.00	.00	303	494	745	725	520	209
12	229	.00	.00	.00	.00	.00	295	446	757	734	490	208
13	230	.00	.00	.00	.00	.00	235	427	781	684	478	208
14	230	.00	.00	.00	.00	.00	236	469	759	691	460	243
15	230	.00	.00	.00	.00	.00	278	482	753	706	477	262
16	231	.00	.00	.00	.00	.00	403	458	789	715	476	261
17	232	.00	.00	.00	.00	.00	571	432	784	732	467	318
18	233	.00	.00	.00	.00	.00	656	399	809	742	532	350
19	234	.00	.00	.00	.00	.00	739	364	901	749	456	310
20	235	.00	.00	.00	.00	.00	631	352	899	758	434	65
21	236	.00	.00	.00	.00	.00	494	375	892	765	613	.00
22	236	.00	.00	.00	.00	.00	385	409	886	788	676	.00
23	236	.00	.00	.00	.00	.00	461	448	874	756	599	.00
24	236	.00	.00	.00	.00	.00	608	678	855	768	596	.00
25	235	.00	.00	.00	.00	.00	500	755	786	793	579	.00
26	177	.00	.00	.00	.00	.00	296	553	719	828	563	.00
27	197	.00	.00	.00	.00	.00	316	507	720	851	547	.00
28	236	.00	.00	.00	.00	.00	356	588	770	882	491	.00
29	237	.00	.00	.00	---	.00	310	583	794	772	539	.00
30	74	.00	.00	110	---	.00	285	609	767	701	547	.00
31	.00	---	.00	110	---	.00	---	728	---	682	396	---
TOTAL	6796.00	0.00	0.00	220.00	0.00	0.00	9986.00	14153	23519	23219	16859	5436.00
MEAN	219	.000	.000	7.10	.000	.000	333	457	784	749	544	181
MAX	259	.00	.00	110	.00	.00	739	755	901	882	763	354
MIN	.00	.00	.00	.00	.00	.00	.00	275	527	651	396	.00
AC-FT	13480	.00	.00	436	.00	.00	19810	28070	46650	46050	33440	10780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

MEAN	119	18.8	8.40	28.8	106	312	368	515	796	972	721	349
MAX	599	266	357	527	659	1094	1258	1261	1277	1293	1233	1153
(WY)	1984	1999	1999	1997	1986	1980	1980	1982	1978	1973	1967	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	13.8	356	76.7	.000
(WY)	1950	1949	1949	1949	1949	1952	1964	1961	1977	1981	1977	1959

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1949 - 2001	
ANNUAL TOTAL	137568.00		100188.00			
ANNUAL MEAN	376		274		361	
HIGHEST ANNUAL MEAN					736	1983
LOWEST ANNUAL MEAN					43.8	1977
HIGHEST DAILY MEAN	1040	Jun 8	901	Jun 19	1330	Jul 2 1973
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 31	.00	Oct 3 1948
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 31	.00	Oct 3 1948
ANNUAL RUNOFF (AC-FT)	272900		198700		261600	
10 PERCENT EXCEEDS	903		756		1050	
50 PERCENT EXCEEDS	278		230		156	
90 PERCENT EXCEEDS	.00		.00		.00	

11250000 FRIANT–KERN CANAL AT FRIANT, CA

LOCATION.—Lat 36°59'53", long 119°42'11", in SE 1/4 SW 1/4 sec.5, T.11 S., R.21 E., Fresno County, Hydrologic Unit 18040006, at Friant Dam, 0.9 mi northeast of Friant.

PERIOD OF RECORD.—March 1949 to current year.

GAGE.—Discharge computed on basis of megawatt meter reading, efficiency of generator coefficient, and net head on turbines. Prior to January 1986, discharge computed on basis of valve openings and head on valves. Prior to July 8, 1949, nonrecording gages at various sites and datums. July 8 to Sept. 30, 1949, water-stage recorder at site 0.2 mi downstream.

REMARKS.—Canal diverts from Millerton Lake (station 11250100) at left end of Friant Dam for irrigation in upper San Joaquin Valley. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 5,330 ft^3/s, June 25, 1982; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	303	302	122	243	253	858	1050	3590	2380	1840	934
2	1110	305	301	299	243	253	905	1090	3410	2740	1800	839
3	1260	243	302	351	243	116	905	1090	3500	2800	1610	1060
4	1360	200	302	350	243	.00	905	1010	3660	2920	1290	1260
5	1330	230	330	350	242	.00	905	944	3760	3010	1320	1290
6	1120	252	349	350	243	.00	838	1060	3860	2820	1570	1290
7	871	254	467	350	243	.00	704	1240	3860	2450	1610	1120
8	960	256	530	282	243	.00	590	1410	3670	2510	1600	883
9	1070	259	500	234	243	.00	547	1580	3410	2930	1600	884
10	1010	231	499	234	243	.00	521	1760	3470	3220	1480	1060
11	847	212	498	98	243	.00	503	1710	3660	3390	1250	1210
12	607	214	497	.00	244	156	451	1390	3810	3410	1370	1210
13	414	264	528	138	102	268	349	1250	3670	3140	1490	1120
14	352	271	492	236	.00	269	302	1610	3340	2760	1560	879
15	353	250	321	236	.00	270	371	2040	3030	2900	1670	756
16	471	308	230	236	.00	270	437	2200	2630	3090	1650	867
17	621	349	96	236	.00	271	505	2010	2590	3180	1420	1000
18	666	349	.00	237	.00	271	609	1930	2920	3200	1110	1100
19	602	353	.00	139	139	272	654	1760	3160	3130	1190	1150
20	527	356	.00	.00	248	273	518	1900	3100	2800	1380	1100
21	474	356	87	129	249	274	420	2210	2850	2370	1710	937
22	540	278	212	239	249	319	420	2680	2560	2460	2020	701
23	670	222	97	239	250	352	468	3140	2370	2810	2160	774
24	748	224	.00	240	251	352	502	3350	2450	2900	2030	948
25	734	227	.00	85	280	380	502	3110	2650	2830	1840	987
26	656	228	136	.00	272	537	557	2760	2710	2370	1920	974
27	521	270	233	.00	252	643	596	2790	2770	1880	2080	988
28	393	300	282	162	252	730	596	2970	2780	1500	2170	832
29	352	301	220	243	---	792	714	3190	2650	1590	2030	648
30	323	301	.00	243	---	792	912	3600	2400	1700	1670	684
31	302	---	.00	243	---	792	---	3690	---	1750	1280	---
TOTAL	22314	8166	7811.00	6301.00	5460.00	8905.00	18064	63524	94290	82940	50720	29485
MEAN	720	272	252	203	195	287	602	2049	3143	2675	1636	983
MAX	1360	356	530	351	280	792	912	3690	3860	3410	2170	1290
MIN	302	200	.00	.00	.00	.00	302	944	2370	1500	1110	648
AC-FT	44260	16200	15490	12500	10830	17660	35830	126000	187000	164500	100600	58480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

MEAN	868	324	95.9	222	1211	1230	1389	1719	2692	2963	2574	1513
MAX	3085	1364	926	1349	4505	3551	4476	4238	4529	4905	4339	4033
(WY)	1979	1979	1999	1966	1965	1965	1962	1993	1993	1993	1967	1967
MIN	.000	.000	.000	.000	.000	5.13	32.2	87.5	598	262	384	1.33
(WY)	1950	1950	1950	1950	1950	1991	1998	1977	1977	1949	1949	1950

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1949 - 2001	
ANNUAL TOTAL	640977.00		397980.00			
ANNUAL MEAN	1751		1090		1411	
HIGHEST ANNUAL MEAN					2356	1993
LOWEST ANNUAL MEAN					270	1950
HIGHEST DAILY MEAN	4670	May 11	3860	Jun 6	5330	Jun 25 1982
LOWEST DAILY MEAN	.00	Jan 1	.00	Dec 18	.00	Jul 5 1949
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Mar 4	.00	Sep 11 1949
ANNUAL RUNOFF (AC-FT)	1271000		789400		1022000	
10 PERCENT EXCEEDS	3900		2910		3550	
50 PERCENT EXCEEDS	1400		648		990	
90 PERCENT EXCEEDS	.00		139		.00	

11250100 MILLERTON LAKE AT FRIANT, CA

LOCATION.—Lat 37°00'00", long 119°42'13", in SW 1/4 SW 1/4 sec.5, T.11 S., R.21 E., Fresno County, Hydrologic Unit 18040006, near center of Friant Dam, on San Joaquin River, just upstream from Cottonwood Creek, and 0.9 mi northeast of Friant.

DRAINAGE AREA.—1,638 mi^2.

PERIOD OF RECORD.—October 1941 to current year. Monthend contents only for some periods, published in WSP 1315-A.

GAGE.—Water-stage recorder. Elevation of gage is sea level (levels by U.S. Bureau of Reclamation). Prior to May 29, 1944, nonrecording gage on left bank at same datum.

REMARKS.—Reservoir is formed by gravity-type concrete dam with spillway near center, completed in December 1942. Control valves installed in February 1944, and spillway gates installed in November 1947. Usable capacity, 503,200 acre-ft, between elevations 375.4 ft, invert of river outlet, and 578.0 ft, top of drum-type spillway gates. Not available for release, 17,400 acre-ft. Millerton Lake is one of the storage units in the Central Valley Project. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.—Records and capacity table were provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 528,800 acre-ft, July 21, 1998, elevation, 579.68 ft, (maximum instantaneous contents, 530,500 acre-ft, at 1300 hours, Jan. 3, 1997, elevation, 580.01 ft); minimum since lake first filled, 133,600 acre-ft, Apr. 11, 1969, elevation, 467.81 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 509,100 acre-ft, May 22, elevation, 575.65 ft; minimum, 177,700 acre-ft, Sept. 19, 20, elevation, 486.30 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated 1941)

400	36,400	460	117,500	520	279,400	560	436,500
420	57,000	480	161,700	540	353,000	580	530,400
440	83,300	500	215,000				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211000	224100	269600	273900	288900	306900	380000	453500	502900	389000	242600	194400
2	212300	224800	269400	274000	288800	307400	382700	457300	501300	384700	240400	194600
3	212600	226200	269700	274000	288600	309700	385600	460600	499800	380100	238500	193800
4	212000	227900	270400	273500	288400	312100	388300	465200	498100	374900	236600	192200
5	210700	229200	270500	273100	288500	317300	390700	469100	495700	369800	234800	190400
6	210000	231000	270100	273000	289100	319200	393300	473200	492000	364200	233500	188400
7	209500	232700	270100	273000	289200	321400	397000	477100	487400	359500	233300	186500
8	209100	235400	269400	273800	289300	323600	399900	479700	481100	355900	230000	185900
9	210500	238200	268200	274600	289200	326400	402800	482200	480000	351500	228300	185600
10	210400	241100	267700	275900	289500	329700	405900	484700	476200	347900	226600	186200
11	210700	244000	267000	277200	290400	332600	408700	488100	472000	342600	224800	185900
12	211300	245700	266700	277900	290700	335200	411800	491600	468000	337500	224100	185300
13	211900	248300	266500	278000	291900	337400	412900	495800	462500	332100	222800	184100
14	212000	249000	266100	277600	292800	339000	414300	498500	458700	325700	221900	184000
15	213000	248700	267400	277800	294500	340100	417000	500400	454500	319600	220600	183600
16	214600	248700	268100	277700	295300	341400	417100	501800	451600	314200	219300	182300
17	215100	247800	268800	278400	296200	342300	417000	502300	448500	307800	218700	180300
18	216500	249800	269300	279800	297300	343100	418300	505400	444700	301700	217900	178500
19	217800	253600	269800	280900	298000	345400	419600	507400	440300	295700	215500	177700
20	219900	254900	270200	282300	298800	348400	420900	508800	434700	290700	214900	177700
21	220200	255100	270300	282700	300200	350100	422600	509000	430400	285900	213000	177900
22	220900	255800	270800	283200	301000	352000	424400	509100	426000	280400	211000	178800
23	219700	258200	271400	282900	301800	352900	427700	508500	422300	275800	208500	179400
24	219300	261500	272500	285400	303300	353700	430600	506800	418300	270600	206400	180200
25	219500	265000	272900	286400	304300	355700	433600	506400	414500	265500	204300	181600
26	220100	266400	273000	287300	304800	358000	436400	506700	410300	261100	202200	183100
27	220500	267500	272900	288500	305400	362300	439200	507300	405800	258000	199200	185400
28	220800	268300	272800	288800	305900	365700	443500	507500	410200	253800	197000	188600
29	221300	221300	273000	289100	---	369000	446700	507400	397300	249900	195800	189300
30	221600	269600	273400	289400	---	372400	450500	506800	392800	247400	193800	187900
31	222600	---	273800	289100	---	375800	---	504700	---	244500	193700	---
MAX	222600	269600	273800	289400	305900	375800	450500	509100	502900	389000	242600	194600
MIN	209100	221300	266100	273000	288400	306900	380000	453500	392800	244500	193700	177700
a	502.35	517.12	518.36	522.81	527.54	545.71	563.13	574.75	549.85	509.43	492.30	490.15
b	+10700	+47000	+4200	+15300	+16800	+69900	+74700	+54200	-111900	-148300	-50800	-5800

CAL YR 2000 b -3700
WTR YR 2001 b -24000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11251000 SAN JOAQUIN RIVER BELOW FRIANT, CA

LOCATION.—Lat 36°59'04", long 119°43'24", in SW 1/4 SW 1/4 sec.7, T.11 S., R.21 E., Fresno County, Hydrologic Unit 18040001, on left bank, 0.5 mi west of Friant, 1.5 mi downstream from Cottonwood Creek, and 2 mi downstream from Friant Dam at mile 268.1.

DRAINAGE AREA.—1,676 mi^2.

PERIOD OF RECORD.—October 1907 to current year. Published as "near Pollasky" October 1907 to December 1908, and as "near Friant" January 1909 to September 1938. Monthly discharge only for October 1907 to November 1908, published in WSP 1315-A.

REVISED RECORDS.—WSP 843: 1914(M).

GAGE.—Water-stage recorder. Datum of gage is 294.00 ft above sea level (levels by U.S. Bureau of Reclamation). Oct. 18, 1907, to Nov. 9, 1913, nonrecording gage at site 4.5 mi upstream at different datum. Nov. 10, 1913, to Sept. 30, 1938, water-stage recorder at site 2.5 mi upstream at different datum.

REMARKS.—Records good. Flow regulated by Millerton Lake (station 11250100) beginning in 1941, and by nine powerplants and eight reservoirs with combined capacity of about 609,300 acre-ft. Diversion for irrigation to Madera and Friant–Kern Canals (stations 11249500 and 11250000) began in 1943 and 1949, respectively. See schematic diagram of lower San Joaquin River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 77,200 ft^3/s, Dec. 11, 1937, gage height, 23.8 ft, site and datum then in use; minimum daily, 54 ft^3/s, Sept. 15, 1924. Maximum discharge since construction of Friant Dam in 1941, 60,300 ft^3/s, Jan. 3, 1997, gage height, 22.97 ft (provided by U.S. Bureau of Reclamation); minimum daily, 11 ft^3/s, Jan. 8, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	195	172	151	115	83	120	126	228	191	242	257
2	209	194	172	e149	117	85	119	147	228	188	244	257
3	203	192	172	e150	118	84	118	145	228	188	244	256
4	203	191	172	e158	118	84	116	143	228	188	244	608
5	196	179	172	160	119	102	116	145	231	188	244	897
6	194	169	172	161	122	113	118	147	229	222	241	900
7	194	169	168	163	115	100	119	147	228	271	238	899
8	191	168	167	154	111	92	118	148	228	269	238	549
9	199	167	169	139	113	94	119	147	228	244	237	253
10	198	168	169	143	116	95	114	144	228	234	237	250
11	196	169	172	154	123	93	116	141	225	219	237	247
12	194	169	173	140	122	93	115	142	227	216	237	248
13	189	169	175	142	98	92	116	142	224	217	237	245
14	188	166	172	142	83	90	118	143	226	215	238	244
15	188	164	174	142	84	93	118	148	298	212	234	244
16	187	164	172	143	84	90	118	144	369	214	236	244
17	195	162	172	138	84	86	119	145	369	215	234	243
18	197	164	172	142	84	86	119	142	381	214	234	227
19	197	164	175	142	86	88	120	133	386	211	234	211
20	200	164	177	142	86	86	118	133	386	212	234	211
21	200	166	178	142	84	85	113	136	391	212	241	207
22	200	165	180	144	85	83	122	149	389	212	258	209
23	199	164	180	143	85	86	121	158	389	212	259	209
24	201	169	179	153	89	84	118	159	289	212	257	210
25	199	169	179	149	93	82	121	164	200	212	257	216
26	195	169	184	137	86	84	125	167	193	208	257	208
27	202	172	168	127	87	86	120	167	189	206	257	190
28	198	168	151	126	85	87	126	167	191	206	256	187
29	201	170	151	128	---	119	123	170	194	205	256	188
30	201	172	151	129	---	119	123	164	194	222	257	188
31	198	---	151	121	---	120	---	188	---	245	257	---
TOTAL	6135	5131	5291	4454	2792	2864	3566	4641	7994	6680	7576	9502
MEAN	198	171	171	144	99.7	92.4	119	150	266	215	244	317
MAX	223	195	184	163	123	120	126	188	391	271	259	900
MIN	187	162	151	121	83	82	113	126	189	188	234	187
AC-FT	12170	10180	10490	8830	5540	5680	7070	9210	15860	13250	15030	18850

e Estimated.

11251000 SAN JOAQUIN RIVER BELOW FRIANT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1940, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	628	609	868	1276	1704	2246	3805	5876	6085	2765	1166	772
MAX	1678	1317	3589	4507	4391	6854	8010	11170	15870	9635	2312	1361
(WY)	1919	1928	1910	1909	1937	1938	1916	1938	1911	1911	1914	1938
MIN	164	196	301	333	393	419	1262	1703	635	335	264	156
(WY)	1932	1932	1909	1918	1924	1924	1912	1934	1924	1924	1924	1931

SUMMARY STATISTICS	WATER YEARS 1908 - 1940	
ANNUAL TOTAL		
ANNUAL MEAN	2343	
HIGHEST ANNUAL MEAN	4961	1938
LOWEST ANNUAL MEAN	698	1924
HIGHEST DAILY MEAN	38800	Jan 31 1911
LOWEST DAILY MEAN	54	Sep 15 1924
ANNUAL SEVEN-DAY MINIMUM	105	Sep 16 1931
MAXIMUM PEAK FLOW	77200	Dec 11 1937
MAXIMUM PEAK STAGE	23.80	Dec 11 1937
ANNUAL RUNOFF (AC-FT)	1698000	
10 PERCENT EXCEEDS	6100	
50 PERCENT EXCEEDS	1190	
90 PERCENT EXCEEDS	394	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	352	261	401	741	1074	1210	1717	1871	1683	1034	583	462
MAX	1663	1623	3798	9144	7100	7705	7701	9107	9438	5322	2807	2392
(WY)	1946	1983	1983	1997	1969	1969	1983	1941	1941	1995	1945	1948
MIN	47.2	37.3	32.5	30.0	33.9	33.0	43.2	43.9	78.6	101	91.1	67.2
(WY)	1970	1972	1971	1966	1966	1968	1971	1971	1970	1970	1970	1969

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	96237		66626			
ANNUAL MEAN	263		183		947	
HIGHEST ANNUAL MEAN					4385	1983
LOWEST ANNUAL MEAN					66.9	1971
HIGHEST DAILY MEAN	2190	Jun 18	900	Sep 6	36800	Jan 3 1997
LOWEST DAILY MEAN	71	Jan 28	82	Mar 25	11	Jan 8 1977
ANNUAL SEVEN-DAY MINIMUM	72	Feb 3	84	Mar 20	20	Jan 22 1990
MAXIMUM PEAK FLOW			911	Sep 5	60300	Jan 3 1997
MAXIMUM PEAK STAGE			415	Sep 5	22.97	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	190900		132200		686200	
10 PERCENT EXCEEDS	342		244		2890	
50 PERCENT EXCEEDS	187		172		152	
90 PERCENT EXCEEDS	98		93		53	

11253310 CANTUA CREEK NEAR CANTUA CREEK, CA

LOCATION.—Lat 36°24'08", long 120°25'57", in SE 1/4 SE 1/4 sec.34, T.17 S., R.14 E., Fresno County, Hydrologic Unit 18030012, on left bank, 9.2 mi southwest of town of Cantua Creek, and 19 mi north of Coalinga.

DRAINAGE AREA.—46.4 mi^2.

PERIOD OF RECORD.—Water years 1958–65 (annual maximum), October 1966 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 680 ft above sea level, from topographic map. Prior to October 1966, crest-stage gage at datum 2.00 ft lower.

REMARKS.—Records fair. Some small dams for stock use upstream from station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,420 ft^3/s, Mar. 1, 1983, gage height, 5.72 ft, maximum gage height, 7.38 ft, from floodmarks, Mar. 10, 1995; no flow for several months in most years.

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. 19	1515	62	1.54	Mar. 6	1145	70	1.72
Mar. 5	0930	1,060	4.20				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	1.2	6.8	3.1	1.8	.13	.00	.00	.00
2	.00	.00	.00	.00	.85	6.4	3.1	1.5	.10	.00	.00	.00
3	.00	.00	.00	.00	.69	6.2	3.4	1.6	.10	.00	.00	.00
4	.00	.00	.00	.00	.52	87	3.3	1.6	.21	.00	.00	.00
5	.00	.00	.00	.00	.48	498	3.4	1.4	.27	.00	.00	.00
6	.00	.00	.00	.00	.44	73	3.0	1.3	.25	.00	.00	.00
7	.00	.00	.00	.01	.50	17	3.6	1.1	.28	.00	.00	.00
8	.00	.00	.00	.17	.59	10	3.4	1.1	.22	.00	.00	.00
9	.00	.00	.00	.03	.64	8.5	4.1	1.0	.16	.00	.00	.00
10	.00	.00	.00	.82	1.0	7.3	4.3	.99	.19	.00	.00	.00
11	.00	.00	.00	5.2	1.5	6.1	3.5	.89	.23	.00	.00	.00
12	.00	.00	.00	9.4	2.8	6.0	3.2	.84	.27	.00	.00	.00
13	.00	.00	.00	4.2	2.2	5.5	2.8	.98	.21	.00	.00	.00
14	.00	.00	.00	2.0	2.1	5.5	2.6	e.98	.22	.00	.00	.00
15	.00	.00	.00	1.3	1.8	6.0	2.5	.99	.18	.00	.00	.00
16	.00	.00	.00	.69	1.7	5.9	2.3	.94	.09	.00	.00	e.00
17	.00	.00	.00	.33	1.6	5.5	2.1	.88	.04	.00	.00	e.00
18	.00	.00	.00	.13	2.0	5.0	2.1	.81	.00	.00	.00	.00
19	.00	.00	.00	.06	19	4.7	2.3	.75	.00	.00	.00	.00
20	.00	.00	.00	.05	26	4.6	2.8	.63	.00	.00	.00	.00
21	.00	.00	.00	.03	9.8	4.2	4.2	.55	e.00	.00	.00	.00
22	.00	.00	.00	.02	7.6	4.2	3.0	.48	e.00	.00	.00	.00
23	.00	.00	.00	.02	6.4	4.1	2.5	.36	.00	.00	.00	.00
24	.00	.00	.00	.03	6.7	3.9	2.3	.27	.00	.00	.00	.00
25	.00	.00	.00	.48	8.0	3.7	2.0	.23	.00	.00	.00	.00
26	.00	.00	.00	2.5	13	3.7	1.9	.23	.00	.00	.00	.00
27	.00	.00	.00	2.6	11	3.5	2.2	.30	.00	.00	.00	.00
28	.00	.00	.00	2.0	8.4	3.2	2.2	.33	.00	.00	.00	.00
29	.00	.00	.00	1.6	---	3.1	2.2	.35	.00	.00	.00	.00
30	.00	.00	.00	1.5	---	3.0	2.0	.33	.00	.00	.00	.00
31	.00	---	.00	1.3	---	2.8	---	.24	---	.00	.00	---
TOTAL	0.00	0.00	0.00	36.47	138.51	814.4	85.4	25.75	3.15	0.00	0.00	0.00
MEAN	.000	.000	.000	1.18	4.95	26.3	2.85	.83	.11	.000	.000	.000
MAX	.00	.00	.00	9.4	26	498	4.3	1.8	.28	.00	.00	.00
MIN	.00	.00	.00	.00	.44	2.8	1.9	.23	.00	.00	.00	.00
AC-FT	.00	.00	.00	72	275	1620	169	51	6.2	.00	.00	.00

e Estimated.

11253310 CANTUA CREEK NEAR CANTUA CREEK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.10	.35	1.37	6.82	10.8	13.5	4.92	2.60	1.13	.41	.11	.14
MAX	1.40	2.82	11.2	44.0	65.3	101	23.2	17.4	7.64	3.83	1.83	1.41
(WY)	1984	1973	1984	1969	1998	1995	1983	1983	1983	1983	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1967	1967	1969	1975	1976	1989	1972	1972	1968	1968	1968	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001	
ANNUAL TOTAL	404.65		1103.68			
ANNUAL MEAN	1.11		3.02		3.49	
HIGHEST ANNUAL MEAN					18.9	1983
LOWEST ANNUAL MEAN					.003	1989
HIGHEST DAILY MEAN	43	Feb 14	498	Mar 5	1070	Mar 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 11	.00	Oct 1	.00	Oct 1 1966
MAXIMUM PEAK FLOW			1060	Mar 5	3420	Mar 1 1983
MAXIMUM PEAK STAGE			4.20	Mar 5	7.38	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	803		2190		2530	
10 PERCENT EXCEEDS	2.7		4.2		6.4	
50 PERCENT EXCEEDS	.03		.00		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

11253500 JAMES BYPASS NEAR SAN JOAQUIN, CA

LOCATION.—Lat 36°39'09", long 120°l0'49", in NE 1/4 SW 1/4 sec.1, T.15 S., R.16 E., Fresno County, Hydrologic Unit 18030012, on right bank, and 3.2 mi north of San Joaquin.

PERIOD OF RECORD.—October 1947 to current year. Published as "Fresno Slough bypass" in WSP 1315-A and 1735. Daily discharge data for period October 1954 to September 1972 are in files of U.S. Bureau of Reclamation. Monthly totals published in WDR CA-72-2.

GAGE.—Water-stage recorder. Elevation of gage is 160 ft above sea level, from topographic map.

REMARKS.—Diversion upstream from station for irrigation. James Bypass carries overflow from Kings River to San Joaquin River.

COOPERATION.—Records were provided by San Luis & Delta Mendota Water Authority; rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 5,570 ft^3/s, June 7, 1969; no flow for all or most of each year.

EXTREMES FOR CURRENT YEAR.—No flow for 2001 water year.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	53.8	141	214	341	343	514	715	868	556	251	35.9	25.5
MAX	1723	2364	3648	3551	4688	5192	5066	4932	4913	2985	1077	811
(WY)	1984	1984	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1948	1948	1948	1948	1948	1948	1948	1954	1953	1948	1948	1949

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1948 - 2001a		
ANNUAL MEAN							315		
HIGHEST ANNUAL MEAN							3189		1983
LOWEST ANNUAL MEAN							.000		1954
HIGHEST DAILY MEAN							5360	Mar 3	1983
LOWEST DAILY MEAN	.00	Jan 1		.00	Oct 1		.00	Oct 1	1947
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1		.00	Oct 1		.00	Oct 1	1947
ANNUAL RUNOFF (AC-FT)							228400		
10 PERCENT EXCEEDS	.00			.00			907		
50 PERCENT EXCEEDS	.00			.00			.00		
90 PERCENT EXCEEDS	.00			.00			.00		

a Does not include water years 1955 to 1972 (see Period of Record).

11254000 SAN JOAQUIN RIVER NEAR MENDOTA, CA

LOCATION.—Lat 36°48'38", long 120°22'38", in SE 1/4 SW 1/4 sec.7, T.13 S., R.15 E., Fresno County, Hydrologic Unit 18040001, 2.5 mi below Mendota Dam, and 3.5 mi north of Mendota.

DRAINAGE AREA.—3,940 mi^2.

PERIOD OF RECORD.—October 1939 to September 1954, December 1999 to current year.

REVISED RECORDS.—WDR CA-00-3: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 138.81 ft above sea level (levels by U.S. Bureau of Reclamation). Prior to Nov. 3, 1947, at site 200 ft downstream. Prior to Nov. 4, 1953, at datum 2.00 ft higher.

REMARKS.—Records good. Flow regulated at Mendota Dam by storage and diversions from Mendota pool of residue of waters released at Friant Dam and imported through Delta–Mendota Canal. Many diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,700 ft^3/s, June 20, 1941, gage height, 13.75 ft, site and datum then in use; no flow for several days in December 1999 and January 2000.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	46	162	135	197	340	222	148	475	486	597	150
2	220	71	196	144	203	356	212	166	549	512	558	146
3	209	72	196	180	214	335	209	189	607	581	505	145
4	199	73	193	243	222	312	231	186	646	614	439	143
5	e190	73	181	282	254	267	270	173	648	637	423	140
6	e183	72	183	298	265	196	297	165	648	646	430	159
7	e170	74	184	275	329	162	283	207	637	598	440	176
8	e157	76	182	255	382	155	295	318	620	569	437	172
9	e144	77	170	182	371	173	287	427	622	578	430	164
10	e130	78	167	150	359	188	258	508	623	585	442	152
11	e122	76	155	118	368	205	201	514	615	610	477	148
12	107	74	155	84	372	235	146	502	616	546	507	175
13	74	74	159	83	321	239	119	478	599	418	510	196
14	73	74	157	83	266	212	105	477	532	365	511	196
15	76	75	155	82	265	180	112	419	510	367	500	191
16	73	76	154	80	264	145	132	351	484	425	490	190
17	71	71	156	75	264	124	150	328	460	515	451	183
18	68	53	157	66	268	117	226	276	487	542	413	182
19	70	53	159	66	270	118	261	260	516	524	445	205
20	73	55	164	66	271	156	256	261	548	518	478	219
21	75	61	152	65	278	213	200	279	587	518	453	219
22	77	52	144	79	279	249	168	298	626	525	425	226
23	79	51	139	141	270	294	165	298	596	515	366	262
24	68	51	137	166	256	302	161	300	540	531	307	271
25	54	52	137	166	248	273	158	279	506	584	247	248
26	48	53	136	151	237	245	150	239	481	605	205	226
27	43	58	135	127	251	216	149	239	455	598	184	184
28	27	70	135	133	301	202	149	250	447	581	165	e160
29	28	68	135	151	---	208	148	257	492	595	170	e145
30	27	66	135	155	---	218	147	305	514	613	166	e126
31	28	---	134	184	---	219	---	385	---	620	153	---
TOTAL	3184	1975	4904	4465	7845	6854	5867	9482	16686	16921	12324	5499
MEAN	103	65.8	158	144	280	221	196	306	556	546	398	183
MAX	221	78	196	298	382	356	297	514	648	646	597	271
MIN	27	46	134	65	197	117	105	148	447	365	153	126
AC-FT	6320	3920	9730	8860	15560	13590	11640	18810	33100	33560	24440	10910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	199	288	688	1155	1651	1518	1681	2430	2421	773	318	222
MAX	637	1144	2548	3531	5188	6187	6158	8680	10340	3446	562	394
(WY)	1946	1946	1951	1942	1941	1943	1952	1941	1941	1941	1945	1945
MIN	29.9	45.6	49.9	14.3	52.7	73.8	162	200	244	327	12.1	9.87
(WY)	1941	1950	1949	2000	1950	1948	1948	1951	1948	1949	1940	1940

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	94410.78		96006			
ANNUAL MEAN	258		263		1156	
HIGHEST ANNUAL MEAN					3546	1941
LOWEST ANNUAL MEAN					188	1950
HIGHEST DAILY MEAN	772	Mar 16	648	Jun 5	11700	Jun 20 1941
LOWEST DAILY MEAN	.00	Jan 4	27	Oct 28	.00	Dec 20 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 4	35	Oct 26	.00	Dec 24 1999
MAXIMUM PEAK FLOW			665	Jul 6	11700	Jun 20 1941
MAXIMUM PEAK STAGE			5.87	Jul 6	13.75	Jun 20 1941
ANNUAL RUNOFF (AC-FT)	187300		190400		837800	
10 PERCENT EXCEEDS	567		541		3640	
50 PERCENT EXCEEDS	202		207		311	
90 PERCENT EXCEEDS	47		73		75	

e Estimated.

11255575 PANOCHE CREEK AT INTERSTATE 5, NEAR SILVER CREEK, CA

LOCATION.—Lat 36°39'09", long 120°37'52", in NE 1/4 SW 1/4 sec.2 T.15 S., R.12 E., Fresno County, Hydrologic Unit 18040001, on left bank, at downstream side of Interstate Highway 5 bridge over Panoche Creek, 7.3 mi southwest of Silver Creek Township, and 11.8 mi east of Panoche.

DRAINAGE AREA.— 305 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.— December 1997 to current year. Record is published seasonally, Dec. 1 to June 30 of each water year.

GAGE.—Water-stage recorder. Datum of gage is 450 ft above sea level, from topographic map.

REMARKS.—Records poor. No known regulation or diversions upstream of station. A gravel operation located about 1 mile upstream of gage excavates the dry stream bed each season. This creates a large depression which traps an unknown volume of water and sediment before it reaches the gage location.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,940 ft^3/s, Feb. 3, 1998, gage height, 13.46 ft, from rating curve extended above 1,500 ft^3/s, on the basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum. No peak greater than 150 ft^3/s occurred outside of period of published record during this water year:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1015	2,710	8.13

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.00	.00	.00	.00	.38	.00	.00	---	---	---
2	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	---
3	---	---	.00	.00	.00	.00	.21	.00	.00	---	---	---
4	---	---	.00	.00	.00	.00	.49	.13	.00	---	---	---
5	---	---	.00	.00	.00	625	.66	.45	.16	---	---	---
6	---	---	.00	.00	.00	69	.61	.39	1.1	---	---	---
7	---	---	.00	.00	.00	21	.00	.29	.96	---	---	---
8	---	---	.00	.00	.00	5.6	.00	.37	.96	---	---	---
9	---	---	.00	.00	.00	.13	.00	.00	.43	---	---	---
10	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	---
11	---	---	.00	.00	.00	.00	.00	.00	.11	---	---	---
12	---	---	.00	.00	.00	.00	.00	.00	.62	---	---	---
13	---	---	.00	.00	.00	.00	.19	.00	.63	---	---	---
14	---	---	.00	.00	.00	.00	.20	.00	.56	---	---	---
15	---	---	.00	.00	.00	.00	.18	.00	.35	---	---	---
16	---	---	.00	.00	.00	.00	.12	.00	.00	---	---	---
17	---	---	.00	.00	.00	.00	.22	.00	.00	---	---	---
18	---	---	.00	.00	.00	.00	.24	.38	.00	---	---	---
19	---	---	.00	.00	.00	.00	.03	.66	.00	---	---	---
20	---	---	.00	.00	.00	.00	.06	.30	.00	---	---	---
21	---	---	.00	.00	.00	.00	.05	.14	.00	---	---	---
22	---	---	.00	.00	.00	.00	.19	.00	.00	---	---	---
23	---	---	.00	.00	.00	.00	.04	.00	.00	---	---	---
24	---	---	.00	.00	.00	.00	.25	.00	.00	---	---	---
25	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	---
26	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	---
27	---	---	.00	.00	.00	.00	.00	.20	.00	---	---	---
28	---	---	.00	.00	.00	.00	.00	.34	.00	---	---	---
29	---	---	.00	.00	---	.00	.00	.35	.00	---	---	---
30	---	---	.00	.00	---	.00	.00	.29	.00	---	---	---
31	---	---	.00	.00	---	.00	---	.55	---	---	---	---
TOTAL	---	---	0.00	0.00	0.00	720.73	4.12	4.84	5.88	---	---	---
MEAN	---	---	.000	.000	.000	23.2	.14	.16	.20	---	---	---
MAX	---	---	.00	.00	.00	625	.66	.66	1.1	---	---	---
MIN	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	---
AC-FT	---	---	.00	.00	.00	1430	8.2	9.6	12	---	---	---

10256000 WHITEWATER RIVER AT WHITE WATER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	---	---	.000	.65	78.9	6.77	2.79	1.13	.89	---	---	---
MAX	---	---	.000	2.59	316	23.2	10.9	4.26	1.81	---	---	---
(WY)	---	---	1998	1998	1998	2001	1998	1998	1999	---	---	---
MIN	---	---	.000	.000	.000	.053	.000	.000	.20	---	---	---
(WY)	---	---	1998	2000	2001	1999	2000	2000	2001	---	---	---

SUMMARY STATISTICS	WATER YEARS 1998 - 2001		
HIGHEST DAILY MEAN	3250	Feb	3 1998
LOWEST DAILY MEAN	.00	Dec	1 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Dec	1 1997
MAXIMUM PEAK FLOW	9940	Feb	3 1998
MAXIMUM PEAK STAGE	13.46	Feb	3 1998
10 PERCENT EXCEEDS	3.9		
50 PERCENT EXCEEDS	.00		
90 PERCENT EXCEEDS	.00		

11255575 PANOCHE CREEK AT INTERSTATE 5, NEAR SILVER CREEK, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—January 1998 to current year.
CHEMICAL DATA: January 1998 to current year.
SEDIMENT DATA: January 1998 to current year.

REMARKS.—Zero bed-load discharge observed for flows less than 0.67 ft^3/s during current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
MAR										
05...	1300	1020	21000	747	11.3	103	7.8	1760	10.0	508
06...	0900	59	2600	750	11.3	102	8.4	2100	10.0	628

DATE	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)	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)
MAR									
05...	587	146	54.2	6.10	3.05	170	38.3	78	96
06...	771	168	85.1	5.62	3.39	216	37.7	143	174

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)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-CTUENTS, DIS-SOLVED (MG/L) (70301)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)
MAR									
05...	26.6	.6	8.0	794	1.9	1390	1250	8.6	11.2
06...	45.7	.6	11.2	949	2.4	1730	1570	10.2	7.8

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
MAR								
05...	1545	654	11.0	52000	91800	40	50	64
06...	0845	59	10.0	6120	975	35	46	60
APR								
04...	1100	.41	15.0	97	.11	--	--	--
JUL								
10...	0935	.67	22.0	1110	2.0	--	--	--

11255575 PANOCHE CREEK AT INTERSTATE 5, NEAR SILVER CREEK, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
MAR							
05...	77	85	90	90	93	98	100
06...	68	73	80	88	98	100	--
APR							
04...	--	--	95	--	--	--	--
JUL							
10...	--	--	70	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAR								
06...	1345	1	90	10.0	2	3	7	22
06...	1348	1	90	10.0	4	18	62	93
06...	1351	1	90	10.0	1	3	17	76
06...	1354	1	90	10.0	--	2	21	82
06...	1357	1	90	10.0	--	1	12	73
06...	1400	1	90	10.0	--	4	26	82
06...	1403	1	90	10.0	1	8	40	88
06...	1406	1	90	10.0	7	23	62	92
06...	1409	1	90	10.0	12	36	82	97
06...	1412	1	90	10.0	15	39	56	65

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
MAR							
06...	34	40	48	58	78	100	--
06...	96	97	99	100	--	--	--
06...	98	99	99	100	--	--	--
06...	98	100	--	--	--	--	--
06...	92	95	97	98	100	--	--
06...	98	99	99	100	--	--	--
06...	100	--	--	--	--	--	--
06...	97	98	99	99	99	100	--
06...	99	100	--	--	--	--	--
06...	71	77	84	86	88	91	100

11255575 PANOCHE CREEK AT INTERSTATE 5, NEAR SILVER CREEK, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	STARTING TIME (2400 HOURS) (82073)	ENDING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
MAR									
05...	1630	1000	1140	.250	0	1630	1635	15	5.0
05...	1640	1000	1140	.250	0	1640	1645	15	5.0
06...	0920	1000	1150	.250	0	0915	0923	20	5.0
06...	0930	1000	1150	.250	0	0926	0935	20	5.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VERTICALS IN COMPOSITE SAMPLE (NUM) (04119)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COMPOSITE SAMPLE T/D/FT (04122)	SEDIMENT DISCHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)
MAR									
05...	2	10	10	2.50	496	11.0	3.08	150	1
05...	2	10	10	2.50	462	11.0	2.90	150	1
06...	2	14	14	2.50	65	10.0	.57	38	1
06...	2	14	14	2.50	68	10.0	.52	38	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
MAR								
05...	3	19	86	98	99	100	--	--
05...	4	17	75	96	98	99	100	--
06...	7	37	81	91	93	95	97	100
06...	8	36	85	98	99	100	--	--

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA

LOCATION.—Lat 37°14'52", long 120°51'00", in NE 1/4 SE 1/4 sec.27, T.7 S., R.10 E., Merced County, Hydrologic Unit 18040001, on left bank, at bridge on Highway 165, and 2.0 mi souuth of Stevinson.

DRAINAGE AREA.—7,388 mi^2, approximately.

PERIOD OF RECORD.—Water year 1989 to September 1995, October 1999 to September 2000, January 2001 to August 2001. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for June 1985 to September 1988 are available in U.S. Geological Survey Open-File Report 91-74.
CHEMICAL DATA: Water year 1993, October 1999 to September 2000, January 2001 to August 2001.
SPECIFIC CONDUCTANCE: Water year 1989 to September 1995.
WATER TEMPERATURE: Water year 1989 to September 1995.

PERIOD OF DAILY RECORD.—October 1988 to September 1995.
SPECIFIC CONDUCTANCE: October 1988 to September 1995.
WATER TEMPERATURE: October 1988 to September 1995.

INSTRUMENTATION.—Water-quality monitor October 1985 to September 1995.

REMARKS.—Flows consist of return water from irrigation areas. Discharge data furnished by Department of Water Resources (not reviewed by U.S. Geological Survey). Chemical Data for water year 2000 available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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 TOTAL (MG/L AS C) (00680)
JAN													
	04...1100	e3.3	8.1[1]	1160	--	--	--	--	--	--	--	--	--
	11...0950	e33	7.9[1]	925	--	--	--	--	--	--	--	--	--
	18...1240	e9.7	7.8[1]	901	--	--	--	--	--	--	--	--	--
	26...1000	e158	7.7[1]	448	--	--	--	--	--	--	--	--	--
	26...1230	e166	7.7[1]	420	.543	1.3	1.8	1.90	.045	.415	.359	.589	13
	26...1800	e195	7.8[1]	435	--	--	--	--	--	--	--	--	--
	26...2130	e211	7.8[1]	420	.629	1.5	2.4	1.70	.042	.405	.371	.638	16
	27...0130	e220	7.8[1]	389	--	--	--	--	--	--	--	--	--
	27...0340	e225	7.7[1]	378	--	--	--	--	--	--	--	--	--
	27...0840	e237	7.8[1]	373	--	--	--	--	--	--	--	--	--
	27...1210	e247	7.8[1]	365	--	--	--	--	--	--	--	--	--
	28...0000	e254	7.8[1]	347	--	--	--	--	--	--	--	--	--
	28...1120	e216	7.8[1]	354	--	--	--	--	--	--	--	--	--
FEB													
	01...1140	e78	7.8[1]	689	--	--	--	--	--	--	--	--	--
	08...1200	e8.4	7.7[1]	1090	--	--	--	--	--	--	--	--	--
	15...1210	e167	7.7[1]	443	--	--	--	--	--	--	--	--	--
	22...0940	e2.3	7.7[1]	1020	--	--	--	--	--	--	--	--	--
	25...0130	e201	7.7[1]	637	--	--	--	--	--	--	--	--	--
	25...0420	e203	8.0[1]	660	--	--	--	--	--	--	--	--	--
	25...0900	e201	7.5[1]	644	--	--	--	--	--	--	--	--	--
	25...1300	e201	7.4[1]	627	--	--	--	--	--	--	--	--	--
	25...1740	e203	7.3[1]	365	--	--	--	--	--	--	--	--	--
	25...2120	e201	7.3[1]	472	--	--	--	--	--	--	--	--	--
	26...0040	e201	7.3[1]	421	--	--	--	--	--	--	--	--	--
	26...0440	e200	7.4[1]	379	--	--	--	--	--	--	--	--	--
	26...1400	e196	7.4[1]	307	--	--	--	--	--	--	--	--	--
APR													
	11...0940	e68	7.7[1]	727[1]	--	--	--	--	--	--	--	--	--
	18...1020	e13	8.1[1]	1060[1]	--	--	--	--	--	--	--	--	--
	25...0850	e89	8.0[1]	541[1]	--	--	--	--	--	--	--	--	--
MAY													
	02...0930	e7.0	8.2[1]	1660[1]	--	--	--	--	--	--	--	--	--
	09...0800	e1.7	7.9[1]	1420[1]	--	--	--	--	--	--	--	--	--
	16...1030	e4.5	8.4[1]	1520[1]	--	--	--	--	--	--	--	--	--
	23...0920	e2.4	7.8	1410	--	--	--	--	--	--	--	--	--
	30...0740	e.18	8.4[1]	1770[1]	--	--	--	--	--	--	--	--	--
JUN													
	06...0830	e1.9	--	1690[1]	--	--	--	--	--	--	--	--	--
	12...0900	e.55	8.0	1580	--	--	--	--	--	--	--	--	--
	19...1100	e2.6	--	1510[1]	--	--	--	--	--	--	--	--	--
	20...1110	e1.3	--	--	--	--	--	--	--	--	--	--	--
	26...0800	e.52	8.3	1590	--	--	--	--	--	--	--	--	--
JUL													
	03...1020	e.92	8.1	1470	--	--	--	--	--	--	--	--	--
	10...1130	e5.5	8.7	1640	--	--	--	--	--	--	--	--	--
	17...0920	e.74	8.8	1000	--	--	--	--	--	--	--	--	--
	24...1020	e1.3	7.9[1]	1360[1]	--	--	--	--	--	--	--	--	--
	31...0940	e.78	8.0	1280	--	--	--	--	--	--	--	--	--
AUG													
	02...1310	e.97	--	--	--	--	--	--	--	--	--	--	--
	07...1050	e.87	8.3[1]	1200[1]	--	--	--	--	--	--	--	--	--
	14...0930	e.74	8.5	1330	--	--	--	--	--	--	--	--	--
	21...1110	e1.7	8.7	1360	--	--	--	--	--	--	--	--	--

e Estimated.
[1] Laboratory value.

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBOPHENOTHION WATER UNFLTRD (UG/L) (39786)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CHLORPYRIFOS TOTAL RECOVER (UG/L) (38932)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)
JAN													
04	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--	.019
11	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	e.004	--	e.010
18	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.012	<.020	--	e.003	--	e.010
26	--	--	--	--	--	--	--	--	--	--	--	--	--
26	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.138	<.020	<.02	.005	<.01	<.018
26	--	--	--	--	--	--	--	--	--	--	--	--	--
26	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.118	<.020	<.02	.007	<.01	<.018
27	--	--	--	--	--	--	--	--	--	--	--	--	--
27	<.002	<.004	<.007	<.005	e.003	<.010	<.002	e.098	<.020	--	.007	--	<.025
27	--	--	--	--	--	--	--	--	--	--	--	--	--
27	<.002	<.004	<.007	<.005	e.003	<.010	<.002	e.108	<.020	--	e.005	--	<.020
28	<.002	<.004	<.007	<.005	e.003	<.010	<.002	e.110	<.020	--	.007	--	<.020
28	<.002	<.004	<.005	<.005	e.003	<.010	<.002	e.102	<.020	--	.006	--	<.025
FEB													
01	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018
08	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.050	<.020	--	<.005	--	.034
15	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.004	--	e.010
22	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	e.011
25	--	--	--	--	--	--	--	--	--	--	--	--	--
25	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	e.010
25	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	<.005	--	<.018
25	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	<.005	--	e.008
25	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	<.02	<.005	<.01	e.009
25	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--	<.005	--	e.006
26	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018
26	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	e.010
26	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	e.008
APR													
11	<.002	<.004	<.002	<.005	e.006	<.010	<.002	e.035	e.009	--	<.005	--	e.018
18	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	e.005	--	<.005	--	e.013
25	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	e.011	--	<.005	--	<.018
MAY													
02	<.002	<.004	<.002	<.005	e.007	<.010	<.002	<.075	<.020	--	<.005	--	.027
09	<.002	<.004	<.002	<.005	e.006	<.010	<.002	<.041	<.020	--	<.005	--	.041
16	<.002	<.004	<.002	<.005	e.007	<.010	<.002	<.041	<.020	--	e.005	--	.028
23	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	--	e.002	--	.023
30	<.002	<.004	<.002	<.005	e.007	<.010	<.002	<.041	<.020	--	<.005	--	e.013
JUN													
06	<.002	<.004	<.002	<.005	.008	<.010	<.002	<.041	<.020	--	<.005	--	e.013
12	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	--	<.005	--	e.013
19	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	--	<.005	--	e.017
20	<.002	<.004	<.002	<.005	.008	<.010	<.002	<.041	<.020	--	<.005	--	<.018
26	<.002	<.004	<.002	<.005	e.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018
JUL													
03	<.002	<.004	<.002	<.005	.010	<.010	<.002	<.041	<.020	--	<.005	--	e.013
10	<.002	<.004	<.002	<.005	.016	<.010	<.002	<.041	<.020	--	.005	--	.434
17	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	--	<.005	--	.553
24	<.002	<.004	<.002	<.005	.012	<.010	<.002	<.041	<.020	--	<.005	--	1.84
31	<.002	<.004	<.002	<.005	.010	<.010	<.002	<.041	<.020	--	<.140	--	4.14
AUG													
02	<.002	<.004	<.002	<.005	.012	<.010	<.002	<.041	<.020	--	e.005	--	4.34
07	<.002	<.004	<.002	<.005	e.006	<.010	<.002	<.041	<.020	--	<.005	--	1.98
14	<.002	<.004	<.002	<.005	e.004	<.010	<.002	<.041	<.020	--	<.030	--	1.08
21	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--	.014	--	.614

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

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS (DYFONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)
JAN													
04...	<.003	<.006	--	<.005	--	<.005	<.021	.039	<.009	--	<.005	--	<.003
11...	<.003	<.006	--	.009	--	<.005	<.021	.031	<.009	--	<.005	--	<.003
18...	<.003	<.006	--	.131	--	<.005	<.021	.025	<.009	--	<.005	--	<.003
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	e.002	<.006	<.02	.289	.21	<.005	<.021	<.025	<.009	<.01	<.005	<.01	<.003
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	e.001	e.002	<.02	.205	.14	<.005	<.021	.017	<.009	<.01	<.005	<.01	<.003
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	e.001	<.006	--	.128	--	<.005	<.021	.008	<.009	--	<.005	--	<.003
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	e.001	<.006	--	.156	--	<.005	<.021	.011	<.009	--	<.005	--	<.003
28...	e.001	<.006	--	.150	--	<.005	<.021	.008	<.009	--	<.005	--	<.003
28...	e.001	<.006	--	.140	--	<.005	<.021	.012	<.009	--	<.010	--	<.003
FEB													
01...	<.003	<.006	--	.056	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003
08...	<.003	<.006	--	.024	--	<.005	<.021	.034	<.009	--	<.005	--	<.003
15...	<.003	<.006	--	.083	--	<.005	<.021	.009	<.009	--	<.005	--	<.003
22...	<.003	<.006	--	.014	--	<.005	<.021	.025	<.009	--	<.005	--	<.003
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.003	<.006	--	.021	--	<.005	<.021	.009	<.009	--	<.005	--	<.003
25...	e.001	e.002	--	.018	--	<.005	<.021	.008	<.009	--	<.005	--	<.003
25...	<.003	e.002	--	.022	--	<.005	<.021	.008	<.009	--	<.005	--	<.003
25...	e.002	<.006	<.02	.039	.03	<.005	<.021	.008	<.009	<.01	<.005	<.01	<.003
25...	e.002	<.006	--	.094	--	<.005	<.021	.005	<.009	--	<.005	--	<.003
26...	e.003	<.006	--	.130	--	<.005	<.021	.005	<.009	--	<.005	--	<.003
26...	e.003	<.006	--	.115	--	<.005	<.021	.006	<.009	--	<.005	--	<.003
26...	e.002	<.006	--	.070	--	<.005	<.021	e.004	<.009	--	<.005	--	<.003
APR													
11...	e.001	<.006	--	.014	--	<.005	<.021	.075	<.009	--	<.005	--	<.003
18...	<.003	<.006	--	.006	--	<.005	<.021	.044	<.009	--	<.005	--	<.003
25...	<.003	<.006	--	.014	--	<.005	<.021	.156	<.009	--	<.005	--	<.003
MAY													
02...	<.003	<.006	--	<.005	--	<.005	<.021	.017	<.009	--	e.004	--	<.003
09...	<.003	e.003	--	<.005	--	<.005	<.021	.011	<.009	--	<.005	--	<.003
16...	<.003	<.006	--	e.005	--	<.005	<.021	.015	<.009	--	<.005	--	<.003
23...	<.003	e.003	--	e.004	--	<.005	<.021	.007	<.009	--	<.005	--	<.003
30...	<.003	e.003	--	<.005	--	<.005	<.021	.008	<.009	--	<.005	--	<.003
JUN													
06...	<.003	e.003	--	<.005	--	<.005	<.021	.007	<.009	--	<.005	--	<.003
12...	<.003	e.004	--	<.005	--	<.005	<.021	.005	<.009	--	<.005	--	<.003
19...	<.003	<.006	--	<.005	--	<.005	<.021	.009	<.009	--	<.005	--	<.003
20...	<.003	<.006	--	e.003	--	<.005	<.021	.007	<.009	--	<.005	--	<.003
26...	<.003	<.006	--	<.005	--	<.005	<.021	.009	<.009	--	<.005	--	<.003
JUL													
03...	<.003	e.001	--	<.005	--	<.005	<.021	.010	<.009	--	<.005	--	<.003
10...	<.003	e.006	--	<.005	--	<.005	<.021	.014	<.009	--	<.005	--	<.003
17...	<.003	<.006	--	<.005	--	<.005	<.021	.075	<.009	--	<.005	--	<.003
24...	<.003	<.006	--	<.005	--	<.005	<.021	.018	<.009	--	<.005	--	<.003
31...	<.003	<.006	--	<.005	--	<.005	<.021	.019	<.009	--	<.005	--	<.003
AUG													
02...	<.003	<.006	--	<.005	--	<.005	<.021	.029	<.009	--	<.005	--	<.003
07...	<.003	<.006	--	<.005	--	<.005	<.021	.013	<.009	--	<.005	--	<.003
14...	<.003	<.006	--	<.005	--	<.005	<.021	.006	<.009	--	<.005	--	<.003
21...	<.003	<.006	--	e.004	--	<.005	<.021	.008	<.009	--	<.005	--	<.003

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

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MALA- THION, TOTAL (UG/L) (39530)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
JAN													
04...	<.004	<.035	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007
11...	<.004	<.035	<.027	--	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007
18...	<.004	<.035	<.027	--	<.050	--	<.006	e.011	.012	<.002	<.007	<.003	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.007	<.035	.039	<.03	<.050	<.01	<.006	e.005	.019	<.002	<.007	<.003	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.007	<.035	e.026	<.03	<.050	<.01	<.006	.013	.010	<.002	E.004	<.003	<.007
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.004	<.035	e.015	--	<.050	--	<.006	.015	.021	<.002	<.007	<.003	<.007
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.007	<.035	e.018	--	<.050	--	<.006	e.009	.020	<.002	<.007	<.003	<.007
28...	<.007	<.035	e.016	--	<.050	--	<.006	e.010	.017	<.002	<.007	<.003	<.007
28...	<.005	<.035	e.021	--	<.050	--	<.006	e.011	.026	<.002	<.007	<.003	<.007
FEB													
01...	<.004	<.035	<.027	--	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007
08...	.005	<.035	<.027	--	<.050	--	<.006	e.006	<.006	<.002	<.007	<.003	<.007
15...	<.004	<.035	e.008	--	<.050	--	<.006	e.005	.009	<.002	<.007	<.003	<.007
22...	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006	<.002	<.007	<.003	<.007
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.004	<.035	<.027	--	<.050	--	<.006	e.012	<.006	<.002	<.007	<.003	<.007
25...	<.004	<.035	<.027	--	<.050	--	<.006	e.009	<.006	<.002	<.007	<.003	<.007
25...	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006	<.002	<.007	<.003	<.007
25...	<.004	<.035	<.027	<.06	<.050	<.01	<.006	.015	<.006	<.002	<.007	<.003	<.007
25...	<.004	<.035	e.012	--	<.050	--	<.006	.017	<.006	<.002	<.007	<.003	<.007
26...	<.004	<.035	e.015	--	<.050	--	<.006	.015	.009	<.002	<.007	<.003	<.007
26...	<.004	<.035	e.011	--	<.050	--	<.006	e.012	.012	<.002	<.007	<.003	<.007
26...	<.004	<.035	e.007	--	<.050	--	<.006	e.008	.008	<.002	<.007	<.003	<.007
APR													
11...	<.004	<.035	<.027	--	<.050	--	<.006	e.011	<.006	<.002	<.007	<.003	<.007
18...	<.004	<.035	<.027	--	<.050	--	<.006	.047	<.006	<.002	<.007	<.003	<.007
25...	<.004	<.035	<.027	--	<.050	--	<.006	.022	<.006	<.002	<.007	<.003	<.007
MAY													
02...	<.004	<.035	<.027	--	<.050	--	<.006	.013	<.006	<.002	<.007	<.003	<.007
09...	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006	<.002	<.007	<.003	<.007
16...	<.004	<.035	<.027	--	<.050	--	<.006	e.009	<.006	<.002	<.007	<.003	<.007
23...	<.004	<.035	<.027	--	<.050	--	<.006	.120	<.006	.006	<.007	<.003	<.007
30...	<.004	<.035	<.027	--	<.050	--	<.006	.164	<.006	<.002	<.007	<.003	<.007
JUN													
06...	<.004	<.035	<.027	--	<.050	--	<.006	.278	<.006	<.002	<.007	<.003	<.007
12...	<.004	<.035	<.027	--	<.050	--	<.006	.388	<.006	.006	<.007	<.003	<.007
19...	<.004	<.035	<.027	--	<.050	--	<.006	.335	<.006	<.002	<.007	<.003	<.007
20...	<.004	<.035	<.027	--	<.050	--	<.006	.329	<.006	<.002	e.005	e.001	<.007
26...	<.004	<.035	<.027	--	<.050	--	<.006	.176	<.006	<.002	<.007	<.003	<.007
JUL													
03...	<.004	<.035	<.027	--	<.050	--	<.006	.112	<.006	<.002	<.007	<.003	<.007
10...	<.004	<.035	<.027	--	<.050	--	<.006	.377	<.006	<.002	<.007	<.003	<.007
17...	<.004	<.035	<.027	--	<.050	--	<.006	.169	<.006	.071	<.007	<.003	<.007
24...	<.004	<.035	<.027	--	<.050	--	<.006	.256	<.006	.007	<.007	<.003	<.007
31...	<.004	<.035	<.027	--	<.050	--	<.006	1.10	<.006	<.002	<.007	.003	<.007
AUG													
02...	<.004	<.035	<.027	--	<.050	--	<.006	1.38	<.006	<.002	<.007	<.004	<.007
07...	<.004	<.035	<.027	--	<.050	--	<.006	1.06	<.006	<.002	<.007	<.003	<.007
14...	<.004	<.035	<.027	--	<.050	--	<.006	.611	<.006	<.002	<.007	<.003	<.007
21...	<.004	<.035	<.027	--	<.050	--	<.006	.210	<.006	<.002	<.007	<.003	<.007

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

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PARA-THION, TOTAL (UG/L) (39540)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)
JAN													
04...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.022	e.003
11...	--	<.002	e.008	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.020	e.003
18...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.203	<.016
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.01	<.002	<.015	<.006	<.02	<.011	e.005	<.004	<.010	<.011	<.023	.310	<.016
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.01	<.002	<.015	<.006	<.02	<.011	e.005	<.004	<.010	<.011	<.023	.398	<.016
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.002	.014	<.006	--	<.011	e.004	.025	<.010	<.011	<.023	1.07	<.016
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.002	<.010	<.006	--	<.011	e.004	e.004	<.010	<.011	<.023	.306	<.016
28...	--	<.002	.013	<.006	--	<.011	e.004	.030	<.010	<.011	<.023	.493	<.016
28...	--	<.002	<.013	<.006	--	<.011	e.004	<.004	<.010	<.011	<.023	.357	<.016
FEB													
01...	--	<.002	<.010	<.006	--	<.011	<.015	.018	<.010	<.011	<.023	.864	<.016
08...	--	<.002	<.010	<.006	--	<.011	e.002	e.004	<.010	<.011	<.023	.242	e.005
15...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.098	<.016
22...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.049	<.016
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.053	<.016
25...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.046	<.016
25...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.050	<.016
25...	<.01	<.002	<.010	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023	.068	<.016
25...	--	<.002	<.010	<.006	--	<.011	e.004	<.004	<.010	<.011	<.023	.098	e.011
26...	--	<.002	<.010	<.006	--	<.011	e.003	<.011	<.010	<.011	<.023	.145	.018
26...	--	<.002	<.010	<.006	--	<.011	<.015	<.008	<.010	<.011	<.023	.177	<.019
26...	--	<.002	<.010	<.006	--	<.011	e.002	.010	<.010	<.011	<.023	.114	<.016
APR													
11...	--	<.002	<.010	<.006	--	<.011	e.006	<.004	<.010	<.011	<.023	.108	<.016
18...	--	<.002	<.010	<.006	--	<.011	e.001	<.004	<.010	<.011	<.023	.044	<.016
25...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.026	<.016
MAY													
02...	--	<.002	<.010	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023	.017	<.016
09...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.018	<.016
16...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.013	<.016
23...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.014	<.016
30...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.011	<.016
JUN													
06...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.015	e.003
12...	--	<.002	<.010	<.006	--	<.011	e.003	<.004	<.010	<.011	<.023	.016	<.016
19...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.014	e.005
20...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.011	<.016
26...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016
JUL													
03...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016
10...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.013	<.016
17...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016
24...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.012	<.016
31...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.015	<.016
AUG													
02...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.015	<.016
07...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016
14...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.006	<.016
21...	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.004	<.016

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

11260815 SAN JOAQUIN RIVER NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN					
04...	<.034	<.017	<.005	<.002	<.009
11...	<.034	<.017	<.005	<.002	e.002
18...	<.034	<.017	<.005	<.002	e.003
26...	--	--	--	--	--
26...	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--
26...	<.034	<.017	<.005	<.002	<.009
27...	--	--	--	--	--
27...	<.034	<.017	<.005	<.002	<.009
27...	--	--	--	--	--
27...	<.034	<.017	<.005	<.002	<.009
28...	<.034	<.017	e.002	<.002	<.009
28...	<.034	<.017	<.005	<.002	<.009
FEB					
01...	<.034	<.017	<.005	<.002	<.009
08...	<.034	<.017	<.005	<.002	e.002
15...	<.034	<.017	<.005	<.002	e.002
22...	<.034	<.017	<.005	<.002	e.004
25...	--	--	--	--	--
25...	<.034	<.017	<.005	<.002	e.003
25...	<.034	<.017	<.005	<.002	e.004
25...	<.034	<.017	<.005	<.002	e.004
25...	<.034	<.017	<.005	<.002	e.004
25...	<.034	<.017	<.005	<.002	e.004
26...	<.034	<.017	<.005	<.002	e.003
26...	<.034	<.017	<.005	<.002	e.003
26...	<.034	<.017	<.005	<.002	e.002
APR					
11...	<.034	<.017	<.005	<.002	<.009
18...	<.034	<.017	<.005	<.002	e.003
25...	<.034	<.017	<.005	<.002	e.005
MAY					
02...	<.034	<.017	<.005	<.002	<.009
09...	<.034	<.017	<.005	<.002	<.009
16...	<.034	<.017	<.005	<.002	<.009
23...	<.034	<.017	<.005	<.002	<.009
30...	<.034	<.017	<.005	<.002	<.009
JUN					
06...	<.034	<.017	<.005	<.002	e.006
12...	<.034	<.017	<.005	<.002	e.005
19...	<.034	<.017	<.005	<.002	<.009
20...	<.034	<.017	<.005	<.002	.016
26...	<.034	<.017	<.005	<.002	<.009
JUL					
03...	<.034	<.017	<.005	<.002	<.009
10...	<.034	<.017	<.005	<.002	<.009
17...	<.034	<.017	<.005	<.002	<.009
24...	<.034	<.017	<.005	<.002	<.009
31...	<.034	<.017	<.005	<.002	<.009
AUG					
02...	<.034	<.017	<.005	<.002	<.009
07...	<.034	<.017	<.005	<.002	<.009
14...	<.034	<.017	<.005	<.002	<.009
21...	<.034	<.017	<.005	<.002	<.009

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

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA

LOCATION.—Lat 37°14'52", long 120°51'04", in SE 1/4 SE 1/4, sec.10, T.8 S., R.10 E., Merced County, Hydrologic Unit 18040001, on right bank, at bridge on Highway 165, and 5.5 mi south of Stevinson.

DRAINAGE AREA.—Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—Water years 1986–94. October 1995 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is sea level.

REMARKS.—Records good except period of backwater, which is fair. During major storm events record can be affected by backwater from the San Joaquin River. Discharge is affected by irrigation return and drainage from Kesterson Wildlife Refuge.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 810 ft^3/s, Feb. 20, 1986; minimum daily, 24 ft^3/s, Sept. 6, 1992.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	180	134	112	191	358	267	191	127	161	180	86
2	83	189	156	116	191	332	277	143	106	166	167	86
3	75	192	164	108	211	357	278	124	117	167	155	70
4	85	192	179	104	217	423	288	142	160	117	157	58
5	91	186	188	104	220	507	286	139	157	129	165	51
6	83	181	181	108	222	590	256	145	147	152	159	57
7	88	174	169	127	218	688	248	142	145	148	152	57
8	100	175	174	163	211	717	268	125	152	163	124	58
9	117	172	174	209	219	647	293	149	131	167	113	64
10	139	160	174	228	230	528	312	193	120	171	109	66
11	185	145	172	306	246	433	308	185	112	194	105	62
12	211	137	170	353	287	404	273	181	131	195	123	56
13	205	132	158	319	309	412	234	171	139	205	126	63
14	180	127	147	290	312	409	206	172	162	209	135	68
15	144	129	148	263	250	401	207	209	165	196	135	54
16	130	122	151	235	209	420	212	225	191	174	142	48
17	122	112	148	211	214	416	196	224	174	176	169	49
18	117	107	136	199	216	364	173	220	172	194	185	50
19	112	110	132	186	225	321	158	204	207	195	195	52
20	116	111	130	171	235	272	201	168	202	188	204	51
21	116	112	130	160	238	260	225	130	177	209	208	52
22	107	116	128	155	233	253	236	122	172	210	194	42
23	102	123	127	156	247	250	226	121	178	222	184	44
24	101	132	126	161	301	261	215	137	184	223	174	55
25	99	132	124	186	386	310	214	150	193	189	180	75
26	103	140	123	216	452	357	212	174	202	182	175	71
27	122	139	121	229	462	375	208	166	204	179	162	61
28	174	136	122	228	421	357	204	153	193	170	134	70
29	194	134	116	219	---	310	201	145	174	179	94	65
30	188	126	114	215	---	241	205	141	149	186	78	58
31	187	---	111	198	---	247	---	117	---	194	74	---
TOTAL	3968	4323	4527	6035	7373	12220	7087	5008	4843	5610	4657	1799
MEAN	128	144	146	195	263	394	236	162	161	181	150	60.0
MAX	211	192	188	353	462	717	312	225	207	223	208	86
MIN	75	107	111	104	191	241	158	117	106	117	74	42
AC-FT	7870	8570	8980	11970	14620	24240	14060	9930	9610	11130	9240	3570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	158	173	142	168	293	362	257	211	214	234	244	163
MAX	255	273	237	426	631	512	419	355	339	376	411	289
(WY)	1990	1990	1996	1997	1998	1996	1986	1987	1987	1986	1986	1986
MIN	41.3	65.2	63.4	60.6	83.4	231	159	75.2	72.0	61.7	57.1	39.4
(WY)	1993	1993	1991	1991	1991	1992	1997	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	70911		67450			
ANNUAL MEAN	194		185		218	
HIGHEST ANNUAL MEAN					289	1996
LOWEST ANNUAL MEAN					96.6	1992
HIGHEST DAILY MEAN	501	Feb 16	717	Mar 8	810	Feb 20 1986
LOWEST DAILY MEAN	66	Sep 28	42	Sep 22	24	Sep 6 1992
ANNUAL SEVEN-DAY MINIMUM	77	Sep 27	49	Sep 17	31	Dec 25 1992
MAXIMUM PEAK FLOW			728	Mar 8	unknown	Feb 20 1986
MAXIMUM PEAK STAGE			69.02	Mar 8	unknown	Feb 20 1986
ANNUAL RUNOFF (AC-FT)	140700		133800		157800	
10 PERCENT EXCEEDS	343		296		369	
50 PERCENT EXCEEDS	175		172		195	
90 PERCENT EXCEEDS	100		87		86	

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1985–94, October 1995 to current year. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for the period April 1987 to September 1988 are available in U.S. Geological Survey Open File Report 91–74.
CHEMICAL DATA: Water years 1985–88, 1993–94, April to August 2001.
SPECIFIC CONDUCTANCE: Water years 1985–94, October 1995 to current year.
WATER TEMPERATURE: Water years 1985–94, October 1995 to current year.
SEDIMENT DATA: Water years 1983–88, 1993–94.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Water years 1985–94, October 1995 to current year.
WATER TEMPERATURE: Water years 1985–94, October 1995 to current year.

INSTRUMENTATION.—Water-quality monitor.

REMARKS.—Specific conductance records rated excellent except for Dec. 16–19, Jan. 20 to Feb. 16, Mar. 2–30, Apr. 14 to May 10, May 15–22, May 25 to Aug. 15, which are good; Dec. 20–23, Feb. 17–20, Mar. 31 to Apr. 5, which are fair; and Oct. 1–11, Oct. 26, 27, 29, Nov. 8–10, 13, 15, 16, which are poor. Water-temperature records rated excellent except for Nov. 1–21 and Apr. 12 to May 10, which are good. Interruptions in record were due to malfunction of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 4,330 microsiemens, Jan. 16, 1991; minimum recorded, 450 microsiemens, July 24, 1986.
WATER TEMPERATURE: Maximum recorded, 32.5°C, July 15, 1992, July 12, 1999; minimum recorded, 0.5°C, Dec. 26, 1985, Dec. 23, 1990.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,850 microsiemens Feb. 2, Sept. 23, but may have been higher during period of missing record; minimum recorded, 746 microsiemens, July 26, but may have been lower during period of missing record.
WATER TEMPERATURE: Maximum recorded, 30.5°C, May 31, Aug. 8, but may have been higher during period of missing record; minimum recorded, 6.5°C, Jan. 18, but may have been lower during period of missing record.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
APR									
11...	1020	313	7.8[1]	1370[1]	--	<.002	<.004	<.002	<.005
18...	1110	176	7.8[1]	1730[1]	--	<.002	.004	<.002	<.005
25...	0930	212	8.0[1]	1280[1]	--	<.002	<.004	<.002	<.005
MAY									
02...	1000	142	8.0[1]	1530[1]	--	<.002	<.004	<.002	<.005
09...	0830	142	7.8[1]	1530[1]	--	<.002	<.004	<.002	<.005
16...	1000	224	7.9[1]	946[1]	--	<.002	<.004	<.002	<.005
23...	0850	123	7.7	1400	--	<.002	<.004	<.002	<.005
30...	0710	147	7.9[1]	1320[1]	--	<.002	<.004	<.002	<.005
JUN									
06...	0800	153	8.0[1]	1150[1]	20.5	<.002	<.004	<.002	<.005
12...	0930	129	8.0	1310	--	<.002	<.004	<.002	<.005
19...	1030	209	8.5[1]	--	--	<.002	<.004	<.002	<.005
20...	1040	201	--	--	--	<.002	<.004	<.002	<.005
26...	0830	204	8.1	848	--	<.002	<.004	<.002	<.005
JUL									
03...	1000	174	7.9	855	--	<.002	<.004	<.002	<.005
10...	1050	165	7.8	1060	--	<.002	<.004	<.002	<.005
17...	0900	173	8.0	1050	--	<.002	<.004	<.002	<.005
24...	1000	229	7.7[1]	969[1]	--	<.002	<.004	<.002	<.005
31...	0920	196	7.8	772	--	<.002	<.004	<.002	<.005
AUG									
01...	1240	177	--	--	--	<.002	<.004	<.002	<.005
07...	1030	157	7.9[1]	892[1]	--	<.002	<.004	<.002	<.005
14...	1000	138	7.9	1010	--	<.002	<.004	<.002	<.005
21...	1040	209	7.8	943	--	<.002	<.004	<.002	<.005

[1] Laboratory value.
< Actual value is known to be less than the value shown.

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR									
11...	e.004	<.010	<.002	e.017	e.529	<.005	<.018	e.002	<.006
18...	<.007	<.010	<.002	e.004	e.067	e.003	e.008	e.001	<.006
25...	<.007	e.007	<.002	<.041	e.054	<.005	<.018	e.002	<.006
MAY									
02...	e.003	<.010	<.002	e.037	e.038	<.005	<.018	<.003	<.006
09...	e.003	<.010	<.002	e.023	e.013	<.005	e.006	<.003	<.006
16...	<.007	<.010	<.002	e.006	e.010	<.005	<.018	<.003	<.006
23...	e.003	<.010	<.002	e.014	<.020	<.005	<.018	<.003	<.006
30...	e.003	<.010	<.002	e.035	<.020	<.005	<.018	<.003	<.006
JUN									
06...	.008	<.010	<.002	e.004	<.020	<.005	e.006	<.003	e.003
12...	.013	<.010	<.002	e.004	<.020	<.005	<.018	e.001	e.003
19...	.019	<.010	<.002	e.006	<.020	<.005	<.018	<.003	<.006
20...	.014	<.010	<.002	e.022	<.020	.008	<.018	<.003	e.002
26...	.020	<.010	<.002	e.019	<.020	<.005	<.018	<.003	<.006
JUL									
03...	.018	<.010	<.002	e.016	<.020	e.002	.036	<.003	<.006
10...	.015	<.010	<.002	e.049	<.020	<.005	.886	<.003	e.005
17...	.014	<.010	<.002	<.041	<.020	<.005	.064	<.003	e.002
24...	.012	<.010	<.002	e.236	<.020	.017	.057	<.003	<.006
31...	e.006	<.010	<.002	e.015	e.010	<.008	.089	<.003	<.006
AUG									
01...	.009	<.010	<.002	e.009	<.020	.009	.063	<.003	<.006
07...	e.003	<.010	<.002	e.021	e.009	.400	e.015	<.003	<.006
14...	e.002	<.010	<.002	e.014	e.016	.072	.425	<.003	<.006
21...	e.004	<.010	<.002	e.031	e.032	.055	e.014	<.003	<.006

DATE	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
APR									
11...	.005	<.005	<.021	.598	<.009	<.005	<.003	<.004	<.035
18...	e.003	<.005	<.021	.058	<.009	<.005	<.003	<.004	<.035
25...	e.004	<.005	<.021	.299	<.009	<.005	<.003	<.004	<.035
MAY									
02...	<.005	<.005	<.021	.048	<.009	<.005	<.003	<.004	<.035
09...	<.005	<.005	<.021	.031	<.009	<.005	<.003	<.004	<.035
16...	.009	<.005	<.021	.029	<.009	<.005	<.003	<.004	<.035
23...	e.004	<.005	<.021	.025	<.009	<.005	<.003	<.004	<.035
30...	.005	<.005	<.021	.013	<.009	<.005	<.003	<.004	<.035
JUN									
06...	.007	<.005	<.021	.013	<.009	<.005	<.003	<.004	<.035
12...	.008	<.005	<.021	.022	<.009	<.005	<.003	<.004	<.035
19...	.006	<.005	<.021	.006	<.009	<.005	<.003	<.004	<.035
20...	.006	<.005	<.021	.015	<.009	<.005	<.003	<.004	<.035
26...	e.002	<.005	<.021	.090	<.009	<.005	<.003	<.004	<.035
JUL									
03...	e.004	<.005	<.021	.063	<.009	<.005	<.003	<.004	<.035
10...	e.003	<.005	<.021	.025	<.009	<.005	<.003	<.004	<.035
17...	e.003	<.005	<.021	.018	<.009	<.005	<.003	<.004	<.035
24...	.009	<.005	<.021	.029	<.009	<.005	<.003	<.004	<.035
31...	.184	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035
AUG									
01...	.042	<.005	<.021	.014	<.009	<.005	<.003	<.004	<.035
07...	.023	<.005	<.021	.046	<.009	<.005	<.003	<.004	<.035
14...	.023	<.005	<.021	2.24	<.009	<.005	<.003	<.004	<.035
21...	.045	<.005	<.021	.032	<.009	<.005	<.003	<.004	<.035

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

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MALATHION, DISSOLVED (UG/L) (39532)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)
APR									
11...	e.012	<.050	<.006	.019	<.006	<.002	<.007	<.003	<.007
18...	e.004	<.050	<.006	e.010	<.006	<.002	<.007	<.003	<.007
25...	e.006	<.050	<.006	.061	<.006	<.002	<.007	<.003	<.007
MAY									
02...	<.027	<.050	<.006	.038	<.006	.004	<.007	<.003	<.007
09...	<.027	<.050	<.006	.242	<.006	<.002	<.007	<.003	<.007
16...	<.027	<.050	<.006	.129	<.006	<.003	<.007	<.003	<.007
23...	<.027	<.050	<.006	.376	<.006	.002	<.007	<.003	<.007
30...	<.027	<.050	<.006	.095	<.006	<.002	<.007	<.003	<.007
JUN									
06...	<.027	<.050	<.006	.211	<.006	.011	<.007	<.003	<.007
12...	<.027	<.050	<.006	.120	<.006	.018	<.007	<.003	<.007
19...	<.027	<.050	<.006	.129	<.006	.018	<.007	<.003	<.007
20...	<.027	<.050	<.006	.119	<.006	.013	<.007	<.003	<.007
26...	<.027	<.050	<.006	.510	<.006	.009	<.007	<.003	<.007
JUL									
03...	e.005	<.050	<.006	.266	<.006	.015	<.007	<.003	<.007
10...	<.027	<.050	<.006	.486	<.006	.007	<.007	<.003	<.007
17...	<.027	<.050	<.006	.248	<.006	.008	<.007	<.003	<.007
24...	<.027	<.050	<.006	.202	<.006	.006	<.007	<.003	<.007
31...	<.027	<.050	<.006	.243	<.006	<.002	<.007	<.003	<.007
AUG									
01...	e.016	<.050	<.006	.146	<.006	<.004	<.007	<.003	<.007
07...	<.027	<.050	<.006	.077	<.006	<.002	<.007	<.003	<.007
14...	e.010	<.050	<.006	.075	<.006	<.002	<.007	<.003	<.007
21...	<.027	<.050	<.006	.201	<.010	<.004	<.007	<.003	<.007

DATE	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
APR									
11...	<.002	<.010	<.006	<.011	e.002	<.004	<.010	<.011	<.023
18...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
MAY									
02...	.059	e.004	<.006	<.011	e.002	<.004	<.010	<.011	<.023
09...	<.002	<.010	<.006	<.011	<.015	.041	<.010	<.011	<.023
16...	.025	<.010	<.006	<.011	<.015	<.005	<.010	<.011	<.023
23...	.011	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
30...	<.004	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
JUN									
06...	<.002	<.010	<.006	<.011	e.003	<.004	<.010	<.011	<.023
12...	<.002	<.010	<.006	<.011	<.015	<.004	e.001	<.011	<.023
19...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
20...	<.002	<.010	<.006	<.011	<.015	.005	<.010	<.011	<.023
26...	<.002	<.010	<.006	<.011	<.015	e.003	<.010	<.011	<.023
JUL									
03...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
10...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
17...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
24...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
31...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
AUG									
01...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	e.021
07...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023
14...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	.037
21...	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023

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

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR							
11...	.065	<.016	<.034	<.017	<.005	<.002	.332
18...	.026	<.016	<.034	<.017	<.005	<.002	.103
25...	.031	<.016	<.034	<.017	<.005	<.002	.096
MAY							
02...	.025	e.004	<.034	<.017	<.005	<.002	e.016
09...	.018	<.016	<.034	<.017	<.005	<.002	.045
16...	.024	<.016	<.034	<.017	<.005	<.002	.206
23...	.019	<.016	<.034	<.017	<.005	<.002	.040
30...	.020	<.016	<.034	<.017	.005	<.002	.074
JUN							
06...	.021	e.004	<.034	<.017	<.005	<.002	.089
12...	.018	<.016	<.034	<.017	.013	<.002	.062
19...	.015	<.016	<.034	<.017	<.005	<.002	.029
20...	.013	<.016	<.034	<.017	<.005	<.002	.055
26...	.012	<.016	<.034	<.017	.007	<.002	.039
JUL							
03...	.013	<.016	<.034	<.017	.006	<.002	.033
10...	.012	<.016	<.034	<.017	<.005	<.002	.028
17...	e.007	e.003	<.034	<.017	.005	<.002	.020
24...	e.011	e.006	<.034	<.017	<.005	<.002	.043
31...	e.006	<.016	<.034	<.017	<.005	<.002	.028
AUG							
01...	e.008	<.016	<.034	<.017	<.005	<.002	.026
07...	e.004	<.016	<.034	<.017	<.005	<.002	.022
14...	e.005	<.016	<.034	<.017	<.005	<.002	.019
21...	e.006	<.016	<.034	<.017	<.005	<.002	.016

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
18...*	1616	1140	25.5	65.0
18...*	1617	1140	25.5	58.0
18...*	1618	1140	25.5	51.0
18...*	1619	1140	25.5	44.0
18...*	1620	1140	25.5	37.0
18...*	1621	1140	25.5	30.0
18...*	1622	1140	25.5	23.0
18...*	1623	1140	25.5	16.0
18...*	1624	1140	25.5	10.0
18...*	1625	1140	25.5	2.00

< Actual value is known to be less than the value shown.
e Estimated.
* Instantaneous discharge at time of cross-sectional measurement: 198 ft^3/s.

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	936	783	---	---	---	---	---	---	1790	1760	1530	1490
2	935	862	---	---	---	---	---	---	1850	1740	1520	1450
3	962	903	---	---	---	---	---	---	1740	1590	1470	1380
4	958	937	---	---	---	---	---	---	1650	1580	1380	1300
5	964	951	---	---	---	---	---	---	1680	1610	1300	1280
6	1010	946	---	---	1450	1270	---	---	1680	1590	1310	1260
7	1050	1010	---	---	1450	1410	---	---	1650	1590	1270	1240
8	1040	967	1640	1610	---	---	---	---	1660	1610	1350	1260
9	982	894	1700	1640	1410	1360	---	---	1650	1510	1490	1350
10	990	870	1800	1700	---	---	---	---	1520	1460	1540	1490
11	982	863	---	---	---	---	---	---	1460	1390	1570	1520
12	---	---	---	---	---	---	---	---	1440	1340	1550	1510
13	---	---	1360	1300	---	---	1470	1370	1390	1340	1560	1500
14	---	---	---	---	---	---	1530	1470	1430	1380	1570	1530
15	---	---	1400	1320	---	---	1580	1460	1590	1430	1580	1520
16	---	---	1370	1320	1190	1070	1680	1570	1610	1570	1560	1500
17	---	---	---	---	1140	1110	1710	1450	1610	1530	1710	1520
18	---	---	---	---	1170	1140	1700	1640	1560	1520	1740	1680
19	---	---	---	---	1170	1140	1740	1660	1540	1460	1760	1690
20	---	---	---	---	1170	1160	1770	1730	1530	1420	1820	1750
21	---	---	---	---	1180	1160	1790	1770	1540	1450	1820	1770
22	---	---	---	---	1190	1170	1790	1770	1600	1490	1820	1790
23	---	---	---	---	1190	1170	1820	1780	1600	1440	1810	1750
24	---	---	---	---	---	---	1840	1740	1440	1390	1770	1620
25	---	---	---	---	---	---	1740	1590	1420	1370	1620	1480
26	1210	1160	---	---	---	---	1590	1480	1430	1400	1490	1430
27	1220	1140	---	---	---	---	1550	1470	1450	1420	1450	1410
28	---	---	---	---	---	---	1600	1490	1510	1450	1510	1450
29	1390	1230	---	---	---	---	1660	1590	---	---	1640	1500
30	---	---	---	---	---	---	1640	1570	---	---	1680	1590
31	---	---	---	---	---	---	1800	1560	---	---	1620	1570
MONTH	---	---	---	---	---	---	---	---	1850	1340	1820	1240

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1620	1550	1340	1250	1490	1290	1280	1130	947	889	1440	1320
2	1610	1540	1640	1340	1380	1300	1180	1120	1070	943	1370	1300
3	1620	1550	1710	1640	1400	1260	1170	1090	1100	988	1480	1370
4	1700	1550	1680	1410	1270	1050	1430	1170	1050	987	1530	1450
5	1690	1620	1510	1430	1190	1010	1520	1170	1020	916	1640	1530
6	1670	1590	1490	1380	1300	1110	1270	1090	1040	974	1560	1480
7	1620	1480	1480	1380	1370	1240	1240	1150	1050	961	1550	1530
8	1480	1340	1620	1480	1340	1250	1250	1130	1160	1050	1550	1500
9	1390	1290	1610	1280	1370	1310	1150	1090	1210	1110	1510	1350
10	1340	1280	1290	1150	1490	1370	1110	1020	1210	1120	1360	1260
11	1480	1340	1270	1180	1530	1410	1020	972	1210	1170	1420	1330
12	1500	1450	1310	1190	1420	1340	996	951	1170	1040	1500	1420
13	1600	1480	1380	1200	1440	1380	977	918	1130	1090	1540	1460
14	1750	1530	1350	1180	1410	1250	938	900	1090	1030	1500	1400
15	1730	1530	1180	1040	1310	1160	1080	896	1120	1040	1520	1440
16	1580	1460	1100	1000	1240	1150	1130	1070	1140	1080	1580	1520
17	1600	1480	1120	981	1300	1210	1170	1060	1150	985	1590	1540
18	1670	1600	1190	1100	1330	1230	1120	1060	1020	999	1660	1530
19	1720	1660	1290	1170	1230	1120	1110	1090	1030	961	1660	1540
20	1700	1340	1390	1210	1210	1140	1100	1020	980	948	1710	1590
21	1340	1240	1460	1370	1240	1120	1120	1070	984	934	1710	1570
22	1240	1170	1470	1380	1250	1090	1130	1000	1030	984	1840	1650
23	1330	1200	---	---	1130	1080	1080	972	1050	1010	1850	1630
24	1320	1270	---	---	1130	1060	1070	944	1060	1030	1630	1430
25	1340	1280	1400	1300	1110	984	1080	1000	1040	999	1430	1260
26	1320	1270	1350	1210	1040	979	1050	746	1070	1030	1440	1260
27	1340	1290	1300	1220	1070	1030	1050	961	1100	1060	1460	1430
28	1340	1290	1400	1270	1120	1040	1040	967	1230	1090	1470	1400
29	1360	1320	1410	1300	1150	1080	1030	913	1410	1230	1500	1410
30	1360	1230	1410	1300	1290	1150	931	864	1460	1400	1570	1500
31	---	---	1500	1370	---	---	893	842	1510	1420	---	---
MONTH	1750	1170	---	---	1530	979	1520	746	1510	889	1850	1260

11261100 SALT SLOUGH AT HIGHWAY 165, NEAR STEVINSON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.0	20.5	15.5	13.5	12.0	10.0	9.0	7.5	10.5	9.0	13.5	12.0
2	25.5	21.0	16.0	14.0	11.0	9.5	9.5	7.5	11.5	9.0	13.0	12.5
3	23.5	19.5	16.0	14.0	10.5	10.0	10.0	7.5	12.0	10.0	13.0	12.5
4	22.5	18.5	16.5	14.0	10.0	9.5	10.0	7.5	13.0	11.0	12.5	12.0
5	22.5	18.5	16.5	14.5	10.0	9.5	10.0	7.5	13.5	11.5	12.5	11.5
6	23.0	19.5	16.0	14.0	10.0	9.0	10.0	7.5	13.5	11.5	13.5	12.0
7	21.5	19.5	14.5	12.5	11.0	9.5	9.5	8.0	11.5	9.0	15.0	12.5
8	21.5	18.0	14.5	12.5	12.0	10.5	10.5	9.0	9.5	7.5	16.0	14.0
9	21.0	18.5	14.5	12.5	12.0	10.5	10.5	9.5	9.0	8.5	15.5	13.5
10	19.0	17.0	14.0	12.0	13.0	11.5	10.0	9.0	9.5	8.5	14.0	12.5
11	18.0	16.5	13.0	11.0	13.0	12.0	9.0	9.0	10.0	8.5	15.0	13.0
12	18.0	16.0	12.5	10.0	13.0	11.5	9.5	8.5	10.5	8.5	16.0	13.5
13	18.5	16.0	12.0	9.5	12.0	11.0	9.5	8.5	9.0	8.0	17.0	14.5
14	19.0	16.5	12.5	10.0	12.5	11.5	10.0	8.5	10.5	8.0	17.5	15.5
15	20.0	17.0	11.5	10.0	14.0	12.0	---	---	12.0	9.5	17.0	16.0
16	20.5	17.0	12.5	11.0	13.0	11.5	---	---	13.0	10.5	17.0	15.0
17	21.0	17.5	12.5	10.0	12.0	10.5	---	---	12.0	11.0	17.0	15.0
18	21.0	18.0	12.0	9.5	10.5	9.5	8.5	6.5	13.0	11.0	18.5	15.5
19	20.5	17.5	12.5	9.5	11.0	9.0	9.5	8.0	13.5	11.5	20.0	17.0
20	19.5	17.5	12.0	9.5	11.0	9.0	9.5	7.5	12.5	11.5	21.0	18.5
21	18.5	15.0	12.0	10.0	11.0	8.5	9.5	8.0	13.5	11.5	21.5	19.0
22	15.5	12.5	12.0	10.5	11.5	9.5	11.0	8.5	13.0	12.0	21.0	18.5
23	16.5	12.5	11.5	10.0	11.0	9.5	11.5	9.5	12.5	11.0	20.0	17.5
24	17.5	14.0	11.0	10.5	11.5	9.5	12.0	10.5	11.5	10.0	20.5	18.0
25	17.0	15.0	11.5	10.5	10.5	9.0	11.0	10.0	11.0	9.5	20.0	18.0
26	15.5	14.0	11.0	10.5	10.0	8.0	11.0	9.5	12.5	11.0	19.0	17.0
27	16.5	14.0	11.5	10.5	9.5	7.5	10.0	8.5	14.0	12.0	18.5	16.5
28	16.0	14.5	11.5	10.5	9.5	7.5	10.0	8.5	14.0	12.5	20.0	17.0
29	16.0	15.0	11.0	9.5	10.0	7.5	11.0	9.0	---	---	20.5	18.0
30	15.5	14.0	12.0	9.5	10.0	8.0	10.5	9.0	---	---	20.5	18.0
31	15.5	13.5	---	---	10.0	7.5	11.0	8.5	---	---	21.0	18.5
MONTH	25.5	12.5	16.5	9.5	14.0	7.5	---	---	14.0	7.5	21.5	11.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.5	19.0	23.0	20.0	29.5	26.0	28.5	25.0	28.0	24.0	27.5	22.0
2	19.5	16.0	20.0	16.0	28.0	23.0	29.0	25.5	27.5	24.0	28.5	23.5
3	16.5	14.5	20.0	14.0	24.0	20.5	30.0	26.5	27.5	24.0	28.5	23.5
4	16.5	14.0	23.0	17.0	23.5	19.5	29.0	26.0	27.5	24.0	29.5	23.0
5	17.5	14.5	24.0	19.0	24.0	20.5	29.5	24.5	27.5	24.0	29.0	22.5
6	16.0	14.0	25.0	20.0	25.0	20.5	28.0	25.0	28.0	24.0	26.0	21.0
7	15.0	13.5	26.5	21.5	27.0	22.0	29.0	24.5	28.5	25.0	26.5	20.0
8	15.0	12.5	28.0	22.5	28.0	23.5	29.5	26.0	30.5	26.0	27.0	20.5
9	15.5	13.0	28.5	24.0	28.0	23.0	29.0	25.5	29.5	26.0	26.5	20.5
10	16.0	13.5	27.0	23.5	27.5	22.5	28.5	24.5	28.5	24.5	26.0	20.0
11	15.5	14.5	28.0	24.0	26.5	21.5	26.5	23.5	28.0	23.0	26.5	20.5
12	16.5	13.0	26.0	23.0	25.5	22.0	25.5	22.0	28.0	23.5	27.0	20.5
13	18.0	14.5	24.0	20.5	23.0	20.5	26.5	22.5	27.0	23.0	26.5	20.5
14	18.5	15.0	24.0	20.5	25.5	20.0	27.5	24.0	27.0	23.0	27.5	21.0
15	19.5	15.5	24.0	20.5	28.0	23.0	26.5	22.5	27.5	23.5	28.0	21.5
16	20.5	17.0	25.0	21.5	28.0	24.0	24.0	21.0	28.0	24.0	27.5	21.0
17	20.5	17.0	25.0	21.5	28.0	24.5	24.5	20.5	27.5	25.0	27.0	20.0
18	21.0	17.5	25.5	22.0	28.5	24.5	26.0	22.0	28.0	25.0	27.5	21.0
19	19.0	17.0	26.5	22.5	29.0	25.0	27.0	23.0	27.5	24.5	27.5	21.0
20	17.0	14.0	27.0	23.0	29.0	25.5	26.5	22.5	26.5	24.0	27.0	21.0
21	16.5	12.5	28.5	23.0	29.5	25.5	25.0	22.0	25.0	22.5	26.5	20.5
22	18.5	14.0	29.0	24.0	30.0	26.0	26.0	22.0	25.0	22.0	26.5	20.0
23	21.0	16.5	---	24.0	28.0	25.0	27.0	23.5	25.5	22.5	25.5	20.5
24	23.0	18.5	28.0	---	27.0	24.0	28.0	24.5	26.5	23.0	25.0	19.5
25	25.0	20.5	27.5	23.5	26.0	22.5	28.0	24.0	27.0	23.5	24.5	20.0
26	25.5	22.5	27.5	23.5	26.0	22.0	28.0	24.0	27.5	24.0	25.0	20.0
27	24.0	21.0	26.0	23.0	25.0	23.0	28.5	25.0	27.5	24.5	26.0	20.0
28	22.5	20.0	25.0	21.0	26.0	22.0	28.5	25.0	28.5	25.0	24.0	19.5
29	22.0	18.5	25.0	20.5	27.0	23.0	27.5	24.5	28.5	24.0	24.0	18.5
30	23.0	18.5	27.5	22.0	29.0	24.0	26.0	23.0	26.5	22.0	25.5	18.5
31	---	---	30.5	24.0	---	---	26.5	22.5	27.0	21.0	---	---
MONTH	25.5	12.5	---	---	30.0	19.5	30.0	20.5	30.5	21.0	29.5	18.5

11262895 SAN LUIS DRAIN, SITE B, NEAR STEVINSON, CA

LOCATION.—Lat 37°14'27", long 120°52'37", in SE 1/4 NW 1/4 sec.16, T.8 S., R.10 E., Merced County, Hydrologic Unit 18040001, Kesterson National Wildlife Refuge, on left bank, 1.8 mi upstream of terminus of drain, and 6.2 mi southwest of Stevinson.

DRAINAGE AREA.—Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Acoustic-velocity meter and water-stage recorder. Elevation of gage is 75 ft above sea level, from topographic map.

REMARKS.—Records fair. Drain intercepts subsurface drainage water from irrigated farmland and conveys it into Mud Slough and the San Joaquin River.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily, 82 ft^3/s, Aug. 29, 1999, Mar. 8, 2001; minimum daily, 9.2 ft^3/s, Sept. 28, 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	21	24	21	37	63	41	33	52	57	57	52
2	19	20	24	20	41	57	40	30	53	59	60	51
3	19	21	24	20	43	57	41	34	55	60	56	40
4	19	25	23	21	49	57	38	31	53	60	56	34
5	21	24	23	22	51	60	39	32	54	60	57	33
6	21	20	23	22	53	67	38	35	58	61	62	36
7	20	19	24	23	58	79	35	35	57	66	61	35
8	19	19	25	26	e58	82	35	38	60	62	60	33
9	17	19	24	27	52	76	35	33	58	62	57	37
10	17	18	23	26	52	71	37	35	60	61	57	32
11	24	17	24	25	55	67	37	35	60	59	56	27
12	34	18	25	32	59	66	38	36	63	61	52	25
13	33	17	24	32	64	65	37	38	60	61	55	20
14	27	17	28	28	62	61	35	43	52	60	56	20
15	25	17	28	27	61	58	34	42	50	57	60	16
16	23	19	25	25	58	56	34	40	46	60	61	13
17	21	19	23	28	55	56	34	40	45	60	60	12
18	20	19	23	27	55	54	34	40	47	64	59	14
19	21	19	23	26	58	54	32	40	51	59	57	16
20	19	18	23	26	58	58	31	40	51	60	58	17
21	17	19	24	26	58	55	33	46	50	58	57	17
22	16	19	24	27	57	46	38	49	51	56	54	16
23	16	22	24	30	57	41	37	46	52	59	51	14
24	17	21	23	33	60	38	33	45	50	58	53	13
25	15	20	23	33	63	38	34	50	50	55	62	12
26	16	20	23	34	67	41	32	49	49	54	56	11
27	19	22	23	36	63	45	37	42	51	55	53	9.9
28	23	22	24	36	63	50	35	42	54	53	54	9.2
29	22	22	22	37	---	52	34	42	53	52	51	9.9
30	21	22	21	35	---	47	36	46	57	53	54	10
31	19	---	21	35	---	43	---	50	---	55	52	---
TOTAL	638	595	735	866	1567	1760	1074	1237	1602	1817	1754	685.0
MEAN	20.6	19.8	23.7	27.9	56.0	56.8	35.8	39.9	53.4	58.6	56.6	22.8
MAX	34	25	28	37	67	82	41	50	63	66	62	52
MIN	15	17	21	20	37	38	31	30	45	52	51	9.2
AC-FT	1270	1180	1460	1720	3110	3490	2130	2450	3180	3600	3480	1360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	27.9	24.8	23.4	27.8	57.0	55.7	38.5	44.8	58.4	60.3	58.9	31.1
MAX	33.2	28.8	23.7	27.9	59.6	56.8	44.8	48.2	61.0	63.0	63.6	40.3
(WY)	1999	2000	2001	2001	1999	2001	2000	1999	2000	1999	1999	1999
MIN	20.6	19.8	22.8	27.6	55.5	54.2	34.9	39.9	53.4	58.6	56.5	22.8
(WY)	2001	2001	2000	1999	2000	2000	1999	2001	2001	2001	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	15230		14330.0			
ANNUAL MEAN	41.6		39.3		42.3	
HIGHEST ANNUAL MEAN					44.6	1999
LOWEST ANNUAL MEAN					39.3	2001
HIGHEST DAILY MEAN	76	Apr 19	82	Mar 8	82	Aug 29 1999
LOWEST DAILY MEAN	15	Oct 25	9.2	Sep 28	9.2	Sep 28 2001
ANNUAL SEVEN-DAY MINIMUM	17	Oct 20	11	Sep 24	11	Sep 24 2001
ANNUAL RUNOFF (AC-FT)	30210		28420		30660	
10 PERCENT EXCEEDS	63		60		63	
50 PERCENT EXCEEDS	43		37		41	
90 PERCENT EXCEEDS	19		19		22	

e Estimated.

11262895 SAN LUIS DRAIN, SITE B, NEAR STEVINSON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water year 1999 to current year.
SPECIFIC CONDUCTANCE: Water year 1999 to current year.
WATER TEMPERATURE: Water year 1999 to current year.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1998.

REMARKS.—Specific conductance records rated excellent except for Oct. 6, 7, 19, 20, Nov. 5–15, 20–27, Dec. 30 to Jan. 9, Mar. 3–19, 22-30, Apr. 11, 12, 23, 24, May 4–9, 14–18, 20–24, May 27 to June 4, June 11–25, July 2–7, 17–31, Aug. 6–13, 20–27, Sept. 6–12, 26–30, which are good; Oct. 21, Nov. 28 to Dec. 2, Mar. 31 to Apr. 4, 13, 25, 26, May 10, 11, 19, which are fair; and Oct. 22–25, Dec. 3–11, Apr. 5–10, 14–17, 27–30, which are poor. Water-temperature records rated excellent except for Oct. 19, 20, Dec. 24 to Apr. 1, Apr. 10, 19–22, May 30 to June 6, July 4 to Aug. 6, which are good; Oct. 21, 22, Apr. 23, 24, which are fair; and Oct. 1, 10–17, 23, 24, Apr. 25 to May 18, which are poor. Water quality is influenced by subsurface drainage from irrigated farmland. Interruptions in record were due to malfunction of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 6,030 microsiemens, Apr. 6, 1999; minimum recorded, 2,770 microsiemens, Aug. 20, 21, 2000.
WATER TEMPERATURE: Maximum recorded, 31.5°C, July 13, 1999; minimum recorded, 4.0°C, Dec. 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 5,740 microsiemens, Mar. 19, but may have been higher during period of missing record; minimum recorded, 2,830 microsiemens, Aug. 18.
WATER TEMPERATURE: Maximum recorded, 30.0°C, May 11, July 3, 5, Aug. 8; minimum recorded, 8.0°C, several days in December and January.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH DEPTH BOTTOM AT SAMPLE LOC-ATION, (FEET) (81903)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUN					
14...*	1305	1.20	4490	23.0	1.90
14...*	1307	3.50	4490	22.5	4.70
14...*	1308	5.50	4490	22.5	7.50
14...*	1309	6.20	4480	22.5	10.3
14...*	1310	6.10	4490	22.5	13.1
14...*	1311	6.40	4490	22.5	15.9
14...*	1312	6.20	4490	22.5	18.7
14...*	1313	4.40	4490	22.5	21.5
14...*	1314	2.50	4490	22.5	24.3
14...*	1315	1.00	4490	23.0	27.1

* Instantaneous discharge at time of cross-sectional measurement: 53 ft^3/s.

11262895 SAN LUIS DRAIN, SITE B, NEAR STEVINSON, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	3870	3680	3820	3930	3880	3910	3680	3560	3610	4150	4100	4130
2	4070	3770	3860	4020	3880	3910	3750	3460	3620	4160	4090	4120
3	4360	4070	4280	4170	3850	4060	3480	3400	3450	4250	4060	4110
4	4390	4340	4360	3880	3680	3790	3620	3390	3460	4300	4100	4220
5	4430	4220	4340	3850	3690	3790	3760	3580	3640	4100	3960	4020
6	4330	4140	4230	3930	3810	3880	3960	3760	3900	4040	3990	4020
7	4180	4100	4150	4370	3780	3990	3860	3640	3710	4110	3970	4020
8	4100	3840	3910	4390	4340	4370	4070	3790	4000	4110	3930	4000
9	3840	3630	3710	4420	3780	4190	4010	3940	3980	4060	3980	4020
10	3790	3530	3660	3780	3650	3680	4050	4000	4030	4020	3850	3940
11	3860	3320	3600	3790	3640	3700	4080	3910	4010	3910	3740	3820
12	3430	3180	3320	4040	3790	3900	4000	3910	3970	3890	3760	3820
13	3940	3360	3570	4280	4040	4180	4020	3970	4000	3920	3690	3790
14	4410	3940	4180	4370	4280	4330	4180	4000	4080	3930	3600	3760
15	4610	4380	4500	4380	4260	4330	4120	4090	4110	4000	3720	3880
16	4560	3840	4070	4370	4290	4340	4150	4080	4110	3900	3700	3780
17	4100	3750	3950	4370	4190	4290	4150	3980	4050	4030	3710	3920
18	3810	3630	3730	4250	4100	4190	4130	3980	4000	4150	3960	4070
19	3630	3540	3560	4110	3960	4050	4130	3460	3730	4160	3990	4120
20	3660	3570	3630	3970	3850	3920	3770	3430	3610	4170	3990	4090
21	3730	3630	3690	3860	3810	3830	3800	3450	3620	4100	3990	4040
22	3740	3660	3700	3860	3800	3830	3940	3800	3890	4090	3860	3990
23	3910	3670	3800	3860	3800	3820	4000	3930	3970	4070	3520	3850
24	4060	3910	4020	3870	3720	3820	3980	3940	3960	4170	3900	4070
25	---	3990	---	3780	3720	3750	4040	3950	4000	4180	3960	4130
26	4170	3810	4060	3760	3670	3720	4090	4000	4050	4270	4150	4200
27	4070	3780	3940	3750	3680	3710	4150	4080	4110	4370	4260	4300
28	4080	3980	4030	3890	3720	3800	4120	4080	4100	4340	4160	4260
29	4110	4000	4060	4070	3800	3930	4130	4080	4100	4220	4050	4140
30	4080	3990	4050	3990	3650	3760	4150	4090	4120	4050	3960	3990
31	4000	3920	3960	---	---	---	4150	4110	4130	3970	3810	3890
MONTH	---	3180	---	4420	3640	3960	4180	3390	3910	4370	3520	4020

		FEBRUARY			MARCH			APRIL			MAY	
1	4150	3930	4070	4520	4380	4480	5360	4720	4970	4970	4480	4840
2	4200	4140	4170	4600	4150	4340	5540	5280	5390	5150	4840	5040
3	4190	4080	4130	4780	4600	4690	5480	5250	5360	5010	4760	4880
4	4190	3680	4060	4910	4690	4810	5400	5210	5320	4760	4570	4680
5	4100	3570	3850	4910	4710	4780	5530	5160	5350	4950	4480	4700
6	4100	3740	3960	4960	4700	4850	5520	5300	5410	4990	4850	4920
7	3800	3650	3710	5030	4890	4950	5520	5400	5460	5060	4860	4950
8	4150	3710	---	4910	4100	4420	5560	5240	5450	5250	4860	5090
9	4060	3670	3900	4780	4240	4560	5280	5060	5180	5120	4480	4700
10	4080	3580	3870	5090	4780	5010	5230	5000	5110	4850	4670	4770
11	4160	4000	4080	5200	4970	5060	5280	4970	5130	5030	4550	4780
12	4200	3950	4100	5270	5080	5190	5300	4770	5010	4720	4200	4470
13	4500	4100	4290	5240	5050	5140	5150	4830	5020	4880	4600	4740
14	4230	4050	4130	5190	4910	5100	4920	4780	4840	4760	4390	4650
15	4300	4010	4160	5410	5040	5200	4920	4810	4860	4640	4410	4560
16	4450	3950	4240	5510	5240	5420	4990	4800	4890	4580	4400	4490
17	4360	4160	4250	5540	5310	5430	4900	4810	4850	4490	4240	4360
18	4450	4160	4330	5660	5510	5610	---	---	---	4500	4380	4450
19	4490	4370	4430	5740	5490	5580	---	---	---	---	4350	---
20	4490	4410	4450	5530	5420	5470	---	---	---	4480	4070	4330
21	4460	4340	4410	5660	5450	5570	---	---	---	4250	4020	4090
22	4600	4410	4520	5700	5300	5540	---	---	---	4420	4220	4290
23	4600	4260	4510	5440	5290	5370	5390	5180	5290	4430	4240	4310
24	4510	4260	4370	5440	4950	5270	5280	4680	4980	4320	---	---
25	4610	4370	4480	5190	4930	5100	4830	4580	4710	4320	4080	4170
26	4830	4610	4700	5320	4950	5140	4860	4580	4730	4210	4010	4090
27	4720	4510	4620	5440	4910	5150	4850	4600	4710	4320	3960	4110
28	4530	4330	4410	5410	4980	5190	5130	4660	4940	4190	3910	4020
29	---	---	---	5270	4960	5100	5110	4780	5000	4240	3950	4060
30	---	---	---	5230	4930	5090	5070	4460	4750	4650	4140	4290
31	---	---	---	5030	4870	4950	---	---	---	4680	4300	4470
MONTH	4830	3570	---	5740	4100	5080	---	---	---	---	---	---

11262895 SAN LUIS DRAIN, SITE B, NEAR STEVINSON, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4530	4320	4410	4210	3930	4110	3800	3440	3710	4330	4050	4200
2	4340	4170	4270	4140	3630	3900	3730	3420	3560	4050	3820	3910
3	4450	4160	4270	3870	3640	3760	3730	3440	3600	3840	3540	3620
4	4450	4040	4220	4030	3510	3810	3970	3610	3770	3900	3520	3770
5	4310	4040	4170	3940	3550	3700	3660	3530	3610	3650	3500	3560
6	4290	4100	4180	3860	3570	3750	3700	3250	3530	3970	3640	3760
7	4420	4210	4280	3850	3610	3700	3520	3200	3330	4280	3970	4180
8	4310	4160	4240	3740	3420	3580	3600	3120	3370	4470	4150	4300
9	4350	4110	4260	3670	3370	3540	3390	3120	3250	4370	4010	4240
10	4290	4120	4210	3720	3520	3650	3170	2840	3080	4050	3870	3970
11	4380	4120	4260	3550	3360	3460	3260	2840	3150	4280	3860	4070
12	4420	4140	4270	3540	3340	3460	3580	3200	3350	4260	3980	4100
13	4370	4180	4240	3640	3460	3540	3570	3230	3360	4380	3360	3930
14	---	---	---	3720	3510	3620	3430	3150	3250	3600	3210	3370
15	4470	4260	4370	3980	3550	3780	3580	3180	3380	3840	3550	3620
16	4410	4260	4340	3840	3630	3730	3560	3080	3390	4380	3840	4210
17	4420	4260	4340	3760	3640	3700	3390	2940	3230	4380	4340	4370
18	4560	4370	4470	3920	3700	3820	3230	2830	3070	4440	4280	4390
19	4480	4340	4390	4120	3880	4010	3400	3180	3280	4450	4280	4370
20	4350	4200	4280	4160	3880	3990	3540	3160	3360	4420	4180	4250
21	4480	4280	4380	4190	3880	4050	3400	3160	3310	4220	4060	4160
22	4460	4270	4370	4140	3790	4000	3670	3300	3500	4070	3990	4030
23	4320	3920	4080	4120	3790	3940	3610	3470	3540	4240	4060	4140
24	4370	3890	4060	4180	3780	3980	3850	3550	3680	4400	4240	4320
25	4360	4020	4160	4280	3980	4150	3920	3470	3690	4560	4390	4470
26	4250	3900	4010	4160	3940	4030	3730	3470	3620	4680	4550	4630
27	4160	3990	4070	4300	3840	4050	3670	3250	3500	4690	4600	4670
28	4200	3990	4130	4190	3910	4020	3660	3240	3410	4600	4120	4360
29	4290	4090	4170	4200	3900	4030	4080	3520	3750	4120	4060	4080
30	4330	4110	4260	4050	3850	3960	4110	3950	4030	4150	4050	4110
31	---	---	---	3950	---	---	4240	3980	4140	---	---	---
MONTH	---	---	---	4300	---	---	4240	2830	3480	4690	3210	4110

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	27.5	24.5	25.5	16.0	14.5	15.5	11.5	10.5	11.5	9.0	8.0	8.5
2	---	---	---	17.0	15.0	15.5	11.5	10.5	11.0	9.0	8.0	8.5
3	---	---	---	17.0	15.5	16.0	11.0	10.5	11.0	9.0	8.0	8.5
4	---	---	---	17.0	15.5	16.5	11.0	10.5	10.5	9.0	8.0	8.5
5	---	---	---	17.0	16.0	16.5	10.5	10.0	10.5	9.0	8.0	8.5
6	---	---	---	16.5	14.5	16.0	10.5	10.0	10.5	9.0	8.0	8.5
7	---	---	---	15.0	13.5	14.5	11.0	10.0	10.5	9.0	8.0	8.5
8	---	---	---	15.0	13.5	14.5	12.0	10.5	11.0	10.0	9.0	9.5
9	---	---	---	15.5	13.5	14.5	12.0	11.0	11.5	10.0	9.0	9.5
10	22.5	21.0	21.5	14.0	13.5	14.0	13.0	11.5	12.5	10.0	9.0	9.5
11	21.0	20.0	20.5	14.0	12.5	13.0	13.0	12.5	12.5	9.5	9.0	9.0
12	21.0	19.5	20.0	13.0	12.0	12.5	13.0	12.0	12.5	10.0	9.0	9.5
13	21.0	19.0	20.0	12.5	11.5	12.0	12.5	12.0	12.5	10.5	9.0	10.0
14	21.5	19.5	20.5	13.0	11.5	12.0	13.0	12.0	12.5	11.0	10.0	10.5
15	22.0	20.0	20.5	12.5	11.5	11.5	13.5	12.5	13.0	10.0	9.0	9.5
16	22.0	20.0	21.0	12.5	11.5	12.0	13.0	12.0	12.5	9.0	8.0	8.5
17	22.5	20.0	21.0	12.5	11.0	12.0	12.0	11.5	12.0	9.5	8.0	8.5
18	22.0	20.5	21.5	12.5	11.0	11.5	11.5	10.5	11.0	9.0	8.0	8.5
19	22.0	20.0	21.0	12.5	11.0	11.5	11.0	10.0	10.5	9.5	8.5	9.0
20	21.5	20.0	21.0	12.5	11.0	11.5	11.0	10.0	10.5	9.5	8.0	8.5
21	20.5	17.0	19.0	12.0	11.0	11.5	11.0	10.0	10.5	9.0	8.0	8.5
22	17.0	15.0	15.5	12.0	11.5	11.5	11.5	10.0	11.0	10.0	8.5	9.5
23	17.0	14.5	15.5	12.0	11.0	11.5	11.0	10.0	10.5	10.5	9.0	10.0
24	17.5	15.0	16.5	11.5	11.0	11.5	11.0	10.0	10.5	11.0	10.0	10.5
25	17.0	16.0	16.5	11.5	11.0	11.5	10.5	9.5	10.0	10.5	10.0	10.5
26	16.5	15.0	15.5	11.5	11.0	11.0	10.0	9.0	9.5	11.0	10.0	10.0
27	16.5	14.5	15.5	11.5	11.0	11.5	10.0	9.0	9.5	10.5	9.5	10.0
28	16.0	15.5	16.0	11.5	11.0	11.5	9.5	8.5	9.0	10.5	9.0	10.0
29	16.5	15.5	16.0	11.0	10.5	11.0	9.5	8.5	9.0	11.0	9.5	10.5
30	16.5	15.0	15.5	12.0	10.5	11.0	9.5	8.5	9.0	10.5	9.5	10.0
31	16.0	14.5	15.5	---	---	---	9.5	8.0	9.0	11.0	9.0	10.0
MONTH	---	---	---	17.0	10.5	12.9	13.5	8.0	10.9	11.0	8.0	9.3

11262895 SAN LUIS DRAIN, SITE B, NEAR STEVINSON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.5	9.0	10.0	14.5	12.5	13.5	22.0	20.0	21.0	24.5	23.0	24.0
2	11.0	9.5	10.5	14.0	13.5	14.0	20.0	18.0	19.0	23.0	18.5	20.0
3	12.0	10.0	11.0	13.5	13.0	13.5	18.5	16.5	17.5	20.5	17.5	19.0
4	12.5	11.0	11.5	13.5	12.5	12.5	18.0	15.5	17.0	22.5	19.5	20.5
5	13.0	11.5	12.5	13.0	12.0	12.5	18.0	16.0	17.0	24.0	20.5	22.0
6	13.5	12.5	13.0	13.5	12.5	13.0	17.0	15.0	16.0	25.0	22.5	23.5
7	12.5	9.5	11.0	15.0	13.0	14.0	16.0	14.5	15.0	26.5	23.5	25.0
8	10.5	8.5	9.5	16.5	14.5	15.5	16.0	13.5	15.0	29.0	25.5	27.0
9	9.5	9.0	9.0	15.5	14.5	15.0	16.0	14.0	15.0	29.5	26.5	28.0
10	9.0	8.5	9.0	15.5	13.5	14.5	16.5	14.0	15.0	29.5	26.5	28.0
11	9.5	8.5	9.0	16.0	14.0	15.0	16.5	15.0	15.5	30.0	27.5	28.5
12	10.5	8.5	9.5	16.0	14.0	15.0	17.0	14.0	15.5	29.0	27.0	28.0
13	9.5	8.5	9.0	17.5	15.0	16.0	18.0	15.0	16.5	27.0	25.0	26.0
14	10.5	9.0	9.5	18.0	16.0	17.0	18.5	15.5	17.0	26.0	24.0	25.0
15	11.5	10.0	10.5	17.5	16.0	17.0	19.5	16.5	18.0	25.5	23.5	24.5
16	12.5	10.5	11.5	17.5	16.0	17.0	20.5	17.5	18.5	25.5	23.5	24.5
17	12.0	12.0	12.0	18.0	15.5	17.0	21.0	18.0	19.5	26.0	23.5	24.5
18	13.0	11.5	12.0	18.5	16.0	17.5	21.5	19.0	20.0	26.0	24.0	25.0
19	13.5	12.0	12.5	20.0	17.5	18.5	20.0	19.0	19.5	26.0	24.0	25.0
20	13.0	12.0	12.5	21.0	19.0	20.0	19.0	16.5	17.5	26.0	24.0	25.0
21	13.5	12.0	12.5	21.5	19.5	20.5	18.5	15.5	17.0	27.0	24.0	25.5
22	13.0	12.5	12.5	21.5	19.5	20.5	19.5	16.5	18.0	28.0	25.5	26.5
23	12.5	11.5	12.0	21.0	19.0	20.0	20.5	18.0	19.0	28.0	25.5	27.0
24	12.0	10.5	11.0	21.5	19.0	20.0	22.5	19.0	20.5	27.5	25.5	26.5
25	12.0	10.5	11.0	20.5	19.0	19.5	24.5	21.0	22.5	27.5	25.0	26.0
26	13.0	11.0	12.0	19.5	18.0	19.0	25.5	23.0	24.0	27.5	25.0	26.0
27	13.5	12.0	12.5	19.5	17.5	18.5	26.0	23.5	24.5	26.5	24.5	25.5
28	14.0	12.5	13.0	20.5	18.0	19.5	25.5	23.5	24.5	26.0	23.5	24.5
29	---	---	---	20.5	19.0	19.5	24.5	22.5	23.5	24.5	22.5	24.0
30	---	---	---	20.5	18.5	19.5	25.5	22.5	23.5	26.0	22.5	24.0
31	---	---	---	21.5	19.0	20.5	---	---	---	28.0	24.5	26.0
MONTH	14.0	8.5	11.1	21.5	12.0	16.9	26.0	13.5	18.7	30.0	17.5	25.0

		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.0	26.0	27.0	28.5	25.5	27.0	27.5	25.0	26.5	25.5	23.0	24.5
2	27.5	25.5	26.5	29.0	26.0	27.5	27.5	25.0	26.5	26.5	24.0	25.0
3	25.5	22.5	23.5	30.0	27.0	28.5	28.0	25.0	26.5	27.0	24.5	25.5
4	23.5	21.0	22.5	29.5	28.0	28.5	28.0	25.0	26.5	28.0	25.0	26.0
5	23.5	21.5	22.5	30.0	27.0	28.0	28.0	25.0	26.5	28.0	25.0	26.0
6	24.0	21.0	22.5	28.5	27.0	27.5	28.0	25.5	27.0	26.0	24.0	25.0
7	25.5	22.0	24.0	28.5	26.0	27.0	28.5	26.0	27.0	25.5	23.0	24.0
8	26.5	24.0	25.0	29.0	26.5	27.5	30.0	26.5	28.0	25.5	23.0	24.0
9	27.0	24.0	25.5	29.0	27.0	28.0	29.5	27.0	28.5	25.5	23.0	24.0
10	27.0	24.5	25.5	29.0	26.5	27.5	28.5	26.0	27.5	25.0	22.5	23.5
11	25.5	23.5	24.5	27.5	25.5	26.5	28.0	25.0	26.5	25.5	22.5	23.5
12	24.5	22.5	23.5	26.0	24.0	25.0	27.5	25.0	26.5	26.0	22.5	23.5
13	23.5	21.0	22.0	26.5	23.5	25.0	27.0	24.5	25.5	25.5	22.5	24.0
14	24.5	20.5	22.5	27.5	24.5	26.0	27.0	24.0	25.5	26.5	23.0	24.0
15	26.0	22.5	24.0	27.0	24.5	25.5	27.5	24.5	26.0	26.5	23.5	24.5
16	27.5	24.0	25.5	25.0	23.0	24.0	27.5	24.5	26.0	26.5	23.5	24.5
17	27.5	24.5	26.0	24.5	21.5	23.0	27.5	25.0	26.5	26.0	23.5	24.5
18	28.0	25.0	26.5	25.5	22.5	24.0	28.0	25.5	27.0	26.5	23.5	24.5
19	29.0	26.0	27.5	26.5	23.5	25.0	28.5	25.5	27.0	26.5	23.5	25.0
20	29.0	26.5	28.0	27.0	24.0	25.0	27.0	25.0	26.0	26.0	23.5	25.0
21	29.5	26.5	28.0	26.0	23.5	25.0	26.0	23.5	25.0	25.5	23.5	24.5
22	29.5	27.0	28.5	26.5	23.0	25.0	25.5	23.0	24.0	26.0	23.5	24.5
23	29.0	26.0	27.5	27.5	24.0	26.0	25.5	23.0	24.0	25.5	23.5	24.5
24	28.0	25.5	26.5	28.5	25.0	26.5	26.0	23.5	24.5	25.0	22.5	23.5
25	27.0	24.5	25.5	28.5	25.5	27.0	26.5	23.5	25.0	24.5	22.0	23.0
26	26.5	23.5	24.5	28.5	25.5	27.0	27.0	24.5	26.0	24.0	22.0	23.0
27	25.5	24.0	24.5	29.0	26.0	27.5	27.5	25.0	26.0	25.0	22.5	23.5
28	26.0	23.0	24.5	29.0	26.5	28.0	27.5	25.0	26.5	24.0	22.0	23.0
29	26.5	23.5	25.0	28.5	26.5	27.5	27.0	25.5	26.5	23.5	21.5	22.5
30	28.0	24.5	26.5	27.5	25.0	26.0	25.5	24.0	25.0	24.5	21.5	23.0
31	---	---	---	27.5	24.5	26.0	25.0	22.5	24.0	---	---	---
MONTH	29.5	20.5	25.2	30.0	21.5	26.4	30.0	22.5	26.1	28.0	21.5	24.2

11262900 MUD SLOUGH NEAR GUSTINE, CA

LOCATION.—Lat 37°15'45", long 120°54'20", in SE 1/4 SE 1/4 sec.6, T.8 S., R.10 E., Merced County, Hydrologic Unit 18040001, Kesterson National Wildlife Refuge, on right bank at footbridge, 400 ft northwest of terminus of San Luis Drain, and 5.2 mi east of Gustine.

DRAINAGE AREA.—Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1985 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 70 ft above sea level, from topographic map.

REMARKS.—Records fair. During major storm events record can be affected by backwater from the San Joaquin River. Discharge is affected by irrigation return and drainage from Kesterson Wildlife Refuge.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,060 ft^3/s, Feb. 8, 1998, gage height, 11.11 ft, maximum gage height, 12.03 ft, Jan. 28, 1997; minimum daily, 0.01 ft^3/s, Sept. 24, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	235	161	124	204	222	73	e56	65	66	67	57
2	69	222	155	120	200	222	70	e51	62	72	68	57
3	78	216	154	115	198	226	e72	e58	71	82	65	45
4	88	212	150	113	198	243	e68	e53	72	77	61	41
5	107	201	145	113	195	290	e69	e54	66	76	67	41
6	121	192	139	112	195	352	e67	e60	72	76	76	48
7	126	177	142	110	198	389	65	e60	77	80	74	53
8	126	169	143	126	197	419	66	e64	72	77	67	70
9	136	164	143	141	193	413	68	e56	70	77	64	71
10	181	161	142	162	201	421	75	e60	73	78	63	72
11	222	165	147	203	219	429	89	60	73	70	59	68
12	216	157	153	225	239	398	95	72	73	70	54	60
13	204	151	158	e225	252	350	93	77	65	68	60	47
14	196	142	167	e190	238	334	91	95	59	67	57	44
15	189	131	165	e180	228	314	84	115	58	65	58	41
16	186	131	158	e170	214	275	77	100	55	70	66	38
17	189	132	155	e190	206	208	66	78	62	73	68	40
18	195	129	154	e180	207	199	57	66	68	83	67	43
19	199	129	156	e175	216	183	57	60	70	74	60	45
20	202	128	158	e175	210	168	58	66	61	71	62	46
21	205	124	161	e175	211	153	66	75	59	68	60	49
22	209	126	159	e180	206	132	e70	73	60	63	60	58
23	207	127	152	e199	212	117	e62	76	61	67	64	56
24	202	127	149	201	231	103	e56	72	58	67	68	56
25	189	131	147	207	248	101	e58	70	56	62	71	68
26	193	131	142	218	241	97	e54	67	57	63	64	68
27	250	141	138	217	236	96	e62	75	61	81	64	65
28	288	147	135	211	231	94	e59	94	62	81	65	67
29	301	153	127	211	---	97	e58	95	63	80	60	79
30	270	157	124	215	---	87	e61	92	69	71	62	86
31	261	---	125	208	---	80	---	87	---	67	59	---
TOTAL	5670	4708	4604	5391	6024	7212	2066	2237	1950	2242	1980	1679
MEAN	183	157	149	174	215	233	68.9	72.2	65.0	72.3	63.9	56.0
MAX	301	235	167	225	252	429	95	115	77	83	76	86
MIN	65	124	124	110	193	80	54	51	55	62	54	38
AC-FT	11250	9340	9130	10690	11950	14310	4100	4440	3870	4450	3930	3330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	67.8	80.4	96.6	152	209	178	83.3	51.6	49.1	47.2	41.4	28.9
MAX	189	181	305	545	958	563	229	123	130	114	100	105
(WY)	1999	1997	1997	1997	1998	1998	1986	1998	1986	1998	1987	1998
MIN	3.35	7.53	5.86	6.17	6.96	28.0	19.2	1.76	3.79	7.42	3.36	2.67
(WY)	1993	1991	1991	1991	1991	1990	1992	1992	1994	1994	1994	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	48421		45763			
ANNUAL MEAN	132		125		89.9	
HIGHEST ANNUAL MEAN					252	1998
LOWEST ANNUAL MEAN					17.6	1991
HIGHEST DAILY MEAN	362	Feb 18	429	Mar 11	1060	Feb 9 1998
LOWEST DAILY MEAN	42	Sep 27	38	Sep 16	.01	Sep 24 1991
ANNUAL SEVEN-DAY MINIMUM	46	Sep 23	42	Sep 14	.12	Sep 23 1992
MAXIMUM PEAK FLOW			440	Mar 11	1060	Feb 8 1998
MAXIMUM PEAK STAGE			7.97	Mar 11	12.03	Jan 28 1997
ANNUAL RUNOFF (AC-FT)	96040		90770		65150	
10 PERCENT EXCEEDS	245		218		197	
50 PERCENT EXCEEDS	108		93		58	
90 PERCENT EXCEEDS	56		58		5.5	

e Estimated.

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water year 1985 to current year. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for the period April 1987 to September 1988 are available in U.S. Geological Survey Open-File Report 91-74.
CHEMICAL DATA: Water years 1985–88, 1993–94, 1999, April 2001 to September 2001.
SPECIFIC CONDUCTANCE: October 1985 to current year.
WATER TEMPERATURE: October 1985 to current year.
SEDIMENT DATA: Water years 1985–94, 1999, April 2001 to September 2001.

PERIOD OF DAILY RECORD.—October 1985 to current year.
SPECIFIC CONDUCTANCE: October 1985 to current year.
WATER TEMPERATURE: October 1985 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1985.

REMARKS.—Specific conductance records rated excellent except for Nov. 11–27, Jan. 18–23, Feb. 9–14, 16, Mar. 12–27, 29–31, Apr. 14, 15, 19–22, May 12–15, June 28 to July 3, Aug. 16 to Sept. 17, which are rated good; Apr. 23–27, May 16–18, which are rated fair; and Apr. 28 to May 10, May 19–26, which are rated poor. Water-temperature records rated excellent except for June 9–23, July 9–19, which are rated good; June 24 to July 3, July 20–30 which are rated fair; and July 31 to Aug. 16 which are rated poor. Maximum and minimum values are affected by the drainage of holding ponds located immediately upstream and the terminus of San Luis Drain 400 ft upstream from the station. Interruptions in record were due to malfunction of the recording instrument. Chemical Data for water year 2000 available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 15,900 microsiemens, Feb. 25, 1991; minimum recorded, 470 microsiemens, Oct. 15, 1986.
WATER TEMPERATURE: Maximum recorded, 34.5°C, July 22, 1988, Aug. 6, 1990, July 2, 25, Aug. 13, 1996; minimum recorded, 2.5°C, Jan. 17, 1987, Dec. 24, 1990.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 5,380 microsiemens, Apr. 19, but may have been higher during periods of missing record; minimum recorded, 980 microsiemens, Oct. 21, 22, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, 30.5°C, June 22, but may have been higher during periods of missing record; minimum recorded, 6.0°C, Jan. 17, 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
APR													
11	1200	95	--	--	--	--	--	--	--	--	--	--	--
18	1210	57	--	--	--	--	--	--	--	--	--	--	--
25	1030	e72	--	--	--	--	--	--	--	--	--	--	--
MAY													
02	1100	e68	--	--	--	--	--	--	--	--	--	--	--
09	0930	e66	--	--	--	--	--	--	--	--	--	--	--
16	1130	100	--	--	--	--	--	--	--	--	--	--	--
23	1000	75	--	--	--	--	--	8.0	3130	--	--	--	--
30	0830	89	--	--	--	--	--	--	--	--	--	--	--
JUN													
06	0950	66	--	--	--	--	--	--	--	21.0	--	--	--
12	1030	72	--	--	--	--	--	8.4	4250	--	--	--	--
12	1130	73	.145	.110	752	7.9	90.1	8.2	4280	25.0	--	928	227
19	1140	71	--	--	--	--	--	--	--	--	--	--	--
20	0950	62	--	--	--	--	--	--	--	--	--	--	--
26	0910	57	--	--	--	--	--	8.3	3890	--	--	--	--
JUL													
03	1040	86	--	--	--	--	--	8.4	2790	--	--	--	--
10	0950	79	.138	.101	760	8.8	112	8.1	3730	27.0	--	864	211
10	1230	78	--	--	--	--	--	8.3	3760	--	--	--	--
17	0950	72	--	--	--	--	--	8.6	3450	--	--	--	--
24	1100	67	--	--	--	--	--	--	--	--	--	--	--
31	1010	68	--	--	--	--	--	8.3	3480	--	--	--	--
AUG													
01	1030	68	--	--	--	--	--	--	--	--	--	--	--
07	1120	73	--	--	--	--	--	--	--	--	--	--	--
08	1020	67	.127	.094	--	--	--	--	--	--	640	760	183
14	1030	54	--	--	--	--	--	8.5	3170	--	--	--	--
21	1010	62	--	--	--	--	--	8.6	3310	--	--	--	--
SEP													
06	1200	47	.186	.142	760	8.5	102	8.5	2010	24.0	500	639	149

e Estimated.

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	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)
APR													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	87.4	3.45	8.98	628	59.5	--	539	.4	10.5	1330	--	3210	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	82.0	3.35	7.80	527	56.9	--	445	.3	14.0	1150	--	2780	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	73.7	3.45	7.90	500	58.8	120	437	.3	7.9	1120	3.6	2660	2440
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	65.0	4.63	6.92	402	57.6	140	381	.3	11.7	846	2.9	2170	1940

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-HYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
APR													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.040	.57	1.2	<.240	.100	.013	<.020	.079	6.5	<.2	20	50.6	<30
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.040	.63	1.1	11.4	.084	.010	<.020	.080	3.9	2.7	14	6.1	<30
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	e.024	.62	1.2	10.3	.075	.013	<.020	.053	5.0	2.1	12	43.3	<30
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	6.3	1.8	14	17.9	<30

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

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
APR													
11...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	e.015	e.405	<.005	<.018	e.002
18...	--	<.002	<.004	<.002	<.005	.010	<.010	<.002	<.041	e.065	e.003	e.006	e.001
25...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	e.009	e.004	<.018	e.002
MAY													
02...	--	<.002	<.004	<.002	<.005	.007	<.010	<.002	e.007	e.056	e.004	<.018	e.002
09...	--	<.002	<.004	<.002	<.005	e.007	<.010	<.002	<.041	e.008	<.005	<.018	<.003
16...	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002	<.041	<.020	e.003	<.018	<.003
23...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	.012	<.018	<.003
30...	--	<.002	<.004	<.002	<.005	.007	<.010	<.002	<.041	<.020	.005	<.018	<.003
JUN													
06...	--	<.002	<.004	<.002	<.005	.013	<.010	<.002	<.041	<.020	<.005	<.018	<.003
12...	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002	e.012	<.020	.007	<.018	<.003
12...	94.5	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	<.002	<.004	<.002	<.005	.019	<.010	<.002	<.041	<.020	e.004	e.005	<.003
20...	--	<.002	<.004	<.002	<.005	.016	<.010	<.002	<.041	<.020	e.004	<.018	<.003
26...	--	<.002	<.004	<.002	<.005	.013	<.010	<.002	<.041	<.020	e.003	<.018	<.003
JUL													
03...	--	<.002	<.004	<.002	<.005	.018	<.010	<.002	<.041	<.020	e.002	<.018	--
10...	--	<.002	<.004	<.002	<.005	.015	<.010	<.002	<.041	<.020	e.005	<.018	<.003
17...	--	<.002	<.004	<.002	<.005	.018	<.010	<.002	<.041	<.020	e.001	<.018	<.003
24...	--	<.002	<.004	<.002	<.005	.017	<.010	<.002	<.041	<.020	e.004	e.011	<.003
31...	--	<.002	<.004	<.002	<.005	.011	<.010	<.002	<.041	<.020	.010	<.018	<.003
AUG													
01...	--	<.002	<.004	<.002	<.005	.011	<.010	<.002	<.041	<.020	.008	e.010	<.003
07...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041	<.020	.011	<.018	<.003
08...	10.7	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<.002	<.004	<.002	<.005	.011	<.010	<.002	<.041	<.020	.011	<.018	<.003
21...	--	<.002	<.004	.003	<.005	.013	<.010	<.002	<.041	e.007	.026	e.008	<.003
SEP													
06...	211	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALATHION, DISSOLVED (UG/L) (39532)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)
APR													
11...	<.006	.005	<.005	<.021	.009	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
18...	e.005	<.005	<.005	<.021	.465	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
25...	e.006	<.005	<.005	<.021	.029	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
MAY													
02...	e.006	e.005	<.005	<.021	.045	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
09...	e.003	.015	<.005	<.021	.033	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
23...	e.005	.071	<.005	<.021	.009	<.009	<.005	<.003	<.004	e.018	<.027	<.050	<.006
30...	e.003	.038	<.005	<.021	.006	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
JUN													
06...	e.008	.007	<.005	<.021	.003	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
12...	e.004	e.004	<.005	<.021	.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.006	.007	<.005	<.021	.004	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
20...	<.006	e.003	<.005	<.021	.003	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
26...	<.006	.009	<.005	<.021	.019	<.009	<.005	<.003	<.004	e.011	<.027	<.050	<.006
JUL													
03...	e.004	e.004	<.005	<.021	.078	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	e.005	.005	<.005	<.021	.014	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
17...	e.005	e.001	<.005	<.021	.005	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
24...	e.008	.009	<.005	<.021	4.73	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
31...	<.006	<.005	<.005	<.021	.056	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
AUG													
01...	e.006	.007	<.005	<.021	.050	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
07...	e.003	.018	<.005	<.021	.026	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.006	e.005	<.005	<.021	.082	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
21...	<.006	e.004	<.005	<.021	.010	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)
APR													
11...	.019	<.006	<.007	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.003	<.004	<.010
18...	e.012	<.006	.007	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.002	<.004	<.010
25...	e.011	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
MAY													
02...	.055	<.006	.007	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.001	e.004	<.010
09...	.017	<.006	.058	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
16...	.048	<.006	.085	<.007	<.003	<.007	.025	<.010	<.006	<.011	<.015	<.004	<.010
23...	.046	<.006	1.33	<.007	<.003	<.007	.007	<.010	<.006	<.011	<.015	<.004	<.010
30...	.039	<.006	.522	<.007	<.003	<.007	.004	<.010	<.006	<.011	<.015	<.004	<.010
JUN													
06...	.478	<.006	.385	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.004	<.004	<.010
12...	.096	<.006	.006	e.005	M	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	.145	<.006	.233	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.002	<.004	<.010
20...	.088	<.006	.170	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.002	<.004	<.010
26...	.369	<.006	.102	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
JUL													
03...	.169	.007	.070	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.507	<.006	.054	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
17...	.469	<.006	.043	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
24...	.097	<.006	.030	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
31...	.256	<.006	.021	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
AUG													
01...	.173	<.006	.024	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
07...	.070	.006	.012	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	.226	<.006	.013	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
21...	.076	.006	.010	<.007	<.003	<.007	<.002	<.010	<.006	<.011	e.002	<.004	<.010
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TEBU-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	THIO-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
APR										
11...	<.011	<.023	.061	<.016	<.034	<.017	<.005	<.002	.102	--
18...	<.011	<.023	.020	e.003	<.034	<.017	<.005	<.002	<.009	--
25...	<.011	<.023	.014	<.016	<.034	<.017	<.005	<.002	e.005	--
MAY										
02...	<.011	<.023	.024	e.004	<.034	<.017	e.004	<.002	M	--
09...	<.011	<.023	.024	<.016	<.034	<.017	.045	<.002	<.009	--
16...	<.011	<.023	.019	<.016	<.034	<.017	.076	<.002	<.009	--
23...	<.011	<.023	.017	<.016	<.034	<.017	.177	<.002	<.009	--
30...	<.011	<.023	.022	e.003	<.034	<.017	.163	<.002	e.003	--
JUN										
06...	<.011	<.023	.013	e.004	<.034	<.017	.608	<.002	<.009	--
12...	<.011	<.023	.012	e.003	<.034	<.017	.011	<.002	.010	--
12...	--	--	--	--	--	--	--	--	--	--
19...	<.011	<.023	.014	<.016	<.034	<.017	.148	<.002	<.009	--
20...	<.011	<.023	e.009	<.016	<.034	<.017	.110	<.002	<.009	--
26...	<.011	<.023	e.009	<.016	<.034	<.017	.126	<.002	<.009	--
JUL										
03...	<.011	<.023	.012	e.003	<.034	<.017	.090	<.002	e.002	--
10...	--	--	--	--	--	--	--	--	--	18
10...	<.011	<.023	e.010	<.016	<.034	<.017	.025	<.002	e.006	--
17...	<.011	<.023	e.010	e.003	<.034	<.017	.027	<.002	<.009	--
24...	<.011	<.023	e.010	e.007	<.034	<.017	.023	<.002	<.009	--
31...	<.011	<.023	e.006	<.016	<.034	<.017	.011	<.002	<.009	--
AUG										
01...	<.011	<.023	e.010	<.016	<.034	<.017	.014	<.002	<.009	--
07...	<.011	<.023	e.003	<.016	<.034	<.017	e.005	<.002	<.009	--
08...	--	--	--	--	--	--	--	--	--	17
14...	<.011	<.023	e.006	<.016	<.034	<.017	<.005	<.002	<.009	--
21...	<.011	<.023	e.009	e.004	<.034	<.017	e.004	<.002	e.002	--
SEP										
06...	--	--	--	--	--	--	--	--	--	17

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUN				
14...*	1420	4490	23.5	35.2
14...*	1421	4500	23.5	31.5
14...*	1422	4500	23.5	27.8
14...*	1423	4500	23.5	24.1
14...*	1424	4500	23.5	20.4
14...*	1425	4510	23.5	16.7
14...*	1426	4510	23.5	13.0
14...*	1427	4510	23.5	9.30
14...*	1428	4510	23.5	5.60
14...*	1429	4520	23.5	1.90

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUN						
12..N	1130	73	21.0	56	11	87
JUL						
10..N	0950	79	27.0	36	7.7	83
AUG						
08..N	1020	67	--	25	4.5	25
SEP						
06..N	1200	47	24.0	22	2.8	94

* Instantaneous discharge at time of cross-sectional measurement: 60 ft^3/s.

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1760	1610	1350	1240	---	---	2170	2140	2260	2150	2800	2660
2	1640	1550	1350	1320	---	---	2210	2140	2330	2260	2690	2470
3	1550	1430	1440	1320	---	---	2240	2170	2410	2320	2730	2570
4	1620	1380	---	---	---	---	---	2230	2470	2380	2720	2650
5	1540	1350	---	---	---	---	2320	2270	2510	2300	2700	2460
6	1370	1290	---	---	---	---	2360	2290	2550	2390	2510	2240
7	1360	1300	---	---	---	---	2360	2300	---	2370	2760	2450
8	1340	1180	---	---	2040	1910	2350	2200	2560	---	2580	2260
9	1200	1110	---	---	2040	1950	2230	2110	2500	2140	2550	2340
10	1120	1020	---	---	2000	1920	2120	1960	2510	2370	2580	2280
11	1230	1020	1520	1490	2000	1910	2030	1860	2520	2400	2560	2370
12	1260	1180	1620	1520	2000	1950	1910	1860	2450	2360	2640	2340
13	1280	1230	1670	1610	1960	1920	1900	1780	2590	2420	2680	2580
14	1320	1250	1810	1660	1960	1890	1830	1760	2560	2480	2700	2560
15	1350	1280	1860	1800	2070	1960	1890	1790	---	---	2820	2630
16	1360	1190	1890	1840	2050	2010	1930	1840	2740	2390	3210	2780
17	1220	1150	1890	1850	2040	1990	2020	1860	2720	2630	3320	3040
18	1180	1090	1910	1860	2010	1960	2050	1990	2750	2640	3130	2990
19	1150	1060	1890	1860	2020	1900	2050	2010	2780	2550	---	2990
20	1120	1060	1900	1860	1950	1860	2080	2020	2730	---	3350	3180
21	1060	980	1940	1880	1910	1850	2060	2040	---	---	3400	3240
22	1060	980	1930	1890	2010	1900	2080	1980	---	---	3330	3180
23	1080	1040	1980	1890	2020	1990	2080	1970	---	---	3280	3110
24	1190	1080	1960	1930	2040	2010	2140	1980	2730	2600	3450	3230
25	1240	1140	1940	1800	2090	2010	2170	2090	2670	2570	3480	3350
26	1350	1230	1870	1830	2120	2070	2200	2020	2880	2670	3710	3450
27	1290	1110	1870	1790	2140	2100	2220	2140	---	2700	3790	3620
28	1250	1120	1800	1780	2190	2130	2230	2180	---	---	---	---
29	1240	1170	---	---	2190	2160	2190	2100	---	---	---	---
30	1270	1230	---	---	2200	2130	2180	2090	---	---	---	4180
31	1250	1220	---	---	2160	2140	2160	2100	---	---	4540	4400
MONTH	1760	980	---	---	---	---	---	1760	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4500	4300	---	---	---	---	4270	3950	3920	3640	4090	3860
2	5060	4430	---	---	---	---	4070	3420	3790	3460	3900	3500
3	5180	---	---	---	---	---	3420	3160	3730	3460	3530	3210
4	---	---	---	---	---	---	3640	3270	4160	3670	3300	3150
5	---	---	---	---	---	---	3600	3200	4030	3410	3270	2780
6	---	---	---	---	---	---	3640	3310	3480	3320	2940	2750
7	4540	3920	---	---	---	---	3790	3600	3500	3080	2960	2690
8	4650	3930	---	---	---	---	3780	3540	3750	3310	2690	2120
9	4090	3730	---	---	---	---	3690	3430	3530	3290	2720	2470
10	3760	3270	---	---	---	---	3670	3560	3420	3170	2610	2110
11	---	2990	3830	3410	---	---	3630	3520	3410	2990	2520	1690
12	3190	2930	3480	3030	---	---	3650	3470	3610	3330	2820	1900
13	3250	2930	3450	3030	---	---	3810	3610	3740	3000	2840	2570
14	3220	3070	3370	2650	---	---	3910	3660	3550	3310	2790	2230
15	3260	---	3000	2520	---	---	4230	3790	3720	3400	2330	2220
16	---	---	3250	2860	---	---	4140	3920	3710	3160	2430	2280
17	---	---	3460	3240	---	---	3990	3860	3210	2830	2560	2420
18	---	---	3770	3460	---	---	4040	3670	3040	2540	---	---
19	5380	4710	4050	3760	---	---	4240	3760	3360	2990	---	---
20	4910	4650	3920	3560	---	---	4300	3850	3560	3150	---	---
21	4830	4700	3560	3310	---	---	4240	3830	3460	3140	---	---
22	---	4740	3630	3350	---	---	4260	3990	3330	3150	---	---
23	---	---	3650	3410	4000	3760	4140	3740	3290	2820	---	---
24	---	---	3440	3360	3980	3660	3990	3670	3260	2830	---	---
25	---	---	3570	3440	4270	3810	4270	3960	3660	3160	---	---
26	---	---	3630	3540	4190	3850	4250	3750	3490	3080	---	---
27	---	---	---	---	4030	3580	3750	2550	3210	2990	---	---
28	---	---	---	---	4200	3580	3180	2900	3160	2970	---	---
29	---	---	---	---	4220	3760	3250	2930	3520	3130	---	---
30	---	---	---	---	4300	3640	3720	3150	3790	3510	---	---
31	---	---	---	---	---	---	3900	3590	3960	3690	---	---
MONTH	---	---	---	---	---	---	4300	2550	4160	2540	---	---

11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.5	21.0	16.0	13.0	---	---	9.0	7.0	10.5	8.5	14.5	12.0
2	25.5	22.0	16.5	14.0	---	---	8.5	6.5	11.5	8.5	14.0	13.0
3	24.0	20.5	17.0	14.5	---	---	9.0	6.5	12.5	10.0	13.5	12.5
4	23.5	20.0	---	---	---	---	9.0	7.0	13.5	10.5	13.0	12.0
5	23.0	20.0	---	---	---	---	9.0	7.0	14.5	11.5	13.0	11.5
6	23.5	20.5	---	---	---	---	9.0	7.0	14.5	12.0	14.0	12.0
7	23.0	20.5	---	---	11.0	---	9.0	7.5	12.0	9.0	16.0	13.0
8	22.5	19.5	---	---	12.0	10.0	10.5	9.0	10.0	7.0	17.0	14.0
9	22.0	19.5	---	---	12.5	10.5	10.5	9.0	9.5	8.5	16.0	13.5
10	20.0	18.0	---	---	13.5	11.5	10.0	8.5	9.5	8.0	15.0	12.0
11	18.0	17.0	13.0	11.0	13.0	12.0	9.0	8.5	10.0	8.5	16.0	13.0
12	19.0	16.0	12.5	9.5	13.0	11.5	10.5	8.5	11.0	8.5	17.0	13.5
13	19.5	16.5	12.0	9.5	12.0	10.5	11.0	8.5	10.0	8.0	18.5	14.5
14	20.5	17.0	12.0	9.5	12.0	11.0	11.5	9.5	11.5	8.5	19.0	15.5
15	21.0	18.0	11.5	9.5	13.5	11.5	10.0	8.0	12.5	9.5	18.0	16.0
16	21.5	18.0	12.0	10.5	12.5	11.0	9.0	6.5	13.5	10.5	17.5	15.0
17	22.0	18.5	12.0	9.5	11.5	10.0	8.5	6.0	12.5	11.5	19.5	14.5
18	21.5	19.0	12.0	9.0	10.0	9.0	8.5	6.0	14.0	11.0	20.5	16.0
19	21.5	18.5	12.0	9.5	10.0	8.0	9.0	7.5	14.0	12.0	22.0	17.0
20	21.0	18.5	12.0	9.5	10.0	8.0	9.0	7.0	13.0	11.5	22.5	19.0
21	19.5	15.5	12.0	10.0	10.5	8.0	9.0	7.5	14.0	11.0	22.5	19.0
22	15.5	13.0	12.0	10.5	11.0	9.0	10.5	8.0	---	---	22.5	18.5
23	16.0	13.0	11.5	10.0	11.0	9.0	11.5	9.0	---	---	21.5	17.5
24	17.5	14.0	11.0	10.5	11.0	9.5	11.5	10.0	12.0	10.0	22.0	18.0
25	17.0	15.0	11.5	10.5	10.0	8.0	10.5	9.0	12.5	9.5	20.5	18.0
26	16.0	14.5	11.0	10.5	9.5	7.5	10.5	8.5	13.5	11.0	19.5	16.5
27	16.5	14.0	11.0	10.0	9.0	7.0	10.5	8.0	15.0	12.0	19.5	16.0
28	16.0	14.5	11.0	---	9.0	7.0	10.5	8.0	14.5	12.0	21.0	17.0
29	16.0	15.0	---	---	9.5	7.0	11.5	9.0	---	---	21.0	18.0
30	16.0	14.0	---	---	9.5	7.0	10.5	8.5	---	---	21.5	17.5
31	16.0	13.5	---	---	9.0	7.0	11.0	8.0	---	---	22.0	18.0
MONTH	25.5	13.0	---	---	---	---	11.5	6.0	---	---	22.5	11.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	22.5	18.5	---	---	28.5	25.0	28.0	25.0	27.5	24.0	26.5	23.0
2	19.5	17.0	---	---	27.5	24.0	29.0	25.5	27.0	24.0	27.5	23.5
3	---	15.0	---	---	24.5	21.5	30.0	26.5	27.5	24.0	27.5	24.0
4	---	---	---	---	23.5	19.0	29.0	27.0	27.5	24.0	28.0	24.0
5	---	---	---	---	23.5	20.0	30.0	26.0	28.0	24.0	28.5	23.5
6	16.0	---	---	---	23.5	20.0	28.5	26.0	28.0	24.5	26.0	23.0
7	16.5	14.0	---	---	25.5	20.5	28.5	25.5	28.5	25.0	25.5	22.0
8	15.5	12.5	---	---	26.5	22.5	28.5	25.5	29.5	26.0	26.0	22.0
9	17.0	13.0	---	---	26.5	22.5	29.0	25.5	29.5	26.5	25.5	22.0
10	17.5	13.0	---	---	27.0	23.0	28.5	25.5	28.5	26.0	25.0	22.0
11	16.5	15.0	29.5	23.5	26.5	23.0	27.5	24.0	27.5	25.0	25.5	22.0
12	17.5	13.5	27.0	23.5	25.5	23.0	26.0	23.0	27.5	24.5	26.0	22.0
13	18.0	14.5	26.0	21.5	24.0	21.5	26.0	23.0	27.0	24.0	26.5	21.5
14	18.5	15.0	25.5	21.0	24.5	21.0	27.0	23.0	27.0	24.0	27.0	21.5
15	---	15.5	25.0	21.0	27.0	23.0	26.5	23.5	27.0	24.0	27.0	22.5
16	---	16.5	25.5	21.5	28.0	24.0	25.0	22.0	28.0	24.0	27.0	22.0
17	20.5	17.5	26.0	20.5	28.5	24.0	24.5	21.0	28.0	24.5	26.5	21.5
18	21.5	17.5	26.0	21.5	29.0	24.5	26.0	22.0	28.5	24.5	---	---
19	19.5	16.0	26.5	22.0	30.0	25.0	26.5	22.5	28.0	25.0	---	---
20	16.5	13.5	27.0	22.5	30.0	26.0	26.5	23.0	27.5	24.5	---	---
21	18.5	15.0	27.5	23.0	30.0	26.5	26.0	22.5	26.5	24.0	---	---
22	20.0	---	28.0	24.0	30.5	27.0	26.0	22.5	26.0	23.0	---	---
23	---	---	28.0	24.0	29.5	26.0	27.0	23.0	26.5	22.5	---	---
24	---	---	27.5	23.5	28.5	25.0	28.0	24.0	27.0	23.0	---	---
25	---	---	27.5	23.5	27.5	24.5	28.0	24.5	27.0	23.5	---	---
26	---	---	27.5	23.5	27.0	23.0	28.5	24.5	27.5	24.0	---	---
27	---	---	26.5	22.5	26.0	23.5	28.0	24.5	28.0	24.5	---	---
28	---	---	26.5	22.0	26.5	23.0	28.5	25.0	28.0	24.5	---	---
29	---	---	25.5	21.5	27.0	23.5	28.0	25.0	28.0	25.0	---	---
30	---	---	26.5	21.5	28.5	24.5	27.5	23.5	26.5	23.5	---	---
31	---	---	29.0	23.0	---	---	27.5	23.5	26.0	22.5	---	---
MONTH	---	---	---	---	30.5	19.0	30.0	21.0	29.5	22.5	---	---

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CA

LOCATION.—Lat 37°43'54", long 119°33'28", unsurveyed, Mariposa County, Hydrologic Unit 18040008, Yosemite National Park, on right bank, 10 ft downstream from footbridge, at Happy Isles, 0.4 mi downstream from Illilouette Creek, and 2.0 mi southeast of Yosemite National Park Headquarters.

DRAINAGE AREA.—181 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—August 1915 to current year.

REVISED RECORDS.—WSP 1215: 1938(M).

GAGE.—Water-stage recorder. Datum of gage is 4,016.58 ft above sea level. Prior to Nov. 2, 1916, nonrecording gage at datum 0.55 ft lower.

REMARKS.—Records good except for estimated daily discharges, which are fair. Up to 5 ft^3/s can be diverted upstream from station for Yosemite Valley water supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,100 ft^3/s, Jan. 2, 1997, gage height, 13.27 ft, from rating curve extended above 4,000 ft^3/s, on basis of contracted-opening measurements at gage heights 10.4 and 11.55 ft; minimum daily, 1.5 ft^3/s, Sept. 26, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,900 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 9	0100	2,330	6.22

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	30	18	12	27	41	868	1650	880	98	29	11
2	9.2	29	18	12	29	47	689	1580	791	97	28	11
3	9.2	29	18	12	34	42	491	1030	552	110	28	10
4	8.9	29	18	13	47	50	366	902	438	134	27	11
5	9.0	28	18	13	57	60	305	1090	398	131	26	12
6	7.4	27	17	13	57	64	264	1400	405	227	25	12
7	6.9	27	17	13	51	70	242	1740	425	224	25	12
8	6.8	26	17	13	42	85	231	2000	418	255	23	11
9	6.9	25	17	13	42	91	209	2010	390	202	24	11
10	11	27	17	13	40	82	203	1940	363	193	25	10
11	13	26	17	13	41	80	197	1950	348	153	26	9.3
12	13	25	17	e16	43	79	191	1950	311	119	25	8.9
13	12	25	18	e17	52	88	195	1510	272	99	24	8.4
14	12	24	18	e17	49	103	197	1350	231	84	23	8.0
15	12	22	19	e18	45	118	221	1470	215	73	21	7.5
16	11	22	19	e17	46	115	295	1850	227	67	20	7.0
17	11	21	19	e16	46	134	367	1960	232	62	19	6.8
18	11	21	19	e17	44	184	411	1690	223	57	19	5.9
19	10	20	19	e18	44	254	433	1260	208	53	18	5.8
20	9.9	19	19	e19	45	331	373	1420	197	49	17	5.7
21	9.6	19	19	e18	46	372	341	1510	194	46	16	5.6
22	9.5	19	19	e17	44	371	328	1610	198	43	15	5.4
23	9.0	18	18	e18	45	344	400	1520	201	40	15	5.2
24	8.6	18	18	e22	46	392	585	1440	199	39	14	5.1
25	8.6	18	16	e21	48	418	833	1320	176	36	13	6.3
26	9.2	17	15	e22	48	442	1070	1210	147	34	12	8.5
27	15	17	15	e21	47	462	1200	996	130	33	12	7.2
28	17	17	14	e22	44	571	1180	862	119	32	11	6.7
29	31	17	14	e23	---	703	1050	778	111	32	11	6.3
30	32	18	14	e25	---	710	1280	800	105	31	11	6.0
31	30	---	13	26	---	792	---	877	---	30	11	---
TOTAL	379.3	680	534	530	1249	7695	15015	44675	9104	2883	613	246.6
MEAN	12.2	22.7	17.2	17.1	44.6	248	500	1441	303	93.0	19.8	8.22
MAX	32	30	19	26	57	792	1280	2010	880	255	29	12
MIN	6.8	17	13	12	27	41	191	778	105	30	11	5.1
AC-FT	752	1350	1060	1050	2480	15260	29780	88610	18060	5720	1220	489

e Estimated.

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	36.3	61.1	83.3	89.9	108	191	540	1263	1222	478	114	44.2
MAX	267	818	736	1084	401	575	1007	2675	3317	2393	775	360
(WY)	1919	1951	1965	1997	1986	1986	1926	1969	1983	1995	1983	1978
MIN	2.58	4.89	4.49	6.56	8.89	25.2	173	231	120	28.6	7.79	3.18
(WY)	1956	1933	1977	1991	1991	1977	1975	1977	1924	1931	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1916 - 2001	
ANNUAL TOTAL	121384.2		83603.9			
ANNUAL MEAN	332		229		353	
HIGHEST ANNUAL MEAN					802	1983
LOWEST ANNUAL MEAN					84.9	1977
HIGHEST DAILY MEAN	2450	May 28	2010	May 9	9030	Jan 2 1997
LOWEST DAILY MEAN	5.7	Jan 8	5.1	Sep 24	1.5	Sep 26 1977
ANNUAL SEVEN-DAY MINIMUM	5.9	Jan 4	5.5	Sep 18	1.9	Oct 14 1964
MAXIMUM PEAK FLOW			2330	May 9	10100	Jan 2 1997
MAXIMUM PEAK STAGE			6.22	May 9	13.27	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	240800		165800		255900	
10 PERCENT EXCEEDS	1220		845		1140	
50 PERCENT EXCEEDS	84		30		99	
90 PERCENT EXCEEDS	11		10		11	

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1966–96, October 2000 to September 2001.
CHEMICAL DATA: Water years 1968–96, October 2000 to September 2001.
BIOLOGICAL DATA: Water years 1973–81.
WATER TEMPERATURE: Water years 1966–77, 1979–93.
SEDIMENT DATA: Water years 1970–71, 1973–96, October 2000 to September 2001.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1965 to September 1977, October 1978 to September 1993.

REMARKS.—Water-quality samples were obtained 1,000 ft downstream of the gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	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											
25...	1315	8.6	659	10.4	102	7.1	33	--	7.5	8.57	2.97
MAY											
01...	1110	1550	661	12.4	121	6.9	11	--	8.0	2.75	.94
JUN											
20...	1350	200	662	8.8	99	6.7	12[1]	--	14.0	3.09	1.07
SEP											
13...	0950	8.6	660	10.0	108	6.9	38	22.0	12.5	8.65	3.02

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)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	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											
25...	.277	.57	.357	2.4	36.0	8	10	<.01	5.1	M	7.2
MAY											
01...	.099	.22	.202	.8	35.5	6	7	--	.6	--	4.3
JUN											
20...	.103	.20	.202	.8	34.7	4	5	--	1.0	--	3.5
SEP											
13...	.268	.57	.374	2.5	37.0	8	10	--	5.1	--	6.5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	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)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT											
25...	.5	.027	20	24.0	<.002	--	.017	<.001	--	<.007	.46
MAY											
01...	.4	.015	--	10.7	.003	E.05	.017	--	<.006	<.007	2.2
JUN											
20...	.6	.013	--	9.58	.003	<.10	.015	--	<.006	<.007	.93
SEP											
13...	.5	.029	21	23.6	.002	<.10	.039	--	<.006	<.007	.62

[1] Laboratory value.
< Actual value is known to be less than the value shown.
M Presence of material verified, but not quantified.

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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						
25...	1315	8.6	7.5	1	.02	--
MAY						
01...	1330	1420	8.0	13	50	28
JUN						
20...	1255	200	15.5	2	1.1	50
SEP						
13...	0920	8.6	12.5	2	.05	37

11266500 MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CA

LOCATION.—Lat 37°43'01", long 119°39'55", unsurveyed, Mariposa County, Hydrologic Unit 18040008, Yosemite National Park, on left bank, 150 ft upstream from Pohono Bridge, 0.4 mi upstream from Artist Creek, and 4.8 mi southwest of Yosemite National Park Headquarters.

DRAINAGE AREA.—321 mi^2.

PERIOD OF RECORD.—October 1916 to current year. Monthly discharge only for October and November 1916, published in WSP 1315-A.
CHEMICAL DATA: Water years 1971–72, 1981–82, 1994, 1995.
WATER TEMPERATURE: Water year 1995.
SEDIMENT DATA: Water year 1995.

GAGE.—Water-stage recorder. Datum of gage is 3,861.66 ft above sea level. Prior to Sept. 5, 1918, at datum 1.8 ft higher. Sept. 5, 1918, to Sept. 30, 1955, at datum 1.0 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are fair. No diversions between stations at Happy Isles Bridge and Pohono Bridge.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 24,600 ft^3/s, Jan. 3, 1997, gage height, 23.43 ft, from floodmarks in gagehouse, from rating curve extended above 17,000 ft^3/s, on basis of computation of flow over diversion dam for Yosemite Powerplant 1 mi downstream at gage heights 20.1 and 21.98 ft, present datum; minimum daily, 5.4 ft^3/s, Oct. 26, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,900 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 9	0145	3,880	7.72

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	47	44	37	56	79	1730	2960	1220	139	50	23
2	26	47	44	36	58	94	1430	2920	1130	133	48	23
3	25	48	44	35	65	81	1040	2070	845	139	46	23
4	25	47	e43	35	80	104	767	1820	679	166	45	23
5	24	45	43	35	104	132	657	2060	604	163	45	23
6	24	46	42	34	118	131	569	2490	591	249	44	24
7	23	48	42	34	110	134	518	2960	599	269	43	24
8	23	47	42	35	88	161	478	3400	581	319	41	23
9	24	47	43	35	90	192	441	3390	545	275	40	23
10	28	50	42	38	83	177	432	3250	507	248	41	22
11	29	50	e41	47	82	170	448	3240	481	e222	41	21
12	29	48	e41	41	78	164	416	3250	443	e175	41	21
13	29	47	42	43	86	173	429	2650	394	e150	39	20
14	28	47	44	43	86	203	430	2300	345	e130	39	20
15	28	46	46	45	81	239	485	2420	312	e114	37	19
16	28	45	46	44	82	240	648	2750	314	e107	36	18
17	28	44	46	42	82	260	821	2950	317	95	35	18
18	27	43	47	43	84	356	903	2640	306	90	34	18
19	27	43	47	46	85	506	1020	2120	286	83	32	18
20	26	42	47	49	87	677	842	2190	271	79	31	17
21	26	41	47	48	88	766	757	2250	262	76	30	17
22	26	41	47	47	88	788	734	2330	261	72	30	16
23	25	41	45	48	83	758	888	2210	262	68	30	16
24	24	40	45	55	90	866	1250	2090	259	66	30	15
25	25	40	43	52	89	1010	1690	1900	240	63	29	17
26	26	40	42	56	90	1080	2100	1760	207	59	27	17
27	29	40	41	55	89	1070	2290	1500	185	57	26	18
28	33	40	40	56	83	1230	2300	1320	168	55	25	17
29	50	43	39	57	---	1460	2100	1200	158	54	25	17
30	54	46	38	56	---	1440	2390	1180	148	53	24	17
31	49	---	38	56	---	1560	---	1230	---	52	24	---
TOTAL	894	1339	1341	1383	2385	16301	31003	72800	12920	4020	1108	588
MEAN	28.8	44.6	43.3	44.6	85.2	526	1033	2348	431	130	35.7	19.6
MAX	54	50	47	57	118	1560	2390	3400	1220	319	50	24
MIN	23	40	38	34	56	79	416	1180	148	52	24	15
AC-FT	1770	2660	2660	2740	4730	32330	61490	144400	25630	7970	2200	1170

e Estimated.

11266500 MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.9	121	183	201	247	421	1103	2337	1923	651	151	65.5
MAX	436	1587	1666	2461	1035	1459	2136	5305	6279	3460	1045	426
(WY)	1983	1951	1951	1997	1986	1986	1982	1969	1983	1983	1983	1978
MIN	5.89	13.9	15.1	17.3	21.0	51.5	343	379	148	47.2	14.7	7.38
(WY)	1978	1930	1977	1977	1991	1977	1977	1977	1924	1931	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1917 - 2001	
ANNUAL TOTAL	233241		146082			
ANNUAL MEAN	637		400		623	
HIGHEST ANNUAL MEAN					1466	1983
LOWEST ANNUAL MEAN					127	1977
HIGHEST DAILY MEAN	4700	May 8	3400	May 8	21000	Jan 2 1997
LOWEST DAILY MEAN	18	Jan 6	15	Sep 24	5.4	Oct 26 1977
ANNUAL SEVEN-DAY MINIMUM	18	Jan 4	16	Sep 20	5.6	Oct 20 1977
MAXIMUM PEAK FLOW			3880	May 9	24600	Jan 3 1997
MAXIMUM PEAK STAGE			7.72	May 9	23.43	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	462600		289800		451300	
10 PERCENT EXCEEDS	2310		1450		1920	
50 PERCENT EXCEEDS	146		55		181	
90 PERCENT EXCEEDS	28		24		26	

11267350 BIG CREEK DIVERSION NEAR FISH CAMP, CA

LOCATION.—Lat 37°28'10", long 119°36'51", in SE 1/4 NE 1/4 sec.25, T.5 S., R.21 E., Mariposa County, Hydrologic Unit 18040008, Sierra National Forest, on right bank, 0.5 mi downstream from diversion weir, 0.5 mi upstream from Rainier Creek, and 1.2 mi southeast of Fish Camp.

PERIOD OF RECORD.—October 1969 to June 1977, April 1987 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow is diverted from the left bank of Big Creek, a tributary to South Fork of the Merced River, to Lewis Fork of the Fresno River. Flow is used for domestic and irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 66 ft^3/s, June 1, 2, 1975; no flow for several days in summer months of most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.29	4.1	3.2	e1.0	e.40	29	33	15	3.6	.60	.42
2	.21	2.9	3.7	3.3	e1.3	e.40	29	32	14	3.6	.52	.37
3	.22	4.3	3.6	3.7	e2.5	e.40	27	32	14	2.6	.48	.34
4	.24	4.1	3.5	3.7	e5.0	15	25	32	11	1.9	.48	.34
5	.23	4.1	3.6	3.5	e5.0	28	23	32	8.3	1.9	.47	.34
6	.22	4.3	3.6	3.9	e4.0	21	21	32	8.1	1.9	.47	.34
7	.25	4.0	3.6	3.7	e3.0	12	19	32	8.0	1.9	.48	.34
8	.29	3.7	3.8	e3.2	e2.4	13	19	33	8.0	1.9	.48	.32
9	.31	3.9	3.8	e4.0	e1.7	9.6	18	33	7.9	1.9	.43	.29
10	.47	3.9	3.6	e7.0	e2.3	e8.5	17	32	7.4	1.8	.40	.29
11	.51	e3.8	3.5	e8.0	e1.5	e8.0	17	32	7.3	1.7	.35	.29
12	.54	e3.6	3.7	e9.0	e1.8	e9.0	17	32	6.8	1.6	.32	.30
13	.57	e3.5	3.7	e8.0	e2.0	e10	17	32	5.3	1.6	.30	.31
14	.52	e3.4	3.8	e5.0	e1.0	e12	19	31	4.2	1.5	.29	.29
15	.55	e3.4	4.1	e3.0	e.80	e14	21	31	4.1	1.5	.28	.29
16	.49	e3.5	3.9	e6.0	e.70	e16	24	32	4.1	1.5	.29	.29
17	.44	e3.6	3.8	e7.0	e.80	e17	26	31	3.9	1.4	.27	.29
18	.39	e3.5	3.6	e8.0	e.60	e19	26	30	3.9	1.3	.28	.29
19	.38	e3.4	3.5	e6.0	e.80	e20	27	30	3.8	1.2	.27	.28
20	.39	e3.3	3.4	e5.0	e.70	e21	25	30	3.7	1.2	.25	.29
21	.36	e3.2	3.3	e4.0	e.50	26	23	29	3.7	1.1	.25	.29
22	.29	3.1	e3.3	e3.5	e.60	26	23	29	3.7	1.0	.25	.29
23	.33	3.3	e3.2	e3.0	e.50	27	26	28	3.7	.94	.25	.29
24	.34	3.3	3.1	e3.5	e.40	28	29	23	3.7	.94	.35	.28
25	.38	3.3	e3.0	e3.0	e.30	28	31	26	3.7	.93	.48	.26
26	.43	3.3	e2.9	e2.5	e.30	28	32	24	3.7	.94	.48	.25
27	.38	3.2	e2.8	e2.3	e.40	28	33	22	3.7	.90	.45	.23
28	.38	3.3	e2.7	e2.0	e.40	29	33	20	3.7	.76	.48	.23
29	.44	4.7	2.6	e1.5	---	29	32	19	3.8	.70	.48	.23
30	.29	4.6	2.7	e1.7	---	29	32	18	3.7	.65	.48	.24
31	.29	---	3.2	e1.3	---	29	---	16	---	.66	.45	---
TOTAL	11.34	105.79	106.7	132.5	42.30	561.30	740	888	185.9	47.02	12.11	8.90
MEAN	.37	3.53	3.44	4.27	1.51	18.1	24.7	28.6	6.20	1.52	.39	.30
MAX	.57	4.7	4.1	9.0	5.0	29	33	33	15	3.6	.60	.42
MIN	.21	.29	2.6	1.3	.30	.40	17	16	3.7	.65	.25	.23
AC-FT	22	210	212	263	84	1110	1470	1760	369	93	24	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

MEAN	1.39	3.78	6.38	7.97	9.77	17.1	24.1	29.1	17.6	4.08	.94	.78
MAX	7.61	11.9	31.3	35.8	32.7	37.3	43.3	56.2	58.0	22.3	3.14	3.46
(WY)	1970	1997	1997	1970	1970	1972	1993	1975	1998	1998	1973	1995
MIN	.026	1.10	.75	.76	.19	.32	3.21	2.65	.025	.52	.025	.000
(WY)	1989	1991	1991	1996	1997	1996	1995	1995	1995	1995	1988	1987

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	5445.52		2841.86			
ANNUAL MEAN	14.9		7.79		10.8	
HIGHEST ANNUAL MEAN					19.3	1993
LOWEST ANNUAL MEAN					3.67	1995
HIGHEST DAILY MEAN	52	Feb 14	33	Apr 27	66	Jun 1 1975
LOWEST DAILY MEAN	.14	Sep 19	.21	Oct 1	.00	Jul 1 1973
ANNUAL SEVEN-DAY MINIMUM	.15	Aug 20	.23	Oct 1	.00	Aug 1 1987
ANNUAL RUNOFF (AC-FT)	10800		5640		7810	
10 PERCENT EXCEEDS	42		28		34	
50 PERCENT EXCEEDS	4.1		3.3		3.7	
90 PERCENT EXCEEDS	.18		.29		.22	

e Estimated.

11269500 LAKE MCCLURE AT EXCHEQUER, CA

LOCATION.—Lat 37°35'02", long 120°16'09", in NW 1/4 SE 1/4 sec.13, T.4 S., R.15 E., Mariposa County, Hydrologic Unit 18040008, on left end of New Exchequer Dam on Merced River, 0.9 mi east of Exchequer, and 5.5 mi northeast of Merced Falls.

DRAINAGE AREA.—1,037 mi^2.

PERIOD OF RECORD.—April 1926 to September 1930 (daily gage heights; also summary of yearly contents in WSP 881), October 1930 to current year.

REVISED RECORDS.—WSP 881: 1926–32 (yearly summaries only). WSP 1345: 1951(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Merced Irrigation District). Prior to Oct. 1, 1964, indicator in powerplant at same datum. Oct. 1, 1964, to July 31, 1966, nonrecording gage at center of upstream face of dam at same datum.

REMARKS.—Reservoir is formed by a rockfill dam with a reinforced concrete face completed in March 1967. Dam is downstream from and connected to the original concrete arch and gravity-type dam which was completed in April 1926. Usable capacity, 1,024,000 acre-ft, between elevations 440.0 ft, invert entrance to outlet tunnel, and 867.0 ft, top of spillway gates. Dead storage, 300 acre-ft. Water is released through Exchequer Powerplant (station 11269700) down the Merced River to a diversion dam for Merced Irrigation District's main canal.

COOPERATION.—Records were provided by Pacific Gas and Electric 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, 1,026,000 acre-ft, July 14, 15, 1969, elevation, 867.2 ft; practically no storage at times in 1926, 1930–31, 1964–65 when reservoir was drained for inspection or construction. Minimum since construction of New Exchequer Dam in 1966 and since lake first filled, 66,100 acre-ft, Feb. 28, 1991, elevation, 588.4 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 774,500 acre-ft, May 26, elevation, 828.02 ft; minimum, 440,500 acre-ft, Sept. 30, minimum elevation, 756.72 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Merced Irrigation District, dated June 1966)

590	67,900	640	137,800	720	317,800	840	845,800
600	79,900	660	173,500	750	415,900	860	975,700
610	92,800	680	215,200	780	534,500	870	1,046,000
620	106,700	700	263,000	820	729,600		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	686000	627600	601900	592200	588300	604200	666800	694200	770400	685900	577600	485600
2	683900	627400	601300	591600	588200	605000	668900	700800	769600	682400	574100	483500
3	682700	627700	601500	591300	588200	606300	669500	704900	767800	678900	570600	481400
4	680600	627300	600900	590800	588600	610400	669000	707400	765600	675200	567400	479600
5	679000	626300	600200	590400	588700	618300	668700	710900	762600	671800	564100	477600
6	679000	626100	599600	590000	588600	623500	668300	715100	760100	668300	560800	475600
7	675500	626100	599000	589500	588200	624600	667800	719400	757900	664700	557400	473900
8	673700	625500	598500	589100	588300	626800	667500	725100	755500	661200	554000	471800
9	672000	624500	598200	588700	588200	627700	667900	730200	753200	658500	550600	470500
10	670600	623400	597900	588800	589000	629200	667400	734000	750600	655300	547300	468800
11	669300	622400	597300	589300	590400	630500	667100	737600	748400	651800	544200	467100
12	668100	621500	597000	589000	590900	631100	667400	741800	746200	648600	541300	465500
13	666800	620500	596400	588900	591000	631400	667400	744200	743100	645200	537900	463600
14	665300	619700	596000	588500	591100	632500	667300	745600	740000	641500	534600	462100
15	662700	618700	595600	588200	591100	633700	667100	747100	737600	637700	531400	460400
16	659900	618100	595900	587300	591300	634600	667600	749600	734600	634100	528600	458700
17	657500	617200	596100	586600	591900	634300	668000	754800	732500	631300	525400	457300
18	655100	616400	595500	586300	592600	636300	666700	758400	728700	627500	521900	455800
19	653200	615600	594900	586200	593200	637000	666000	761200	725600	623600	518800	454300
20	651000	615000	594800	586400	595500	639100	665400	763700	722400	619900	515500	452900
21	648100	613400	594600	586700	596400	641200	665700	765800	719200	616800	512600	451500
22	644700	611500	594300	586300	598000	643400	665600	768300	716300	613400	509700	450300
23	641600	609800	594500	586000	598400	645100	664700	770600	713200	610200	506600	449100
24	638600	609000	594700	587200	599500	646900	665400	772600	709800	607100	504100	447800
25	636000	607600	594300	587700	601400	649200	666600	773800	706400	603000	501500	446600
26	633600	605500	594100	588000	601800	650800	669600	774500	703200	599200	499400	445500
27	631500	604300	593900	588600	602400	652000	673500	774400	700100	595800	497300	444300
28	629700	603800	593500	589000	603400	654400	679000	773900	696600	592100	495100	443000
29	629400	603000	592900	588900	---	655700	683500	773100	693000	588600	492700	441800
30	628700	602500	592700	588700	---	658100	687400	772400	689300	585000	490200	440500
31	627900	---	592400	588400	---	661500	---	771500	---	581100	487900	---
MAX	686000	627700	601900	592200	603400	661500	687400	774500	770400	685900	577600	485600
MIN	627900	602500	592400	586000	588200	604200	664700	694200	689300	581100	487900	440500
a	800.30	795.04	792.87	792.05	795.12	807.12	812.17	827.48	812.48	790.44	768.85	756.72
b	-59600	-25400	-10100	-4000	+15000	+58100	+25900	+84100	-82200	-108200	-93200	-47400
c	64650	14290	15810	17930	14140	26730	82980	136900	120500	116800	90470	43650

CAL YR 2000 b -13100
WTR YR 2001 b -247000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Diversion, in acre-feet, through Exchequer Powerplant (station 11269700), provided by Pacific Gas & Electric Co.

11270900 MERCED RIVER BELOW MERCED FALLS DAM, NEAR SNELLING, CA

LOCATION.—Lat 37°31'18", long 120°19'53", in SE 1/4 SW 1/4 sec.4, T.5 S., R.15 E., Merced County, Hydrologic Unit 18040008, on right bank, 0.1 mi south of Merced Falls, 0.2 mi downstream from Merced Falls Dam, and 5.8 mi east of Snelling.

DRAINAGE AREA.—1,061 mi^2.

PERIOD OF RECORD.—April 1901 to current year. Records for water years 1914–16 incomplete, yearly estimates published in WSP 1315-A. Published as "near Merced Falls" 1901–13; as "at Exchequer" 1916–64.

REVISED RECORDS.—WSP 1315-A: 1901–09, 1911(M). WSP 1515: 1918–20, 1942–43 (published as station 11270000). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 310.55 ft above sea level. See WSP 1930 for history of changes prior to Oct. 1, 1964.

REMARKS.—Merced Falls Dam diverts water to Northside Canal for irrigation downstream from station. Flow regulated by Exchequer (station 11269700), McSwain Powerplant (station 11270610), and Merced Falls Powerplant, Lake McClure (station 11269500) since 1926, enlarged 1967, and McSwain Reservoir (station 11270600) since 1966, capacity, 9,200 acre-ft.

COOPERATION.—Records were provided by Pacific Gas and Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD (water years 1901–13, 1916–2001).—Maximum discharge observed, 47,700 ft^3/s, Jan. 31, 1911, gage height, 23.3 ft, site and datum then in use; no flow for part of Nov. 21, 1901. Maximum discharge since construction of Exchequer Dam in 1926, 46,200 ft^3/s, Dec. 4, 1950, gage height, 22.6 ft, from floodmarks, site and datum then in use, from rating curve extended above 16,000 ft^3/s on basis of computation of peak flow over dam; minimum daily, 3.4 ft^3/s, Mar. 5, 1966.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	859	395	326	268	253	259	1060	1380	1900	1860	1690	1030
2	881	465	324	270	256	263	1150	1390	1930	1860	1670	1000
3	890	532	321	275	252	274	1240	1450	1920	1860	1650	989
4	889	533	347	272	252	280	1210	1520	1880	1870	1630	992
5	825	532	348	270	256	384	1220	1560	1830	1880	1590	937
6	828	534	325	274	265	308	1240	1900	1800	1900	1590	918
7	828	535	320	272	256	296	1160	2100	1780	1880	1610	890
8	780	542	320	279	250	291	1070	2440	1790	1840	1610	736
9	729	545	330	273	259	272	966	2660	1800	1820	1610	654
10	698	544	324	270	271	257	906	2750	1800	1780	1620	725
11	632	544	326	270	277	253	852	2800	1820	1770	1610	847
12	857	543	327	265	260	254	798	2800	1830	1800	1600	828
13	1250	542	320	265	256	259	781	2790	1810	1870	1560	780
14	1380	541	320	265	256	259	783	2740	1770	1880	1520	779
15	1330	541	318	270	261	258	815	2600	1750	1820	1510	779
16	1250	542	318	270	260	253	1090	2390	1750	1800	1510	784
17	1060	542	320	265	257	260	1260	1980	1750	1790	1500	771
18	991	559	320	265	256	264	1630	1720	1760	1790	1520	752
19	1430	543	320	265	256	256	1990	1830	1780	1800	1540	693
20	1620	555	320	263	258	258	1950	1860	1790	1790	1520	655
21	1530	557	320	265	261	256	1870	1920	1780	1740	1520	659
22	1530	548	320	313	262	434	1870	1950	1780	1710	1450	645
23	1480	541	317	281	256	699	1860	1890	1790	1720	1280	606
24	1340	556	318	272	280	806	1920	1850	1810	1750	1230	587
25	1160	546	317	254	268	806	1930	1830	1810	1760	1150	582
26	865	540	317	250	259	814	1910	1850	1810	1800	1110	594
27	682	535	308	250	257	816	1490	1880	1830	1790	1140	594
28	590	412	290	252	280	833	1190	1890	1850	1770	1170	561
29	593	345	278	253	---	900	1200	1890	1870	1760	1150	547
30	517	325	272	253	---	926	1280	1860	1860	1730	1120	520
31	421	---	268	257	---	980	---	1870	---	1720	1070	---
TOTAL	30715	15514	9819	8286	7290	13728	39691	63340	54430	55910	45050	22434
MEAN	991	517	317	267	260	443	1323	2043	1814	1804	1453	748
MAX	1620	559	348	313	280	980	1990	2800	1930	1900	1690	1030
MIN	421	325	268	250	250	253	781	1380	1750	1710	1070	520
AC-FT	60920	30770	19480	16440	14460	27230	78730	125600	108000	110900	89360	44500
a	9470	9180	6250	8600	9330	8960	8950	9060	9410	9260	9190	9100
b	63600	661	.00	.00	.00	15970	77990	121400	106400	109500	90570	47940

a End of month contents, in acre-feet, McSwain Reservoir (station 11270600), provided by Pacific Gas & Electric Co.

b Total discharge, in acre-feet, McSwain Powerplant (station 11270610), provided by Pacific Gas & Electric Co.

11270900 MERCED RIVER BELOW MERCED FALLS DAM, NEAR SNELLING, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 1925, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	224	222	396	1095	1290	2102	2644	4362	3719	1261	306	144
MAX	1522	531	1676	4409	3232	6995	5749	6768	8225	5867	958	302
(WY)	1905	1910	1910	1911	1909	1907	1907	1922	1906	1906	1906	1904
MIN	49.4	58.5	83.7	100	208	314	774	1478	212	61.3	29.9	20.5
(WY)	1914	1922	1906	1918	1913	1924	1912	1924	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1901 - 1925	
ANNUAL MEAN	1443	
HIGHEST ANNUAL MEAN	2937	1907
LOWEST ANNUAL MEAN	348	1924
HIGHEST DAILY MEAN	37200	Jan 30 1911
LOWEST DAILY MEAN	1.0	Nov 21 1901
ANNUAL SEVEN-DAY MINIMUM	20	Sep 4 1924
MAXIMUM PEAK FLOW	47700	Jan 31 1911
MAXIMUM PEAK STAGE	23.30	Jan 31 1911
ANNUAL RUNOFF (AC-FT)	1045000	
10 PERCENT EXCEEDS	4340	
50 PERCENT EXCEEDS	488	
90 PERCENT EXCEEDS	80	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1964, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	223	57.8	267	402	694	1059	1892	3143	2737	1739	1400	884
MAX	638	385	4698	3869	3155	5375	3876	7249	7426	2384	1713	1313
(WY)	1945	1951	1951	1956	1938	1938	1958	1952	1938	1938	1963	1952
MIN	20.8	25.2	26.0	20.7	35.1	33.3	275	1049	1090	210	171	17.2
(WY)	1932	1932	1934	1940	1960	1948	1948	1955	1934	1931	1961	1931

SUMMARY STATISTICS	WATER YEARS 1927 - 1964	
ANNUAL MEAN	1210	
HIGHEST ANNUAL MEAN	2738	1938
LOWEST ANNUAL MEAN	360	1931
HIGHEST DAILY MEAN	24000	Dec 4 1950
LOWEST DAILY MEAN	4.5	Feb 11 1960
ANNUAL SEVEN-DAY MINIMUM	8.7	Jan 12 1940
MAXIMUM PEAK FLOW	46200	Dec 4 1950
MAXIMUM PEAK STAGE	22.60	Dec 4 1950
ANNUAL RUNOFF (AC-FT)	876500	
10 PERCENT EXCEEDS	2510	
50 PERCENT EXCEEDS	1150	
90 PERCENT EXCEEDS	38	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	901	387	550	780	1135	1342	1826	2264	2302	2119	1733	1361
MAX	3143	1396	2451	7368	6686	4680	5278	5701	6975	5177	2761	3049
(WY)	1984	1970	1983	1997	1997	1983	1983	1982	1983	1983	1983	1983
MIN	76.4	118	120	133	113	139	394	528	813	922	636	83.1
(WY)	1978	1969	1969	1977	1977	1977	1991	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	478901		366207			
ANNUAL MEAN	1308		1003		1393	
HIGHEST ANNUAL MEAN					3779	1983
LOWEST ANNUAL MEAN					363	1977
HIGHEST DAILY MEAN	3030	Feb 16	2800	May 11	8020	Jan 4 1997
LOWEST DAILY MEAN	242	Jan 2	250	Jan 26	46	Oct 3 1968
ANNUAL SEVEN-DAY MINIMUM	246	Jan 1	253	Jan 26	74	Oct 12 1977
MAXIMUM PEAK FLOW			3070	May 11	9360	Jun 1 1969
MAXIMUM PEAK STAGE			8.06	May 11	12.40	Jun 1 1969
ANNUAL RUNOFF (AC-FT)	949900		726400		1009000	
TOTAL DIVERSION (AC-FT) a	874200		634000			
10 PERCENT EXCEEDS	2400		1870		2840	
50 PERCENT EXCEEDS	1340		828		1180	
90 PERCENT EXCEEDS	266		260		187	

a Total discharge, in acre-feet, McSwain Powerplant (station 11270610), provided by Pacific Gas & Electric Co.

11271290 MERCED RIVER AT SHAFFER BRIDGE, NEAR CRESSEY, CA

LOCATION.—Lat 37°27'15", long 120°36'28", in NW 1/4 SW 1/4 sec.36, T.5 S., R.12 E., Merced County, Hydrologic Unit 18040002, near center of span on downstream side of county road bridge, 0.6 mi upstream from Dry Creek, and 4.0 mi northeast of Cressey.

DRAINAGE AREA.—1,117 mi^2.

PERIOD OF RECORD.—October 1965 to current year (low-flow records only).

GAGE.—Water-stage recorder. Datum of gage is 116.79 ft above sea level.

REMARKS.—No records computed above 200 ft^3/s. Most water released from Lake McClure (station 11269500) is diverted upstream into the main canal of Merced Irrigation District. Flow past station consists of releases from diversion dam, irrigation return flow, and tributary inflow.

COOPERATION.—Records were provided by Pacific Gas and Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	---	---	---	---	---	---	---	---	173	151	126
2	184	---	---	---	---	---	---	---	---	173	147	130
3	174	---	---	---	---	---	---	---	---	173	142	131
4	167	---	---	---	---	---	---	---	---	171	138	124
5	163	---	---	---	---	---	---	---	---	170	133	126
6	172	---	---	---	---	---	---	---	---	170	129	138
7	176	---	---	---	---	---	---	---	---	170	124	144
8	179	---	---	---	---	---	---	---	---	168	119	140
9	178	---	---	---	---	---	---	---	---	168	132	135
10	178	---	---	---	---	---	---	---	---	168	128	138
11	190	---	---	---	---	---	---	---	---	167	127	141
12	---	---	---	---	---	---	---	---	---	165	145	153
13	199	---	---	---	---	---	---	---	---	165	152	146
14	---	---	---	---	---	---	---	---	---	165	137	149
15	---	---	---	---	---	---	---	---	---	164	130	158
16	---	---	---	---	---	---	---	---	---	162	135	169
17	---	---	---	---	---	---	---	---	---	162	143	162
18	---	---	---	---	---	---	---	---	199	162	139	148
19	---	---	---	---	---	---	---	---	197	160	144	146
20	---	---	---	---	---	---	---	---	195	160	144	151
21	---	---	---	---	---	---	---	---	192	160	134	137
22	---	---	---	---	---	---	---	---	190	160	133	131
23	---	---	---	---	---	---	---	---	188	157	129	133
24	---	---	---	---	---	---	---	---	185	157	128	134
25	---	---	---	---	---	---	---	---	183	157	131	138
26	---	---	---	---	---	---	---	---	181	156	133	136
27	---	---	---	---	---	---	---	---	179	154	132	131
28	---	---	---	---	---	---	---	---	176	154	118	130
29	---	---	---	---	---	---	---	---	176	154	118	130
30	---	---	---	---	---	---	---	---	174	153	119	134
31	---	---	---	---	---	---	---	---	---	152	128	---
TOTAL	---	---	---	---	---	---	---	---	---	5050	4142	4189
MEAN	---	---	---	---	---	---	---	---	---	163	134	140
MAX	---	---	---	---	---	---	---	---	---	173	152	169
MIN	---	---	---	---	---	---	---	---	---	152	118	124
AC-FT	---	---	---	---	---	---	---	---	---	10020	8220	8310

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA

LOCATION.—Lat 37°21'04", long 120°57'39", in NE 1/4 SE 1/4 sec.4, T.7 S., R.9 E., Merced County, Hydrologic Unit 1804002, on upstream side of River Road Bridge, near right bank, just downstream from Hatfield State Park, and 1.1 river miles upstream from confluence with the San Joaquin River.

DRAINAGE AREA.—1,276 mi^2.

PERIOD OF RECORD.—April 1992 to current year. Published as "Merced River near Stevinson" (11272500) water years 1985–94.
CHEMICAL DATA: Water years 1994–95, February 1997 to September 1999, October 2000 to September 2001.
SEDIMENT DATA: Water years 1994–95, February 1997 to current year.
SPECIFIC CONDUCTANCE: April 1992 to current year.
WATER TEMPERATURE: April 1992 to current year.

PERIOD OF DAILY RECORD.—April 1992 to current year.
SPECIFIC CONDUCTANCE: April 1992 to current year.
WATER TEMPERATURE: April 1992 to current year.

INSTRUMENTATION.—Water-quality monitor since April 1992.

REMARKS.—Specific conductance records rated excellent except for Oct. 23–29, Dec. 9–20, Jan. 28, 29, May 10, 11, which are rated good; and Oct. 30 to Nov. 1, which are rated fair. Water-temperature records rated excellent except for Apr. 7 to May 11, which are rated good. Interruptions in record were due to malfunction of the recording instruments. Specific-conductance and water-temperature values are affected by irrigation return flow. Discharges based on upstream Department of Water Resources gage 11272500 (not reviewed by U.S. Geological Survey) with appropriate travel times taken into account. Chemical data for water year 2000 available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 910 microsiemens, Aug. 7, 1992; minimum recorded, 22 microsiemens, June 23, 1995.
WATER TEMPERATURE: Maximum recorded, 34.0°C, July 12, 13, 1999; minimum recorded, 4.5°C, Dec. 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 532 microsiemens, Aug.10; minimum recorded, 40 microsiemens, Oct. 24.
WATER TEMPERATURE: Maximum recorded, 32.0°C, June 22; minimum recorded, 7.0°C, Jan. 17, 18, 20.

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	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)
OCT													
	17...1200	e832	763	8.8	90.9	8.5[1]	48	17.0	--	17.4	4.49	1.50	.93
NOV													
	28...1430	e524	761	10.1	91.7	8.0[1]	88	11.0	--	--	--	--	--
DEC													
	12...1430	e325	759	8.9	77.3	7.6[1]	158	9.0	--	46.0	12.1	3.85	1.08
JAN													
	04...1150	e258	--	--	--	7.8[1]	182	--	--	--	--	--	--
	11...1020	e285	--	--	--	7.7[1]	157	10.0	--	--	--	--	--
	18...1200	e273	--	--	--	7.8[1]	166	--	--	--	--	--	--
	26...0710	e370	--	--	--	8.2[1]	77	--	--	--	--	--	--
	26...1050	e378	--	--	--	8.0[1]	83	--	--	--	--	--	--
	26...1530	e382	--	--	--	7.9[1]	85	--	--	--	--	--	--
	26...1850	e380	--	--	--	7.9[1]	83	--	--	--	--	--	--
	26...2340	e370	--	--	--	7.9[1]	96	--	--	--	--	--	--
	27...0200	e366	--	--	--	7.8[1]	95	--	--	--	--	--	--
	27...0610	e368	--	--	--	7.8[1]	95	--	--	--	--	--	--
	27...1000	e374	--	--	--	7.8[1]	104	--	--	--	--	--	--
	27...1250	e380	--	--	--	7.8[1]	110	--	--	--	--	--	--
	27...2300	e374	--	--	--	7.7[1]	122	--	--	--	--	--	--
FEB													
	01...1100	e280	--	--	--	7.9[1]	176	--	--	--	--	--	--
	08...1130	e254	--	--	--	7.1[1]	175	--	7.9	53.9	14.0	4.60	1.33
	15...1140	e316	--	--	--	7.5[1]	195	--	--	--	--	--	--
	22...0850	e263	--	--	--	7.6[1]	172	--	--	--	--	--	--
	24...2230	e285	--	--	--	7.6[1]	168	--	--	--	--	--	--
	25...0700	e285	--	--	--	7.5[1]	166	--	--	--	--	--	--
	25...1100	e287	--	--	--	7.4[1]	161	--	--	--	--	--	--
	25...1510	e292	--	--	--	7.4[1]	153	--	--	--	--	--	--
	25...1910	e298	--	--	--	7.5[1]	148	--	--	--	--	--	--
	25...2310	e306	--	--	--	7.4[1]	144	--	--	--	--	--	--
	26...0300	e334	--	--	--	7.3[1]	127	--	--	--	--	--	--
	26...1300	e389	--	--	--	7.8[1]	95	--	--	--	--	--	--
MAR													
	07...1100	e1090	762	8.9	82.6	7.9	81	12.0	--	27.3	6.45	2.70	3.71
APR													
	05...1130	--	758	8.9	90.7	7.8	220	16.0	--	63.7	16.4	5.56	1.50
	11...1250	--	--	--	--	7.5[1]	164[1]	--	--	--	--	--	--
	18...1300	--	--	--	--	7.7[1]	94[1]	--	--	--	--	--	--
	25...1150	--	--	--	--	7.9[1]	71[1]	--	--	--	--	--	--
MAY													
	02...1200	e555	--	--	--	7.7[1]	98[1]	--	--	--	--	--	--
	08...1130	e808	760	8.2	94.1	7.6	64	22.0	6.7	22.7	5.86	1.95	.68
	09...1020	e885	--	--	--	7.7[1]	57[1]	--	--	--	--	--	--
	16...1210	e1200	--	--	--	7.8[1]	49[1]	--	--	--	--	--	--
	23...1040	e420	--	--	--	7.5	181	--	--	--	--	--	--
	30...0930	e340	--	--	--	7.7[1]	176[1]	--	--	--	--	--	--
JUN													
	06...1050	e280	--	--	--	7.8[1]	213[1]	22.0	--	--	--	--	--
	08...1110	e241	759	7.7	92.0	7.5	225	24.0	9.7	64.7	16.6	5.67	1.36
	12...1130	e224	--	--	--	7.8	240	--	--	--	--	--	--
	19...0950	--	--	--	--	--	--	--	--	--	--	--	--
	20...1340	--	--	--	--	--	--	--	--	--	--	--	--
	26...1000	--	--	--	--	7.7	295	--	--	--	--	--	--
JUL													
	03...1120	e155	--	--	--	7.7	239	--	--	--	--	--	--
	10...1320	e175	--	--	--	7.7	246	--	--	--	--	--	--
	17...1030	e155	--	--	--	7.8	242	--	--	--	--	--	--
	23...1320	e136	762	7.8	97.2	7.8	292	26.5	--	81.0	20.3	7.36	1.95
	24...1200	e140	--	--	--	7.6[1]	293[1]	--	--	--	--	--	--
AUG													
	01...0840	e132	--	--	--	--	--	--	--	--	--	--	--
	07...1200	e122	--	--	--	--	--	--	--	--	--	--	--
	14...1100	e132	--	--	--	7.8	181	--	--	--	--	--	--
	16...1100	e109	759	9.1	111	7.8	468	25.0	--	--	--	--	--
	21...1150	e135	--	--	--	7.9	232	--	--	--	--	--	--
SEP													
	12...1130	e120	756	8.1	95.3	7.9	300	23.0	5.8	78.8	20.2	6.88	1.72

e Estimated.
[1] Laboratory value.

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	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)	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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT													
17...	.245	2.3	21.6	19	1.5	e.1	7.8	2.1	.0	35	32.7	<.041	.11
NOV													
28...	--	--	--	21	--	--	--	--	--	--	--	<.041	.12
DEC													
12...	.733	11.4	34.4	--	11.6	<.2	10.4	9.4	--	98	--	<.041	.14
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	.102	.38
26...	--	--	--	--	--	--	--	--	--	--	--	.102	.38
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	.743	12.5	32.9	46	10.8	<.2	9.7	10.2	.1	107	99.6	e.035	.13
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
07...	.361	4.3	22.8	30	2.8	<.2	10.2	3.3	.1	71	54.1	.069	.72
APR													
05...	.905	16.6	35.5	65	14.8	e.1	10.9	13.3	.2	126	128	e.032	.20
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	.318	3.5	24.4	16	2.9	<.2	7.9	3.0	.1	46	35.9	<.041	e.10
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	1.01	18.7	38.0	55	18.1	<.2	11.6	13.7	.2	139	128	<.040	.12
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	1.21	25.1	39.6	--	22.7	<.2	13.2	16.9	--	168	--	<.040	.22
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
12...	1.28	26.1	41.3	73	25.2	<.2	14.2	16.6	.2	171	155	--	--

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

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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 TOTAL (MG/L AS C) (00680)	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)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
OCT													
17...	.11	.109	<.006	.023	.020	.083	--	e9	30	11.4	<2.4	--	--
NOV													
28...	.38	.947	e.004	.012	e.010	.022	--	15	--	--	<2.4	--	--
DEC													
12...	.19	1.77	.020	.018	<.018	.024	--	--	50	18.7	--	<.002	<.004
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
11...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	5.5	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	.68	.705	.019	.054	.044	.123	4.8	--	--	--	--	<.002	<.004
26...	.68	.705	.019	.054	.044	.123	4.8	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
27...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
27...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
27...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
27...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
08...	.09	1.97	.016	.020	.020	.031	--	15	50	17.4	<2.4	<.002	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
22...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
MAR													
07...	1.1	.439	.014	.190	.151	.306	--	e12	130	5.1	<2.4	<.002	<.004
APR													
05...	.25	2.21	.023	.033	.025	.058	--	24	60	26.6	<2.4	<.002	<.004
11...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
25...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
08...	.21	.096	.021	.023	<.018	.075	--	--	60	7.6	--	<.002	<.004
09...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
16...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
23...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
30...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
08...	.21	2.06	.020	.029	e.015	.045	--	--	60	23.2	--	<.002	<.004
12...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
19...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
20...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
26...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
10...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
17...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
23...	.31	3.39	.036	.051	e.014	.069	--	--	40	45.3	--	<.002	<.004
24...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
31...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
07...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
14...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
SEP													
12...	--	--	--	--	--	--	--	--	30	60.5	--	--	--

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

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
JAN													
04...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.002	--	<.018	<.003	<.006
11...	<.002	<.005	<.007	<.010	<.002	e.023	<.020	--	e.003	--	<.018	e.001	<.006
18...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.006	--	<.018	<.003	<.006
26...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
26...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.002	--	<.007	<.010	<.002	e.025	<.020	--	.006	--	<.018	e.001	--
26...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.006	--	<.018	e.003	<.006
27...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.008	--	<.018	e.001	<.006
27...	<.002	<.005	<.007	<.010	<.002	<.040	<.020	--	.008	--	<.018	e.001	<.006
27...	<.002	<.005	e.002	<.010	<.002	e.031	<.020	--	.009	--	<.018	e.001	<.006
27...	<.002	<.005	e.002	<.010	<.002	<.040	<.020	--	.010	--	<.018	e.001	<.006
27...	<.005	<.005	e.004	<.010	<.002	<.050	<.020	--	.016	--	<.018	e.001	<.006
FEB													
01...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
08...	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--	e.002	--	<.018	<.003	<.006
15...	<.002	<.005	e.005	<.010	<.002	e.003	<.020	--	.012	--	<.018	<.003	<.006
22...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.02	e.002	<.01	<.018	<.003	<.006
25...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--	<.018	<.003	<.006
25...	<.002	<.005	e.001	<.010	<.002	<.041	<.020	<.02	e.003	<.01	<.018	<.003	<.006
25...	<.002	<.005	e.004	<.010	<.002	<.041	<.020	--	e.002	--	<.018	<.003	e.002
25...	<.002	<.005	.013	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
26...	<.002	<.005	.008	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
26...	<.002	<.005	.021	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
MAR													
07...	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	.016	--	<.018	<.003	<.006
APR													
05...	<.002	<.005	e.013	<.010	<.002	e.007	<.020	--	<.005	--	<.018	<.003	<.006
11...	<.002	<.005	<.007	<.010	<.002	e.010	<.020	--	<.005	--	<.018	<.003	<.006
18...	<.002	<.005	<.007	<.010	<.002	e.009	<.020	--	<.005	--	<.018	<.003	<.006
25...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
MAY													
02...	<.002	<.005	e.001	<.010	<.005	e.006	<.020	--	e.004	--	<.018	e.002	<.006
08...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
09...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
16...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.005	--	<.018	<.003	<.006
23...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--	<.018	<.003	<.006
30...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--	<.018	<.003	<.006
JUN													
06...	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
08...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
12...	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.002
19...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
20...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.025	--	<.018	<.003	<.006
26...	<.002	<.005	<.007	<.010	e.001	e.002	<.020	--	e.002	--	<.018	<.003	<.006
JUL													
03...	<.002	<.005	<.007	<.010	<.002	e.017	<.020	--	e.005	--	<.018	<.003	<.006
10...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.008	--	<.018	<.003	<.006
17...	<.002	<.005	<.007	<.010	<.002	e.001	<.020	--	.013	--	<.018	<.003	<.006
23...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.005	--	<.018	<.003	<.006
24...	<.002	<.005	<.007	<.010	<.002	e.006	<.020	--	e.005	--	<.018	<.003	<.006
31...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	e.012	<.003	<.006
AUG													
01...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
07...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
14...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.009	--	<.018	<.003	<.006
SEP													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	DEF TOTAL (UG/L) (39040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHO-PROP WATER FLTRD 0.7 U GF, REC 82672)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
JAN													
04...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
11...	--	.021	--	<.005	<.021	<.005	<.009	--	<.005	--	<.003	<.004	<.035
18...	--	.016	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	.013	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	.014	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	.050	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	.095	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
27...	--	.044	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
27...	--	.047	--	<.005	<.021	e.002	<.009	--	<.005	--	<.003	<.004	<.035
27...	--	.276	--	<.005	<.021	.007	<.009	--	<.005	--	<.003	<.007	<.035
27...	--	.413	--	<.005	<.021	.009	<.009	--	<.005	--	<.003	<.015	<.035
27...	--	.435	--	<.005	<.021	.007	<.009	--	<.005	--	<.003	<.015	<.035
FEB													
01...	--	.043	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
08...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
15...	--	.068	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
22...	--	e.004	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.02	e.004	<.02	<.005	<.021	<.002	<.009	<.01	<.005	<.01	<.003	<.004	<.035
25...	--	e.004	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
25...	<.02	.006	M	<.005	<.021	<.002	<.009	<.01	<.005	<.01	<.003	<.004	<.035
25...	--	.016	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
25...	--	.043	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	.037	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	.025	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
MAR													
07...	--	.013	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
APR													
05...	--	e.002	--	<.005	<.021	e.002	<.009	--	<.005	--	<.003	<.004	<.035
11...	--	<.005	--	<.005	<.021	e.004	<.009	--	<.005	--	<.003	<.004	<.035
18...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
25...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
MAY													
02...	--	<.005	--	<.005	<.021	e.002	<.009	--	<.005	--	<.003	<.004	<.035
08...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
09...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
16...	--	e.002	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
23...	--	<.005	--	<.005	<.021	.011	<.009	--	<.005	--	<.003	<.004	<.035
30...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
JUN													
06...	--	<.005	--	<.005	<.021	.002	<.009	--	<.005	--	<.003	<.004	<.035
08...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
12...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
19...	--	<.005	--	<.005	<.021	.003	<.009	--	<.005	--	<.003	<.004	<.035
20...	--	.007	--	<.005	<.021	.002	<.009	--	<.005	--	<.003	<.004	<.035
26...	--	<.005	--	<.005	<.021	.006	<.009	--	<.005	--	<.003	<.004	<.035
JUL													
03...	--	<.005	--	<.005	<.021	.004	<.009	--	<.005	--	<.003	<.004	<.035
10...	--	<.005	--	<.005	<.021	.003	<.009	--	<.005	--	<.003	<.004	<.035
17...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
23...	--	<.005	--	<.005	<.021	e.002	<.009	--	<.005	--	<.003	<.004	<.035
24...	--	<.005	--	<.005	<.021	e.002	<.009	--	<.005	--	<.003	<.004	<.035
31...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
AUG													
01...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
07...	--	e.004	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
14...	--	<.005	--	<.005	<.021	<.002	<.009	--	<.005	--	<.003	<.004	<.035
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.005	--	<.005	<.021	.014	<.009	--	<.005	--	<.003	<.004	<.035
SEP													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MALATHION, DISSOLVED (UG/L) (39532)	MALATHION, TOTAL (UG/L) (39530)	AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION, TOTAL (UG/L) (39600)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PARATHION, TOTAL (UG/L) (39540)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	e.006	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
JAN													
04...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
11...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	e.006	<.003	<.007	--	<.002
18...	<.027	--	<.050	--	<.006	e.001	<.006	<.002	<.007	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	.013	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	.016	<.003	<.007	--	<.002
27...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	.015	<.003	<.007	--	<.002
27...	<.027	--	<.050	--	<.006	e.004	<.006	<.002	.013	<.003	<.007	--	<.002
27...	<.027	--	<.050	--	<.006	.015	<.006	<.002	.013	<.003	<.007	--	<.002
27...	<.027	--	<.050	--	<.006	.024	<.006	<.002	.011	<.003	<.007	--	<.002
27...	<.027	--	<.050	--	<.006	.017	<.006	<.002	.010	<.003	<.007	--	<.002
FEB													
01...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
08...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	e.005	<.003	<.007	--	<.002
15...	<.027	--	<.050	--	<.006	e.002	<.006	<.002	e.006	<.003	<.007	--	<.002
22...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.027	<.06	<.050	<.01	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.01	<.002
25...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
25...	<.027	<.03	<.050	<.01	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.01	<.002
25...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
25...	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002
MAR													
07...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	.008	<.003	<.007	--	<.002
APR													
05...	<.027	--	<.050	--	<.006	e.001	<.006	<.002	<.007	<.003	<.007	--	<.002
11...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
18...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002
25...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
MAY													
02...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002
08...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
09...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
16...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
23...	<.027	--	<.050	--	<.006	e.002	<.006	.003	<.007	<.003	<.007	--	<.002
30...	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002
JUN													
06...	<.027	--	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002
08...	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002
12...	<.027	--	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002
19...	<.027	--	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002
20...	<.027	--	<.050	--	<.006	e.005	<.006	e.001	<.007	<.003	<.007	--	<.002
26...	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002
JUL													
03...	<.027	--	e.007	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002
10...	<.027	--	<.050	--	<.006	.026	<.006	.005	<.007	<.003	<.007	--	<.002
17...	<.027	--	<.050	--	<.006	e.009	<.006	<.002	<.007	<.003	<.007	--	<.002
23...	e.005	--	<.050	--	<.006	e.009	<.006	<.002	<.007	<.003	<.007	--	<.002
24...	e.003	--	<.050	--	<.006	.015	<.006	<.002	<.007	<.003	<.007	--	<.002
31...	<.027	--	<.050	--	<.006	e.007	<.006	<.002	<.007	<.003	<.007	--	<.002
AUG													
01...	<.027	--	<.050	--	<.006	e.010	<.006	<.002	<.007	<.003	<.007	--	<.002
07...	<.027	--	<.050	--	<.006	e.006	<.006	<.002	<.007	<.003	<.007	--	<.002
14...	<.027	--	<.050	--	<.006	.019	<.006	<.002	<.007	<.003	<.007	--	<.002
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	e.004	--	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002
SEP													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
JAN													
04...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017
11...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.082	<.016	<.034	<.017
18...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.018	<.016	<.034	<.017
26...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
26...	.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.101	<.016	<.034	<.017
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.068	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.168	<.016	<.034	<.017
26...	.071	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.208	<.016	--	<.017
27...	.085	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.286	<.016	<.034	<.017
27...	.067	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.473	<.016	<.034	<.017
27...	.070	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	1.65	<.016	<.034	<.017
27...	.079	<.006	--	<.011	e.001	<.004	<.010	<.011	<.023	2.47	<.016	<.034	<.017
27...	.049	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	3.76	<.016	<.034	<.017
FEB													
01...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.231	<.016	<.034	<.017
08...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.016	<.016	<.034	<.017
15...	.014	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.805	<.016	<.034	<.017
22...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.023	<.016	<.034	<.017
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	e.008	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023	.051	<.016	<.034	<.017
25...	e.008	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.060	<.016	<.034	<.017
25...	e.007	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023	.060	<.016	<.034	<.017
25...	e.008	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.309	<.016	<.034	<.017
25...	.019	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.807	<.016	<.034	<.017
26...	.022	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.634	<.016	<.034	<.017
26...	.014	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	2.26	<.016	<.034	<.017
MAR													
07...	.011	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	.926	<.016	<.034	<.017
APR													
05...	e.011	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017
11...	.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017
18...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017
25...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.008	<.016	<.034	<.017
MAY													
02...	e.045	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.003	<.016	<.034	<.017
08...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
09...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
16...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
23...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
30...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.004	<.016	<.034	<.017
JUN													
06...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.003	<.016	<.034	<.017
08...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
12...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017
19...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.084	e.005	<.016	<.034	<.017
20...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.100	e.004	<.016	<.034	<.017
26...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.003	<.016	<.034	<.017
JUL													
03...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.098	e.004	<.016	<.034	<.017
10...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.063	e.005	<.016	<.034	<.017
17...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.011	e.004	<.016	<.034	<.017
23...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	e.004	<.016	<.034	<.017
24...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.022	e.005	<.016	<.034	<.017
31...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.028	<.011	<.016	<.034	<.017
AUG													
01...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.025	<.011	<.016	<.034	<.017
07...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017
14...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023	M	<.016	<.034	<.017
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.025	e.004	<.016	<.034	<.017
SEP													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT			
17...	--	--	--
NOV			
28...	--	--	--
DEC			
12...	<.005	<.002	<.009
JAN			
04...	<.005	<.002	<.009
11...	<.005	<.002	e.001
18...	<.005	<.002	<.009
26...	<.005	<.002	<.009
26...	<.005	<.002	<.009
26...	--	--	--
26...	--	--	--
27...	<.005	<.002	<.009
27...	<.005	<.002	<.009
27...	<.005	<.002	<.009
27...	<.005	<.002	<.009
27...	<.005	<.002	<.009
FEB			
01...	<.005	<.002	<.009
08...	<.005	<.002	<.009
15...	<.005	<.002	<.009
22...	<.005	<.002	e.003
24...	--	--	--
25...	<.005	<.002	e.003
25...	<.005	<.002	e.003
25...	<.005	<.002	e.003
25...	<.005	<.002	<.009
25...	<.005	<.002	<.009
26...	<.005	<.002	<.009
26...	<.005	<.002	<.009
MAR			
07...	<.005	<.002	e.003
APR			
05...	<.005	<.002	<.009
11...	<.005	<.002	<.009
18...	<.005	<.002	<.009
25...	<.005	<.002	<.009
MAY			
02...	<.005	<.002	<.009
08...	<.005	<.002	<.009
09...	<.005	<.002	<.009
16...	<.005	<.002	<.009
23...	<.005	<.002	e.003
30...	<.005	<.002	e.003
JUN			
06...	<.005	<.002	e.002
08...	<.005	<.002	<.009
12...	<.005	<.002	e.005
19...	<.005	<.002	e.006
20...	<.005	<.002	e.003
26...	<.005	<.002	.009
JUL			
03...	<.005	<.002	<.009
07...	<.005	<.002	<.009
10...	<.005	<.002	.017
17...	<.005	<.002	e.005
23...	<.005	<.002	e.003
24...	<.005	<.002	e.003
31...	<.005	<.002	e.007
AUG			
01...	<.005	<.002	<.009
07...	<.005	<.002	<.009
14...	<.005	<.002	<.009
16...	--	--	--
21...	<.005	<.002	<.009
SEP			
12...	--	--	--

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

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

CROSS-SESCTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC-ATION, (FEET) (81903)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL					
18...*	1515	1.50	334	27.5	95.0
18...*	1516	1.50	334	27.5	85.0
18...*	1517	1.50	335	27.5	75.0
18...*	1518	1.50	335	28.0	65.0
18...*	1519	2.00	335	28.0	55.0
18...*	1520	2.00	335	28.0	45.0
18...*	1521	2.00	335	28.0	35.0
18...*	1522	2.00	335	28.0	25.0
18...*	1523	2.00	335	28.0	15.0
18...*	1524	2.00	334	28.0	5.00

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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						
17..N	1200	e832	17.0	39	e88	54
NOV						
28..N	1430	e524	11.0	8	e11	85
DEC						
12..N	1430	e325	9.0	4	e3.5	63
JAN						
11..N	1030	e285	10.0	10	e7.7	90
FEB						
08..N	1130	e254	--	4	e2.7	91
MAR						
07..N	1100	e1090	12.0	69	e202	86
APR						
05..N	1130	--	16.0	12	--	64
MAY						
08..N	1130	e808	22.0	25	e55	53
JUN						
08..N	1110	e241	24.0	9	e5.8	78
JUL						
23..N	1320	e136	26.5	7	e2.6	76
AUG						
16..N	1100	e109	25.0	17	e5.0	79
SEP						
12..N	1130	e120	23.0	9	e2.9	80

* Instantaneous discharge at time of cross-sectional measurement: 152 ft^3/s.

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

e estimated.

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	258	238	72	66	106	91	162	149	174	168	192	171
2	259	212	74	69	157	106	---	---	170	166	171	120
3	283	201	88	73	---	---	167	159	170	168	---	---
4	293	244	100	88	---	---	184	168	169	164	---	132
5	256	233	102	93	---	---	179	175	172	169	---	---
6	262	242	98	90	---	---	178	174	181	172	139	82
7	256	227	90	77	---	---	183	175	182	178	89	79
8	237	183	81	78	---	136	---	---	179	172	104	89
9	195	165	86	81	158	149	---	---	189	172	146	104
10	165	144	89	86	164	152	---	---	---	168	171	131
11	162	142	91	85	165	78	---	---	---	---	175	153
12	156	142	88	86	160	148	---	---	145	83	207	176
13	152	120	91	88	155	125	---	---	117	80	221	207
14	159	120	92	88	133	128	---	---	177	117	237	196
15	181	159	90	88	133	124	---	---	203	180	220	209
16	173	63	91	90	137	124	174	168	198	189	215	200
17	65	44	93	89	145	136	172	162	188	180	204	200
18	44	41	92	87	145	143	164	152	185	178	204	193
19	43	41	92	86	164	144	154	148	181	177	221	191
20	47	41	91	83	167	141	157	152	178	165	198	183
21	51	46	86	79	167	150	---	155	---	164	198	184
22	58	47	87	83	167	156	177	156	173	167	252	181
23	60	46	88	79	166	153	161	157	167	163	182	164
24	54	40	86	81	160	151	161	148	162	152	214	172
25	48	42	86	81	158	150	147	91	162	139	217	162
26	51	42	87	86	156	149	94	76	139	91	170	150
27	47	43	87	81	156	149	122	91	192	118	199	160
28	49	43	89	85	158	138	150	122	195	180	196	140
29	55	49	93	86	138	137	170	151	---	---	155	131
30	57	51	95	90	143	135	171	170	---	---	195	139
31	76	55	---	---	158	145	173	171	---	---	221	178
MONTH	293	40	102	66	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	209	197	93	78	219	162	332	300	343	282	353	257
2	204	168	106	86	203	164	303	205	394	322	290	237
3	234	177	102	88	216	194	365	223	364	310	313	277
4	296	234	133	89	212	170	398	315	417	361	382	283
5	296	148	116	95	208	169	381	275	416	330	446	346
6	152	131	120	84	236	193	335	295	356	292	463	372
7	146	115	98	66	246	199	335	268	366	292	422	302
8	151	138	76	---	237	222	272	257	402	334	360	291
9	154	134	68	50	321	235	268	187	382	355	311	256
10	152	129	60	50	310	214	310	190	532	362	300	214
11	192	152	59	47	263	211	327	304	399	310	354	255
12	171	153	55	47	253	217	321	277	396	351	354	298
13	167	148	53	48	325	233	342	290	352	206	314	271
14	210	148	54	49	268	210	400	315	251	200	315	241
15	214	139	53	49	275	210	404	330	402	241	405	259
16	192	151	56	49	322	260	330	246	497	346	259	229
17	175	155	62	50	---	315	351	266	375	283	246	216
18	175	87	66	54	349	297	387	334	306	255	250	200
19	93	69	96	66	387	296	389	334	306	271	297	224
20	82	62	119	85	394	328	436	350	291	257	295	253
21	72	60	122	95	379	336	392	310	352	241	316	260
22	68	61	---	---	421	358	393	319	383	350	316	276
23	96	68	---	---	462	384	322	255	371	297	346	291
24	73	61	---	---	466	302	383	252	322	250	428	315
25	75	64	---	118	379	329	463	343	376	322	397	289
26	78	61	151	136	337	301	388	338	381	291	316	220
27	78	64	172	151	306	260	378	341	336	295	282	215
28	76	60	178	---	373	258	341	307	384	288	298	254
29	114	76	196	---	351	297	350	337	408	371	298	271
30	107	77	195	147	333	297	350	246	392	345	274	238
31	---	---	191	151	---	---	309	246	398	309	---	---
MONTH	296	60	---	---	---	162	463	187	532	200	463	200

11273500 MERCED RIVER AT RIVER ROAD BRIDGE, NEAR NEWMAN, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.5	20.5	14.5	13.5	11.0	10.0	9.0	8.0	10.0	8.5	14.0	11.5
2	24.0	21.0	15.0	13.5	11.0	9.5	9.5	8.0	11.0	8.5	14.0	12.5
3	23.0	20.0	15.0	13.5	11.0	10.5	9.0	7.5	11.5	9.0	13.0	12.0
4	22.5	19.5	15.5	13.5	11.0	10.5	9.5	7.5	12.0	9.5	12.5	12.0
5	22.5	19.0	15.0	14.0	11.0	10.5	9.0	7.5	13.0	10.0	13.0	11.5
6	23.0	19.5	15.0	13.5	11.0	10.0	9.0	7.5	13.0	11.0	12.5	11.5
7	22.5	19.5	14.5	13.0	11.5	10.5	9.0	7.5	11.5	9.5	13.5	11.0
8	22.0	19.0	14.5	12.5	12.0	10.5	10.0	9.0	11.0	8.5	15.0	12.5
9	21.5	19.0	14.0	12.5	12.0	10.5	10.0	9.0	10.5	9.5	14.5	12.5
10	19.5	18.0	13.0	12.0	12.5	11.5	9.5	9.0	10.5	9.0	15.0	12.0
11	18.5	17.5	13.0	11.5	12.5	11.5	10.0	9.0	11.0	9.0	16.0	13.0
12	18.5	16.5	12.0	10.5	12.5	11.5	11.0	9.5	10.5	8.5	16.5	13.0
13	18.5	16.5	11.5	10.0	11.5	10.5	11.0	9.5	9.0	8.0	17.0	13.5
14	19.0	16.5	11.5	10.0	12.0	11.0	---	---	10.5	8.0	17.5	14.0
15	19.5	17.0	11.0	9.5	13.0	12.0	10.0	8.0	11.0	8.5	16.5	14.5
16	19.0	17.0	12.0	10.5	12.5	11.5	9.5	7.5	12.0	9.0	17.5	14.0
17	18.0	16.5	11.5	10.0	12.0	10.5	9.0	7.0	11.0	10.0	18.0	14.5
18	17.5	16.0	11.5	9.5	11.0	10.0	9.0	7.0	13.0	10.5	19.0	15.5
19	17.0	16.0	11.0	9.5	11.0	9.5	9.0	8.0	13.5	11.5	20.0	16.0
20	17.0	16.0	11.0	9.0	10.5	9.5	9.0	7.0	13.0	11.5	20.5	17.5
21	16.5	15.0	11.0	9.5	10.5	9.0	9.0	7.5	13.5	11.5	20.5	17.5
22	15.5	14.0	11.0	10.0	11.0	9.5	10.5	8.0	13.5	11.5	21.0	18.0
23	15.0	14.0	11.0	10.0	10.5	9.0	10.5	9.0	13.5	11.0	21.0	17.5
24	15.0	14.0	11.0	10.0	11.0	9.5	11.5	10.0	12.5	11.0	21.5	18.0
25	15.0	14.5	11.0	10.5	10.0	8.5	10.5	9.0	13.5	10.5	20.5	18.5
26	14.5	14.0	11.0	11.0	9.5	8.0	11.0	9.0	13.5	11.5	20.0	17.0
27	14.5	14.0	11.0	11.0	9.5	8.0	10.5	9.0	14.0	12.0	20.0	16.5
28	14.5	14.0	11.0	10.5	9.5	8.0	10.5	8.5	14.0	11.5	21.5	17.5
29	15.0	14.0	11.0	10.0	9.5	8.0	11.0	9.0	---	---	21.0	17.5
30	14.5	13.5	11.5	10.0	9.0	7.5	10.5	8.5	---	---	21.5	17.5
31	14.5	13.5	---	---	9.0	7.5	10.5	8.5	---	---	22.0	18.0
MONTH	24.5	13.5	15.5	9.0	13.0	7.5	---	---	14.0	8.0	22.0	11.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	22.0	18.5	20.5	18.5	28.0	24.5	29.5	24.0	29.5	23.5	27.5	22.5
2	20.0	17.5	19.5	17.0	27.0	23.5	29.5	24.5	29.0	23.5	28.0	23.5
3	19.0	15.5	20.0	17.0	25.0	22.0	31.0	25.5	28.5	23.5	28.0	23.5
4	19.0	15.0	21.0	17.5	25.5	21.0	29.0	25.5	28.5	23.0	28.5	23.5
5	19.0	15.0	21.5	18.0	25.5	21.5	31.0	24.0	29.0	22.5	27.5	22.5
6	17.5	15.5	22.5	19.0	25.5	21.5	29.0	25.0	29.0	23.0	25.5	21.0
7	16.5	14.5	23.0	20.0	27.0	22.0	31.0	25.0	30.0	24.0	25.5	21.0
8	16.0	13.5	22.5	21.0	27.5	23.0	30.5	25.0	31.5	25.0	26.0	21.0
9	17.0	13.5	22.0	20.0	27.0	22.5	29.5	25.0	30.5	25.0	25.5	21.5
10	17.5	13.5	20.5	19.0	27.0	22.0	29.0	24.5	28.5	23.0	25.5	21.0
11	17.0	15.0	20.0	19.0	26.5	22.5	29.0	23.5	28.5	22.5	25.5	21.0
12	18.0	14.0	19.5	18.5	27.0	22.5	28.0	22.5	28.5	22.5	26.0	21.0
13	18.5	15.0	19.0	18.0	25.0	22.0	28.5	22.5	27.5	22.5	25.5	21.0
14	19.0	15.0	18.0	17.0	27.5	21.5	29.0	23.0	28.0	22.5	26.0	21.5
15	19.5	15.5	18.5	17.0	29.0	23.0	28.5	22.5	28.5	22.5	26.0	22.0
16	20.5	16.5	19.0	17.5	29.5	24.0	27.5	22.5	28.5	22.5	25.5	21.5
17	21.0	17.0	19.5	18.0	29.5	24.0	28.0	22.0	28.5	23.0	25.0	21.0
18	21.0	17.5	20.5	18.5	29.5	24.0	28.5	22.5	29.0	23.5	25.5	21.5
19	19.0	17.5	22.5	19.5	30.5	24.0	29.5	23.0	28.5	23.0	25.5	22.0
20	17.5	14.5	24.0	20.5	30.5	24.0	28.5	22.0	28.0	23.0	25.0	21.5
21	14.5	13.5	26.0	22.0	31.0	25.0	28.0	22.0	27.5	22.5	25.0	21.0
22	15.0	13.0	26.5	22.5	32.0	25.0	28.0	21.5	27.5	21.5	25.0	21.0
23	16.5	14.5	26.5	23.0	30.5	24.5	29.0	23.0	27.0	21.5	24.0	21.0
24	18.0	16.0	26.5	22.5	28.5	22.5	30.0	24.5	27.5	22.5	23.0	20.0
25	19.0	17.0	26.5	22.5	27.0	21.5	29.5	24.0	28.0	21.5	24.0	20.0
26	19.0	18.0	26.5	22.5	28.0	21.5	30.0	24.0	28.5	22.5	23.5	20.0
27	19.0	17.5	25.0	21.5	27.5	23.0	29.5	24.0	28.5	23.0	24.5	20.5
28	18.0	17.0	25.0	21.0	28.0	22.5	30.0	24.0	29.0	23.5	23.0	19.5
29	19.0	16.5	25.5	21.5	28.5	22.5	30.5	24.0	28.0	23.0	23.0	19.0
30	20.0	17.5	26.5	22.0	30.0	23.5	28.5	23.5	27.0	22.5	24.0	19.5
31	---	---	28.0	23.5	---	---	28.5	22.5	27.0	21.5	---	---
MONTH	22.0	13.0	28.0	17.0	32.0	21.0	31.0	21.5	31.5	21.5	28.5	19.0

11274000 SAN JOAQUIN RIVER NEAR NEWMAN, CA

LOCATION.—Lat 37°21'02", long 120°58'34", in NW 1/4 SW 1/4 sec.3, T.7 S., R.9 E., Stanislaus County, Hydrologic Unit 18040002, on left bank, 600 ft downstream from bridge on Hills Ferry Road, 650 ft downstream from Merced River, and 3.5 mi northeast of Newman.

DRAINAGE AREA.—9,520 mi^2.

PERIOD OF RECORD.—April 1912 to current year. Water years 1938–43 include flows through Merced River Slough.
CHEMICAL DATA: Water year 1993.
SPECIFIC CONDUCTANCE: Water years 1989, 1992–95.
TEMPERATURE: Water years 1989, 1992–95.
SEDIMENT DATA: Water year 1993.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level. Prior to Mar. 3, 1931, gage at various sites within 240 ft of bridge. Mar. 3, 1931, to Sept. 30, 1959, water-stage recorder within 300 ft of bridge, at datum 47.31 ft higher. Oct. 1, 1959, to Aug. 9, 1960, water-stage recorder at site 70 ft upstream, at present datum.

REMARKS.—Records fair. Natural flow of stream affected by storage reservoirs, ground-water withdrawals, diversions for irrigation, and imported water; low flows consist mainly of return water from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge (river only), 36,200 ft^3/s, Jan. 28, 1997, elevation, 66.14 ft; minimum daily, 15 ft^3/s, Aug. 9, 10, 1924. Maximum discharge (including flow in Merced River Slough in water years 1938–43), 33,000 ft^3/s, Mar. 7, 1938.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 2, 1868, reached a stage of 69.0 ft, from floodmarks; flood of February 1886 reached a stage of 67.1 ft, from floodmarks; and flood of 1911 reached a stage of 66.3 ft, from floodmarks. All stages referred to current datum. Discharges unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	1360	902	691	905	1310	769	992	608	385	415	323
2	348	1320	865	677	863	1240	782	940	571	414	395	347
3	347	1230	815	664	836	1190	764	858	551	394	379	340
4	345	1150	804	637	839	1220	743	840	581	382	358	299
5	370	1060	798	622	842	1350	758	835	614	382	359	265
6	375	1010	787	621	834	2000	777	843	594	379	389	260
7	399	1010	775	631	821	2510	766	910	583	403	370	275
8	439	994	774	668	793	2740	769	1040	552	415	343	277
9	481	978	763	725	776	2620	848	1130	514	440	323	311
10	548	955	752	793	792	2270	894	1330	517	432	312	328
11	613	943	743	907	842	1900	883	1420	506	426	324	294
12	701	931	752	1030	926	1660	877	1440	492	446	330	283
13	811	923	763	1080	1080	1520	855	1480	485	447	356	268
14	811	909	755	1060	1100	1450	814	1520	478	441	371	278
15	754	887	757	1030	1050	1390	802	1530	470	433	351	281
16	875	880	751	974	958	1340	784	1560	462	444	344	280
17	1130	876	745	928	892	1260	744	1550	439	419	343	286
18	1200	857	731	886	865	1180	768	1380	440	406	385	289
19	1230	847	726	859	855	1090	810	1130	428	416	398	281
20	1140	852	726	830	859	1030	1070	956	441	406	418	280
21	1060	861	724	817	862	977	1410	873	426	409	398	269
22	1130	861	723	806	869	955	1600	777	393	434	384	270
23	1460	859	722	794	897	920	1790	738	382	443	387	265
24	1470	875	722	791	981	878	1800	721	395	449	402	262
25	1450	888	722	831	1120	866	1740	694	399	430	386	278
26	1470	889	726	1000	1370	885	1660	685	404	388	385	313
27	1590	897	724	1140	1470	877	1610	679	415	396	389	299
28	1540	902	720	1160	1440	897	1490	720	417	413	374	293
29	1470	898	715	1070	---	901	1140	687	419	383	333	309
30	1420	902	707	989	---	843	1030	672	396	409	318	318
31	1350	---	701	944	---	789	---	654	---	411	314	---
TOTAL	28654	28804	23390	26655	26737	42058	31547	31584	14372	12875	11333	8721
MEAN	924	960	755	860	955	1357	1052	1019	479	415	366	291
MAX	1590	1360	902	1160	1470	2740	1800	1560	614	449	418	347
MIN	327	847	701	621	776	789	743	654	382	379	312	260
AC-FT	56840	57130	46390	52870	53030	83420	62570	62650	28510	25540	22480	17300

11274000 SAN JOAQUIN RIVER NEAR NEWMAN, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1937, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	290	362	796	1857	3623	3223	3395	5010	5490	1888	328	209
MAX	1422	1233	2907	8356	11840	13000	11780	14210	15700	8803	1370	442
(WY)	1919	1928	1923	1914	1916	1916	1916	1916	1922	1914	1914	1936
MIN	55.0	85.5	136	228	278	233	122	115	92.5	29.1	21.3	26.7
(WY)	1914	1932	1913	1918	1913	1913	1931	1931	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1912 - 1937	
ANNUAL MEAN	2208	
HIGHEST ANNUAL MEAN	6585	1916
LOWEST ANNUAL MEAN	196	1931
HIGHEST DAILY MEAN	20700	Jan 27 1914
LOWEST DAILY MEAN	15	Aug 9 1924
ANNUAL SEVEN-DAY MINIMUM	17	Aug 4 1924
MAXIMUM PEAK FLOW	20700	Jan 27 1914
MAXIMUM PEAK STAGE	65.30	Jan 27 1914
ANNUAL RUNOFF (AC-FT)	1599000	
10 PERCENT EXCEEDS	7040	
50 PERCENT EXCEEDS	590	
90 PERCENT EXCEEDS	112	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1943, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	447	494	1558	3378	7512	10070	7308	8025	9334	3383	686	482
MAX	708	1065	2832	5111	14350	23500	11480	15310	21010	8625	1745	768
(WY)	1939	1939	1938	1942	1938	1938	1938	1938	1938	1938	1938	1938
MIN	226	190	423	1967	2442	679	959	627	333	234	225	278
(WY)	1940	1940	1940	1939	1939	1939	1939	1939	1939	1939	1939	1939

SUMMARY STATISTICS	WATER YEARS 1938 - 1943	
ANNUAL MEAN	4366	
HIGHEST ANNUAL MEAN	8643	1938
LOWEST ANNUAL MEAN	904	1939
HIGHEST DAILY MEAN	33000	Mar 7 1938
LOWEST DAILY MEAN	170	Nov 9 1939
ANNUAL SEVEN-DAY MINIMUM	171	Nov 8 1939
MAXIMUM PEAK FLOW	33000	Mar 7 1938
MAXIMUM PEAK STAGE	65.81	Mar 7 1938
ANNUAL RUNOFF (AC-FT)	3163000	
10 PERCENT EXCEEDS	11900	
50 PERCENT EXCEEDS	1580	
90 PERCENT EXCEEDS	291	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	713	672	1206	2350	3233	3111	2938	2800	2164	993	517	620
MAX	5831	4039	10880	24920	21100	24170	18860	14050	15280	11320	2683	3786
(WY)	1984	1984	1983	1997	1983	1983	1983	1983	1983	1983	1983	1983
MIN	25.2	122	202	230	180	212	159	141	48.7	45.9	80.4	41.2
(WY)	1978	1978	1950	1991	1991	1948	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1944 - 2001	
ANNUAL TOTAL	468590		286730			
ANNUAL MEAN	1280		786		1767	
HIGHEST ANNUAL MEAN					11620	1983
LOWEST ANNUAL MEAN					200	1961
HIGHEST DAILY MEAN	6500	Mar 2	2740	Mar 8	36000	Jan 28 1997
LOWEST DAILY MEAN	327	Oct 1	260	Sep 6	20	Oct 26 1977
ANNUAL SEVEN-DAY MINIMUM	340	Sep 28	272	Sep 19	23	Oct 7 1977
MAXIMUM PEAK FLOW			2780	Mar 8	36200	Jan 28 1997
MAXIMUM PEAK STAGE			53.97	Mar 8	66.14	Jan 28 1997
INSTANTANEOUS LOW FLOW					15	Aug 9 1924
ANNUAL RUNOFF (AC-FT)	929400		568700		1280000	
10 PERCENT EXCEEDS	3300		1370		4150	
50 PERCENT EXCEEDS	752		769		603	
90 PERCENT EXCEEDS	434		337		221	

11274500 ORESTIMBA CREEK NEAR NEWMAN, CA

LOCATION.—Lat 37°18'56", long 121°07'27", in NE 1/4 NE 1/4 sec.19, T.7 S., R.8 E., Stanislaus County, Hydrologic Unit 18040002, on right bank, 20 ft downstream from bridge at California Aqueduct Siphon, 3 mi downstream from Oso Creek, and 5.5 mi west of Newman.

DRAINAGE AREA.—134 mi^2.

PERIOD OF RECORD.—January 1932 to current year.

REVISED RECORDS.—WSP 1445: 1932(M), 1938(P), 1940–41(M), 1945, 1951(M). WSP 1930: Drainage area, WDR CA-95-3: 1986(M).

GAGE.—Water-stage recorder. Datum of gage is 216.01 ft above sea level. Prior to Oct. 1, 1958, at site 1,080 ft downstream at datum 24.14 ft lower. Oct. 1, 1958, to Aug. 13, 1969, at site 960 ft downstream at datum 27.14 ft lower. Aug. 13, 1969, to Feb. 6, 1984, at site 240 ft upstream, present datum.

REMARKS.—Records fair. No storage or diversion upstream from station except for minor stock ponds.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,000 ft^3/s, Mar. 10, 1995, gage height, 9.51 ft, from rating curve extended above 4,000 ft^3/s, on basis of critical depth measurement; no flow for all or parts of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s (revised), or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	1915	513	4.11	Mar. 5	1015	958	4.64

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	8.8	.92	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	7.7	.65	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	6.0	.46	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	43	.43	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	606	.44	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	174	.48	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	75	.99	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	40	1.1	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	26	1.1	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	19	.65	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	14	.48	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	14	11	.38	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	16	9.2	.08	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	7.2	7.8	.02	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	2.1	6.8	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.60	5.9	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.03	5.0	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	4.3	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.23	3.8	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	2.8	3.4	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	4.5	3.1	.30	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	4.0	2.7	1.5	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	9.5	2.5	.75	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	179	2.2	.36	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	189	1.8	.06	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	62	1.7	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	27	1.7	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	14	1.6	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	1.4	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	1.1	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.95	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	531.96	1097.45	11.15	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	19.0	35.4	.37	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	189	606	1.5	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	1060	2180	22	.00	.00	.00	.00	.00

11274500 ORESTIMBA CREEK NEAR NEWMAN, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.91	11.3	45.4	87.0	48.8	21.9	3.33	.68	.12	.001	.000
MAX	.000	31.0	181	432	818	345	362	46.9	15.1	5.32	.045	.000
(WY)	1933	1951	1956	1997	1998	1995	1958	1983	1941	1941	1958	1932
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1933	1933	1933	1936	1935	1933	1933	1933	1932	1932	1932	1932

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL TOTAL	4208.28		1640.56			
ANNUAL MEAN	11.5		4.49		17.9	
HIGHEST ANNUAL MEAN					89.4	1983
LOWEST ANNUAL MEAN					.000	1947
HIGHEST DAILY MEAN	1040	Feb 14	606	Mar 5	4550	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	May 9 1932
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	May 9 1932
MAXIMUM PEAK FLOW			958	Mar 5	12000	Mar 10 1995
MAXIMUM PEAK STAGE			4.64	Mar 5	9.51	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	8350		3250		12990	
10 PERCENT EXCEEDS	15		2.1		20	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA

LOCATION.—Lat 37°24'49", long 121°00'54", in Orestimba Grant, Stanislaus County, Hydrologic Unit 18040002, on right bank, at downstream side of River Road Bridge, 0.8 mi upstream of mouth, and 3.4 mi northeast of Crows Landing.

DRAINAGE AREA.—Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—April 1992 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 65 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flows during summer and fall consist mainly of return water from irrigated areas. During major storm events record can be affected by backwater from the San Joaquin River.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,650 ft^3/s, Mar. 10, 1995, gage height, 18.40 ft, from rating curve extended above 2,470 ft^3/s, maximum gage height, 19.60 ft, Jan. 23, 1997 (backwater from San Joaquin River); no flow for many days during winter months for some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	26	e36	11	15	3.6	6.2	81	15	19	13	8.4
2	24	44	e44	6.5	10	13	4.8	89	17	17	12	16
3	4.8	43	e42	8.9	12	30	24	115	23	18	12	9.7
4	10	36	e39	6.0	13	63	19	125	26	18	16	7.5
5	29	67	e47	.99	12	488	47	89	18	18	19	7.3
6	12	61	e41	4.7	14	261	25	82	28	16	15	4.8
7	3.4	53	e30	15	7.0	102	52	83	19	17	14	2.5
8	3.2	48	31	20	6.3	61	30	78	13	18	17	2.0
9	24	44	69	17	8.3	41	25	85	15	22	16	1.9
10	16	26	40	33	7.6	31	7.9	101	18	21	41	1.7
11	74	23	36	60	46	23	10	121	23	20	19	1.4
12	31	28	37	69	93	9.8	7.8	104	59	19	17	1.0
13	4.1	67	42	47	60	1.1	12	108	62	18	14	.80
14	1.4	58	35	41	46	7.0	11	110	18	17	14	2.0
15	.37	55	28	40	54	10	25	88	20	21	9.1	2.4
16	.00	50	16	47	84	22	17	70	22	17	9.7	6.2
17	46	36	16	49	53	13	4.3	47	20	19	15	6.1
18	72	24	19	41	37	45	6.4	29	20	17	17	3.9
19	101	20	31	37	27	68	16	11	21	17	13	2.2
20	85	38	53	51	21	34	79	22	15	18	12	2.0
21	68	41	45	27	20	26	97	20	16	16	11	4.5
22	53	25	29	21	22	16	98	13	14	15	15	2.5
23	101	18	23	58	22	13	119	11	17	18	9.2	3.1
24	94	42	14	62	55	15	117	16	32	11	8.6	6.4
25	74	53	35	58	276	30	123	29	29	9.6	7.4	2.8
26	116	47	49	56	96	22	131	22	19	14	5.6	3.8
27	125	42	44	52	26	9.9	130	24	18	17	7.2	5.1
28	44	28	23	48	8.0	8.4	128	16	14	17	4.2	11
29	40	e27	18	41	---	4.0	102	16	18	17	2.7	4.5
30	44	e27	13	31	---	26	97	19	15	21	6.2	12
31	33	---	13	21	---	15	---	15	---	17	3.9	---
TOTAL	1341.37	1197	1038	1080.09	1151.2	1511.8	1571.4	1839	664	539.6	395.8	145.50
MEAN	43.3	39.9	33.5	34.8	41.1	48.8	52.4	59.3	22.1	17.4	12.8	4.85
MAX	125	67	69	69	276	488	131	125	62	22	41	16
MIN	.00	18	13	.99	6.3	1.1	4.3	11	13	9.6	2.7	.80
AC-FT	2660	2370	2060	2140	2280	3000	3120	3650	1320	1070	785	289

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	30.5	31.0	20.7	119	179	101	63.3	58.5	27.7	30.7	24.9	16.4
MAX	121	101	54.1	596	721	318	185	243	97.3	104	62.2	42.7
(WY)	1999	1999	1997	1997	1998	1995	1998	1998	1998	1998	1998	1998
MIN	2.19	3.82	1.01	11.4	6.15	12.5	12.2	11.7	7.38	14.1	11.2	4.04
(WY)	1995	1995	1995	1994	1995	1994	1994	1994	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	14905.27		12474.76			
ANNUAL MEAN	40.7		34.2		58.9	
HIGHEST ANNUAL MEAN					134	1998
LOWEST ANNUAL MEAN					15.7	1994
HIGHEST DAILY MEAN	1030	Feb 14	488	Mar 5	2250	Feb 3 1998
LOWEST DAILY MEAN	.00	Oct 16	.00	Oct 16	.00	Dec 18 1992
ANNUAL SEVEN-DAY MINIMUM	3.6	Mar 15	1.5	Sep 8	.00	Dec 18 1992
MAXIMUM PEAK FLOW			777	Mar 5	2650	Mar 10 1995
MAXIMUM PEAK STAGE			10.70	Mar 5	19.60	Jan 23 1997
ANNUAL RUNOFF (AC-FT)	29560		24740		42690	
10 PERCENT EXCEEDS	94		81		123	
50 PERCENT EXCEEDS	22		20		20	
90 PERCENT EXCEEDS	6.2		5.0		2.8	

e Estimated.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—April 1992 to current year.
CHEMICAL DATA: Water years 1992–95, February 1997 to September 1999, October 2000 to September 2001.
SPECIFIC CONDUCTANCE: April 1992 to current year.
WATER TEMPERATURE: April 1992 to current year.
SEDIMENT DATA: Water years 1992–95, February 1997 to current year.

PERIOD OF DAILY RECORD.—April 1992 to current year.
SPECIFIC CONDUCTANCE: April 1992 to current year.
WATER TEMPERATURE: April 1992 to current year.

INSTRUMENTATION.—Water-quality monitor since April 1992.

REMARKS.—Specific conductance records rated excellent except for Oct. 17 to Nov. 1, Nov. 24–28, Dec. 8 to Jan. 5, Mar. 29 to Apr. 4, May 10–15, May 17–21, May 26 to June 5, June 12–30, July 14–16, July 18–20, Aug. 5–10, Aug. 16 to Sept. 30, which are rated good; Jan. 6–8, May 22–25, July 10–13, July 21 to Aug. 4, which are rated fair; and Jan. 9, 10, July 2–9, which are rated poor. Water-temperature records rated excellent except for Oct. 1–15, Oct. 17 to Nov. 29, Dec.7, May 1–5, June 25 to July 9, July 23–26, Aug. 27 to Sept. 8, which are rated good; May 6–9, July 10–15, July 27–30, Sept. 9–20, which are rated fair; and May 10–15, July 16–18, July 31 to Aug. 16, Sept. 21–30, which are rated poor. Interruptions in record were due to malfunction of the recording instruments and when no flow occurred. Specific-conductance, water-temperature, and chemical values are affected by irrigation-return flow from a drainage pipe located 30 ft upstream from gage. Chemical and Sediment Data for water year 2000 available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,890 microsiemens, Sept. 13, 1992; minimum recorded, 103 microsiemens, Jan. 7, 1993.
WATER TEMPERATURE: Maximum recorded, 32.0°C, May 31, Aug. 7, 2001; minimum recorded, 2.0°C, Dec. 22, 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,170 microsiemens, Sept. 20; minimum recorded, 257 microsiemens, Mar. 5.
WATER TEMPERATURE: Maximum recorded, 32.0°C, May 31, Aug. 7; minimum recorded, 3.0°C, Jan. 6.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE TIME	DIS-CHARGE, INST CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT												
17...1130	112	--	--	763	8.7	91.0	8.2[1]	540	17.5	44	126	24.7
NOV												
28...1350	28	--	--	761	10.7	95.0	8.2[1]	545	10.0	--	--	--
DEC												
12...1350	28	--	--	759	10.7	97.6	8.1[1]	632	11.0	41	124	25.8
JAN												
04...1220	7.9	--	--	--	--	--	8.3[1]	640	--	--	--	--
11...1050	33	--	--	--	--	--	--	--	--	--	--	--
11...1100	33	--	--	--	--	--	8.1[1]	643	--	34	139	28.2
18...1120	43	--	--	--	--	--	8.2[1]	674	--	--	--	--
25...1450	49	--	--	--	--	--	8.6[1]	827	9.5	--	--	--
25...1800	59	--	--	--	--	--	8.9[1]	832	9.5	--	--	--
25...2000	64	--	--	--	--	--	8.8[1]	812	9.5	--	--	--
25...2100	60	--	--	--	--	--	8.6[1]	784	9.5	--	--	--
25...2200	57	--	--	--	--	--	8.7[1]	776	9.5	--	--	--
26...0000	59	--	--	--	--	--	8.9[1]	790	9.0	--	--	--
26...0200	59	--	--	--	--	--	8.5[1]	776	8.5	--	--	--
26...0300	59	--	--	--	--	--	8.4[1]	789	8.5	--	--	--
26...0700	56	--	--	--	--	--	8.4[1]	794	7.5	--	--	--
FEB												
01...1030	18	--	--	--	--	--	8.0[1]	758	--	--	--	--
08...1100	6.6	--	--	--	--	--	7.9[1]	795	--	--	--	--
08...1110	6.4	--	--	--	--	--	7.9[1]	795	--	74	187	38.5
15...1110	61	--	--	--	--	--	8.0[1]	809	--	--	--	--
22...0830	23	--	--	--	--	--	7.9[1]	756	--	--	--	--
24...1430	75	--	--	--	--	--	7.7[1]	704	--	--	--	--
24...1530	77	--	--	--	--	--	7.5[1]	705	--	--	--	--
24...1630	73	--	--	--	--	--	7.6[1]	691	--	--	--	--
24...1800	80	--	--	--	--	--	7.7[1]	706	--	--	--	--
24...1930	84	--	--	--	--	--	7.9[1]	707	--	--	--	--
24...2120	80	--	--	--	--	--	7.5[1]	711	--	--	--	--
25...0030	167	--	--	--	--	--	7.5[1]	735	--	--	--	--
25...0330	405	--	--	--	--	--	7.6[1]	689	--	--	--	--
25...1030	334	--	--	--	--	--	7.7[1]	561	--	--	--	--
MAR												
07...1200	102	--	--	762	9.8	92.1	7.7	494	12.5	38	179	37.0
APR												
05...1040	36	--	--	758	9.5	94.9	8.1	827	15.0	80	212	46.1
11...1330	9.7	--	--	--	--	--	7.3[1]	876[1]	--	--	--	--
18...1330	6.2	--	--	--	--	--	8.2[1]	1010[1]	--	--	--	--
25...1220	200	--	--	--	--	--	8.2[1]	764[1]	--	--	--	--
MAY												
02...1230	91	--	--	--	--	--	8.1[1]	751[1]	--	--	--	--
08...1030	93	--	--	760	8.2	92.5	8.1	729	21.0	71	193	40.5
09...1100	58	--	--	--	--	--	7.9[1]	737[1]	--	--	--	--
16...1240	52	--	--	--	--	--	8.1[1]	536[1]	--	--	--	--
23...1100	12	--	--	--	--	--	8.0	862	--	--	--	--
30...1040	24	--	--	--	--	--	8.2[1]	828[1]	--	--	--	--
JUN												
06...1200	47	--	--	--	--	--	8.3[1]	821[1]	21.0	--	--	--
08...1030	15	--	--	759	7.9	91.9	8.2	956	22.5	130	319	67.8
12...1200	68	--	--	--	--	--	8.1	701	--	--	--	--
13...1000	100	.392	.368	760	8.3	92.7	8.2	667	20.5	82	200	43.0
19...0900	17	--	--	--	--	--	8.4[1]	709[1]	--	--	--	--
20...1150	14	--	--	--	--	--	--	--	--	--	--	--
26...1020	18	--	--	--	--	--	8.0	702	--	--	--	--
JUL												
03...1200	17	--	--	--	--	--	8.2	570	--	--	--	--
10...1240	19	.104	.081	760	6.4	--	7.9	860	--	--	275	59.5
10...1400	21	--	--	--	--	--	7.9	822	--	--	--	--
17...1050	15	--	--	--	--	--	8.2	642	--	--	--	--
23...1210	15	--	--	762	7.3	84.5	8.1	807	22.5	110	245	51.9
24...1220	15	--	--	--	--	--	7.9[1]	738[1]	--	--	--	--
31...1120	16	--	--	--	--	--	8.1	700	--	--	--	--

[1] Laboratory value.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 GRAN T FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT													
17...	15.5	3.13	2.57	66.2	52.6	82	80.2	e.1	12.6	43.8	--	--	.4
NOV													
28...	--	--	--	--	--	73	--	--	--	--	--	--	--
DEC													
12...	14.6	3.30	2.61	66.8	53.1	83	101	e.1	12.6	53.8	--	--	.5
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	16.7	3.62	2.57	69.7	51.3	100	101	e.1	10.4	66.3	--	--	.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	110	--	--	--	--	--	--	--
08...	22.1	4.00	2.53	79.5	47.4	110	112	e.1	8.8	92.4	--	--	.6
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
07...	20.9	3.34	1.05	32.1	27.6	140	15.6	.2	11.8	83.8	--	--	.4
APR													
05...	23.5	4.33	2.55	85.4	46.1	130	95.8	e.2	13.9	125	--	--	.7
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	22.2	3.00	2.07	66.1	42.3	120	83.4	e.1	15.1	87.2	--	--	.6
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	36.3	4.69	1.64	67.3	31.1	190	90.7	.2	16.4	135	--	--	.8
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	22.4	3.32	2.07	67.3	41.8	120	82.5	.2	14.4	91.4	347	21	.6
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	30.7	4.27	1.47	56.2	30.3	--	70.9	.2	16.4	107	227	23	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	28.1	3.05	1.79	64.4	36.0	130	86.8	e.2	17.0	99.3	--	--	.7
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--

e Estimated.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
17...	303	299	<.041	.29	.29	.738	.008	.055	.043	e.052	--	--	--
NOV													
28...	--	--	e.024	.33	.31	1.13	.008	.055	.049	.093	--	--	--
DEC													
12...	362	333	<.041	.27	.38	1.20	.031	.066	.029	.085	--	--	--
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	381	366	.077	.43	.64	1.56	.019	.080	.064	.148	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	6.4
25...	--	--	.116	.45	1.7	1.38	.015	.094	.085	.506	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	7.7
26...	--	--	.088	.46	.71	1.38	.015	.077	.073	.177	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	467	434	e.040	.28	.33	1.73	.021	.092	.083	.124	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
07...	315	291	.074	.43	.61	.268	.009	.060	.043	.128	--	--	--
APR													
05...	504	486	.257	.74	1.1	2.62	.057	.165	.147	.293	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	438	401	<.041	.34	.90	2.38	.050	.096	.050	.257	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	606	560	<.040	.32	.88	5.82	.059	.175	.135	.427	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	418	408	.095	.40	1.3	2.69	.038	.141	.118	.484	4.8	.4	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	542	--	.057	.56	1.3	5.76	.204	.129	.111	.357	3.7	4.6	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	488	452	<.040	.34	1.1	4.63	.055	.154	.109	.502	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHEOPHYTIN A, PHYTOPLANKTON (UG/L) (62360)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	BORON, DISSOLVED (UG/L AS B) (01020)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)
OCT													
17...	--	--	207	M	5.0	<2.4	--	--	--	--	--	--	--
NOV													
28...	--	--	197	--	--	<2.4	--	--	--	--	--	--	--
DEC													
12...	--	--	--	<10	5.0	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
JAN													
04...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002
11...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
11...	--	--	258	<10	e3.2	<2.4	<.002	<.004	<.002	<.005	e.004	<.010	<.002
18...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
FEB													
01...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
08...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
08...	--	--	283	<10	9.5	<2.4	<.002	<.004	<.005	<.005	e.004	<.010	<.002
15...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002
22...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
MAR													
07...	--	--	223	M	9.8	<2.4	--	--	--	--	--	--	--
APR													
05...	--	--	502	<10	3.6	e1.3	<.002	<.004	<.002	<.005	e.003	<.010	<.002
11...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
18...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
MAY													
02...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
08...	--	--	--	50	<3.2	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
09...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
16...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
23...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
30...	--	--	--	--	--	--	<.002	<.004	.013	<.005	e.005	<.010	<.002
JUN													
06...	--	--	--	--	--	--	<.002	<.004	.005	<.005	.007	<.010	<.002
08...	--	--	--	<10	13.2	--	<.002	<.004	.004	<.005	e.006	<.010	<.002
12...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.023	<.010	<.002
13...	13	9.2	--	<10	e2.2	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.016	<.010	<.002
20...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.013	<.010	<.002
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.012	<.010	.003
JUL													
03...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.015	<.010	<.002
10...	1.5	.8	--	<10	48.3	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.016	<.010	<.002
17...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.012	<.010	<.002
23...	--	--	--	<10	5.0	--	<.002	<.004	<.002	<.005	.010	<.010	<.002
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.009	<.010	<.002
31...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002

M Presence of material verified, but not quantified.
< Actual value is known to be less than value shown.
e Estimated.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	e.003	--	<.005	<.021
JAN													
04...	<.041	<.020	--	<.005	--	<.018	e.003	<.006	--	.023	--	<.005	<.021
11...	<.041	<.020	--	.007	--	<.018	.011	<.006	--	.038	--	<.005	<.021
11...	<.041	<.020	--	e.007	--	<.018	.011	<.006	--	.037	--	<.005	<.021
18...	<.041	<.020	--	e.002	--	<.018	<.003	e.003	--	.009	--	<.005	<.021
25...	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021
25...	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	e.005	--	<.005	<.021
25...	<.040	<.020	--	e.003	--	<.018	.004	<.006	--	.015	--	<.005	<.021
25...	<.050	<.020	--	e.003	--	<.018	.364	<.006	--	.019	--	<.005	<.021
25...	<.041	<.020	<.02	e.002	<.01	<.018	.207	<.006	<.10	.020	e.01	<.005	<.021
26...	<.041	<.020	--	<.005	--	<.018	.076	<.006	--	.012	--	<.005	<.021
26...	e.208	<.020	<.02	<.005	<.01	<.018	.033	<.006	<.10	.010	e.01	<.005	<.021
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.041	<.020	--	<.005	--	<.018	.009	<.006	--	.008	--	<.005	<.021
FEB													
01...	<.041	<.020	--	.068	--	<.018	<.003	<.006	--	.062	--	<.005	<.021
08...	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.022	--	<.005	<.021
08...	<.041	<.020	--	.006	--	<.018	e.003	e.002	--	.025	--	<.005	<.021
15...	<.041	e.011	--	<.005	--	<.018	e.002	<.006	--	.041	--	<.005	<.021
22...	<.041	<.020	--	<.005	--	<.018	e.002	e.002	--	.024	--	<.005	<.021
24...	e.026	<.020	<.08	<.005	<.06	<.018	.021	<.006	<.08	.021	M	<.005	<.021
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	e.010	<.020	--	<.005	--	<.018	.012	e.002	--	.018	--	<.005	<.021
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	e.007	<.020	<.02	<.005	<.01	<.018	.010	<.006	<.02	.017	e.01	<.005	<.021
24...	<.041	<.020	--	<.005	--	<.018	.009	e.002	--	.022	--	<.005	<.021
25...	<.041	<.020	--	<.005	--	<.018	e.003	e.003	--	.032	--	<.005	<.021
25...	<.041	<.020	--	.006	--	<.018	e.002	<.006	--	.015	--	<.005	<.021
25...	<.041	<.020	--	.007	--	<.018	e.002	<.006	--	.015	--	<.005	<.021
MAR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
05...	e.006	e.042	--	e.003	--	e.006	e.002	<.006	--	.067	--	<.005	<.021
11...	e.015	e.030	--	<.005	--	<.018	e.002	<.006	--	.016	--	.005	<.021
18...	e.018	e.041	--	<.005	--	<.018	e.002	<.006	--	.011	--	.007	<.021
25...	<.041	e.028	--	<.005	--	<.018	<.003	<.006	--	.006	--	<.005	<.021
MAY													
02...	e.014	e.026	--	.013	--	<.018	e.002	e.004	--	.031	--	<.005	<.021
08...	e.006	e.014	--	<.005	--	<.018	<.003	e.002	--	.011	--	<.005	<.021
09...	e.009	e.006	--	e.004	--	<.018	<.003	<.006	--	.009	--	<.005	<.021
16...	e.005	<.020	--	e.002	--	<.018	<.003	<.006	--	.008	--	<.005	<.021
23...	e.004	<.020	--	.026	--	e.004	.004	<.006	--	.011	--	.006	<.021
30...	e.015	<.020	--	.011	--	<.018	e.002	<.006	--	.010	--	.007	<.021
JUN													
06...	e.006	<.020	--	e.004	--	<.018	e.001	e.003	--	.008	--	<.005	<.021
08...	e.049	<.020	--	.007	--	<.018	.004	<.006	--	.005	--	.005	<.021
12...	e.006	<.020	--	<.005	--	<.018	<.003	e.004	--	.009	--	<.005	<.021
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	e.006	<.020	--	.035	--	<.018	<.003	<.006	--	.010	--	<.005	<.021
20...	e.004	<.020	--	.149	--	<.018	<.003	<.006	--	e.004	--	.007	<.021
26...	e.013	<.020	--	.035	--	<.018	<.003	<.006	--	e.004	--	.011	<.021
JUL													
03...	<.041	<.020	--	.024	--	<.018	<.003	<.006	--	.071	--	.011	<.021
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	e.014	<.020	--	.013	--	<.018	<.003	e.005	--	.013	--	.011	<.021
17...	e.006	<.020	--	.059	--	<.018	<.003	<.006	--	.021	--	.010	<.021
23...	<.041	<.020	--	.022	--	<.018	<.003	<.006	--	.075	--	.010	<.021
24...	e.006	<.020	--	.023	--	e.012	<.003	<.006	--	.075	--	.013	<.021
31...	e.023	<.020	--	<.009	--	<.018	<.003	<.006	--	.029	--	.009	<.021

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS (DY-FONATE) WATER WHOLE TOT REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MALA-THION, TOTAL (UG/L) (39530)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
JAN													
04...	e.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
11...	.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
11...	.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
18...	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	e.003	<.009	<.01	<.005	<.01	<.003	<.004	<.035	<.027	--	<.050	<.01	<.006
26...	e.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
26...	e.003	<.009	<.01	<.005	<.01	<.003	<.004	<.035	<.027	--	<.050	<.01	<.006
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
FEB													
01...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
08...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
08...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
15...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
22...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
24...	<.002	<.009	<.05	<.005	<.03	<.003	<.004	<.035	<.027	<.12	<.050	<.06	<.006
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.002	<.009	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.06	<.050	<.01	<.006
24...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
MAR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
05...	.020	<.009	--	<.005	--	<.003	<.004	<.035	e.005	--	<.050	--	<.006
11...	.012	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
18...	.048	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
25...	.085	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
MAY													
02...	.230	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
08...	.137	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
09...	.062	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
16...	.074	<.009	--	e.003	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
23...	.019	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	.011
30...	.025	<.009	--	e.003	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
JUN													
06...	.023	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
08...	.013	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
12...	.009	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	.039	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	e.053	--	<.006
20...	.048	<.009	--	e.003	--	<.003	<.004	<.035	<.027	--	<.050	--	e.004
26...	.077	<.009	--	.116	--	<.003	<.004	<.035	<.027	--	e.012	--	.009
JUL													
03...	.183	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--	e.032	--	.016
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.010	<.009	--	.025	--	<.003	<.004	<.035	<.027	--	e.031	--	<.006
17...	.014	<.009	--	.012	--	<.003	<.004	<.035	<.027	--	<.050	--	.010
23...	.019	<.009	--	.006	--	<.003	<.004	<.035	e.010	--	<.050	--	<.006
24...	.022	<.009	--	.012	--	<.003	<.004	<.035	e.019	--	e.013	--	<.006
31...	.070	<.009	--	<.005	--	<.003	<.004	<.035	e.011	--	<.050	--	<.006

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

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PARA-THION, TOTAL (UG/L) (39540)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
12...	e.001	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
JAN													
04...	e.004	<.006	<.004	<.007	e.002	<.007	--	<.002	<.010	<.006	--	<.011	e.001
11...	.026	.008	<.002	<.007	e.002	<.007	--	<.002	e.008	<.006	--	<.011	<.015
11...	.024	.008	<.004	<.007	e.002	<.007	--	<.002	e.008	<.006	--	<.011	<.015
18...	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002	.011	<.006	--	<.011	e.004
25...	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
25...	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
25...	e.007	.008	<.005	<.007	<.003	<.007	--	<.002	.013	<.006	--	<.011	e.002
25...	.040	.010	<.005	e.004	e.007	<.007	--	<.002	.015	<.006	--	<.011	e.002
25...	.017	.026	<.002	<.007	<.003	<.007	<.01	<.002	e.009	<.006	<.10	<.011	<.015
26...	e.008	e.005	<.002	<.007	<.003	<.007	--	<.002	e.008	<.006	--	<.011	<.015
26...	.040	.040	<.002	e.004	<.003	<.007	<.01	<.002	.067	<.006	<.10	<.011	e.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	e.007	e.005	<.004	<.007	<.003	<.007	--	<.002	.014	<.006	--	<.011	e.002
FEB													
01...	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	e.010	<.006	--	<.011	<.015
08...	e.011	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
08...	.022	.008	<.002	e.004	e.002	<.007	--	<.002	.011	<.006	--	<.011	<.015
15...	e.012	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
22...	.015	<.006	<.002	<.007	<.004	<.007	--	<.002	<.010	<.006	--	<.011	<.015
24...	.079	.097	<.002	<.007	e.003	<.007	<.05	<.002	.017	<.006	<.08	<.011	<.015
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	.047	.103	<.002	<.007	e.003	<.007	--	<.002	.012	<.006	--	<.011	<.015
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	.022	.030	<.002	<.007	e.003	<.007	<.01	<.002	e.008	<.006	<.02	<.011	<.015
24...	.045	.021	<.002	<.007	e.003	<.007	--	<.002	e.008	<.006	--	<.011	<.015
25...	.024	.006	<.002	<.007	e.002	<.007	--	<.002	<.010	<.006	--	<.011	<.015
25...	e.006	<.006	<.002	<.007	<.010	<.007	--	<.002	<.010	<.006	--	<.011	<.015
25...	e.007	<.006	<.002	<.007	<.020	<.007	--	<.002	<.010	<.006	--	<.011	<.015
MAR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
05...	.073	<.006	<.002	<.007	e.006	<.007	--	<.002	<.010	<.006	--	<.011	e.001
11...	.292	e.006	<.002	<.007	.006	<.007	--	<.002	<.010	<.006	--	<.011	<.015
18...	.034	.030	<.002	e.006	e.008	<.007	--	<.002	<.010	<.006	--	<.011	e.002
25...	.063	<.006	<.002	<.007	e.002	<.007	--	<.002	<.010	<.006	--	<.011	<.015
MAY													
02...	.060	e.006	e.003	.009	<.003	<.007	--	<.002	e.011	<.006	--	<.011	e.001
08...	.059	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015
09...	.056	<.006	<.002	<.007	e.002	<.007	--	<.002	<.010	<.006	--	<.011	<.015
16...	.054	e.005	<.002	<.007	e.002	<.007	--	.002	<.010	<.006	--	<.011	<.015
23...	.299	.006	.004	<.007	.005	<.007	--	<.002	<.010	<.006	--	<.011	<.015
30...	.557	.029	<.002	e.006	.010	<.007	--	<.002	<.010	<.006	--	<.011	<.015
JUN													
06...	.160	e.006	.007	<.007	.006	<.007	--	<.002	<.010	<.006	--	<.011	<.015
08...	.288	e.005	<.004	<.007	.008	<.007	--	<.002	<.010	<.006	--	<.011	<.015
12...	.162	<.006	.009	<.007	.014	<.007	--	<.002	<.010	<.006	--	<.011	<.015
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	.145	<.006	.014	e.005	.010	<.007	--	<.002	<.010	<.006	--	<.011	<.015
20...	.271	<.006	.006	<.007	.009	<.007	--	<.002	<.010	<.006	--	<.011	<.015
26...	.736	.012	.016	e.006	.024	<.007	--	<.002	.043	<.006	--	<.011	<.015
JUL													
03...	.250	e.004	.028	e.004	.021	<.007	--	<.002	.131	<.006	--	<.011	<.015
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.464	.011	.016	.008	.017	<.007	--	<.002	.227	<.006	--	<.011	<.015
17...	.242	<.006	.018	e.006	.019	<.007	--	<.002	.196	<.006	--	<.011	<.015
23...	.245	<.006	.014	e.004	.020	<.007	--	<.002	.112	e.004	--	<.011	<.015
24...	.276	<.006	.009	e.006	.017	<.007	--	<.002	.149	<.006	--	<.011	<.015
31...	.590	.010	<.008	.010	.017	<.007	--	<.002	.147	<.006	--	<.011	<.015

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

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT											
17...	--	--	--	--	--	--	--	--	--	--	--
NOV											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
12...	<.004	<.010	<.011	<.023	.183	<.016	<.034	<.017	<.005	<.002	e.006
JAN											
04...	<.004	<.010	<.011	<.023	.013	<.016	<.034	<.017	e.001	<.002	e.001
11...	<.004	<.010	<.011	e.015	2.48	<.016	<.034	<.017	<.005	<.002	.011
11...	<.004	<.010	<.011	e.013	2.48	<.016	<.034	<.017	<.005	<.002	.011
18...	<.004	<.010	<.011	<.023	.076	<.016	<.034	<.017	<.005	<.002	e.005
25...	<.004	<.010	<.011	<.023	.026	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.004	<.010	<.011	<.023	.025	<.016	<.034	<.017	<.005	<.002	e.005
25...	<.004	<.010	<.011	<.023	.052	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.004	<.010	<.011	.024	.049	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.004	<.010	<.011	<.023	.051	<.016	<.034	<.017	<.005	<.002	e.007
26...	<.004	<.010	<.011	<.023	.105	<.016	<.034	<.017	<.005	<.002	e.007
26...	<.004	<.010	<.011	e.014	.258	<.016	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<.004	<.010	<.011	<.023	.170	<.016	<.034	<.017	<.005	<.002	<.009
FEB											
01...	<.004	<.010	<.011	<.023	.026	<.016	<.034	<.017	<.005	<.002	e.006
08...	<.004	<.010	<.011	<.023	.045	<.016	<.034	<.017	<.005	<.002	e.004
08...	<.004	<.010	<.011	<.023	.062	<.016	<.034	<.017	<.005	<.002	e.005
15...	<.004	<.010	<.011	<.023	.109	<.016	<.034	<.017	<.005	<.002	.013
22...	<.004	<.010	<.011	<.023	.767	<.016	<.034	<.017	<.005	<.002	.012
24...	<.004	<.010	<.011	<.023	.349	<.016	<.034	<.017	<.005	<.002	.011
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<.004	<.010	<.011	<.023	.330	<.016	<.034	<.017	<.005	<.002	.010
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<.004	<.010	<.011	<.023	.355	<.016	<.034	<.017	<.005	<.002	.010
24...	<.004	<.010	<.011	<.023	.462	<.016	<.034	<.017	<.005	<.002	.010
25...	<.004	<.010	<.011	<.023	.804	<.016	<.034	<.017	<.005	<.002	.010
25...	<.004	<.010	<.011	<.023	.437	<.016	<.034	<.017	<.005	<.002	e.007
25...	<.004	<.010	<.011	<.023	.870	<.016	<.034	<.017	<.005	<.002	e.005
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	<.004	<.010	<.011	<.023	.106	e.007	<.034	<.017	<.005	<.002	.018
11...	<.004	<.010	<.011	<.023	.058	<.016	<.034	<.017	<.005	<.002	.027
18...	<.004	<.010	<.011	<.023	.043	<.016	<.034	<.017	<.005	<.002	.152
25...	<.004	<.010	<.011	<.023	.053	<.016	<.034	<.017	<.005	<.002	.015
MAY											
02...	<.004	<.010	<.011	<.023	.044	e.005	<.034	<.017	<.005	<.002	e.008
08...	<.004	<.010	<.011	<.023	.038	<.016	<.034	<.017	<.005	<.002	.019
09...	<.004	<.010	<.011	<.023	.038	<.016	<.034	<.017	<.005	<.002	.027
16...	<.004	<.010	<.011	<.023	.082	e.004	<.034	<.017	<.005	<.002	.029
23...	<.004	<.010	<.011	<.023	.035	e.005	<.034	<.017	<.005	<.002	.117
30...	<.004	<.010	<.011	<.023	.025	e.004	<.034	<.017	<.005	<.002	.115
JUN											
06...	<.004	<.010	<.011	<.023	.028	e.003	<.034	<.017	.017	<.002	.081
08...	<.004	<.010	<.011	<.023	.023	<.016	<.034	<.017	e.003	<.002	.170
12...	<.004	<.010	<.011	<.023	.029	e.005	<.034	<.017	<.005	<.002	.066
13...	--	--	--	--	--	--	--	--	--	--	--
19...	<.004	<.010	<.011	.187	.019	<.016	<.034	<.017	<.005	<.002	.052
20...	<.004	<.010	<.011	.036	.013	<.016	<.034	<.017	<.005	<.002	.123
26...	<.004	<.010	<.011	.084	.022	<.016	<.034	<.017	e.003	<.002	.053
JUL											
03...	<.004	<.010	<.011	.026	.035	<.016	<.034	<.017	e.003	<.002	.040
10...	--	--	--	--	--	--	--	--	--	--	--
10...	<.004	<.010	<.011	.119	.028	e.004	<.034	<.017	<.005	<.002	.064
17...	<.004	<.010	<.011	.176	e.010	<.016	<.034	<.017	.005	<.002	.045
23...	<.004	<.010	<.011	.035	.014	<.016	<.034	<.017	e.003	<.002	.073
24...	<.004	<.010	<.011	.166	e.011	<.016	<.034	<.017	e.004	<.002	.038
31...	<.004	<.010	<.011	.611	.016	<.016	<.034	<.017	<.005	<.002	.053

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

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TRANSPARENCY (SECCHI DISK) (IN) (00077)
OCT		
17...	1130	--
NOV		
28...	1350	--
DEC		
12...	1350	--
JAN		
04...	1220	--
11...	1050	--
11...	1100	--
18...	1120	--
25...	1450	--
25...	1800	--
25...	2000	--
25...	2100	--
25...	2200	--
26...	0000	--
26...	0200	--
26...	0300	--
26...	0700	--
FEB		
01...	1030	--
08...	1100	--
08...	1110	--
15...	1110	--
22...	0830	--
24...	1430	--
24...	1530	--
24...	1630	--
24...	1800	--
24...	1930	--
24...	2120	--
25...	0030	--
25...	0330	--
25...	1030	--
MAR		
07...	1200	--
APR		
05...	1040	--
11...	1330	--
18...	1330	--
25...	1220	--
MAY		
02...	1230	--
08...	1030	--
09...	1100	--
16...	1240	--
23...	1100	--
30...	1040	--
JUN		
06...	1200	--
08...	1030	--
12...	1200	--
13...	1000	4
19...	0900	--
20...	1150	--
26...	1020	--
JUL		
03...	1200	--
10...	1240	4
10...	1400	--
17...	1050	--
23...	1210	--
24...	1220	--
31...	1120	--

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
AUG													
01	1110	9.5	--	--	--	--	--	--	--	--	--	--	--
07	1230	12	--	--	--	--	--	8.2[1]	646[1]	--	--	--	--
08	1240	12	.070	.053	--	--	--	8.0[1]	800[1]	--	100	230	49.2
14	1130	17	--	--	--	--	--	8.2	828	--	--	--	--
16	1030	13	--	--	759	7.9	91.9	8.1	932	22.5	--	307	65.5
21	1210	7.7	--	--	--	--	--	7.7	910	--	--	--	--
SEP													
06	1400	5.2	.161	.128	760	9.1	105	8.3	973[1]	22.0	140	268	56.0
12	1030	10	--	--	756	8.2	89.5	8.4	1230[1]	19.0	230	425	86.2

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 GRAN T FIELD CACO3 (MG/L) (29802)	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)	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)
AUG													
01	--	--	--	--	--	--	--	--	--	--	--	--	--
07	--	--	--	--	--	--	--	--	--	--	--	--	--
08	25.9	2.83	1.89	65.8	38.1	130	99.3	e.1	16.3	106	.7	498	463
14	--	--	--	--	--	--	--	--	--	--	--	--	--
16	34.8	3.67	1.78	71.8	33.4	--	91.0	.2	16.1	145	--	583	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06	31.2	6.06	2.18	81.9	39.2	130	130	.2	15.3	127	.8	597	528
12	51.0	3.71	1.92	90.9	31.5	200	128	.2	10.7	215	1.1	780	735

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
AUG													
01	--	--	--	--	--	--	--	--	--	--	--	--	--
07	--	--	--	--	--	--	--	--	--	--	--	--	--
08	e.022	.28	.93	4.64	.031	.148	.126	.328	2.4	2.5	3.4	5.2	<10
14	--	--	--	--	--	--	--	--	--	--	--	--	--
16	e.029	.32	1.2	4.34	.029	.173	.151	.336	--	--	--	--	<10
21	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06	--	--	--	--	--	--	--	--	5.8	1.1	4.2	2.7	M
12	<.040	.40	.45	6.66	.054	.148	.104	.180	--	--	--	--	<10

DATE	MANGA-NESE, DIS-SOLVED UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
AUG													
01	--	<.002	<.004	<.002	<.005	.010	<.010	<.002	e.009	<.020	.009	<.018	.005
07	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.008	<.020	.007	<.018	<.003
08	6.2	--	--	--	--	--	--	--	--	--	--	--	--
14	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	.028	<.018	<.003
16	12.1	<.002	<.004	<.002	<.005	.007	<.010	<.002	e.004	e.006	.030	<.018	<.003
21	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.009	e.012	.013	<.018	<.003
SEP													
06	16.6	--	--	--	--	--	--	--	--	--	--	--	--
12	16.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	.022

[1] Laboratory value.
e Estimated.
< Actual value is known to be less than value shown.
M Presence of material verified, but not quantified.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALATHION, DISSOLVED (UG/L) (39532)	METHYLAZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYLPARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)
AUG													
01...	<.006	.022	.010	<.021	.078	<.009	.007	<.003	<.004	<.035	e.009	<.050	<.006
07...	<.006	.006	.015	<.021	.014	<.009	<.005	<.003	<.004	<.035	e.007	<.050	<.006
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.006	.012	.011	<.021	.009	<.009	<.005	<.003	<.004	<.035	.081	<.050	<.006
16...	e.002	.009	.012	<.021	.004	<.009	<.005	<.003	<.004	<.035	.166	e.007	<.006
21...	<.006	.006	.014	<.021	.009	<.009	<.005	<.003	<.004	<.035	e.004	<.050	<.006
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.006	e.004	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006

DATE	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)
AUG													
01...	.235	<.006	.006	e.006	e.016	<.007	<.002	.118	<.006	<.011	<.015	<.004	<.010
07...	.362	.009	<.005	<.007	.018	<.007	<.002	.215	<.006	<.011	<.015	<.004	<.010
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	.196	<.006	<.002	<.007	.013	<.007	<.002	.036	<.006	<.011	<.015	<.004	<.010
16...	.348	<.006	<.002	e.006	.013	<.007	<.002	.067	<.006	<.011	<.015	<.004	<.010
21...	.119	<.006	.003	.011	.009	<.007	<.002	.080	<.006	<.011	<.015	<.004	<.010
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	.029	<.006	<.002	<.007	.013	<.007	<.002	<.010	<.006	<.011	e.007	<.004	<.010

DATE	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANSPARENCY (SECCHI DISK) (IN) (00077)
AUG										
01...	<.011	.538	.015	<.016	<.034	<.017	<.005	<.002	.031	--
07...	<.011	1.12	e.005	<.016	<.034	<.017	<.005	<.002	.034	--
08...	--	--	--	--	--	--	--	--	--	--
14...	<.011	.190	.013	<.016	<.034	<.017	<.005	<.002	.039	--
16...	<.011	.102	e.010	e.001	<.034	<.017	<.005	<.002	.023	--
21...	<.011	.445	.119	<.016	<.034	<.017	<.005	<.002	.021	--
SEP										
06...	--	--	--	--	--	--	--	--	--	--
12...	<.011	.091	.024	<.016	<.034	<.017	<.005	<.002	<.009	--

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

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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						
17..N	1130	112	17.5	535	162	95
NOV						
28..N	1350	28	10.0	27	2.0	95
DEC						
12..N	1350	28	11.0	25	1.9	98
JAN						
11..N	1100	33	--	50	4.5	98
FEB						
8..N	1110	6.4	--	17	.29	96
MAR						
07..N	1200	102	12.5	52	14	95
APR						
05..N	1040	36	15.0	118	11	97
MAY						
08..N	1030	93	21.0	190	48	89
JUN						
08..N	1030	15	22.5	235	9.5	99
13..N	1000	100	20.5	521	141	96
JUL						
10..N	1240	19	--	273	14	96
23..N	1210	15	22.5	463	19	98
AUG						
08..N	1240	12	--	272	8.8	99
16..N	1030	13	22.5	253	8.9	98
SEP						
06..N	1400	5.2	22.0	96	1.3	94
12..N	1030	10	19.0	19	.51	98

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
18...*	1347	732	22.5	1.00
18...*	1348	732	22.5	3.00
18...*	1349	733	22.5	5.00
18...*	1350	732	22.5	7.00
18...*	1351	731	22.5	9.00
18...*	1352	731	22.5	11.0
18...*	1353	731	23.0	13.0
18...*	1354	731	23.0	15.0
18...*	1355	731	23.0	17.0
18...*	1356	731	23.0	19.0

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAQWA) protocol.

* Instantaneous discharge at time of cross-sectional measurement: 15.0 ft^3/s.

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	695	475	593	525	---	---	649	633	761	747	651	607
2	634	429	584	521	---	---	659	647	809	761	718	568
3	510	472	557	518	---	---	680	646	810	777	760	566
4	532	446	585	530	---	---	652	626	830	764	757	659
5	511	457	552	531	---	---	636	618	772	740	659	257
6	503	474	540	521	---	---	923	606	749	737	438	345
7	551	503	581	519	---	---	888	741	782	739	499	438
8	634	540	563	514	669	607	745	557	807	782	554	483
9	699	504	547	495	684	634	729	562	815	807	564	545
10	642	499	559	496	673	634	695	551	829	814	562	538
11	579	486	604	528	648	620	665	518	838	814	686	539
12	545	464	596	518	636	623	599	370	823	790	700	672
13	586	543	573	508	717	623	577	493	810	801	711	675
14	631	552	511	495	699	618	624	554	812	799	990	688
15	656	591	530	509	709	606	620	589	810	786	780	749
16	---	---	559	507	646	610	652	602	796	736	863	728
17	1040	498	540	500	624	609	652	626	753	729	802	724
18	501	477	545	502	688	601	674	643	754	685	742	610
19	556	496	566	517	703	591	677	640	743	690	726	621
20	537	502	521	501	655	581	708	654	789	743	789	714
21	543	524	506	498	664	609	712	656	771	748	819	787
22	557	538	526	504	666	642	719	701	757	740	834	778
23	576	523	569	526	689	647	792	707	745	714	834	787
24	585	529	586	538	680	650	792	738	714	642	907	759
25	582	534	548	538	668	635	834	767	726	523	762	733
26	568	537	570	543	650	623	826	781	639	532	744	710
27	538	508	543	535	654	629	834	781	613	572	779	736
28	559	510	552	541	658	617	871	807	633	585	848	779
29	540	498	---	---	674	638	808	772	---	---	857	802
30	525	508	---	---	659	632	845	777	---	---	934	786
31	545	523	---	---	643	626	832	748	---	---	887	821
MONTH	---	---	---	---	---	---	923	370	838	523	990	257

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	933	867	762	708	990	837	843	760	724	686	874	852
2	979	911	748	736	1010	938	845	707	754	693	873	771
3	1140	854	748	690	1070	817	733	549	745	718	785	734
4	886	804	690	661	973	828	680	558	755	723	760	734
5	881	771	708	665	931	840	737	641	765	702	905	760
6	894	690	738	708	925	801	776	652	758	681	939	839
7	1020	690	751	735	936	807	841	736	775	670	980	895
8	918	791	758	727	1070	846	832	761	773	721	978	932
9	960	830	766	694	1090	819	827	804	762	719	1060	912
10	933	752	702	677	875	760	858	822	768	584	1140	1040
11	900	800	709	670	854	708	833	759	756	621	1140	1060
12	901	781	713	703	789	600	779	695	782	753	1130	1080
13	997	800	703	694	677	609	778	685	808	782	1080	1060
14	938	698	699	607	910	608	781	703	846	807	1120	1010
15	1060	698	686	589	874	728	844	712	851	844	1010	966
16	954	754	694	576	840	675	778	675	984	847	1060	929
17	1020	888	791	593	801	674	755	639	976	787	1060	898
18	1060	783	796	713	881	736	748	686	963	809	1000	898
19	1090	839	843	740	885	675	859	748	864	789	1150	1000
20	998	877	844	684	788	621	937	852	873	764	1170	1020
21	957	753	772	717	760	575	901	865	915	764	1160	1070
22	864	746	883	769	786	717	881	806	909	858	1160	1070
23	788	684	901	833	817	733	814	758	939	909	1090	1030
24	785	656	910	819	872	600	825	758	950	921	1080	863
25	905	682	886	753	774	636	836	792	938	891	936	877
26	753	610	952	789	786	664	799	738	896	876	936	823
27	714	607	921	805	787	707	773	724	918	881	899	807
28	664	595	908	848	735	668	757	739	896	871	850	783
29	726	664	989	805	813	678	748	700	903	864	1010	804
30	708	644	968	863	804	674	735	690	875	853	997	840
31	---	---	937	850	---	---	713	667	878	860	---	---
MONTH	1140	595	989	576	1090	575	937	549	984	584	1170	734

11274538 ORESTIMBA CREEK AT RIVER ROAD, NEAR CROWS LANDING, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.5	20.0	15.0	13.0	---	---	7.0	6.0	9.0	7.0	12.5	10.0
2	25.0	22.5	16.0	13.5	---	---	6.0	4.5	9.5	7.0	13.5	11.0
3	24.0	20.5	16.0	14.0	---	---	6.0	5.0	10.5	8.0	13.0	12.0
4	22.0	18.5	16.5	14.0	---	---	6.0	5.0	12.0	9.5	13.0	12.0
5	23.0	20.0	16.5	14.5	---	---	6.0	3.5	12.5	10.0	12.0	11.0
6	22.0	19.5	16.0	14.0	---	---	5.5	3.0	12.5	11.0	12.5	11.5
7	21.0	19.0	14.0	12.0	10.0	---	8.5	5.5	11.5	7.0	16.0	12.0
8	20.5	17.5	14.0	12.0	11.0	9.5	9.0	8.0	7.5	5.5	18.0	13.0
9	21.0	18.5	13.5	12.0	11.5	10.0	8.5	7.5	8.0	7.0	17.0	13.0
10	20.0	18.0	13.0	11.0	12.0	11.0	8.5	7.5	8.0	7.0	14.5	11.5
11	18.5	17.5	12.0	10.5	12.0	11.0	8.5	8.0	9.5	7.5	14.5	12.0
12	18.0	16.5	11.0	9.5	11.5	10.5	9.5	8.0	10.0	8.5	16.0	12.5
13	17.0	15.0	11.5	9.5	11.5	10.0	10.0	7.5	9.0	7.5	18.5	12.0
14	17.0	14.5	10.5	9.0	11.5	10.5	10.0	9.0	10.5	7.5	16.5	13.0
15	18.0	14.0	10.5	8.5	12.0	11.0	9.5	7.5	11.5	8.5	16.5	14.5
16	---	---	11.0	10.0	11.5	10.0	8.0	6.0	12.5	9.5	17.5	14.0
17	21.5	14.0	10.5	8.5	10.5	9.5	7.5	5.5	11.5	10.5	17.5	14.0
18	21.0	18.5	10.0	8.5	9.5	7.5	8.0	5.5	13.0	11.0	19.5	15.5
19	21.0	18.0	10.0	8.5	9.5	7.0	8.0	7.0	13.0	11.5	21.5	17.0
20	20.5	18.5	10.5	8.5	9.5	7.5	8.0	6.5	12.5	11.0	22.0	19.0
21	19.5	16.0	10.5	9.0	9.5	7.5	8.0	6.5	13.0	11.5	22.0	19.5
22	16.0	13.0	10.5	9.5	9.5	8.0	9.0	7.0	13.0	11.5	21.5	18.5
23	15.5	12.5	10.0	9.0	9.5	8.0	10.0	8.0	13.0	11.0	21.5	17.5
24	16.5	14.0	10.5	9.5	9.5	8.5	10.0	9.0	12.0	10.0	21.5	17.0
25	16.5	15.0	10.5	9.5	9.0	7.5	9.5	8.0	12.0	9.0	21.0	19.0
26	16.0	14.5	10.0	10.0	9.0	7.0	9.5	8.5	14.5	11.5	19.0	16.5
27	16.0	14.5	10.0	10.0	8.5	6.5	9.5	7.5	14.0	11.5	18.5	15.0
28	16.0	14.5	10.0	9.5	8.0	5.5	9.5	7.5	13.0	10.5	21.0	16.0
29	15.5	14.5	9.5	8.5	8.0	5.5	10.0	8.5	---	---	19.5	15.0
30	15.0	14.0	---	---	7.0	5.5	9.5	7.5	---	---	21.0	16.5
31	14.5	13.0	---	---	7.5	5.5	9.0	7.0	---	---	21.0	16.5
MONTH	---	---	---	---	---	---	10.0	3.0	14.5	5.5	22.0	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.0	17.0	22.0	19.5	28.0	24.0	27.0	21.5	27.5	22.5	26.5	21.0
2	19.0	14.0	19.5	15.5	24.5	21.0	28.0	22.0	29.0	22.5	27.5	22.5
3	17.5	11.5	18.0	14.0	23.5	19.0	29.0	24.5	26.0	22.5	27.5	22.5
4	18.0	12.5	20.5	15.5	24.5	18.5	28.0	25.5	28.5	22.5	28.0	23.0
5	18.5	14.5	22.0	17.5	24.5	19.0	28.5	23.5	29.5	22.5	26.5	23.0
6	16.0	13.5	23.5	18.5	26.5	20.0	27.0	23.5	31.5	23.5	24.0	21.0
7	15.5	13.5	24.0	19.5	28.0	21.0	27.5	24.0	32.0	24.5	24.0	19.5
8	14.5	12.0	26.0	21.0	27.0	21.0	28.0	23.5	31.5	25.0	24.0	19.5
9	15.5	12.5	25.5	21.0	28.5	20.0	28.5	23.5	31.5	25.5	23.5	19.5
10	15.5	10.5	25.5	21.0	26.0	20.0	27.5	22.5	31.0	23.0	22.5	19.0
11	15.5	13.5	26.0	22.0	25.5	20.5	27.0	21.5	27.5	22.5	23.5	19.0
12	15.5	12.0	24.0	21.0	24.5	20.5	26.5	20.5	27.0	22.5	23.5	19.0
13	16.5	13.0	22.0	19.0	23.0	20.0	26.0	21.0	25.0	21.5	23.0	18.5
14	17.5	11.5	22.5	18.5	26.0	19.0	27.5	22.0	25.5	20.5	25.5	19.0
15	20.0	14.0	23.0	18.5	26.5	22.5	26.0	21.5	24.5	21.5	26.0	22.0
16	19.5	15.5	23.5	20.0	28.5	21.5	25.5	21.0	25.5	22.0	25.5	20.5
17	20.0	14.0	24.0	19.5	28.0	22.5	25.5	20.0	27.0	22.5	28.5	20.0
18	20.0	15.5	23.5	20.0	27.0	22.5	25.5	21.0	27.5	21.0	27.5	21.5
19	18.5	14.0	24.0	21.5	29.0	23.0	25.5	21.0	27.0	21.5	25.5	21.5
20	17.5	15.5	25.5	21.5	29.5	22.5	26.0	20.0	27.5	21.5	22.5	19.0
21	17.5	14.0	26.5	22.5	30.0	23.5	24.0	19.5	27.0	20.0	23.0	19.0
22	19.0	15.0	29.0	22.5	31.0	24.0	27.0	20.0	25.5	20.0	22.5	19.0
23	20.5	17.0	29.0	21.5	28.0	24.0	28.0	21.5	24.0	20.0	23.5	18.5
24	22.5	18.5	27.0	21.5	26.5	21.5	31.5	24.0	26.0	20.5	21.0	18.5
25	24.0	19.5	28.0	22.0	24.0	20.0	27.5	23.0	25.0	20.5	27.5	17.0
26	23.5	21.0	27.5	21.0	24.5	20.5	27.0	23.5	28.0	22.0	21.5	16.5
27	23.0	20.0	24.5	20.0	24.5	22.0	30.5	22.5	27.5	23.5	24.0	17.5
28	22.0	19.0	25.0	19.5	24.5	21.5	28.5	22.0	29.0	24.5	21.5	17.0
29	21.0	17.5	26.5	19.5	26.0	21.0	30.5	23.0	29.5	24.0	20.0	17.0
30	22.5	18.0	28.0	21.0	27.0	21.5	28.0	22.5	25.5	22.5	21.5	19.0
31	---	---	32.0	22.5	---	---	30.0	20.5	27.5	20.0	---	---
MONTH	24.0	10.5	32.0	14.0	31.0	18.5	31.5	19.5	32.0	20.0	28.5	16.5

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA

LOCATION.—Lat 37°25'42", long 121°00'12", in NE 1/4 NE 1/4 sec.7, T.6 S., R.9 E., Stanislaus County, Hydrologic Unit 18040002, on right bank, 50 ft downstream from bridge on Crows Landing Road, and 4.2 miles northeast of Crows Landing.

DRAINAGE AREA.—9,694 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1995 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by storage reservoirs, ground-water withdrawals, diversions for irrigation, and imported water; low flows consist mainly of return water from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 38,000 ft^3/s, Jan. 28, 1997, gage height, 59.23 ft, from rating curve extended above 32,100 ft^3/s; minimum daily, 317 ft^3/s, Sept. 22, 2001.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	1450	1010	724	1000	1400	845	1200	678	503	517	423
2	488	1450	999	703	938	1330	853	1180	642	529	506	452
3	460	1380	985	701	894	1310	861	1110	640	518	511	463
4	457	1320	964	680	893	1330	846	1070	678	531	523	430
5	515	1270	953	648	892	1800	853	e1060	684	505	530	385
6	502	1210	914	648	888	2080	898	e1080	688	512	540	358
7	529	1190	882	664	875	2510	905	e1160	648	522	492	386
8	548	1170	866	703	854	2720	888	e1310	593	539	428	387
9	632	1150	896	754	841	2720	956	e1410	569	570	429	411
10	671	1110	868	841	846	2460	969	e1550	582	557	434	445
11	788	1100	841	997	926	2140	966	e1700	583	511	441	398
12	866	1080	848	1110	1040	1870	965	e1720	571	550	464	375
13	904	1100	861	1170	1170	1710	948	e1750	593	555	487	327
14	945	1080	846	1160	1210	1650	926	e1780	539	561	506	358
15	910	1050	842	1140	1180	1580	919	e1790	524	555	463	378
16	934	1040	822	1090	1120	1530	891	e1810	540	575	453	376
17	1180	1020	818	1050	1040	1450	839	e1790	522	559	458	396
18	1320	989	810	1010	985	1380	819	e1640	517	530	497	401
19	1400	964	804	969	963	1330	866	e1360	526	536	516	360
20	1350	980	842	952	950	1220	1130	e1140	534	530	546	353
21	1270	999	841	906	951	1120	1510	e990	512	535	483	341
22	1250	984	823	882	957	1080	1730	e840	490	563	468	317
23	1530	973	804	902	979	1030	1940	e790	470	582	509	325
24	1630	994	798	914	1060	988	1980	755	511	548	533	339
25	1580	1020	811	933	1350	984	1920	758	529	547	516	372
26	1690	1020	822	1070	1430	992	1890	753	531	525	510	375
27	1810	1020	814	1210	1520	961	1800	744	528	484	515	364
28	1710	1020	790	1250	1500	955	1750	774	547	519	506	366
29	1600	1020	770	1200	---	973	1440	758	558	507	440	383
30	1550	1020	754	1110	---	946	1280	736	525	531	401	391
31	1480	---	730	1050	---	872	---	721	---	532	399	---
TOTAL	32957	33173	26428	29141	29252	46421	35383	37229	17052	16621	15021	11435
MEAN	1063	1106	853	940	1045	1497	1179	1201	568	536	485	381
MAX	1810	1450	1010	1250	1520	2720	1980	1810	688	582	546	463
MIN	457	964	730	648	841	872	819	721	470	484	399	317
AC-FT	65370	65800	52420	57800	58020	92080	70180	73840	33820	32970	29790	22680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	1333	998	1553	5383	8804	4766	3687	3344	2601	1890	819	785
MAX	2338	1228	4364	25600	23390	10130	13980	12090	11890	8176	1757	1842
(WY)	1996	1999	1997	1997	1997	1998	1998	1998	1998	1998	1998	1998
MIN	648	751	687	940	1045	1497	1179	1201	568	536	485	381
(WY)	1998	1998	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	536068		330113			
ANNUAL MEAN	1465		904		2965	
HIGHEST ANNUAL MEAN					6775	1998
LOWEST ANNUAL MEAN					904	2001
HIGHEST DAILY MEAN	6590	Mar 3	2720	Mar 8	37600	Jan 28 1997
LOWEST DAILY MEAN	457	Oct 4	317	Sep 22	317	Sep 22 2001
ANNUAL SEVEN-DAY MINIMUM	475	Sep 28	344	Sep 19	344	Sep 19 2001
MAXIMUM PEAK FLOW			2780	Mar 8	38000	Jan 28 1997
MAXIMUM PEAK STAGE			43.51	Mar 8	59.23	Jan 28 1997
ANNUAL RUNOFF (AC-FT)	1063000		654800		2148000	
10 PERCENT EXCEEDS	3580		1520		8320	
50 PERCENT EXCEEDS	888		861		1030	
90 PERCENT EXCEEDS	610		453		556	

e Estimated.

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—January 1996 to current year.
CHEMICAL DATA: October 2000 to September 2001.
SPECIFIC CONDUCTANCE: January 1996 to current year.
WATER TEMPERATURE: January 1996 to current year.
SEDIMENT DATA: October 2000 to current year.

PERIOD OF DAILY RECORD.—January 1996 to current year.
SPECIFIC CONDUCTANCE: January 1996 to current year.
WATER TEMPERATURE: January 1996 to current year.

INSTRUMENTATION.—Water-quality monitor since January 1996.

REMARKS.— Specific conductance records rated excellent except for Jan. 11 to Mar. 8, Apr. 1–5, May 21 to June 8, July 12 to Aug. 1, Sept. 8–30, which are rated good; and Mar. 9–31, which are rated fair. Water-temperature records rated excellent except for Oct. 9 to Nov. 19, Mar. 5 to Apr. 29, July 7 to Aug. 14, which are good; and Oct. 1–8, which are fair. Specific conductance and water temperature values are affected by irrigation return flow. Interruptions in record are due to malfunction of the recording instrument. Chemical and Sediment Data for water year 2000 available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Mar. 31, 2001; minimum recorded, 120 microsiemens, July 11, 12, 16, 1998.
WATER TEMPERATURE: Maximum recorded, 31.0°C, July 12, 13, 1999; minimum recorded, 4.0°C, Dec. 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Mar. 31, but may have been higher during periods of missing record; minimum recorded, 380 microsiemens, Oct. 23, 24, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, 30.5°C, June 22; minimum recorded, 6.5°C, Jan. 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT										
03...1100	464	.104	.077	758	7.7	88.0	7.7	990	21.5	83
17...1120	1190	.126	.097	763	7.8	82.4	7.8	585	18.0	31
APR										
11...1400	969	--	--	--	--	--	7.3[1]	1240[1]	--	--
18...1400	829	--	--	--	--	--	7.9[1]	1370[1]	--	--
25...1250	1930	--	--	--	--	--	8.0[1]	546[1]	--	--
MAY										
02...1250	1190	--	--	--	--	--	8.0[1]	873[1]	--	--
09...1120	e1350	--	--	--	--	--	8.0[1]	748[1]	--	--
16...1300	e1800	--	--	--	--	--	8.1[1]	469[1]	--	--
23...1130	e790	--	--	--	--	--	7.7	1120	--	--
30...1100	754	--	--	--	--	--	8.0[1]	1120[1]	--	--
JUN										
06...1300	713	--	--	--	--	--	8.2[1]	1050[1]	22.5	--
14...0910	565	--	--	--	--	--	8.1	--	--	--
14...1000	565	.111	.083	758	8.2	94.7	8.2	1330	22.0	170
19...1320	516	--	--	--	--	--	8.4[1]	1340[1]	--	--
28...0900	527	--	--	--	--	--	8.0	1130	--	--
28...0950	562	.135	.101	763	7.4	86.5	8.1	1240	23.0	130
JUL										
03...1220	520	--	--	--	--	--	8.1	--	--	--
12...0910	554	--	--	--	--	--	--	--	--	--
12...1030	562	.128	.096	761	7.4	88.4	8.5	1320	24.0	130
17...1110	565	--	--	--	--	--	8.1	1160	--	--
26...1000	546	--	--	--	--	--	--	--	--	--
26...1130	546	.121	.091	757	7.4	89.8	8.3	1330	24.5	--
31...1130	546	--	--	--	--	--	8.0	1110	--	--
AUG										
09...1000	435	--	--	--	--	--	--	--	--	--
09...1030	435	.115	.087	758	8.0	101	8.3	1420	26.5	140
14...1150	531	--	--	--	--	--	8.3	1160	--	--
21...1220	479	--	--	--	--	--	8.0	1170	--	--
23...1100	531	.104	.079	763	7.8	91.2	8.2	1150	23.0	110
SEP										
06...1300	361	.113	.085	760	8.9	104	8.2	1540	22.5	140
20...1030	354	.102	.077	758	7.5	87.4	8.2	1070	22.5	140

[1] Laboratory value.
e Estimated.

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT													
03...	209	46.4	22.5	3.00	3.35	111	53.2	130	125	.1	16.4	150	50
17...	122	28.0	12.6	3.07	2.47	62.6	52.0	91	72.3	e.1	13.1	78.2	--
APR													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	299	67.3	31.7	3.28	4.21	167	54.6	130	174	.2	14.8	248	62
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	277	61.9	29.8	4.29	3.63	139	51.7	150	152	.2	16.8	215	104
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	284	63.0	30.7	3.65	4.07	158	54.3	150	167	.2	14.7	233	111
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	291	64.6	31.5	3.54	4.15	163	54.5	--	172	.2	15.0	239	100
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	299	65.3	33.0	3.82	4.27	170	54.8	160	180	.2	14.9	247	77
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	239	52.6	26.1	3.34	3.66	130	53.8	130	152	.2	16.2	180	82
SEP													
06...	311	65.7	35.6	4.12	4.41	179	55.2	170	211	.2	16.4	235	--
20...	269	57.6	30.4	3.05	4.13	156	55.4	120	188	.2	16.0	197	42

e Estimated.

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	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)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)
OCT													
03...	<10	.8	593	563	<.020	.36	.80	2.87	.026	.138	.115	.243	3.8
17...	--	.5	346	331	.212	.71	.71	1.25	.011	.151	.123	.146	4.7
APR													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	6	1.2	864	807	<.040	.43	1.3	4.93	.063	.113	.089	.298	3.9
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	12	1.0	754	729	.060	.62	1.3	5.00	.065	.191	.161	.355	4.4
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	19	1.1	822	780	<.040	.43	1.5	3.91	.078	.135	.112	.324	4.9
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	13	--	846	--	<.040	.40	1.3	4.12	.073	.105	.100	.272	4.4
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	10	1.2	898	828	e.023	.43	1.1	3.41	.057	.141	.116	.339	3.9
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	12	1.0	708	657	<.040	.36	1.1	4.11	.035	.143	.124	.295	3.6
SEP													
06...	--	1.3	928	847	--	--	--	--	--	--	--	--	3.6
20...	6	1.1	782	738	<.040	.30	.81	3.39	.030	.112	.093	.209	3.2

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

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	PHEO- PHYTIN A, PHYTO- PHYTON (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
OCT													
03...	.3	--	19.0	.6	<10	42.6	--	--	--	--	--	--	--
17...	1.1	--	8.5	e.6	20	11.8	--	--	--	--	--	--	--
APR													
11...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
18...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
25...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
MAY													
02...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002
09...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
16...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
23...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002
30...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
JUN													
06...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
14...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.008	<.010	e.001
14...	2.0	14	49.5	--	<10	28.6	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.011	<.010	<.002
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	2.5	17	27.8	--	<10	34.6	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.009	<.010	<.002
12...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.010	<.010	<.002
12...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.011	<.010	<.002
17...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.011	<.010	<.002
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002
26...	2.3	11	39.4	--	<10	9.0	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
AUG													
09...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002
09...	3.2	22	65.7	--	<10	35.7	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
21...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002
23...	2.3	29	13.5	--	<10	24.3	--	--	--	--	--	--	--
SEP													
06...	1.9	24	23.7	--	<10	109	--	--	--	--	--	--	--
20...	1.4	13	15.8	--	<10	99.0	--	--	--	--	--	--	--

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

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
OCT													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
11...	e.017	e.221	<.005	<.018	e.001	<.006	<.005	<.005	<.021	.025	<.009	<.005	<.003
18...	e.129	e.100	<.005	<.018	<.003	<.006	<.005	<.005	<.021	.067	<.009	<.005	<.003
25...	<.041	e.018	<.005	<.018	<.003	<.006	.007	<.005	<.021	.083	<.009	<.005	<.003
MAY													
02...	e.008	e.011	.005	e.006	e.002	<.006	.012	<.005	<.021	.035	<.009	<.005	<.003
09...	<.041	<.020	<.005	<.018	<.003	<.006	e.004	<.005	<.021	.011	<.009	<.005	<.003
16...	<.041	<.020	<.005	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003
23...	<.041	<.020	<.005	<.018	<.003	<.006	.037	<.005	<.021	.007	<.009	<.005	<.003
30...	e.002	<.020	e.003	<.018	<.003	e.002	.006	<.005	<.021	.018	<.009	<.005	<.003
JUN													
06...	<.041	<.020	<.005	<.018	<.003	<.006	e.003	<.005	<.021	.005	<.009	<.005	<.003
14...	e.002	<.020	<.005	<.018	<.003	e.003	e.002	<.005	<.021	.006	<.009	<.005	<.003
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	e.102	<.020	.007	<.018	<.003	<.006	e.003	<.005	<.021	.007	<.009	<.005	<.003
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	e.013	<.020	e.005	.052	<.003	<.006	.007	<.005	<.021	.074	<.009	<.005	<.003
12...	e.006	<.020	.009	.052	<.003	<.006	e.003	<.005	<.021	.009	<.009	<.005	<.003
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	e.004	<.020	.007	.038	<.003	e.002	<.005	<.005	<.021	.010	<.009	<.005	<.003
26...	<.041	<.020	.006	.028	<.003	<.006	.005	<.005	<.021	.128	<.009	<.005	<.003
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	e.011	e.010	<.005	.059	<.003	<.006	.050	<.005	<.021	.017	<.009	<.005	<.003
AUG													
09...	<.041	<.020	.028	.083	<.003	<.006	.006	<.005	<.021	.013	<.009	<.005	<.003
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.041	<.020	.010	.075	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003
21...	e.008	e.012	.008	.020	<.003	e.002	.007	<.005	<.021	.015	<.009	<.005	<.003
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
11...	<.004	<.035	<.027	<.050	<.006	.030	<.006	<.002	<.007	<.003	<.007	<.002	e.009
18...	<.004	<.035	<.027	<.050	<.006	e.012	<.006	<.002	<.007	<.003	<.007	<.002	<.010
25...	<.004	<.035	<.027	<.050	<.006	.023	<.006	<.002	<.007	<.003	<.007	<.002	<.010
MAY													
02...	<.004	<.035	<.027	<.050	<.006	.035	<.006	e.003	e.005	<.003	<.007	e.004	e.018
09...	<.004	<.035	<.027	<.050	<.006	.028	<.006	<.002	<.007	<.003	<.007	<.002	<.010
16...	<.004	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010
23...	<.004	<.035	<.027	<.050	.059	.062	<.006	.066	<.007	<.003	<.007	<.002	<.010
30...	<.004	<.035	<.027	<.050	<.006	.108	<.006	.039	<.007	<.003	<.007	<.002	<.010
JUN													
06...	<.004	<.035	<.027	<.050	<.006	.156	<.006	.022	<.007	<.003	<.007	<.002	<.010
14...	<.004	<.035	<.027	<.050	<.006	.107	<.006	.014	<.007	<.003	<.007	<.002	<.010
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.004	<.035	<.027	e.019	<.006	.108	<.006	.017	<.007	<.003	<.007	<.002	<.010
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	<.004	<.035	<.027	e.014	<.006	.180	<.006	.008	<.007	<.003	<.007	<.002	.015
12...	<.004	<.035	<.027	<.050	<.006	.216	<.006	.007	<.007	<.003	<.007	<.002	.010
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.004	<.035	<.027	e.005	<.006	.203	<.006	.006	<.007	e.001	<.007	<.002	.017
26...	<.004	<.035	e.006	<.050	<.006	.113	<.006	.004	<.007	<.003	<.007	<.002	.014
26...	<.004	<.035	e.004	<.050	<.006	.113	<.006	.003	<.007	<.003	<.007	<.002	<.011
31...	<.004	<.035	<.027	<.050	<.006	.138	<.006	<.002	<.007	<.003	<.007	<.002	.020
AUG													
09...	<.004	<.035	<.027	<.050	<.006	.093	<.006	<.002	<.007	<.003	<.007	<.002	.020
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.004	<.035	e.016	<.050	<.006	.108	<.006	<.002	<.007	<.003	<.007	<.002	<.010
21...	<.004	<.035	e.005	<.050	<.006	.072	<.006	<.002	<.007	<.003	<.007	<.002	<.010
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
OCT													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
11...	<.006	<.011	e.003	<.004	<.010	<.011	<.023	.034	<.016	<.034	<.017	<.005	<.002
18...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.023	<.016	<.034	<.017	<.005	<.002
25...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.022	<.016	<.034	<.017	<.005	<.002
MAY													
02...	<.006	<.011	e.001	<.004	<.010	<.011	<.023	.014	e.002	<.034	<.017	<.005	<.002
09...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002
16...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
23...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.027	<.016	<.034	<.017	.005	<.002
30...	<.006	<.011	<.015	.005	<.010	<.011	<.023	.013	<.016	<.034	<.017	.007	<.002
JUN													
06...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.012	<.016	<.034	<.017	.006	<.002
14...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.012	e.008	<.034	<.017	.022	<.002
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.015	<.016	<.034	<.017	.009	<.002
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002
12...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.006	<.011	<.015	<.004	<.010	<.011	e.021	e.008	e.002	<.034	<.017	<.005	<.002
26...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.006	<.011	<.015	<.004	<.010	<.011	.041	e.007	<.016	<.034	<.017	<.005	<.002
AUG													
09...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.006	<.016	<.034	<.017	<.005	<.002
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.006	<.011	<.015	<.004	<.010	<.011	.030	e.004	<.016	<.034	<.017	<.005	<.002
21...	<.006	<.011	<.015	<.004	<.010	<.011	e.013	.018	<.016	<.034	<.017	<.005	<.002
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TRI-FLUR-ALIN WAT FLT 0.7U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
OCT		
03...	--	10
17...	--	--
APR		
11...	.064	--
18...	e.019	--
25...	.014	--
MAY		
02...	e.005	--
09...	e.006	--
16...	<.009	--
23...	e.007	--
30...	.013	--
JUN		
06...	.013	--
14...	.038	--
14...	--	--
19...	.012	--
28...	--	--
28...	--	--
JUL		
03...	.011	--
12...	.014	--
12...	--	9
17...	.013	--
26...	.016	--
26...	--	8
31...	.012	--
AUG		
09...	.013	--
09...	--	--
14...	.012	--
21...	e.006	--
23...	--	10
SEP		
06...	--	15
20...	--	13

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
03..N	1100	464	21.5	86	52	65
17..N	1120	1190	18.0	86	90	299
JUN						
14..N	1000	565	22.0	91	72	110
28..N	0950	562	23.0	91	53	80
JUL						
12..N	1030	562	24.0	91	111	168
26..N	1130	546	24.5	87	107	158
AUG						
09..N	1030	435	26.5	90	81	95
23..N	1100	531	23.0	91	96	138
SEP						
06..N	1300	361	22.5	82	51	50
20..N	1030	354	22.5	94	47	45

e Estimated.
< Actual value is known to be less than value shown.
N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC-ATION, (FEET) (81903)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL					
18...*	1130	2.10	1340	23.5	7.00
18...*	1133	3.50	1330	23.5	21.0
18...*	1136	4.00	1330	23.5	35.0
18...*	1137	4.00	1330	23.5	49.0
18...*	1139	8.00	1330	23.5	63.0
18...*	1141	9.00	1330	23.5	77.0
18...*	1143	10.0	1330	23.5	91.0
18...*	1144	10.0	1330	23.5	105
18...*	1146	11.5	1330	23.5	119
18...*	1147	10.5	1330	23.5	133

* Instantaneous discharge at time of cross-sectional measurement: 544 ft^3/s.

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1040	990	557	520	863	842	1240	1190	1420	1340	1290	1200
2	1020	977	544	520	915	854	1250	1240	1480	1420	1290	1230
3	992	965	574	544	979	915	1260	1250	1540	1480	1260	1240
4	1060	986	628	568	999	968	1300	1250	1550	1520	1290	1240
5	1060	968	677	628	1000	994	1340	1300	1560	1520	1240	957
6	1080	980	689	665	1010	995	1350	1310	1560	1470	1090	828
7	1090	975	688	666	1040	1000	1320	1300	1570	1530	854	721
8	1030	968	688	671	1050	1020	1310	1260	1570	1510	859	724
9	973	867	709	685	1040	1000	1270	1190	1580	1530	1020	859
10	926	735	736	706	1070	1040	1190	1050	1590	1500	1170	1020
11	764	733	740	718	1070	1050	1130	1050	1500	1370	1260	1170
12	765	723	756	727	1070	1050	1080	1030	1390	1310	1300	1260
13	775	724	756	748	1060	1030	1130	1070	1310	1160	1320	1300
14	791	713	774	751	1070	1040	1170	1130	1310	1200	1360	1320
15	871	790	784	766	1090	1060	1190	1160	1300	1250	1410	1360
16	873	689	786	779	1120	1090	1220	1180	1330	1270	1500	1410
17	689	515	791	777	1130	1110	1250	1220	1450	1330	1580	1500
18	516	487	808	791	1120	1100	1300	1250	1470	1450	1650	1580
19	497	465	822	801	1130	1100	1320	1300	1490	1450	1690	1650
20	501	467	817	790	1110	1100	1340	1300	1510	1490	1730	1690
21	519	499	792	783	1120	1090	1400	1340	1510	1470	1750	1730
22	518	469	800	783	1140	1110	1410	1390	1520	1500	1760	1750
23	469	380	814	789	1160	1130	1420	1380	1540	1510	1750	1730
24	405	380	809	789	1170	1150	1390	1380	1530	1410	1730	1710
25	422	404	796	789	1160	1140	1400	1360	1410	1220	1710	1690
26	423	399	805	790	1150	1130	1370	1200	1230	1120	1690	1630
27	430	405	818	802	1160	1150	1200	1110	1130	1100	1630	1560
28	471	424	829	813	1180	1160	1110	1070	1200	1130	1560	1550
29	515	470	831	821	1190	1180	1190	1100	---	---	1610	1550
30	552	509	845	825	1200	1180	1300	1180	---	---	1710	1550
31	577	552	---	---	1210	1200	1340	1300	---	---	1830	1710
MONTH	1090	380	845	520	1210	842	1420	1030	1590	1100	1830	721

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1810	1770	---	---	1270	1100	1440	1350	1210	1170	1540	1420
2	1800	1650	---	---	1310	1240	1520	1240	1270	1170	1490	1350
3	1690	1590	---	---	1320	1240	1360	1230	1310	1220	1420	1270
4	1750	1670	---	---	1290	1180	1390	1270	1270	1220	1330	1180
5	1780	1650	---	---	1240	1120	1450	1280	1380	1250	1370	1220
6	1700	1540	---	---	1160	1040	1530	1350	1430	1210	1460	1290
7	1590	1480	---	---	1280	1160	1530	1340	1360	1250	1430	1300
8	1560	1460	---	---	1350	1250	1420	1300	1410	1320	1400	1330
9	1490	1350	---	---	1400	1330	1410	1240	1450	1310	1420	1270
10	1360	1270	---	---	1410	1270	1250	1150	1510	1200	1270	1200
11	1300	1250	---	---	1330	1240	1360	1250	1380	1250	1320	1230
12	1310	1260	---	---	1350	1270	1320	1180	1350	1260	1310	1220
13	1360	1290	---	---	1490	1320	1260	1180	1370	1170	1400	1190
14	1380	1320	---	---	1490	1270	1240	1190	1270	1160	1430	1200
15	1420	1330	---	---	1420	1260	1310	1220	1290	1220	1330	1230
16	1390	1350	---	---	1380	1220	1250	1130	1400	1240	1310	1160
17	1410	1360	---	---	1400	1280	1350	1180	1440	1360	1190	1120
18	1450	1320	---	---	1430	1300	1400	1320	1380	1230	1150	1100
19	1330	1200	---	---	1440	1330	1420	1340	1270	1150	1290	1140
20	1200	887	---	---	1420	1360	1430	1310	1190	1110	1320	1190
21	887	681	---	---	1430	1330	1420	1360	1240	1140	1350	1240
22	689	635	---	---	1470	1350	1370	1290	1280	1220	1420	1330
23	677	601	---	---	1570	1470	1340	1190	---	---	1400	1310
24	601	567	1190	1080	1540	1300	1320	1270	---	---	1360	1300
25	596	569	1130	1070	1320	1160	1340	1280	---	---	1390	1230
26	604	586	1150	1090	1280	1140	1440	1280	1330	1260	1360	1170
27	625	587	1160	1080	1270	1190	1530	1340	1310	1200	1180	1110
28	681	616	1120	960	1270	1210	1390	1290	1260	1200	1200	1120
29	874	681	1040	988	1290	1220	1350	1270	1370	1260	1210	1120
30	---	---	1090	1020	1410	1270	1340	1190	1440	1360	1200	1150
31	---	---	1120	1060	---	---	1210	1140	1540	1430	---	---
MONTH	---	---	---	---	1570	1040	1530	1130	---	---	1540	1100

11274550 SAN JOAQUIN RIVER NEAR CROWS LANDING, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.0	21.5	14.5	13.5	10.5	10.0	8.5	7.5	10.0	8.5	13.5	12.0
2	24.0	22.0	15.0	13.5	10.5	9.5	8.5	7.5	10.5	9.0	13.5	13.0
3	23.0	21.0	15.0	14.0	10.0	10.0	8.5	7.5	11.5	9.5	13.0	12.5
4	22.5	20.5	15.5	14.0	10.0	10.0	9.0	7.5	12.5	10.5	13.0	12.0
5	22.5	20.0	15.5	14.5	10.0	9.5	9.0	7.5	13.0	11.0	12.5	11.5
6	22.5	20.5	15.5	14.0	10.0	9.5	8.5	7.5	13.0	12.0	13.0	12.0
7	22.0	20.5	14.0	13.0	11.0	9.5	8.5	7.5	12.0	9.5	14.0	12.0
8	22.0	20.0	14.0	12.5	11.5	10.5	9.5	8.5	9.5	8.0	15.0	13.5
9	21.0	19.5	13.5	12.5	11.5	10.5	10.0	9.0	9.5	9.0	15.0	14.5
10	19.5	18.0	13.0	12.0	12.5	11.5	9.5	9.0	9.5	8.5	14.5	13.0
11	18.0	17.5	12.5	11.5	12.5	12.0	9.0	8.5	10.5	9.0	14.5	13.5
12	18.0	16.5	12.0	10.5	12.0	11.5	9.5	8.5	10.0	9.0	15.5	13.5
13	18.5	16.5	11.5	10.0	11.5	11.0	10.0	9.0	9.5	8.5	16.5	14.5
14	19.0	17.0	11.0	10.0	11.5	11.0	10.0	9.5	10.0	8.0	17.0	15.5
15	19.5	17.5	11.0	10.0	12.5	11.5	9.5	8.5	10.5	9.0	16.5	16.0
16	19.5	17.5	11.5	10.5	12.0	11.5	8.5	7.5	12.0	10.0	17.0	15.5
17	19.5	17.5	11.0	10.0	11.5	10.0	8.0	7.0	11.5	11.0	17.5	15.5
18	19.0	17.5	11.0	9.5	10.0	9.5	8.0	6.5	12.5	11.0	18.5	16.0
19	18.5	17.0	11.0	9.5	10.0	9.0	8.5	7.5	13.5	12.0	19.5	17.0
20	18.5	17.0	10.5	9.5	10.0	9.0	8.5	7.5	13.0	12.0	20.5	18.5
21	18.0	16.0	10.5	9.5	10.0	8.5	8.5	7.5	13.0	12.0	21.0	19.5
22	16.0	14.0	11.0	10.5	10.5	9.0	9.5	8.0	13.0	12.0	21.0	19.0
23	15.0	13.5	11.0	10.0	10.5	9.0	10.5	9.0	12.5	11.5	21.0	19.0
24	15.5	13.5	10.5	10.0	10.5	9.5	11.0	10.0	12.0	10.5	21.0	18.5
25	15.5	14.5	11.0	10.0	9.5	8.5	10.5	9.5	12.0	10.0	20.5	18.5
26	15.0	14.5	11.0	10.5	9.0	8.0	10.0	9.0	13.0	11.5	19.5	17.5
27	15.5	14.0	11.0	10.5	8.5	7.5	10.0	8.5	13.5	12.0	19.5	17.0
28	15.0	14.0	11.0	10.5	8.5	7.5	9.5	8.5	13.5	12.0	20.5	17.5
29	15.0	14.5	10.5	10.0	8.5	7.5	10.0	9.0	---	---	20.5	18.5
30	14.5	14.0	11.0	9.5	8.5	7.0	10.0	9.0	---	---	21.0	18.0
31	15.0	13.5	---	---	8.5	7.5	10.0	8.5	---	---	21.5	18.5
MONTH	24.0	13.5	15.5	9.5	12.5	7.0	11.0	6.5	13.5	8.0	21.5	11.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.5	19.0	---	---	28.0	25.5	28.5	24.5	28.0	24.0	27.0	23.0
2	20.0	17.5	---	---	26.5	24.0	28.5	24.5	27.5	24.0	27.5	24.0
3	18.5	16.0	---	---	24.5	22.0	30.0	26.0	27.0	23.5	27.0	24.0
4	18.0	15.5	---	---	24.0	20.5	29.0	26.5	26.5	23.0	27.0	23.5
5	18.5	15.5	---	---	24.5	21.5	29.0	25.0	26.5	23.0	26.5	23.0
6	17.0	15.0	---	---	25.0	21.5	28.0	25.5	27.5	23.0	25.0	21.5
7	16.0	14.5	---	---	26.5	22.5	29.0	25.0	28.5	24.0	24.5	20.5
8	15.5	13.5	---	---	27.5	23.5	29.0	25.5	29.5	25.0	25.0	21.5
9	16.0	13.5	---	---	26.5	23.0	28.5	25.0	28.5	25.0	25.0	21.5
10	16.5	13.5	---	---	26.5	22.5	28.5	25.0	27.5	23.5	25.0	21.5
11	17.0	15.5	---	---	26.0	22.5	27.5	24.0	27.0	23.0	24.5	22.0
12	17.0	14.5	---	---	26.0	22.5	26.5	23.0	26.5	23.0	25.0	21.5
13	18.0	15.0	---	---	24.0	21.5	27.5	23.5	26.0	22.5	25.5	21.5
14	18.5	15.5	---	---	26.5	21.0	27.5	23.5	26.5	22.0	26.0	22.0
15	19.5	16.0	---	---	28.0	23.5	28.0	23.5	27.0	23.0	25.5	22.5
16	20.5	17.0	---	---	28.5	24.0	26.0	23.0	27.5	23.0	25.0	22.0
17	20.5	18.0	---	---	28.5	25.0	26.5	22.5	27.5	24.0	25.0	21.0
18	21.0	18.5	---	---	28.0	24.5	27.0	22.5	28.0	24.0	25.0	21.5
19	19.5	17.5	---	---	29.0	24.5	27.5	23.5	28.0	24.0	25.5	22.0
20	17.5	15.5	---	---	29.5	25.0	27.0	23.0	27.0	23.5	25.0	22.0
21	16.0	14.0	---	---	30.0	26.0	26.0	23.0	26.5	23.0	24.5	21.5
22	16.5	14.0	---	---	30.5	26.0	26.5	22.0	26.5	22.5	24.5	21.0
23	18.0	15.5	27.0	---	29.5	26.0	27.5	23.0	---	---	24.0	21.5
24	19.5	17.0	26.5	23.5	27.0	24.0	28.5	24.5	26.5	22.5	23.0	20.5
25	21.0	18.5	26.5	23.5	25.0	22.5	28.5	24.5	26.5	---	23.5	20.0
26	21.5	19.5	26.5	23.0	26.5	21.5	28.5	24.5	27.5	23.5	23.5	20.0
27	21.0	19.0	24.5	22.5	26.0	23.0	28.5	24.5	27.5	24.0	24.0	20.5
28	20.0	18.5	24.5	21.5	26.5	22.5	28.5	24.5	28.0	24.5	22.5	19.5
29	20.0	17.5	25.0	21.5	27.0	23.0	28.5	24.5	28.0	24.5	22.5	19.0
30	---	---	26.5	22.5	28.5	24.0	27.0	24.0	26.5	23.0	23.5	20.0
31	---	---	28.5	24.0	---	---	27.0	23.0	26.5	22.5	---	---
MONTH	---	---	---	---	30.5	20.5	30.0	22.0	---	---	27.5	19.0

11274560 HARDING DRAIN AT CARPENTER ROAD, NEAR PATTERSON, CA

(Formerly published as Turlock Irrigation District Lateral No. 5 near Patterson)

LOCATION.—Lat 37°27'52", long 121°01'52", in SE 1/4 SE 1/4 sec.25, T.5 S., R.8 E., Stanislaus County, Hydrologic Unit 18040002, on right bank, at upstream side of abandoned bridge, upstream of bridge crossing on Carpenter Road, and 7.2 mi east of Patterson.

PERIOD OF RECORD.—April 1992 to December 1994, October 1998 to September 1999, October 2000 to September 2001.
CHEMICAL DATA: April 1992 to November 1994, October 1998 to September 1999, October 2000 to September 2001.
SPECIFIC CONDUCTANCE: April 1992 to December 1994.
WATER TEMPERATURE: April 1992 to December 1994.
SEDIMENT DATA: April 1992 to November 1994, October 1998 to September 1999, June to September 2001.

INSTRUMENTATION.—Water-quality monitor since May 1992.

REMARKS.—Discharge data furnished by Turlock Irrigation District (not reviewed by U.S. Geological Survey). Water year 2000 data available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	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)
JUN													
13...	1600	57	.098	.077	760	7.9	90.8	7.8	454	22.0	93.6	26.2	6.84
21...	1120	62	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	1010	85	.074	.057	760	8.2	94.2	8.0	458	22.0	105	28.8	7.99
AUG													
02...	1020	139	--	--	--	--	--	--	--	--	--	--	--
06...	1030	106	.079	.059	759	6.2	--	7.8[1]	558[1]	21.5	131	36.6	9.56
SEP													
04...	1310	82	.093	.071	757	--	--	8.1	467	24.0	139	37.7	11.0

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
JUN													
13...	5.35	2.54	56.4	55.0	100	58.3	e.1	22.3	25.8	.4	292	291	2.43
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	2.93	2.18	51.3	50.7	--	47.8	e.1	20.8	23.7	--	283	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	4.41	2.15	56.4	47.3	140	49.0	.2	26.3	30.6	.5	333	334	1.86
SEP													
04...	5.04	2.61	70.9	51.4	150	64.1	e.1	30.2	34.5	.5	394	345	e1.02

[1] Laboratory value.
e Estimated.

11274560 HARDING DRAIN AT CARPENTER ROAD, NEAR PATTERSON, CA—Continued
(Formerly published as Turlock Irrigation District Lateral No. 5 near Patterson)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
JUN													
13...	3.1	3.5	4.83	.647	2.08	1.90	2.05	4.6	.9	10	4.4	e8.6	15.2
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	--	--	--	--	--	--	--	3.1	1.4	6.2	1.7	e7.6	30.7
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	2.7	3.0	7.49	.679	.782	.765	.842	3.5	.6	8.3	13.3	e8.4	20.5
SEP													
04...	e1.8	--	e8.41	e.733	e.925	e.911	--	4.0	.4	3.0	1.9	10	20.4

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
JUN													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.002	<.004	<.002	.011	e.004	<.010	<.002	e.007	<.020	.012	<.018	<.003	e.004
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	<.002	<.004	<.002	.019	e.003	<.010	<.002	<.041	<.020	.008	<.018	<.003	<.006
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DI-AZINON, DIS-SOLVED UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)
JUN													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	.038	<.005	<.021	.010	<.009	<.005	<.003	.025	<.035	<.027	<.050	<.006	.015
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	.013	<.005	<.021	<.002	<.009	<.005	<.003	.029	<.035	<.027	<.050	<.006	e.004
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

e Estimated.
M Presence of material verified, but not quantified.
< Actual value is known to be less than value shown.

11274560 HARDING DRAIN AT CARPENTER ROAD, NEAR PATTERSON, CA—Continued
(Formerly published as Turlock Irrigation District Lateral No. 5 near Patterson)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
JUN													
13 ...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010	<.011
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
JUN									
13...	--	--	--	--	--	--	--	--	>32
21...	<.023	e.008	<.016	<.034	<.017	<.005	<.002	e.009	--
JUL									
12...	--	--	--	--	--	--	--	--	>29
AUG									
02...	2.40	<.011	<.016	<.034	<.017	<.005	<.002	<.009	--
06...	--	--	--	--	--	--	--	--	>36
SEP									
04...	--	--	--	--	--	--	--	--	>32

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
13	N 1600	57	22.0	12	1.8	73
JUL						
12	N 1010	85	22.0	25	5.7	69
AUG						
06	N 1030	106	21.5	37	11	37
SEP						
04	N 1310	82	24.0	10	2.2	82

> Actual value is known to be greater than value shown.
< Actual value is known to be less than value shown.
e Estimated.
N Suspended-sediment data determined from a sample collected and proccessed according to National Water-Quality Assessment (NAWQA) protocol.

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA

LOCATION.—Lat 37°29'54", long 121°04'54", in SW1/4 SW 1/4, sec.15, T.5 S, R.8 E, Stanislaus County, Hydrologic Unit 18040002, on left bank, 0.2 mi below bridge on Palm Avenue, and 2.3 mi northeast of Patterson.

DRAINAGE AREA.—9.760 mi^2, approximately.

PERIOD OF RECORD.—October 1988 to September 1989, January 1990 to September 1994, January 2001 to August 2001. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for the period April 1987 to September 1988 are available in U.S. Geological Survey Open-File Report 91-74.
CHEMICAL DATA: October 1992 to September 1994, January 2001 to August 2001.
SPECIFIC CONDUCTANCE: October 1988 to September 1989, January 1990 to September 1994.
WATER TEMPERATURE: October 1988 to September 1989, January 1990 to September 1994.
SEDIMENT DATA: October 1992 to September 1994.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1988 to September 1989, January 1990 to September 1994.
WATER TEMPERATURE: October 1988 to September 1989, January 1990 to September 1994.

REMARKS.—Discharge data provided by California Department of Water Resources (not reviewed by U.S. Geological Survey). Chemical data for water year 2000 available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JAN													
04	1300	e950	8.1[1]	1200	--	--	--	--	--	--	--	--	--
11	1140	e1290	7.9[1]	1010	--	--	--	--	--	--	--	--	--
18	1050	e1340	8.0[1]	1220	--	--	--	--	--	--	--	--	--
26	0830	e1300	8.1[1]	1270	--	--	--	--	--	--	--	--	--
26	1310	e1310	8.1[1]	1240	--	.311	.90	1.4	2.03	.025	.244	.214	.399
26	1630	e1320	8.2[1]	1190	--	--	--	--	--	--	--	--	--
26	2020	e1350	8.1[1]	1160	--	.254	.81	1.3	1.83	.026	.226	.212	.382
27	0040	e1400	8.1[1]	1160	--	--	--	--	--	--	--	--	--
27	0250	e1420	8.1[1]	1130	--	--	--	--	--	--	--	--	--
27	1100	e1460	8.1[1]	1100	--	--	--	--	--	--	--	--	--
FEB													
01	1000	e1230	7.7[1]	1340	--	--	--	--	--	--	--	--	--
08	1030	e1130	7.9[1]	1590	--	--	--	--	--	--	--	--	--
15	1040	e1530	7.9[1]	1270	--	--	--	--	--	--	--	--	--
22	0800	e1230	7.9[1]	1460	--	--	--	--	--	--	--	--	--
24	2350	e1370	7.7[1]	1210	--	--	--	--	--	--	--	--	--
25	0300	e1410	7.8[1]	1410	--	--	--	--	--	--	--	--	--
25	0800	e1440	7.6[1]	1350	--	--	--	--	--	--	--	--	--
25	1200	e1520	7.8[1]	1270	--	--	--	--	--	--	--	--	--
25	1620	e1650	7.9[1]	1180	--	--	--	--	--	--	--	--	--
25	2000	e1710	7.0[1]	1200	--	--	--	--	--	--	--	--	--
25	2350	e1720	7.7[1]	1210	--	--	--	--	--	--	--	--	--
26	0340	e1710	7.7[1]	1220	--	--	--	--	--	--	--	--	--
APR													
11	1030	e1320	7.9[1]	1130[1]	--	--	--	--	--	--	--	--	--
18	1000	e1140	8.1[1]	1240[1]	--	--	--	--	--	--	--	--	--
25	0800	e2170	8.0[1]	562[1]	19.0	--	--	--	--	--	--	--	--
MAY													
02	0850	e1390	8.0[1]	962[1]	17.5	--	--	--	--	--	--	--	--
09	0840	e1400	7.8[1]	750[1]	--	--	--	--	--	--	--	--	--
16	0810	e1860	7.8[1]	518[1]	--	--	--	--	--	--	--	--	--
23	0800	e924	7.8	1140	--	--	--	--	--	--	--	--	--
30	0830	e870	7.9[1]	1110[1]	--	--	--	--	--	--	--	--	--
JUN													
06	0750	e916	8.0[1]	1130[1]	--	--	--	--	--	--	--	--	--
12	0820	e678	7.9	1400	20.0	--	--	--	--	--	--	--	--
19	0830	e637	8.3[1]	1260[1]	--	--	--	--	--	--	--	--	--
20	0910	e650	--	--	--	--	--	--	--	--	--	--	--
26	0730	e669	8.2	1200	21.5	--	--	--	--	--	--	--	--
JUL													
03	0910	e743	8.2	1010	--	--	--	--	--	--	--	--	--
10	0900	e799	8.2	1240	--	--	--	--	--	--	--	--	--
17	0900	e816	8.2	1010	--	--	--	--	--	--	--	--	--
24	0900	e743	7.9[1]	1220[1]	--	--	--	--	--	--	--	--	--
31	1000	e777	8.0	1080	--	--	--	--	--	--	--	--	--
AUG													
02	0900	e715	--	--	--	--	--	--	--	--	--	--	--
07	1000	e659	8.3[1]	1080[1]	25.5	--	--	--	--	--	--	--	--
14	0930	e683	8.3	1010	--	--	--	--	--	--	--	--	--
21	0940	e683	8.0	1160	--	--	--	--	--	--	--	--	--

[1] Laboratory value.
e Estimated.

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBOPHENOTHION WATER UNFLTRD (UG/L) (39786)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CHLORPYRIFOS TOTAL RECOVER (UG/L) (38932)
JAN													
04...	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--	<.005	--
11...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.018	<.020	--	e.004	--
18...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--
26...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--
26...	10	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	9.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.02	<.005	<.01
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.004	--
FEB													
01...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.017	<.020	--	<.005	--
08...	--	<.002	<.004	<.002	e.003	e.003	e.003	<.002	<.041	<.020	--	e.002	--
15...	--	<.002	<.004	<.002	e.003	e.003	<.010	<.002	<.041	<.020	--	.005	--
22...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	<.005	--
24...	--	<.002	<.004	<.002	e.004	<.007	<.010	<.002	<.041	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	e.004	e.004	<.010	<.002	e.015	<.020	<.02	<.005	<.01
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.013	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	<.02	<.005	<.01
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.004	--
25...	--	<.002	<.004	<.002	e.003	<.007	<.010	<.002	e.010	<.020	--	<.005	--
26...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.010	<.020	--	<.005	--
APR													
11...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.026	e.156	--	<.005	--
18...	--	<.002	<.004	<.002	e.003	e.003	<.010	<.002	e.006	e.034	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	e.018	--	<.005	--
MAY													
02...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.008	e.009	--	e.004	--
09...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.031	<.020	--	e.003	--
16...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.009	<.020	--	e.003	--
23...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.049	<.020	--	.006	--
30...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.006	<.020	--	e.003	--
JUN													
06...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.033	<.020	--	<.005	--
12...	--	<.002	<.004	<.002	e.002	e.007	<.010	<.002	e.004	<.020	--	e.004	--
19...	--	<.002	<.004	<.002	<.005	.010	<.010	<.002	e.026	<.020	--	<.005	--
20...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	e.002	<.020	--	<.005	--
26...	--	<.002	<.004	<.002	<.005	e.007	<.010	.013	e.012	<.020	--	e.004	--
JUL													
03...	--	<.002	<.004	<.002	e.004	.008	<.010	<.002	e.004	<.020	--	e.003	--
10...	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	e.009	<.020	--	.007	--
17...	--	<.002	<.004	<.002	e.004	.011	<.010	<.002	e.005	<.020	--	.009	--
24...	--	<.002	<.004	<.002	<.005	e.007	<.010	<.002	e.035	<.020	--	.009	--
31...	--	<.002	<.004	<.002	e.004	e.004	<.010	<.002	e.013	e.010	--	<.005	--
AUG													
02...	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.008	<.020	--	.006	--
07...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.008	<.020	--	.006	--
14...	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--	.011	--
21...	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.009	e.015	--	.009	--

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

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DISULFOTON UNFILT RECOVER (UG/L) (39011)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
JAN													
04...	<.018	<.003	<.006	--	.005	--	<.005	<.021	--	.007	<.009	--	<.005
11...	<.018	.060	<.006	--	.023	--	<.005	<.021	--	.009	<.009	--	<.005
18...	<.018	<.003	<.006	--	.020	--	<.005	<.021	--	.005	<.009	--	<.005
26...	<.018	e.004	<.006	--	.028	--	<.005	<.021	--	.005	<.009	--	<.005
26...	<.018	<.003	<.006	--	.024	--	<.005	<.021	--	<.002	<.009	--	<.005
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.018	<.003	<.006	<.02	.020	e.01	<.005	<.021	--	<.002	<.009	<.01	<.005
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.018	e.001	<.006	--	.057	--	<.005	<.021	--	.006	<.009	--	<.005
FEB													
01...	<.018	<.003	<.006	--	.039	--	<.005	<.021	--	<.002	<.009	--	<.005
08...	<.018	e.001	<.006	--	.010	--	<.005	<.021	--	.005	<.009	--	<.005
15...	e.010	e.002	<.006	--	.050	--	<.005	<.021	--	.006	<.009	--	<.005
22...	e.007	<.003	e.003	--	.011	--	<.005	<.021	--	<.002	<.009	--	<.005
24...	<.018	.006	<.006	--	.010	--	<.005	<.021	--	.004	<.009	--	<.005
25...	e.008	e.003	<.006	--	.011	--	<.005	<.021	--	.004	<.009	--	<.005
25...	e.007	e.002	<.006	<.02	.014	e.01	<.005	<.021	<.07	.005	<.009	<.01	<.005
25...	e.007	e.002	<.006	--	.015	--	<.005	<.021	--	.004	<.009	--	<.005
25...	e.008	e.002	<.006	<.02	.012	e.01	<.005	<.021	<.07	.004	<.009	<.01	<.005
25...	e.009	e.002	<.006	--	.011	--	<.005	<.021	--	.004	<.009	--	<.005
25...	e.008	e.002	<.006	--	.012	--	<.005	<.021	--	.005	<.009	--	<.005
26...	e.009	e.002	<.006	--	.012	--	<.005	<.021	--	.004	<.009	--	<.005
APR													
11...	<.018	<.003	<.006	--	e.005	--	<.005	<.021	--	.034	<.009	--	<.005
18...	e.006	<.003	<.006	--	.064	--	<.005	<.021	--	.040	<.009	--	<.005
25...	<.018	<.003	<.006	--	.012	--	<.005	<.021	--	.117	<.009	--	<.005
MAY													
02...	<.018	e.002	e.004	--	.022	--	<.005	<.021	--	.018	<.009	--	<.005
09...	<.018	<.003	<.006	--	.033	--	<.005	<.021	--	.013	<.009	--	<.005
16...	<.018	<.003	<.006	--	.013	--	<.005	<.021	--	.008	<.009	--	<.005
23...	<.018	<.003	<.006	--	.067	--	<.005	<.021	--	.006	<.009	--	<.005
30...	<.018	<.003	<.006	--	.011	--	<.005	<.021	--	.005	<.009	--	<.005
JUN													
06...	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	.004	<.009	--	<.005
12...	<.018	<.003	e.003	--	.007	--	<.005	<.021	--	.003	<.009	--	<.005
19...	<.018	<.003	<.006	--	.008	--	<.005	<.021	--	.008	<.009	--	<.005
20...	<.018	<.003	e.003	--	.007	--	<.005	<.021	--	.008	<.009	--	<.005
26...	<.018	<.003	<.006	--	e.001	--	<.005	<.021	--	.029	<.009	--	<.005
JUL													
03...	.025	<.003	<.006	--	.008	--	<.005	<.021	--	.043	<.009	--	<.005
10...	.136	<.003	e.005	--	e.004	--	<.005	<.021	--	.013	<.009	--	<.005
17...	.026	<.003	e.002	--	.006	--	<.005	<.021	--	.010	<.009	--	<.005
24...	.109	<.003	<.006	--	.010	--	<.005	<.021	--	.031	<.009	--	<.005
31...	.046	<.003	<.006	--	.029	--	<.005	<.021	--	.017	<.009	--	<.005
AUG													
02...	.056	<.003	<.006	--	.030	--	<.005	<.021	--	.014	<.009	--	<.005
07...	.048	<.003	e.002	--	.010	--	<.005	<.021	--	.012	<.009	--	<.005
14...	.060	<.003	<.006	--	.014	--	<.005	<.021	--	.068	<.009	--	<.005
21...	.029	<.003	<.006	--	.008	--	<.005	<.021	--	.013	<.009	--	<.005

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

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MALA-THION, TOTAL (UG/L) (39530)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)
JAN													
04...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007
11...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.028	.009	<.002	<.007
18...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.004	<.006	<.002	<.007
26...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.005	<.006	<.002	<.007
26...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.01	<.003	<.004	<.035	<.027	<.03	<.050	<.01	<.006	<.013	<.006	<.002	<.007
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006	<.002	.014
FEB													
01...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.006	<.006	<.002	<.007
08...	--	<.003	.006	<.035	<.027	--	<.050	--	<.006	.028	<.006	<.002	E.003
15...	--	<.003	.006	<.035	<.027	--	<.050	--	<.006	e.028	<.006	<.002	E.005
22...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.012	<.006	<.002	<.007
24...	--	<.003	.008	<.035	<.027	--	<.050	--	<.006	.016	.007	e.003	<.007
25...	--	<.003	.005	<.035	<.027	--	<.050	--	<.006	.013	.010	e.003	<.007
25...	<.01	<.003	.009	<.035	<.027	<.06	<.050	<.01	<.006	.015	<.006	e.003	<.007
25...	--	<.003	.005	<.035	<.027	--	<.050	--	<.006	.018	<.006	e.003	<.007
25...	<.01	<.003	.005	<.035	e.018	<.06	<.050	<.01	<.006	e.013	<.006	<.002	<.007
25...	--	<.003	.004	<.035	e.020	--	<.050	--	<.006	e.012	<.006	e.004	<.007
25...	--	<.003	.006	<.035	e.008	--	<.050	--	<.006	e.011	<.006	e.004	<.007
26...	--	<.003	.005	<.035	e.006	--	<.050	--	<.006	e.011	<.006	e.004	<.007
APR													
11...	--	<.003	.007	<.035	e.006	--	<.050	--	<.006	.014	<.006	<.002	<.007
18...	--	.006	.008	<.035	<.027	--	<.050	--	<.006	e.010	e.005	<.002	.055
25...	--	<.003	e.003	<.035	<.027	--	<.050	--	<.006	.030	<.006	<.002	<.007
MAY													
02...	--	<.003	e.004	<.035	<.027	--	<.050	--	<.006	.038	<.006	e.003	.024
09...	--	<.003	e.003	<.035	<.027	--	<.050	--	<.006	.077	<.006	<.002	.028
16...	--	<.003	<.004	e.008	<.027	--	<.050	--	<.006	.032	e003	<.002	.011
23...	--	<.003	<.004	<.035	.088	--	<.050	--	<.006	.083	e.004	.051	.013
30...	--	<.003	e.004	<.035	<.027	--	<.050	--	<.006	.113	<.006	.027	<.007
JUN													
06...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.117	<.006	.020	<.007
12...	--	<.003	.005	<.035	<.027	--	<.050	--	<.006	.125	<.006	.015	e.005
19...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.120	<.006	.011	<.007
20...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.104	<.006	.008	<.007
26...	--	<.003	e.001	<.035	<.027	--	e.005	--	<.006	.156	<.006	.010	e.002
JUL													
03...	--	<.003	.009	<.035	<.027	--	e.016	--	<.006	.196	<.006	.006	e.002
10...	--	<.003	e.002	<.035	<.027	--	e.010	--	<.006	.236	<.006	.006	e.006
17...	--	<.003	.010	<.035	<.027	--	e.005	--	<.006	.157	<.006	.004	<.007
24...	--	<.003	e.002	<.035	e.003	--	<.050	--	<.006	.123	<.006	.003	e.004
31...	--	<.003	.004	<.035	<.027	--	<.050	--	<.006	.122	<.006	<.002	<.007
AUG													
02...	--	<.003	.006	<.035	e.004	--	<.050	--	<.006	.145	<.006	<.002	<.007
07...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.096	<.006	<.002	<.007
14...	--	<.003	<.004	<.035	.028	--	<.050	--	<.006	.090	<.006	<.002	<.007
21...	--	<.003	e.003	<.035	e.004	--	<.050	--	<.006	.086	e.004	<.002	<.007

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

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PARA-THION, TOTAL (UG/L) (39540)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
JAN													
04...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
11...	e.001	<.007	--	<.002	.034	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
18...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
26...	<.003	<.007	--	<.002	.029	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
26...	<.003	<.007	--	<.002	.034	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.003	<.007	<.01	<.002	.013	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.003	<.007	--	<.002	.038	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
FEB													
01...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
08...	e.003	<.007	--	<.002	.018	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023
15...	<.003	<.007	--	<.002	.020	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023
22...	<.003	<.007	--	<.002	.011	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
24...	<.003	<.007	--	<.002	.029	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	.026	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	<.01	<.002	.028	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	.043	<.006	--	<.011	<.015	.009	<.010	<.011	<.023
25...	<.003	<.007	<.01	<.002	.030	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	.024	<.006	--	<.011	<.015	.008	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	.024	<.006	--	<.011	<.015	.013	<.010	<.011	<.023
26...	<.003	<.007	--	<.002	.021	<.006	--	<.011	<.015	.016	<.010	<.011	<.023
APR													
11...	<.003	<.007	--	<.002	.013	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023
18...	<.003	<.007	--	.086	e.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
MAY													
02...	<.003	<.007	--	.019	e.010	<.006	--	<.011	M	<.004	<.010	<.011	<.023
09...	<.003	<.007	--	.071	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
16...	<.003	<.007	--	.018	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
23...	<.003	<.007	--	.010	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
30...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
JUN													
06...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
12...	e.001	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.013
19...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
20...	e.002	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.066
26...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.008
JUL													
03...	<.003	<.007	--	<.002	.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
10...	<.003	<.007	--	<.002	.017	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
17...	<.003	<.007	--	<.002	.011	<.006	--	<.011	<.015	<.004	<.010	<.011	e.015
24...	<.003	<.007	--	<.002	.012	<.006	--	<.011	<.015	<.004	<.010	<.011	.026
31...	<.003	<.007	--	<.002	.018	<.006	--	<.011	<.015	<.004	<.010	<.011	.030
AUG													
02...	<.003	<.007	--	<.002	.014	<.006	--	<.011	<.015	<.004	<.010	<.011	.054
07...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.041
14...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
21...	<.003	<.007	--	<.002	e.008	<.006	--	<.011	<.015	<.004	<.010	<.011	e.050

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11274570 SAN JOAQUIN RIVER AT PATTERSON BRIDGE, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN							
04...	.052	<.016	<.034	<.017	<.005	<.002	<.009
11...	.331	--	<.034	<.017	<.005	<.002	.011
18...	.118	<.016	<.034	<.017	<.005	<.002	<.009
26...	.084	<.016	<.034	<.017	<.005	<.002	e.005
26...	.090	<.016	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--	--	--
26...	.029	<.016	<.034	<.017	<.005	<.002	e.004
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	.165	<.016	<.034	<.017	<.005	<.002	e.005
FEB							
01...	.173	<.016	<.034	<.017	<.005	<.002	<.009
08...	.061	e.005	<.034	<.017	<.005	<.002	e.005
15...	.368	<.016	<.034	<.017	<.005	<.002	.017
22...	.037	<.016	<.034	<.017	<.005	<.002	.013
24...	.085	.180	<.034	<.017	<.005	<.002	.016
25...	.080	.306	<.034	<.017	<.005	<.002	.016
25...	.089	.250	<.034	<.017	<.005	<.002	.017
25...	.175	.142	<.034	<.017	<.005	<.002	.015
25...	.132	.063	<.034	<.017	<.005	<.002	.014
25...	.245	.043	<.034	<.017	<.005	<.002	.015
25...	.141	.023	<.034	<.017	<.005	<.002	.015
26...	.104	e.014	<.034	<.017	<.005	<.002	.015
APR							
11...	.039	<.016	<.034	<.017	<.005	<.002	.052
18...	.022	e.003	<.034	<.017	<.005	<.002	.013
25...	.028	<.016	<.034	<.017	<.005	<.002	.021
MAY							
02...	.013	e.002	<.034	<.017	<.005	<.002	e.005
09...	.016	<.016	<.034	<.017	<.005	<.002	.015
16...	e.010	<.016	<.034	<.017	<.005	<.002	.048
23...	.028	<.016	<.034	<.017	.005	<.002	.027
30...	.013	<.016	<.034	<.017	.006	<.002	.019
JUN							
06...	.012	<.016	<.034	<.017	e.004	<.002	.011
12...	.015	<.016	<.034	<.017	.042	<.002	.013
19...	.012	<.016	<.034	<.017	.007	<.002	.013
20...	.011	<.016	<.034	<.017	<.005	<.002	.011
26...	e.011	<.016	<.034	<.017	e.002	<.002	.013
JUL							
03...	e.010	<.016	<.034	<.017	e.002	<.002	.010
10...	.012	<.016	<.034	<.017	<.005	<.002	.015
17...	e.009	<.016	<.034	<.017	<.005	<.002	.014
24...	e.009	<.016	<.034	<.017	<.005	<.002	.015
31...	e.007	<.016	<.034	<.017	<.005	<.002	.010
AUG							
02...	e.007	<.016	<.034	<.017	<.005	<.002	.014
07...	.014	<.016	<.034	<.017	<.005	<.002	.010
14...	e.005	<.016	<.034	<.017	<.005	<.002	e.007
21...	.017	<.016	<.034	<.017	<.005	<.002	e.007

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

11274630 DEL PUERTO CREEK NEAR PATTERSON, CA

LOCATION.—Lat 37°29'12", long 121°12'29", in SE 1/4 NW 1/4 sec.21, T.5 S., R.7 E., Stanislaus County, Hydrologic Unit 18040002, on left bank, 1.0 mi upstream from California Aqueduct crossing, and 4.4 mi west of Patterson.

DRAINAGE AREA.—72.6 mi^2.

PERIOD OF RECORD.—October 1958 to May 1965 (maximums only), June 1965 to current year.

REVISED RECORDS.—WSP 1930: 1959–60(M), drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 200 ft above sea level, from topographic map. Prior to June 1965, crest-stage gage at site 1.0 mi downstream at different datum.

REMARKS.—Records good except those below 0.1 ft^3/s, which are poor. Some stock ponds and small diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,270 ft^3/s, Feb. 3, 1998, gage height, 14.92, from rating curve extended above 3,400 ft^3/s, on basis of computation of peak flow through culvert; no flow for several months in most years.

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)
Mar. 5	0915	324	4.67

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.66	1.7	5.8	2.6	.77	.05	.00	.00	.00
2	.00	.00	.00	.67	1.6	6.1	2.5	.70	.05	.00	.00	.00
3	.00	.00	.00	.67	1.5	5.6	2.5	.60	.07	.00	.00	.00
4	.00	.00	.00	.70	1.4	42	2.5	.57	.06	.00	.00	.00
5	.00	.00	.00	.73	1.4	175	2.3	.54	.06	.00	.00	.00
6	.00	.00	.00	.78	1.4	47	2.2	.54	.08	.00	.00	.00
7	.00	.00	.00	.79	1.4	26	3.6	.49	.08	.00	.00	.00
8	.00	.00	.00	1.0	1.3	17	3.4	.44	.06	.00	.00	.00
9	.00	.00	.00	.99	1.4	14	3.2	.41	.05	.00	.00	.00
10	.00	.00	.00	2.6	3.2	11	2.5	.38	.05	.00	.00	.00
11	.00	.00	.00	8.4	9.4	8.3	2.2	.34	.07	.00	.00	.00
12	.00	.00	.00	6.9	12	7.2	2.3	.36	.09	.00	.00	.00
13	.00	.00	.00	3.9	7.6	6.5	2.1	.36	.11	.00	.00	.00
14	.00	.00	.00	2.6	5.6	6.0	2.0	.32	.06	.00	.00	.00
15	.00	.00	.00	1.9	4.5	5.5	2.1	.30	.04	.00	.00	.00
16	.00	.00	.00	1.6	3.8	5.2	1.9	.28	.04	.00	.00	.00
17	.00	.00	.16	1.4	3.3	4.8	1.6	.23	.04	.00	.00	.00
18	.00	.00	.30	1.3	2.9	4.6	1.6	.20	.04	.00	.00	.00
19	.00	.00	.36	1.3	3.7	4.5	1.5	.22	.04	.00	.00	.00
20	.00	.00	.44	1.3	5.9	4.4	2.8	.19	.04	.00	.00	.00
21	.00	.00	.46	1.3	5.7	4.2	5.2	.16	.03	.00	.00	.00
22	.00	.00	.46	1.2	4.3	4.0	3.5	.12	.03	.00	.00	.00
23	.00	.00	.47	1.1	6.3	3.8	2.3	.11	.00	.00	.00	.00
24	.00	.00	.49	1.3	21	3.7	1.8	.08	.00	.00	.00	.00
25	.00	.00	.54	1.7	33	3.7	1.4	.05	.00	.00	.00	.00
26	.00	.00	.55	4.9	18	3.6	1.2	.06	.00	.00	.00	.00
27	.00	.00	.55	3.9	9.6	3.3	1.1	.06	.00	.00	.00	.00
28	.00	.00	.58	2.6	6.9	3.2	.94	.08	.00	.00	.00	.00
29	.00	.00	.62	2.4	---	3.0	.91	.11	.00	.00	.00	.00
30	.00	.00	.62	2.0	---	2.7	.82	.11	.00	.00	.00	.00
31	.00	---	.62	1.9	---	2.7	---	.08	---	.00	.00	---
TOTAL	0.00	0.00	7.22	64.49	179.8	444.4	66.57	9.26	1.24	0.00	0.00	0.00
MEAN	.000	.000	.23	2.08	6.42	14.3	2.22	.30	.041	.000	.000	.000
MAX	.00	.00	.62	8.4	33	175	5.2	.77	.11	.00	.00	.00
MIN	.00	.00	.00	.66	1.3	2.7	.82	.05	.00	.00	.00	.00
AC-FT	.00	.00	14	128	357	881	132	18	2.5	.00	.00	.00

11274630 DEL PUERTO CREEK NEAR PATTERSON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.14	1.02	3.49	19.0	35.3	25.6	9.46	4.05	1.89	.35	.097	.19
MAX	2.15	9.38	31.8	130	340	218	54.1	31.5	31.3	5.56	2.06	4.48
(WY)	1984	1983	1984	1997	1998	1983	1983	1983	1983	1983	1983	1990
MIN	.000	.000	.000	.000	.000	.062	.002	.000	.000	.000	.000	.000
(WY)	1966	1967	1969	1977	1977	1977	1990	1992	1966	1965	1965	1965

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	1789.44		772.98			
ANNUAL MEAN	4.89		2.12		8.24	
HIGHEST ANNUAL MEAN					47.7	1983
LOWEST ANNUAL MEAN					.030	1977
HIGHEST DAILY MEAN	288	Feb 14	175	Mar 5	1870	Feb 3 1998
LOWEST DAILY MEAN	.00	Feb 8	.00	Oct 1	.00	Jul 1 1965
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 12	.00	Oct 1	.00	Jul 1 1965
MAXIMUM PEAK FLOW			324	Mar 5	5270	Feb 3 1998
MAXIMUM PEAK STAGE			4.67	Mar 5	14.92	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	3550		1530		5970	
10 PERCENT EXCEEDS	9.9		4.4		14	
50 PERCENT EXCEEDS	.12		.04		.14	
90 PERCENT EXCEEDS	.00		.00		.00	

11274653 DEL PUERTO CREEK AT VINEYARD ROAD, NEAR PATTERSON, CA

LOCATION.—Lat 37°31'15", long 121°08'55", Stanislaus County, Hydrologic Unit 18040002, at upstream side of Vineyard Road, northwest of Loquat Avenue, and 2.5 mi north of Patterson.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—October 1992 to September 1995, April 2001 to August 2001.
CHEMICAL DATA: October 1992 to September 1995, April 2001 to August 2001.

REMARKS.—Water year 2000 data available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR													
11	1140	2.5	8.2	719	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.147
18	1100	8.0	8.4[1]	909[1]	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.073
25	0910	12	8.2[1]	671[1]	18.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.005
MAY													
02	0920	8.9	8.0	734	12.0	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.230
09	0920	5.8	8.0[1]	926[1]	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.026
16	0900	10	7.9[1]	534[1]	19.4	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.010
23	0830	18	7.9	1100	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.017
30	0910	18	8.0[1]	1100[1]	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.008
JUN													
06	0810	17	8.1[1]	1210[1]	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.010
12	0900	12	8.1	1230	21.0	<.002	<.004	<.002	<.005	.014	<.010	<.002	e.025
19	1030	15	8.3[1]	1370[1]	--	<.002	<.004	<.002	<.005	.012	<.010	<.002	e.005
20	1440	6.4	--	--	--	<.002	<.004	<.002	<.005	.013	<.010	<.002	e.013
26	0830	14	8.1	1070	19.5	<.002	<.004	<.004	<.005	.018	<.010	.004	e.008
JUL													
03	1000	17	8.4	804	--	<.002	<.004	<.002	<.005	.012	<.010	<.002	e.002
10	1040	17	8.1	921	--	<.002	<.004	<.002	<.005	.014	<.010	<.002	e.004
17	1000	15	8.0	935	--	<.002	<.004	<.002	<.005	.012	<.010	<.002	<.041
24	0940	12	8.2[1]	1110[1]	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002	<.041
31	1040	12	7.5	988	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	<.041
AUG													
01	1420	4.6	--	--	--	<.002	<.004	<.002	<.005	.007	<.010	<.002	e.005
07	1110	6.0	7.9[1]	797[1]	24.5	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041
14	1010	6.6	7.8	1060	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.008
21	1010	15	7.9	978	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041

< Actual value is known to be less than the value shown.
e Estimated.
[1] Laboratory value.

11274653 DEL PUERTO CREEK AT VINEYARD ROAD, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)
APR													
11...	e.065	<.005	<.018	<.003	<.006	.009	<.005	<.021	.138	<.009	<.005	e.003	<.004
18...	e.042	<.005	e.006	<.003	<.006	.019	<.005	<.021	.200	.028	<.005	e.002	e.001
25...	e.045	.077	<.018	<.003	<.006	.011	<.005	<.021	.130	<.009	<.005	<.003	<.004
MAY													
02...	e.044	.120	e.008	e.002	<.006	.014	<.005	<.021	.474	e.005	<.005	<.003	<.004
09...	e.013	<.005	<.018	<.003	<.006	.018	<.005	<.021	.144	<.009	<.005	<.003	<.004
16...	<.020	.012	<.018	<.003	<.006	.012	<.005	<.021	.049	<.009	<.005	<.003	<.004
23...	<.020	.050	<.018	<.003	<.006	.031	<.005	<.021	.041	<.009	<.005	<.003	<.004
30...	<.020	.025	<.018	<.003	<.006	.010	<.005	<.021	.015	<.009	<.005	<.003	e.002
JUN													
06...	<.020	e.003	<.018	<.003	e.002	e.003	<.005	<.021	.007	<.009	<.005	<.003	.007
12...	<.020	<.005	<.018	<.003	e.003	e.004	<.005	<.021	.005	<.009	<.005	<.003	<.004
19...	<.020	<.005	<.018	<.003	e.004	.019	<.005	<.021	.021	<.009	<.005	<.003	<.004
20...	<.020	<.005	<.018	<.003	e.004	.008	<.005	<.021	.047	<.009	<.005	<.003	<.004
26...	<.020	.009	<.018	<.003	<.006	e.003	<.005	<.021	.068	<.009	<.005	<.003	e.002
JUL													
03...	<.020	e.002	<.018	<.003	<.006	.009	<.005	<.021	.065	.027	<.005	<.003	e.003
10...	<.020	.006	e.012	<.003	<.006	.081	e.003	<.021	.011	<.009	<.005	<.003	<.004
17...	<.020	.006	<.018	<.003	e.002	.011	<.005	<.021	.051	e.007	<.005	<.003	<.004
24...	<.020	e.003	e.008	<.003	<.006	.007	<.005	<.021	.017	<.009	<.005	<.003	<.004
31...	<.020	<.005	.038	<.003	<.006	.011	<.005	<.021	.134	<.009	<.005	<.003	<.004
AUG													
01...	<.020	.007	.024	<.003	e.005	.010	<.005	<.021	.049	<.009	<.005	<.003	<.004
07...	<.020	<.005	.025	<.003	<.006	.008	<.005	<.021	.012	e.006	<.005	<.003	<.004
14...	<.020	<.005	.029	<.003	e.003	.082	<.005	<.021	.019	<.009	<.005	<.003	<.004
21...	<.020	.040	e.007	<.003	<.006	.006	<.005	<.030	.008	<.009	<.005	<.003	<.004

DATE	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALATHION, DISSOLVED (UG/L) (39532)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
APR													
11...	<.035	<.027	<.050	<.006	.040	<.006	<.002	.025	e.003	<.007	.018	<.010	<.006
18...	<.035	<.027	<.050	<.006	.019	.006	<.002	e.006	<.003	<.007	.009	<.010	<.006
25...	<.035	.033	<.050	<.006	.035	<.006	<.002	e.005	<.003	<.007	<.003	<.010	<.006
MAY													
02...	e.019	.029	<.050	.017	.068	.012	.005	.009	e.003	<.007	e.004	<.010	<.006
09...	<.035	<.027	<.050	<.006	.065	<.006	<.002	e.006	<.003	<.007	.018	<.010	<.006
16...	<.035	<.027	<.050	<.006	.039	<.006	<.002	e.002	e.001	<.007	.006	<.010	<.006
23...	<.035	e.017	<.050	.039	.083	<.006	.014	.008	.004	<.007	<.002	<.010	<.006
30...	<.035	<.027	<.050	<.006	.078	<.006	.026	e.004	e.002	<.007	<.002	<.010	<.006
JUN													
06...	<.035	<.027	<.050	<.006	.166	e.005	.011	e.003	e.002	<.007	<.002	<.010	<.006
12...	<.035	<.027	<.050	<.006	.158	<.006	.011	<.007	<.003	<.007	<.002	<.010	<.006
19...	<.035	e.021	<.050	.034	.167	<.006	.007	<.007	<.003	<.007	<.002	<.010	<.006
20...	<.035	e.017	<.050	<.006	.705	<.006	.016	.072	.005	<.007	<.002	<.010	<.006
26...	<.035	e.002	<.050	.006	.199	<.006	.013	e.006	<.003	<.007	<.002	<.010	<.006
JUL													
03...	<.035	.031	<.050	<.006	.333	<.006	.025	e.004	.005	<.007	<.002	<.010	<.006
10...	<.035	e.015	e.008	e.005	.267	e.005	.029	e.005	.007	<.007	<.002	<.010	<.006
17...	<.035	e.021	e.007	<.006	.336	<.006	.013	<.007	.005	<.007	<.002	<.010	<.006
24...	<.035	<.027	<.050	<.006	.116	<.006	.009	<.007	.003	<.007	<.002	<.010	<.006
31...	<.035	e.017	e.022	<.006	.470	<.006	<.002	<.007	.003	<.007	<.002	<.010	<.006
AUG													
01...	<.035	e.010	<.050	<.006	.210	<.010	<.005	<.007	.004	<.007	<.002	<.010	<.006
07...	<.035	<.027	<.050	<.006	.119	<.006	<.002	<.007	.003	<.007	<.002	<.010	<.006
14...	<.035	<.027	<.050	<.006	.083	<.006	<.002	.012	.004	<.007	<.002	<.010	<.006
21...	<.035	<.027	<.050	<.006	.041	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006

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

11274653 DEL PUERTO CREEK AT VINEYARD ROAD, NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR													
11...	<.011	e.002	<.004	<.010	<.011	<.023	.056	<.016	<.034	<.017	<.005	<.002	.015
18...	<.011	<.015	<.004	<.010	<.011	<.023	.046	e.004	<.034	<.017	<.005	<.002	e.005
25...	<.011	<.015	<.004	<.010	<.011	<.023	.057	<.016	<.034	<.017	<.005	<.002	1.30
MAY													
02...	<.011	e.001	<.004	<.010	<.011	<.023	.073	e.005	<.034	e.004	<.005	<.002	1.74
09...	<.011	<.015	<.004	<.010	<.011	<.023	.026	<.016	<.034	<.017	<.005	<.002	.011
16...	<.011	<.015	<.004	<.010	<.011	<.023	.028	<.016	<.034	<.017	<.005	<.002	.013
23...	<.011	<.015	<.004	<.010	<.011	<.023	.048	<.016	<.034	<.017	<.005	<.002	.513
30...	<.011	<.015	<.004	<.010	<.011	<.023	.023	<.016	<.034	<.017	e.004	<.002	.122
JUN													
06...	<.011	<.015	<.004	<.010	<.011	<.023	.017	<.016	<.034	<.017	<.005	<.002	.101
12...	<.011	<.015	<.004	<.010	<.011	<.023	.023	e.004	<.034	<.017	.015	<.002	e.036
19...	<.011	<.015	<.004	<.010	<.011	<.023	.020	<.016	<.034	<.017	<.005	<.002	.039
20...	<.011	<.015	<.004	<.010	<.011	<.023	.022	<.016	<.034	<.017	<.005	<.002	.134
26...	<.011	<.015	<.004	<.010	<.011	e.015	.017	<.016	<.034	<.017	<.005	<.002	.214
JUL													
03...	<.011	<.015	<.004	<.010	<.011	.090	e.010	<.016	<.034	<.017	<.005	<.002	.087
10...	<.011	<.015	<.004	<.010	<.011	.044	.013	e.006	<.034	<.017	<.005	<.002	.140
17...	<.011	<.015	<.004	<.010	<.011	.082	e.011	<.016	<.034	<.017	<.005	<.002	.368
24...	<.011	<.015	<.004	<.010	<.011	.031	e.009	<.016	<.034	<.017	<.005	<.002	.106
31...	<.011	<.015	<.004	<.010	<.011	.355	e.009	<.016	<.034	<.017	<.005	<.002	.104
AUG													
01...	<.011	<.015	<.004	<.010	<.011	.073	e.011	<.016	<.034	<.017	<.005	<.002	.070
07...	<.011	<.015	<.004	<.010	<.011	2.33	e.011	<.016	<.034	<.017	<.005	<.002	.018
14...	<.011	<.015	<.004	<.010	<.011	.036	e.007	<.016	<.034	<.017	<.005	<.002	.010
21...	<.011	<.015	<.004	<.010	<.011	.123	.011	<.016	<.034	<.017	<.005	<.002	.033

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

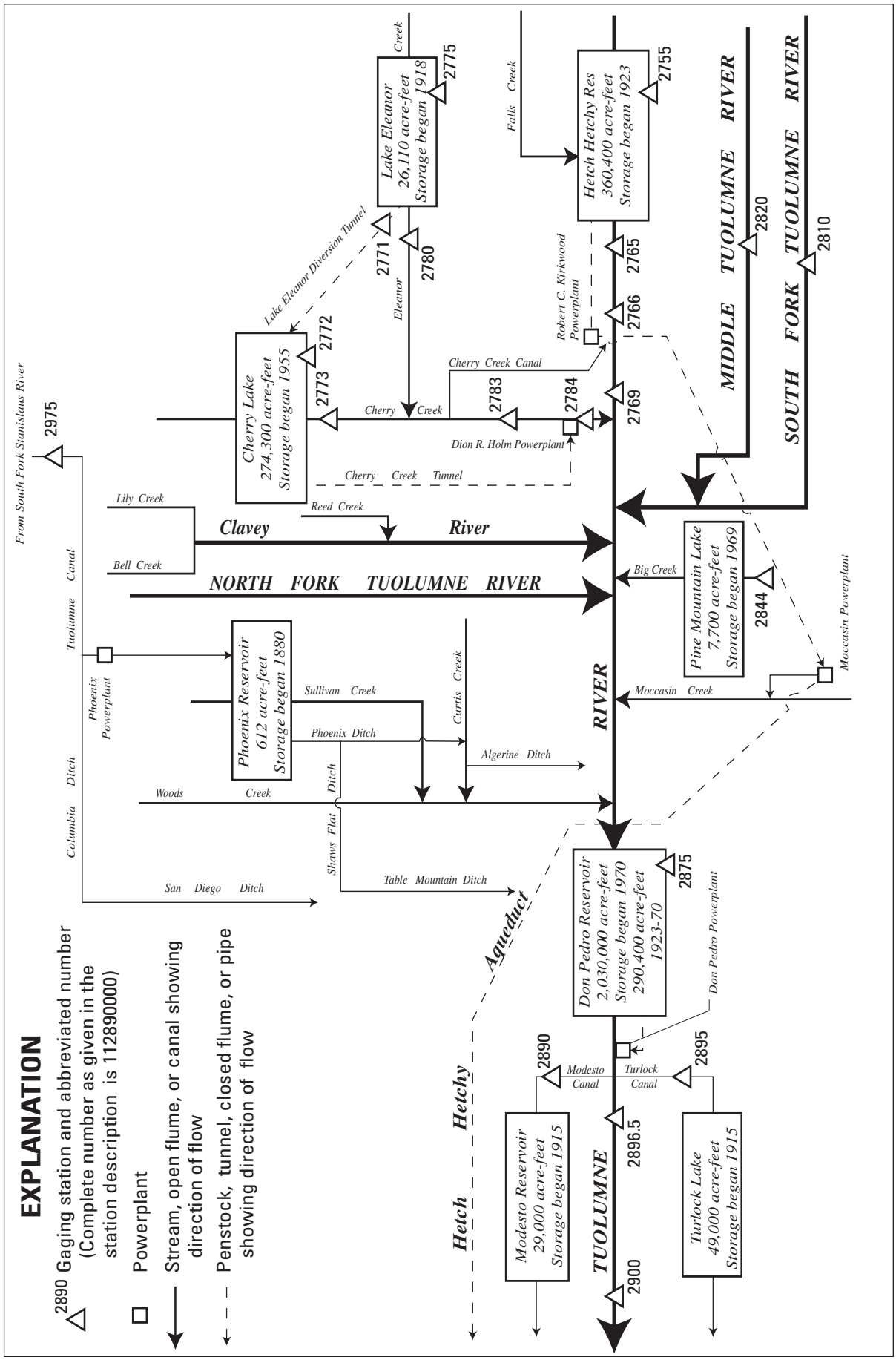

Figure 29. Diversions and storage in Tuolumne River Basin.

11275500 HETCH HETCHY RESERVOIR AT HETCH HETCHY, CA

LOCATION.—Lat 37°56'52", long 119°47'13", in NW 1/4 NW 1/4 sec.16, T.1 N., R.20 E., Tuolumne County, Hydrologic Unit 18040009, Yosemite National Park, near center of O'Shaughnessy Dam on Tuolumne River at Hetch Hetchy, 1.5 mi downstream from Falls Creek.

DRAINAGE AREA.—455 mi^2.

PERIOD OF RECORD.—May 1923 to current year. Prior to October 1930 monthend contents published in WSP 1315-A.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder installed March 1995. Datum of gage is 1.84 ft above sea level. Prior to Oct. 1, 1927, nonrecording gage at same site and datum. Oct. 1, 1927, to July 9, 1972, water-stage recorder at same site and datum. Prior to October 1974, datum published as at mean sea level.

REMARKS.—Reservoir is formed by concrete gravity-type dam, completed to crest gage height 3,726.5 ft in 1923 and raised to 3,812.0 ft in 1937. Storage began Apr. 6, 1923. Ten-foot drum gates were installed on spillway in 1949. Capacity, 360,400 acre-ft, between gage heights 3,512.0 ft, bottom outlet, and 3,806.0 ft, top of drum-type spillway gates. Water is diverted from reservoir through tunnel to Robert C. Kirkwood Powerplant 15 mi downstream. Flow is diverted from powerplant tailrace in a closed conduit through Hetch Hetchy Aqueduct to Moccasin Powerplant with flows in excess of aqueduct capacity being spilled to the river. At Moccasin Creek Diversion Dam, water re-enters Hetch Hetchy Aqueduct and flows into Crystal Springs Reservoir, which supplies city of San Francisco. Surplus water is spilled into Don Pedro Reservoir (station 11287500) at Red Mountain Bar. Flow downriver is for State Department of Fish and Game and Raker Act requirements. Hetch Hetchy Reservoir is the main storage unit of Hetch Hetchy water-supply system for San Francisco. Records, including extremes for current year, represent contents at 2400 hours. See schematic diagram of Tuolumne River Basin.

EXTREMES (AT 0800) FOR PERIOD OF RECORD.—Maximum contents, 369,100 acre-ft, Dec. 3, 1950, gage height, 3,810.4 ft; no contents at times in 1929–31.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 359,900 acre-ft, June 9, gage height, 3,805.75 ft; minimum, 169,600 acre-ft, Mar. 17, minimum gage height, 3,696.35 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by San Francisco Public Utilities Commission, dated May 20, 1971)

3,512	0	3,540	8,700	3,640	97,000	3,740	238,900
3,513	51	3,560	22,900	3,660	119,900	3,760	273,700
3,515	154	3,580	39,500	3,680	146,200	3,780	310,400
3,520	410	3,600	57,400	3,700	175,000	3,800	348,600
3,530	3,300	3,620	76,500	3,720	206,000	3,810.4	369,100

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285800	259000	233700	215100	200400	176700	192200	220400	355600	347100	319500	284300
2	284800	258000	233600	214300	199400	175800	194100	224900	357200	346200	318300	283200
3	283800	256900	233400	213700	198500	174900	194800	226600	357900	345400	317300	282200
4	282800	256100	232700	212900	197800	174400	194800	227700	358200	344700	316200	281000
5	281800	255800	232100	212400	197000	174300	194400	229600	358600	343900	315200	279700
6	280800	255000	231300	212100	196200	173900	193900	233200	359000	343800	314000	278500
7	279700	254000	230800	211600	195300	173500	193600	238400	359600	343600	312900	277500
8	279300	253100	229800	211100	194400	173200	193400	245800	359800	343400	311800	276400
9	278400	252100	229600	210600	193500	172900	192900	253200	359900	342800	310700	275200
10	277500	251200	229300	210300	192700	172500	192100	260200	359500	342000	309700	274100
11	276500	250900	228600	209900	191900	171900	191500	267500	359500	341400	308600	273100
12	275400	250100	227500	209400	191000	171300	190900	274500	359300	340600	307400	271900
13	274400	249100	226700	208900	190000	170800	190200	279900	358900	339600	306100	270800
14	273600	248300	225900	208500	189200	170500	189800	284200	358500	338600	305000	269700
15	273200	247600	224900	208500	188200	170200	189900	288900	358200	337800	304000	268700
16	272400	246600	224200	208500	187300	169800	190100	296300	357700	336800	302800	267700
17	271400	245700	223700	208600	186400	169600	190700	303100	357300	335700	301600	266500
18	270400	244800	222900	208600	185500	169800	191500	308800	356800	334800	300500	265400
19	269300	244000	222100	208200	184800	170500	192900	313400	356300	333800	299400	264300
20	268300	243100	221800	208300	184000	171500	193800	318000	355800	332700	298100	263300
21	267600	242500	220900	208400	183300	172700	194400	322700	355100	331900	297000	262300
22	267000	241400	220200	207800	182500	174100	195000	328300	354500	330800	295800	261400
23	265800	240100	220000	206600	181700	175400	195900	334200	353800	329900	294600	260300
24	264900	239000	219300	205700	181000	176800	197200	339000	352800	328700	293600	259100
25	264000	238600	218900	205500	180200	178500	199300	342800	352100	327600	292400	257900
26	263200	237500	218200	205000	179400	180000	202400	346000	351300	326300	291300	256900
27	262200	236700	217500	204800	178600	181400	205800	348000	350500	325000	290100	256000
28	262000	235800	216800	204200	177600	183300	209000	349300	349500	323800	289000	255100
29	261400	235200	216300	203300	---	185300	211700	350400	348700	322900	287800	253900
30	260500	234600	216000	202400	---	187200	215300	352100	348000	321700	286600	252800
31	259800	---	215800	201400	---	189500	---	353700	---	320500	285400	---
MAX	285800	259000	233700	215100	200400	189500	215300	353700	359900	347100	319500	284300
MIN	259800	234600	215800	201400	177600	169600	189800	220400	348000	320500	285400	252800
a	3752.14	3737.46	3726.11	3717.06	3701.73	3709.55	3725.75	3802.61	3799.67	3785.40	3766.47	3748.12
b	-26500	-25200	-18800	-14400	-23800	+11900	+25800	+138400	-5700	-27500	-35100	-32600

CAL YR 2000 b -15600
WTR YR 2001 b -33500

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°56'15", long 119°47'50", in SW 1/4 SE 1/4 sec.17, T.1 N., R.20 E., Tuolumne County, Hydrologic Unit 18040009, Yosemite National Park, on left bank 0.9 mi downstream from O'Shaughnessy Dam at Hetch Hetchy, and 2.5 mi downstream from Falls Creek.

DRAINAGE AREA.—457 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Hetch Hetchy damsite, near Sequoia" 1910–14 and as "below Hetch Hetchy damsite, near Sequoia" 1915–18.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage with concrete control since May 5, 1970. Elevation of gage is 3,480 ft above sea level, from topographic map. Prior to Jan. 1, 1915, water-stage recorder at site 1 mi upstream, at damsite, at different datum. Jan. 1, 1915, to Sept. 3, 1968, water-stage recorder, at same site and datum. Oct. 1, 1968, to May 4, 1970, nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.—Records good. Flow regulated by Hetch Hetchy Reservoir (station 11275500) 0.9 mi upstream beginning in April 1923. Flow diverted upstream from station through tunnel to Robert C. Kirkwood Powerplant and Hetch Hetchy Aqueduct beginning Apr. 26, 1967. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,400 ft^3/s, Jan. 3, 1997, gage height, 15.08 ft; no flow at times in 1968–70.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	66	61	49	49	52	61	143	137	89	112	93
2	59	66	57	45	53	53	65	159	117	93	112	82
3	64	66	57	45	52	52	63	164	119	109	112	82
4	65	66	57	44	55	54	67	165	117	109	112	82
5	65	66	57	45	56	66	73	157	116	107	111	82
6	65	66	57	45	52	55	70	153	158	110	111	81
7	65	66	57	44	49	53	69	155	110	112	111	82
8	65	66	57	45	50	53	68	156	111	112	111	81
9	65	66	57	44	51	53	68	159	109	111	111	81
10	65	66	57	45	52	53	67	160	107	110	111	81
11	65	66	57	46	52	52	67	148	107	109	111	81
12	64	66	57	45	51	52	74	141	108	107	111	81
13	64	66	57	45	51	51	74	145	107	111	111	81
14	64	67	57	45	52	51	74	145	106	111	111	80
15	65	65	57	45	52	51	73	143	109	110	111	72
16	65	64	57	45	52	51	74	144	112	109	110	66
17	64	67	57	45	51	52	74	146	112	109	110	66
18	64	67	56	45	52	53	75	147	111	109	110	66
19	65	67	57	42	52	53	77	149	110	109	110	66
20	66	66	57	40	54	53	79	149	111	109	110	66
21	66	66	57	40	54	51	82	151	110	109	110	66
22	66	65	57	39	54	50	79	116	108	109	110	66
23	66	64	57	39	53	50	78	88	108	109	110	66
24	66	66	57	41	54	50	101	130	110	109	113	68
25	66	67	57	40	55	50	126	157	112	108	114	69
26	66	66	57	40	54	50	127	155	110	108	114	67
27	66	66	57	41	53	50	128	146	109	108	113	67
28	66	66	57	40	52	50	129	150	107	111	113	67
29	67	66	57	40	---	50	130	153	109	113	113	67
30	66	66	57	40	---	50	131	156	111	112	113	67
31	66	---	57	40	---	50	---	157	---	112	113	---
TOTAL	2019	1979	1770	1334	1467	1614	2523	4587	3388	3363	3455	2222
MEAN	65.1	66.0	57.1	43.0	52.4	52.1	84.1	148	113	108	111	74.1
MAX	68	67	61	49	56	66	131	165	158	113	114	93
MIN	59	64	56	39	49	50	61	88	106	89	110	66
AC-FT	4000	3930	3510	2650	2910	3200	5000	9100	6720	6670	6850	4410

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1966, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	534	516	544	528	519	620	971	2005	3149	1396	636	548
MAX	813	780	2281	1221	1556	1078	2803	5336	7859	4624	1320	1143
(WY)	1949	1939	1951	1965	1965	1916	1952	1919	1911	1911	1939	1939
MIN	13.8	1.52	1.83	2.51	34.2	11.2	507	493	480	279	27.1	5.83
(WY)	1925	1924	1924	1924	1924	1925	1937	1961	1924	1919	1924	1923

SUMMARY STATISTICS	WATER YEARS 1911 - 1966	
ANNUAL MEAN	997	
HIGHEST ANNUAL MEAN	1724	1911
LOWEST ANNUAL MEAN	516	1924
HIGHEST DAILY MEAN	11400	Jun 18 1911
LOWEST DAILY MEAN	1.3	Nov 2 1923
ANNUAL SEVEN-DAY MINIMUM	1.4	Nov 1 1923
MAXIMUM PEAK FLOW	12900	Jun 1 1943
MAXIMUM PEAK STAGE	13.90	Jun 1 1943
ANNUAL RUNOFF (AC-FT)	722600	
10 PERCENT EXCEEDS	2230	
50 PERCENT EXCEEDS	721	
90 PERCENT EXCEEDS	115	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	51.2	63.1	77.6	121	74.1	80.6	222	1083	1761	855	163	76.3
MAX	164	561	618	2105	305	489	1371	3327	5885	5149	1263	125
(WY)	1987	1987	1997	1997	1974	1983	1986	1969	1983	1983	1983	1989
MIN	31.1	33.6	34.1	33.5	31.7	29.9	33.6	49.0	71.2	68.2	66.7	31.6
(WY)	1969	1991	1991	1977	1971	1974	1981	1990	1977	1968	1974	1970

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	94911		29721			
ANNUAL MEAN	259		81.4		386	
HIGHEST ANNUAL MEAN					1433	1983
LOWEST ANNUAL MEAN					49.5	1977
HIGHEST DAILY MEAN	3540	Jun 15	165	May 4	13800	Jan 3 1997
LOWEST DAILY MEAN	34	Jan 2	39	Jan 22	.00	Oct 3 1968
ANNUAL SEVEN-DAY MINIMUM	34	Jan 9	40	Jan 20	.00	Feb 20 1970
MAXIMUM PEAK FLOW			1810	Jun 6	16400	Jan 3 1997
MAXIMUM PEAK STAGE			8.20	Jun 6	15.08	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	188300		58950		280000	
10 PERCENT EXCEEDS	515		126		990	
50 PERCENT EXCEEDS	125		66		66	
90 PERCENT EXCEEDS	57		50		35	

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1987 to current year.
WATER TEMPERATURE: Water years 1987 to current year.

PERIOD OF DAILY RECORD.—August 1987 to current year.
WATER TEMPERATURE: August 1987 to current year.

INSTRUMENTATION.—Water-temperature recorder since August 1987.

REMARKS.—Water-temperature records rated excellent except for Feb. 9–27, Apr. 16 to May 6, June 13 to July 2, July 20 to Aug. 20 which are rated good; and May 7–10 which are rated fair. Water-temperature recorder installed Aug. 13, 1987, located 0.6 mi upstream from gaging station on left bank at road bridge. Water temperature can be affected by releases from O'Shaughnessy Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 19.5°C, July 12, 1996, and June 30, 2000; minimum recorded, 4.0°C, Mar. 25, 1991.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 13.0°C, several days in June and July; minimum recorded, 6.0°C, several days in February and March.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL			
16...*	1415	10.5	25.0
16...*	1416	10.0	20.0
16...*	1418	10.5	16.0
16...*	1420	10.5	15.0
16...*	1422	10.0	13.0
16...*	1425	10.5	11.0
16...*	1430	10.5	9.00
16...*	1455	10.5	7.00
16...*	1459	10.5	3.00

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	10.5	11.5	10.0	11.5	11.0	10.0	9.5	8.0	7.5	7.0	6.0
2	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.5	8.5	7.5	7.0	6.5
3	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.5	8.5	7.5	7.0	6.0
4	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.0	8.5	7.5	7.0	6.5
5	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.5	8.5	7.5	7.0	6.5
6	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.0	8.0	7.0	7.5	6.5
7	12.0	10.5	11.5	10.5	11.5	11.0	10.0	9.0	7.5	7.0	8.0	6.5
8	12.0	10.5	11.5	10.5	11.5	11.0	9.5	9.0	7.5	7.0	8.0	6.5
9	11.5	10.5	11.0	10.5	11.5	10.5	9.5	9.0	7.5	7.0	7.0	6.5
10	11.0	10.5	11.0	10.5	11.5	10.5	9.0	8.0	7.0	6.5	7.5	6.0
11	11.0	10.5	10.5	10.0	11.0	10.5	9.5	8.0	7.0	6.5	7.5	6.5
12	11.0	10.0	11.0	10.0	11.0	10.5	9.5	8.5	7.0	6.0	8.0	6.5
13	11.5	10.0	11.0	10.0	11.0	10.5	9.5	8.5	7.5	6.5	8.0	6.5
14	11.5	10.5	11.0	10.0	11.0	10.5	9.0	8.5	7.5	6.5	8.0	6.5
15	11.5	10.5	11.0	10.0	11.0	10.5	9.0	8.0	7.5	6.5	8.0	6.5
16	12.0	10.5	11.0	10.0	11.0	10.5	8.5	8.0	7.5	6.5	8.0	6.5
17	12.0	10.5	11.0	10.0	11.0	10.5	8.5	8.0	7.0	6.5	8.0	6.5
18	12.0	10.5	11.0	10.5	11.0	10.0	9.0	8.0	7.5	7.0	8.5	7.0
19	12.0	10.5	11.5	10.5	10.5	10.0	9.5	8.5	7.0	6.5	8.5	7.0
20	12.0	10.5	11.5	10.5	11.0	10.0	9.0	8.0	7.0	6.5	8.5	7.0
21	11.5	10.5	11.5	10.5	11.0	10.0	9.0	8.0	7.0	6.5	8.5	7.0
22	11.0	10.0	11.5	10.5	10.5	10.0	9.0	8.5	6.5	6.0	9.0	7.0
23	11.5	10.5	11.5	10.5	10.5	10.0	9.0	8.0	7.0	6.0	8.5	7.0
24	11.5	10.5	11.5	11.0	10.5	9.5	8.5	7.0	6.5	6.0	8.5	7.0
25	11.5	10.5	11.5	11.0	10.5	9.5	8.0	7.5	7.0	6.5	8.5	7.5
26	11.0	10.5	12.0	11.0	10.0	9.5	8.5	7.5	7.0	6.5	8.5	7.0
27	11.5	10.5	12.0	11.0	10.5	9.5	8.5	7.5	7.5	6.5	8.5	7.0
28	11.0	10.5	12.0	11.0	10.5	9.5	8.0	7.5	7.0	6.0	9.0	7.5
29	11.0	10.5	11.5	11.0	10.5	10.0	8.5	7.5	---	---	9.0	7.0
30	11.0	10.5	11.5	10.5	10.0	9.5	8.0	7.0	---	---	9.0	7.0
31	11.0	10.0	---	---	10.5	9.5	8.0	7.5	---	---	9.0	7.5
MONTH	12.0	10.0	12.0	10.0	11.5	9.5	10.0	7.0	8.5	6.0	9.0	6.0

* Instantaneous discharge at time of cross-sectional measurement: 110 ft^3/s.

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	7.5	9.0	7.5	12.5	10.5	13.0	10.5	11.0	10.0	11.0	10.0
2	7.5	7.0	8.5	7.5	11.5	10.5	12.5	11.0	11.0	10.0	11.5	10.0
3	7.0	6.5	9.5	7.5	12.0	10.0	12.0	11.0	11.0	10.0	11.5	10.0
4	8.0	6.5	8.5	7.0	12.0	10.5	11.5	11.0	10.5	9.5	11.5	10.0
5	8.0	7.0	9.0	8.0	12.0	10.5	11.5	11.0	11.0	9.5	11.0	10.0
6	7.5	7.5	9.0	8.0	12.5	9.5	11.0	10.5	11.0	9.5	11.0	9.5
7	7.5	6.5	9.0	8.0	12.5	11.0	11.5	10.5	11.0	10.0	11.0	10.0
8	8.0	7.0	9.0	8.0	12.5	11.0	11.5	10.5	11.0	10.0	11.0	9.5
9	8.5	7.0	9.0	8.0	12.5	10.5	11.5	10.5	11.0	10.0	11.0	10.0
10	8.5	7.0	9.0	8.0	12.5	11.0	11.5	10.0	11.0	10.0	11.0	10.0
11	7.5	7.5	9.0	8.0	12.5	11.0	11.0	10.0	11.0	10.0	11.0	10.0
12	8.5	7.0	9.0	8.0	12.5	11.0	11.0	10.0	11.0	10.0	11.0	10.0
13	8.5	7.5	9.5	8.0	12.5	10.5	11.0	9.5	11.0	10.0	11.0	10.0
14	8.5	7.0	9.0	8.0	12.5	11.0	10.5	9.5	11.0	10.0	11.0	10.0
15	9.0	7.0	9.0	8.0	13.0	11.5	10.5	9.0	11.0	10.0	11.5	10.0
16	9.0	7.5	9.5	8.0	12.5	11.0	10.5	9.0	11.0	10.0	11.5	10.0
17	9.0	7.0	10.0	8.5	12.5	11.5	10.5	9.0	11.0	10.0	11.5	10.0
18	8.5	7.0	9.5	8.5	12.5	11.0	10.5	9.5	11.0	10.0	11.5	10.0
19	7.5	7.5	10.0	8.5	12.5	11.0	10.5	9.0	11.0	10.0	11.5	10.0
20	7.5	6.5	10.0	8.5	13.0	11.5	10.5	9.0	11.0	9.5	11.5	10.0
21	8.5	7.0	10.0	8.5	13.0	11.5	10.5	9.5	10.5	9.5	11.5	10.0
22	9.0	7.0	11.0	9.0	13.0	11.5	10.5	9.5	10.5	9.5	11.5	10.0
23	9.0	7.5	10.5	9.0	13.0	11.5	10.5	9.5	10.5	9.5	11.0	10.0
24	9.0	7.5	10.0	9.0	12.0	11.0	11.0	9.5	11.0	9.5	11.5	10.0
25	8.5	7.5	10.5	9.0	12.0	10.5	11.0	9.5	11.0	10.0	11.5	10.5
26	8.5	7.5	10.5	9.0	12.0	11.0	11.0	10.0	11.0	10.0	11.5	10.0
27	8.5	7.5	10.5	9.0	12.0	11.0	10.5	9.5	11.0	10.0	11.5	10.0
28	8.5	7.5	10.0	9.0	12.0	10.5	10.5	9.5	11.0	10.0	11.5	10.0
29	8.5	7.5	11.0	9.5	12.5	11.0	10.5	9.5	11.0	10.0	11.5	10.0
30	9.0	7.5	11.5	10.0	12.0	11.0	10.5	9.5	11.0	10.0	11.5	10.0
31	---	---	12.0	10.5	---	---	11.0	9.5	11.0	10.0	---	---
MONTH	9.0	6.5	12.0	7.0	13.0	9.5	13.0	9.0	11.0	9.5	11.5	9.5

11276600 TUOLUMNE RIVER ABOVE EARLY INTAKE, NEAR MATHER, CA

LOCATION.—Lat 37°52'46", long 119°56'46", in SE 1/4 SW 1/4 sec.1, T.1 S., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on left bank, 0.5 mi upstream from Early Intake, 2.4 mi upstream from Cherry Creek, and 5.0 mi west of Mather.

DRAINAGE AREA.—484 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 2,420 ft above sea level, from topographic map.

REMARKS.—Records good. Flow regulated by Hetch Hetchy Reservoir (station 11275500) 12 mi upstream. Flow diverted upstream from station through tunnel to Robert C. Kirkwood Powerplant and Hetch Hetchy Aqueduct. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,700 ft^3/s, Jan. 3, 1997, gage height, 22.98 ft; minimum daily, 25 ft^3/s, Oct. 11, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of June 1, 1943, reached a stage of 22.1 ft, discharge, 12,900 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	73	73	57	52	84	75	172	176	111	119	114
2	62	72	65	49	62	88	86	201	126	83	118	86
3	60	71	64	47	64	93	84	204	127	110	118	85
4	65	72	63	47	67	99	83	208	128	113	118	84
5	64	73	63	47	70	293	90	204	124	113	118	84
6	64	73	63	47	68	176	92	190	162	112	118	83
7	64	72	63	47	62	133	103	189	123	118	118	83
8	64	72	63	48	60	123	98	190	117	117	118	83
9	66	72	62	48	61	122	96	192	116	116	118	82
10	70	73	63	51	68	109	96	194	113	115	118	82
11	67	72	62	71	71	102	99	190	112	114	117	82
12	67	73	64	57	67	98	108	163	113	113	117	82
13	66	74	61	53	67	95	109	172	112	113	117	82
14	66	74	64	53	68	94	105	172	111	117	116	81
15	66	76	66	52	70	93	102	166	111	115	117	80
16	66	73	63	52	71	92	100	168	117	114	116	67
17	65	74	62	51	71	90	99	170	117	114	116	66
18	66	75	61	50	73	91	98	171	116	114	116	65
19	66	75	60	50	87	92	132	171	115	114	116	65
20	69	75	60	48	106	92	184	172	116	114	115	65
21	70	74	60	46	98	90	236	173	115	114	115	65
22	69	73	59	46	99	86	210	166	113	114	116	65
23	69	71	59	46	95	84	177	98	112	114	115	65
24	69	70	60	61	95	81	158	112	111	113	116	64
25	70	74	59	56	101	83	199	175	116	114	120	72
26	73	72	59	57	101	82	187	184	115	113	119	68
27	72	72	59	57	91	79	181	163	114	113	119	67
28	72	72	59	56	90	78	177	167	113	114	119	67
29	95	77	58	54	---	77	175	171	111	118	119	66
30	78	77	58	53	---	75	172	175	116	119	119	66
31	73	---	58	52	---	74	---	178	---	119	118	---
TOTAL	2134	2196	1913	1609	2155	3148	3911	5421	3588	3515	3639	2266
MEAN	68.8	73.2	61.7	51.9	77.0	102	130	175	120	113	117	75.5
MAX	95	77	73	71	106	293	236	208	176	119	120	114
MIN	60	70	58	46	52	74	75	98	111	83	115	64
AC-FT	4230	4360	3790	3190	4270	6240	7760	10750	7120	6970	7220	4490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

MEAN	53.8	75.9	110	188	150	163	275	1096	1766	881	176	84.7
MAX	142	552	801	2501	375	814	1564	3339	6142	5424	1319	132
(WY)	1987	1987	1997	1997	1998	1983	1983	1982	1983	1995	1983	1989
MIN	33.3	36.6	38.7	39.7	38.5	38.5	39.7	55.8	78.0	74.3	73.7	56.7
(WY)	1989	1991	1991	1977	1977	1977	1977	1992	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	111586		35495			
ANNUAL MEAN	305		97.2		419	
HIGHEST ANNUAL MEAN					1584	1983
LOWEST ANNUAL MEAN					53.5	1977
HIGHEST DAILY MEAN	3810	Jun 15	293	Mar 5	14500	Jan 3 1997
LOWEST DAILY MEAN	35	Jan 3	46	Jan 21	25	Oct 11 1988
ANNUAL SEVEN-DAY MINIMUM	35	Jan 3	47	Jan 3	27	Oct 11 1988
MAXIMUM PEAK FLOW			382	Mar 5	17700	Jan 3 1997
MAXIMUM PEAK STAGE			13.75	Mar 5	22.98	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	221300		70400		303400	
10 PERCENT EXCEEDS	549		169		995	
50 PERCENT EXCEEDS	128		86		84	
90 PERCENT EXCEEDS	62		59		42	

11276600 TUOLUMNE RIVER ABOVE EARLY INTAKE, NEAR MATHER, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1987 to current year.
WATER TEMPERATURE: Water years 1987 to current year.

PERIOD OF DAILY RECORD.—August 1987 to current year.
WATER TEMPERATURE: August 1987 to current year.

INSTRUMENTATION.—Water-temperature recorder since Aug. 12, 1987.

REMARKS.—Water-temperature records rated excellent except for Oct. 1 to Nov. 15, Mar. 11 to Apr. 3, Apr. 14–24, May 23 to June 7 which are rated good; Apr. 25 to May 6, June 8–21 which are rated fair; and May 7, 8 which are rated poor. Temperature recorder located 600 ft upstream from gaging station on right bank. Water temperature is affected by regulation from O'Shaughnessy Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 25.5°C, June 1, 1992; minimum recorded, 0.0°C, Dec. 24, 25, 1990.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 23.0°C, July 2, 3; minimum recorded, 2.5°C, Jan. 18.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL			
16...*	1700	19.5	62.0
16...*	1701	19.5	56.0
16...*	1702	19.5	50.0
16...*	1703	19.5	44.0
16...*	1704	19.5	38.0
16...*	1705	19.5	32.0
16...*	1706	19.0	26.0
16...*	1707	19.5	20.0
16...*	1708	19.5	14.0
16...*	1709	19.5	8.00
16...*	1710	19.5	2.00

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	14.5	9.5	8.0	8.5	7.5	5.5	4.5	5.5	3.5	7.5	5.5
2	17.0	14.5	10.0	8.5	8.0	7.0	5.0	4.5	6.0	4.0	7.5	6.5
3	17.0	14.5	9.5	8.0	7.5	6.5	5.0	4.0	6.5	5.0	7.5	5.5
4	17.0	14.5	9.5	8.0	7.5	6.5	5.0	4.0	7.0	5.5	7.5	7.0
5	16.5	14.0	10.0	8.5	7.5	6.5	5.0	4.0	7.5	6.0	7.0	6.5
6	16.5	14.0	10.0	9.0	8.0	6.5	5.0	4.0	7.5	6.0	8.0	6.5
7	16.5	14.0	9.5	8.0	9.0	7.5	5.5	4.0	7.0	5.5	9.5	6.5
8	16.5	14.0	10.0	8.5	9.5	8.5	6.0	5.0	6.0	4.5	10.0	8.0
9	16.0	14.0	10.0	8.5	9.0	8.0	6.5	5.5	6.0	5.0	9.5	8.5
10	14.5	13.5	9.0	8.0	9.0	8.5	6.0	5.0	5.0	3.0	10.0	8.0
11	13.5	12.0	8.5	7.0	9.0	8.0	6.0	4.5	4.0	3.0	10.0	8.0
12	13.0	11.5	7.0	6.0	9.0	8.0	6.0	5.0	5.0	3.0	10.0	7.5
13	13.0	10.5	7.0	5.5	8.5	7.5	6.0	5.0	5.5	3.5	10.5	8.0
14	13.0	11.0	7.0	5.5	9.0	8.0	5.5	4.5	5.5	4.0	11.0	8.0
15	13.0	11.0	6.0	5.5	8.5	7.5	5.0	4.0	6.5	4.5	10.5	9.0
16	13.5	11.5	6.0	5.0	7.5	7.0	4.0	3.5	6.5	4.5	11.5	9.0
17	14.0	11.5	6.0	5.0	7.0	6.5	3.5	3.0	7.0	5.0	12.0	9.0
18	14.0	12.0	6.0	5.0	6.5	6.0	4.0	2.5	7.5	6.5	12.5	9.5
19	14.0	12.0	6.5	5.0	6.0	5.5	5.0	3.5	7.5	6.5	13.5	10.5
20	13.5	12.0	6.5	5.5	6.5	5.5	5.0	3.5	7.5	7.0	13.5	11.0
21	13.0	11.5	7.0	6.0	6.5	5.5	5.0	3.5	7.5	6.5	14.0	11.5
22	12.0	10.5	7.5	6.5	6.0	5.5	6.5	5.0	7.0	6.0	14.5	11.5
23	11.5	10.0	7.5	6.0	6.5	5.0	6.5	5.0	7.0	5.5	15.0	11.5
24	11.5	9.5	7.5	6.5	6.0	5.5	6.0	3.5	6.0	5.0	15.0	12.0
25	11.5	10.0	7.5	6.5	6.0	5.0	5.5	4.0	7.0	5.5	15.0	13.0
26	11.0	10.5	8.0	7.0	5.5	5.0	5.5	4.0	7.0	6.0	15.0	12.0
27	11.0	10.0	8.0	7.0	6.0	4.5	5.5	4.0	8.0	6.0	15.5	12.0
28	11.0	10.0	8.0	7.0	5.5	4.5	5.0	4.0	7.0	5.5	16.0	13.0
29	10.5	9.5	8.5	7.5	5.5	4.5	5.5	4.0	---	---	16.5	13.0
30	10.5	9.5	8.5	8.0	5.5	5.0	5.0	3.5	---	---	17.0	13.0
31	10.0	8.5	---	---	5.5	4.5	5.0	4.0	---	---	17.5	14.0
MONTH	17.0	8.5	10.0	5.0	9.5	4.5	6.5	2.5	8.0	3.0	17.5	5.5

* Instantaneous discharge at time of cross-sectional measurement: 114 ft^3/s.

11276600 TUOLUMNE RIVER ABOVE EARLY INTAKE, NEAR MATHER, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.5	14.0	16.0	12.0	19.0	15.5	22.0	18.0	20.0	16.5	19.0	16.0
2	15.0	13.0	15.5	12.5	19.0	15.5	23.0	18.5	20.5	17.0	19.5	16.0
3	13.0	11.0	14.0	11.0	18.5	15.0	23.0	19.5	20.5	17.0	19.5	16.5
4	12.0	10.0	13.5	10.5	18.5	14.5	21.0	20.0	20.0	16.5	20.0	17.0
5	10.5	9.5	14.5	11.0	18.5	14.5	21.0	19.0	20.0	16.5	20.0	17.0
6	9.5	8.5	15.0	11.5	19.0	15.0	19.5	18.5	20.0	16.5	19.5	16.0
7	9.0	7.0	16.0	12.0	20.0	15.0	20.0	17.5	20.5	17.0	19.0	16.0
8	8.5	7.5	16.5	12.5	20.5	16.0	20.5	17.0	21.0	17.5	19.0	15.5
9	9.0	6.5	16.5	13.0	20.0	16.5	21.0	17.5	21.0	17.5	19.0	15.5
10	11.0	7.0	16.5	13.0	20.0	16.5	21.5	18.0	21.0	17.5	18.5	15.5
11	9.0	8.5	16.5	13.0	19.5	16.5	21.0	18.0	20.5	17.0	18.0	16.0
12	11.5	8.0	15.5	13.5	20.0	16.5	20.5	17.5	20.5	17.0	18.0	15.0
13	11.5	8.5	16.0	12.5	20.0	16.0	21.0	17.0	20.5	17.0	18.0	15.0
14	12.0	9.0	16.0	12.5	20.0	16.5	20.5	17.0	20.0	16.5	18.0	15.0
15	13.5	9.5	15.0	13.0	20.5	16.5	20.0	16.5	19.0	16.5	18.0	15.5
16	14.5	10.5	16.5	12.5	21.0	17.0	20.0	16.5	19.5	16.0	18.5	15.5
17	14.5	11.0	17.0	13.0	20.5	17.5	20.0	16.5	19.0	16.0	18.5	15.5
18	14.0	11.5	17.5	13.5	21.0	17.0	20.0	16.5	20.0	16.5	19.0	15.5
19	12.5	10.5	17.5	13.5	21.0	17.0	20.0	16.5	19.5	16.5	19.0	16.0
20	10.5	7.0	17.5	13.5	21.5	17.5	20.0	16.5	19.0	16.0	19.0	16.0
21	8.5	7.0	18.0	14.0	21.5	18.0	20.0	16.5	18.5	15.5	19.0	16.0
22	10.5	7.5	18.5	14.5	22.0	18.0	20.0	16.5	18.0	15.0	18.5	16.0
23	13.0	8.5	20.0	15.0	22.0	18.5	20.0	16.5	18.0	15.0	18.0	16.0
24	15.0	10.5	20.0	16.5	21.5	18.0	20.5	16.5	18.5	15.0	18.0	15.0
25	15.5	11.5	19.5	16.0	20.5	17.5	20.5	17.0	19.0	15.5	18.0	16.0
26	15.5	12.0	18.0	14.5	20.0	17.0	21.0	17.5	19.0	16.0	18.0	15.0
27	15.5	12.0	17.0	14.0	18.5	17.0	21.0	17.5	19.5	16.0	18.0	15.0
28	14.5	11.5	17.5	13.5	20.0	16.0	21.0	17.5	19.5	16.0	17.5	15.0
29	14.5	10.5	18.0	14.0	21.0	17.0	20.5	17.0	19.5	16.0	17.5	15.0
30	15.0	11.0	18.5	14.5	21.5	17.5	20.0	16.5	19.0	16.0	18.0	15.0
31	---	---	19.5	15.0	---	---	20.0	16.5	19.0	16.0	---	---
MONTH	16.5	6.5	20.0	10.5	22.0	14.5	23.0	16.5	21.0	15.0	20.0	15.0

11276900 TUOLUMNE RIVER BELOW EARLY INTAKE, NEAR MATHER, CA

LOCATION.—Lat 37°52'54", long 119°58'09", in NW 1/4 SW 1/4 sec.2, T.1 S., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on left bank, 0.6 mi upstream from Cherry Creek, 0.7 mi downstream from Robert C. Kirkwood Powerplant and Hetch Hetchy Aqueduct, and 6.3 mi west of Mather.

DRAINAGE AREA.—487 mi^2.

PERIOD OF RECORD.—October 1966 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 2,200 ft above sea level, from topographic map.

REMARKS.—Records good. Flow regulated by Hetch Hetchy Reservoir (station 11275500) 13 mi upstream and Robert C. Kirkwood Powerplant beginning Apr. 26, 1967. Water is diverted to Hetch Hetchy Aqueduct from the tailrace of the powerplant through a closed conduit. Flow in excess of aqueduct capacity is diverted to river. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,200 ft^3/s, Jan. 3, 1997, gage height, 12.33 ft; minimum daily, 12 ft^3/s, Nov. 28–30, 1976.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	79	76	56	51	88	176	921	574	118	120	116
2	61	78	68	50	60	90	247	960	490	89	119	88
3	59	77	65	48	64	100	295	976	317	108	119	86
4	64	77	64	48	64	106	394	982	285	117	119	85
5	63	77	64	48	70	301	412	963	135	117	120	85
6	63	78	63	48	65	184	416	941	164	116	119	85
7	63	76	64	48	60	146	379	931	131	124	119	85
8	64	77	64	50	57	136	185	933	124	122	119	85
9	65	76	63	50	59	136	346	953	182	121	118	84
10	68	78	62	53	67	121	422	960	270	119	118	84
11	65	76	61	77	69	113	399	969	120	118	117	85
12	64	77	65	60	65	107	372	965	120	117	117	85
13	64	77	62	56	64	100	378	878	119	117	117	84
14	63	78	63	54	65	100	295	969	117	122	117	84
15	63	79	67	54	67	100	179	978	116	120	117	e82
16	64	75	61	53	71	96	277	984	122	119	117	e68
17	63	77	60	62	68	94	381	977	122	119	117	e67
18	63	78	59	70	71	97	381	975	121	118	116	e67
19	63	78	59	342	88	97	418	982	120	118	117	e67
20	65	77	59	48	112	95	472	999	121	118	116	67
21	66	76	59	46	102	94	509	1010	121	119	116	67
22	64	77	59	150	104	88	447	532	120	117	116	67
23	65	75	58	47	97	86	428	309	119	116	116	67
24	65	73	58	63	98	84	708	726	121	115	117	66
25	66	77	58	57	106	83	915	979	122	115	121	74
26	68	77	58	57	106	82	883	990	123	115	121	70
27	67	74	57	56	93	78	876	973	120	115	121	69
28	68	74	57	56	95	89	872	974	119	115	120	69
29	107	80	57	54	---	230	868	826	118	119	120	69
30	87	81	56	53	---	224	895	666	122	120	120	68
31	80	---	56	52	---	197	---	669	---	120	120	---
TOTAL	2093	2309	1902	2066	2158	3742	14225	27850	5075	3623	3666	2325
MEAN	67.5	77.0	61.4	66.6	77.1	121	474	898	169	117	118	77.5
MAX	107	81	76	342	112	301	915	1010	574	124	121	116
MIN	59	73	56	46	51	78	176	309	116	89	116	66
AC-FT	4150	4580	3770	4100	4280	7420	28220	55240	10070	7190	7270	4610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

MEAN	82.4	105	156	273	308	383	500	1359	2013	1001	235	120
MAX	247	313	1169	2917	1039	990	1694	3727	6260	5530	1726	370
(WY)	1984	1984	1997	1997	1996	1996	1983	1986	1983	1983	1983	1983
MIN	30.0	34.8	29.4	31.1	34.8	37.5	33.7	52.0	36.9	29.9	31.1	28.7
(WY)	1989	1988	1977	1977	1977	1977	1977	1992	1976	1976	1976	1976

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	192029		71034			
ANNUAL MEAN	525		195		545	
HIGHEST ANNUAL MEAN					1778	1983
LOWEST ANNUAL MEAN					49.2	1977
HIGHEST DAILY MEAN	3960	Jun 15	1010	May 21	14400	Jan 3 1997
LOWEST DAILY MEAN	38	Jan 6	46	Jan 21	12	Nov 28 1976
ANNUAL SEVEN-DAY MINIMUM	39	Jan 5	49	Jan 2	13	Nov 24 1976
MAXIMUM PEAK FLOW			1040	May 20	18200	Jan 3 1997
MAXIMUM PEAK STAGE			5.58	May 20	12.33	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	380900		140900		394800	
10 PERCENT EXCEEDS	1240		611		1360	
50 PERCENT EXCEEDS	137		95		134	
90 PERCENT EXCEEDS	61		59		46	

e Estimated.

11277100 LAKE ELEANOR DIVERSION TUNNEL TO CHERRY LAKE, NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°58'47", long 119°52'51", in SW 1/4 SW 1/4 sec.34, T.2 N., R.19 E., Tuolumne County, Hydrologic Unit 18040009, Yosemite National Park, on west side of Lake Eleanor, 0.5 mi northwest of Eleanor Dam, and 6.0 mi northwest of Hetch Hetchy.

PERIOD OF RECORD.—July 1996 to August 1996, October 1996 to September 1999, November 2000 to September 2001.

GAGE.—Ultrasonic-velocity meter system. Elevation of gage is 4,670 ft above sea level, from topographic map.

REMARKS.—Records good. Instrumentation damaged by forest fire on Aug. 26, 1996. Flow is gravity flow or regulated by pump station at Cherry Lake (station 11277200). Diversion from Lake Eleanor (station 11277500) to Cherry Lake began in March 1960. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 816 ft^3/s, Feb. 17, 2001; no flow at times each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.00	.00	.00	349	620	58	172	.00	.00	.00
2	---	---	.00	.00	.00	342	609	.00	169	.00	.00	.00
3	---	---	.00	.00	.00	336	517	.00	166	.00	.00	.00
4	---	---	.00	.00	.00	337	514	161	121	.00	.00	.00
5	---	---	.00	.00	.00	349	525	256	85	.00	.00	.00
6	---	e.00	.00	.00	.00	353	527	250	74	.00	.00	.00
7	---	.00	.00	.00	.00	357	500	248	58	.00	.00	.00
8	---	.00	.00	.00	.00	363	469	320	58	.00	.00	.00
9	---	.00	.00	.00	.00	365	442	468	57	.00	.00	.00
10	---	.00	.00	.00	.00	369	444	463	52	.00	.00	.00
11	---	.00	.00	.00	.00	370	429	451	45	.00	.00	.00
12	---	.00	.00	.00	.00	369	403	439	14	.00	.00	.00
13	---	.00	.00	.00	.00	369	377	430	.00	.00	.00	.00
14	---	.00	.00	.00	.00	365	350	418	.00	.00	.00	.00
15	---	.00	.00	.00	.00	369	323	411	.00	.00	.00	.00
16	---	.00	.00	.00	365	376	305	402	.00	.00	.00	.00
17	---	.00	.00	.00	816	376	298	392	.00	.00	.00	.00
18	---	.00	.00	.00	791	388	289	381	.00	.00	.00	.00
19	---	.00	.00	.00	764	399	284	373	.00	.00	.00	.00
20	---	.00	.00	.00	742	401	281	364	.00	.00	.00	.00
21	---	.00	.00	.00	711	454	236	353	.00	.00	.00	.00
22	---	.00	.00	.00	560	474	234	344	.00	.00	.00	.00
23	---	.00	.00	.00	440	455	246	336	.00	.00	.00	.00
24	---	.00	.00	.00	404	443	241	326	.00	.00	.00	.00
25	---	.00	.00	.00	386	466	235	319	.00	.00	.00	.00
26	---	.00	.00	.00	371	460	228	311	.00	.00	.00	125
27	---	.00	.00	.00	361	461	216	304	.00	.00	.00	213
28	---	.00	.00	.00	355	520	202	296	.00	.00	.00	212
29	---	.00	.00	.00	---	515	182	256	.00	.00	.00	87
30	---	.00	.00	.00	---	657	163	197	.00	.00	.00	.00
31	---	---	.00	.00	---	630	---	175	---	.00	.00	---
TOTAL	---	---	0.00	0.00	7066.00	12837	10689	9502.00	1071.00	0.00	0.00	637.00
MEAN	---	---	.000	.000	252	414	356	307	35.7	.000	.000	21.2
MAX	---	---	.00	.00	816	657	620	468	172	.00	.00	213
MIN	---	---	.00	.00	.00	336	163	.00	.00	.00	.00	.00
AC-FT	---	---	.00	.00	14020	25460	21200	18850	2120	.00	.00	1260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	39.9	71.0	137	23.0	163	300	417	389	135	75.3	30.6	5.31
MAX	160	183	286	115	308	434	504	550	224	179	123	21.2
(WY)	1999	1999	1998	1998	1998	1998	1998	1998	1998	1999	1998	2001
MIN	.000	.000	.000	.000	.000	.000	356	307	35.7	.000	.000	.000
(WY)	1997	1997	2000	1997	1997	2000	2001	2001	2001	2001	1997	1997

SUMMARY STATISTICS	WATER YEARS 1996 - 2001	
ANNUAL MEAN	177	
HIGHEST ANNUAL MEAN	221	1998
LOWEST ANNUAL MEAN	121	1997
HIGHEST DAILY MEAN	816	Feb 17 2001
LOWEST DAILY MEAN	.00	Oct 1 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1996
ANNUAL RUNOFF (AC-FT)	128500	
10 PERCENT EXCEEDS	424	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

e Estimated.

11277200 CHERRY LAKE NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°58'33", long 119°54'47", in SE 1/4 NW 1/4 sec.5, T.1 N., R.19 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on upstream face of Cherry Valley Dam on Cherry Creek, 4.2 mi upstream from Eleanor Creek, 7 mi north of Early Intake, and 7.3 mi northwest of Hetch Hetchy.

DRAINAGE AREA.—117 mi^2.

PERIOD OF RECORD.—August 1956 to current year. Prior to October 1959, published as Lake Lloyd near Hetch Hetchy.

GAGE.—Water-stage recorder. Datum of gage is 2.42 ft above sea level. Prior to October 1974, datum published as at mean sea level.

REMARKS.—Reservoir is formed by a rockfill dam completed in 1956. Storage began in December 1955. Capacity, 274,300 acre-ft, between gage heights 4,430 ft, bottom of sluice gates, and 4,703 ft, top of flashboard gates on concrete spillway. No dead storage. Installation of flashboard gates on top of concrete spillway completed in 1979. Water is released down Cherry Creek for power development and domestic supply as part of Hetch Hetchy system of city and county of San Francisco. Unmeasured diversion from Lake Eleanor (station 11277500) into Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake through tunnel to Dion R. Holm Powerplant near mouth of Cherry Creek began Aug. 1, 1960. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 274,300 acre-ft, June 25–28, 1986, gage height, 4,703.0 ft; minimum since reservoir first filled, 7,660 acre-ft, Jan. 24, 1960, gage height, 4,502.1 ft. Reservoir drained for inspection in 1961, 1964, and 1989.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 270,900 acre-ft, June 18, gage height, 4,701.14 ft; minimum, 94,700 acre-ft, Feb. 16, gage height, 4,587.36 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by San Francisco Public Utilities Commission, dated May 15, 1971)

4,440	0	4,490	3,020	4,560	60,800	4,660	201,100
4,450	75	4,500	6,030	4,580	85,100	4,680	234,100
4,460	250	4,510	11,700	4,600	111,800	4,700	268,800
4,470	675	4,520	19,700	4,620	139,900	4,705	277,900
4,480	1,530	4,540	38,900	4,640	169,700		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118100	110800	114200	112800	104600	98300	134700	184800	264900	268500	252500	232000
2	117700	111100	114400	112500	103500	98000	137400	187000	266100	268000	251700	232000
3	117300	111300	114400	112000	103000	98000	139100	186700	267000	267300	250900	231700
4	116900	111500	114500	112100	102900	98100	140600	186900	267500	266900	250400	231100
5	116400	111700	114700	112200	102400	98100	141800	187900	268000	266400	250100	230500
6	115800	111800	114700	112100	101700	98000	143200	189700	268500	266100	249300	230100
7	115200	112000	114800	112300	100800	98100	144700	191700	268900	265900	248500	229400
8	114600	112100	114900	112400	100100	98200	146200	194400	269400	265700	247600	228900
9	113400	112200	115000	112200	99400	98600	147100	198700	269800	265200	246700	228600
10	112200	112300	115100	112300	99000	98700	148000	202900	270100	264500	246000	227900
11	110600	112400	115200	112200	98400	98800	149000	207400	270300	264000	245300	227200
12	109200	112500	115400	112300	97600	98600	149800	211700	270500	263400	244900	226500
13	107700	112600	115500	112400	96600	98900	150800	215700	270700	262800	244700	225600
14	107800	112700	115700	112200	95800	99300	151900	219400	270800	262300	244000	224900
15	107900	112800	115900	111800	94900	99600	153200	222400	270800	262200	243200	224500
16	107900	112800	116000	111100	94700	99900	154200	226100	270700	261600	242500	224300
17	108100	112900	116300	110100	95700	100800	155500	229700	270800	261000	241700	223700
18	108300	113000	116100	109200	96800	102000	157000	233100	270900	260500	241200	223100
19	108400	113000	115700	108400	97700	103000	158900	236300	270400	259800	240500	222400
20	108500	113100	115300	108300	98600	104500	160200	239400	269700	259300	239900	221900
21	108500	113100	115000	108200	99500	105800	161700	242600	269700	259000	239000	221300
22	108400	113200	114400	107100	99900	107700	163200	245600	269400	258700	238300	221000
23	108400	113200	114500	106700	99800	109400	164600	248300	269400	258100	237600	220900
24	108300	113300	114700	106300	100000	111700	166500	251200	269200	257500	236800	220400
25	108400	113300	114700	106400	100000	115000	168800	253700	269100	256900	236300	220000
26	108500	113400	114500	106500	99800	117100	171600	256000	268800	256300	235800	219900
27	108800	113500	114100	106700	99200	118900	174300	258000	268800	255600	235000	220200
28	109100	113500	113600	106700	98700	121600	177100	259800	268700	255000	234300	220600
29	110000	113800	113400	106300	---	124700	179400	261100	268600	254600	233400	220900
30	110300	114000	113400	105800	---	127900	182100	262400	268400	254000	232900	220500
31	110500	---	113100	105500	---	131300	---	263700	---	253300	232200	---
MAX	118100	114000	116300	112800	104600	131300	182100	263700	270900	268500	252500	232000
MIN	107700	110800	113100	105500	94700	98000	134700	184800	264900	253300	232200	219900
a	4599.07	4601.61	4600.92	4595.42	4590.40	4613.92	4648.00	4697.08	4699.74	4691.15	4678.85	4671.88
b	-7900	+3500	-900	-7600	-6800	+32600	+50800	+81600	+4700	-15100	-21100	-11700

CAL YR 2000 b -105300
WTR YR 2001 b +102100

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11277300 CHERRY CREEK BELOW CHERRY VALLEY DAM, NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°58'04", long 119°54'59", in SE 1/4 SW 1/4 sec.5, T.1 N., R.19 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on right bank, 0.7 mi downstream from Cherry Valley Dam, 3.5 mi upstream from Eleanor Creek, 6.7 mi north of Early Intake, and 7.2 mi west of Hetch Hetchy.

DRAINAGE AREA.—118 mi^2.

PERIOD OF RECORD.—November 1956 to current year.

GAGE.—Water-stage recorder. Datum of gage is 4,337.08 ft above sea level (levels by city and county of San Francisco).

REMARKS.—Records good. Flow regulated by Cherry Lake (station 11277200) 0.7 mi upstream. Diversion between Lake Eleanor (station 11277500) and Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake to Dion R. Holm Powerplant began Aug. 1, 1960. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,120 ft^3/s, May 16, 1996, from rating curve extended above 4,000 ft^3/s, gage height, 11.15 ft; minimum daily, 0.77 ft^3/s, Dec. 1–4, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	5.8	6.5	5.5	6.2	6.8	5.5	5.4	5.5	9.7	14	15
2	6.2	5.8	6.3	5.5	6.2	6.8	5.5	5.4	5.5	13	16	15
3	6.2	5.8	6.2	5.5	6.2	6.8	5.7	5.2	5.5	13	16	15
4	6.2	5.7	6.2	5.7	6.2	6.9	5.8	5.2	5.5	13	16	15
5	6.2	5.5	6.2	5.8	6.2	8.8	5.7	5.2	5.5	13	16	15
6	6.2	5.5	6.2	5.8	6.2	7.9	5.7	5.1	5.5	13	16	15
7	6.2	5.5	6.2	5.8	6.2	7.7	5.8	5.1	5.5	13	16	15
8	6.2	5.5	6.2	5.8	6.2	7.3	5.8	4.9	5.5	13	16	15
9	6.2	5.5	6.2	5.8	6.2	6.8	5.8	4.9	5.4	13	16	14
10	6.5	5.5	6.2	6.2	6.3	6.8	5.8	5.1	5.4	13	17	9.7
11	6.5	5.5	6.2	6.3	6.2	6.7	6.0	5.2	5.2	13	17	6.0
12	6.7	5.5	6.4	6.2	6.2	6.6	6.5	5.2	5.4	13	16	14
13	6.8	5.5	6.5	6.2	6.2	6.5	6.5	5.2	5.4	13	16	14
14	6.8	5.5	6.4	6.2	6.2	6.5	6.3	5.2	5.4	14	16	14
15	6.8	5.8	6.2	6.2	6.2	6.5	6.2	5.2	5.4	14	16	15
16	6.8	6.2	6.1	5.9	6.2	6.5	6.2	5.2	5.3	14	15	15
17	6.8	6.4	5.8	5.8	6.2	6.5	6.2	5.2	4.9	14	15	15
18	6.8	6.5	5.8	5.8	6.2	6.3	6.2	5.2	5.3	14	15	15
19	6.8	6.5	5.1	5.8	6.3	6.2	6.7	5.1	5.2	14	15	15
20	6.8	6.5	5.8	5.8	6.8	6.2	7.1	5.1	5.3	13	15	15
21	6.8	6.5	5.8	5.8	6.8	6.2	7.6	4.9	5.3	13	15	15
22	7.1	6.5	5.8	5.8	6.8	6.2	7.5	4.9	5.2	13	15	15
23	7.2	6.3	5.8	5.9	6.8	6.0	7.5	4.9	5.2	13	15	15
24	7.2	6.2	5.8	6.3	6.8	5.8	7.2	4.9	5.2	13	15	15
25	6.7	6.2	5.8	6.2	6.8	6.2	7.0	4.9	5.1	13	15	15
26	5.7	6.2	5.7	6.2	6.8	5.8	6.8	4.9	5.3	13	15	15
27	5.5	6.2	5.5	6.2	6.8	5.8	6.7	5.1	5.5	13	15	15
28	5.7	6.2	5.5	6.2	6.8	5.8	6.3	5.2	5.4	13	15	15
29	7.1	6.7	5.5	6.2	---	5.7	5.5	5.4	5.2	13	15	15
30	5.9	6.5	5.5	6.2	---	5.5	5.5	5.5	5.2	13	15	15
31	5.8	---	5.5	6.2	---	5.5	---	5.5	---	13	15	---
TOTAL	203.7	179.5	184.9	184.8	179.2	201.6	188.6	159.4	160.2	405.7	480	431.7
MEAN	6.57	5.98	5.96	5.96	6.40	6.50	6.29	5.14	5.34	13.1	15.5	14.4
MAX	9.3	6.7	6.5	6.3	6.8	8.8	7.6	5.5	5.5	14	17	15
MIN	5.5	5.5	5.1	5.5	6.2	5.5	5.5	4.9	4.9	9.7	14	6.0
AC-FT	404	356	367	367	355	400	374	316	318	805	952	856

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	9.86	12.0	11.2	19.8	11.9	15.2	13.8	37.9	128	102	27.5	21.6
MAX	166	135	155	352	134	171	167	359	1198	993	176	139
(WY)	1978	1977	1977	1997	1977	1969	1969	1978	1983	1983	1977	1977
MIN	3.19	3.99	4.82	4.71	4.51	4.45	4.58	4.40	4.46	10.9	12.0	10.6
(WY)	1999	1970	1970	1961	1961	1972	1990	1973	1973	1978	1961	1976

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	5842.6		2959.3			
ANNUAL MEAN	16.0		8.11		34.3	
HIGHEST ANNUAL MEAN					195	1983
LOWEST ANNUAL MEAN					7.08	1961
HIGHEST DAILY MEAN	531	Jun 15	17	Aug 10	2830	Jul 7 1995
LOWEST DAILY MEAN	5.1	Dec 19	4.9	May 8	.77	Dec 1 1988
ANNUAL SEVEN-DAY MINIMUM	5.5	Nov 5	4.9	May 20	.79	Nov 28 1988
MAXIMUM PEAK FLOW			18	Aug 3	5120	May 16 1996
MAXIMUM PEAK STAGE			3.61	Aug 3	11.15	May 16 1996
ANNUAL RUNOFF (AC-FT)	11590		5870		24840	
10 PERCENT EXCEEDS	15		15		17	
50 PERCENT EXCEEDS	8.1		6.2		7.4	
90 PERCENT EXCEEDS	5.8		5.3		5.0	

11277500 LAKE ELEANOR NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°58'27", long 119°52'48", in SE 1/4 NW 1/4 sec.3, T.1 N., R.19 E., Tuolumne County, Hydrologic Unit 18040009, Yosemite National Park, 710 ft from left bank on upstream side of dam on Eleanor Creek, 1.7 mi upstream from Miguel Creek, and 5.5 mi northwest of Hetch Hetchy.

DRAINAGE AREA.—78.1 mi^2.

PERIOD OF RECORD.—June 1918 to current year. Prior to October 1930, published in WSP 1315-A. Published as "near Sequoia" 1919–20.

REVISED RECORDS.—WSP 1445: 1938(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 2.39 ft above sea level. Prior to Oct. 1, 1927, nonrecording gage on upstream side of dam at same site and datum.

REMARKS.—Reservoir is formed by multiple-arch dam completed in 1918; storage began June 23, 1918. Capacity, 26,110 acre-ft, between gage heights 4,620.9 ft, natural outlet of old lake, and 4,660.0 ft, top of 5-ft flashboards. Records, including extremes, represent usable contents at 2400 hours. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 31,000 acre-ft, Dec. 11, 1937, from capacity table then in use, gage height, 4,663.4 ft, maximum gage height, 4,663.87 ft, Jan. 1, 1997; no usable contents at times in many years.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 27,200 acre-ft, May 24, 25, gage height, 4,661.10 ft, May 24; minimum, 0 acre-ft, several days in October and November, gage height, 4,613.15 ft, Nov. 1.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by San Francisco Public Utilities Commission, dated May 1941)

4,608	0	4,620	36	4,628	1,480	4,646	13,500
4,610	6	4,622	49	4,630	2,450	4,650	17,000
4,612	12	4,624	92	4,632	3,580	4,655	21,500
4,614	18	4,625	211	4,635	5,270	4,660	26,100
4,616	24	4,626	550	4,638	7,330	4,663	29,100
4,618	27	4,627	996	4,642	10,300		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14700	.00	2680	5460	8340	1810	9800	18300	26400	26100	24900	23300
2	13200	47	2800	5510	8450	1770	9840	19800	26400	26000	24800	23200
3	11700	900	2900	5560	8620	1720	9630	20800	26300	26000	24800	23200
4	10300	1010	2980	5600	8910	1780	9200	21300	26200	26000	24700	23100
5	8870	1100	3050	5640	9240	1900	8660	22000	26200	25900	24700	23100
6	7540	1190	3130	5670	9530	1950	8180	22700	26100	26000	24600	23000
7	6190	1260	3180	5710	9730	2030	7810	23600	26200	25900	24600	23000
8	4990	1330	3240	5770	9900	2180	7390	24500	26100	25900	24500	22900
9	4210	1400	3310	5820	10100	2300	6970	25100	26100	25900	24500	22900
10	3630	1490	3370	5970	10300	2300	6500	25500	26100	25800	24400	22800
11	3220	1560	3440	6090	10500	2290	6110	25900	26100	25800	24400	22800
12	2910	1630	3540	6190	10700	2250	5750	26300	26100	25800	24300	22700
13	2670	1700	3630	6290	10900	2280	5440	26300	26200	25800	24300	22700
14	2480	1750	3780	6390	11000	2370	5240	26300	26200	25700	24200	22600
15	2350	1800	3950	6470	11100	2490	5190	26400	26200	25700	24200	22600
16	2240	1840	4110	6540	10600	2580	5410	26500	26200	25600	24100	22500
17	1990	1880	4270	6620	9220	2700	5870	26700	26300	25600	24100	22500
18	1760	1920	4420	6680	7960	3010	6410	26800	26300	25500	24000	22500
19	1580	1970	4550	6780	6760	3540	7230	26900	26300	25500	24000	22400
20	62	2000	4680	6880	5460	4210	7700	26900	26300	25400	23900	22400
21	.00	2030	4780	6970	4330	4660	8000	27000	26300	25400	23800	22400
22	.00	2070	4900	7060	3480	5010	8340	27000	26300	25300	23800	22400
23	.00	2100	4980	7170	2900	5380	8890	27100	26300	25300	23700	22300
24	.00	2130	5050	7390	2540	5850	9820	27200	26200	25300	23700	22300
25	.00	2160	5110	7530	2300	7070	11000	27200	26200	25200	23600	22300
26	.00	2180	5170	7690	2120	7680	12200	27100	26200	25200	23600	22100
27	.00	2210	5220	7820	1980	8130	13500	26900	26200	25100	23500	21700
28	.00	2240	5260	7930	1890	8580	14600	26700	26200	25100	23500	21300
29	.00	2410	5310	8050	---	9140	15600	26500	26100	25000	23400	21100
30	.00	2550	5370	8150	---	9270	16700	26500	26100	25000	23400	21000
31	.00	---	5430	8250	---	9490	---	26500	---	24900	23300	---
MAX	14700	2550	5430	8250	11100	9490	16700	27200	26400	26100	24900	23300
MIN	.00	.00	2680	5460	1890	1720	5190	18300	26100	24900	23300	21000
a	4613.16	4630.19	4635.24	4639.33	4628.85	4640.99	4649.66	4660.32	4659.95	4658.67	4656.99	4654.50
b	-16300	+2550	+2880	+2820	-6360	+7600	+7210	+9800	-400	-1200	-1600	-2300

CAL YR 2000 b -12870
WTR YR 2001 b +4700

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11278000 ELEANOR CREEK NEAR HETCH HETCHY, CA

LOCATION.—Lat 37°58'09", long 119°52'52", in NW 1/4 SW 1/4 sec.3, T.1 N., R.19 E., Tuolumne County, Hydrologic Unit 18040009, Yosemite National Park, on right bank, 0.5 mi downstream from Lake Eleanor Dam, 1.1 mi upstream from Miguel Creek, and 5.5 mi northwest of Hetch Hetchy.

DRAINAGE AREA.—78.4 mi^2.

PERIOD OF RECORD.—October 1909 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Sequoia" 1910–18.

REVISED RECORDS.—WSP 1315-A: 1923(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 4,500 ft above sea level, from topographic map. November 1909 to November 1915, nonrecording gage and water-stage recorder at site 1 mi upstream at different datum. Prior to Jan. 2, 1997, datum of gage 10 ft lower.

REMARKS.—Records fair. Flow regulated by Lake Eleanor (station 11277500) 0.5 mi upstream beginning in 1918. Since March 1960, water is diverted at Lake Eleanor via Lake Eleanor diversion tunnel (station 11277100) to Cherry Lake (station 11277200). See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 19,500 ft^3/s, Jan. 2, 1997, gage height, 26.74 ft, from rating curve extended above 2,600 ft^3/s, on basis of slope-area measurements at gage heights 9.94 and 12.24 ft, datum then in use; no flow at times in 1910, 1930–31, 1933, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	64	7.6	7.3	8.1	4.6	5.8	5.0	19	20	20	20
2	11	44	7.6	7.3	8.2	4.8	5.8	5.1	19	20	20	20
3	11	5.0	7.6	7.4	8.3	4.6	5.8	5.1	19	20	20	20
4	11	5.4	7.6	7.4	8.4	5.8	5.7	5.2	19	20	20	20
5	12	5.3	7.6	7.4	8.4	7.4	5.7	5.2	19	20	20	20
6	12	6.3	7.6	7.4	8.4	5.8	5.8	9.7	19	20	20	20
7	11	7.2	7.2	7.4	8.3	5.6	6.0	33	19	20	20	20
8	12	7.1	6.7	7.5	8.3	5.6	5.8	47	19	20	20	20
9	12	7.1	6.7	7.4	6.8	5.3	5.9	44	19	20	20	20
10	12	7.2	6.7	7.8	5.4	5.1	5.9	45	19	20	20	20
11	11	7.1	6.7	7.8	5.4	4.9	6.2	38	19	20	20	20
12	11	7.2	6.9	7.7	5.3	4.8	6.5	32	19	20	20	20
13	12	7.2	6.8	7.7	5.3	4.8	6.0	208	19	20	20	20
14	11	7.2	7.1	7.7	5.4	4.7	5.7	155	19	20	19	20
15	11	7.3	7.2	7.7	5.5	4.7	5.7	20	19	20	20	19
16	11	7.3	7.0	7.7	5.6	5.4	5.6	20	19	20	20	14
17	17	7.3	7.1	7.7	5.5	5.8	5.6	21	20	20	20	8.7
18	22	7.3	7.1	7.6	5.8	5.6	5.7	30	20	20	20	9.2
19	23	7.3	7.1	7.7	6.0	5.6	7.2	17	20	20	20	9.4
20	97	7.3	7.1	7.7	5.9	5.6	7.3	22	20	20	20	9.5
21	138	7.3	7.2	7.7	5.9	5.7	7.8	24	19	20	20	9.7
22	84	7.4	7.2	7.7	5.3	5.7	7.5	21	19	19	20	9.8
23	62	7.4	7.2	7.8	5.0	5.7	7.0	20	19	20	20	9.8
24	49	7.4	7.2	8.1	4.9	5.8	6.7	20	19	20	20	9.9
25	40	7.4	7.2	8.0	5.0	6.0	6.5	28	19	20	20	9.9
26	36	7.4	7.2	8.0	4.8	5.9	6.5	28	19	20	20	9.9
27	32	7.4	7.2	8.0	4.8	5.9	6.6	19	19	20	20	9.8
28	30	7.4	7.2	8.0	4.7	5.9	6.8	19	19	20	20	9.8
29	19	7.8	7.2	8.1	---	5.9	6.9	19	20	20	20	9.6
30	62	7.6	7.3	8.0	---	5.8	5.9	19	20	20	20	9.6
31	67	---	7.3	8.0	---	5.8	---	19	---	20	20	---
TOTAL	961	305.6	222.4	238.7	174.7	170.6	187.9	1003.3	576	619	619	447.6
MEAN	31.0	10.2	7.17	7.70	6.24	5.50	6.26	32.4	19.2	20.0	20.0	14.9
MAX	138	64	7.6	8.1	8.4	7.4	7.8	208	20	20	20	20
MIN	11	5.0	6.7	7.3	4.7	4.6	5.6	5.0	19	19	19	8.7
AC-FT	1910	606	441	473	347	338	373	1990	1140	1230	1230	888

11278000 ELEANOR CREEK NEAR HETCH HETCHY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1917, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	25.2	62.5	97.2	208	175	320	610	742	640	190	25.7	8.81
MAX	157	287	358	485	307	516	806	945	1207	484	65.4	25.8
(WY)	1917	1910	1910	1914	1911	1916	1916	1914	1911	1911	1911	1913
MIN	.081	.19	12.4	33.6	66.6	116	264	536	230	36.5	6.06	2.10
(WY)	1916	1916	1912	1913	1912	1912	1912	1913	1910	1910	1910	1915

SUMMARY STATISTICS	WATER YEARS 1910 - 1917		
ANNUAL MEAN	259		
HIGHEST ANNUAL MEAN	386		1911
LOWEST ANNUAL MEAN	144		1913
HIGHEST DAILY MEAN	5000	Jan 30	1911
LOWEST DAILY MEAN	.00	Sep 8	1910
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 8	1910
ANNUAL RUNOFF (AC-FT)	187300		
10 PERCENT EXCEEDS	770		
50 PERCENT EXCEEDS	109		
90 PERCENT EXCEEDS	5.0		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1959, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.0	75.5	105	94.5	134	224	460	696	409	144	98.9	103
MAX	145	931	826	490	454	708	794	1330	981	471	204	179
(WY)	1929	1951	1951	1956	1945	1928	1936	1952	1922	1958	1958	1933
MIN	3.68	1.65	1.74	2.50	6.64	1.70	44.5	138	46.0	20.7	16.4	4.16
(WY)	1932	1928	1932	1957	1930	1920	1924	1931	1924	1959	1959	1931

SUMMARY STATISTICS	WATER YEARS 1920 - 1959		
ANNUAL MEAN	218		
HIGHEST ANNUAL MEAN	356		1938
LOWEST ANNUAL MEAN	86.2		1924
HIGHEST DAILY MEAN	8270	Nov 19	1950
LOWEST DAILY MEAN	.00	Oct 15	1930
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 15	1930
MAXIMUM PEAK FLOW	11700	Nov 19	1950
MAXIMUM PEAK STAGE	14.95	Nov 19	1950
ANNUAL RUNOFF (AC-FT)	158200		
10 PERCENT EXCEEDS	584		
50 PERCENT EXCEEDS	113		
90 PERCENT EXCEEDS	8.5		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.9	36.2	32.0	72.3	60.1	26.0	93.6	297	339	114	25.5	25.5
MAX	333	565	314	1416	586	198	916	1029	1605	677	176	137
(WY)	1983	1984	1984	1997	1986	1986	1982	1995	1983	1983	1983	1982
MIN	.15	2.55	4.30	4.27	3.76	4.15	4.44	4.81	4.72	12.0	2.43	.40
(WY)	1967	1978	1964	1978	1974	1972	1973	1972	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	54175.7		5525.8			
ANNUAL MEAN	148		15.1		94.9	
HIGHEST ANNUAL MEAN					320	1983
LOWEST ANNUAL MEAN					4.73	1977
HIGHEST DAILY MEAN	2640	May 8	208	May 13	15100	Jan 2 1997
LOWEST DAILY MEAN	5.0	Nov 3	4.6	Mar 1	.10	Oct 9 1966
ANNUAL SEVEN-DAY MINIMUM	5.9	Jan 4	4.8	Feb 25	.10	Oct 24 1966
MAXIMUM PEAK FLOW			516	May 13	19500	Jan 2 1997
MAXIMUM PEAK STAGE			12.90	May 13	26.74	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	107500		10960		68740	
10 PERCENT EXCEEDS	496		20		287	
50 PERCENT EXCEEDS	22		8.4		8.2	
90 PERCENT EXCEEDS	7.2		5.6		4.7	

11278300 CHERRY CREEK NEAR EARLY INTAKE, CA

LOCATION.—Lat 37°53'40", long 119°57'42", in NW 1/4 SE 1/4 sec.35, T.1 N., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on right bank, 1.2 mi upstream from mouth, 1.3 mi north of Early Intake, and 10.3 mi southwest of Hetch Hetchy.

DRAINAGE AREA.—226 mi^2.

PERIOD OF RECORD.—May 1956 to current year.

GAGE.—Water-stage recorder. Datum of gage is 2,272.00 ft above sea level (levels by city and county of San Francisco).

REMARKS.—Records fair. Flow regulated by Cherry Lake (station 11277200) 10 mi upstream and Lake Eleanor (station 11277500) 9.8 mi upstream. Diversion from Cherry Lake to Dion R. Holm Powerplant began Aug. 1, 1960. Water is returned to creek 1.2 mi below station. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33,200 ft^3/s, Jan. 2, 1997, gage height, 18.46 ft, from rating curve extended above 4,600 ft^3/s; minimum daily, 0.30 ft^3/s, Apr. 5, 6, 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	80	19	17	20	30	36	50	31	26	31	32
2	20	76	18	17	21	34	34	47	31	32	31	32
3	19	22	18	17	22	34	33	45	30	32	32	32
4	19	15	18	17	23	42	33	42	30	32	32	32
5	19	15	18	17	23	99	32	41	30	32	32	32
6	21	15	18	17	22	83	33	40	30	32	32	32
7	19	15	18	17	22	82	48	53	30	34	32	32
8	19	16	17	18	21	86	42	90	29	33	32	32
9	21	16	17	18	21	91	40	69	29	32	32	32
10	23	17	17	20	23	77	43	84	29	32	32	31
11	21	16	17	35	22	70	50	67	28	32	32	24
12	20	16	20	22	20	67	61	65	28	32	32	28
13	20	16	18	20	20	65	64	184	28	32	32	31
14	21	17	20	19	20	69	65	265	28	31	32	31
15	21	17	21	19	21	70	63	44	28	31	32	31
16	21	17	19	19	21	69	59	43	28	32	32	31
17	20	17	18	18	21	69	53	44	27	32	32	24
18	30	17	18	18	23	69	48	55	27	32	32	23
19	30	17	18	19	31	71	88	40	27	31	32	23
20	58	17	17	19	41	71	115	37	27	31	31	23
21	202	17	17	19	39	68	123	43	27	31	32	23
22	116	17	17	19	42	62	133	40	27	31	32	23
23	83	17	17	19	34	58	136	36	26	31	32	24
24	65	17	17	26	37	53	122	35	26	31	32	23
25	53	17	17	22	37	60	94	36	26	31	32	26
26	49	17	17	22	35	55	77	51	26	31	32	24
27	42	17	17	21	31	48	68	33	26	31	32	24
28	36	17	17	21	33	44	63	32	26	31	32	24
29	55	21	17	21	---	42	58	32	26	31	32	24
30	59	23	17	21	---	39	54	32	27	31	32	23
31	83	---	17	20	---	37	---	31	---	31	32	---
TOTAL	1314	634	551	614	746	1914	1968	1806	838	974	989	826
MEAN	42.4	21.1	17.8	19.8	26.6	61.7	65.6	58.3	27.9	31.4	31.9	27.5
MAX	202	80	21	35	42	99	136	265	31	34	32	32
MIN	19	15	17	17	20	30	32	31	26	26	31	23
AC-FT	2610	1260	1090	1220	1480	3800	3900	3580	1660	1930	1960	1640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	24.3	50.7	60.9	153	143	118	167	358	470	209	41.7	38.6
MAX	341	610	390	2566	922	399	1298	1342	2845	1699	229	164
(WY)	1983	1984	1965	1997	1986	1983	1982	1982	1983	1983	1983	1978
MIN	2.95	4.85	3.07	3.27	2.70	2.71	2.12	2.16	2.88	9.55	10.3	11.0
(WY)	1961	1961	1977	1977	1977	1977	1977	1977	1977	1977	1963	1962

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	74401		13174			
ANNUAL MEAN	203		36.1		153	
HIGHEST ANNUAL MEAN					634	1983
LOWEST ANNUAL MEAN					8.08	1977
HIGHEST DAILY MEAN	2540	May 8	265	May 14	25200	Jan 2 1997
LOWEST DAILY MEAN	15	Nov 4	15	Nov 4	.30	Apr 5 1964
ANNUAL SEVEN-DAY MINIMUM	16	Nov 4	16	Nov 4	1.4	Oct 6 1970
MAXIMUM PEAK FLOW			516	May 13	33200	Jan 2 1997
MAXIMUM PEAK STAGE			4.30	May 13	18.46	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	147600		26130		110600	
10 PERCENT EXCEEDS	620		67		391	
50 PERCENT EXCEEDS	48		31		32	
90 PERCENT EXCEEDS	17		17		10	

11278400 CHERRY CREEK BELOW DION R. HOLM POWERPLANT, NEAR MATHER, CA

LOCATION.—Lat 37°53'24", long 119°58'08", in NE 1/4 NW 1/4 sec.2, T.1 S., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on left bank, 600 ft upstream from mouth, 0.5 mi downstream from powerplant, 0.8 mi northwest of Early Intake, and 6.2 mi west of Mather.

DRAINAGE AREA.—234 mi^2.

PERIOD OF RECORD.—March 1963 to current year. Prior to October 1965, published as "below Cherry Powerhouse, near Mather."

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 2,133.50 ft above sea level (levels by city and county of San Francisco).

REMARKS.—Records fair. Flow regulated by Cherry Lake (station 11277200) 11 mi upstream and Lake Eleanor (station 11277500) 10 mi upstream. Flow diverted, at times, into Cherry Creek Canal (station 11278200) 2 mi upstream from station for domestic use and to supplement flow to Hetch Hetchy Aqueduct. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33,500 ft^3/s, Jan. 2, 1997, gage height unknown, on basis of combined peak flow for Cherry Creek near Early Intake (station 11278300) and Dion R. Holm Powerplant, maximum gage height, 25.4 ft, Jan. 3, 1997, from flood mark caused by backwater from Tuolumne River; minimum daily, 1.6 ft^3/s, June 4, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	83	24	246	666	506	47	507	184	99	460	41
2	1040	79	23	239	698	501	300	502	58	224	426	196
3	1040	29	23	280	470	291	262	1120	54	377	476	166
4	1040	19	23	21	393	328	214	1050	43	254	315	369
5	1040	19	22	21	595	525	311	1130	42	363	201	324
6	1050	19	22	21	657	491	253	930	43	339	420	263
7	1040	19	22	21	705	478	154	1140	54	220	515	378
8	953	20	22	23	526	509	52	1170	41	107	472	229
9	1040	21	22	193	539	481	299	209	40	348	504	273
10	1050	22	22	200	461	472	369	236	39	398	465	372
11	1050	21	22	72	587	503	334	134	53	359	410	451
12	953	21	26	156	599	606	341	77	41	356	250	379
13	867	21	24	36	623	426	267	237	41	355	106	435
14	51	22	26	252	701	413	134	333	84	323	431	462
15	40	21	58	389	677	457	100	259	41	44	441	88
16	86	22	26	390	667	489	402	177	175	335	439	126
17	26	22	31	711	452	256	388	151	40	343	427	347
18	37	22	303	589	475	344	356	167	38	357	309	308
19	37	22	348	603	503	505	423	57	345	366	299	321
20	70	22	339	143	574	457	433	96	452	321	405	373
21	210	22	328	177	524	627	142	106	72	178	463	324
22	118	22	398	715	545	557	185	228	192	165	409	34
23	86	22	30	377	665	517	383	248	91	328	368	145
24	68	22	21	460	434	219	458	106	123	363	492	282
25	57	22	21	102	440	264	449	126	156	332	334	335
26	52	22	186	89	521	484	360	64	195	381	e334	198
27	46	22	333	32	642	478	481	46	65	431	e350	34
28	41	22	312	95	596	295	262	45	38	326	e480	33
29	63	27	168	329	---	210	208	152	105	217	413	90
30	62	30	107	381	---	135	396	191	40	378	377	39
31	87	---	242	359	---	223	---	127	---	407	370	---
TOTAL	14450	779	3574	7722	15935	13047	8763	11121	2985	9394	12161	7415
MEAN	466	26.0	115	249	569	421	292	359	99.5	303	392	247
MAX	1050	83	398	715	705	627	481	1170	452	431	515	462
MIN	26	19	21	21	393	135	47	45	38	44	106	33
AC-FT	28660	1550	7090	15320	31610	25880	17380	22060	5920	18630	24120	14710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

MEAN	415	423	458	633	691	732	834	1076	1165	773	529	473
MAX	962	1445	1394	3266	1528	1351	2199	2310	3728	2643	1161	898
(WY)	1983	1984	1984	1997	1986	1997	1982	1996	1983	1983	1983	2000
MIN	12.7	14.9	5.56	4.22	3.84	3.71	2.63	2.67	4.08	11.3	25.8	20.4
(WY)	1994	1994	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1963 - 2001	
ANNUAL TOTAL	319148		107346			
ANNUAL MEAN	872		294		683	
HIGHEST ANNUAL MEAN					1437	1983
LOWEST ANNUAL MEAN					47.9	1977
HIGHEST DAILY MEAN	3860	May 8	1170	May 8	25500	Jan 2 1997
LOWEST DAILY MEAN	19	Nov 4	19	Nov 4	1.6	Jun 4 1977
ANNUAL SEVEN-DAY MINIMUM	20	Nov 4	20	Nov 4	2.1	Apr 21 1977
MAXIMUM PEAK FLOW			1250	May 8	33500	Jan 2 1997
MAXIMUM PEAK STAGE			9.16	May 8	25.40	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	633000		212900		494800	
10 PERCENT EXCEEDS	1580		595		1280	
50 PERCENT EXCEEDS	996		262		616	
90 PERCENT EXCEEDS	23		22		54	

e Estimated.

11281000 SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CA

LOCATION.—Lat 37°49'18", long 120°00'43", in SE 1/4 SE 1/4 sec.29, T.1 S., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on right bank, 75 ft downstream from highway bridge on Big Oak Flat Road, 0.5 mi southwest of Oakland Recreation Camp, and 0.6 mi upstream from Middle Tuolumne River.

DRAINAGE AREA.—87.0 mi^2.

PERIOD OF RECORD.—March 1923 to September 1996, October 1997 to current year.

REVISED RECORDS.—WSP 1445: 1923, 1925(M), 1926–28, 1929–30(M), 1932(M), 1935–36(M), 1937–38, 1943(M), 1945(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 2,800 ft above sea level, from topographic map. Prior to Nov. 22, 1931, at site 50 ft upstream at same datum. Nov. 22, 1931, to July 19, 1977, at present site, datum 1.00 ft higher.

REMARKS.—Records good. No diversion upstream from station. One small recreation reservoir (capacity unknown) is located approximately 3.5 mi upstream. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,900 ft^3/s, Dec. 23, 1955, gage height, 11.9 ft, from floodmarks, present datum, from rating curve extended above 3,300 ft^3/s, on basis of slope-area measurements, at gage heights 9.08 and 11.9 ft; minimum daily, 0.4 ft^3/s, Aug. 22, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 3, 1997, reached a stage of 12.51 ft, from floodmarks, discharge, 12,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 900 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	0845	462	5.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e13	23	25	19	22	42	177	277	41	14	6.8	4.5
2	e13	22	23	18	22	47	149	276	39	13	6.6	4.5
3	13	21	21	19	24	46	115	215	37	13	6.6	4.5
4	13	21	21	18	30	87	95	197	36	12	6.5	4.5
5	13	20	20	18	35	343	85	208	35	13	6.3	4.5
6	12	20	20	18	36	168	78	233	34	12	6.4	4.5
7	16	20	20	18	33	112	92	252	31	13	6.3	4.5
8	13	19	20	21	25	104	77	273	30	15	6.4	4.5
9	13	19	20	23	30	108	71	258	28	14	6.3	4.5
10	18	20	20	29	29	88	70	242	27	13	6.2	4.6
11	20	20	20	61	26	77	74	240	26	13	6.1	4.6
12	18	19	26	30	26	72	72	226	26	12	6.1	4.7
13	17	19	22	24	29	68	72	192	25	12	6.3	4.7
14	17	21	25	22	27	72	74	174	24	11	6.0	4.7
15	17	19	26	21	26	76	76	168	24	10	5.9	4.7
16	16	20	25	18	26	77	85	160	19	9.1	5.7	4.7
17	16	19	23	18	27	76	100	159	20	9.8	5.6	4.8
18	15	19	22	20	31	86	106	145	20	9.9	5.4	4.8
19	15	20	21	21	57	106	163	146	19	9.6	5.2	4.9
20	15	19	21	20	96	125	174	129	18	9.3	5.1	4.9
21	15	20	21	20	68	133	186	119	18	9.1	5.0	5.2
22	15	20	20	20	65	134	176	110	17	8.9	5.0	5.3
23	15	19	20	21	49	134	185	99	17	8.7	5.2	5.2
24	15	19	20	31	48	132	211	89	16	8.6	5.0	5.0
25	15	20	20	26	56	155	237	78	15	8.4	5.0	5.2
26	19	19	19	26	50	147	248	68	16	8.2	5.0	5.0
27	25	20	19	24	45	137	250	61	15	7.7	5.0	5.2
28	21	19	20	22	49	144	245	55	15	7.3	4.9	5.2
29	84	29	20	22	---	168	221	52	15	7.0	4.8	5.2
30	39	37	19	21	---	162	238	48	15	7.0	4.5	5.1
31	27	---	19	22	---	164	---	45	---	6.9	4.5	---
TOTAL	593	622	658	711	1087	3590	4202	4994	718	325.5	175.7	144.2
MEAN	19.1	20.7	21.2	22.9	38.8	116	140	161	23.9	10.5	5.67	4.81
MAX	84	37	26	61	96	343	250	277	41	15	6.8	5.3
MIN	12	19	19	18	22	42	70	45	15	6.9	4.5	4.5
AC-FT	1180	1230	1310	1410	2160	7120	8330	9910	1420	646	349	286

e Estimated.

11281000 SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.0	30.9	61.1	90.8	139	167	226	256	132	35.8	13.6	10.3
MAX	50.6	229	516	652	725	750	730	760	656	242	57.9	39.0
(WY)	1983	1951	1956	1969	1986	1983	1982	1969	1983	1983	1983	1998
MIN	1.53	3.66	6.04	8.05	8.74	11.1	15.7	26.0	12.7	2.56	.48	.75
(WY)	1978	1930	1991	1977	1991	1977	1977	1977	1976	1931	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1923 - 2001	
ANNUAL TOTAL	38754		17820.4			
ANNUAL MEAN	106		48.8		97.3	
HIGHEST ANNUAL MEAN					330	1983
LOWEST ANNUAL MEAN					9.25	1977
HIGHEST DAILY MEAN	1110	Feb 14	343	Mar 5	6960	Dec 23 1955
LOWEST DAILY MEAN	12	Oct 6	4.5	Aug 30	.40	Aug 22 1934
ANNUAL SEVEN-DAY MINIMUM	13	Sep 30	4.5	Aug 30	.45	Aug 12 1977
MAXIMUM PEAK FLOW			462	Mar 5	11900	Dec 23 1955
MAXIMUM PEAK STAGE			5.27	Mar 5	11.90	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	76870		35350		70480	
10 PERCENT EXCEEDS	256		151		263	
50 PERCENT EXCEEDS	36		20		31	
90 PERCENT EXCEEDS	15		5.2		6.2	

11282000 MIDDLE TUOLUMNE RIVER AT OAKLAND RECREATION CAMP, CA

LOCATION.—Lat 37°49'42", long 120°00'38", in SW 1/4 NW 1/4 sec.28, T.1 S., R.18 E., Tuolumne County, Hydrologic Unit 18040009, Stanislaus National Forest, on left bank, 1,000 ft downstream from Oakland Recreation Camp, 0.8 mi upstream from South Fork Tuolumne River, and 2.7 mi east of Buck Meadows Post Office.

DRAINAGE AREA.—73.5 mi^2.

PERIOD OF RECORD.—October 1916 to September 1996, October 1997 to current year. Monthly discharge only for October and November 1916, published in WSP 1315-A. Published as "Middle Fork of Tuolumne River near Buck Meadows" 1917–32 and as "Middle Tuolumne River near Buck Meadows" 1933–40.

REVISED RECORDS.—WSP 1395: 1919(M), 1938(M), 1951(P). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 2,800 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation but small diversion upstream from station for irrigation. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,920 ft^3/s, Dec. 23, 1955, gage height, 11.75 ft, from flood profile, 11.05 ft, from floodmarks inside gage well, from rating curve extended above 3,000 ft^3/s, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 3, 1997, reached a stage of 13.02 ft, from floodmarks, discharge, 6,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 380 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 12	0145	475	4.70

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	12	14	10	15	27	154	300	68	15	4.2	2.2
2	6.2	12	13	9.9	16	32	140	314	65	14	4.5	2.3
3	6.0	12	12	10	17	29	107	244	60	13	4.2	2.2
4	6.0	12	12	10	20	57	86	224	55	13	4.2	2.1
5	6.0	12	11	10	23	201	77	241	51	13	4.1	2.0
6	6.1	12	11	10	23	66	71	278	49	14	4.0	1.9
7	5.9	12	11	10	21	47	75	305	46	16	3.9	2.1
8	5.9	11	11	11	16	48	70	354	43	19	3.5	2.1
9	6.3	11	12	12	22	50	64	348	40	18	3.4	2.1
10	8.7	12	12	33	20	42	65	339	38	22	3.1	2.1
11	11	11	12	43	19	38	67	351	37	21	3.0	2.2
12	9.8	9.5	13	18	17	36	64	348	36	16	2.8	2.2
13	9.1	10	12	16	21	35	65	296	35	14	2.8	2.2
14	8.7	11	13	15	22	38	68	262	33	12	2.8	2.1
15	8.6	9.8	14	14	22	40	72	277	31	11	2.7	2.1
16	9.3	11	13	11	21	40	85	275	30	10	2.8	2.1
17	8.2	9.9	13	10	22	42	104	281	28	10	2.9	2.0
18	7.8	10	12	13	24	46	109	264	27	10	2.7	2.0
19	7.8	11	12	16	47	56	153	240	26	9.5	2.6	1.9
20	7.8	10	12	14	67	68	152	232	25	8.6	2.6	1.9
21	7.8	11	12	14	38	73	157	225	23	8.0	2.3	1.9
22	7.7	11	12	14	36	75	142	211	22	7.6	2.3	1.8
23	7.7	10	11	15	30	78	148	204	21	7.2	2.5	1.7
24	7.7	10	11	21	34	84	174	173	20	6.8	2.6	1.6
25	7.6	10	11	16	38	103	207	151	19	6.5	2.7	2.4
26	9.1	10	11	19	32	105	234	138	19	6.2	2.9	3.4
27	11	11	11	17	29	102	241	121	19	6.1	2.8	3.7
28	11	11	11	16	31	113	244	100	18	5.2	2.7	3.1
29	57	14	11	18	---	134	230	89	17	4.8	2.6	2.8
30	20	18	11	14	---	140	248	82	16	4.4	2.5	2.7
31	14	---	10	17	---	142	---	75	---	4.4	2.4	---
TOTAL	312.1	337.2	367	476.9	743	2187	3873	7342	1017	346.3	95.1	66.9
MEAN	10.1	11.2	11.8	15.4	26.5	70.5	129	237	33.9	11.2	3.07	2.23
MAX	57	18	14	43	67	201	248	354	68	22	4.5	3.7
MIN	5.9	9.5	10	9.9	15	27	64	75	16	4.4	2.3	1.6
AC-FT	619	669	728	946	1470	4340	7680	14560	2020	687	189	133

11282000 MIDDLE TUOLUMNE RIVER AT OAKLAND RECREATION CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.49	15.3	31.6	43.5	68.6	88.4	157	296	190	38.9	7.21	3.70
MAX	36.9	181	318	248	345	353	476	747	875	361	60.7	27.3
(WY)	1983	1951	1951	1956	1986	1995	1982	1969	1983	1983	1983	1998
MIN	.083	.80	1.71	2.49	3.51	4.87	16.9	24.0	10.7	.85	.011	.000
(WY)	1978	1930	1991	1991	1991	1977	1977	1977	1992	1924	1977	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1917 - 2001	
ANNUAL TOTAL	32751.8		17163.5			
ANNUAL MEAN	89.5		47.0		78.7	
HIGHEST ANNUAL MEAN					246	1983
LOWEST ANNUAL MEAN					6.49	1977
HIGHEST DAILY MEAN	701	May 8	354	May 8	4000	Dec 23 1955
LOWEST DAILY MEAN	5.9	Oct 7	1.6	Sep 24	.00	Sep 4 1924
ANNUAL SEVEN-DAY MINIMUM	6.0	Oct 2	1.8	Sep 18	.00	Sep 4 1924
MAXIMUM PEAK FLOW			475	May 12	4920	Dec 23 1955
MAXIMUM PEAK STAGE			4.70	May 12	11.75	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	64960		34040		57010	
10 PERCENT EXCEEDS	266		151		239	
50 PERCENT EXCEEDS	26		14		19	
90 PERCENT EXCEEDS	7.7		2.7		1.7	

11284400 BIG CREEK ABOVE WHITES GULCH, NEAR GROVELAND, CA

LOCATION.—Lat 37°50'31", long 120°11'02", in SW 1/4 NE 1/4 sec.23, T.1 S., R.16 E., Tuolumne County, Hydrologic Unit 18040009, on right bank, 500 ft upstream from Whites Gulch, and 2.5 mi east of Groveland.

DRAINAGE AREA.—16.4 mi^2.

PERIOD OF RECORD.—May 1969 to current year.

REVISED RECORDS.—WDR CA-85-3: 1980–84(P).

GAGE.—Water-stage recorder. Datum of gage is 2,561.79 ft above sea level (levels by Boise–Cascade Corp.).

REMARKS.—Records good except flows below 1 ft^3/s, which are fair, and flows below 0.10 ft^3/s, which are poor. No storage or diversion from station. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,620 ft^3/s, Feb. 17, 1986, gage height, 7.03 ft, from rating curve extended above 1,100 ft^3/s, on basis of slope-area measurement at gage height 6.51 ft; no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 6, 1965, reached a stage of 6.4 ft, from floodmarks, discharge, 1,850 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	0900	459	4.74

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.70	.42	3.1	15	1.9	3.1	.21	.00	.00	.00
2	.00	.00	.57	.41	2.8	16	1.8	2.9	.13	.00	.00	.00
3	.00	.00	.48	.41	2.6	16	1.7	2.6	.12	.00	.00	.00
4	.00	.00	.42	.41	2.5	25	1.7	2.4	.11	.00	.00	.00
5	.00	.00	.38	.41	2.4	248	1.7	2.4	.12	.00	.00	.00
6	.00	.00	.38	.42	2.2	67	1.8	2.2	.11	.00	.00	.00
7	.00	.04	.38	.43	2.1	29	12	2.1	.09	.00	.00	.00
8	.00	.06	.38	.81	1.9	19	9.3	2.0	.07	.00	.00	.00
9	.00	.08	.35	1.1	2.0	14	6.0	1.9	.05	.00	.00	.00
10	.00	.14	.35	3.0	4.7	11	4.2	1.8	.04	.00	.00	.00
11	.00	.16	.36	32	8.0	9.2	3.6	1.7	.03	.00	.00	.00
12	.00	.17	.62	8.3	6.8	7.6	3.9	1.6	.02	.00	.00	.00
13	.00	.18	.66	3.3	5.9	6.5	3.1	1.5	.02	.00	.00	.00
14	.00	.21	.80	2.1	6.1	5.7	2.8	1.5	.02	.00	.00	.00
15	.00	.21	.85	1.7	7.0	5.1	2.5	1.4	.02	.00	.00	.00
16	.00	.21	.77	1.4	7.7	4.7	2.3	1.3	.01	.00	.00	.00
17	.00	.21	.68	1.2	9.1	4.1	2.1	1.3	.01	.00	.00	.00
18	.00	.21	.59	1.1	11	3.7	2.1	1.1	.01	.00	.00	.00
19	.00	.22	.53	.99	40	3.4	3.7	1.0	.01	.00	.00	.00
20	.00	.24	.51	.99	51	3.1	12	.92	.01	.00	.00	.00
21	.00	.24	.49	.93	25	2.9	36	.82	.00	.00	.00	.00
22	.00	.26	.49	.91	20	2.8	23	.69	.00	.00	.00	.00
23	.00	.26	.45	1.2	19	2.6	14	.62	.00	.00	.00	.00
24	.00	.27	.45	17	28	2.4	9.7	.56	.00	.00	.00	.00
25	.00	.27	.45	9.2	46	2.9	7.4	.52	.00	.00	.00	.00
26	.00	.28	.45	7.6	26	2.6	5.9	.47	.00	.00	.00	.00
27	.00	.29	.44	6.2	16	2.3	4.5	.40	.00	.00	.00	.00
28	.00	.29	.45	4.6	15	2.2	4.1	.35	.00	.00	.00	.00
29	.10	.57	.45	4.0	---	2.2	3.7	.37	.00	.00	.00	.00
30	.05	.82	.45	4.1	---	2.0	3.4	.32	.00	.00	.00	.00
31	.01	---	.45	3.7	---	1.9	---	.28	---	.00	.00	---
TOTAL	0.16	5.89	15.78	120.34	373.9	539.9	191.9	42.12	1.21	0.00	0.00	0.00
MEAN	.005	.20	.51	3.88	13.4	17.4	6.40	1.36	.040	.000	.000	.000
MAX	.10	.82	.85	32	51	248	36	3.1	.21	.00	.00	.00
MIN	.00	.00	.35	.41	1.9	1.9	1.7	.28	.00	.00	.00	.00
AC-FT	.3	12	31	239	742	1070	381	84	2.4	.00	.00	.00

11284400 BIG CREEK ABOVE WHITES GULCH, NEAR GROVELAND, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.087	3.10	10.1	27.9	35.1	25.4	11.3	3.92	1.19	.27	.041	.023
MAX	1.05	43.2	103	184	173	126	74.1	26.2	7.61	2.42	.82	.42
(WY)	1983	1983	1997	1997	1986	1983	1982	1983	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.038	.014	.018	.000	.000	.000	.000
(WY)	1971	1977	1977	1991	1991	1977	1977	1977	1977	1972	1971	1969

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	4243.70		1291.20			
ANNUAL MEAN	11.6		3.54		9.74	
HIGHEST ANNUAL MEAN					38.2	1983
LOWEST ANNUAL MEAN					.011	1977
HIGHEST DAILY MEAN	529	Feb 14	248	Mar 5	1370	Jan 2 1997
LOWEST DAILY MEAN	.00	Aug 5	.00	Oct 1	.00	Aug 27 1969
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 5	.00	Oct 1	.00	Aug 27 1969
MAXIMUM PEAK FLOW			459	Mar 5	2620	Feb 17 1986
MAXIMUM PEAK STAGE			4.74	Mar 5	7.03	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	8420		2560		7050	
10 PERCENT EXCEEDS	20		7.6		16	
50 PERCENT EXCEEDS	.50		.32		.37	
90 PERCENT EXCEEDS	.00		.00		.00	

11287500 DON PEDRO RESERVOIR NEAR LA GRANGE, CA

LOCATION.—Lat 37°42'06", long 120°25'16", in NE 1/4 SW 1/4 sec.3, T.3 S., R.14 E., Tuolumne County, Hydrologic Unit 18040009, on left end of New Don Pedro Dam on Tuolumne River, 500 ft downstream from Mexican Gulch, and 3.4 mi northeast of La Grange.

DRAINAGE AREA.—1,533 mi^2.

PERIOD OF RECORD.—September 1923 to current year. Year-end contents only 1923–24 and October 1924 to September 1930 monthend contents, published in WSP 1315-A.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Turlock Irrigation District). Prior to Feb. 1, 1941, nonrecording gage at site 1.5 mi upstream at same datum. Feb. 2, 1941, to Nov. 3, 1970, water-stage recorder at site 1.5 mi upstream at same datum. Nov. 4, 1970, to Apr. 26, 1972, nonrecording gage at same site and datum.

REMARKS.—Reservoir is formed by earthfill dam completed June 23, 1971. Storage began Nov. 3, 1970. Total capacity, 2,030,000 acre-ft, at elevation 830.0 ft, top of uncontrolled spillway, of which 309,000 acre-ft below elevation 600.0 ft, mutually agreed-upon minimum, is not available for release. Water passes through powerplant at dam and down Tuolumne River to La Grange Dam, 2.5 mi downstream, where it is diverted into Turlock and Modesto Canals (stations 11289500 and 11289000) for irrigation. This reservoir is operated jointly by Turlock and Modesto Irrigation Districts. Prior to June 1971, reservoir was formed by a concrete gravity-type dam completed Jan. 1, 1923, capacity, 290,400 acre-ft. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 2,044,000 acre-ft, Jan. 2, 1997, elevation, 831.11 ft; minimum, 29,200 acre-ft, Sept. 1–3, 5, 1934, minimum elevation, 475.0 ft, Sept. 1, 2, 1934. Minimum since reservoir first filled, 302,600 acre-ft, Oct. 14, 15, 1977, elevation, 598.2 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 1,690,000 acre-ft, Oct. 1, elevation, 801.89 ft; minimum, 1,198,000 acre-ft, Sept. 30, elevation, 752.29 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Modesto and Turlock Irrigation Districts, dated August 1970)

550	158,700	620	384,100	710	869,700	800	1,669,000
570	212,900	650	517,400	740	1,095,000	830	2,030,000
590	274,800	680	679,000	770	1,359,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690000	1655000	1643000	1628000	1644000	1650000	1678000	1675000	1647000	1524000	1380000	1263000
2	1688000	1655000	1642000	1628000	1645000	1650000	1676000	1676000	1645000	1519000	1376000	1258000
3	1686000	1654000	1642000	1626000	1647000	1650000	1673000	1676000	1642000	1513000	1373000	1253000
4	1683000	1654000	1642000	1626000	1648000	1650000	1670000	1677000	1641000	1508000	1369000	1248000
5	1681000	1654000	1641000	1624000	1649000	1658000	1666000	1677000	1638000	1504000	1364000	1246000
6	1680000	1653000	1642000	1623000	1651000	1662000	1663000	1680000	1634000	1500000	1360000	1244000
7	1680000	1652000	1640000	1622000	1652000	1661000	1661000	1680000	1630000	1496000	1355000	1242000
8	1680000	1652000	1640000	1622000	1653000	1662000	1660000	1680000	1626000	1491000	1349000	1239000
9	1679000	1652000	1640000	1622000	1655000	1663000	1658000	1680000	1622000	1486000	1344000	1236000
10	1679000	1651000	1640000	1623000	1656000	1664000	1657000	1679000	1617000	1483000	1340000	1232000
11	1679000	1651000	1640000	1626000	1658000	1664000	1655000	1677000	1613000	1479000	1336000	1230000
12	1678000	1650000	1639000	1626000	1659000	1666000	1655000	1676000	1610000	1475000	1334000	1228000
13	1678000	1650000	1640000	1626000	1660000	1667000	1654000	1676000	1606000	1469000	1330000	1226000
14	1677000	1649000	1640000	1626000	1661000	1671000	1654000	1676000	1600000	1463000	1326000	1224000
15	1674000	1649000	1641000	1626000	1661000	1671000	1653000	1674000	1596000	1458000	1322000	1222000
16	1672000	1649000	1641000	1626000	1661000	1673000	1653000	1673000	1591000	1454000	1318000	1220000
17	1668000	1649000	1641000	1627000	1662000	1674000	1652000	1671000	1586000	1450000	1314000	1218000
18	1664000	1648000	1641000	1628000	1662000	1676000	1652000	1671000	1581000	1445000	1310000	1217000
19	1662000	1648000	1640000	1629000	1664000	1678000	1651000	1671000	1578000	1440000	1305000	1215000
20	1659000	1648000	1639000	1630000	1666000	1679000	1654000	1670000	1574000	1435000	1302000	1213000
21	1658000	1647000	1639000	1630000	1666000	1681000	1656000	1669000	1570000	1431000	1299000	1212000
22	1656000	1646000	1638000	1631000	1664000	1681000	1658000	1668000	1565000	1426000	1295000	1211000
23	1656000	1646000	1638000	1632000	1661000	1682000	1659000	1665000	1561000	1421000	1291000	1210000
24	1654000	1646000	1637000	1635000	1659000	1683000	1662000	1662000	1556000	1415000	1288000	1208000
25	1654000	1645000	1635000	1637000	1656000	1685000	1664000	1660000	1553000	1410000	1284000	1206000
26	1654000	1644000	1633000	1638000	1654000	1686000	1665000	1660000	1548000	1405000	1280000	1205000
27	1654000	1643000	1632000	1639000	1652000	1686000	1668000	1660000	1542000	1400000	1278000	1204000
28	1654000	1643000	1633000	1640000	1651000	1685000	1671000	1659000	1538000	1397000	1274000	1203000
29	1654000	1643000	1631000	1641000	---	1683000	1672000	1658000	1533000	1392000	1272000	1201000
30	1655000	1643000	1631000	1642000	---	1682000	1673000	1654000	1528000	1388000	1270000	1198000
31	1655000	---	1631000	1643000	---	1679000	---	1650000	---	1384000	1267000	---
MAX	1690000	1655000	1643000	1643000	1666000	1686000	1678000	1680000	1647000	1524000	1380000	1263000
MIN	1654000	1643000	1631000	1622000	1644000	1650000	1651000	1650000	1528000	1384000	1267000	1198000
a	798.71	797.63	796.55	797.65	798.39	800.89	800.36	798.27	786.95	772.54	760.07	752.29
b	-36000	-12000	-12000	+12000	+8000	+28000	-6000	-23000	-122000	-144000	-117000	-69000

CAL YR 2000 b +102000
WTR YR 2001 b -493000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11289000 MODESTO CANAL NEAR LA GRANGE, CA

LOCATION.—Lat 37°40'21", long 120°28'26", in NE 1/4 SW 1/4 sec.18, T.3 S., R.14 E., Stanislaus County, Hydrologic Unit 18040002, on left bank, 0.9 mi northwest of La Grange, and 1.7 mi downstream from intake at La Grange Dam.

PERIOD OF RECORD.—April 1903 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

REVISED RECORDS.—WSP 1315-A: 1904–9 (monthly figures only).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 267.47 ft above sea level (levels by Modesto Irrigation District). See WSP 1930 for history of changes prior to March 1932. March 1932 to Apr. 27, 1988, at site 1.1 mi upstream at different datum.

REMARKS.—Records good. Canal diverts from right bank of Tuolumne River at La Grange Dam for irrigation in Modesto and Waterford Irrigation Districts. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,820 ft^3/s, July 1, 1935; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	441	88	.00	.02	32	.00	562	547	884	949	910	633
2	452	20	.00	82	329	.00	297	506	610	975	718	682
3	487	20	.00	119	181	.00	1060	671	881	1140	491	654
4	352	20	.00	111	107	.00	844	662	701	702	1080	941
5	400	20	.00	.00	172	.01	966	688	684	723	1270	650
6	285	197	.00	82	228	.00	1170	538	931	669	895	621
7	239	19	.00	106	333	.00	772	931	908	799	973	586
8	306	19	.00	87	343	.00	1110	940	776	960	1260	652
9	273	91	.00	.01	238	68	871	989	730	958	636	757
10	454	49	.00	70	368	470	430	766	892	670	801	690
11	373	16	.00	50	377	364	467	752	635	827	709	588
12	380	125	.00	32	62	186	311	436	574	1060	475	612
13	430	210	.00	106	185	.03	246	716	979	1060	674	509
14	334	.16	.00	.02	2.4	.00	313	667	1040	886	393	605
15	627	.01	.00	145	.00	.00	263	895	795	1030	567	517
16	485	10	.00	141	.00	.00	361	861	823	423	691	498
17	430	.02	.00	17	.00	.00	671	684	896	1390	946	373
18	520	.00	.65	33	.00	.00	601	822	944	1030	916	426
19	128	.00	551	.17	.00	31	720	971	774	1030	898	573
20	173	.00	382	.14	77	81	632	851	835	927	650	379
21	72	26	8.0	58	.00	94	712	1050	635	882	835	383
22	445	24	168	.93	327	436	573	788	908	1080	695	321
23	87	1.1	89	168	172	97	806	651	328	1210	839	418
24	170	44	85	68	172	451	469	789	637	977	813	490
25	117	245	.08	443	171	447	404	744	654	690	912	728
26	224	76	189	37	112	468	612	609	1110	639	726	513
27	94	3.4	221	33	.00	549	627	590	1100	839	741	117
28	106	.02	51	.00	.00	621	265	820	535	816	727	68
29	74	.00	388	67	---	691	483	850	847	840	353	738
30	46	.00	12	102	---	666	600	1020	1020	904	447	1280
31	71	---	174	86	---	879	---	1160	---	957	744	---
TOTAL	9075	1323.71	2318.73	2244.29	3988.40	6599.04	18218	23964	24066	28042	23785	17002
MEAN	293	44.1	74.8	72.4	142	213	607	773	802	905	767	567
MAX	627	245	551	443	377	879	1170	1160	1110	1390	1270	1280
MIN	46	.00	.00	.00	.00	.00	246	436	328	423	353	68
AC-FT	18000	2630	4600	4450	7910	13090	36140	47530	47730	55620	47180	33720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2001, BY WATER YEAR (WY)

MEAN	245	104	76.2	54.1	87.4	298	654	821	887	791	645	434
MAX	633	579	416	465	407	799	1198	1349	1244	1194	977	902
(WY)	1968	1983	1980	1976	1976	1932	1949	1946	1943	1956	1983	1980
MIN	.000	.000	.000	.000	.000	.000	220	224	450	186	12.1	.000
(WY)	1913	1910	1910	1910	1920	1938	1991	1977	1926	1919	1918	1917

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1909 - 2001	
ANNUAL TOTAL	159101.51		160626.17			
ANNUAL MEAN	435		440		428	
HIGHEST ANNUAL MEAN					570	1980
LOWEST ANNUAL MEAN					198	1910
HIGHEST DAILY MEAN	1320	Apr 11	1390	Jul 17	1820	Jul 1 1935
LOWEST DAILY MEAN	.00	Nov 18	.00	Nov 18	.00	Feb 8 1909
ANNUAL SEVEN-DAY MINIMUM	.00	Nov 29	.00	Nov 29	.00	Feb 8 1909
ANNUAL RUNOFF (AC-FT)	315600		318600		309700	
10 PERCENT EXCEEDS	929		942		1000	
50 PERCENT EXCEEDS	381		430		379	
90 PERCENT EXCEEDS	18		.00		.00	

11289500 TURLOCK CANAL NEAR LA GRANGE, CA

LOCATION.—Lat 37°39'57", long 120°26'24", in NW 1/4 NW 1/4 sec.21, T.3 S., R.14 E., Stanislaus County, Hydrologic Unit 18040002, on right bank, 0.4 mi downstream from intake at La Grange Dam, and 1.2 mi east of La Grange.

PERIOD OF RECORD.—October 1898 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

REVISED RECORDS.—WSP 1315-A: 1899–1908 (monthly figures only). WSP 1445: 1917–20, 1922.

GAGE.—Ultrasonic flow meter and concrete control. Datum of gage is 277.70 ft above sea level (levels by Turlock Irrigation District). See WSP 1930 for history of changes prior to Apr. 17, 1924. From May 17, 1984, to Oct. 7, 1999, water-stage recorder at site 0.2 mi downstream at datum 2.72 ft lower.

REMARKS.—Records good. Canal diverts from left bank of Tuolumne River at La Grange Dam for irrigation in Turlock Irrigation District and to supply town of La Grange. Capacity of canal increased in March 1980 and in March 1984. During autumn and winter, some unmeasured flow is diverted from canal at tunnel 0.1 mi upstream from gage, passed through La Grange Powerplant, and returned to river. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3,400 ft^3/s, several days in May 1984; no diversion for irrigation during some periods in some years; prior to 1939, unmeasured small discharge during winter called zero. No flow Jan. 27, 1984, to Mar. 14, 1984, when canal was drained for construction and installation of electromagnetic flow meter, and many days during most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	995	.00	78	378	.00	62	1540	269	1470	1400	1650	1860
2	1160	.00	76	228	.00	730	1820	1510	1050	1910	1520	1780
3	1210	.00	34	672	.00	457	2120	1190	1010	2500	1610	2200
4	1400	.00	9.7	179	.00	280	2230	919	703	2170	1290	1450
5	1210	.00	129	832	.00	693	2230	1490	1430	1940	1180	730
6	789	.00	17	346	.00	401	1760	464	1470	1470	1750	709
7	135	.00	16	166	.00	962	1700	1570	1880	1810	2210	982
8	416	.00	3.8	25	.01	35	326	1950	1750	1650	2300	862
9	624	.00	4.2	.00	.00	122	1290	1780	1550	1920	2010	1220
10	518	.00	2.5	.00	.00	380	1400	1930	1890	1580	1970	1380
11	568	.00	2.1	.03	.00	29	1790	1990	1960	1250	1640	1070
12	459	.00	68	.00	.00	197	1540	1860	1680	1620	990	809
13	309	.00	2.5	.00	.00	329	1180	665	1330	2460	1730	784
14	257	.00	48	.00	.00	13	763	1730	2090	2260	1640	857
15	472	.00	1.3	.02	.00	20	946	1830	1840	1820	1650	923
16	1020	.00	1.9	.27	.00	81	933	1290	1960	1560	1740	611
17	1000	.01	16	.00	.00	344	1490	1860	1890	1260	1630	595
18	1070	.00	26	.00	.00	16	561	596	1780	1760	1680	646
19	1100	.00	151	.00	.00	550	400	1440	1330	2000	1830	607
20	986	.00	206	.00	.00	566	190	1200	1710	1860	1140	644
21	289	.00	479	.00	.00	921	157	2030	1870	1190	1210	453
22	185	126	216	.00	.00	856	265	1240	2150	1470	1310	502
23	170	.00	266	.05	.00	516	199	2050	1500	1900	1610	380
24	1.8	164	252	.00	.00	183	298	2340	2050	2460	1190	408
25	.62	43	850	.00	.00	151	1720	1770	1270	2340	1720	348
26	.00	118	508	.00	.00	726	1790	773	1810	2150	1160	453
27	.00	48	415	.00	.05	1250	1130	925	1930	2090	1270	408
28	.00	53	604	.01	226	1730	746	755	1910	1310	1430	341
29	.00	63	361	.00	---	1950	227	1390	1960	1800	1010	376
30	.00	102	178	.00	---	1890	573	2170	1690	1090	1020	373
31	.00	---	342	.01	---	2000	---	2130	---	1940	1220	---
TOTAL	16344.42	717.01	5364.0	2826.39	226.06	18440	33314	45106	49913	55940	47310	24761
MEAN	527	23.9	173	91.2	8.07	595	1110	1455	1664	1805	1526	825
MAX	1400	164	850	832	226	2000	2230	2340	2150	2500	2300	2200
MIN	.00	.00	1.3	.00	.00	13	157	269	703	1090	990	341
AC-FT	32420	1420	10640	5610	448	36580	66080	89470	99000	111000	93840	49110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2001, BY WATER YEAR (WY)

MEAN	303	144	133	79.8	128	474	1024	1251	1350	1295	1085	696
MAX	883	1008	1210	506	855	1457	1874	1829	1883	2098	1991	1604
(WY)	1996	1976	1984	1999	1976	1997	1949	1984	1981	1980	1983	1967
MIN	.000	.000	.000	.000	.000	2.72	90.3	27.4	71.0	.000	25.4	.000
(WY)	1901	1901	1900	1900	1905	1973	1900	1977	1900	1914	1901	1901

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1899 - 2001	
ANNUAL TOTAL	311548.93		300261.88			
ANNUAL MEAN	851		823		669	
HIGHEST ANNUAL MEAN					1082	1984
LOWEST ANNUAL MEAN					54.3	1900
HIGHEST DAILY MEAN	2640	Apr 11	2500	Jul 3	3400	May 24 1984
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 26	.00	Nov 14 1899
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 26	.00	Nov 14 1899
ANNUAL RUNOFF (AC-FT)	618000		595600		484400	
10 PERCENT EXCEEDS	1980		1920		1680	
50 PERCENT EXCEEDS	752		624		460	
90 PERCENT EXCEEDS	.00		.00		.00	

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CA

LOCATION.—Lat 37°39'59", long 120°26'28", in NW 1/4 NW 1/4 sec.21, T.3 S., R.14 E., Stanislaus County, Hydrologic Unit 18040002, on left bank, 0.5 mi downstream from La Grange Dam, and 1.1 mi east of La Grange.

DRAINAGE AREA.—1,538 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 170.19 ft above sea level (levels by Turlock Irrigation District).

REMARKS.—Records good. Flow diverted into Modesto Canal (station 11289000) and Turlock Canal (station 11289500) at La Grange Dam. Flow regulated by Don Pedro Powerplant, Don Pedro Reservoir (station 11287500), 4.5 mi upstream, Hetch Hetchy Reservoir (station 11275500), Cherry Lake (station 11277200), and Lake Eleanor (station 11277500). Tuolumne Canal (station 11297500) diverts water from the Stanislaus River Basin into the Tuolumne River Basin for power, irrigation, and domestic supply in the vicinity of Sonora, upstream from station. Diversion through Hetch Hetchy Aqueduct to San Francisco began Oct. 19, 1934; an average of 354 ft^3/s was diverted during the current year. For records of combined discharge of river and Modesto and Turlock Canals, see station 11289651. See schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD.—River only, maximum discharge, 58,900 ft^3/s, Jan. 3, 1997, gage height, 28.43 ft; no flow for several days during September and October 1977.

Combined flow, maximum daily discharge, 50,100 ft^3/s, Jan. 3, 1997; minimum daily, 0.45 ft^3/s, Nov. 2, 1970.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	393	332	312	320	1450	355	1430	62	51	109	105
2	504	336	336	312	320	1180	355	1420	50	49	105	104
3	536	334	334	313	320	955	348	1430	53	49	106	109
4	492	335	334	313	321	959	342	1420	55	48	106	105
5	503	335	367	317	321	960	331	1400	56	54	106	105
6	505	335	361	320	321	1140	320	1430	57	55	106	106
7	459	340	363	346	320	1150	328	1420	64	56	105	107
8	456	335	344	334	328	1400	325	1060	56	54	107	107
9	457	333	332	339	467	1130	318	958	54	54	111	107
10	451	331	330	357	660	788	325	878	57	51	110	107
11	449	334	325	335	683	628	326	886	58	64	111	107
12	452	331	326	335	735	611	327	879	54	100	111	108
13	452	342	328	334	792	459	327	876	57	105	112	108
14	451	357	331	335	1010	353	316	870	60	106	113	108
15	397	359	337	334	1130	347	245	878	51	103	114	108
16	399	356	340	325	1090	346	243	881	50	107	114	115
17	401	360	340	336	1100	350	243	883	55	104	114	116
18	401	372	337	341	1050	354	1150	788	56	110	115	115
19	401	371	334	335	963	351	1460	342	51	112	117	117
20	344	370	335	321	1130	351	1050	144	50	111	114	117
21	343	370	333	318	1800	346	626	149	50	106	109	118
22	343	364	334	319	2940	346	623	146	53	111	120	118
23	343	342	336	318	3390	347	623	153	54	109	107	118
24	346	338	335	317	3400	347	619	153	52	109	108	119
25	349	338	335	317	3210	348	619	153	52	112	108	119
26	346	337	336	317	2910	352	618	138	46	109	109	118
27	345	340	333	317	2550	347	627	155	50	109	108	118
28	346	344	309	317	2070	341	684	142	50	116	108	118
29	404	336	312	317	---	349	1240	138	51	108	109	119
30	394	335	313	317	---	341	1420	148	54	109	107	122
31	376	---	313	318	---	348	---	140	---	112	104	---
TOTAL	12756	10403	10355	10086	35651	19074	16733	21888	1618	2753	3403	3368
MEAN	411	347	334	325	1273	615	558	706	53.9	88.8	110	112
MAX	536	393	367	357	3400	1450	1460	1430	64	116	120	122
MIN	311	331	309	312	320	341	243	138	46	48	104	104
AC-FT	25300	20630	20540	20010	70710	37830	33190	43410	3210	5460	6750	6680

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	693	379	929	1613	2037	1934	1625	1467	725	453	246	516
MAX	4187	905	4625	13070	8116	6636	8900	9744	5161	3808	1747	3491
(WY)	1984	1984	1997	1997	1997	1983	1983	1983	1983	1983	1983	1983
MIN	1.02	8.16	10.2	9.78	21.6	93.9	40.9	8.73	8.43	7.46	5.63	4.42
(WY)	1978	1978	1978	1978	1978	1989	1977	1972	1976	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	391094		148088			
ANNUAL MEAN	1069		406		1047	
HIGHEST ANNUAL MEAN					4786	1983
LOWEST ANNUAL MEAN					84.3	1989
HIGHEST DAILY MEAN	6610	Mar 4	3400	Feb 24	50100	Jan 3 1997
LOWEST DAILY MEAN	269	Jun 18	46	Jun 26	.00	Sep 26 1977
ANNUAL SEVEN-DAY MINIMUM	271	Jun 29	50	Jun 26	.00	Oct 12 1977
MAXIMUM PEAK FLOW			3780	Feb 22	58900	Jan 3 1997
MAXIMUM PEAK STAGE			9.66	Feb 22	28.43	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	775700		293700		758200	
10 PERCENT EXCEEDS	3700		958		3480	
50 PERCENT EXCEEDS	374		331		278	
90 PERCENT EXCEEDS	283		58		14	

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1971 to current year.
WATER TEMPERATURE: Water years 1971 to current year.

PERIOD OF DAILY RECORD.—November 1970 to current year.
WATER TEMPERATURE: November 1970 to current year.

INSTRUMENTATION.—Water-temperature recorder since November 1970.

REMARKS.—Water-temperature records rated poor except for Sept. 29, 30, which are rated fair; Aug. 1–5, Sept. 11–28, which are rated good; and Aug. 6 to Sept. 10, which are rated excellent. Interruptions in record were due to malfunction of the recording instruments. Water temperature can be affected by releases from La Grange Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 29.0°C, Sept. 27, Oct. 15, 1977; minimum recorded, 6.0°C, Feb. 6–8, 10, 1971.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 15.5°C, July 27, but may have been higher during periods of missing record; minimum recorded, 8.0°C, Apr. 2–4, 9, 10, but may have been lower during periods of missing record.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOCATION, (FEET) (81903)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
31...*	1327	2.50	14.5	6.00
31...*	1330	5.50	13.5	18.0
31...*	1334	5.10	13.5	30.0
31...*	1337	4.90	13.5	42.0
31...*	1339	5.00	13.5	54.0
31...*	1341	4.00	13.5	66.0
31...*	1343	3.20	13.5	78.0
31...*	1345	2.10	13.5	90.0
31...*	1346	1.20	14.0	102

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	10.5	10.5	10.0	10.0	9.5	---	---	10.0	9.0	10.0	9.0
2	12.0	10.5	10.5	10.0	10.0	9.5	---	---	10.0	9.0	9.5	9.0
3	11.5	10.5	10.5	10.0	9.5	9.5	---	---	10.0	9.0	9.5	9.0
4	11.5	10.5	10.5	10.0	10.0	9.5	---	---	10.0	9.5	9.0	9.0
5	11.5	10.5	10.5	10.0	9.5	9.5	---	---	10.0	9.5	9.0	9.0
6	12.0	10.5	10.5	10.0	9.5	9.5	10.0	9.5	9.5	9.0	9.5	9.0
7	11.5	10.5	10.5	9.5	10.0	9.5	10.0	9.5	9.5	9.0	9.5	9.0
8	11.5	10.5	10.5	10.0	10.0	10.0	10.0	10.0	9.5	8.5	10.0	9.0
9	11.5	10.5	10.5	9.5	10.0	9.5	10.0	9.5	9.5	9.0	9.5	9.0
10	11.0	10.5	10.0	9.5	---	---	9.5	9.5	9.5	9.0	10.0	9.0
11	11.0	10.5	10.0	9.0	---	---	9.5	9.5	9.5	9.0	10.0	9.0
12	11.0	10.5	10.0	9.0	---	---	10.0	9.5	9.5	9.0	10.5	9.0
13	11.5	10.0	10.0	9.0	---	---	10.0	9.5	10.0	9.0	10.0	9.0
14	11.5	10.0	10.0	9.5	---	---	9.5	9.0	10.0	9.5	10.5	9.0
15	11.5	10.0	9.5	9.0	---	---	10.0	9.0	10.0	9.0	10.0	9.5
16	11.5	10.0	10.0	9.5	---	---	9.5	9.0	10.5	9.0	10.5	9.0
17	11.5	10.0	10.0	9.0	---	---	9.5	9.0	10.0	9.5	10.5	9.0
18	11.5	10.5	10.0	9.0	---	---	10.0	9.0	10.0	9.5	10.5	9.0
19	11.5	10.0	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.5	9.0
20	11.5	10.0	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.5	9.0
21	11.0	10.5	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.5	8.5
22	11.0	10.0	10.0	9.5	---	---	10.0	9.5	9.5	9.5	10.5	8.5
23	11.0	10.0	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.5	8.5
24	11.0	10.0	10.0	9.5	---	---	10.0	9.5	9.5	9.5	10.5	8.5
25	11.0	10.5	10.0	9.5	---	---	10.0	9.0	10.0	9.5	10.5	8.5
26	10.5	10.0	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.5	8.5
27	11.0	10.0	10.0	9.5	---	---	10.0	9.5	10.0	9.5	10.0	8.5
28	10.5	10.5	10.0	9.5	---	---	10.0	9.5	9.5	9.0	10.5	8.5
29	10.5	10.0	10.0	9.5	---	---	10.0	9.5	---	---	10.5	8.5
30	10.5	10.0	10.0	9.5	---	---	9.5	9.0	---	---	10.5	8.5
31	10.5	10.0	---	---	---	---	9.5	9.0	---	---	10.5	8.5
MONTH	12.0	10.0	10.5	9.0	---	---	---	---	10.5	8.5	10.5	8.5

* Instantaneous discharge at time of cross-sectional measurement: 114 ft^3/s.

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	8.5	---	---	---	---	---	---	14.5	12.0	14.5	12.0
2	9.5	8.0	---	---	---	---	---	---	14.0	11.5	14.5	12.0
3	10.0	8.0	---	---	---	---	---	---	14.0	11.5	14.0	12.0
4	10.0	8.0	---	---	---	---	---	---	14.0	11.5	14.5	12.0
5	10.0	8.5	---	---	---	---	---	---	14.5	11.5	14.0	12.0
6	9.0	8.5	---	---	---	---	---	---	14.5	11.5	14.0	11.5
7	9.5	8.5	---	---	---	---	---	---	14.5	11.5	14.0	11.5
8	10.0	8.5	---	---	---	---	---	---	14.5	11.5	14.0	11.5
9	10.0	8.0	---	---	---	---	---	---	14.5	12.0	14.0	11.5
10	10.0	8.0	---	---	---	---	---	---	14.5	12.0	14.0	11.5
11	9.0	8.5	---	---	---	---	---	---	14.5	11.5	13.5	11.5
12	---	---	---	---	---	---	---	---	14.5	11.5	14.0	11.5
13	---	---	---	---	---	---	---	---	14.5	11.5	14.0	11.5
14	---	---	---	---	---	---	---	---	14.5	11.5	14.0	11.5
15	---	---	---	---	---	---	---	---	14.5	11.5	14.0	11.5
16	---	---	---	---	---	---	14.0	10.0	14.5	11.5	14.0	11.5
17	---	---	---	---	---	---	15.0	10.0	14.0	12.0	13.5	11.5
18	---	---	11.0	9.0	---	---	14.0	10.0	14.5	12.0	13.5	11.5
19	---	---	11.5	9.0	---	---	14.5	10.0	14.5	11.5	13.5	11.5
20	---	---	12.5	9.5	---	---	14.0	9.5	14.0	12.0	13.5	11.5
21	---	---	13.0	9.5	---	---	13.5	10.0	14.0	11.5	13.5	11.5
22	---	---	12.5	9.5	---	---	14.5	10.5	14.5	11.5	13.5	11.5
23	---	---	13.0	9.5	---	---	14.5	10.5	14.5	12.0	13.0	11.5
24	---	---	12.5	9.5	---	---	15.0	10.5	14.5	12.0	13.0	11.5
25	---	---	12.0	9.5	---	---	14.0	11.0	14.5	12.0	13.5	11.5
26	---	---	12.5	9.5	---	---	15.0	11.0	14.5	12.0	13.5	11.5
27	---	---	12.0	9.5	---	---	15.5	10.5	15.0	12.0	13.5	11.5
28	---	---	---	---	---	---	14.5	11.0	14.5	12.0	13.0	11.5
29	---	---	---	---	---	---	15.0	11.0	14.5	12.0	13.0	11.5
30	---	---	---	---	---	---	14.0	10.5	14.0	12.0	13.0	11.0
31	---	---	---	---	---	---	14.5	11.0	14.5	12.0	---	---
MONTH	---	---	---	---	---	---	---	---	15.0	11.5	14.5	11.0

11289651 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CA—Continued

TUOLUMNE RIVER, MODESTO CANAL NEAR LA GRANGE, AND TURLOCK CANAL NEAR LA GRANGE, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	481	410	690	352	1510	2460	2250	2410	2400	2670	2600
2	2110	356	412	622	649	1910	2480	3440	1710	2930	2340	2560
3	2240	354	368	1100	501	1410	3530	3290	1940	3690	2210	2960
4	2240	355	344	603	428	1240	3410	3000	1460	2920	2480	2500
5	2110	355	496	1150	493	1650	3530	3580	2170	2710	2560	1480
6	1580	532	378	748	549	1540	3250	2430	2460	2200	2750	1440
7	833	359	379	618	653	2110	2800	3920	2850	2670	3280	1680
8	1180	354	348	446	671	1440	1760	3950	2590	2660	3670	1620
9	1350	424	336	339	705	1320	2480	3730	2330	2930	2760	2090
10	1420	380	332	427	1030	1640	2160	3580	2840	2300	2880	2180
11	1390	350	327	385	1060	1020	2590	3630	2660	2140	2460	1770
12	1290	456	394	367	797	994	2180	3180	2300	2780	1570	1530
13	1190	552	330	440	977	788	1760	2260	2370	3620	2510	1400
14	1040	357	379	335	1010	366	1400	3270	3190	3260	2140	1570
15	1500	359	338	479	1130	367	1460	3600	2690	2950	2330	1550
16	1900	366	342	466	1090	427	1530	3030	2830	2090	2540	1220
17	1830	360	356	353	1100	694	2400	3420	2840	2750	2690	1080
18	1990	372	364	374	1050	370	2310	2210	2780	2900	2720	1180
19	1630	371	1040	335	963	932	2580	2750	2150	3140	2850	1300
20	1500	370	923	321	1210	998	1870	2190	2590	2900	1900	1140
21	704	396	820	376	1800	1370	1500	3230	2550	2180	2150	954
22	973	514	718	320	3270	1640	1460	2180	3110	2660	2120	941
23	600	343	691	486	3560	960	1620	2850	1880	3220	2560	916
24	518	546	672	385	3570	981	1390	3280	2740	3550	2110	1020
25	467	626	1180	760	3380	946	2740	2660	1970	3140	2740	1200
26	570	531	1030	354	3020	1540	3020	1520	2970	2900	2000	1080
27	439	391	969	350	2550	2150	2390	1680	3080	3040	2120	643
28	452	397	964	317	2300	2690	1690	1720	2490	2250	2270	527
29	478	399	1060	384	---	2990	1950	2380	2860	2750	1470	1230
30	440	437	503	419	---	2900	2590	3340	2760	2100	1580	1770
31	447	---	829	404	---	3230	---	3430	---	3010	2060	---
TOTAL	38161	12443	18032	15153	39868	44123	68290	90980	75570	86740	74490	45131
MEAN	1231	415	582	489	1424	1423	2276	2935	2519	2798	2403	1504
MAX	2240	626	1180	1150	3570	3230	3530	3950	3190	3690	3670	2960
MIN	439	343	327	317	352	366	1390	1520	1460	2090	1470	527
AC-FT	75690	24680	35770	30060	79080	87520	135500	180500	149900	172000	147800	89520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

MEAN	1362	803	1315	1807	2244	2760	3269	3340	2957	3071	2560	1819
MAX	4693	2383	5327	13630	8885	6677	9873	11840	7644	6670	4715	5429
(WY)	1984	1983	1983	1997	1997	1983	1983	1983	1983	1983	1983	1983
MIN	107	35.9	115	76.8	97.8	230	921	262	595	664	606	305
(WY)	1978	1978	1989	1978	1989	1992	1992	1977	1992	1992	1992	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	861521		608981			
ANNUAL MEAN	2354		1668		2288	
HIGHEST ANNUAL MEAN					6186	1983
LOWEST ANNUAL MEAN					442	1992
HIGHEST DAILY MEAN	7020	Mar 8	3950	May 8	50100	Jan 3 1997
LOWEST DAILY MEAN	327	Dec 11	317	Jan 28	.45	Nov 2 1970
ANNUAL SEVEN-DAY MINIMUM	348	Dec 9	348	Dec 9	.61	Oct 29 1970
ANNUAL RUNOFF (AC-FT)	1709000		1208000		1658000	
10 PERCENT EXCEEDS	4260		3090		4600	
50 PERCENT EXCEEDS	2370		1570		1940	
90 PERCENT EXCEEDS	380		369		268	

11290000 TUOLUMNE RIVER AT MODESTO, CA

LOCATION.—Lat 37°37'38", long 120°59'11", in SE 1/4 SW 1/4 sec.33, T.3 S., R.9 E., Stanislaus County, Hydrologic Unit 18040002, on left bank at bridge on Ninth Street in Modesto, and 0.2 mi downstream from Dry Creek.

DRAINAGE AREA.—1,884 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—1878–84, 1891–94, 1897 (gage heights only), January 1895 to December 1896, April 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Water-quality data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Water-quality data for the period April 1987 to September 1988 are available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is sea level (levels by Modesto Irrigation District). Prior to July 11, 1947, at site 1,700 ft downstream at same datum; July 11, 1947, to Nov. 16, 1953, at site 1,000 ft downstream at same datum.

REMARKS.—Records fair. Flow regulated by reservoirs and powerplants upstream from station. Several major diversions for power, irrigation, and municipal supply upstream of station, including Modesto and Turlock Canals (stations 11289000 and 11289500). See REMARKS for Tuolumne River below La Grange Dam (station 11289650) and schematic diagram of Tuolumne River Basin.

EXTREMES FOR PERIOD OF RECORD (water years 1896, 1941–2001).—Maximum discharge observed, 57,000 ft^3/s, Dec. 9, 1950, elevation, 69.19 ft, maximum gage height, 71.21 ft, Jan. 4, 1997 (backwater caused by debris on railroad trestle 1,500 ft downstream of gage); minimum daily, 56 ft^3/s, Aug. 6, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	611	611	449	428	456	2130	576	1450	351	178	235	282
2	575	710	447	429	455	1620	563	1460	325	196	235	292
3	709	555	446	430	453	1290	554	1490	318	198	247	278
4	937	486	444	431	447	1180	521	1470	289	196	248	269
5	982	476	444	433	441	1490	528	1470	297	191	258	281
6	967	470	466	437	437	2670	542	1470	254	205	267	288
7	992	470	479	441	433	1900	650	1530	267	220	274	306
8	950	472	476	558	434	1740	694	1470	260	230	265	294
9	935	466	459	507	457	2020	594	1160	275	214	270	306
10	954	464	440	568	594	1670	553	1120	256	199	282	308
11	1020	459	439	622	814	1300	535	1020	270	182	282	276
12	792	457	448	740	929	1120	545	1000	237	187	281	268
13	707	455	441	836	1120	1000	549	1030	241	213	294	268
14	702	462	449	840	1040	703	547	1070	230	250	291	281
15	686	481	449	833	1170	585	575	1030	239	278	282	283
16	611	485	453	658	1230	545	491	1020	235	320	276	289
17	584	486	456	500	1200	528	458	1090	242	283	278	313
18	554	487	458	487	1220	521	483	1080	233	277	296	286
19	553	498	455	492	1190	519	1190	972	193	303	276	290
20	564	498	451	487	1090	526	1530	675	184	311	289	287
21	533	503	457	465	1390	519	1220	524	182	292	284	269
22	502	498	456	449	1960	544	858	421	206	293	281	256
23	485	489	456	445	3100	526	811	382	226	329	266	266
24	484	465	458	467	3440	538	787	368	242	281	268	277
25	525	463	457	509	3680	549	753	382	256	280	305	291
26	747	462	454	624	3540	524	748	408	234	290	309	297
27	925	461	443	710	3020	524	758	364	220	297	305	290
28	739	465	441	573	2670	515	775	422	224	311	294	279
29	632	473	426	503	---	513	877	381	207	301	272	307
30	642	458	426	477	---	547	1270	343	189	277	272	303
31	662	---	429	464	---	549	---	384	---	252	265	---
TOTAL	22261	14685	13952	16843	38410	30905	21535	28456	7382	7834	8547	8580
MEAN	718	490	450	543	1372	997	718	918	246	253	276	286
MAX	1020	710	479	840	3680	2670	1530	1530	351	329	309	313
MIN	484	455	426	428	433	513	458	343	182	178	235	256
AC-FT	44150	29130	27670	33410	76190	61300	42710	56440	14640	15540	16950	17020

11290000 TUOLUMNE RIVER AT MODESTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	869	988	1544	1937	2201	2117	1927	1928	1571	647	378	567
MAX	4760	4124	8677	15500	8782	7658	9268	10420	7665	4244	2225	4041
(WY)	1984	1951	1951	1997	1997	1983	1983	1983	1942	1983	1983	1983
MIN	78.2	93.1	110	154	166	199	169	138	94.5	78.8	67.5	72.6
(WY)	1978	1978	1978	1991	1991	1961	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	480949		219390			
ANNUAL MEAN	1314		601		1378	
HIGHEST ANNUAL MEAN					5518	1983
LOWEST ANNUAL MEAN					185	1989
HIGHEST DAILY MEAN	7000	Mar 6	3680	Feb 25	52900	Jan 4 1997
LOWEST DAILY MEAN	327	Feb 9	178	Jul 1	56	Aug 6 1977
ANNUAL SEVEN-DAY MINIMUM	342	Feb 4	193	Jun 30	62	Aug 2 1977
MAXIMUM PEAK FLOW			3870	Feb 25	57000	Dec 9 1950
MAXIMUM PEAK STAGE			45.46	Feb 25	71.21	Jan 4 1997
ANNUAL RUNOFF (AC-FT)	954000		435200		998500	
10 PERCENT EXCEEDS	4150		1160		3680	
50 PERCENT EXCEEDS	696		459		608	
90 PERCENT EXCEEDS	445		251		183	

11290000 TUOLUMNE RIVER AT MODESTO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water year 1989 to March 31, 1995, December 2000 to September 2001. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for the period April 1987 to September 1988 are available in the files of the U.S. Geological Survey.
CHEMICAL DATA: Water years 1993–95.
SPECIFIC CONDUCTANCE: Water years 1989–95, December 2000 to September 2001.
WATER TEMPERATURE: Water years 1989–95, December 2000 to September 2001.
SEDIMENT: Water years 1993–95.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1988 to March 31, 1995, December 2000 to September 2001.
WATER TEMPERATURE: October 1988 to March 31, 1995, December 2000 to September 2001.

INSTRUMENTATION.—Water-quality montitor since December 2000.

REMARKS.—Specific conductance records rated poor except for Jan. 24–28, Mar. 2–5, Mar. 19–26, Apr. 17–21, June 16–21, July 17 to Aug. 1, which are rated fair; Dec. 29 to Jan. 10, Jan. 17–23, Mar. 6–10, Mar. 15–18, Mar. 27 to Apr. 3, Apr. 10–16, June 22–30, July 12–16, which are rated good; and Jan. 11–16, Mar. 11–14, Apr. 4–9, July 1–11, which are excellent. Water-temperature records rated poor except for Mar. 6 to Apr. 19, May 30 to Sept. 6, which are rated fair; and Apr. 20 to May 29, Sept. 7–30, which are rated good. Interruptions in record were caused by malfunction of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 587 microsiemens, Mar. 12, 1993; minimum recorded, 22 microsiemens, Feb. 26, 27, 2001.
WATER TEMPERATURE: Maximum recorded, 34.5°C, July 3–5, 1991; minimum recorded, 3.5°C, several days during December 1990.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 325 microsiemens, June 21, but may have been higher during periods of missing record; minimum recorded, 22 microsiemens, Feb. 26, 27, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, 31.0°C, June 21, 22; minimum recorded, 7.0°C, Jan. 17, 18.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
19...*	1140	162	24.5	93.0
19...*	1141	165	24.5	86.0
19...*	1142	165	24.5	76.0
19...*	1143	163	24.5	70.0
19...*	1144	166	24.5	62.0
19...*	1145	182	25.0	54.0
19...*	1146	193	25.5	46.0
19...*	1147	211	26.0	38.0
19...*	1148	213	26.0	30.0
19...*	1149	213	26.0	22.0
19...*	1150	213	26.0	8.00
19...*	1151	213	26.0	6.00

* Instantaneous discharge at time of cross-sectional measurement: 300 ft^3/s.

11290000 TUOLUMNE RIVER AT MODESTO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	143	141	140	137	32	27
2	---	---	---	---	---	---	143	140	137	135	42	32
3	---	---	---	---	---	---	142	140	136	134	51	42
4	---	---	---	---	---	---	142	136	136	134	57	51
5	---	---	---	---	---	---	137	135	135	132	95	56
6	---	---	---	---	---	---	137	134	133	131	99	66
7	---	---	---	---	---	---	135	133	133	131	68	58
8	---	---	---	---	---	---	134	112	133	131	59	46
9	---	---	---	---	---	---	128	118	132	124	47	38
10	---	---	---	---	---	---	128	110	126	87	53	40
11	---	---	---	---	---	---	120	115	87	64	62	50
12	---	---	---	---	---	---	121	91	72	64	66	62
13	---	---	---	---	---	---	91	75	---	---	80	66
14	---	---	---	---	---	---	76	75	---	---	122	80
15	---	---	---	---	---	---	78	76	---	---	147	122
16	---	---	---	---	---	---	129	77	---	---	152	147
17	---	---	---	---	---	---	142	129	---	---	152	150
18	---	---	---	---	---	---	144	139	---	---	151	145
19	---	---	---	---	---	---	139	133	---	---	146	144
20	---	---	---	---	---	---	133	130	51	48	144	137
21	---	---	---	---	---	---	137	133	52	32	141	135
22	---	---	---	---	---	---	138	136	32	23	135	126
23	---	---	---	---	---	---	138	136	29	25	132	126
24	---	---	---	---	---	---	136	129	39	27	133	125
25	---	---	---	---	---	---	129	104	41	32	126	119
26	---	---	---	---	---	---	122	118	39	22	126	123
27	---	---	---	---	---	---	131	122	26	22	126	121
28	---	---	---	---	---	---	141	131	27	23	125	121
29	---	---	---	---	143	140	142	141	---	---	123	119
30	---	---	---	---	143	141	142	140	---	---	122	114
31	---	---	---	---	143	141	140	138	---	---	122	113
MONTH	---	---	---	---	---	---	144	75	---	---	152	27

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	119	113	38	33	171	133	243	209	209	194	195	181
2	116	114	34	33	187	167	267	189	205	151	183	147
3	117	113	34	32	193	178	246	191	208	156	198	175
4	118	116	35	32	207	180	253	182	185	167	199	182
5	118	115	35	34	216	172	259	176	186	163	203	176
6	118	110	36	34	235	176	280	206	193	178	195	187
7	113	95	---	---	236	205	281	202	189	170	192	143
8	99	86	---	---	241	218	256	216	195	175	188	156
9	107	98	---	---	231	196	277	223	196	146	188	152
10	116	105	---	---	251	214	277	219	186	128	192	141
11	118	111	---	---	245	226	293	219	193	144	200	190
12	117	108	---	---	241	229	295	253	191	142	196	162
13	119	105	---	---	271	241	284	260	195	145	203	186
14	116	111	---	---	290	263	276	216	184	167	204	164
15	114	103	---	---	321	276	229	176	195	174	186	172
16	135	112	---	---	296	220	211	125	194	139	190	159
17	142	135	---	---	222	211	219	166	190	169	188	134
18	141	136	---	---	233	211	213	196	194	173	188	151
19	138	41	---	---	294	233	199	162	181	149	191	171
20	41	32	---	---	304	282	182	132	180	140	185	163
21	42	32	---	---	325	293	199	161	177	158	197	166
22	58	42	---	---	315	253	185	170	178	150	189	165
23	65	57	---	---	264	219	181	127	189	158	190	183
24	69	63	---	---	239	216	196	169	195	177	184	166
25	73	69	---	---	216	175	195	169	182	147	192	151
26	74	71	---	---	233	181	178	159	180	150	188	151
27	76	72	---	---	256	233	187	151	183	158	187	154
28	76	70	---	---	254	199	193	166	184	161	187	175
29	70	58	171	164	241	172	187	141	192	168	187	144
30	58	38	183	171	244	165	189	151	206	152	177	158
31	---	---	181	132	---	---	203	187	195	175	---	---
MONTH	142	32	---	---	325	133	295	125	209	128	204	134

11290000 TUOLUMNE RIVER AT MODESTO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	9.0	8.5	10.0	8.5	10.5	10.0
2	---	---	---	---	---	---	9.5	8.5	10.0	9.0	11.0	10.0
3	---	---	---	---	---	---	9.0	8.0	10.5	9.0	11.0	10.0
4	---	---	---	---	---	---	9.5	8.0	11.5	9.5	10.5	10.5
5	---	---	---	---	---	---	9.5	8.0	12.0	10.0	11.0	10.5
6	---	---	---	---	---	---	9.0	8.0	11.5	10.5	11.5	10.5
7	---	---	---	---	---	---	9.0	8.0	10.5	9.5	12.5	11.0
8	---	---	---	---	---	---	9.5	8.5	10.0	8.5	12.5	11.0
9	---	---	---	---	---	---	10.0	9.0	10.0	9.0	12.5	11.5
10	---	---	---	---	---	---	10.0	9.0	9.5	8.5	12.0	11.0
11	---	---	---	---	---	---	10.0	9.5	9.5	8.5	13.0	10.5
12	---	---	---	---	---	---	10.0	9.5	9.5	8.5	13.5	11.5
13	---	---	---	---	---	---	10.0	9.0	8.5	8.0	14.5	12.0
14	---	---	---	---	---	---	9.5	9.0	9.5	8.0	15.0	12.5
15	---	---	---	---	---	---	9.0	8.5	11.0	8.5	14.5	13.0
16	---	---	---	---	---	---	8.5	7.5	11.0	9.5	15.5	13.0
17	---	---	---	---	---	---	8.5	7.0	10.5	10.0	16.0	13.0
18	---	---	---	---	---	---	8.5	7.0	11.0	10.0	16.5	14.0
19	---	---	---	---	---	---	9.0	8.0	11.5	10.5	17.5	14.5
20	---	---	---	---	---	---	9.0	7.5	11.5	10.5	18.0	16.0
21	---	---	---	---	---	---	9.0	8.0	11.5	10.5	18.5	16.0
22	---	---	---	---	---	---	10.0	8.5	11.0	10.5	18.5	16.5
23	---	---	---	---	---	---	10.5	9.0	10.5	10.0	18.5	16.0
24	---	---	---	---	---	---	10.5	10.0	10.5	10.0	18.5	16.0
25	---	---	---	---	---	---	10.0	8.5	10.5	9.5	18.5	16.5
26	---	---	---	---	---	---	10.5	9.5	11.0	10.5	18.0	15.5
27	---	---	---	---	---	---	10.0	8.5	11.5	10.5	18.0	15.5
28	---	---	---	---	---	---	10.0	8.5	11.5	10.0	19.0	16.0
29	---	---	---	---	9.5	8.0	10.0	9.0	---	---	18.5	16.0
30	---	---	---	---	9.0	8.5	10.0	8.5	---	---	19.0	16.5
31	---	---	---	---	9.5	8.0	10.0	8.5	---	---	19.5	16.5
MONTH	---	---	---	---	---	---	10.5	7.0	12.0	8.0	19.5	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.0	17.0	16.5	14.5	27.0	24.0	29.0	24.0	29.5	24.5	28.0	23.5
2	18.0	16.0	16.0	14.0	26.0	22.5	28.5	24.5	28.5	24.5	27.5	24.0
3	17.0	14.5	15.5	13.0	25.0	21.0	29.5	25.5	27.5	24.0	27.5	24.0
4	16.0	14.0	16.0	13.5	25.0	20.5	27.5	25.5	28.0	23.5	27.5	23.5
5	16.5	13.5	16.5	14.0	25.0	21.0	29.0	24.5	28.0	23.5	26.5	23.5
6	15.5	14.0	16.5	14.0	26.5	21.0	28.5	25.0	28.5	24.0	25.5	22.0
7	14.5	13.5	17.0	14.5	27.0	22.0	29.5	25.0	29.0	24.5	25.0	22.0
8	14.5	12.5	17.5	15.0	27.5	23.0	29.5	25.0	30.5	25.5	25.5	22.0
9	14.5	12.5	18.5	15.5	26.5	22.5	29.5	24.5	29.0	25.5	25.0	21.5
10	15.5	12.5	19.5	16.5	27.0	22.0	29.0	24.0	27.5	24.5	24.5	21.5
11	15.0	14.0	19.5	16.5	26.5	22.0	28.5	23.0	27.5	23.5	24.5	21.5
12	16.5	13.0	18.5	16.5	27.0	22.0	28.5	22.5	27.5	24.0	24.5	21.5
13	16.5	14.0	18.5	16.0	26.0	21.5	29.0	23.5	26.5	23.0	25.0	20.5
14	16.5	13.5	18.0	15.5	28.0	22.0	28.5	24.0	27.5	23.0	25.0	21.5
15	17.5	14.0	19.0	16.0	29.0	23.5	27.5	23.0	28.0	23.5	25.5	22.0
16	18.0	15.0	19.0	16.5	30.0	24.0	26.5	22.5	28.0	23.0	25.0	21.5
17	19.0	16.0	19.5	16.5	28.5	24.0	27.5	22.5	28.0	24.0	24.5	21.0
18	19.5	16.5	19.5	16.5	29.0	24.0	28.0	23.0	28.5	23.5	25.0	21.5
19	18.5	14.0	20.5	17.0	30.5	24.5	28.0	23.5	27.5	24.0	25.0	22.0
20	14.0	11.5	22.0	18.0	30.5	25.0	26.5	23.0	27.0	23.5	24.5	22.0
21	13.0	11.0	24.5	20.0	31.0	25.5	27.0	22.5	26.5	22.5	24.5	21.5
22	15.0	11.5	25.5	21.5	31.0	26.0	28.0	23.0	26.0	22.5	24.5	21.0
23	17.0	13.5	26.0	22.0	29.0	25.5	27.5	23.5	26.5	22.5	24.0	21.0
24	18.5	15.0	26.5	22.5	27.0	23.0	29.5	24.5	27.5	23.0	23.5	20.5
25	19.5	16.0	26.0	23.0	25.0	21.5	29.5	24.5	27.0	23.0	23.5	20.5
26	19.5	17.0	26.0	22.5	27.5	22.5	29.0	24.0	27.5	23.5	23.5	20.5
27	19.5	16.5	25.5	22.0	27.0	23.5	29.5	24.0	27.5	23.5	23.0	20.5
28	18.5	16.5	24.5	21.0	27.0	22.5	29.5	24.5	28.0	24.0	22.5	19.5
29	18.0	15.5	25.0	21.5	27.0	23.0	29.0	25.0	28.0	24.0	22.0	19.5
30	17.0	15.0	26.5	22.0	28.5	23.5	27.5	24.0	27.0	23.5	23.5	20.0
31	---	---	27.5	23.5	---	---	28.5	23.5	27.5	23.0	---	---
MONTH	19.5	11.0	27.5	13.0	31.0	20.5	29.5	22.5	30.5	22.5	28.0	19.5

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA

LOCATION.—Lat 37°36'12", long 121°07'49", in SE 1/4 NE 1/4 sec.7, T.4 S., R.8 E., Stanislaus County, Hydrologic Unit 18040002, at Shiloh Bridge, at the old town of Tuolumne City, 3.8 mi northeast of Grayson, and 6.7 mi southwest of Modesto.

DRAINAGE AREA.—1,897 mi^2.

PERIOD OF RECORD.—October 1960 to September 1966, water years 1980, 1992, 1994, January 2001 to August 2001.
CHEMICAL DATA: Water years 1960–1966, 1980, 1992, 1994, January 2001 to August 2001.

REMARKS.—CALFED cooperator station. Water year 2000 data available in the files of the U.S. Geological Survey. Discharge values calculated from flows at U.S. Geological Survey Gage 11290000, Tuolumne River at Modesto, with appropriate travel times taken into account.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JAN										
04...1350	e430	7.9[1]	194	--	--	--	--	--	--	--
08...1630	e595	7.5[1]	171	--	--	--	--	--	--	--
11...1240	e602	7.6[1]	141	--	--	--	--	--	--	--
18...1340	e482	7.7[1]	213	--	--	--	--	--	--	--
26...0500	e519	7.8[1]	163	--	--	--	--	--	--	--
26...0910	e603	7.8[1]	143	--	.081	.23	.51	1.08	.012	.032
26...1500	e592	7.7[1]	155	--	--	--	--	--	--	--
26...1820	e631	7.7[1]	163	--	.098	.34	.48	1.17	.012	.067
26...2230	e646	7.7[1]	180	--	--	--	--	--	--	--
27...0200	e646	7.8[1]	169	--	--	--	--	--	--	--
27...0550	e650	7.8[1]	167	--	--	--	--	--	--	--
27...0930	e650	7.7[1]	165	--	--	--	--	--	--	--
27...1330	e688	7.8[1]	169	--	--	--	--	--	--	--
27...2100	e756	7.7[1]	186	--	--	--	--	--	--	--
28...0900	e657	7.7[1]	168	--	--	--	--	--	--	--
FEB										
01...1240	e458	7.8[1]	205	--	--	--	--	--	--	--
08...0950	e433	7.3[1]	203	--	--	--	--	--	--	--
15...0950	e1040	7.6[1]	96	--	--	--	--	--	--	--
21...1800	e1300	7.7[1]	86	--	--	--	--	--	--	--
22...1040	e1640	7.4[1]	66	--	--	--	--	--	--	--
24...2200	e3510	7.5[1]	46	--	--	--	--	--	--	--
25...0200	e3420	7.0[1]	46	--	--	--	--	--	--	--
25...0700	e3380	7.4[1]	46	--	--	--	--	--	--	--
25...1100	e3460	7.2[1]	47	--	--	--	--	--	--	--
25...1510	e3560	7.1[1]	51	--	--	--	--	--	--	--
25...1900	e3590	7.4[1]	60	--	--	--	--	--	--	--
25...2310	e3700	6.7[1]	75	--	--	--	--	--	--	--
26...0300	e3810	7.0[1]	63	--	--	--	--	--	--	--
26...1100	e3790	7.2[1]	47	--	--	--	--	--	--	--
APR										
11...1330	e522	7.8[1]	190[1]	--	--	--	--	--	--	--
18...1230	e470	7.9[1]	215[1]	--	--	--	--	--	--	--
25...1040	e776	7.8[1]	121[1]	19.0	--	--	--	--	--	--
MAY										
02...1120	e1460	7.6[1]	58[1]	15.0	--	--	--	--	--	--
09...1050	e1310	8.2[1]	72[1]	--	--	--	--	--	--	--
16...1100	e1020	7.7[1]	88[1]	--	--	--	--	--	--	--
23...1030	e381	7.5	76	--	--	--	--	--	--	--
30...1020	e330	7.7[1]	262[1]	--	--	--	--	--	--	--
JUN										
06...1000	e259	7.8[1]	270[1]	--	--	--	--	--	--	--
12...1000	e226	7.6	329	19.5	--	--	--	--	--	--
19...0920	e206	7.8[1]	325[1]	--	--	--	--	--	--	--
21...1230	e177	--	--	--	--	--	--	--	--	--
26...1000	e223	7.7	247	19.5	--	--	--	--	--	--
JUL										
03...1130	e164	7.9	218	--	--	--	--	--	--	--
10...1130	e186	7.8	345	--	--	--	--	--	--	--
17...1115	e266	7.9	196	--	--	--	--	--	--	--
24...1110	e282	7.7[1]	232[1]	--	--	--	--	--	--	--
31...1150	e237	7.8	237	--	--	--	--	--	--	--
AUG										
02...1130	e213	--	--	--	--	--	--	--	--	--
07...1210	e242	8.1[1]	211[1]	--	--	--	--	--	--	--
14...1120	e294	7.9	207	--	--	--	--	--	--	--
21...1120	e274	8.0	227	--	--	--	--	--	--	--

e Estimated.
[1] Laboratory value.

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)
JAN													
04...	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--
08...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.064	<.020	--
11...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.136	<.020	--
18...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--
26...	--	--	2.8	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.001	<.020	--
26...	.035	.095	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.042	<.020	<.02
26...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.021	<.020	--
26...	.063	.134	4.8	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.048	<.020	<.02
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--
27...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--
27...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
28...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
FEB													
01...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--
08...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--
15...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
21...	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--
22...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
24...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.006	<.020	--
25...	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.006	<.020	--
25...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.02
25...	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--
25...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.02
25...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
25...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
26...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
26...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
APR													
11...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.040	<.020	--
18...	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.038	<.020	--
25...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
MAY													
02...	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	e.007	<.020	--
09...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
16...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
23...	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.063	<.020	--
30...	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.008	<.020	--
JUN													
06...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.004	<.020	--
12...	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.002	<.020	--
19...	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.005	<.020	--
21...	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.002	<.020	--
26...	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	.004	e.003	<.020	--
JUL													
03...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	.004	e.014	<.020	--
10...	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	.003	e.031	<.020	--
17...	--	--	--	<.002	<.004	<.002	<.005	.007	<.010	.004	e.007	<.020	--
24...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.004	e.004	<.020	--
31...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
AUG													
02...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.006	<.020	--
07...	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--
14...	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--
21...	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	<.041	<.020	--

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

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
JAN													
04...	e.004	--	<.018	<.003	e.005	--	e.005	--	<.005	<.021	--	<.002	<.009
08...	<.005	--	<.018	<.003	<.006	--	.039	--	<.005	<.021	--	<.004	<.009
11...	.009	--	<.018	e.001	<.006	--	.135	--	<.005	<.021	--	e.004	<.009
18...	.008	--	<.018	<.003	e.004	--	e.005	--	<.005	<.021	--	<.002	<.009
26...	.007	--	<.018	<.003	<.006	--	.035	--	<.005	<.021	--	<.002	<.009
26...	.007	e.01	<.018	<.003	<.006	<.02	.201	.16	<.005	<.021	--	<.002	<.009
26...	.009	--	<.018	<.003	<.006	--	.108	--	<.005	<.021	--	<.002	<.009
26...	.010	<.01	<.018	<.003	<.006	<.02	.123	.09	<.005	<.021	--	<.002	<.009
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	e.005	--	<.018	<.003	<.006	--	.026	--	<.005	<.021	--	<.002	<.009
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	.005	--	<.018	<.003	e.003	--	.022	--	<.005	<.021	--	<.002	<.009
27...	.006	--	<.018	<.003	<.006	--	.022	--	<.005	<.021	--	<.002	<.009
27...	.006	--	<.018	<.003	<.006	--	.035	--	<.005	<.021	--	<.002	<.009
28...	e.005	--	<.018	e.001	e.004	--	.027	--	<.005	<.021	--	<.002	<.009
FEB													
01...	e.002	--	<.018	e.001	e.003	--	.008	--	<.005	<.021	--	<.002	<.009
08...	e.002	--	<.018	e.001	e.004	--	<.005	--	<.005	<.021	--	<.002	<.009
15...	<.005	--	<.018	<.003	<.006	--	e.005	--	<.005	<.021	--	<.002	<.009
21...	<.005	--	<.018	<.003	<.006	--	.007	--	<.005	<.021	--	<.002	<.009
22...	<.005	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	<.002	<.009
24...	<.005	--	<.018	<.003	<.006	--	.006	--	<.005	<.021	--	<.002	<.009
25...	<.005	--	<.018	<.003	<.006	--	e.005	--	<.005	<.021	--	<.002	<.009
25...	<.005	<.01	<.018	<.003	<.006	<.02	.006	e.01	<.005	<.021	<.07	<.002	<.009
25...	<.005	--	<.018	e.001	e.002	--	e.004	--	<.005	<.021	--	<.002	<.009
25...	<.005	<.01	<.018	<.003	<.006	<.02	e.004	<.02	<.005	<.021	<.07	<.002	<.009
25...	<.005	--	<.018	e.001	<.006	--	e.004	--	<.005	<.021	--	<.002	<.009
25...	<.005	--	<.018	<.003	<.006	--	.006	--	<.005	<.021	--	<.002	<.009
26...	<.005	--	<.018	<.003	<.006	--	e.005	--	<.005	<.021	--	<.002	<.009
26...	<.005	--	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009
APR													
11...	<.005	--	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009
18...	<.005	--	<.018	<.003	e.003	--	e.002	--	<.005	<.021	--	e.003	<.009
25...	<.005	--	<.018	<.003	e.003	--	e.002	--	<.005	<.021	--	<.002	<.009
MAY													
02...	e.004	--	<.018	e.002	<.006	--	e.004	--	<.005	<.021	--	e.003	<.009
09...	e.005	--	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009
16...	.015	--	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009
23...	.007	--	<.018	<.003	e.003	--	e.002	--	<.005	<.021	--	<.002	<.009
30...	e.004	--	<.018	<.003	e.002	--	e.002	--	<.005	<.021	--	<.002	<.009
JUN													
06...	e.002	--	<.018	<.003	e.003	--	e.002	--	<.005	<.021	--	<.002	<.009
12...	<.005	--	<.018	<.003	e.004	--	<.005	--	<.005	<.021	--	<.002	<.009
19...	e.003	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	.003	<.009
21...	.021	--	<.018	<.003	<.006	--	.026	--	<.005	<.021	--	e.002	<.009
26...	.006	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	.005	<.009
JUL													
03...	e.003	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	<.002	<.009
10...	.012	--	<.018	<.003	e.006	--	.010	--	<.005	<.021	--	<.002	<.009
17...	.007	--	<.018	<.003	e.003	--	e.003	--	<.005	<.021	--	.042	<.009
24...	.006	--	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	.007	<.009
31...	.006	--	<.018	<.003	<.006	--	.008	--	<.005	<.021	--	.011	<.009
AUG													
02...	.012	--	<.018	<.003	e.005	--	.009	--	<.005	<.021	--	.005	<.009
07...	.020	--	<.018	<.003	e.002	--	.007	--	<.005	<.021	--	.009	<.009
14...	.008	--	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	.003	<.009
21...	.009	--	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	.005	<.009

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

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ETHION, TOTAL (UG/L) (39398)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MALA-THION, TOTAL (UG/L) (39530)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
JAN													
04...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
08...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
11...	--	<.005	--	<.003	<.004	<.035	e.010	--	<.050	--	<.006	e.003	<.006
18...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
26...	--	<.005	--	<.003	<.004	<.035	e.016	--	<.050	--	<.006	<.013	<.006
26...	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.03	<.050	<.01	<.006	<.013	<.006
26...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
26...	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.03	<.050	<.01	<.006	<.013	<.006
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.005	<.006
27...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.009	<.006
27...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.011	<.006
28...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.006	<.006
FEB													
01...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006
08...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
15...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006
21...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
22...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
24...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
25...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
25...	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.06	<.050	<.01	<.006	<.013	<.006
25...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
25...	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.06	<.050	<.01	<.006	<.013	<.006
25...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006
25...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006
26...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.002	<.006
26...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006
APR													
11...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
18...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
25...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006
MAY													
02...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006
09...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.002	<.006
16...	--	<.005	--	<.003	<.004	<.035	e.002	--	<.050	--	<.006	e.002	<.006
23...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006
30...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	e.005	e.003	<.006
JUN													
06...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006
12...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006
19...	--	<.005	--	<.003	<.004	<.035	e.004	--	<.050	--	<.006	.042	<.006
21...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.018	<.006
26...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.040	<.006
JUL													
03...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.018	<.006
10...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.031	<.006
17...	--	<.005	--	<.003	<.004	<.035	<.027	--	e.018	--	<.006	.051	<.006
24...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.021	<.006
31...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.006	<.006
AUG													
02...	--	<.005	--	<.003	<.004	<.035	e.005	--	<.050	--	<.006	e.009	<.006
07...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.008	<.006
14...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006
21...	--	<.005	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.010	<.006

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

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PARATHION, TOTAL (UG/L) (39540)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPAPROPACHLOR, WATER, DISS, REC (UG/L) (04024)
JAN													
04...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
08...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
11...	<.002	.008	<.003	<.007	--	<.002	.076	<.006	--	<.011	e.004	<.004	<.010
18...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	<.007	<.003	<.007	--	<.002	.019	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	<.007	<.003	<.007	<.01	<.010	.061	<.006	<.02	<.011	<.015	<.004	<.010
26...	<.002	<.007	<.003	<.007	--	<.002	.079	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	<.007	<.003	<.007	<.01	<.010	.040	<.006	<.02	<.011	<.015	<.004	<.010
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.002	.019	<.003	<.007	--	<.002	.019	<.006	--	<.011	<.015	<.004	<.010
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.002	.019	<.003	<.007	--	<.002	.023	<.006	--	<.011	<.015	<.004	<.010
27...	<.002	.019	<.003	<.007	--	<.002	.018	<.006	--	<.011	<.015	<.004	<.010
27...	<.002	.021	<.003	<.007	--	<.002	.014	<.006	--	<.011	<.015	<.004	<.010
28...	<.002	.014	<.003	<.007	--	<.002	.013	<.006	--	<.011	<.015	<.004	<.010
FEB													
01...	<.002	<.007	<.003	<.007	--	<.002	e.005	<.006	--	<.011	<.015	<.004	<.010
08...	<.002	<.007	<.003	<.007	--	<.002	e.005	<.006	--	<.011	<.015	<.004	<.010
15...	<.002	e.006	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
21...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
22...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
24...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
25...	<.002	<.007	<.003	<.007	--	<.002	e.005	<.006	--	<.011	<.015	<.004	<.010
25...	<.002	<.007	<.003	<.007	<.01	<.002	<.010	<.006	<.02	<.011	<.015	<.004	<.010
25...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
25...	<.002	<.007	<.003	<.007	<.01	<.002	<.010	<.006	<.02	<.011	<.015	<.004	<.010
25...	<.002	.009	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
25...	<.002	.009	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	e.006	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	e.004	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
APR													
11...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
18...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
25...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
MAY													
02...	e.003	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
09...	<.002	<.007	<.003	<.007	--	<.006	<.010	<.006	--	<.011	<.015	<.004	<.010
16...	<.002	<.007	<.003	<.007	--	<.004	<.010	<.006	--	<.011	<.015	<.004	<.010
23...	.003	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
30...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
JUN													
06...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
12...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
19...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	e.001	<.004	<.010
21...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
26...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
JUL													
03...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	e.002	<.004	<.010
10...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
17...	<.002	<.007	<.003	<.007	--	<.002	e.005	<.006	--	<.011	<.015	<.004	<.010
24...	<.002	<.007	<.003	<.007	--	<.002	e.003	<.006	--	<.011	<.015	<.004	<.010
31...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
AUG													
02...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
07...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
14...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010
21...	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010

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

11290200 TUOLUMNE RIVER AT SHILOH ROAD BRIDGE, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN									
04...	<.011	<.023	e.003	<.016	<.034	<.017	<.005	<.002	<.009
08...	<.011	<.023	.022	<.016	--	<.017	<.005	<.002	<.009
11...	<.011	<.023	.049	<.016	<.034	<.017	<.005	<.002	e.001
18...	<.011	<.023	.055	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	.023	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	.020	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	.042	<.016	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--	--	--	--	--
27...	<.011	<.023	.039	<.016	<.034	<.017	<.005	<.002	<.009
27...	--	--	--	--	--	--	--	--	--
27...	<.011	<.023	.034	<.016	<.034	<.017	<.005	<.002	<.009
27...	<.011	<.023	.052	<.016	<.034	<.017	<.005	<.002	<.009
27...	<.011	<.023	.302	<.016	<.034	<.017	<.005	<.002	<.009
28...	<.011	<.023	.142	<.016	<.034	<.017	<.005	<.002	<.009
FEB									
01...	<.011	<.023	.043	<.016	<.034	<.017	<.005	<.002	<.009
08...	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002	<.009
15...	<.011	<.023	.158	<.016	<.034	<.017	<.005	<.002	<.009
21...	<.011	<.023	.051	<.016	<.034	<.017	<.005	<.002	<.009
22...	<.011	<.023	.064	<.016	<.034	<.017	<.005	<.002	<.009
24...	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	.012	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	.017	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	.045	<.016	<.034	<.017	<.005	<.002	e.003
25...	<.011	<.023	.128	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	.221	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	.372	<.016	<.034	<.017	<.005	<.002	e.002
26...	<.011	<.023	.219	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	.067	<.016	<.034	<.017	<.005	<.002	<.009
APR									
11...	<.011	<.023	.021	<.016	<.034	<.017	<.005	<.002	<.009
18...	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002	<.009
MAY									
02...	<.011	<.023	e.006	<.016	<.034	<.017	<.005	<.002	e.001
09...	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002	<.009
16...	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002	<.009
23...	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002	<.009
30...	<.011	<.023	.026	<.016	<.034	<.017	<.005	<.002	<.009
JUN									
06...	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002	<.009
12...	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002	<.009
19...	e.002	<.023	.011	<.016	<.034	<.017	<.005	<.002	<.009
21...	<.011	<.023	e.008	<.016	<.034	<.017	<.005	<.002	<.009
26...	<.011	<.023	.014	<.016	<.034	<.017	<.005	<.002	<.009
JUL									
03...	<.011	<.023	.015	<.016	<.034	<.017	<.005	<.002	<.009
10...	e.003	<.023	.064	<.016	<.034	<.017	<.005	<.002	<.009
17...	<.011	e.018	e.010	<.016	<.034	<.017	<.005	<.002	<.009
24...	<.011	e.010	.039	<.016	<.034	<.017	<.005	<.002	<.009
31...	<.011	<.023	.012	<.016	<.034	<.017	<.005	<.002	<.009
AUG									
02...	<.011	.470	.014	<.016	<.034	<.017	<.005	<.002	<.009
07...	<.011	.086	e.005	<.016	<.034	<.017	<.005	<.002	e.009
14...	<.011	.032	<.011	<.016	<.034	<.017	<.005	<.002	<.009
21...	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002	<.009

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

11290500 SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE, NEAR MODESTO, CA

LOCATION.—Lat 37°48'10", long 121°19'00", Stanislaus County, at Maze Road Bridge, 0.2 mi downstream from gaging station, at Hetch Hetchy Crossing, 2.7 mi upstream from Stanislaus River, and 12 mi west of Modesto.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—Water years 1951 to 1966, 1985 to 1988, 1992 to 1994, April 2001 to August 2001.
CHEMICAL DATA: October 1953 to June 1966, April 2001 to August 2001.

REMARKS.—Discharge values calculated from U.S. Geological Survey gaging station 11303500 and Department of Water Resources gaging station 11303000 with appropriate travel times taken into account.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR													
11	1420	e1830	7.9[1]	874[1]	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.185
18	1330	e1500	8.2[1]	886[1]	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.011
25	1140	e2850	8.1[1]	445[1]	20.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041
MAY													
02	1210	e2680	7.9[1]	505[1]	17.0	<.002	<.004	<.002	<.005	e.001	<.010	<.002	e.015
09	1120	e2610	8.0[1]	455[1]	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.023
16	1150	e3010	7.8[1]	419[1]	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.007
23	1120	e1470	8.0	872	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.010
30	1050	e1280	8.1[1]	864[1]	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.021
JUN													
06	1040	e1120	8.4[1]	990[1]	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.004
12	1030	e1010	8.3	1090	22.5	<.002	<.004	<.002	<.005	.015	<.010	<.002	<.041
19	1000	e824	8.3[1]	1050[1]	--	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041
26	1040	e947	8.4	885	21.5	<.002	<.004	<.002	<.005	.009	<.010	.005	e.026
JUL													
03	1210	e856	8.9	794	--	<.002	<.004	<.002	<.005	.008	<.010	<.002	e.002
10	1250	e871	8.8	994	--	<.002	<.004	<.002	<.005	.007	<.010	.004	e.011
17	1200	e974	8.4	829	--	<.002	<.004	<.002	<.005	.010	<.010	.002	<.041
24	1150	e962	8.2[1]	973[1]	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.005
31	1220	e945	8.3	906	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	<.041
AUG													
07	1300	e921	8.7[1]	798[1]	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041
14	1200	e930	8.6	809	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041
21	1150	e1030	8.2	857	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002	e.006

DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD GF, REC (UG/L) (82677)	EPTC WATER FLTRD GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
APR														
11	e.041	<.005	<.018	<.003	<.006	e.004	<.005	<.021	.005	<.009	<.005	e.004	<.004	
18	e.025	<.005	<.018	<.003	e.003	.023	<.005	<.021	.012	<.009	<.005	e.003	e.001	
25	e.017	<.005	<.018	<.003	<.006	.007	<.005	<.021	.057	<.009	<.005	<.003	<.004	
MAY														
02	e.007	e.004	<.018	e.002	<.006	.012	<.005	<.021	.009	e.004	<.005	<.003	e.003	
09	<.020	.006	<.018	<.003	<.006	.022	<.005	<.021	.022	<.009	<.005	<.003	e.001	
16	<.020	.007	<.018	<.003	<.006	.011	<.005	<.021	.009	<.009	<.005	<.003	<.004	
23	<.020	.015	<.018	<.003	e.002	.029	<.005	<.021	.008	<.009	<.005	<.003	<.004	
30	<.020	.006	e.004	<.003	e.003	.009	<.005	<.021	.009	<.009	<.005	<.003	e.002	
JUN														
06	<.020	e.004	e.004	<.003	e.003	e.002	<.005	<.021	.005	<.009	<.005	<.003	<.004	
12	<.020	<.005	e.006	<.003	e.008	.008	<.005	<.021	.004	<.009	<.005	<.003	<.004	
19	<.020	<.005	<.018	<.003	e.004	.007	<.005	<.021	.016	<.009	<.005	<.003	<.004	
26	<.020	.011	<.018	<.003	<.006	e.004	<.005	<.021	.014	<.009	<.005	<.003	<.004	
JUL														
03	<.020	e.004	e.009	<.003	<.006	.009	<.005	<.021	.014	e.006	<.005	<.003	<.004	
10	<.020	.007	.038	<.003	e.005	e.005	<.005	<.021	.013	<.009	<.005	<.003	e.002	
17	<.020	.009	<.018	<.003	e.001	.006	<.005	<.021	.012	<.009	<.005	<.003	<.004	
24	<.020	e.005	.026	<.003	<.006	.007	<.005	<.021	.048	<.009	<.005	<.003	e.001	
31	<.020	e.005	.031	<.003	<.006	.009	<.005	<.021	.023	<.009	<.005	<.003	e.003	
AUG														
07	<.020	<.005	.044	<.003	<.006	.008	<.005	<.021	.005	<.009	<.005	<.003	<.004	
14	<.020	.008	.032	<.003	<.006	.008	<.005	<.021	.011	<.009	<.005	<.003	<.004	
21	e.009	.010	.021	<.003	<.006	.006	<.005	<.021	.008	<.009	<.005	<.003	e.002	

e Estimated.
[1] Laboratory value.
< Actual value is known to be less than value shown.

11290500 SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE, NEAR MODESTO, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
APR													
11...	<.035	e.006	<.050	<.006	.015	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
18...	<.035	<.027	<.050	<.006	e.012	e.006	<.002	.008	<.003	<.007	.012	e.010	<.006
25...	<.035	<.027	<.050	<.006	.025	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
MAY													
02...	<.035	<.027	<.050	<.006	.019	e.005	e.002	e.006	<.003	<.007	.005	e.010	<.006
09...	<.035	<.027	<.050	<.006	.041	<.006	<.002	<.007	<.003	<.007	.020	<.010	<.006
16...	<.035	<.027	<.050	<.006	.030	<.006	<.003	e.005	<.003	<.007	<.009	<.010	<.006
23...	<.035	e.014	<.050	<.006	.037	<.006	.098	<.007	<.003	<.007	<.002	<.010	<.006
30...	<.035	<.027	<.050	<.006	.064	<.006	.023	<.007	<.003	<.007	<.002	<.010	<.006
JUN													
06...	<.035	<.027	<.050	<.006	.087	<.006	.011	<.007	<.003	<.007	<.002	<.010	<.006
12...	<.035	<.027	<.050	<.006	.481	<.006	.280	<.007	<.003	<.007	<.002	<.010	<.006
19...	<.035	e.008	<.050	<.006	.114	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
26...	<.035	<.027	<.050	.008	.119	<.006	.003	<.007	<.003	<.007	<.002	<.010	<.006
JUL													
03...	<.035	<.027	<.050	<.006	.111	<.006	.002	<.007	<.003	<.007	<.002	<.010	<.006
10...	<.035	<.027	<.050	<.006	.106	<.006	.004	<.007	<.003	<.007	<.002	.018	<.006
17...	<.035	<.027	e.042	<.006	.102	<.006	.002	<.007	<.003	<.007	<.002	e.008	<.006
24...	<.035	e.003	<.050	<.006	.082	<.006	<.004	<.007	<.003	<.007	<.002	e.006	<.006
31...	<.035	<.027	<.050	<.006	.068	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
AUG													
07...	<.035	<.027	<.050	<.006	.060	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
14...	<.035	e.007	<.050	<.006	.059	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
21...	<.035	e.002	<.050	<.006	.051	<.006	<.002	<.007	e.001	<.007	<.002	<.010	<.006

DATE	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (83664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82691)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR													
11...	<.011	<.015	<.004	<.010	<.011	<.023	.062	<.016	<.034	<.017	<.005	<.002	.017
18...	<.011	<.015	<.004	<.010	<.011	<.023	.016	<.016	<.034	<.017	<.005	<.002	e.006
25...	<.011	<.015	<.004	<.010	<.011	<.023	.021	<.016	<.034	<.017	<.005	<.002	.011
MAY													
02...	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002	.010
09...	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002	.012
16...	<.011	<.015	<.004	<.010	<.011	<.023	.012	<.016	<.034	<.017	<.005	<.002	.015
23...	<.011	<.015	<.004	<.010	<.011	<.023	.021	<.016	<.034	<.017	e.002	<.002	e.007
30...	<.011	<.015	<.004	<.010	<.011	<.023	.019	<.016	<.034	<.017	.006	<.002	.012
JUN													
06...	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002	e.007
12...	<.011	<.015	<.004	<.010	<.011	<.023	.014	<.016	<.034	<.017	.697	<.002	e.006
19...	<.011	<.015	<.004	<.010	<.011	<.023	.013	<.016	<.034	<.017	<.005	<.002	e.009
26...	<.011	<.015	<.004	<.010	<.011	<.023	.017	<.016	<.034	<.017	<.005	<.002	.010
JUL													
03...	<.011	<.015	<.004	<.010	<.011	<.023	.013	<.016	<.034	<.017	<.005	<.002	e.007
10...	<.011	<.015	<.004	<.010	<.011	<.023	.029	<.016	<.034	<.017	<.005	<.002	.011
17...	<.011	<.015	<.004	<.010	<.011	e.011	e.008	<.016	<.034	<.017	<.005	<.002	.010
24...	<.011	<.015	<.004	<.010	<.011	e.012	e.007	<.016	<.034	<.017	<.005	<.002	e.007
31...	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002	.009
AUG													
07...	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002	e.007
14...	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002	e.006
21...	<.011	e.001	<.004	<.010	<.011	<.023	.016	<.016	<.034	<.017	<.005	<.002	e.008

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

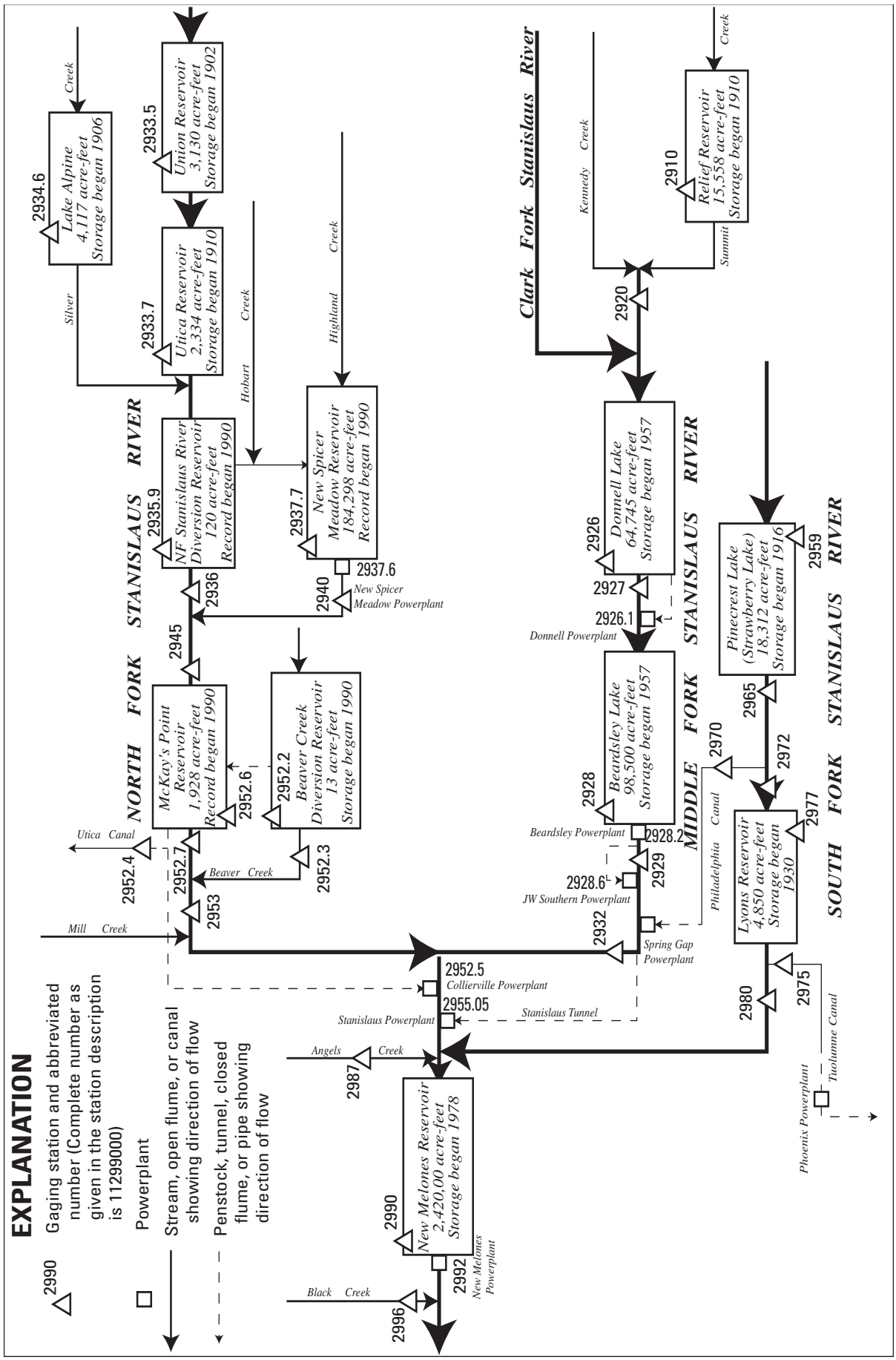

Figure 30. Diversions and storage in Stanislaus River Basin.

11291000 RELIEF RESERVOIR NEAR BAKER STATION, CA

LOCATION.—Lat 38°16'52", long 119°43'57", in NW 1/4 SW 1/4 sec.13, T.5 N., R.20 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on dam near spillway, 2.2 mi south of Kennedy Meadows, 3.6 mi southeast of Baker Station, and 7.0 mi southeast of Dardanelle.

DRAINAGE AREA.—24.4 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Unpublished records for water years 1981–86 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder. Prior to Dec. 9, 1991, nonrecording gage observed approximately weekly. Datum of gage is 7,200 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete-faced, rockfill dam completed in 1910. Usable capacity, 12,348 acre-ft, between gage height 1.37 ft, invert of outlet, and 123 ft, spillway crest. Flashboards are added in the summer months, increasing gage height to 138 ft and usable capacity to 15,550 acre-ft. Figures given represent total contents. Released water is used for hydroelectric power and irrigation downstream. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by the Pacific Gas & Electric 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, 15,908 acre-ft, June 29, 2000, gage height, 139.55 ft; minimum observed, 33 acre-ft, Jan. 12, 1987, gage height, 6.1 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 15,700 acre-ft, May 16, gage height, 138.45 ft; minimum, less than 947 acre-ft, many days, gage height, unknown.

Capacity table (gage height, in feet, and contents, in acre-ft)
(Based on survey by Pacific Gas & Electric Co. in 1942)

10	53	40	842	70	3763	100	8105
20	105	50	1605	80	5105	120	11895
30	308	60	2632	90	6579	140	16012

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5180	1600	956	<947	<947	<947	e2880	7650	15500	14000	10300	7170
2	5000	1600	950	<947	<947	<947	3060	8070	15400	13900	10200	7080
3	4810	1600	950	<947	<947	<947	3210	8360	15400	13800	10100	6990
4	4620	1590	<947	<947	<947	<947	3300	8640	15400	13700	9970	6900
5	4440	1580	<947	<947	<947	<947	3380	9070	15400	13500	9860	6820
6	4260	1560	<947	<947	<947	<947	3460	9600	15400	13400	9760	6730
7	4090	1560	<947	<947	<947	<947	3520	10300	15400	13300	9660	6640
8	3920	1560	<947	<947	<947	<947	3580	11100	15400	13200	9560	6560
9	3760	1550	<947	<947	<947	<947	3630	11800	15400	13100	9460	6460
10	3600	1540	<947	<947	<947	<947	3640	12400	15400	13000	9360	6390
11	3440	1540	<947	<947	<947	<947	3660	13200	15400	12900	9250	6350
12	3290	1530	<947	<947	<947	<947	3670	13900	15400	12800	9150	6310
13	3140	1520	<947	<947	<947	<947	3680	14600	15300	12700	9050	6190
14	3000	1520	<947	<947	<947	<947	3690	15100	15300	12600	8950	5980
15	2860	1480	<947	<947	<947	<947	3710	15600	15300	12400	8840	5770
16	2720	1360	<947	<947	<947	<947	3720	15700	15200	12300	8730	5560
17	2570	1360	<947	<947	<947	<947	3760	15600	15200	12200	8630	5410
18	2460	1360	<947	<947	<947	<947	3850	15600	15100	12000	8520	5320
19	2380	1320	<947	<947	<947	<947	3940	15600	15100	11900	8410	5230
20	2300	1290	<947	<947	<947	<947	4050	15600	15100	11800	8300	5130
21	2220	1180	<947	<947	<947	<947	4200	15600	15000	11700	8190	5040
22	2150	1180	<947	<947	<947	<947	4340	15600	15000	11600	8090	4950
23	2080	1180	<947	<947	<947	e1000	4540	15600	14900	11500	8000	4860
24	2010	1150	<947	<947	<947	e1200	4750	15600	14800	11400	7910	4750
25	1930	1110	<947	<947	<947	e1300	5060	15600	14800	11300	7810	4690
26	1870	1080	<947	<947	<947	e1400	5460	15500	14700	11200	7720	4610
27	1810	1060	<947	<947	<947	e1610	5910	15500	14600	11000	7630	4520
28	1750	1030	<947	<947	<947	e1770	6300	15500	14400	10900	7530	4430
29	1700	997	<947	<947	---	e1850	6660	15500	14300	10800	7440	4350
30	1650	970	<947	<947	---	e2080	7120	15500	14200	10600	7340	4260
31	1620	---	<947	<947	---	e2460	---	15500	---	10500	7250	---
MAX	5180	1600	956	947	947	2460	7120	15700	15500	14000	10300	7170
MIN	1620	970	947	947	947	947	2880	7650	14200	10500	7250	4260
a	50.19	42.00					93.48	137.81	131.16	112.43	94.61	73.96
b	-3755	-650					+4660	+8380	-1300	-3700	-3250	-2990

CAL YR 2000 MAX 15908 MIN 947
WTR YR 2001 MAX 15700 MIN 947 b -1115

< Actual value is known to be less than the value shown.
e Estimated.
a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292000 MIDDLE FORK STANISLAUS RIVER AT KENNEDY MEADOWS, NEAR DARDANELLE, CA

LOCATION.—Lat 38°17'51", long 119°44'25", in SW 1/4 NE 1/4 sec.11, T.5 N., R.20 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank at upper end of Kennedy Meadows, 1.3 mi upstream from Deadman Creek, 1.6 mi downstream from Relief Reservoir, and 5.8 mi southwest of Dardanelle.

DRAINAGE AREA.—47.5 mi^2.

PERIOD OF RECORD.—October 1938 to current year. Records for water year 1946 incomplete, yearly estimate published in WSP 1315-A. Prior to October 1960, published as "at Kennedy Meadows."

REVISED RECORDS.—WSP 1315-A: 1939(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 6,326.3 ft above sea level.

REMARKS.—Low and medium flow regulated by Relief Reservoir (station 11291000) 1.6 mi upstream. No diversion upstream from station. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 3,310 ft^3/s, May 16, 1996, gage height, 8.37 ft; minimum daily, 7.1 ft^3/s, Jan. 14, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	39	37	21	20	e20	107	177	358	125	76	55
2	113	29	37	20	19	20	92	165	317	124	69	55
3	112	29	37	21	20	e20	74	123	207	124	68	57
4	112	27	36	20	21	20	62	110	173	123	68	58
5	110	28	29	20	21	20	55	121	164	122	67	56
6	109	28	21	21	21	20	51	144	169	121	67	55
7	109	27	21	20	21	20	50	170	182	121	65	55
8	108	27	21	20	e21	20	46	203	176	118	63	54
9	108	27	21	20	20	21	44	206	168	123	63	54
10	110	28	21	20	24	21	42	197	155	115	62	41
11	108	27	21	22	30	21	40	209	145	101	62	26
12	107	26	21	21	e30	21	40	221	134	99	62	26
13	106	26	21	21	e35	21	39	212	142	96	61	64
14	104	27	21	20	e40	22	40	208	131	94	61	115
15	104	26	21	e23	e30	22	43	275	128	93	60	114
16	102	33	21	e20	e25	22	49	625	130	92	60	114
17	101	40	21	e20	e22	27	55	592	130	91	60	87
18	73	40	21	e20	e20	34	60	519	126	90	59	61
19	59	40	21	e20	20	40	64	437	123	89	59	61
20	58	39	20	20	20	49	59	461	122	88	59	61
21	58	39	20	20	20	54	57	498	124	87	58	60
22	58	39	20	20	20	57	57	526	126	87	58	60
23	56	38	21	20	21	60	67	552	125	86	58	60
24	56	38	20	21	20	67	88	536	120	85	58	59
25	57	38	21	e21	20	74	118	476	112	85	58	63
26	57	38	20	21	19	71	145	424	109	84	57	61
27	57	38	21	e20	19	72	154	354	119	84	57	60
28	58	37	21	e20	20	86	149	302	129	83	57	59
29	61	37	21	20	---	97	136	290	128	82	56	59
30	58	38	21	e20	---	96	153	313	126	82	56	59
31	57	---	21	e20	---	103	---	338	---	82	56	---
TOTAL	2660	993	717	633	639	1318	2236	9984	4598	3076	1900	1869
MEAN	85.8	33.1	23.1	20.4	22.8	42.5	74.5	322	153	99.2	61.3	62.3
MAX	114	40	37	23	40	103	154	625	358	125	76	115
MIN	56	26	20	20	19	20	39	110	109	82	56	26
AC-FT	5280	1970	1420	1260	1270	2610	4440	19800	9120	6100	3770	3710

e Estimated.

11292000 MIDDLE FORK STANISLAUS RIVER AT KENNEDY MEADOWS, NEAR DARDANELLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	81.2	46.0	39.3	33.4	30.4	45.1	95.3	316	439	243	122	126
MAX	226	372	266	272	92.5	155	247	626	949	767	328	272
(WY)	1983	1951	1951	1997	1997	1980	1943	1969	1983	1995	1983	1983
MIN	10.4	9.85	10.0	9.23	8.81	12.6	23.7	28.0	68.1	43.1	24.9	12.2
(WY)	1967	1978	1960	1960	1991	1948	1975	1977	1977	1939	1961	1981

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1939 - 2001	
ANNUAL TOTAL	49321		30623			
ANNUAL MEAN	135		83.9		135	
HIGHEST ANNUAL MEAN					256	1983
LOWEST ANNUAL MEAN					36.4	1977
HIGHEST DAILY MEAN	1020	May 25	625	May 16	2350	May 16 1996
LOWEST DAILY MEAN	18	Jan 11	19	Feb 2	7.1	Jan 14 1977
ANNUAL SEVEN-DAY MINIMUM	18	Jan 8	20	Feb 24	7.5	Feb 21 1991
MAXIMUM PEAK FLOW			728	May 16	3310	May 16 1996
MAXIMUM PEAK STAGE			5.06	May 16	8.37	May 16 1996
ANNUAL RUNOFF (AC-FT)	97830		60740		97760	
10 PERCENT EXCEEDS	359		159		359	
50 PERCENT EXCEEDS	96		58		61	
90 PERCENT EXCEEDS	21		20		15	

11292600 DONNELL LAKE NEAR DARDANELLE, CA

LOCATION.—Lat 38°19'46", long 119°57'37", unsurveyed, T.6 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on left bank in hoist house of Donnell Dam on Middle Fork Stanislaus River, 1.2 mi downstream from Niagara Creek, and 6.9 mi west of Dardanelle.

DRAINAGE AREA.—230 mi^2.

PERIOD OF RECORD.—October 1957 to current year. Prior to October 1960, published as Donnells Reservoir near Dardanelle.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 4.84 ft above sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

REMARKS.—Lake is formed by concrete arch-type dam completed in 1957. Usable capacity, 64,745 acre-ft, between gage heights 4,720.0 ft, minimum operating head, and 4,917.0 ft, top of spillway gates. Lake is for power and conservation storage. Water passes through a 7.2-mi tunnel to a powerplant and down the Middle Fork Stanislaus River to Beardsley Lake (station 11292800). Records, including extremes, represent total contents at 2400 hours, of which 2,150 acre-ft is below minimum operating head. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 64,900 acre-ft, May 8, 1963, gage height, 4,917.3 ft; minimum since reservoir first filled, 2,220 acre-ft, Apr. 15, 1983, gage height, 4,720.6 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 63,200 acre-ft, June 2, gage height, 4913.23 ft; minimum, 4,940 acre-ft, Jan. 17, gage height, 4,735.97 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated Oct. 1, 1956)

4,720	2,150	4,740	5,830	4,780	16,200	4,850	38,700
4,725	2,850	4,750	8,220	4,790	19,100	4,880	49,800
4,730	3,730	4,760	10,800	4,800	22,100	4,917.3	64,900
4,735	4,730	4,770	13,400	4,820	28,400		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16000	13200	5760	4970	5940	5090	15100	21300	62900	59200	50200	37400
2	16200	12900	5920	5090	5900	5270	15600	22800	63200	58600	49600	36800
3	16100	12500	6080	5200	5990	5400	15700	23700	63000	57900	49100	36200
4	16000	12600	6230	5310	6160	5580	15400	24300	62600	57200	49300	35700
5	15800	12800	6380	5420	6340	5680	15100	25300	62500	56500	49400	35100
6	15700	12900	6480	5520	6520	5730	14700	26500	62400	55900	48900	34500
7	15900	12900	6560	5630	6560	5800	14300	28100	62400	56100	48400	33800
8	16200	12800	6650	5750	6510	5950	13800	30100	62200	55800	47900	33400
9	16000	12700	6620	5860	6220	5920	13500	32200	62100	55500	47400	33100
10	16000	12600	6460	5980	6300	6010	13200	34200	62400	55300	46900	32400
11	15800	12500	6010	6060	6460	6080	12700	36300	62900	54900	47000	31700
12	15700	12300	5640	6150	6460	6160	12400	38200	62800	54600	47100	30900
13	15600	11800	5180	6270	6010	5990	12100	39800	62800	54200	46600	30500
14	15800	11300	4990	6380	5970	5920	11400	41100	62400	54400	46100	30200
15	16000	10800	5100	6490	5650	5850	10700	42300	62200	54600	45500	30400
16	16000	10400	5240	6490	5630	5800	10300	44600	62000	54200	45000	30600
17	15800	9880	5370	4940	5740	6090	10300	46800	61700	53800	44400	30300
18	15600	9410	5480	5020	5890	6580	10400	48600	61200	53400	44600	29900
19	15500	8930	5610	5170	6050	6540	10700	50100	61200	52900	44700	29500
20	15300	8450	5580	5290	5450	6530	10700	51600	61000	52500	44100	29100
21	15400	7950	5510	5410	5410	7000	10900	53100	60600	52700	43600	28700
22	15500	7090	5500	5530	5340	7660	10900	54800	60400	52900	43000	28800
23	15300	6430	5580	5490	5180	8240	11200	56500	60100	52500	42400	28900
24	15100	5950	5700	5320	5340	9010	11700	58100	59700	52700	41900	28500
25	14600	5560	5710	5440	5490	10100	12700	59400	59700	52300	41300	28100
26	14200	4970	5650	5570	5520	10800	14400	60400	59000	51800	40800	27700
27	13700	5100	5520	5650	5490	11300	15800	61100	59000	51300	40200	27400
28	13800	5250	5310	5760	5000	12000	17000	61500	58800	51500	39700	27000
29	14100	5430	5070	5770	---	12600	18000	61800	58500	51600	39100	27000
30	13800	5600	5120	5710	---	13100	19400	62100	58800	51200	38500	27100
31	13600	---	4950	5820	---	14200	---	62500	---	50700	37900	---
MAX	16200	13200	6650	6490	6560	14200	19400	62500	63200	59200	50200	37400
MIN	13600	4970	4950	4940	5000	5090	10300	21300	58500	50700	37900	27000
a	4770.54	4738.97	4736.00	4739.97	4736.24	4772.72	4791.21	4911.62	4902.71	4882.25	4847.84	4816.02
b	-2200	-8000	-650	+870	-820	+9200	+5200	+43100	-3700	-8100	-12800	-10800

CAL YR 2000 b -5550
WTR YR 2001 b +11300

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CA

LOCATION.—Lat 38°14'50", long 120°02'01", in NW 1/4 NE 1/4 sec.31, T.5 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, on left bank 200 ft upstream from Donnell Powerplant, 800 ft downstream from Hells Half Acre bridge, 1.1 mi upstream from Cow Creek, and 4.7 mi northwest of Pinecrest.

DRAINAGE AREA.—287 mi^2.

PERIOD OF RECORD.—February 1956 to current year. Prior to October 1965, published as Middle Fork Stanislaus River at Hells Half Acre bridge.

WATER TEMPERATURE: Water years 1966–71 and 1973–78.

GAGE.—Water-stage recorder. Datum of gage is 3,418.31 ft above sea level (river-profile survey). Prior to Aug. 9, 1961, at site 1,600 ft upstream at different datum.

REMARKS.—Flow regulated by Relief Reservoir (station 11291000), Donnell Lake (station 11292600) since April 1957 and diversion around station through Donnell Powerplant (station 11292610). See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, 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, 24,600 ft^3/s, revised, Jan. 2, 1997, gage height, 18.02 ft, from rating curve extended above 5,200 ft^3/s on basis of slope-area measurement at gage height 12.20 ft; minimum daily, 3.3 ft^3/s, Nov. 9, 10, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum stage known since at least 1905, 23 ft, Dec. 23, 1955, from floodmarks, at present site, discharge, 26,600 ft^3/s by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	41	21	20	23	31	246	378	65	41	37	37
2	40	40	21	20	24	33	215	340	63	41	36	37
3	40	39	21	20	25	32	161	281	61	40	36	37
4	40	25	21	20	28	38	135	263	59	39	36	37
5	39	24	21	20	32	53	121	279	58	39	36	21
6	39	24	21	20	32	53	114	293	57	39	36	18
7	39	24	21	20	30	56	117	309	55	39	36	18
8	39	24	21	22	28	61	102	333	51	39	35	34
9	40	24	21	22	28	65	97	315	50	38	35	34
10	44	25	22	23	29	59	93	290	49	38	35	34
11	41	24	22	28	29	54	98	282	47	38	35	34
12	41	24	24	23	28	52	96	267	47	37	35	34
13	41	24	22	23	27	54	98	241	46	37	35	34
14	40	24	26	23	27	62	104	218	44	36	35	33
15	40	23	27	22	27	66	111	196	43	36	35	33
16	40	23	24	22	27	64	131	183	42	36	35	33
17	40	23	23	22	27	69	157	169	41	37	34	33
18	40	23	22	22	29	83	174	152	39	39	34	33
19	39	22	22	22	33	103	237	140	38	38	34	33
20	39	22	22	22	36	123	192	129	40	37	34	33
21	39	22	22	22	36	136	183	120	39	37	34	33
22	39	22	22	22	37	147	190	112	38	36	34	33
23	40	21	22	23	33	153	225	105	38	36	34	33
24	40	21	21	27	34	157	302	97	43	36	34	32
25	40	21	21	25	34	251	378	89	43	36	34	35
26	41	20	21	25	34	209	400	84	43	36	34	33
27	41	20	21	24	33	184	391	80	43	72	33	33
28	40	20	21	24	32	209	361	77	44	41	33	33
29	51	23	21	24	---	232	325	74	43	38	37	32
30	44	23	21	24	---	211	346	71	42	38	37	32
31	41	---	21	23	---	229	---	67	---	38	37	---
TOTAL	1256	735	679	699	842	3329	5900	6034	1411	1208	1085	969
MEAN	40.5	24.5	21.9	22.5	30.1	107	197	195	47.0	39.0	35.0	32.3
MAX	51	41	27	28	37	251	400	378	65	72	37	37
MIN	39	20	21	20	23	31	93	67	38	36	33	18
AC-FT	2490	1460	1350	1390	1670	6600	11700	11970	2800	2400	2150	1920
a	7950	11300	4100	2310	4340	9480	27680	38860	23780	15640	16150	13830

a Diversion, in acre-feet, through Donnell Powerplant (station 11262610), provided by Oakdale and South San Joaquin Irrigation District.

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	37.8	45.2	84.0	159	163	211	294	851	996	281	46.2	35.2
MAX	184	305	814	1856	986	738	808	3144	4512	2016	320	72.8
(WY)	1983	1984	1965	1997	1986	1986	1986	1969	1983	1995	1983	1983
MIN	12.6	7.09	8.69	13.9	12.4	13.0	19.9	29.9	16.7	12.5	11.5	12.1
(WY)	1978	1958	1959	1961	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL TOTAL	83553		24147			
ANNUAL MEAN	228		66.2		267	
HIGHEST ANNUAL MEAN					868	1983
LOWEST ANNUAL MEAN					18.4	1977
HIGHEST DAILY MEAN	2660	May 26	400	Apr 26	17300	Jan 2 1997
LOWEST DAILY MEAN	20	Nov 26	18	Sep 6	3.3	Nov 9 1957
ANNUAL SEVEN-DAY MINIMUM	21	Nov 22	20	Jan 1	3.7	Nov 7 1957
MAXIMUM PEAK FLOW			479	Apr 25	24600	Jan 2 1997
MAXIMUM PEAK STAGE			5.50	Apr 25	18.02	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	165700		47900		193400	
TOTAL DIVERSION (AC-FT) a	261400		175400		258900	
10 PERCENT EXCEEDS	493		183		619	
50 PERCENT EXCEEDS	43		37		48	
90 PERCENT EXCEEDS	23		22		20	

a Diversion, in acre-feet, through Donnell Powerplant (station 11262610), provided by Oakdale and South San Joaquin Irrigation District.

11292800 BEARDSLEY LAKE NEAR STRAWBERRY, CA

LOCATION.—Lat 38°12'17", long 120°04'31", in SE 1/4 NW 1/4 sec.14, T.4 N., R.17 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, in hoist house of Beardsley Dam on Middle Fork Stanislaus River, 2.4 mi upstream from Spring Gap Powerplant, 3.9 mi west of Strawberry, and 4.7 mi west of Pinecrest.

DRAINAGE AREA.—309 mi^2.

PERIOD OF RECORD.—June 1957 to current year. Prior to October 1960, published as Lake Hartley near Strawberry.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 7.84 ft above sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

REMARKS.—Reservoir is formed by rockfill, earth-core dam completed in 1957. Capacity, 98,500 acre-ft, between gage heights 3,145.0 ft, tunnel invert, and 3,398.0 ft, top of spillway gates. No dead storage. Reservoir is used for power and conservation storage. Water passes through Beardsley Powerplant, is diverted at Beardsley Afterbay to J.W. Southern Powerplant at Sand Bar Flat on the Middle Fork Stanislaus River, then diverted to Stanislaus Powerplant at the head of New Melones Reservoir (station 11299000). Records, including extremes, represent contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 98,700 acre-ft, June 27, 1957, gage height, 3,398.2 ft; minimum since reservoir first filled, 3 acre-ft, Sept. 23, 1976, gage height, 3,154.4 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 69,100 acre-ft, Oct. 1, gage height, 3,354.40 ft; minimum, 13,200 acre-ft, Feb. 19, gage height, 3,244.40 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated Oct. 3, 1956)

3,154	2	3,190	1,370	3,240	11,600	3,350	66,400
3,160	41	3,200	2,370	3,260	19,500	3,370	79,200
3,170	267	3,210	3,790	3,290	33,100	3,398	98,500
3,180	693	3,220	5,720	3,320	48,800		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69100	49100	40000	19700	14800	14000	22600	44200	64700	59800	45100	36500
2	68200	48700	39000	19400	14700	13900	24700	45100	65200	59800	44700	36500
3	67600	48200	38000	19200	14500	13800	25600	45800	65700	59800	44300	36400
4	67100	47200	37100	18900	14300	13800	27400	46500	66200	59800	43300	36400
5	66500	46500	36100	18700	14000	13900	28400	47100	66300	59900	42300	36300
6	65900	46300	35100	18400	14000	14100	29500	47900	66500	59900	41900	36200
7	65000	46200	34200	18200	13900	14100	30600	48600	66600	59000	41500	36300
8	64000	46200	33200	18000	13800	14100	31600	49400	66700	58600	41200	36100
9	63500	46100	32400	17700	14100	14300	32000	50100	66800	58200	40800	35800
10	63000	46200	31800	17600	13900	14400	32100	50800	66300	57800	40400	35800
11	62400	46100	31300	17400	13700	14400	32500	51400	65700	57600	39700	35900
12	61800	46100	30800	17200	13600	14400	32500	52300	65500	57100	39000	36000
13	61300	46500	30400	17000	13700	14800	32600	53200	65200	56700	38900	36100
14	60300	46900	29800	16700	13600	15000	33100	54000	65300	55700	38800	36200
15	59400	47300	28800	16400	13800	15200	33600	54800	65100	54700	38700	35800
16	58800	47300	27900	16400	13700	15400	34100	55500	65000	54300	38700	35500
17	58300	47100	26900	17600	13500	15300	34400	56200	64900	54000	38600	35600
18	57700	47200	26000	17400	13300	15200	34800	56800	64900	53600	37900	35700
19	57000	46800	25100	17100	13200	15900	35300	57500	64600	53200	37200	35800
20	56400	46500	24300	16900	13900	16500	35900	58100	64300	52900	37100	35900
21	55500	46100	23600	16600	13800	16800	36000	58600	64200	51900	37100	35900
22	54500	46100	22800	16400	13800	17000	36400	59200	63900	50800	37000	35700
23	53900	46000	21900	16300	13900	17200	36700	59700	63700	50400	36900	35300
24	53400	45600	21000	16500	13800	17400	37600	60300	63500	49400	36900	35400
25	53100	45100	20500	16300	13700	17900	38600	60900	62900	49000	36800	35600
26	52700	44800	20300	16100	13700	18500	39400	61500	62900	48700	36800	35700
27	52500	43800	20200	15800	13800	19100	40400	62000	62400	48300	36700	35800
28	51600	42800	20200	15600	14100	19700	41400	62600	61900	47300	36700	35900
29	50700	41900	20200	15400	---	21200	42300	63100	61800	46200	36600	35600
30	50200	40900	19900	15300	---	22200	43200	63700	60800	45900	36600	35200
31	49600	---	19900	15100	---	22600	---	64200	---	45500	36500	---
MAX	69100	49100	40000	19700	14800	22600	43200	64200	66800	59900	45100	36500
MIN	49600	40900	19900	15100	13200	13800	22600	44200	60800	45500	36500	35200
a	3321.48	3305.44	3261.09	3249.46	3246.63	3267.14	3309.73	3346.43	3340.84	3313.95	3296.85	3294.13
b	-20400	-8700	-21000	-4800	-1000	+8500	+20600	+21000	-3400	-15300	-9000	-1300

CAL YR 2000 b -2500
WTR YR 2001 b -34800

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292900 MIDDLE FORK STANISLAUS RIVER BELOW BEARDSLEY DAM, CA

LOCATION.—Lat 38°11'36", long 120°05'53", in NW 1/4 NW 1/4 sec.22, T.4 N., R.17 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank, 0.5 mi downstream from Beardsley Afterbay Dam, 1.5 mi downstream from Beardsley Dam, and 5.7 mi west of Pinecrest.

DRAINAGE AREA.—316 mi^2.

PERIOD OF RECORD.—December 1956 to current year.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 3,044.7 ft above sea level (river-profile survey).

REMARKS.—Diversion from Beardsley Afterbay Dam, 0.5 mi upstream, to J.W. Southern Powerplant (station 11292860) at Sand Bar Flat 3 mi downstream, began May 31, 1986. Flow regulated by Relief Reservoir (station 11291000) since 1909, Donnell Lake (station 11292600) since April 1957, and by Beardsley Lake (station 11292800) since January 1957. See schematic diagram of Stanislaus River Basin. For records of combined discharge for river and powerplant, see station 11292901.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—River only, maximum discharge, 28,200 ft^3/s, from rating curve extended above 5,400 ft^3/s, on basis of spillway computation at Beardsley Dam, Jan. 2, 1997, gage height, 19.31 ft; minimum daily, 3.0 ft^3/s, Oct. 10, 11, 1958.
Combined flow, maximum daily discharge, 23,100 ft^3/s, Jan. 2, 1997; minimum daily, 25 ft^3/s, Oct. 23, 1986.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	144	139	142	139	140	137	138	137	137	139	140
2	141	144	139	141	139	141	137	137	139	138	139	140
3	142	144	142	140	139	140	138	138	139	138	139	140
4	142	144	142	140	139	142	137	139	140	139	139	141
5	142	143	139	140	139	146	137	139	139	138	139	140
6	141	144	140	140	137	140	138	139	139	137	139	140
7	141	144	139	140	138	142	137	139	138	139	139	140
8	142	142	139	139	138	142	139	138	138	137	139	140
9	143	142	139	139	139	142	138	139	139	137	138	140
10	142	142	139	138	136	141	139	136	138	138	137	140
11	144	142	139	135	135	140	139	137	139	137	137	140
12	144	144	139	138	139	141	137	139	139	139	137	140
13	144	144	140	142	144	143	139	138	139	139	137	141
14	144	144	139	142	141	140	140	137	139	139	139	142
15	143	144	139	143	140	139	139	137	139	140	139	141
16	144	143	140	144	139	139	139	137	139	138	139	141
17	143	142	141	144	139	139	138	138	139	139	139	141
18	142	141	140	142	139	139	138	139	139	139	139	142
19	143	141	140	140	140	139	135	139	139	138	139	142
20	143	141	140	140	141	140	135	139	139	139	139	142
21	143	142	140	140	141	141	135	138	138	139	139	142
22	144	142	141	140	142	146	139	137	137	137	140	142
23	143	142	140	141	140	150	139	137	138	138	142	142
24	143	141	140	135	141	138	139	138	138	138	142	143
25	144	140	141	135	140	137	138	139	138	138	142	144
26	144	140	141	140	140	138	138	139	137	138	142	145
27	144	141	141	140	140	138	138	139	138	138	142	145
28	144	140	141	142	140	138	139	139	139	139	142	145
29	144	140	141	140	---	137	138	139	136	139	141	145
30	142	137	141	140	---	136	139	138	136	139	142	145
31	143	---	141	140	---	136	---	136	---	138	140	---
TOTAL	4429	4264	4342	4342	3904	4350	4138	4281	4151	4286	4325	4251
MEAN	143	142	140	140	139	140	138	138	138	138	140	142
MAX	144	144	142	144	144	150	140	139	140	140	142	145
MIN	141	137	139	135	135	136	135	136	136	137	137	140
AC-FT	8780	8460	8610	8610	7740	8630	8210	8490	8230	8500	8580	8430
a	31770	8770	26680	.00	.00	.00	22060	31350	30990	34140	27940	17750

a Diversion, in acre-feet, through Beardsley Powerplant (station 11292820).

11292900 MIDDLE FORK STANISLAUS RIVER BELOW BEARDSLEY DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1985, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	396	410	449	432	478	494	588	1271	1607	819	523	488
MAX	651	1064	1322	1035	1322	1307	1378	3754	5325	2420	958	690
(WY)	1984	1983	1984	1984	1980	1983	1982	1969	1983	1983	1983	1983
MIN	23.3	19.9	18.8	18.9	21.0	22.4	180	168	348	77.5	44.5	39.5
(WY)	1977	1977	1977	1977	1977	1977	1957	1960	1976	1977	1977	1977

SUMMARY STATISTICS	WATER YEARS 1957 - 1985	
ANNUAL MEAN	671	
HIGHEST ANNUAL MEAN	1507	1983
LOWEST ANNUAL MEAN	111	1977
HIGHEST DAILY MEAN	8630	May 30 1983
LOWEST DAILY MEAN	3.0	Oct 10 1958
ANNUAL SEVEN-DAY MINIMUM	5.0	Jan 16 1957
MAXIMUM PEAK FLOW	9080	May 30 1983
MAXIMUM PEAK STAGE	12.30	May 30 1983
ANNUAL RUNOFF (AC-FT)	485800	
10 PERCENT EXCEEDS	1270	
50 PERCENT EXCEEDS	500	
90 PERCENT EXCEEDS	110	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	115	118	116	255	153	191	202	664	874	356	126	117
MAX	152	172	154	2227	398	625	607	1973	3266	1960	269	151
(WY)	1998	1999	1990	1997	1997	1996	1995	1995	1995	1995	1995	1998
MIN	54.8	54.4	53.9	53.1	55.1	58.7	135	59.1	57.6	57.3	55.8	56.8
(WY)	1991	1991	1995	1995	1991	1991	1991	1994	1994	1994	1988	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	81600		51063			
ANNUAL MEAN	223		140		274	
HIGHEST ANNUAL MEAN					735	1995
LOWEST ANNUAL MEAN					76.6	1988
HIGHEST DAILY MEAN	2620	May 26	150	Mar 23	23100	Jan 2 1997
LOWEST DAILY MEAN	135	Apr 17	135	Jan 11	25	Oct 23 1986
ANNUAL SEVEN-DAY MINIMUM	138	Apr 12	137	Mar 29	44	Jan 19 1995
MAXIMUM PEAK FLOW			187	Mar 22	28200	Jan 2 1997
MAXIMUM PEAK STAGE			4.03	Mar 22	19.31	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	161900		101300		198700	
TOTAL DIVERSION (AC-FT) a	339700		231500		293600	
10 PERCENT EXCEEDS	235		143		473	
50 PERCENT EXCEEDS	142		139		143	
90 PERCENT EXCEEDS	139		137		57	

a Diversion, in acre-feet, through Beardsley Powerplant (station 11292820).

11292901 MIDDLE FORK STANISLAUS RIVER BELOW BEARDSLEY DAM, CA—Continued

MIDDLE FORK STANISLAUS RIVER AND J.W. SOUTHERN POWERPLANT BELOW BEARDSLEY DAM, CA

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	558	552	142	139	140	137	535	539	580	597	416
2	543	567	552	141	139	141	137	543	541	583	595	419
3	542	552	553	140	139	140	138	545	541	582	595	414
4	542	558	552	140	139	142	137	488	541	584	595	420
5	540	393	550	140	139	146	137	546	540	583	594	416
6	543	144	551	140	137	140	138	544	541	585	592	410
7	542	144	534	140	138	142	137	547	540	586	592	411
8	540	142	553	139	138	142	139	542	541	585	591	411
9	540	142	551	139	139	142	358	547	542	585	589	410
10	543	142	548	138	136	141	516	530	543	588	583	410
11	542	142	514	135	135	140	511	531	541	587	415	409
12	543	144	551	138	139	141	510	550	542	588	413	409
13	545	144	552	142	144	143	510	549	540	589	412	281
14	544	144	548	142	141	140	511	548	545	589	414	220
15	543	144	548	143	140	139	508	538	542	591	417	220
16	544	347	544	144	139	139	511	539	542	588	428	221
17	522	428	537	144	139	139	510	539	543	591	419	221
18	544	318	534	142	139	139	513	541	543	590	420	222
19	544	534	525	140	140	139	503	539	542	590	417	222
20	545	554	522	140	141	140	494	541	541	593	418	222
21	545	554	520	140	141	141	507	541	540	591	416	222
22	549	553	518	140	142	146	491	538	565	590	418	222
23	550	554	508	141	140	150	482	539	580	590	420	222
24	552	552	503	135	141	138	478	536	580	592	420	223
25	549	551	366	135	140	137	466	540	584	590	420	224
26	551	550	242	140	140	138	477	540	582	593	420	225
27	551	551	199	140	140	138	497	541	583	598	419	225
28	552	519	199	142	140	138	505	541	587	599	418	225
29	569	554	192	140	---	137	518	542	518	600	418	225
30	555	551	149	140	---	136	540	540	583	599	416	225
31	549	---	145	140	---	136	---	538	---	598	414	---
TOTAL	16905	11730	14412	4342	3904	4350	12016	16718	16532	18277	14695	9022
MEAN	545	391	465	140	139	140	401	539	551	590	474	301
MAX	569	567	553	144	144	150	540	550	587	600	597	420
MIN	522	142	145	135	135	136	137	488	518	580	412	220
AC-FT	33530	23270	28590	8610	7740	8630	23830	33160	32790	36250	29150	17900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	406	285	405	417	389	524	608	1131	1411	838	575	494
MAX	671	538	656	2608	1007	1560	1448	2554	3874	2504	805	702
(WY)	2000	1987	1997	1997	1997	1986	1986	1995	1998	1995	1995	1999
MIN	57.6	58.1	55.8	55.3	55.1	58.7	146	72.7	208	444	471	124
(WY)	1989	1989	1989	1989	1991	1991	1988	1990	1987	1994	1994	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	241426		142903			
ANNUAL MEAN	660		392		625	
HIGHEST ANNUAL MEAN					1165	1995
LOWEST ANNUAL MEAN					221	1988
HIGHEST DAILY MEAN	3280	May 26	600	Jul 29	23100	Jan 2 1997
LOWEST DAILY MEAN	137	Jan 21	135	Jan 11	25	Oct 23 1986
ANNUAL SEVEN-DAY MINIMUM	139	Jan 16	137	Mar 29	27	Nov 12 1985
ANNUAL RUNOFF (AC-FT)	478900		283400		452500	
10 PERCENT EXCEEDS	884		584		1190	
50 PERCENT EXCEEDS	656		507		504	
90 PERCENT EXCEEDS	144		139		67	

11293200 MIDDLE FORK STANISLAUS RIVER BELOW SAND BAR DIVERSION DAM, CA

LOCATION.—Lat 38°10'59", long 120°09'28", in NW 1/4 SE 1/4 sec.24, T.4 N., R.16 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on left bank, 100 ft downstream from Sand Bar Diversion Dam, and 8.5 mi west of Strawberry.

DRAINAGE AREA.—332 mi^2.

PERIOD OF RECORD.—October 1985 to current year (low-flow records only). Unpublished records for water years 1970, 1971, and 1976–85 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and sharp-crested weir since February 1986. Elevation of gage is 2,700 ft above sea level, from topographic map.

REMARKS.—No records computed above 70 ft^3/s. Flow regulated by Relief Reservoir and Donnell and Beardsley Lakes (stations 11291000, 11292600, and 11292800, respectively). Most of the water is diverted at Sand Bar Diversion Dam for use at Stanislaus Powerplant (station 11295505). See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	60	31	28	26	27	29	55	55	53	58	52
2	56	50	29	28	26	27	29	55	55	53	58	52
3	56	35	29	29	26	27	28	55	55	53	58	52
4	56	33	29	28	26	27	28	55	55	53	58	52
5	59	---	29	27	26	27	29	55	55	53	58	52
6	61	---	29	27	26	27	29	55	55	53	56	52
7	61	---	30	26	26	27	28	55	55	55	56	52
8	61	---	30	26	26	27	28	55	55	54	56	52
9	60	39	30	26	26	27	31	58	55	53	54	52
10	60	39	30	26	26	27	33	55	55	54	52	52
11	60	39	30	26	26	27	32	55	55	54	52	62
12	60	39	30	26	26	27	32	55	55	54	52	---
13	60	39	31	26	26	27	32	55	54	54	52	---
14	60	39	32	26	26	28	32	55	55	53	52	---
15	60	39	31	26	26	28	32	55	55	54	52	52
16	60	37	29	26	27	28	31	55	55	52	52	52
17	60	32	28	26	27	28	32	55	55	53	52	52
18	60	34	28	26	27	28	32	55	55	52	53	52
19	60	37	28	26	27	28	40	55	55	52	52	53
20	60	35	28	26	28	28	32	55	54	53	52	53
21	60	32	28	26	27	28	34	55	54	52	52	53
22	60	32	28	26	27	29	31	55	52	52	52	53
23	60	33	28	26	27	29	30	55	52	53	52	53
24	60	32	28	26	27	29	29	55	52	53	52	54
25	60	32	28	26	27	29	29	55	52	53	52	52
26	60	32	28	26	27	29	30	55	52	54	53	53
27	60	32	28	26	27	29	32	55	52	57	52	53
28	60	32	28	26	27	29	34	55	55	58	53	53
29	61	32	28	26	---	29	45	56	53	58	53	53
30	60	32	28	26	---	29	55	55	53	59	52	53
31	60	---	28	26	---	29	---	55	---	58	52	---
TOTAL	1846	---	899	817	742	865	968	1709	1625	1672	1660	---
MEAN	59.5	---	29.0	26.4	26.5	27.9	32.3	55.1	54.2	53.9	53.5	---
MAX	61	---	32	29	28	29	55	58	55	59	58	---
MIN	55	---	28	26	26	27	28	55	52	52	52	---
AC-FT	3660	---	1780	1620	1470	1720	1920	3390	3220	3320	3290	---
a	30820	18460	26600	8690	8650	11350	24450	31270	29880	31900	25250	16170

CAL YR 2000 a 323500
WTR YR 2001 a 263500

a Diversion, in acre-feet, through Stanislaus Powerplant (station 11295505), provided by Pacific Gas & Electric Co.

11293350 UNION RESERVOIR NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°25'50", long 119°59'47", unsurveyed, T.7 N., R.18 E., Alpine County, Hydrologic Unit 18040010, Stanislaus National Forest, at outlet structure on upstream face of Union Dam on North Fork Stanislaus River, and 6.4 mi east of Big Meadows.

DRAINAGE AREA.—13.8 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Unpublished records for water years 1981–86 available in files of the U.S. Geological Survey.

GAGE.—Nonrecording gage, observed intermittently in the summer months. Datum of gage is 6,823.4 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete and rock dam completed in 1902. Usable capacity, 3,130 acre-ft, between gage heights –1.9 ft, invert of outlet, and 26.9 ft, crest of spillway. Figures given represent usable contents. Released water is used for hydroelectric power and irrigation downstream. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by the Northern California Power Association, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Pacific Gas & Electric Co. in 1954)

0	4	10	359	20	1,756	27.6	3,283
5	81	15	938	25	2,754		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	1790	1460	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	800	---	---	---	---	---	3110	---	2140	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	3060	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	1410
20	---	1410	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	1880	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	1090	---	---	---	---	---	---	2870	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	2280	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

11293370 UTICA RESERVOIR NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°26'26", long 120°00'08", unsurveyed, T.7 N., R.18 E., Alpine County, Hydrologic Unit 18040010, Stanislaus National Forest, at outlet structure on upstream face of Utica Dam on North Fork Stanislaus River, 1.2 mi upstream from Silver Creek, 2.6 mi southeast of Bear Valley, and 6.2 mi east of Big Meadows.

DRAINAGE AREA.—15.2 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Unpublished records for water years 1981–86 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder since Oct. 1, 1999. Datum of gage is 6,776.75 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete and rock dam completed in 1910. Usable capacity, 2,334 acre-ft, between gage heights 0.7 ft, invert of outlet, and 42.5 ft, crest of spillway. Figures given represent usable contents. Released water is used for hydroelectric power and irrigation downstream. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by the Northern California Power Agency, 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, 2,545 acre-ft, May 8, 2000, gage height, 43.57 ft; minimum, 388 acre-ft, Feb. 2, 3, 2001, gage height, 30.74 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 2,530 acre-ft, May 7, 8, maximum gage height, 43.49 ft, May 8; minimum, 388 acre-ft, Feb. 2, 3, gage height, 30.45 ft.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Pacific Gas and Electric Co. in 1954)

0.7	0	20	65	30	356	40	1,763
10	19	25	127	35	858	43	2,456

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1150	449	435	391	428	2200	2520	2390	2230	2130	2030
2	1880	1080	454	432	388	430	2440	2490	2370	2220	2130	2030
3	1870	1010	458	429	388	429	2460	2490	2360	2220	2130	2020
4	1870	937	463	425	391	435	2460	2500	2350	2220	2120	2020
5	1860	868	467	421	392	439	2450	2510	2340	2220	2120	2020
6	1850	795	470	418	396	439	2460	2520	2330	2210	2120	2010
7	1840	727	473	413	397	441	2460	2530	2330	2210	2120	2010
8	1840	686	475	413	398	445	2440	2530	2320	2210	2110	2000
9	1840	683	472	410	406	452	2420	2520	2310	2220	2110	2000
10	1840	682	471	420	413	457	2410	2520	2310	2210	2110	2000
11	1840	679	471	424	422	461	2430	2520	2300	2210	2100	1990
12	1830	674	472	421	422	465	2420	2510	2300	2210	2100	1990
13	1820	662	472	417	421	474	2410	2510	2290	2200	2100	1990
14	1820	640	478	415	420	482	2410	2490	2290	2200	2090	1990
15	1810	620	478	412	418	492	2430	2500	2290	2200	2090	1980
16	1800	597	477	409	417	504	2470	2500	2280	2190	2090	1980
17	1790	576	476	406	415	522	2480	2490	2280	2190	2080	1980
18	1790	553	475	403	416	550	2490	2490	2280	2190	2080	1970
19	1780	530	475	401	421	587	2480	2490	2270	2180	2080	1970
20	1770	511	472	399	424	635	2470	2480	2270	2180	2070	1970
21	1760	496	470	396	427	687	2460	2480	2270	2170	2070	1960
22	1750	480	469	394	430	736	2460	2480	2260	2170	2070	1960
23	1750	465	465	394	429	782	2480	2480	2260	2170	2060	1960
24	1690	451	463	400	434	832	2510	2470	2250	2160	2060	1950
25	1630	437	458	403	433	919	2520	2460	2250	2160	2060	1970
26	1560	422	456	402	432	963	2520	2450	2240	2160	2050	1970
27	1490	418	452	400	431	1010	2520	2430	2240	2150	2050	1970
28	1430	425	449	398	429	1070	2500	2420	2240	2150	2050	1960
29	1370	436	446	397	---	1160	2510	2410	2240	2140	2040	1960
30	1300	442	442	394	---	1460	2520	2400	2230	2140	2040	1960
31	1220	---	439	392	---	1810	---	2390	---	2130	2030	---
MAX	1890	1150	478	435	434	1810	2520	2530	2390	2230	2130	2030
MIN	1220	418	439	392	388	428	2200	2390	2230	2130	2030	1950
a	37.30	31.14	31.10	30.50	30.98	40.23	43.44	42.75	42.07	41.66	41.23	40.89
b	-690	-778	-3	-47	+37	+1381	+710	-130	-160	-100	-100	-70

CAL YR 2000 MAX 2545 MIN 410 b -82
WTR YR 2001 MAX 2530 MIN 388 b +50

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11293460 LAKE ALPINE NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°28'17", long 120°00'10", in NE 1/4 SW 1/4 sec.9, T.7 N., R.18 E., Alpine County, Hydrologic Unit 18040010, Stanislaus National Forest, at outlet structure on upstream face of Lake Alpine Dam on Silver Creek, and 7.2 mi northeast of Big Meadows.

DRAINAGE AREA.—5.34 mi^2.

PERIOD OF RECORD.—October 1986 to current year. Unpublished records for water years 1981–86 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder since October 1, 1999. Elevation of gage is 7,260.07 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed on natural lake by concrete and rock dam completed in 1906. Usable capacity, 4,117 acre-ft, between gage heights 0.0 ft, invert of outlet, and 42.07 ft, crest of spillway. Figures given represent usable contents. Released water is used for hydroelectric power and irrigation downstream. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 4,200 acre-ft, May 7–11, 2001, maximum gage height, 42.56 ft, May 7, 8, 2001; minimum, 1,760 acre-ft, Mar. 16–18, 2001, minimum gage height, 26.54, Mar. 17, 2001.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 4,200 acre-ft, May 7–11, maximum gage height, 42.56 ft, May 7, 8; minimum, 1,760 acre-ft, Mar. 16–18, minimum gage height, 26.54, Mar. 17.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Pacific Gas and Electric Co. in 1948)

0	0	15	533	30	2,229	40	3,765
5	41	20	990	35	2,962	43	4,279
10	208	25	1,564				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2990	2720	2470	2190	1970	1840	2410	3770	4140	3880	3660	3400
2	2980	2700	2460	2180	1960	1840	2460	3870	4130	3880	3650	3390
3	2960	2700	2450	2170	1950	1830	2490	3940	4120	3870	3640	3380
4	2950	2690	2440	2160	1940	1840	2510	4020	4120	3860	3640	3370
5	2940	2680	2430	2150	1940	1840	2530	4140	4110	3860	3630	3360
6	2930	2670	2420	2140	1930	1830	2560	4190	4100	3850	3620	3350
7	2920	2660	2420	2130	1930	1830	2580	4200	4090	3850	3610	3340
8	2910	2650	2410	2120	1920	1820	2590	4200	4080	3840	3600	3340
9	2900	2640	2400	2110	1930	1810	2600	4200	4080	3840	3590	3330
10	2900	2640	2390	2120	1930	1800	2600	4200	4070	3840	3580	3320
11	2890	2630	2390	2130	1940	1800	2620	4200	4050	3830	3580	3310
12	2880	2620	2380	2110	1930	1790	2630	4190	e4040	3820	3570	3300
13	2870	2610	2370	2100	1920	1780	2630	4190	4030	3810	3560	3290
14	2860	2610	2380	2100	1910	1770	2640	4190	4020	3810	3550	3290
15	2850	2600	2370	2090	1910	1770	2650	4190	4010	3800	3550	3280
16	2840	2590	2360	2080	1900	1760	2670	4190	4000	3790	3540	3270
17	2840	2580	2350	2070	1890	1760	2700	4190	4000	3780	3530	3260
18	2820	2570	2340	2060	1880	1760	2750	4180	3990	3770	3520	3250
19	2810	2560	2330	2050	1890	1770	2790	4180	3980	3770	3510	3250
20	2800	2550	2320	2040	1890	1790	2830	4180	3970	3760	3500	3240
21	2790	2540	2310	2040	1890	1820	2850	4180	3960	3750	3490	3230
22	2780	2540	2300	2030	1890	1850	2870	4180	3960	3740	3480	3220
23	2760	2530	2290	2020	1880	1880	2900	4170	3950	3740	3470	3220
24	2750	2520	2280	2030	1890	1910	2950	4170	3940	3730	3470	3210
25	2750	2510	2270	2030	1880	1960	3050	4160	3930	3720	3460	3220
26	2740	2500	2260	2020	1870	2000	3160	4160	3920	3710	3450	3210
27	2730	2490	2250	2010	1860	2040	3280	4150	3910	3700	3440	3200
28	2740	2480	2240	2000	1850	2100	3380	4150	3900	3690	3430	3190
29	2740	2480	2230	2000	---	2170	3490	4150	3900	3680	3420	3180
30	2730	2480	2210	1990	---	2240	3630	4140	3890	3670	3410	3180
31	2720	---	2200	1980	---	2320	---	4140	---	3670	3400	---
MAX	2990	2720	2470	2190	1970	2320	3630	4200	4140	3880	3660	3400
MIN	2720	2480	2200	1980	1850	1760	2410	3770	3890	3670	3400	3180
a	33.42	31.75	29.82	28.18	27.21	30.63	39.18	42.21	40.75	39.42	37.81	36.39
b	-260	-240	-280	-220	-130	+470	+1310	+510	-250	-220	-270	-220

CAL YR 2000 MAX 4163 MIN 1907 b +30
WTR YR 2001 MAX 4200 MIN 1760 b +200

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11293590 NORTH FORK STANISLAUS RIVER DIVERSION RESERVOIR NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°26'18", long 120°01'00", unsurveyed, T.7 N., R.18 E., Alpine County, Hydrologic Unit 18040010, Stanislaus National Forest, on left bank of diversion dam on North Fork Stanislaus River, and 5.6 mi northeast of Big Meadows.

PERIOD OF RECORD.—February 1990 to current year. Contents less than 12 acre-ft and end of month elevations for November 1990 to March 1991 published in WDR CA-91-3 are unreliable and should not be used.

REVISED RECORD.—WDR CA-92-3: 1991.

GAGE.—Water-stage recorder. Prior to Sept. 14, 1990, contents estimated on basis of periodic observations of nonrecording gage. Datum of gage is sea level (levels by Calaveras County Water District).

REMARKS.—Reservoir is formed by gravity-type concrete dam completed in October 1987. Capacity, 120 acre-ft, between elevations 6,672.0 ft, sill of emergency release gate, and 6,695.0 ft, crest of spillway. Reservoir is used for power development and fishery enhancement. Flow is diverted through tunnel to New Spicer Meadow Reservoir (station 11293770). Records, including extremes, represent total contents at 2400 hours. Elevations below 6,678.9 ft are not recorded. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 212 acre-ft, Jan. 1, 1997, elevation, 6,699.6 ft; minimum, 4 acre-ft, many days in October 1999 and October 2000.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 114 acre-ft, May 8, elevation, 6,694.53 ft; minimum, 4 acre-ft, several days in October.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Calaveras County Water District in July 1989)

6,679	11	6,690	65	6,695	120	6,696	140
6,685	32						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	38	12	11	11	12	48	84	32	e8	e7	e9
2	14	38	12	11	11	12	41	61	31	e8	e7	e9
3	14	38	12	11	14	12	43	57	29	e8	e7	e9
4	14	38	12	11	19	13	40	62	28	e8	e7	e9
5	14	38	12	11	20	13	38	74	25	e8	e7	e9
6	14	40	12	11	18	13	38	88	22	e8	e7	e9
7	14	41	12	11	13	16	40	108	18	e8	e7	e9
8	14	24	11	e10	12	20	37	114	14	e8	e8	e9
9	e4	15	12	10	12	21	35	84	12	e8	e8	e9
10	e4	18	15	10	12	18	35	81	11	e8	e8	e9
11	e4	19	e6	11	12	15	35	86	11	e8	e8	e9
12	e4	19	e6	11	12	16	36	71	11	e8	e8	e9
13	e4	27	e6	11	12	21	37	70	11	e8	e8	e9
14	e4	27	e6	11	12	25	39	60	e10	e8	e8	e9
15	e4	25	e6	11	12	26	45	59	e9	e8	e8	e9
16	e4	25	e6	11	12	25	52	64	e8	e8	e8	e9
17	e4	26	e6	11	12	31	56	58	e8	e8	e8	e9
18	e4	28	e6	11	12	33	60	56	e8	e8	e8	e9
19	e4	28	e6	11	12	36	53	55	e8	e8	e8	e8
20	e4	23	e6	11	12	38	49	54	e8	e8	e8	e8
21	e4	18	e6	11	12	39	44	54	e8	e8	e8	e8
22	e4	17	e6	11	12	38	49	53	e8	e8	e8	e8
23	e4	17	e6	11	12	40	60	50	e8	e8	e9	e8
24	32	17	e6	11	12	40	76	47	e8	e8	e9	e8
25	34	17	e6	11	12	42	86	45	e8	e8	e9	e8
26	34	17	e6	11	12	39	85	42	e8	e8	e9	e8
27	35	13	e6	11	12	44	81	40	e8	e8	e9	e8
28	36	11	10	11	12	47	71	38	e8	e8	e9	e8
29	37	11	11	11	---	44	71	36	e8	e8	e9	e8
30	37	12	11	11	---	46	88	34	e8	e7	e9	e8
31	38	---	11	11	---	48	---	33	---	e7	e9	---
MAX	38	41	15	11	20	48	88	114	32	8	9	9
MIN	4	11	6	10	11	12	35	33	8	7	7	8
a	6686.02	6679.63	6679.33	6678.96	6679.74	6687.59	6692.18	6685.35				
b	+24	-26	-1	0	+1	+36	+40	-55	-25	-1	+2	-1

CAL YR 2000 MAX 133 MIN 4 b -4
WTR YR 2001 MAX 114 MIN 4 b -6

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11293600 NORTH FORK STANISLAUS RIVER BELOW DIVERSION DAM, NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°26'04", long 120°01'04", unsurveyed, T.7 N., R.18 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank, 0.3 mi downstream from diversion dam, and 5.6 mi northeast of Big Meadows.

DRAINAGE AREA.—28.8 mi^2.

PERIOD OF RECORD.—October 1987 to current year.

REVISED RECORDS.—WDR CA-89-3: 1988 (M).

GAGE.—Water-stage recorder, crest-stage gage, and artificial control. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.—Low and medium flow regulated by Union and Utica Reservoirs and Lake Alpine (stations 11293350, 11293370, and 11293460). Diversion upstream from station at North Fork Stanislaus River Diversion Reservoir (station 11293590) through North Fork Stanislaus River Diversion Tunnel (station 11293580) and into New Spicer Meadow Reservoir (station 11293770), for hydroelectric power generation. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 3,220 ft^3/s, May 16, 1996, gage height, 7.92 ft, from rating curve extended above 120 ft^3/s on basis of computation of peak flow over diversion dam; minimum daily, 2.3 ft^3/s, Oct. 18–20, 22, 23, 1992.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	19	18	12	13	14	23	28	21	8.0	8.0	8.4
2	11	19	18	12	13	15	21	26	21	7.9	7.5	8.4
3	12	18	18	12	15	14	22	22	21	7.8	7.4	8.2
4	12	18	17	12	19	15	22	22	20	7.8	8.0	8.1
5	12	18	17	12	22	15	21	23	19	7.8	8.3	8.1
6	11	18	17	12	22	15	21	24	18	7.8	8.6	8.0
7	11	19	17	12	19	17	21	24	17	7.8	8.3	8.0
8	12	24	16	12	16	21	21	25	15	7.7	8.1	8.0
9	17	18	10	12	15	24	20	e23	14	7.6	7.9	8.0
10	13	12	11	13	15	22	20	22	13	6.9	7.7	8.1
11	12	12	16	13	14	20	20	22	12	7.8	7.6	8.2
12	12	12	13	13	16	19	20	22	11	8.1	7.4	8.3
13	12	13	13	13	14	21	20	22	12	8.0	7.4	8.3
14	11	24	13	13	14	27	21	22	11	8.0	7.6	8.3
15	11	26	13	13	14	30	21	21	10	7.9	7.8	8.2
16	11	25	14	13	14	28	22	21	9.4	7.9	7.6	8.1
17	12	24	14	12	14	30	23	21	9.1	7.9	7.7	8.1
18	12	24	14	12	14	33	24	20	8.9	7.9	7.7	8.1
19	12	24	14	13	14	33	25	19	8.8	7.9	7.7	10
20	12	28	14	14	15	34	23	19	8.7	7.9	8.0	8.1
21	12	28	13	13	14	34	23	19	8.6	7.8	8.1	8.1
22	12	25	13	13	14	34	22	19	8.6	7.7	8.3	8.1
23	12	24	13	13	14	34	24	21	8.5	7.7	8.2	8.0
24	14	24	12	14	15	34	26	25	8.4	7.6	8.0	8.0
25	18	24	12	14	15	36	27	24	8.4	8.0	8.1	9.4
26	18	24	12	14	14	34	28	23	8.3	7.8	8.2	8.1
27	18	23	12	13	14	28	27	23	8.4	7.9	8.3	8.1
28	18	18	12	13	14	25	27	22	8.3	8.0	8.3	8.1
29	19	17	12	13	---	24	26	22	8.2	7.9	8.3	8.3
30	19	18	12	13	---	22	27	22	8.1	7.4	8.5	8.2
31	19	---	12	13	---	23	---	21	---	8.2	8.4	---
TOTAL	419	620	432	396	426	775	688	689	363.7	242.4	247.0	247.4
MEAN	13.5	20.7	13.9	12.8	15.2	25.0	22.9	22.2	12.1	7.82	7.97	8.25
MAX	19	28	18	14	22	36	28	28	21	8.2	8.6	10
MIN	11	12	10	12	13	14	20	19	8.1	6.9	7.4	8.0
AC-FT	831	1230	857	785	845	1540	1360	1370	721	481	490	491
a	395	437	0	0	0	1560	7280	11700	63	0	0	0

e Estimated.
a Diversion, in acre-feet, through North Fork Stanislaus River Diversion Tunnell (station 11293580) to New Spicer Meadows Reservoir, provided by Northern California Power Agency.

11293600 NORTH FORK STANISLAUS RIVER BELOW DIVERSION DAM, NEAR BIG MEADOWS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.8	18.1	13.7	16.0	16.9	22.3	32.0	41.4	27.7	14.7	12.3	14.7
MAX	20.2	42.2	25.6	39.3	25.3	42.5	99.6	106	98.7	28.1	22.8	26.5
(WY)	1989	1990	1997	1997	1996	1988	1988	1996	1995	1989	1988	1988
MIN	10.1	7.01	3.19	3.80	4.85	16.2	18.8	18.0	9.68	5.45	5.32	5.48
(WY)	1993	1991	1991	1991	1991	1991	1991	1992	1992	1988	1989	1989

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	7077.0		5545.5			
ANNUAL MEAN	19.3		15.2		20.5	
HIGHEST ANNUAL MEAN					32.6	1995
LOWEST ANNUAL MEAN					13.0	1991
HIGHEST DAILY MEAN	303	May 8	36	Mar 25	1840	May 16 1996
LOWEST DAILY MEAN	8.3	Aug 6	6.9	Jul 10	2.3	Oct 18 1992
ANNUAL SEVEN-DAY MINIMUM	9.7	Sep 4	7.6	Aug 10	2.3	Oct 17 1992
MAXIMUM PEAK FLOW			38	Mar 25	3220	May 16 1996
MAXIMUM PEAK STAGE			3.30	Mar 25	7.92	May 16 1996
ANNUAL RUNOFF (AC-FT)	14040		11000		14830	
ANNUAL DIVERSION (AC-FT) a	42220		21430			
10 PERCENT EXCEEDS	28		24		27	
50 PERCENT EXCEEDS	18		13		17	
90 PERCENT EXCEEDS	10		7.9		7.7	

a Diversion, in acre-feet, through North Fork Stanislaus River Diversion Tunnell (station 11293580) to New Spicer Meadows Reservoir, provided by Northern California Power Agency.

11293770 NEW SPICER MEADOW RESERVOIR NEAR BIG MEADOWS, CA

LOCATION.—Lat 38°23'35", long 119°59'53", in NW 1/4 NE 1/4 sec.9, T.7 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, at outlet structure on upstream face of New Spicer Meadow Dam on Highland Creek, and 7.7 mi east-southeast of Big Meadows.

DRAINAGE AREA.—45.4 mi^2.

PERIOD OF RECORD.—February 1990 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Calaveras County Water District).

REMARKS.—Reservoir is formed by rockfill dam with a reinforced concrete face completed in December 1988. Dam is 600 ft downstream from original concrete gravity-type dam which was completed in 1929. Usable capacity, 184,298 acre-ft, between elevations 6,420.0 ft, minimum operating head, and 6,614.0 ft, crest of spillway. Released water is used for hydroelectric power and fishery maintenance. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 190,024 acre-ft, July 5, 1998, elevation, 6,614.5 ft; minimum, 30,198 acre-ft, Mar. 5, 1993, elevation, 6,491.2 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 112,500 acre-ft, May 30, 31, June 1, maximum elevation, 6,571.95 ft, May 31; minimum, 55,200 acre-ft, Mar. 3, 4, minimum elevation, 6,526.08 ft, Mar. 4.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Calaveras County Water District in July 1989)

6,420	4,702	6,480	23,781	6,540	69,652	6,600	160,318
6,440	9,299	6,500	35,214	6,560	94,859	6,614	189,000
6,460	15,511	6,520	50,197	6,580	125,341		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110000	96400	83300	64400	59300	55500	64500	84300	112500	105100	94500	84300
2	109300	96300	83100	64200	59200	55400	65000	85500	112400	104800	94200	84000
3	108800	96100	82200	64000	59000	55200	65400	86200	112400	104500	93900	83700
4	108300	96000	80900	63700	58900	55200	65800	87000	112200	104100	93500	83300
5	107800	95900	79800	63500	58900	55300	66000	88100	112100	103800	93200	82600
6	107400	95700	79000	63300	58700	55300	66300	89300	111900	103400	93000	82300
7	106900	95600	78000	63100	58600	55300	66600	90900	111700	103100	92700	81900
8	106600	95400	76800	e62900	58300	55400	66800	92600	111600	102800	92300	81600
9	106300	95200	75400	62700	58000	55400	67000	94300	111400	102500	91900	81300
10	106000	95100	73900	62700	57900	55400	67200	96000	111300	102200	91600	80900
11	105700	94900	72900	62600	57900	55400	67400	97700	110900	101900	91300	80600
12	105300	94700	71700	62400	57700	55500	67500	99300	110700	101600	91000	80300
13	105000	94500	70600	62300	57600	55500	67700	100800	110400	101200	90600	79900
14	104600	94000	69800	62100	57400	55600	67900	102000	110200	100800	90400	79600
15	104300	93200	69400	61900	57200	55700	68100	103100	109900	100500	90000	79300
16	103900	92300	68900	61800	57100	55800	68500	104400	109700	100100	89700	79000
17	103300	91500	68500	61600	57000	55900	69000	105500	109400	99800	89400	78600
18	102700	90800	68000	61500	56800	56100	69700	106500	109100	99500	88900	78300
19	102100	90200	67600	61300	56800	56500	70600	107400	108800	99100	88300	78000
20	101500	89600	67100	61100	56700	56900	71200	108200	108500	98800	88000	77700
21	100900	88900	66800	60900	56600	57400	71600	109000	e108200	98400	87600	77300
22	100200	88200	66500	60800	56500	57900	72000	109800	e107900	98100	87300	77000
23	99700	87600	66200	60700	56300	58400	72700	110500	e107600	97800	87000	76800
24	99000	86900	66100	60600	56300	58900	73800	111000	e107300	97400	86800	76300
25	98600	86200	65800	60500	56100	59900	75300	111500	106900	97000	86500	76200
26	98000	85400	65600	60400	56000	60400	76900	111800	106600	96600	86100	75900
27	97500	84800	65400	60200	55800	60900	78500	112100	106300	96200	85800	75600
28	97200	84300	65200	60000	55600	61600	79900	112300	106000	95800	85500	75300
29	97000	83900	65000	59800	---	62300	81100	112400	105700	95500	85200	74900
30	96700	83500	64800	59600	---	63000	82700	112500	105400	95100	84900	74600
31	96500	---	64600	59500	---	63800	---	112500	---	94800	84500	---
MAX	110000	96400	83300	64400	59300	63800	82700	112500	112500	105100	94500	84300
MIN	96500	83500	64600	59500	55600	55200	64500	84300	105400	94800	84500	74600
a	6561.54	6551.52	6535.57	6530.28	6526.51	6534.70	6550.85	6571.95	6567.33	6560.35	6552.37	6544.64
b	-14200	-13000	-18900	-5100	-3900	+8200	+18900	+29800	-7100	-10600	-10300	-9900
c	14460	15140	20900	6740	5420	1820	1310	1820	8400	10210	10760	9580

CAL YR 2000 MAX 180800 MIN 64600 b -7900 c 136100
WTR YR 2001 MAX 112500 MIN 55200 b -36100 c 106600

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Diversion, in acre-feet, through New Spicer Meadow Powerplant (station 11293760), provided by Northern California Power Agency.

11294000 HIGHLAND CREEK BELOW NEW SPICER MEADOW RESERVOIR, CA

LOCATION.—Lat 38°23'35", long 119°59'53", in NW 1/4 NE 1/4 sec.9, T.7 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank in New Spicer Meadow Powerplant at downstream side of New Spicer Meadow Dam, 5.4 mi upstream from mouth, and 6.5 mi east-southeast of Big Meadows.

DRAINAGE AREA.—45.4 mi^2.

PERIOD OF RECORD.—October 1952 to current year.

REVISED RECORDS.—WSP 1930: 1953. WDR CA-89-3: Drainage area, 1987(M), 1988(M).

GAGE.—Acoustic-flow meter and water-stage recorder on New Spicer Meadow Reservoir (station 11293770). Elevation of gage is 6,362 ft above sea level, from topographic map. December 1986 to September 1990 at site 1,400 ft downstream at different datum. October 1952 to November 1986, at site 900 ft upstream at different datum.

REMARKS.—Low and medium flows regulated by New Spicer Meadow Reservoir since 1988 and, prior to 1988, by Spicer Meadows Reservoir, capacity, 4,060 acre-ft. Flow has been diverted to New Spicer Meadow Reservoir from North Fork Stanislaus River since Oct. 21, 1987. Penstock diverts from New Spicer Meadow Reservoir to New Spicer Meadow Powerplant. At times flow may bypass New Spicer Meadow Powerplant. Discharges, including extremes, represent flow through or past powerplant, and flow over spillway of reservoir. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 9,860 ft^3/s, Jan. 31, 1963, gage height, 11.88 ft, site and datum then in use, from rating curve extended above 1,200 ft^3/s; no flow some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Nov. 20, 1950, reached a stage of 11.50 ft, site and datum then in use, from Pacific Gas & Electric Co. recorder chart, discharge, 8,800 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	100	100	131	89	92	21	22	104	160	161	161
2	318	100	116	130	89	91	21	22	102	160	162	161
3	271	99	524	130	89	91	21	21	102	173	161	161
4	224	99	678	130	89	73	22	21	111	165	161	161
5	225	99	551	133	89	31	22	21	131	160	161	160
6	225	99	470	134	89	22	22	21	133	159	161	162
7	211	99	498	134	89	21	22	21	133	159	162	160
8	172	99	606	131	157	21	22	21	133	159	193	160
9	172	99	781	117	216	22	22	21	132	158	232	161
10	172	99	778	108	94	21	22	22	133	159	163	162
11	169	99	525	100	91	20	22	22	142	158	161	162
12	168	99	641	99	91	19	22	22	145	161	161	161
13	168	163	604	99	91	20	22	22	144	163	161	161
14	168	272	437	99	91	21	22	22	145	163	161	161
15	167	462	279	100	91	20	22	22	144	162	161	161
16	196	479	280	101	91	21	22	22	144	162	162	161
17	265	433	280	101	90	20	22	22	145	163	181	161
18	301	433	281	102	91	21	22	22	152	163	262	161
19	300	338	284	103	90	20	22	22	153	165	302	160
20	298	316	283	102	91	20	22	22	153	165	220	160
21	297	389	212	102	92	20	22	22	154	165	160	160
22	298	388	166	102	92	21	22	22	153	164	160	160
23	299	387	155	102	92	21	22	22	153	165	160	160
24	300	388	134	102	92	21	22	22	153	164	162	159
25	299	387	134	102	92	21	23	22	153	194	162	160
26	299	455	126	102	92	21	23	31	157	212	162	160
27	279	365	114	102	92	21	22	41	157	189	162	162
28	248	289	114	102	92	21	22	53	156	167	162	162
29	249	250	123	102	---	21	22	74	159	167	162	164
30	184	247	131	102	---	21	22	80	160	163	162	166
31	135	---	131	94	---	21	---	94	---	161	162	---
TOTAL	7292	7631	10536	3398	2734	917	659	916	4236	5148	5425	4831
MEAN	235	254	340	110	97.6	29.6	22.0	29.5	141	166	175	161
MAX	318	479	781	134	216	92	23	94	160	212	302	166
MIN	135	99	100	94	89	19	21	21	102	158	160	159
AC-FT	14460	15140	20900	6740	5420	1820	1310	1820	8400	10210	10760	9580

11294000 HIGHLAND CREEK BELOW NEW SPICER MEADOW RESERVOIR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	69.1	56.1	77.3	69.4	99.1	128	217	373	282	137	93.4	80.4
MAX	358	254	399	334	902	605	456	1047	1097	787	592	423
(WY)	1997	2001	1965	1997	1997	1999	1995	1969	1983	1995	1998	1997
MIN	.000	.000	.50	.50	2.69	.83	17.9	21.9	37.7	5.23	1.63	1.34
(WY)	1965	1965	1961	1961	1960	1977	1992	1991	1987	1961	1961	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	68603		53723			
ANNUAL MEAN	187		147		140	
HIGHEST ANNUAL MEAN					333	1997
LOWEST ANNUAL MEAN					25.3	1977
HIGHEST DAILY MEAN	800	Aug 1	781	Dec 9	5040	Dec 23 1955
LOWEST DAILY MEAN	21	Jan 21	19	Mar 12	.00	Sep 28 1964
ANNUAL SEVEN-DAY MINIMUM	21	Jan 24	20	Mar 11	.00	Sep 28 1964
MAXIMUM PEAK FLOW			817	Dec 10	9860	Jan 31 1963
MAXIMUM PEAK STAGE					11.88	Jan 31 1963
ANNUAL RUNOFF (AC-FT)	136100		106600		101600	
10 PERCENT EXCEEDS	495		292		405	
50 PERCENT EXCEEDS	124		142		53	
90 PERCENT EXCEEDS	21		22		2.9	

11294500 NORTH FORK STANISLAUS RIVER NEAR AVERY, CA

LOCATION.—Lat 38°14'38", long 120°17'24", in SW 1/4 NE 1/4 sec.35, T.5 N., R.15 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank, 1.1 mi upstream from McKay's Point Dam, 3.3 mi upstream from Beaver Creek, and 5.1 mi northeast of Avery.

DRAINAGE AREA.—163 mi^2.

PERIOD OF RECORD.—July 1914 to September 1925, October 1928 to current year. Water-year estimates for 1923–25 and 1929 published in WSP 1315-A.
WATER TEMPERATURE: Water years 1990–98.

REVISED RECORDS.—WSP 1215: 1938(M). WSP 1515: 1915(M), 1932(M), 1936(M), 1938, 1940(M).

GAGE.—Water-stage recorder. Datum of gage is 3,388.3 ft above sea level (river-profile survey). Prior to September 1922, nonrecording gage at same site at datum 0.05 ft lower.

REMARKS.—Low and medium flows regulated by Union and Utica Reservoirs, Lake Alpine, North Fork Stanislaus River Diversion Reservoir, and New Spicer Meadow Reservoir beginning 1990 (stations 11293350, 11293370, 11293460, 11293590, and 11293770), total combined usable capacity, 194,001 acre-ft. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 36,000 ft^3/s, Jan. 31, 1963, gage height, 15.00 ft, from floodmarks, from rating curve extended above 14,000 ft^3/s on basis of slope-area measurement at gage height 13.8 ft; minimum daily, 5.5 ft^3/s, Dec. 6, 7, 1929.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	141	169	145	118	136	654	915	168	165	160	159
2	304	124	125	144	118	146	580	830	164	164	158	159
3	323	123	372	144	123	138	365	591	159	172	157	159
4	231	121	724	144	142	169	287	552	156	170	157	158
5	228	120	697	144	153	199	245	639	169	168	157	158
6	228	120	512	147	146	159	228	701	178	163	157	157
7	228	119	560	147	138	156	233	746	174	164	158	157
8	190	119	593	154	126	184	207	827	169	163	159	157
9	178	125	847	142	293	190	192	796	165	162	248	157
10	200	123	859	142	180	162	187	722	162	163	172	159
11	183	115	766	145	138	147	206	709	161	160	158	159
12	176	113	599	125	130	140	199	660	170	160	158	160
13	175	120	720	123	127	148	213	587	168	164	157	159
14	174	240	593	123	125	177	226	521	166	163	157	159
15	173	437	346	121	126	187	244	442	165	162	157	159
16	172	573	314	121	127	174	305	417	162	162	157	159
17	239	489	314	120	129	189	393	391	160	163	157	159
18	312	488	310	122	132	248	441	347	162	162	218	159
19	316	430	313	127	143	305	604	311	165	164	290	159
20	313	349	312	128	148	374	433	284	166	164	290	161
21	313	411	294	125	151	416	372	254	165	164	161	158
22	311	439	185	125	154	454	398	229	164	163	158	157
23	312	436	182	129	143	447	510	207	163	163	158	158
24	316	436	159	145	149	465	714	188	161	163	159	157
25	328	435	150	133	147	702	868	168	161	166	159	175
26	342	474	148	135	143	587	916	151	165	207	159	161
27	330	493	135	129	141	475	899	147	167	206	159	160
28	283	337	130	128	142	551	829	144	166	167	159	160
29	361	280	130	131	---	630	741	148	165	165	159	161
30	267	344	145	127	---	558	814	160	167	164	159	164
31	176	---	145	127	---	600	---	153	---	159	159	---
TOTAL	7852	8674	11848	4142	4032	9613	13503	13937	4953	5165	5331	4784
MEAN	253	289	382	134	144	310	450	450	165	167	172	159
MAX	361	573	859	154	293	702	916	915	178	207	290	175
MIN	170	113	125	120	118	136	187	144	156	159	157	157
AC-FT	15570	17200	23500	8220	8000	19070	26780	27640	9820	10240	10570	9490

11294500 NORTH FORK STANISLAUS RIVER NEAR AVERY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	86.6	140	231	268	348	514	964	1436	771	183	97.1	88.6
MAX	482	2103	1957	2440	2105	1785	2026	3299	3651	1231	672	464
(WY)	1983	1951	1965	1997	1986	1986	1982	1969	1983	1983	1998	1997
MIN	21.8	10.6	10.1	17.0	23.5	39.7	70.6	138	44.9	34.0	24.2	22.9
(WY)	1960	1960	1977	1977	1933	1977	1924	1924	1924	1924	1981	1924

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1915 - 2001	
ANNUAL TOTAL	153251		93834			
ANNUAL MEAN	419		257		427	
HIGHEST ANNUAL MEAN					1019	1983
LOWEST ANNUAL MEAN					54.3	1924
HIGHEST DAILY MEAN	2430	Feb 14	916	Apr 26	23400	Dec 23 1955
LOWEST DAILY MEAN	113	Nov 12	113	Nov 12	5.5	Dec 6 1929
ANNUAL SEVEN-DAY MINIMUM	117	Jan 2	119	Nov 6	7.4	Dec 2 1929
MAXIMUM PEAK FLOW			1200	Apr 30	36000	Jan 31 1963
MAXIMUM PEAK STAGE			4.77	Apr 30	15.00	Jan 31 1963
ANNUAL RUNOFF (AC-FT)	304000		186100		309400	
10 PERCENT EXCEEDS	794		565		1190	
50 PERCENT EXCEEDS	330		164		145	
90 PERCENT EXCEEDS	158		129		36	

11295220 BEAVER CREEK DIVERSION RESERVOIR NEAR ARNOLD, CA

LOCATION.—Lat 38°13'58", long 120°16'43", in NW 1/4 NW 1/4 sec.1, T.4 N., R.15 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank at outlet structure of Beaver Creek Diversion Dam on Beaver Creek, and 4.5 mi east-southeast of Arnold.

DRAINAGE AREA.—29.3 mi^2.

PERIOD OF RECORD.—February 1990 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Calaveras County Water District).

REMARKS.—Reservoir is formed by concrete gravity-type dam completed in July 1989. Usable capacity, 13 acre-ft, between elevations 4,186.0 ft, minimum fishwater release elevation, and 4,191.5 ft, crest of spillway. Water is diverted through tunnel to McKay's Point Reservoir (station 11295260) on North Fork Stanislaus River. Released water is used for fishery maintenance. At times, during some years, reservoir is drained below minimum fishwater release elevation to allow replacement of the fish screens. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 15 acre-ft, Jan. 1, 1997, elevation, 4,195.5 ft; minimum, no storage Jan. 3 to Nov. 10, 1997, Oct. 26 to Nov. 21, Dec. 14, 1998, Aug. 2 to Oct. 31, 1999.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 13 acre-ft, many days, maximum elevation, 4,126.59 ft, Mar. 4; minimum, 1 acre-ft, many days, minimum elevation, unknown.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Calaveras County Water District in July 1989)

4,180	6	4,184	8	4,188	11	4,192	13
4,182	7	4,186	9	4,190	12	4,193	14

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	10	10	10	10	13	12	12	10	10	10
2	10	10	10	10	10	10	13	12	11	10	10	10
3	10	10	10	10	10	10	12	12	10	10	10	10
4	10	10	10	10	10	13	12	12	10	10	10	10
5	10	10	10	10	10	13	12	12	10	10	10	10
6	10	10	10	10	10	13	12	12	10	10	10	10
7	10	10	10	10	10	13	12	12	10	10	10	10
8	10	10	10	10	11	13	12	12	10	10	10	10
9	10	10	10	10	10	13	12	12	10	10	10	10
10	10	10	10	11	10	13	12	12	10	10	10	10
11	10	10	10	10	10	13	12	12	10	10	10	10
12	e6	10	10	10	10	13	12	12	10	10	10	10
13	e4	10	10	10	10	13	12	12	10	10	10	10
14	e2	10	10	10	10	13	12	12	10	10	10	10
15	e1	10	10	10	10	13	12	12	10	10	e2	10
16	e1	10	10	10	10	13	12	12	10	10	e1	10
17	e1	10	10	10	10	13	12	12	10	10	e1	10
18	e1	10	10	10	10	13	12	12	10	10	e1	10
19	e1	10	10	10	10	13	12	12	10	10	e1	10
20	e1	10	10	10	10	13	12	12	10	10	e1	10
21	e1	10	10	10	11	13	12	12	10	10	e1	10
22	e1	10	10	10	11	13	12	12	10	10	e1	10
23	e1	10	10	10	10	13	13	12	10	10	e1	10
24	e1	10	10	10	10	13	12	12	10	10	e1	10
25	e1	10	10	10	10	13	12	12	10	10	e1	10
26	e7	10	10	10	10	13	12	12	10	10	e1	10
27	10	10	10	10	10	13	12	12	10	10	e1	10
28	10	10	10	10	10	13	12	12	10	10	e1	10
29	13	11	10	10	---	13	12	12	10	10	e1	10
30	10	10	10	10	---	13	12	12	10	10	e8	10
31	10	---	10	10	---	12	---	12	---	10	10	---
MAX	13	11	10	11	11	13	13	12	12	10	10	10
MIN	1	10	10	10	10	10	12	12	10	10	1	10
a	4122.40	4122.40	4122.20	4122.34	4122.54	4125.87	4125.68	4125.62	4122.16	4121.96	4121.89	4121.90
b	0	0	0	0	0	+2	0	0	-2	0	0	0

CAL YR 2000 MAX 14 MIN 1 b 0
WTR YR 2001 MAX 13 MIN 1 b 0

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11295230 BEAVER CREEK BELOW DIVERSION DAM, NEAR ARNOLD, CA

LOCATION.—Lat 38°13'59", long 120°16'46", in NE 1/4 NW 1/4 sec.1, T.4 N., R.15 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, at Beaver Creek Diversion Dam, and 4.5 mi east-southeast of Arnold.

DRAINAGE AREA.—29.3 mi^2.

PERIOD OF RECORD.—February 1990 to current year.

REVISED RECORDS.—WDR CA-92-3: 1991 (M).

GAGE.—Acoustic-velocity meter on low-flow discharge, and water-stage recorder on Beaver Creek Diversion Reservoir (station 11295220). Datum of gage is sea level (levels by Calaveras County Water District).

REMARKS.—Entire flow of Beaver Creek in excess of 16.5 ft^3/s required for stream maintenance can be diverted through tunnel and penstock to turbine at McKay's Point Reservoir (stations 11295210 and 11295260). Capacity of tunnel and penstock is 400 ft^3/s and flow in excess of that amount is either released or spilled at Beaver Creek Diversion Dam to the creek. Discharge, including extremes, represents the combined flow of Beaver Creek and spill or release at diversion dam. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 6,020 ft^3/s, Jan. 1, 1997; minimum daily, 1.2 ft^3/s, Dec. 22, 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	13	12	10	12	15	20	20	20	8.9	5.3	4.1
2	7.3	12	12	10	10	16	19	20	20	8.5	5.2	4.0
3	7.2	11	11	10	12	15	20	20	19	8.2	5.0	4.0
4	7.3	11	11	10	14	21	20	20	18	8.1	4.9	3.5
5	7.2	11	11	10	17	24	20	20	17	8.4	4.9	3.8
6	7.1	10	10	9.8	17	20	20	20	17	8.3	4.8	3.9
7	7.0	10	10	9.9	15	20	20	20	16	8.7	4.6	3.9
8	7.1	9.7	10	12	12	20	20	20	15	8.5	4.5	3.9
9	7.6	9.7	10	11	14	20	20	20	15	7.7	4.4	3.9
10	14	11	10	13	11	20	20	20	14	7.4	4.3	3.9
11	12	11	10	14	12	20	20	20	14	7.3	4.3	3.9
12	e9.0	9.7	12	14	14	20	20	20	14	7.2	4.3	e4.2
13	e8.3	9.9	11	13	15	20	20	20	14	7.0	4.2	e4.1
14	e8.3	10	14	12	14	20	20	20	13	6.8	4.2	e3.9
15	e8.3	9.7	17	11	14	20	20	20	13	6.6	e8.0	4.0
16	e8.3	10	14	9.6	13	20	20	20	12	6.7	e3.8	3.8
17	e8.3	9.4	13	9.9	13	20	20	20	12	6.8	e3.8	e3.9
18	e8.3	9.9	12	12	14	20	20	20	12	6.7	e3.8	3.9
19	e8.3	10	12	12	16	20	20	20	11	6.4	e3.8	3.9
20	e8.3	9.8	12	11	17	20	20	20	11	6.3	e5.1	3.9
21	e8.3	10	12	11	18	20	20	20	11	6.2	e4.8	3.9
22	e8.3	10	12	11	19	20	20	20	10	6.1	e4.8	3.9
23	e8.3	9.9	11	12	17	20	20	20	9.9	5.9	e3.8	3.9
24	e8.3	10	11	11	16	20	20	20	9.7	5.8	e3.8	3.9
25	e8.3	10	11	14	17	23	20	20	9.6	5.6	e3.8	8.4
26	e4.8	10	11	13	17	20	20	20	10	5.5	e3.8	6.1
27	e5.5	10	10	13	16	20	20	20	10	5.3	e3.8	5.0
28	12	10	10	12	15	20	20	20	11	5.1	e3.8	4.7
29	39	14	10	12	---	20	20	20	9.8	5.1	e3.8	4.7
30	18	15	10	11	---	20	20	20	9.3	5.1	e3.8	4.5
31	14	---	10	12	---	20	---	20	---	5.4	2.0	---
TOTAL	301.3	316.7	352	356.2	411	614	599	620	397.3	211.6	135.2	127.4
MEAN	9.72	10.6	11.4	11.5	14.7	19.8	20.0	20.0	13.2	6.83	4.36	4.25
MAX	39	15	17	14	19	24	20	20	20	8.9	8.0	8.4
MIN	4.8	9.4	10	9.6	10	15	19	20	9.3	5.1	2.0	3.5
AC-FT	598	628	698	707	815	1220	1190	1230	788	420	268	253
a	16	0	0	0	5.0	2870	4530	3270	0	0	0	0

e Estimated.

a Diversion, in acre-feet, through tunnel and penstock (station 11295210) to McKay's Point Reservoir, provided by Northern California Power Agency.

11295230 BEAVER CREEK BELOW DIVERSION DAM, NEAR ARNOLD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.99	10.8	28.7	85.1	43.5	61.5	48.0	61.0	32.9	12.8	8.55	7.06
MAX	12.8	21.1	184	610	130	280	185	291	129	21.5	18.2	16.2
(WY)	1999	1997	1997	1997	1997	1995	1995	1995	1998	1998	1998	1998
MIN	3.28	4.48	4.53	5.00	6.32	17.6	17.2	16.3	6.93	4.77	2.61	2.48
(WY)	1991	1991	1991	1991	1991	1990	1990	1992	1992	1994	1994	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	7063.0		4441.7			
ANNUAL MEAN	19.3		12.2		35.4	
HIGHEST ANNUAL MEAN					102	1997
LOWEST ANNUAL MEAN					9.86	1991
HIGHEST DAILY MEAN	565	Feb 14	39	Oct 29	3570	Jan 2 1997
LOWEST DAILY MEAN	4.8	Oct 26	2.0	Aug 31	1.2	Dec 22 1994
ANNUAL SEVEN-DAY MINIMUM	7.2	Oct 2	3.5	Aug 25	2.0	Oct 1 1991
MAXIMUM PEAK FLOW			39	Oct 29	6020	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	14010		8810		25650	
ANNUAL DIVERSION (AC-FT) a	26180		10690			
10 PERCENT EXCEEDS	21		20		49	
50 PERCENT EXCEEDS	16		11		16	
90 PERCENT EXCEEDS	8.3		4.2		4.2	

a Diversion, in acre-feet, through tunnel and penstock (station 11295210) to McKay's Point Reservoir, provided by Northern California Power Agency.

11295240 UTICA CANAL AT PRESSURE TAP, NEAR HATHAWAY PINES, CA

LOCATION.—Lat 38°11'33", long 120°21'14", in SW 1/4 SW 1/4 sec.17, T.4 N., R.15 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, at pressure tap in Collierville Tunnel, and 0.5 mi east of Hathaway Pines.

PERIOD OF RECORD.—October 1989 to current year.

GAGE.—Acoustic-velocity meter. Elevation of gage is 3,160 ft above sea level, from topographic map.

REMARKS.—Flow is diverted into Collierville Tunnel at McKay's Point Reservoir (stations 11295250 and 11295260) and enters canal through pressure tap in the tunnel. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Utica Power Authority, 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, 89 ft^3/s, Oct. 17, 1989; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	34	39	39	38	25	33	23	35	37	41	40
2	50	29	19	39	38	27	34	24	35	38	40	39
3	50	37	39	39	37	27	36	26	36	37	39	38
4	50	45	22	39	36	27	38	25	24	37	40	39
5	50	46	29	39	36	14	39	26	13	38	40	21
6	50	7.6	39	39	36	.00	39	26	13	38	41	.39
7	50	.00	39	39	36	.00	37	26	13	38	39	.11
8	50	.00	39	39	36	.00	35	30	13	38	40	.13
9	50	.00	39	39	36	.00	35	29	25	38	40	.08
10	50	.00	39	31	36	7.0	35	30	37	41	23	.09
11	48	14	39	23	36	14	35	30	37	42	44	.05
12	46	36	39	29	36	14	30	30	37	42	44	.06
13	46	30	39	34	36	21	25	30	37	42	44	.00
14	46	22	39	32	36	28	25	31	38	42	44	.00
15	46	39	39	32	36	28	25	31	38	42	44	.00
16	46	39	39	32	36	28	25	31	37	41	42	.00
17	46	39	39	34	36	28	24	34	37	43	45	.00
18	46	39	38	36	36	28	24	34	38	41	44	.00
19	46	39	37	37	30	28	24	33	37	41	44	.00
20	46	39	37	38	8.9	28	18	34	37	42	41	.00
21	46	39	37	38	.00	28	6.5	35	36	42	40	.00
22	46	39	38	38	7.0	28	.00	34	36	42	38	.00
23	46	39	39	38	18	28	3.5	35	37	42	40	.00
24	46	39	39	34	22	28	7.0	37	37	42	40	.00
25	46	39	39	34	18	28	10	35	38	42	40	.00
26	46	39	39	38	15	28	16	36	37	41	40	.00
27	44	39	39	38	15	28	20	35	37	40	39	.00
28	42	39	39	38	18	28	20	36	38	41	40	.00
29	18	68	39	38	---	30	22	35	38	40	40	.00
30	28	72	39	38	---	33	23	36	38	40	40	.00
31	37	---	39	38	---	33	---	35	---	40	39	---
TOTAL	1407	986.60	1154	1119	804.90	692.00	744.00	972	989	1250	1255	177.91
MEAN	45.4	32.9	37.2	36.1	28.7	22.3	24.8	31.4	33.0	40.3	40.5	5.93
MAX	50	72	39	39	38	33	39	37	38	43	45	40
MIN	18	.00	19	23	.00	.00	.00	23	13	37	23	.00
AC-FT	2790	1960	2290	2220	1600	1370	1480	1930	1960	2480	2490	353

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

MEAN	42.4	36.3	42.5	38.6	34.3	35.4	38.3	53.6	57.3	49.5	43.9	40.4
MAX	74.7	59.3	70.2	77.7	79.0	75.8	81.5	85.2	86.0	81.9	56.0	51.3
(WY)	1990	1992	1994	1990	1991	1990	1990	1992	1992	1993	1995	1993
MIN	16.2	2.20	4.40	.023	.000	.000	3.52	24.3	33.0	36.2	30.4	5.93
(WY)	1997	2000	1997	1997	1997	2000	1999	2000	2001	1990	1990	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	11153.64		11551.41			
ANNUAL MEAN	30.5		31.6		42.8	
HIGHEST ANNUAL MEAN					59.8	1990
LOWEST ANNUAL MEAN					23.7	2000
HIGHEST DAILY MEAN	72	Nov 30	72	Nov 30	89	Oct 17 1989
LOWEST DAILY MEAN	.00	Jan 1	.00	Nov 7	.00	Feb 4 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 25	.00	Sep 13	.00	Feb 4 1990
ANNUAL RUNOFF (AC-FT)	22120		22910		30990	
10 PERCENT EXCEEDS	50		44		77	
50 PERCENT EXCEEDS	39		37		45	
90 PERCENT EXCEEDS	.00		5.3		.70	

11295250 COLLIERVILLE POWERPLANT NEAR MURPHYS, CA

LOCATION.—Lat 38°08'33", long 120°22'39", in NE 1/4 SE 1/4 sec.1, T.3 N., R.14 E., Calaveras County, Hydrologic Unit 18040010, 800 ft upstream from Stanislaus River, and 4.4 mi east of Murphys.

PERIOD OF RECORD.—February 1990 to current year.

GAGE.—Pressure-differential sensors in powerplant penstocks. Elevation of powerplant is 1,120 ft above sea level, from topographic map.

REMARKS.—Flow is diverted from McKay's Point Reservoir (station 11295260) through Collierville Tunnel to the powerplant. A portion of the flow in the tunnel is diverted to Utica Canal (station 11295240) through a pressure tap near Mill Creek in SW 1/4 SW 1/4 sec.17, T.4 N., R.15 E. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 1,610 ft^3/s, May 8, 2000; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	12	180	.32	74	62	256	918	131	.00	116	24
2	220	16	31	120	19	62	658	1010	.00	174	112	105
3	235	97	195	200	5.9	20	329	893	.00	122	130	119
4	203	55	260	106	126	65	379	605	22	4.1	74	63
5	216	146	412	33	69	220	301	409	96	5.9	39	170
6	218	29	383	.00	79	410	229	558	146	261	89	55
7	41	40	496	194	167	154	84	807	115	.00	237	173
8	46	71	753	38	143	41	.00	707	358	.03	377	31
9	226	35	640	47	56	142	283	741	37	231	88	75
10	55	137	563	88	11	2.0	223	805	.11	33	20	184
11	108	192	1020	115	3.6	46	60	810	106	69	14	261
12	125	190	580	17	89	145	312	330	88	116	.00	238
13	100	214	471	.00	122	299	226	509	132	186	13	153
14	57	166	493	135	98	65	177	585	197	52	97	110
15	101	286	190	87	137	85	.30	503	269	5.2	151	.00
16	252	397	65	103	112	182	417	419	15	104	175	22
17	175	387	360	112	8.1	133	522	306	.00	98	427	86
18	276	155	355	69	85	81	408	515	116	184	60	108
19	221	471	209	53	35	460	566	249	113	147	56	189
20	283	532	223	.00	74	409	575	88	152	143	27	132
21	292	337	163	182	179	345	265	386	227	.14	.00	134
22	130	353	96	81	72	374	487	236	196	72	103	52
23	192	228	54	72	102	614	668	340	.00	280	189	94
24	308	249	203	28	22	415	728	198	.04	115	216	109
25	218	383	185	184	90	561	1060	46	63	49	61	218
26	274	538	92	35	101	882	1080	.00	85	139	.00	122
27	417	462	59	2.0	149	318	1050	18	219	128	205	115
28	230	405	110	87	175	650	924	2.8	299	23	167	116
29	231	439	41	97	---	794	375	28	127	.00	49	141
30	217	364	.72	107	---	813	674	136	48	97	5.6	222
31	151	---	3.6	61	---	585	---	142	---	103	152	---
TOTAL	5918	7386	8886.32	2453.32	2403.6	9434.0	13316.30	13299.80	3357.15	2941.37	3449.60	3621.00
MEAN	191	246	287	79.1	85.8	304	444	429	112	94.9	111	121
MAX	417	538	1020	200	179	882	1080	1010	358	280	427	261
MIN	41	12	.72	.00	3.6	2.0	.00	.00	.00	.00	.00	.00
AC-FT	11740	14650	17630	4870	4770	18710	26410	26380	6660	5830	6840	7180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

MEAN	196	143	207	288	445	616	689	676	449	303	257	237
MAX	333	315	774	820	1170	1101	1240	1339	1340	897	544	364
(WY)	1997	1997	1997	1997	1997	1995	1995	1995	1998	1995	1998	1997
MIN	49.5	40.2	25.3	32.3	9.79	140	309	50.6	55.5	94.7	104	114
(WY)	1993	1992	1992	1992	1991	1991	1994	1992	1992	1994	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	142809.82		76466.46			
ANNUAL MEAN	390		209		390	
HIGHEST ANNUAL MEAN					696	1995
LOWEST ANNUAL MEAN					115	1992
HIGHEST DAILY MEAN	1610	May 8	1080	Apr 26	1610	May 8 2000
LOWEST DAILY MEAN	.00	Jan 8	.00	Jan 6	.00	Feb 10 1990
ANNUAL SEVEN-DAY MINIMUM	56	Nov 1	44	Dec 26	.00	Feb 7 1991
ANNUAL RUNOFF (AC-FT)	283300		151700		282500	
10 PERCENT EXCEEDS	808		518		997	
50 PERCENT EXCEEDS	326		136		237	
90 PERCENT EXCEEDS	59		13		3.0	

11295260 MCKAYS POINT RESERVOIR NEAR AVERY, CA

LOCATION.—Lat 38°14'01", long 120°17'30", in NE 1/4 NW 1/4 sec.2, T.4 N., R.15 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank at outlet structure near upstream face of McKay's Point Dam on North Fork Stanislaus River, and 4.6 mi northeast of Avery.

DRAINAGE AREA.—166 mi^2.

PERIOD OF RECORD.—February 1990 to current year.

REVISED RECORDS.—WDR CA-92-3: 1992 (M).

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Calaveras County Water District).

REMARKS.—Reservoir is formed by concrete arch-type dam completed in July 1989. Usable capacity, 1,928 acre-ft, between elevations 3,280.0 ft, minimum operating head, and 3,370.0 ft, crest of spillway. Water is diverted from reservoir through tunnel to Utica Canal (station 11295240) and Collierville Powerplant (station 11295250, near the confluence of the middle and north forks of the Stanislaus River). Released water is used for fishery maintenance. New capacity table started on Sept. 1, 1991, based on inflow-outflow computations. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 2,572 acre-ft, Jan. 1, 1997, elevation, 3,379.9 ft; minimum, 258 acre-ft, Dec. 3, 1999, elevation, 3,279.66 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 2,140 acre-ft, July 8, elevation, 3,366.79 ft; minimum, 307 acre-ft, Dec. 1, elevation, 3,284.89 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on inflow-outflow computations provided by Calaveras County Water District in September 1991)

3,280	320	3,320	869	3,360	1,921	3,380	2,575
3,300	480	3,340	1,325	3,370	2,248		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	1710	307	1740	1380	1270	1680	1840	1310	1760	2040	1810
2	1730	1780	410	1660	1450	1310	1570	1570	1530	1630	2010	1810
3	1760	1740	586	1460	1510	1450	1660	1040	1750	1600	1950	1740
4	1660	1750	1310	1430	1390	1540	1490	909	1930	1820	1980	1800
5	1570	1580	1660	1530	1390	1480	1370	1310	1990	2010	2040	1680
6	1480	1660	1740	1720	1390	988	1340	1540	1970	1730	2050	1800
7	1710	1730	1690	1540	1220	962	1570	1400	2040	1950	1810	1710
8	1880	1790	1220	1670	1040	1220	1950	1610	1630	2140	1270	1900
9	1670	1920	1390	1740	1350	1300	1750	1690	1810	1910	1450	2010
10	1840	1890	1730	1740	1570	1570	1630	1490	2010	2040	1610	1910
11	1850	1660	1010	1670	1730	1650	1830	1260	2020	2090	1740	1680
12	1820	1420	893	1780	1680	1590	1590	1810	2070	2050	1930	e1480
13	1840	1170	1180	1920	1500	1260	1530	1870	2040	1900	2050	e1410
14	1950	1200	1190	1810	1400	1410	1610	1670	1890	1990	2030	1440
15	1970	1340	1350	1770	1240	1530	2050	1510	1600	2120	1920	1700
16	1710	1510	1720	1700	1120	1440	1840	1470	1780	2120	1750	1910
17	1700	1560	1520	1580	1240	1530	1580	1560	1990	2110	1110	1980
18	1650	2020	1320	1550	1200	1810	1630	1190	1970	1960	1260	2020
19	1680	1820	1400	1580	1280	1510	1720	1240	1970	1880	1550	1930
20	1610	1340	1410	1730	1320	1450	1510	1550	1890	1770	1890	1890
21	1510	1340	1530	1520	1210	1560	1770	1250	1660	1950	2070	1880
22	1720	1360	1550	1470	1310	1720	1680	1160	1490	2000	2040	2010
23	1820	1570	1700	1480	1300	1420	1420	839	1710	1670	1880	2070
24	1700	1770	1500	1630	1470	1530	1460	701	1920	1640	1650	2080
25	1760	1730	1340	1440	1500	1900	1230	851	1980	1720	1710	e1940
26	1730	1460	1310	1500	1480	1410	1060	1080	2000	1730	1910	1960
27	1420	1360	1290	1630	1390	1750	855	1220	1800	1760	1690	1990
28	1410	1130	1220	1600	1240	1620	756	1400	1450	1910	1540	2020
29	1590	658	1240	1500	---	1350	1530	1530	1420	2100	1630	2010
30	1610	426	1400	1420	---	895	1800	1460	1540	2080	1780	1860
31	1560	---	1570	1440	---	963	---	1340	---	2080	1670	---
MAX	1970	2020	1740	1920	1730	1900	2050	1870	2070	2140	2070	2080
MIN	1410	426	307	1420	1040	895	756	701	1310	1600	1110	1410
a	3348.68	3296.20	3348.99	3344.47	3336.98	3325.28	3356.39	3341.04	3347.92	3365.02	3352.41	3358.49
b	-140	-1134	+1144	-130	-200	-277	+837	-460	+200	+540	-410	+190

CAL YR 2000 MAX 2287 MIN 307 b -70
WTR YR 2001 MAX 2140 MIN 307 b +160

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11295270 NORTH FORK STANISLAUS RIVER BELOW MCKAYS POINT DAM, NEAR AVERY, CA

LOCATION.—Lat 38°13'58", long 120°17'33", in NE 1/4 NW 1/4 sec.2, T.4 N., R.15 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, at McKay's Point Dam, and 4.5 mi northeast of Avery.

DRAINAGE AREA.—166 mi^2.

PERIOD OF RECORD.—August 1989 to current year.

REVISED RECORDS.—WDR CA-91-3: 1990.

GAGE.—Acoustic-flow meter and water-stage recorder on McKay's Point Reservoir (station 11295260). August 1989 to September 1992 at site 500 ft downstream at different datum. Elevation of gage is 3,280 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Union and Utica Reservoirs, Lake Alpine (stations 11293350, 11293370, and 11293460), New Spicer Meadow Reservoir and McKay's Point Reservoir (stations 11293770 and 11295260) with combined capacity, 200,770 acre-ft. Collierville Tunnel diverts at McKay's Point Reservoir to Utica Canal (station 11295240) and Collierville Powerplant (station 11295250). Discharge, including extremes, represents flow through dam's release valve, mini-hydro generator, and flow over spillway. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 28,000 ft^3/s, Jan. 2, 1997; minimum daily, 3.4 ft^3/s, Nov. 25, 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	19	19	18	18	18	18	18	18	22	23
2	20	20	19	19	20	18	18	18	18	e18	22	23
3	20	20	19	19	20	18	19	18	18	18	22	23
4	20	20	19	19	18	18	19	18	18	19	22	25
5	20	20	19	19	18	18	19	18	18	19	22	24
6	20	20	19	19	18	18	19	18	18	19	22	24
7	20	20	19	19	18	18	19	18	18	19	22	24
8	20	20	19	19	21	18	19	18	18	19	22	24
9	20	20	19	19	19	18	19	18	18	19	22	24
10	20	20	19	19	18	18	19	18	18	20	23	24
11	20	20	19	19	18	18	19	18	18	20	23	24
12	20	20	19	19	18	18	19	18	18	20	23	24
13	20	20	19	19	18	18	19	18	18	20	23	26
14	20	20	19	19	18	18	19	18	18	20	23	25
15	24	20	19	19	18	18	19	18	18	20	24	23
16	22	20	19	21	18	18	19	18	18	20	24	23
17	20	21	19	21	18	18	19	18	18	21	24	24
18	20	22	19	21	18	18	19	18	18	21	25	24
19	20	22	19	21	18	18	19	18	18	21	25	23
20	19	22	19	21	18	18	19	18	18	21	25	23
21	20	22	19	21	18	18	19	18	18	21	25	23
22	20	22	19	19	18	18	19	18	18	21	25	23
23	20	22	19	18	18	18	19	18	18	21	24	23
24	20	22	19	19	18	18	19	18	18	22	25	23
25	20	22	19	18	18	18	18	19	18	22	25	23
26	24	22	19	18	18	18	18	18	18	22	25	21
27	23	20	19	18	18	18	18	18	18	22	25	22
28	20	19	19	18	19	18	18	18	18	22	25	22
29	20	19	19	18	---	18	18	18	18	22	25	22
30	20	19	19	18	---	18	18	18	18	22	25	22
31	20	---	19	18	---	18	---	18	---	22	25	---
TOTAL	632	616	589	593	513	558	562	559	540	631	734	701
MEAN	20.4	20.5	19.0	19.1	18.3	18.0	18.7	18.0	18.0	20.4	23.7	23.4
MAX	24	22	19	21	21	18	19	19	18	22	25	26
MIN	19	19	19	18	18	18	18	18	18	18	22	21
AC-FT	1250	1220	1170	1180	1020	1110	1110	1110	1070	1250	1460	1390

e Estimated.

11295270 NORTH FORK STANISLAUS RIVER BELOW MCKAYS POINT DAM, NEAR AVERY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.0	20.6	35.3	159	28.4	44.7	34.7	74.4	26.8	19.9	20.3	22.0
MAX	27.6	25.9	210	1622	102	253	189	338	63.5	23.1	24.5	27.5
(WY)	1992	1994	1997	1997	1996	1995	1995	1995	1995	1994	1994	1991
MIN	19.1	6.06	5.55	7.93	17.4	15.8	18.0	18.0	18.0	18.0	10.6	18.2
(WY)	1996	1990	1990	1990	1990	1990	1999	1999	2000	1999	1989	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	9042		7228			
ANNUAL MEAN	24.7		19.8		42.7	
HIGHEST ANNUAL MEAN					173	1997
LOWEST ANNUAL MEAN					16.9	1990
HIGHEST DAILY MEAN	698	May 8	26	Sep 13	21600	Jan 2 1997
LOWEST DAILY MEAN	18	Jan 4	18	Jan 23	3.4	Nov 25 1989
ANNUAL SEVEN-DAY MINIMUM	18	Jan 26	18	Jan 25	4.2	Nov 15 1989
MAXIMUM PEAK FLOW			26	Sep 13	28000	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	17930		14340		30950	
10 PERCENT EXCEEDS	20		23		24	
50 PERCENT EXCEEDS	19		19		19	
90 PERCENT EXCEEDS	18		18		18	

11295300 NORTH FORK STANISLAUS RIVER BELOW BEAVER CREEK, NEAR HATHAWAY PINES, CA

LOCATION.—Lat 38°12'26", long 120°18'58", in SW 1/4 SW 1/4 sec.10, T.4 N., R.15 E., Calaveras County, Hydrologic Unit 18040010, Stanislaus National Forest, at confluence with Beaver Creek, and 2.8 mi northeast of Hathaway Pines.

DRAINAGE AREA.—224 mi^2.

PERIOD OF RECORD.—February 1990 to current year.

REVISED RECORD.—WDR CA-91-3: 1990.

GAGE.—Discharge computed as the sum of North Fork Stanislaus River below McKay's Point Dam (station 11295270) and Beaver Creek below diversion dam (station 11295230). Elevation of gage is 2,230 ft above sea level, from topographic map.

REMARKS.—Records consist of release and spill from McKay's Point Reservoir (station 11295260) and Beaver Creek Diversion Reservoir (station 11295220). See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Northern California Power Agency, 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, 25,200 ft^3/s, Jan. 2, 1997; minimum daily, 5.1 ft^3/s, December 22, 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	33	31	29	30	33	38	38	38	27	27	27
2	27	32	31	29	30	34	37	38	38	27	27	27
3	27	31	30	29	32	33	39	38	37	26	27	27
4	27	31	30	29	32	39	39	38	36	27	27	29
5	27	31	30	29	35	42	39	38	35	27	27	28
6	27	30	29	29	35	38	39	38	35	27	27	28
7	27	30	29	29	33	38	39	38	34	28	27	28
8	27	30	29	31	33	38	39	38	33	28	27	28
9	28	30	29	30	33	38	39	38	33	27	26	28
10	34	31	29	32	29	38	39	38	32	27	27	28
11	32	31	29	33	30	38	39	38	32	27	27	28
12	e29	30	31	33	32	38	39	38	32	27	27	e28
13	28	30	30	32	33	38	39	38	32	27	27	e30
14	28	30	33	31	32	38	39	38	31	27	27	e29
15	32	30	36	30	32	38	39	38	31	27	e32	27
16	30	30	33	31	31	38	39	38	30	27	28	27
17	28	30	32	31	31	38	39	38	30	28	28	e28
18	28	32	31	33	32	38	39	38	30	28	29	28
19	28	32	31	33	34	38	39	38	29	27	29	27
20	27	32	31	32	35	38	39	38	29	27	30	27
21	28	32	31	32	36	38	39	38	29	27	30	27
22	28	32	31	30	37	38	39	38	28	27	30	27
23	28	32	30	30	35	38	39	38	28	27	28	27
24	28	32	30	30	34	38	39	38	28	28	29	27
25	28	32	30	32	35	41	38	39	28	28	29	31
26	e29	32	30	31	35	38	38	38	28	28	29	27
27	e29	30	29	31	34	38	38	38	28	27	29	27
28	32	29	29	30	34	38	38	38	29	27	29	27
29	59	33	29	30	---	38	38	38	28	27	29	27
30	38	34	29	29	---	38	38	38	27	27	e29	27
31	34	---	29	30	---	38	---	38	---	27	27	---
TOTAL	929	934	941	950	924	1172	1161	1179	938	843	871	831
MEAN	30.0	31.1	30.4	30.6	33.0	37.8	38.7	38.0	31.3	27.2	28.1	27.7
MAX	59	34	36	33	37	42	39	39	38	28	32	31
MIN	27	29	29	29	29	33	37	38	27	26	26	27
AC-FT	1840	1850	1870	1880	1830	2320	2300	2340	1860	1670	1730	1650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

MEAN	29.9	32.5	66.7	258	71.9	106	82.7	135	59.7	32.7	29.7	29.3
MAX	33.5	42.3	394	2233	223	533	374	629	192	40.2	36.7	34.7
(WY)	1992	1999	1997	1997	1996	1995	1995	1995	1998	1998	1998	1998
MIN	25.9	25.7	23.0	23.7	27.0	33.4	36.1	34.7	27.7	27.2	26.1	25.9
(WY)	1991	1991	1991	1991	1991	1990	1990	1992	1992	2001	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	16112		11673			
ANNUAL MEAN	44.0		32.0		80.5	
HIGHEST ANNUAL MEAN					275	1997
LOWEST ANNUAL MEAN					31.7	1992
HIGHEST DAILY MEAN	1160	Feb 14	59	Oct 29	25200	Jan 2 1997
LOWEST DAILY MEAN	27	Aug 7	26	Jul 3	5.1	Dec 22 1994
ANNUAL SEVEN-DAY MINIMUM	27	Oct 1	27	Jun 30	22	Dec 25 1990
ANNUAL RUNOFF (AC-FT)	31960		23150		58310	
10 PERCENT EXCEEDS	39		38		70	
50 PERCENT EXCEEDS	34		31		35	
90 PERCENT EXCEEDS	28		27		27	

e Estimated.

11295900 PINECREST LAKE AT PINECREST, CA

LOCATION (REVISED).—Lat 38°11'59", long 119°59'11", in NE 1/4 SW 1/4 sec.15, T.4 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on south side of intake tower, 400 ft upstream from dam on South Fork Stanislaus River, and 0.7 mi north of Pinecrest.

DRAINAGE AREA.—26.5 mi^2.

PERIOD OF RECORD.—October 1985 to current year. Unpublished records for water years 1981–85 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder since July 14, 1992. Oct. 1, 1985, to July 13, 1992, nonrecording gage read once daily. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete-faced, rockfill dam, completed in 1916; storage began in 1916. Capacity, 18,312 acre-ft, between elevations 5,498.7 ft, outlet drain, and 5,617.5 ft, top of flash boards in spillway. Released water flows down South Fork Stanislaus River to diversion dam for Philadelphia Canal (station 11297000) for use at Spring Gap Powerplant on Middle Fork Stanislaus River. Figures given, including extremes, represent total contents. Records from July 14, 1992, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 18,582 acre-ft, June 5, 1997, elevation, 5,618.39 ft; minimum, 2,010 acre-ft, Mar. 16, 2001, elevation, 5,535.14 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 18,400 acre-ft, May 31–June 4, maximum elevation, 5,617.94 ft, June 1; minimum, 2,010 acre-ft, Mar. 16, elevation, 5,535.14 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated 1938)

5,520	792	5,550	3,534	5,570	6,395	5,600	13,537
5,530	1,558	5,560	4,738	5,580	8,576	5,618.5	18,615
5,540	2,475						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13000	8580	7340	4560	3460	2430	7120	14300	18400	17200	16500	14600
2	12800	8500	7300	4480	3430	2380	7500	14900	18400	17100	16500	14500
3	12700	8410	7260	4410	3420	2330	7710	15300	18400	17100	16500	14400
4	12600	8390	7160	4340	3440	2300	7850	15600	18400	17100	16400	14300
5	12500	8400	7050	4290	3470	2280	7930	16500	18300	17000	16400	14200
6	12400	8420	6950	4260	3470	2240	8010	16800	18300	17000	16300	14000
7	12200	8420	6840	4220	3460	2210	8060	17600	18300	17000	16300	13900
8	12100	8420	6730	4180	3440	2200	8090	18100	18300	17000	16200	13700
9	12000	8390	6630	4140	3410	2180	8120	18100	18300	16900	16200	13600
10	11900	8350	6520	4120	3380	2140	8130	18100	18300	17000	16100	13400
11	11800	8300	6420	4080	3350	2100	8150	18100	18300	17000	16100	13300
12	11600	8260	6320	4050	3310	2060	8170	18100	18200	16900	16000	13200
13	11500	8220	6220	4010	3260	2030	8200	18100	18200	16900	16000	13000
14	11400	8160	6130	3980	3210	2030	8230	18000	18100	16900	15900	12900
15	11300	8110	6060	3940	3150	2020	8310	18000	18000	16800	15800	12700
16	11100	8050	5980	3900	3100	2010	8470	18100	18000	16800	15700	12600
17	11000	8000	5900	3860	3040	2040	8690	18100	17900	16700	15700	12500
18	10800	7940	5810	3830	2990	2120	8940	18000	17800	16700	15600	12400
19	10600	7900	5730	3800	2940	2270	9210	18000	17700	16700	15500	12200
20	10400	7840	5650	3780	2890	2480	9400	18100	17600	16700	15500	12100
21	10200	7790	5560	3750	2840	2700	9550	18200	17500	16700	15400	12000
22	10100	7740	5460	3710	2790	2960	9720	18200	17500	16700	15400	11800
23	9900	7680	5380	3690	2740	3240	9990	18300	17400	16600	15300	11700
24	9720	7630	5280	3680	2690	3550	10400	18300	17400	16600	15200	11500
25	9550	7570	5190	3660	2640	3980	10900	18200	17400	16600	15100	11400
26	9390	7520	5090	3630	2590	4310	11500	18200	17300	16600	15100	11300
27	9220	7470	5000	3600	2530	4640	12100	18200	17300	16600	15000	11100
28	9070	7430	4910	3570	2480	5080	12600	18200	17300	16600	14900	11000
29	8990	7410	4820	3540	---	5580	13000	18200	17200	16600	14800	10900
30	8840	7380	4730	3510	---	6020	13600	18300	17200	16500	14700	10700
31	8700	---	4650	3480	---	6570	---	18400	---	16500	14700	---
MAX	13000	8580	7340	4560	3470	6570	13600	18400	18400	17200	16500	14600
MIN	8700	7380	4650	3480	2480	2010	7120	14300	17200	16500	14700	10700
a	5580.52	5574.66	5559.30	5549.53	5540.06	5570.87	5600.31	5617.90	5613.70	5610.35	5604.33	5588.95
b	-4400	-1320	-2730	-1170	-1000	+4090	+7030	+4800	-1200	-700	-1800	-4000

CAL YR 2000 MAX 18512 MIN 4336 b -146
WTR YR 2001 MAX 18400 MIN 2010 b -2400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11296500 SOUTH FORK STANISLAUS RIVER AT STRAWBERRY, CA

LOCATION.—Lat 38°11'51", long 120°00'27", in SW 1/4 SW 1/4 sec.16, T.4 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on right bank, 0.4 mi downstream from bridge on State Highway 108 at Strawberry, 0.6 mi downstream from Herring Creek, and 1.2 mi downstream from Pinecrest Lake.

DRAINAGE AREA.—44.8 mi^2.

PERIOD OF RECORD.—October 1911 to January 1917, August 1938 to current year. Monthly discharge only for October 1913 and yearly estimates for 1912–13, published in WSP 1315-A. Published as "near Confidence" 1911–13.

REVISED RECORDS.—WSP 1215: 1945(M). WSP 1515: 1916, 1943(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 5,235.1 ft above sea level (river-profile survey). October 1911 to January 1917, nonrecording gage at site 1 mi downstream at different datum.

REMARKS.—Low and medium flows regulated beginning in 1916 by Pinecrest Lake (station 11295900) 1.2 mi upstream. No diversion upstream from station. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 7,820 ft^3/s, Jan. 2, 1997, gage height, 12.34 ft, from rating curve extended above 1,100 ft^3/s on, basis of contracted-opening measurement of peak flow at bridge 0.3 mi downstream from station; minimum daily, 1.3 ft^3/s, Nov. 22, 1946.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	78	33	53	30	44	108	214	200	24	16	40
2	75	64	32	51	30	43	86	186	172	23	16	40
3	68	64	32	45	30	43	62	141	115	23	16	40
4	68	21	54	45	31	44	60	146	91	22	16	61
5	67	8.0	60	33	31	45	62	177	77	23	16	73
6	67	8.0	60	26	31	51	63	202	71	23	16	73
7	67	8.2	59	26	31	54	65	250	67	24	16	73
8	67	8.4	58	29	32	54	69	475	61	23	16	73
9	67	24	58	32	38	54	61	753	56	23	16	72
10	67	34	58	31	39	54	62	710	59	25	16	71
11	68	30	58	31	38	53	61	746	65	24	16	70
12	67	33	58	32	38	56	62	752	64	23	16	69
13	67	33	58	31	40	58	63	663	64	22	16	69
14	67	33	58	31	43	60	62	616	65	21	15	72
15	66	33	58	31	45	63	63	542	65	21	28	78
16	86	33	57	31	46	63	66	607	64	20	29	43
17	95	33	57	31	45	63	72	619	65	20	29	70
18	95	33	57	31	45	60	74	556	66	19	29	64
19	95	33	57	31	46	61	66	540	66	18	29	64
20	94	33	57	31	46	62	56	550	67	18	29	66
21	93	32	56	31	45	63	51	496	65	18	29	66
22	92	32	56	31	45	60	49	543	27	18	34	66
23	91	32	56	31	45	59	57	518	27	17	39	65
24	93	32	56	31	45	62	83	477	27	17	37	65
25	95	32	56	31	45	86	125	417	26	17	37	65
26	95	32	56	31	44	70	153	351	26	17	38	65
27	95	32	55	30	44	67	163	292	26	17	41	65
28	95	29	54	30	44	81	155	248	26	16	40	64
29	96	29	54	30	---	96	145	168	25	16	40	64
30	95	33	54	30	---	92	181	167	24	16	40	64
31	94	---	53	30	---	104	---	174	---	16	40	---
TOTAL	2539	959.6	1685	1018	1112	1925	2505	13296	1919	624	811	1930
MEAN	81.9	32.0	54.4	32.8	39.7	62.1	83.5	429	64.0	20.1	26.2	64.3
MAX	96	78	60	53	46	104	181	753	200	25	41	78
MIN	66	8.0	32	26	30	43	49	141	24	16	15	40
AC-FT	5040	1900	3340	2020	2210	3820	4970	26370	3810	1240	1610	3830

11296500 SOUTH FORK STANISLAUS RIVER AT STRAWBERRY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.1	52.5	58.6	56.4	54.3	67.9	132	421	381	114	49.1	59.7
MAX	121	344	338	429	229	212	386	874	1066	683	127	99.2
(WY)	1983	1951	1951	1997	1982	1986	1982	1969	1983	1983	1983	1968
MIN	6.43	12.0	6.30	11.0	5.91	5.24	29.0	36.8	37.3	9.17	12.8	8.09
(WY)	1945	1943	1969	1987	1987	1977	1977	1977	1992	1977	1988	1984

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	45301.6		30323.6			
ANNUAL MEAN	124		83.1		126	
HIGHEST ANNUAL MEAN					259	1983
LOWEST ANNUAL MEAN					26.6	1977
HIGHEST DAILY MEAN	1270	May 8	753	May 9	4680	Jan 2 1997
LOWEST DAILY MEAN	8.0	Nov 5	8.0	Nov 5	1.3	Nov 22 1946
ANNUAL SEVEN-DAY MINIMUM	14	Aug 1	16	Aug 8	2.3	Nov 9 1942
MAXIMUM PEAK FLOW			970	May 12	7820	Jan 2 1997
MAXIMUM PEAK STAGE			4.76	May 12	12.34	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	89860		60150		91200	
10 PERCENT EXCEEDS	336		145		326	
50 PERCENT EXCEEDS	57		55		61	
90 PERCENT EXCEEDS	17		21		21	

11297200 SOUTH FORK STANISLAUS RIVER NEAR STRAWBERRY, CA

LOCATION.—Lat 38°10'40", long 120°02'45", in NW 1/4 NW 1/4 sec.30, T.4 N., R.18 E., Tuolumne County, Hydrologic Unit 18040010, on right bank, 400 ft downstream from diversion dam, and 2.8 mi southwest of Strawberry.

DRAINAGE AREA.—48.5 mi^2.

PERIOD OF RECORD.—October 1985 to current year (low-flow records only). Unpublished records for water years 1970, 1976–85 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 4,915 ft above sea level, from topographic map.

REMARKS.—No records computed above 50 ft^3/s. Flow regulated by Pinecrest Lake (station 11295900). Most of the water is diverted at diversion dam 400 ft upstream to Philadelphia Canal (station 11297000). See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	35	4.8	25	4.7	4.6	---	---	---	7.4	7.6	44
2	18	37	4.8	27	4.7	4.7	39	---	---	7.5	8.1	44
3	8.6	37	4.7	25	4.8	4.5	8.3	---	---	7.3	8.1	44
4	8.3	15	24	24	5.0	4.6	5.7	---	---	7.3	8.2	---
5	8.0	6.4	32	15	5.1	4.7	6.3	---	34	7.5	8.1	---
6	7.7	6.3	32	5.5	4.6	4.8	6.8	---	26	7.4	8.1	---
7	7.3	6.6	32	5.4	5.4	4.8	9.8	---	21	7.4	7.9	---
8	7.3	6.9	32	5.1	5.6	4.7	14	---	15	7.3	8.4	---
9	8.0	6.4	31	4.9	4.9	4.9	7.0	---	10	7.3	8.5	---
10	8.6	4.6	31	4.8	6.8	4.8	6.4	---	8.7	7.4	7.7	---
11	7.5	4.7	31	5.7	7.4	4.8	4.9	---	8.4	7.3	7.4	---
12	7.9	4.7	31	4.9	5.4	4.8	7.0	---	7.7	7.2	7.4	50
13	8.7	4.7	31	4.7	4.9	4.8	6.2	---	7.7	7.3	7.3	50
14	8.6	4.7	31	4.7	4.6	6.0	6.0	---	8.0	7.2	7.3	---
15	8.4	4.8	31	4.8	4.7	6.9	6.5	---	8.0	7.2	26	---
16	25	4.8	30	e4.8	4.6	7.5	8.8	---	7.5	7.2	30	---
17	37	4.9	30	e4.8	4.5	7.9	14	---	8.4	7.5	30	---
18	36	4.9	29	4.8	4.7	5.5	18	---	8.7	7.6	30	---
19	35	4.8	29	4.9	4.7	6.7	14	---	8.0	7.4	30	47
20	35	5.0	29	4.9	4.7	7.0	6.2	---	9.4	7.4	30	47
21	34	4.9	28	4.8	4.7	8.8	6.5	---	9.5	7.4	30	47
22	32	4.8	28	4.8	4.7	5.7	4.8	---	7.4	7.7	34	46
23	32	4.7	28	e4.8	4.6	4.7	5.5	---	7.5	7.4	45	46
24	34	4.7	28	e4.8	4.7	7.5	27	---	7.4	7.3	40	45
25	40	4.7	27	e4.9	4.7	34	---	---	7.5	7.5	40	45
26	42	4.7	27	e4.9	4.7	18	---	---	7.5	7.4	41	44
27	37	4.9	27	4.9	4.8	13	---	---	7.4	7.4	45	44
28	41	4.9	26	4.7	4.5	27	---	---	7.5	8.2	45	44
29	50	4.7	26	4.7	---	46	---	---	7.4	7.3	44	43
30	44	4.7	26	4.8	---	40	---	---	7.4	7.5	44	43
31	35	---	25	4.6	---	---	---	---	---	7.6	44	---
TOTAL	742.9	256.9	826.3	243.4	139.2	---	---	---	---	229.8	738.1	---
MEAN	24.0	8.56	26.7	7.85	4.97	---	---	---	---	7.41	23.8	---
MAX	50	37	32	27	7.4	---	---	---	---	8.2	45	---
MIN	7.3	4.6	4.7	4.6	4.5	---	---	---	---	7.2	7.3	---
AC-FT	1470	510	1640	483	276	---	---	---	---	456	1460	---
a	3480	1290	1540	1380	1740	3220	3340	3530	2700	704	197	1180

CAL YR 2000 a 27980
WTR YR 2001 a 24300

e Estimated.
a Diversion, in acre-feet, to Philadelphia Canal (station 11297000), provided by Pacific Gas & Electric Co.

11297700 LYONS RESERVOIR NEAR LONG BARN, CA

LOCATION.—Lat 38°05'38", long 120°09'59", in SW 1/4 NE 1/4 sec.24, T.3 N., R.16 E., Tuolumne County, Hydrologic Unit 18040010, at left abutment of dam, and 1.6 mi west of Long Barn.

DRAINAGE AREA.—66.8 mi^2.

PERIOD OF RECORD.—October 1985 to current year. Unpublished records for 1981–85 water years are available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder. Prior to Dec. 10, 1990, nonrecording gage read three times weekly. Datum of gage is 4,134 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete arch dam completed in 1930; storage began in 1930. Usable capacity, 4,850 acre-ft, between gage heights 0.0 ft, invert of outlet, and 86.0 ft, top of spillway gates. Dead storage, 2.5 acre-ft. Part of the released water is diverted to Tuolumne Canal (station 11297500) near the base of the dam. Records from Dec. 10, 1990, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 observed, 6,292 acre-ft, June 4, 5, 7, 9, 10, 1989, gage height, 90.4 ft, maximum gage height, 90.47 ft, June 15, 2000; minimum observed, 832 acre-ft, Nov. 27, 1995, gage height, 48.51 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 5,550 acre-ft, June 1, 2, maximum gage height, 90.26 ft, June 1; minimum, 1,210 acre-ft, Sept. 1–4, minimum gage height, 55.04 ft, Sept. 3.

Capacity table (gage height, in feet, and contents, in acre-feet)
(Based on survey by Pacific Gas & Electric Co. in 1996)

20	34.2	40	474	60	1,592	80	3,913
25	94.4	50	908	70	2,598	90	5,507
30	186						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	2020	1660	2510	2180	2110	3650	4130	5550	4260	2280	1210
2	1830	2060	1640	2530	2180	2120	3680	4130	5550	4210	2210	1210
3	1790	2100	1630	2560	2180	2100	3660	4080	5530	4140	2150	1210
4	1740	2120	1620	2570	2180	2150	3610	4060	5510	4080	2090	1210
5	1700	2110	1660	2590	2180	2330	3560	4080	5490	4020	2020	1220
6	1650	2100	1700	2590	2190	2420	3520	4110	5460	3960	1960	1230
7	1600	2080	1740	2570	2180	2490	3500	4160	5440	3900	1910	1240
8	1560	2070	1770	2570	2150	2570	3480	4360	5410	3840	1830	1250
9	1520	2050	1810	2550	2120	2630	3440	4550	5370	3780	1770	1260
10	1480	2040	1840	2550	2100	2680	3390	4550	5320	3720	1710	1270
11	1450	2030	1880	2540	2090	2720	3360	4590	5270	3650	1640	1270
12	1410	2010	1920	2510	2060	2750	3330	4610	5220	3590	1580	1280
13	1370	1980	1950	2480	2030	2790	3300	4520	5170	3530	1510	1280
14	1340	1950	2000	2470	2010	2820	3270	4470	5130	3460	1450	1290
15	1310	1930	2040	2450	2010	2850	3230	4500	5080	3390	1400	1310
16	1320	1910	2080	2440	2000	2880	3200	4800	5060	3330	1370	1290
17	1380	1890	2110	2420	1990	2920	3170	5090	5010	3270	1350	1270
18	1440	1870	2150	2410	1990	2950	3160	5130	4950	3200	1330	1290
19	1500	1850	2180	2400	2020	2990	3200	5150	4900	3140	1310	1310
20	1560	1830	2210	2390	2050	3040	3260	5220	4830	3070	1290	1330
21	1610	1810	2240	2370	2080	3080	3320	5220	4780	3010	1270	1350
22	1610	1790	2270	2360	2100	3130	3400	5350	4730	2940	1240	1360
23	1620	1770	2280	2360	2100	3170	3470	5490	4680	2870	1240	1380
24	1640	1750	2310	2350	2100	3210	3550	5500	4630	2810	1240	1400
25	1680	1730	2340	2330	2090	3300	3690	5450	4580	2750	1230	1430
26	1730	1710	2370	2310	2090	3380	3880	5370	4530	2700	1230	1440
27	1770	1690	2390	2280	2100	3420	4030	5430	4470	2630	1220	1460
28	1810	1670	2410	2240	2110	3470	4040	5520	4420	2570	1220	1480
29	1900	1670	2440	2220	---	3530	4030	5470	4370	2500	1220	1490
30	1950	1670	2470	2200	---	3570	4070	5440	4320	2430	1220	1500
31	1990	---	2490	2190	---	3600	---	5520	---	2340	1220	---
MAX	1990	2120	2490	2590	2190	3600	4070	5520	5550	4260	2280	1500
MIN	1310	1670	1620	2190	1990	2100	3160	4060	4320	2340	1220	1210
a	64.32	60.85	69.02	66.32	65.48	77.85	81.06	90.07	82.65	67.70	55.16	58.93
b	+150	-320	+820	-300	-80	+1490	+470	+1450	-1200	-1980	-1120	+280

CAL YR 2000 MAX 5587 MIN 1310 b +10
WTR YR 2001 MAX 5550 MIN 1210 b -340

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11298000 SOUTH FORK STANISLAUS RIVER NEAR LONG BARN, CA

LOCATION.—Lat 38°05'33", long 120°10'04", in NE 1/4 NW 1/4 sec.25, T.3 N., R.16 E., Tuolumne County, Hydrologic Unit 18040010, Stanislaus National Forest, on left bank, 600 ft downstream from Lyons Dam, 1.9 mi west of Long Barn, and 15 mi northeast of Sonora.

DRAINAGE AREA.—66.9 mi^2.

PERIOD OF RECORD.—October 1937 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

REVISED RECORDS.—WSP 1215: 1938(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder and rectangular weir. Elevation of gage is 4,175 ft above sea level (from topographic map). Prior to Sept. 30, 1997, at site 300 ft downstream at different datum.

REMARKS.—Flow regulated by Lyons Reservoir (station 11297700) 600 ft upstream and Pinecrest Lake (station 11295900). Tuolumne Canal (station 11297500) diverts at Lyons Dam. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 12,900 ft^3/s, Jan. 2, 1997, gage height, 13.03 ft, from rating curve extended above 2,400 ft^3/s, on basis of computation of peak flow over Lyons Dam; no flow at times in 1937–39, 1952.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.6	2.6	2.8	2.7	2.7	3.5	89	68	2.6	2.5	2.9
2	3.2	2.6	2.7	2.9	2.7	2.7	2.8	131	80	2.6	2.5	2.8
3	3.2	2.6	2.7	2.8	2.7	2.6	2.8	77	32	2.6	2.4	2.8
4	3.2	2.6	2.7	2.9	2.7	2.6	2.7	45	20	2.6	2.5	2.8
5	3.2	2.6	2.7	2.9	2.7	2.7	2.6	45	12	2.6	2.5	2.8
6	3.2	2.6	2.7	2.9	2.6	2.6	2.5	74	6.1	2.6	2.5	2.8
7	3.2	2.6	2.7	2.9	2.6	2.6	2.4	107	2.7	2.6	2.5	2.9
8	3.2	2.6	2.7	2.9	2.6	2.6	2.4	215	2.7	2.6	2.5	2.8
9	3.2	2.6	2.7	2.9	2.6	2.6	2.4	606	2.7	2.6	2.5	2.8
10	3.1	2.6	2.7	3.0	2.6	2.6	2.5	677	2.8	2.5	2.6	2.8
11	3.0	2.6	2.7	3.1	2.6	2.6	2.8	672	2.8	2.5	2.6	2.8
12	3.0	2.6	2.7	3.0	2.6	2.6	2.7	723	2.8	2.4	2.6	2.8
13	2.9	2.6	2.7	3.0	2.6	2.6	2.7	676	2.9	2.4	2.6	2.8
14	2.9	2.6	2.7	3.0	2.6	2.6	2.7	626	2.8	2.5	2.6	2.8
15	2.9	2.6	2.8	2.9	2.5	2.6	2.7	500	2.8	2.5	2.5	2.8
16	2.8	2.6	2.8	2.9	2.7	2.6	2.7	360	3.0	2.5	2.5	2.8
17	2.7	2.6	2.8	2.9	2.7	2.6	2.7	413	3.1	2.5	2.5	2.6
18	2.6	2.6	2.8	2.9	2.7	2.6	2.7	517	3.0	2.3	2.5	2.6
19	2.6	2.6	2.8	2.9	2.7	2.6	2.7	491	2.8	2.4	2.5	2.5
20	2.6	2.6	2.8	2.9	2.8	2.6	2.8	474	2.7	2.4	2.5	2.6
21	2.6	2.6	2.8	2.9	2.8	2.7	2.7	480	2.8	2.4	2.5	2.6
22	2.6	2.6	2.8	2.9	2.8	2.7	2.7	396	2.8	2.4	2.6	2.6
23	2.6	2.6	2.8	2.9	2.7	2.7	2.7	401	2.8	2.4	2.5	2.6
24	2.6	2.6	2.8	2.9	2.7	2.7	2.7	436	2.8	2.4	2.9	2.9
25	2.6	2.6	2.8	3.0	2.7	2.7	2.7	414	2.7	2.5	3.0	3.1
26	2.6	2.6	2.8	2.9	2.7	2.7	2.9	359	2.6	2.5	3.0	3.1
27	2.6	2.6	2.8	2.9	2.7	2.7	21	175	2.6	2.5	2.9	3.0
28	2.6	2.6	2.8	2.9	2.7	2.7	83	98	2.6	2.5	2.9	3.1
29	2.6	2.6	2.8	2.9	---	2.6	63	124	2.6	2.5	2.9	3.0
30	2.6	2.6	2.8	2.9	---	2.6	40	65	2.6	2.6	2.9	3.0
31	2.6	---	2.8	2.8	---	3.7	---	27	---	2.6	2.9	---
TOTAL	88.5	78.0	85.3	90.3	74.8	82.8	277.2	10493	284.6	77.6	81.4	84.3
MEAN	2.85	2.60	2.75	2.91	2.67	2.67	9.24	338	9.49	2.50	2.63	2.81
MAX	3.2	2.6	2.8	3.1	2.8	3.7	83	723	80	2.6	3.0	3.1
MIN	2.6	2.6	2.6	2.8	2.5	2.6	2.4	27	2.6	2.3	2.4	2.5
AC-FT	176	155	169	179	148	164	550	20810	565	154	161	167
a	1220	875	823	1060	992	1020	2240	2490	1990	2310	2370	2170

a Diversion, in acre-feet, to Tuolumne Canal (station 11297500), provided by Pacific Gas & Electric Co.

11298000 SOUTH FORK STANISLAUS RIVER NEAR LONG BARN, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.47	10.4	23.9	38.5	47.5	57.0	100	365	319	64.2	3.34	2.18
MAX	14.7	324	399	625	306	291	501	875	1042	602	37.7	5.45
(WY)	1983	1951	1951	1997	1982	1938	1982	1969	1998	1998	1983	1995
MIN	.000	.023	.077	.013	.000	.23	.97	1.02	1.00	.92	.83	.71
(WY)	1938	1939	1939	1939	1939	1939	1977	1977	1977	1949	1940	1949

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	45122.5		11797.8			
ANNUAL MEAN	123		32.3		85.5	
HIGHEST ANNUAL MEAN					234	1983
LOWEST ANNUAL MEAN					1.50	1977
HIGHEST DAILY MEAN	1280	May 9	723	May 12	6040	Jan 2 1997
LOWEST DAILY MEAN	2.6	Oct 18	2.3	Jul 18	.00	Oct 1 1937
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 18	2.4	Jul 18	.00	Oct 1 1937
MAXIMUM PEAK FLOW			775	May 12	12900	Jan 2 1997
MAXIMUM PEAK STAGE			4.43	May 12	13.03	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	89500		23400		61960	
ANNUAL DIVERSION (AC-FT) a	20120		19560			
10 PERCENT EXCEEDS	470		29		292	
50 PERCENT EXCEEDS	3.0		2.7		2.5	
90 PERCENT EXCEEDS	2.6		2.5		1.4	

a Diversion, in acre-feet, to Tuolumne Canal (station 11297500), provided by Pacific Gas & Electric Co.

11298700 ANGELS CREEK BELOW UTICA DITCH DIVERSION DAM, NEAR MURPHYS, CA

LOCATION.—Lat 38°07'51", long 120°29'03", in NW 1/4 NW 1/4 sec.7, T.3 N., R.14 E., Calaveras County, Hydrologic Unit 18040010, on right bank, 120 ft downstream from diversion dam, and 1.2 mi southwest of Murphys.

DRAINAGE AREA.—6.01 mi^2.

PERIOD OF RECORD.—October 1990 to September 1999, October 1, 2000, to September 30, 2001 (low-flow records only).

GAGE.—Water-stage recorder and 90° V-notch weir. Elevation of gage is 2,040 ft above sea level, from topographic map.

REMARKS.—No records computed above 2.5 ft^3/s. Flow consists of fishery release and spill over diversion dam. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were collected by Utica Power Authority, 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	2.1	2.5	2.2	2.2	2.0	.87	2.0	2.5	1.0	1.8	1.5
2	e2.0	2.1	---	2.2	2.3	2.1	.67	1.9	2.5	.98	1.7	1.4
3	e2.2	2.0	---	2.2	2.1	---	1.4	1.9	2.5	.96	1.7	1.4
4	e2.2	2.1	2.3	2.2	1.9	---	1.8	1.9	---	.96	1.2	1.4
5	e2.3	2.0	2.3	2.2	1.8	---	2.0	1.9	---	2.5	1.6	.73
6	e2.2	1.7	2.2	2.2	1.7	---	1.9	2.0	---	1.1	1.6	.00
7	e2.2	1.6	2.3	2.2	---	---	2.1	2.1	2.2	1.1	1.6	.00
8	e2.2	1.6	2.3	2.2	---	2.5	1.1	2.1	2.3	1.1	1.6	.00
9	e2.2	1.7	2.3	2.1	---	---	1.1	2.1	2.0	1.1	1.6	.00
10	e2.2	1.6	2.2	---	---	---	1.2	2.1	2.0	1.5	1.4	.00
11	e2.2	1.5	2.2	---	---	---	1.1	2.1	2.2	---	1.6	.00
12	e2.2	1.5	2.3	---	---	---	.97	2.1	2.2	1.9	1.6	.00
13	e2.2	1.6	2.1	2.0	2.1	2.2	1.5	2.1	2.2	1.9	1.6	.00
14	e2.2	1.6	2.0	2.0	1.9	2.3	1.9	2.2	2.2	1.9	1.6	.00
15	e2.2	1.9	1.9	2.1	1.9	2.3	2.4	2.2	2.2	1.9	1.6	.00
16	e2.2	2.2	1.8	2.3	1.8	2.3	---	2.3	2.2	---	1.6	.00
17	e2.2	2.1	1.8	2.1	2.1	2.2	---	2.0	2.1	---	1.6	.00
18	e2.2	2.0	1.8	1.7	---	2.2	---	2.1	2.2	2.0	1.5	.00
19	e2.2	2.2	1.7	1.3	---	2.4	---	1.9	2.2	2.0	1.5	.00
20	e2.2	2.3	1.7	1.1	---	2.3	---	1.8	2.2	1.9	1.5	.00
21	e2.2	2.2	1.7	1.2	---	2.3	2.2	2.0	1.9	1.9	1.5	.00
22	e2.2	2.1	1.5	1.1	---	2.3	2.2	2.1	1.4	2.0	1.4	.00
23	e2.2	2.0	1.4	---	---	2.2	2.0	---	1.1	1.9	1.4	.00
24	e2.1	1.9	1.4	---	---	2.0	1.9	1.9	1.1	2.0	1.4	.00
25	e2.1	1.9	1.4	1.9	---	2.3	2.2	1.8	1.0	2.0	1.4	.00
26	e2.2	1.9	1.4	1.8	---	2.4	2.2	1.9	1.1	1.9	1.4	.00
27	e2.2	2.0	1.5	1.6	---	2.5	1.8	1.9	1.0	1.9	1.4	.00
28	e2.2	2.0	1.6	1.6	2.3	2.3	1.1	1.9	1.1	1.8	1.4	.00
29	e2.4	2.0	1.9	1.6	---	1.7	2.0	1.9	1.1	1.9	1.5	.00
30	e2.1	1.9	2.1	1.9	---	1.2	2.0	2.1	1.1	---	1.5	.00
31	e2.1	---	2.1	2.2	---	.96	---	---	---	---	1.5	---
TOTAL	67.7	57.3	---	---	---	---	---	---	---	---	47.3	6.43
MEAN	2.18	1.91	---	---	---	---	---	---	---	---	1.53	.21
MAX	2.4	2.3	---	---	---	---	---	---	---	---	1.8	1.5
MIN	2.0	1.5	---	---	---	---	---	---	---	---	1.2	.00
AC-FT	134	114	---	---	---	---	---	---	---	---	94	13

e Estimated.

11299000 NEW MELONES RESERVOIR NEAR SONORA, CA

LOCATION.—Lat 37°57'02", long 120°30'49", in NW 1/4 SE 1/4 sec.11, T.1 N., R.13 E., Calaveras County, Hydrologic Unit 18040010, at right abutment of New Melones Dam on Stanislaus River, 0.1 mi downstream from the old Melones Dam, and 7.6 mi southwest of Sonora.

DRAINAGE AREA.—904 mi^2.

PERIOD OF RECORD.—1926 (year-end contents only, published in WSP 1315-A), June 1927 to current year. Prior to October 1970, published as Melones Reservoir at Melones Dam. October 1970 to September 1978, published as Melones Lake near Sonora.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 28, 1961, nonrecording gage, and Mar. 1, 1961, to Nov. 26, 1978, water-stage recorder at site on left side of old Melones Dam, at same datum.

REMARKS.—Reservoir is formed by earth and rockfill dam completed in November 1978. Dam is downstream from the original concrete dam which was completed in December 1926. Usable capacity, 2,420,000 acre-ft, between elevations 543.0 ft, invert entrance to outlet tunnel, and 1,088.0 ft, gross pool elevation. No dead storage. When elevation is above 808.0 ft, water is released through New Melones Powerplant (station 11299200) to Tulloch Reservoir (station 11299995) where it is used for irrigation. Records for the 1971 water year represent contents at 1630 hours. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD (Subsequent to completion of New Melones Dam in 1978).—Maximum contents, 2,400,000 acre-ft, July 8–10, 1983, elevation, 1,086.42 ft; minimum since reservoir first filled in July 1983, 83,630 acre-ft, Oct. 1, 1992, elevation, 721.15 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 1,926,000 acre-ft, Mar. 26, elevation, 1,045.50 ft; minimum, 1,481,000 acre-ft, Sept. 30, elevation, 1,001.07 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Army Corps of Engineers, dated September 1978)

700	53,900	760	160,500	880	611,500	1,000	1,471,000
710	66,950	780	212,300	900	723,000	1,020	1,662,000
720	81,800	800	272,800	920	846,500	1,040	1,867,000
730	98,530	820	342,400	940	982,600	1,060	2,087,000
740	117,200	840	421,800	960	1,132,000	1,088	2,420,000
750	137,800	860	511,200	980	1,295,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1803000	1823000	1848000	1875000	1875000	1896000	1919000	1874000	1798000	1713000	1622000	1536000
2	1804000	1825000	1851000	1875000	1875000	1898000	1916000	1872000	1796000	1710000	1620000	1533000
3	1804000	1826000	1853000	1875000	1875000	1898000	1913000	1870000	1791000	1707000	1617000	1530000
4	1805000	1827000	1853000	1875000	1875000	1900000	1911000	1868000	1789000	1705000	1615000	1528000
5	1805000	1829000	1854000	1875000	1876000	1904000	1909000	1865000	1786000	1702000	1612000	1526000
6	1805000	1829000	1854000	1875000	1875000	1907000	1907000	1862000	1784000	1699000	1609000	1523000
7	1804000	1829000	1856000	1875000	1876000	1909000	1905000	1860000	1781000	1696000	1607000	1521000
8	1803000	1830000	1858000	1876000	1875000	1910000	1903000	1857000	1779000	1694000	1604000	1519000
9	1803000	1830000	1859000	1876000	1876000	1911000	1901000	1855000	1776000	1690000	1602000	1517000
10	1803000	1831000	1861000	1878000	1877000	1912000	1900000	1853000	1773000	1687000	1598000	1515000
11	1803000	1831000	1861000	1878000	1879000	1913000	1899000	1851000	1771000	1684000	1596000	1513000
12	1804000	1832000	1864000	1878000	1879000	1914000	1899000	1848000	1768000	1680000	1593000	1512000
13	1806000	1833000	1865000	1879000	1880000	1915000	1896000	1846000	1765000	1676000	1590000	1509000
14	1807000	1832000	1867000	1879000	1881000	1916000	1894000	1843000	1762000	1673000	1587000	1507000
15	1808000	1832000	1868000	1879000	1881000	1916000	1892000	1840000	1760000	1670000	1583000	1505000
16	1809000	1833000	1868000	1879000	1882000	1917000	1890000	1836000	1757000	1667000	1580000	1503000
17	1808000	1833000	1869000	1879000	1883000	1918000	1888000	1832000	1753000	1663000	1578000	1500000
18	1808000	1834000	1870000	1880000	1884000	1919000	1887000	1829000	1751000	1660000	1575000	1498000
19	1808000	1836000	1871000	1879000	1885000	1919000	1885000	1827000	1748000	1657000	1572000	1497000
20	1807000	1837000	1871000	1876000	1885000	1919000	1884000	1823000	1746000	1655000	1570000	1495000
21	1805000	1837000	1873000	1875000	1886000	1921000	1882000	1822000	1743000	1652000	1567000	1494000
22	1806000	1839000	1874000	1874000	1888000	1921000	1882000	1820000	1739000	1650000	1564000	1492000
23	1807000	1839000	1875000	1874000	1889000	1921000	1881000	1819000	1736000	1647000	1561000	1491000
24	1809000	1840000	1875000	1874000	1891000	1921000	1881000	1816000	1733000	1644000	1558000	1489000
25	1810000	1841000	1875000	1875000	1893000	1923000	1881000	1814000	1730000	1641000	1555000	1488000
26	1812000	1842000	1875000	1875000	1895000	1926000	1880000	1813000	1727000	1639000	1552000	1487000
27	1814000	1844000	1876000	1875000	1896000	1925000	1881000	1810000	1724000	1636000	1550000	1484000
28	1816000	1846000	1876000	1875000	1896000	1924000	1880000	1807000	1721000	1633000	1547000	1483000
29	1819000	1847000	1876000	1874000	---	1923000	1878000	1804000	1719000	1629000	1543000	1482000
30	1821000	1848000	1876000	1874000	---	1923000	1876000	1802000	1716000	1627000	1541000	1481000
31	1822000	---	1876000	1874000	---	1921000	---	1799000	---	1624000	1538000	---
MAX	1822000	1848000	1876000	1880000	1896000	1926000	1919000	1874000	1798000	1713000	1622000	1536000
MIN	1803000	1823000	1848000	1874000	1875000	1896000	1876000	1799000	1716000	1624000	1538000	1481000
a	1035.73	1038.19	1040.81	1040.68	1042.74	1045.00	1040.88	1033.53	1025.43	1016.18	1007.21	1001.07
b	+18000	+26000	+28000	-2000	+22000	+25000	-45000	-77000	-83000	-92000	-86000	-57000
c	3053	1307	897	974	1141	2229	3160	7156	7950	7861	7468	5094
d	30240	.00	.00	18590	11790	29640	116600	159500	119800	126100	115600	80130

CAL YR 2000 b -5000
WTR YR 2001 b -323000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Total evaporation, in acre-feet, published as provided; not reviewed by U.S. Geological Survey.
d Discharge, in acre-feet, through New Melones Powerplant (station 11299200), provided by U.S. Bureau of Reclamation.

11299600 BLACK CREEK NEAR COPPEROPOLIS, CA

LOCATION.—Lat 37°57'40", long 120°36'51", in SE 1/4 SE 1/4, sec.2, T.1 N., R.12 E., Calaveras County, Hydrologic Unit 18040010, on left bank, 100 ft upstream from O'Byrnes Ferry Road Bridge, 1,300 ft upstream from Copper Creek, and 2.1 mi southeast of Copperopolis.

DRAINAGE AREA.—14.4 mi^2.

PERIOD OF RECORD.—August 1983 to current year.

REVISED RECORDS.—WDR CA-86-3: 1984(M).

GAGE.—Water-stage recorder. Datum of gage is 746.13 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,200 ft^3/s, Feb. 19, 1986, gage height, 9.10 ft, from rating curve extended above 2,500 ft^3/s on basis of contracted-opening measurement of peak flow; no flow at times 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. 11	1930	203	3.63	Mar. 5	1445	151	3.47
Feb. 24	1415	173	3.54				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.37	.30	.30	1.0	7.7	1.9	1.0	.00	.00	.00	.00
2	.00	.31	.30	.29	.97	8.2	1.8	.89	.00	.00	.00	.00
3	.00	.28	.30	.29	.91	7.2	1.8	.73	.00	.00	.00	.00
4	.00	.26	.27	.30	.90	22	1.8	.69	.00	.00	.00	.00
5	.00	.23	.26	.30	.85	107	1.8	.65	.00	.00	.00	.00
6	.00	.23	.26	.30	.83	46	2.0	.57	.00	.00	.00	.00
7	.00	.21	.26	.31	.87	23	7.6	.48	.00	.00	.00	.00
8	.00	.21	.26	1.2	.76	16	3.2	.43	.00	.00	.00	.00
9	.00	.23	.26	.94	1.4	13	2.1	.37	.00	.00	.00	.00
10	.00	.23	.26	1.7	4.2	11	1.9	.32	.00	.00	.00	.00
11	.00	.21	.26	3.5	59	8.7	1.9	.28	.00	.00	.00	.00
12	.00	.20	.36	1.4	28	7.1	1.9	.23	.00	.00	.00	.00
13	.00	.22	.30	1.0	11	6.0	1.8	.23	.00	.00	.00	.00
14	.00	.26	.43	.83	6.8	5.3	1.8	.21	.00	.00	.00	.00
15	.00	.25	.62	.73	5.1	4.9	1.8	.19	.00	.00	.00	.00
16	.00	.26	.42	.66	4.1	4.3	1.8	.20	.00	.00	.00	.00
17	.00	.25	.34	.61	3.6	3.9	1.8	.17	.00	.00	.00	.00
18	.00	.23	.32	.60	3.3	3.8	1.9	.16	.00	.00	.00	.00
19	.00	.24	.30	.57	5.9	3.6	2.8	.12	.00	.00	.00	.00
20	.00	.25	.30	.57	11	3.2	5.2	.09	.00	.00	.00	.00
21	.00	.26	.30	.57	11	3.1	7.5	.07	.00	.00	.00	.00
22	.00	.29	.30	.57	27	3.0	2.8	.06	.00	.00	.00	.00
23	.00	.28	.27	.62	22	2.9	2.2	.05	.00	.00	.00	.00
24	.00	.27	.27	4.8	72	3.0	2.0	.04	.00	.00	.00	.00
25	.00	.28	.27	4.2	41	4.5	1.8	.03	.00	.00	.00	.00
26	.00	.26	.26	10	18	3.3	1.6	.03	.00	.00	.00	.00
27	.48	.26	.26	2.9	12	3.2	1.5	.02	.00	.00	.00	.00
28	.34	.26	.27	1.8	9.4	2.9	1.3	.02	.00	.00	.00	.00
29	5.7	.37	.28	1.5	---	2.6	1.3	.02	.00	.00	.00	.00
30	1.0	.41	.29	1.3	---	2.3	1.2	.01	.00	.00	.00	.00
31	.50	---	.30	1.1	---	2.0	---	.00	---	.00	.00	---
TOTAL	8.02	7.87	9.45	45.76	362.89	344.7	71.8	8.36	0.00	0.00	0.00	0.00
MEAN	.26	.26	.30	1.48	13.0	11.1	2.39	.27	.000	.000	.000	.000
MAX	5.7	.41	.62	10	72	107	7.6	1.0	.00	.00	.00	.00
MIN	.00	.20	.26	.29	.76	2.0	1.2	.00	.00	.00	.00	.00
AC-FT	16	16	19	91	720	684	142	17	.00	.00	.00	.00

11299600 BLACK CREEK NEAR COPPEROPOLIS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.14	4.17	9.94	32.8	45.4	21.6	5.49	2.40	.47	.049	.000	.006
MAX	1.80	53.1	98.8	144	171	96.6	32.4	13.6	3.63	.46	.005	.11
(WY)	1992	1984	1997	1997	1998	1995	1998	1998	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.16	.62	.62	.17	.000	.000	.000	.000
(WY)	1986	1991	1991	1991	1991	1988	1988	1992	1988	1984	1984	1984

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	4578.08		858.85			
ANNUAL MEAN	12.5		2.35		10.0	
HIGHEST ANNUAL MEAN					28.6	1998
LOWEST ANNUAL MEAN					.32	1988
HIGHEST DAILY MEAN	641	Feb 13	107	Mar 5	1400	Feb 17 1986
LOWEST DAILY MEAN	.00	Jul 1	.00	Oct 1	.00	Sep 16 1983
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 1	.00	Oct 1	.00	Jun 28 1984
MAXIMUM PEAK FLOW			203	Feb 11	5200	Feb 19 1986
MAXIMUM PEAK STAGE			3.63	Feb 11	9.10	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	9080		1700		7270	
10 PERCENT EXCEEDS	18		4.6		13	
50 PERCENT EXCEEDS	.28		.26		.22	
90 PERCENT EXCEEDS	.00		.00		.00	

11299995 TULLOCH RESERVOIR NEAR KNIGHTS FERRY, CA

LOCATION.—Lat 37°52'34", long 120°36'12", in Rancheria del Rio Estanislao Grant, T.1 S., R.12 E., Tuolumne County, Hydrologic Unit 18040010, in center of Tulloch Dam on Stanislaus River, 1.9 mi upstream from Goodwin Dam, and 5.3 mi northeast of Knights Ferry.

DRAINAGE AREA.—980 mi^2.

PERIOD OF RECORD.—November 1957 to current year.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

REMARKS.—Reservoir is formed by gravity-type concrete dam completed in October 1957. Usable capacity, 56,840 acre-ft, between elevations 431.0 ft, normal minimum water surface, and 511.0 ft, top of radial gates. Dead storage, 11,560 acre-ft. Reservoir is used for irrigation and power. Water passes down Stanislaus River, first passing through Tulloch Powerplant (station 11299996) at dam. Part of flow is diverted at Goodwin Dam to Oakdale Canal (station 11301000) and South San Joaquin Canal (station 11300500). Records, including extremes, represent total contents at 2400 hours.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 69,500 acre-ft, Jan. 7, 1965, elevation, 512.0 ft; minimum, 4,580 acre-ft, Oct. 3, 1960, elevation, 404.0 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 66,300 acre-ft, Sept. 17, elevation, 509.43 ft; minimum, 43,000 acre-ft, Jan. 18, elevation, 487.38.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated October 1956)

404	4,580	430	11,100	460	23,600	490	45,300
411	6,020	445	16,400	475	33,100	512	69,500
420	8,200						

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61600	52700	44700	44000	55000	57000	55900	62100	64500	65200	65100	64500
2	61100	51900	43900	44400	55000	56700	58000	62800	64100	65900	65100	65500
3	60200	51100	43100	44700	55300	56400	58800	63300	65600	65900	64500	65100
4	59700	50400	43800	44700	54800	56500	58800	63300	65400	65200	64600	64500
5	59200	49600	44500	44000	54200	57400	58600	63300	65300	65400	64600	64600
6	58900	48900	45000	43600	55400	57500	58600	63000	64900	65500	64700	65400
7	58900	48000	44500	44000	54900	57300	58800	63300	65400	65500	64700	65100
8	59800	47200	44700	44100	56300	57000	59000	63400	65700	64600	65000	65300
9	59900	46400	44900	43500	56100	56700	59000	63300	65600	65000	64500	65200
10	60200	45500	45200	43200	55700	56300	59000	63200	65800	65100	65300	65300
11	59700	44600	44700	43400	55800	55900	59000	63300	65000	65300	65600	65200
12	59900	43800	43900	43900	56700	56600	57900	63400	65300	65400	65600	65100
13	59400	43300	43400	43600	56700	56600	59100	63400	65700	65600	64800	65300
14	59200	43900	43600	43100	56800	56100	59900	63200	65900	64400	64600	65300
15	58700	44500	43900	43900	56800	56600	59300	63800	65500	64500	64600	65100
16	58200	44400	44100	44300	56300	56200	60300	64500	65900	64200	64800	65100
17	57700	44900	44400	43700	55900	55800	61900	64600	66200	65500	64700	66300
18	57200	44100	44600	43000	55400	55300	61700	64900	65800	65900	64800	65700
19	57600	43300	44800	44200	55000	56400	61700	64500	66000	65700	64800	65500
20	57900	43700	44400	46200	56200	57000	62100	65100	65000	65100	64700	65500
21	59800	44500	43600	48000	56900	55700	63000	64700	64900	65100	64000	64700
22	57800	44100	43100	49200	56700	55300	62500	64600	66100	64900	64200	64800
23	56400	44400	43500	50400	56400	55300	62600	65000	66000	64900	65100	64500
24	55200	44600	43800	52000	56700	55800	62300	65700	65500	65700	65400	63900
25	55200	44800	44100	51800	56600	54900	62100	65600	65100	65700	65100	63400
26	55300	45100	44400	52700	56300	54300	62800	64800	65200	65700	64800	62900
27	55300	44600	44000	53300	56000	54300	60800	64700	65600	65500	65100	63300
28	55200	43800	43300	53600	56500	55100	61400	65200	66100	65800	65000	62400
29	54800	44100	43100	55200	---	56000	60900	66200	65600	66100	65500	61500
30	54200	44700	43400	56100	---	55500	61400	65100	65000	65500	65700	61800
31	53400	---	43700	55500	---	56400	---	66000	---	65800	65200	---
MAX	61600	52700	45200	56100	56900	57500	63000	66200	66200	66100	65700	66300
MIN	53400	43300	43100	43000	54200	54300	55900	62100	64100	64200	64000	61500
a	498.25	489.34	488.19	500.21	501.13	500.98	505.41	509.20	508.42	509.09	508.60	505.78
b	-8600	-8700	-1000	+11800	+1000	-100	+5000	+4600	-1000	+800	-600	-3400
c	41940	24520	24480	20010	16340	35160	101200	109000	106100	109300	109200	84510

CAL YR 2000 b -11700
WTR YR 2001 b -200

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Diversion, in acre-feet, through Tulloch Powerplant (station 11299996), provided by Oakdale and South San Joaquin Irrigation Districts.

11299997 STANISLAUS RIVER BELOW TULLOCH POWERPLANT, NEAR KNIGHTS FERRY, CA

LOCATION.—Lat 37°52'34", long 120°36'15", in Rancheria del Rio Estanislao Grant, T.1 S., R.12 E., on Calaveras–Tuolumne County line, Hydrologic Unit 18040010, temperature recorder in south corner of Tulloch Powerplant at downstream side of Tulloch Dam, 5.2 mi northeast of Knights Ferry.

DRAINAGE AREA.—980 mi^2.

PERIOD OF RECORD.—June 1972 to current year.
WATER TEMPERATURE: June 1972 to current year.

PERIOD OF DAILY RECORD.—June 1972 to current year.
WATER TEMPERATURE: June 1972 to current year.

INSTRUMENTATION.—Water-temperature recorder since June 1972.

REMARKS.—Water-temperature records rated excellent except for Mar. 9 to Apr. 19, which are rated good. Water temperature is affected by regulation from Tulloch Powerplant.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 27.5°C, Aug. 30, 1977; minimum recorded, 5.0°C, Jan. 13, 1973.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 13.0°C, Nov. 11–15; minimum recorded, 9.0°C, many days in January and February.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	12.0	12.5	12.0	11.0	11.0	10.0	10.0	9.5	9.5	9.5	9.5
2	12.5	12.0	12.5	12.5	11.0	11.0	10.0	10.0	9.5	9.5	9.5	9.5
3	12.5	12.0	12.5	12.5	11.0	11.0	10.0	10.0	9.5	9.0	10.0	9.5
4	12.5	12.0	12.5	12.5	11.0	11.0	10.0	10.0	9.5	9.0	9.5	9.5
5	12.5	12.0	12.5	12.5	11.0	11.0	10.0	10.0	9.5	9.0	10.0	9.5
6	12.5	12.5	12.5	12.0	11.0	11.0	10.0	10.0	9.5	9.0	10.0	9.5
7	12.5	12.5	12.5	12.0	11.0	11.0	10.0	9.5	9.5	9.0	10.0	10.0
8	12.5	12.5	12.5	12.5	11.0	10.5	10.0	9.5	9.5	9.5	10.0	10.0
9	12.5	12.5	12.5	12.5	11.0	10.5	10.0	9.5	9.5	9.5	10.0	10.0
10	12.5	12.5	12.5	12.5	11.0	10.5	9.5	9.5	9.5	9.5	10.0	10.0
11	12.5	12.5	13.0	12.5	10.5	10.5	9.5	9.5	9.5	9.5	10.0	10.0
12	12.5	12.0	13.0	12.5	11.0	10.5	10.0	9.5	9.5	9.5	10.5	10.0
13	12.5	12.0	13.0	12.5	11.0	10.5	10.0	9.5	9.5	9.5	10.5	10.0
14	12.5	12.0	13.0	12.5	11.0	10.5	9.5	9.5	9.5	9.0	10.5	10.0
15	12.5	12.0	13.0	12.5	11.0	10.5	9.5	9.5	9.5	9.0	10.5	10.0
16	12.5	12.0	12.5	12.0	10.5	10.5	9.5	9.5	9.5	9.0	10.5	10.0
17	12.5	12.0	12.0	12.0	11.0	10.5	9.5	9.5	9.5	9.0	10.5	10.0
18	12.5	12.0	12.0	11.5	11.0	10.5	9.5	9.5	9.5	9.0	10.5	10.0
19	12.5	12.5	12.0	11.5	10.5	10.5	9.5	9.5	9.5	9.0	10.5	10.0
20	12.5	12.5	12.0	11.5	10.5	10.5	9.5	9.0	9.5	9.5	10.5	10.5
21	12.5	12.5	12.0	11.5	10.5	10.5	9.5	9.0	9.5	9.5	10.5	10.5
22	12.5	12.5	11.5	11.5	10.5	10.5	9.5	9.0	9.5	9.5	10.5	10.5
23	12.5	12.0	11.5	11.5	10.5	10.5	9.5	9.0	9.5	9.5	10.5	10.5
24	12.5	12.0	11.5	11.0	10.5	10.5	9.5	9.5	9.5	9.5	10.5	10.5
25	12.5	12.0	11.5	11.0	10.5	10.5	9.5	9.5	10.0	9.5	11.0	10.5
26	12.5	12.0	11.0	11.0	10.5	10.5	9.5	9.0	9.5	9.5	11.0	10.5
27	12.5	12.0	11.0	11.0	10.5	10.5	9.5	9.0	9.5	9.5	11.0	10.5
28	12.5	12.0	11.0	11.0	10.5	10.0	9.5	9.0	9.5	9.5	11.0	11.0
29	12.5	12.0	11.0	11.0	10.5	10.0	9.5	9.0	---	---	11.0	11.0
30	12.5	12.0	11.0	11.0	10.0	10.0	9.5	9.0	---	---	11.5	11.0
31	12.5	12.0	---	---	10.0	10.0	9.5	9.0	---	---	11.5	11.0
MONTH	12.5	12.0	13.0	11.0	11.0	10.0	10.0	9.0	10.0	9.0	11.5	9.5

11299997 STANISLAUS RIVER BELOW TULLOCH POWERPLANT, NEAR KNIGHTS FERRY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5
2	11.5	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5
3	11.5	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5
4	11.5	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5
5	11.5	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5
6	11.5	11.5	11.5	11.5	12.0	11.5	12.5	12.0	12.5	12.5	12.5	12.5
7	11.5	11.5	11.5	11.5	12.0	11.5	12.5	12.0	12.5	12.5	12.5	12.5
8	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
9	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
10	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
11	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
12	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
13	11.5	11.5	11.5	11.0	12.0	12.0	12.5	12.5	12.5	12.5	12.5	12.5
14	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
15	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5	12.5	12.5
16	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
17	11.5	11.5	11.5	11.0	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
18	11.5	11.5	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
19	11.5	11.0	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
20	11.5	11.5	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
21	11.5	11.0	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
22	11.5	11.0	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
23	11.5	11.0	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
24	11.0	11.0	11.5	11.0	12.0	12.0	12.0	12.0	12.5	12.5	12.5	12.5
25	11.5	11.0	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
26	11.5	11.0	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
27	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.0	12.5	12.5	12.5	12.5
28	11.5	11.5	11.5	11.5	12.5	12.0	12.5	12.0	12.5	12.5	12.5	12.5
29	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5	12.5	12.5
30	11.5	11.5	11.5	11.5	12.0	12.0	12.5	12.5	12.5	12.5	12.5	12.5
31	---	---	11.5	11.5	---	---	12.5	12.5	12.5	12.5	---	---
MONTH	11.5	11.0	11.5	11.0	12.5	11.5	12.5	12.0	12.5	12.5	12.5	12.5

11300500 SOUTH SAN JOAQUIN CANAL NEAR KNIGHTS FERRY, CA

LOCATION.—Lat 37°51'16", long 120°38'14", in Rancheria del Rio Estanislao Grant, Calaveras County, Hydrologic Unit 18040010, on left bank 0.8 mi downstream from headgate at Goodwin Dam, and 3.0 mi northeast of Knights Ferry.

PERIOD OF RECORD.—May 1914 to current year. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 334.18 ft above sea level (levels by Oakdale Irrigation District). Prior to Mar. 12, 1915, nonrecording gage 100 ft downstream. Mar. 12, 1915, to July 1, 1921, nonrecording gage at present site and datum.

REMARKS.—Canal diverts from right bank of Stanislaus River at Goodwin Dam for irrigation in Oakdale and South San Joaquin Irrigation Districts.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, 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, 1,320 ft^3/s, Aug. 10–17, 1978; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	.00	.00	3.0	.00	1.4	898	566	808	872	1020	941
2	288	.00	.00	3.1	.00	3.1	898	589	819	873	1020	930
3	283	.00	.00	3.1	.00	3.0	901	592	809	874	1010	927
4	276	.00	.00	3.1	.00	2.3	899	657	812	875	1010	927
5	268	.00	.00	3.1	.00	2.5	896	712	823	876	1010	811
6	261	.00	.00	2.7	.00	.97	894	742	830	958	1010	739
7	261	.00	.00	2.2	.00	.00	864	740	837	1000	1030	723
8	268	.00	2.3	1.1	.00	.00	843	845	840	999	1040	700
9	278	.00	3.7	.00	.00	.00	820	911	828	998	926	699
10	241	.00	3.8	.00	.00	.00	808	905	821	1000	828	704
11	193	.00	4.0	.00	.00	.00	818	899	822	1010	828	722
12	79	.00	3.7	.00	.00	.00	833	922	876	1010	836	727
13	2.0	.00	2.6	.00	.00	.00	850	944	907	1000	840	725
14	1.9	.00	3.3	.00	.00	.00	855	947	908	1010	838	706
15	4.6	.00	3.5	.00	.00	.00	855	949	954	1010	843	701
16	4.4	.00	3.7	.00	.00	.00	854	932	979	1010	846	698
17	4.3	.00	3.6	.00	.00	.00	728	919	979	1010	843	696
18	4.2	.00	2.2	.00	.00	.00	665	917	986	995	846	696
19	4.2	.00	.00	.00	.00	217	651	924	1010	991	842	686
20	4.2	3.6	.00	.00	.00	386	565	933	1020	991	822	623
21	3.9	4.4	.00	.00	.00	388	488	912	1000	992	897	603
22	3.7	4.1	.00	.00	.00	571	487	811	1000	1000	945	606
23	3.7	4.6	.00	3.2	.00	643	487	777	1000	1000	944	618
24	3.6	4.7	.00	3.4	.00	529	486	779	1000	1010	944	619
25	4.1	4.7	.00	2.1	.00	241	501	791	999	1010	954	617
26	5.2	4.2	.61	2.4	.00	175	475	807	997	1010	963	607
27	2.3	3.7	2.7	2.2	.00	650	448	810	1000	1010	961	590
28	.00	4.8	2.9	2.9	.00	815	522	801	1010	1010	966	581
29	.00	2.8	2.9	4.2	---	834	551	798	903	1030	972	589
30	.00	.00	3.1	1.6	---	857	554	800	872	1020	967	430
31	.00	---	3.1	.00	---	884	---	802	---	1010	956	---
TOTAL	3030.30	41.60	51.71	43.40	0.00	7203.27	21394	25433	27449	30464	28757	20941
MEAN	97.8	1.39	1.67	1.40	.000	232	713	820	915	983	928	698
MAX	288	4.8	4.0	4.2	.00	884	901	949	1020	1030	1040	941
MIN	.00	.00	.00	.00	.00	.00	448	566	808	872	822	430
AC-FT	6010	83	103	86	.00	14290	42440	50450	54450	60430	57040	41540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2001, BY WATER YEAR (WY)

MEAN	156	53.8	30.4	77.4	120	243	687	892	935	877	763	487
MAX	490	408	404	363	456	1087	1160	1265	1259	1260	1251	1031
(WY)	1981	1999	1999	1987	1985	1972	1984	1975	1978	1967	1978	1967
MIN	.000	.000	.000	.000	.000	.000	41.9	84.0	147	78.2	70.9	5.55
(WY)	1920	1920	1920	1916	1916	1930	1995	1977	1924	1924	1924	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1914 - 2001	
ANNUAL TOTAL	169348.31		164808.28			
ANNUAL MEAN	463		452		449	
HIGHEST ANNUAL MEAN					684	1984
LOWEST ANNUAL MEAN					114	1977
HIGHEST DAILY MEAN	1050	Aug 17	1040	Aug 8	1320	Aug 10 1978
LOWEST DAILY MEAN	.00	Feb 1	.00	Oct 28	.00	Oct 30 1914
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 1	.00	Oct 28	.00	Oct 30 1914
ANNUAL RUNOFF (AC-FT)	335900		326900		325400	
10 PERCENT EXCEEDS	982		999		1070	
50 PERCENT EXCEEDS	460		522		344	
90 PERCENT EXCEEDS	.00		.00		.00	

11301000 OAKDALE CANAL NEAR KNIGHTS FERRY, CA

LOCATION.—Lat 37°51'32", long 120°37'56", in SW 1/4 SE 1/4 sec.10, T.1 S., R.12 E., Tuolumne County, Hydrologic Unit 18040010, on left bank, 0.3 mi downstream from headgate at Goodwin Dam, and 3.4 mi northeast of Knights Ferry.

PERIOD OF RECORD.—May 1914 to current year. Records for water years 1933–36 incomplete; monthly and yearly estimates published in WSP 1315-A.

GAGE.—Water-stage recorder. Elevation of gage is 350 ft above sea level, from topographic map. Prior to Apr. 29, 1916, nonrecording gage at site 1,000 ft upstream at different datum. Apr. 29, 1916, to July 3, 1925, nonrecording gage and July 4, 1925, to Apr. 3, 1949, water-stage recorder at present site at datum 0.18 ft higher.

REMARKS.—Canal diverts water from left bank of Stanislaus River at Goodwin Dam 0.3 mi upstream for irrigation in Oakdale Irrigation District.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, 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, 556 ft^3/s, July 8–11, 1967; maximum discharge, 595 ft^3/s, June 10, 1991, gage height, 10.09 ft, result of damage to canal due to vandalism; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	.00	.00	.00	.00	.00	283	267	445	460	485	472
2	310	.00	.00	.00	.00	.00	271	283	445	449	485	455
3	310	.00	.00	.00	.00	.00	280	307	445	440	479	449
4	310	.00	.00	.00	.00	.00	301	313	437	447	468	449
5	310	.00	.00	.00	.00	.00	312	329	424	447	468	449
6	320	.00	.00	.00	.00	.00	305	353	427	451	463	447
7	320	.00	.00	.00	.00	.00	252	361	438	472	458	439
8	318	.00	.00	.00	.00	.00	192	383	441	475	462	439
9	312	.00	.00	.00	.00	.00	161	410	457	475	475	439
10	303	.00	.00	.00	.00	.00	150	415	445	483	475	429
11	274	.00	.00	.00	.00	.00	164	405	445	486	487	423
12	99	.00	.00	.00	.00	.00	196	398	445	494	490	418
13	.00	.00	.00	.00	.00	.00	210	389	445	493	490	408
14	.00	.00	.00	.00	.00	.00	190	383	445	494	484	387
15	.00	.00	.00	.00	.00	.00	229	386	440	485	468	366
16	.00	.00	.00	.00	.00	.00	245	395	419	480	467	360
17	.00	.00	.00	.00	.00	.00	230	405	412	480	467	360
18	.00	.00	.00	.00	.00	.00	258	405	409	479	478	360
19	.00	.00	.00	.00	.00	.00	259	404	420	479	485	333
20	.00	.00	.00	.00	.00	.00	206	424	436	487	486	293
21	.00	.00	.00	.00	.00	.00	44	429	451	489	480	311
22	.00	.00	.00	.00	.00	.00	30	417	445	489	481	343
23	.00	.00	.00	.00	.00	.00	21	417	435	478	481	348
24	.00	.00	.00	.00	.00	.00	7.3	419	435	467	481	373
25	.00	.00	.00	.00	.00	.00	27	430	435	467	481	366
26	.00	.00	.00	.00	.00	12	184	430	435	467	481	358
27	.00	.00	.00	.00	.00	149	217	448	435	467	480	354
28	.00	.00	.00	.00	.00	152	231	449	435	462	480	340
29	.00	.00	.00	.00	---	202	235	445	448	459	481	291
30	.00	.00	.00	.00	---	240	240	445	460	461	481	280
31	.00	---	.00	.00	---	295	---	445	---	462	481	---
TOTAL	3501.00	0.00	0.00	0.00	0.00	1050.00	5930.3	12189	13134	14624	14808	11539
MEAN	113	.000	.000	.000	.000	33.9	198	393	438	472	478	385
MAX	320	.00	.00	.00	.00	295	312	449	460	494	490	472
MIN	.00	.00	.00	.00	.00	.00	7.3	267	409	440	458	280
AC-FT	6940	.00	.00	.00	.00	2080	11760	24180	26050	29010	29370	22890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2001, BY WATER YEAR (WY)

MEAN	98.1	4.78	1.00	1.62	2.10	47.7	226	359	374	373	340	255
MAX	404	51.5	15.8	71.0	77.9	364	496	544	552	554	547	518
(WY)	1979	1940	1987	1987	1976	1972	1962	1965	1965	1967	1967	1958
MIN	.000	.000	.000	.000	.000	.000	.004	97.5	49.8	25.8	.62	1.20
(WY)	1995	1915	1916	1916	1915	1918	1983	1915	1924	1924	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1914 - 2001	
ANNUAL TOTAL	75460.00		76775.30			
ANNUAL MEAN	206		210		176	
HIGHEST ANNUAL MEAN					277	1979
LOWEST ANNUAL MEAN					52.8	1924
HIGHEST DAILY MEAN	496	Jul 29	494	Jul 12	556	Jul 8 1967
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 13	.00	Jun 21 1914
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 8	.00	Oct 13	.00	Oct 16 1914
ANNUAL RUNOFF (AC-FT)	149700		152300		127700	
10 PERCENT EXCEEDS	482		475		475	
50 PERCENT EXCEEDS	280		210		77	
90 PERCENT EXCEEDS	.00		.00		.00	

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CA

LOCATION.—Lat 37°51'06", long 120°38'13", in Rancheria del Rio Estanislao Grant, Calaveras County, Hydrologic Unit 18040010, on right bank 250 ft upstream from Owl Creek, 0.9 mi downstream from Goodwin Dam, and 2.9 mi northeast of Knights Ferry.

DRAINAGE AREA.—986 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—February 1957 to current year. Records equivalent to those published as Stanislaus River at Knights Ferry, 1903–14, and as Stanislaus River near Knights Ferry, 1915–32, if adjusted for diversions in Stanislaus and San Joaquin Water Co.'s Canal and Oakdale and South San Joaquin Canals.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 252.83 ft above sea level.

REMARKS.—Flow regulated by New Melones Reservoir (station 11299000) since 1978 and Tulloch Reservoir (station 11299995) since 1957. South San Joaquin Canal (station 11300500) and Oakdale Canal (station 11301000) divert at Goodwin Dam.

COOPERATION.—Records were provided by Oakdale and South San Joaquin Irrigation Districts, 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, 40,200 ft^3/s, Dec. 24, 1964, gage height, 28.85 ft in gage well, 31.2 ft outside, from floodmarks; minimum daily, 0.12 ft^3/s, Feb. 8, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, reached a stage of 37.7 ft, from floodmarks, discharge, 62,900 ft^3/s, by computation of flow over Goodwin Dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	380	379	318	294	279	416	1500	596	500	349	307
2	300	385	378	316	291	279	417	1500	598	498	351	307
3	302	383	375	313	292	277	418	1500	599	498	351	304
4	299	380	374	312	291	285	445	1510	536	501	351	305
5	296	378	378	318	293	287	565	1500	500	497	350	305
6	297	376	378	317	304	277	560	1500	500	505	352	287
7	299	377	378	317	308	281	557	1500	501	499	350	281
8	293	380	376	317	305	282	568	1490	500	498	350	278
9	299	378	374	319	303	283	554	1480	502	497	357	276
10	303	375	377	322	303	282	556	1480	500	499	352	277
11	300	372	375	320	308	281	556	1480	499	499	350	274
12	300	369	373	321	301	280	553	1490	509	505	351	253
13	307	367	371	322	306	282	550	1480	500	499	350	242
14	303	370	372	320	309	288	562	1490	500	489	354	244
15	298	377	373	320	298	277	553	1490	498	497	352	250
16	297	377	372	319	277	254	559	1490	503	499	349	244
17	653	376	372	318	278	261	559	1480	500	457	350	243
18	1060	375	375	315	284	265	947	1490	498	396	350	245
19	1090	373	371	290	282	264	1510	1260	500	392	350	251
20	1090	370	369	296	281	260	1510	1010	500	370	351	250
21	1100	376	372	296	283	260	1510	771	498	348	349	247
22	1050	371	365	292	286	258	1500	599	500	353	346	243
23	853	372	342	297	294	263	1470	595	500	346	329	243
24	650	373	346	297	300	256	1400	595	501	349	324	248
25	470	375	344	296	293	266	1430	597	499	349	324	247
26	377	377	341	294	277	260	1500	599	499	348	324	247
27	375	372	340	296	284	260	1500	600	509	350	324	230
28	379	370	332	291	284	264	1500	600	499	353	325	221
29	378	373	316	289	---	266	1510	600	501	350	328	224
30	369	373	317	296	---	288	1500	600	500	350	317	219
31	374	---	316	295	---	424	---	598	---	352	304	---
TOTAL	15057	11250	11221	9549	8209	8589	27735	35874	15345	13443	10614	7792
MEAN	486	375	362	308	293	277	924	1157	512	434	342	260
MAX	1100	385	379	322	309	424	1510	1510	599	505	357	307
MIN	293	367	316	289	277	254	416	595	498	346	304	219
AC-FT	29870	22310	22260	18940	16280	17040	55010	71160	30440	26660	21050	15460

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1978, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	128	215	690	1194	1103	1060	1154	1651	1249	96.4	4.18	17.8
MAX	749	681	3521	5040	4309	3265	3686	6233	5100	1063	22.5	231
(WY)	1976	1966	1965	1969	1969	1969	1967	1969	1967	1967	1967	1969
MIN	.19	4.56	.40	11.5	2.19	4.74	2.48	1.52	1.35	1.60	1.09	.51
(WY)	1977	1977	1978	1977	1960	1960	1972	1961	1961	1960	1960	1960

SUMMARY STATISTICS	WATER YEARS 1957 - 1978	
ANNUAL MEAN	725	
HIGHEST ANNUAL MEAN	2131	1969
LOWEST ANNUAL MEAN	6.47	1977
HIGHEST DAILY MEAN	29400	Dec 24 1964
LOWEST DAILY MEAN	.14	Oct 6 1976
ANNUAL SEVEN-DAY MINIMUM	.15	Oct 13 1976
MAXIMUM PEAK FLOW	40200	Dec 24 1964
MAXIMUM PEAK STAGE	28.85	Dec 24 1964
ANNUAL RUNOFF (AC-FT)	525500	
10 PERCENT EXCEEDS	2300	
50 PERCENT EXCEEDS	43	
90 PERCENT EXCEEDS	1.9	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	505	420	744	1014	1254	1334	929	974	716	564	517	419
MAX	1738	2246	4581	6005	6036	4905	1936	2046	1798	1861	1791	1634
(WY)	1999	1984	1984	1997	1997	1986	1998	1998	1998	1998	1998	1998
MIN	172	161	140	132	140	143	236	275	185	229	157	155
(WY)	1991	1991	1992	1990	1990	1991	1991	1991	1984	1984	1991	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	284809		174678			
ANNUAL MEAN	778		479		781	
HIGHEST ANNUAL MEAN					1893	1997
LOWEST ANNUAL MEAN					185	1991
HIGHEST DAILY MEAN	3530	Mar 1	1510	Apr 19	6840	Feb 26 1997
LOWEST DAILY MEAN	293	Oct 8	219	Sep 30	51	Oct 10 1990
ANNUAL SEVEN-DAY MINIMUM	298	Sep 20	234	Sep 24	85	Oct 10 1990
MAXIMUM PEAK FLOW			1580	May 4	7350	Jan 3 1997
MAXIMUM PEAK STAGE			10.34	May 4	15.59	Jan 3 1997
ANNUAL RUNOFF (AC-FT)	564900		346500		565600	
10 PERCENT EXCEEDS	1500		1030		1590	
50 PERCENT EXCEEDS	372		353		395	
90 PERCENT EXCEEDS	299		277		179	

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 1966 to current year.
WATER TEMPERATURE: February 1966 to current year.

PERIOD OF DAILY RECORD.—February 1966 to current year.
WATER TEMPERATURE: February 1966 to current year.

INSTRUMENTATION.—Water-temperature recorder since February 1966.

REMARKS.—Water-temperature records rated excellent except for Oct. 1–13, Feb. 20 to Mar. 12 which are rated good; and Mar. 13–27 which are rated fair. Interruption in record was due to malfunction of the recording instrument. Temperature recorder located 2,300 ft upstream from gaging station. Water temperature is affected by regulation from Goodwin Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 30.5°C, July 25, 1974; minimum recorded, 5.5°C, Feb. 3, 1972.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 14.0°C, several days June to September; minimum recorded, 8.5°C, on several days in January and February.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL			
19...*	0918	12.5	4.00
19...*	0919	12.5	12.0
19...*	0920	12.5	20.0
19...*	0921	12.5	28.0
19...*	0922	12.5	36.0
19...*	0923	12.5	44.0
19...*	0924	12.5	52.0
19...*	0925	12.5	60.0
19...*	0926	12.5	68.0
19...*	0927	12.5	76.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	13.0	12.5	12.0	11.0	10.5	10.0	9.5	9.5	8.5	10.0	9.5
2	13.5	13.0	12.5	12.0	11.0	10.5	10.0	9.5	9.5	9.0	10.0	9.5
3	13.5	12.5	12.5	12.0	10.5	10.5	10.0	9.0	9.5	9.0	10.0	9.5
4	13.0	12.5	12.5	12.0	10.5	10.5	9.5	9.0	10.0	9.0	10.0	9.5
5	13.5	12.5	12.5	12.5	10.5	10.0	9.5	9.0	10.0	9.5	10.0	10.0
6	13.5	12.5	13.0	12.5	10.5	10.0	9.5	9.0	9.5	9.0	10.5	10.0
7	13.5	12.5	12.5	12.0	10.5	10.5	9.5	9.0	9.5	9.0	10.5	10.0
8	13.5	12.5	12.5	12.5	11.0	10.5	9.5	9.5	9.0	8.5	11.0	10.0
9	13.5	12.5	12.5	12.0	11.0	10.5	9.5	9.5	9.0	9.0	10.5	10.0
10	13.0	12.5	12.5	12.0	11.0	10.5	9.5	9.5	9.0	9.0	10.5	10.0
11	12.5	12.5	12.5	12.0	10.5	10.5	9.5	9.0	9.0	9.0	11.0	10.0
12	13.0	12.5	12.5	12.0	10.5	10.5	9.5	9.0	9.0	9.0	11.0	10.0
13	13.0	12.5	12.0	12.0	10.5	10.5	9.5	9.0	9.0	8.5	11.0	10.5
14	13.0	12.5	12.5	12.0	10.5	10.5	9.5	9.0	9.5	8.5	11.5	10.5
15	13.5	12.5	12.5	12.0	11.0	10.5	9.5	9.0	9.5	9.0	11.5	10.5
16	13.5	13.0	12.5	12.0	11.0	10.5	9.0	8.5	9.5	9.0	11.0	10.5
17	13.0	12.5	12.0	11.5	10.5	10.0	9.0	8.5	9.5	9.0	11.5	10.5
18	13.0	12.5	12.0	11.5	10.5	10.0	9.0	8.5	9.5	9.5	12.0	10.5
19	13.0	12.5	12.0	11.5	10.5	10.0	9.0	8.5	10.0	9.5	12.0	11.0
20	13.0	12.5	11.5	11.0	10.5	10.0	9.0	8.5	9.5	9.5	12.0	11.0
21	13.0	12.5	11.5	11.0	10.5	10.0	9.0	8.5	10.0	9.5	11.5	11.0
22	13.0	12.5	11.5	11.0	10.5	10.0	9.5	9.0	10.0	9.5	11.5	11.0
23	13.0	12.0	11.5	11.0	10.5	10.0	9.5	9.0	10.0	9.5	11.5	10.5
24	13.0	12.5	11.0	11.0	10.0	10.0	9.0	9.0	9.5	9.5	11.5	10.5
25	13.0	12.5	11.0	11.0	10.0	10.0	9.0	9.0	10.0	9.5	11.5	11.0
26	12.5	12.5	11.0	11.0	10.0	9.5	9.0	9.0	10.0	9.5	12.0	11.0
27	12.5	12.0	11.0	11.0	10.0	9.5	9.0	9.0	10.5	9.5	---	11.0
28	12.5	12.5	11.0	10.5	10.0	9.5	9.0	8.5	10.0	9.5	---	---
29	12.5	12.5	11.0	10.5	10.0	9.5	9.5	9.0	---	---	---	---
30	12.5	12.0	11.0	10.5	10.0	9.5	9.0	9.0	---	---	---	---
31	12.5	12.0	---	---	10.0	9.5	9.0	8.5	---	---	---	---
MONTH	13.5	12.0	13.0	10.5	11.0	9.5	10.0	8.5	10.5	8.5	---	---

* Instantaneous discharge at time of cross-sectional measurement: 392 ft^3/s.

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
2	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
3	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
4	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
5	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
6	---	---	---	---	13.0	12.0	13.5	12.5	14.0	12.5	13.5	12.5
7	---	---	---	---	13.0	12.0	14.0	12.5	13.5	12.5	13.5	12.5
8	---	---	---	---	13.0	12.0	14.0	12.5	13.5	12.5	13.5	12.5
9	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
10	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
11	---	---	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5
12	---	---	---	---	13.5	12.0	14.0	12.5	13.5	12.5	13.5	12.5
13	---	---	---	---	13.5	12.0	14.0	12.5	13.5	12.5	13.5	12.5
14	---	---	---	---	13.5	12.0	13.5	12.5	13.5	12.5	13.5	12.5
15	---	---	---	---	13.5	12.5	14.0	12.5	13.5	12.5	13.5	12.5
16	---	---	13.0	---	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
17	---	---	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
18	---	---	13.0	12.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
19	---	---	13.5	12.0	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
20	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
21	---	---	13.0	11.5	13.5	12.5	13.5	12.0	13.5	12.5	13.5	12.5
22	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
23	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.0	12.5
24	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
25	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
26	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
27	---	---	12.5	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
28	---	---	12.5	11.5	14.0	12.5	13.5	12.5	13.5	12.5	13.5	12.5
29	---	---	13.0	11.5	13.5	12.5	13.5	12.5	13.5	12.5	13.5	12.5
30	---	---	13.0	12.0	13.5	12.5	13.5	12.5	13.5	12.5	14.0	12.5
31	---	---	13.0	12.0	---	---	13.5	12.5	13.5	12.5	---	---
MONTH	---	---	---	---	14.0	12.0	14.0	12.0	14.0	12.5	14.0	12.5

11302500 STANISLAUS RIVER AT OAKDALE, CA

LOCATION.—Lat 37°46'38", long 120°51'07", in Eight Square Leagues on Stanislaus River Grant, Stanislaus County, Hydrologic Unit 18040002, on left bank at State Highway 120 bridge, at Oakdale.

DRAINAGE AREA.—1,032 mi^2.

PERIOD OF RECORD.—August 1985 to current year.
WATER TEMPERATURE: August 1985 to current year.

PERIOD OF DAILY RECORD.—August 1985 to current year.
WATER TEMPERATURE: August 1985 to current year.

INSTRUMENTATION.—Water-temperature recorder since Aug. 28, 1985.

REMARKS.—Water-temperature records rated excellent except for Feb. 20 to Mar. 16, which are rated good; and Mar. 17 to May 16, which are rated fair. Interruptions in record were due to malfunction of the recording instrument. Water temperature can be affected by releases from Woodward Reservoir Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 26.0°C, June 21, 22, 1992; minimum recorded, 5.0°C, Dec. 22–25, 1990.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 20.0°C, Aug. 8, 9, but may have been higher during period of missing record; minimum recorded, 7.0°C, Jan. 17, 18, but may have been lower during period of missing record.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL			
19...*	0738	16.0	8.00
19...*	0739	16.0	25.0
19...*	0740	16.0	42.0
19...*	0741	16.0	59.0
19...*	0742	15.5	76.0
19...*	0743	15.5	93.0
19...*	0744	15.5	110
19...*	0745	15.5	127
19...*	0746	16.0	144
19...*	0747	16.0	161

* Discharge at time of cross-sectional measurement: Unknown.

11302500 STANISLAUS RIVER AT OAKDALE, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	13.0	11.5	10.5	9.5	9.0	8.5	9.5	8.0	11.0	9.0
2	---	---	13.5	12.0	10.5	9.5	9.5	8.5	9.5	8.5	11.0	10.5
3	---	---	13.5	12.0	10.5	10.0	9.0	8.0	10.0	8.5	11.0	9.5
4	---	---	13.5	12.0	10.5	10.0	9.0	8.0	10.5	9.0	10.5	10.5
5	---	---	13.0	12.5	---	---	9.0	8.0	11.0	9.5	11.0	10.0
6	---	---	13.0	12.0	---	---	9.0	8.0	---	---	12.5	10.5
7	---	---	13.0	11.5	11.0	10.0	9.0	8.0	---	---	13.0	11.0
8	---	---	13.0	12.0	11.0	10.5	9.5	9.0	---	---	13.5	11.5
9	---	---	12.5	11.5	11.0	10.0	10.0	9.5	9.0	8.5	12.5	11.5
10	---	---	12.5	11.5	11.5	11.0	10.0	9.0	9.5	8.5	12.5	10.0
11	13.5	13.0	12.0	11.0	11.0	10.5	9.5	9.0	9.5	9.0	13.0	10.5
12	14.0	12.5	11.5	10.5	11.0	10.2	10.0	9.0	9.0	8.0	13.0	11.0
13	14.0	12.5	11.5	10.0	10.5	10.0	10.0	9.0	9.0	8.0	13.5	11.0
14	14.5	12.5	11.5	10.5	11.0	10.5	9.5	9.0	10.0	8.0	14.0	11.5
15	14.5	13.0	11.5	10.5	11.5	11.0	9.0	8.0	10.0	8.5	13.5	11.5
16	15.0	13.0	12.0	11.0	11.5	10.5	8.5	7.5	10.5	9.0	14.0	11.5
17	14.5	13.0	11.5	10.5	10.5	10.0	8.0	7.0	10.0	9.5	14.5	12.0
18	14.0	12.5	11.5	10.5	10.0	9.5	8.0	7.0	11.0	9.5	15.0	12.5
19	13.5	12.5	11.5	10.5	10.0	9.0	9.0	8.0	11.5	10.5	16.0	13.0
20	13.5	12.0	11.5	10.0	10.0	9.0	9.0	7.5	11.0	10.0	16.0	14.0
21	13.5	12.5	11.5	10.5	10.0	9.0	8.5	8.0	11.5	10.5	16.0	13.5
22	13.0	12.0	11.5	10.5	10.5	9.5	9.5	8.5	11.0	10.5	16.0	13.5
23	13.0	11.5	11.5	10.5	10.0	9.5	10.0	8.5	11.0	10.0	16.0	13.5
24	13.5	12.0	11.0	10.5	10.0	9.5	10.0	9.0	10.5	9.5	16.0	13.5
25	13.5	12.5	11.5	11.0	10.0	9.0	9.0	8.5	11.0	9.0	16.0	14.0
26	13.0	12.5	11.5	11.0	9.5	9.0	9.5	8.5	12.0	10.5	15.5	13.0
27	13.5	12.5	11.0	11.0	9.0	8.5	9.5	8.5	12.5	10.5	15.5	13.0
28	13.0	12.5	11.0	11.0	9.0	8.5	9.0	8.0	11.5	10.0	16.5	13.5
29	13.5	12.5	11.0	10.5	9.5	8.5	9.5	8.5	---	---	16.5	14.0
30	13.0	12.0	10.5	9.5	9.5	8.5	9.5	8.0	---	---	16.0	13.5
31	13.0	12.0	---	---	9.5	8.5	9.5	8.0	---	---	15.5	13.5
MONTH	---	---	13.5	9.5	---	---	10.0	7.0	---	---	16.5	9.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.3	12.7	14.5	13.0	17.0	15.0	---	---	19.5	16.5	19.0	16.5
2	14.0	12.0	14.5	12.5	16.5	14.5	---	---	19.5	16.5	19.0	16.5
3	13.5	11.0	15.0	12.5	16.5	14.0	---	---	19.5	16.5	19.0	17.0
4	13.5	11.5	14.5	12.5	16.5	14.0	---	---	19.5	16.5	19.0	16.5
5	14.0	11.5	15.0	13.0	17.0	14.5	---	---	19.5	16.5	18.5	16.5
6	13.0	12.0	15.0	13.0	17.5	14.5	---	---	19.5	16.5	18.0	16.0
7	12.5	11.0	15.5	13.0	18.0	15.0	---	---	19.5	17.0	17.5	15.5
8	13.0	11.0	15.5	13.0	18.0	15.0	---	---	20.0	17.0	17.5	15.5
9	13.5	11.0	15.5	13.0	18.0	15.0	---	---	20.0	17.5	18.0	15.5
10	14.0	11.0	15.5	13.0	17.5	14.5	---	---	19.5	17.0	18.0	16.0
11	13.5	12.0	15.5	13.0	17.0	14.5	---	---	19.0	16.5	18.0	16.0
12	13.5	11.0	15.0	13.5	17.5	14.5	18.0	15.5	19.0	16.5	18.0	16.0
13	14.0	11.5	15.0	13.0	17.5	14.5	18.5	15.5	19.0	16.0	18.0	16.0
14	14.0	11.5	15.0	13.0	---	---	18.5	15.5	19.0	16.0	18.2	16.1
15	14.5	12.0	15.0	13.0	---	---	18.0	15.5	19.0	16.0	18.0	16.0
16	15.0	12.5	15.5	13.5	---	---	17.5	15.5	19.0	16.0	18.5	16.0
17	14.5	12.5	15.5	13.0	---	---	18.0	15.0	18.5	16.5	18.0	16.0
18	15.0	12.5	15.5	13.0	---	---	18.5	15.5	19.0	16.0	18.0	16.0
19	13.0	12.0	15.5	13.0	---	---	19.0	16.0	19.0	16.5	18.0	16.0
20	12.5	12.0	16.0	13.5	---	---	18.5	16.0	18.5	16.0	18.0	16.0
21	13.0	11.5	16.5	13.5	---	---	19.0	16.0	18.5	16.0	18.0	16.0
22	13.5	11.5	17.5	14.5	---	---	19.0	16.0	18.5	15.5	17.0	15.5
23	---	---	17.5	14.5	---	---	19.0	16.0	18.5	16.0	17.0	15.5
24	---	---	17.0	14.5	---	---	19.5	17.0	19.5	16.5	---	---
25	---	---	17.0	14.5	---	---	19.5	17.0	19.0	16.5	---	---
26	14.5	12.5	17.0	14.0	---	---	19.5	16.5	19.0	16.5	---	---
27	14.0	12.0	16.0	14.0	---	---	19.5	16.5	19.0	16.5	17.5	15.5
28	13.5	12.0	16.0	13.5	---	---	19.5	16.5	19.5	17.0	17.0	15.0
29	14.0	12.0	16.5	13.5	---	---	19.5	16.5	19.0	16.5	17.0	15.0
30	14.5	12.5	17.0	14.5	---	---	19.0	16.5	18.5	16.5	17.0	15.0
31	---	---	17.5	15.0	---	---	19.5	16.5	18.5	16.5	---	---
MONTH	---	---	17.5	12.5	---	---	---	---	20.0	15.5	---	---

11303000 STANISLAUS RIVER AT RIPON, CA

LOCATION.—Lat 37°43'47", long 121°06'34", in NW 1/4 SE 1/4 sec.29, T.2 S., R.8 E., Stanislaus County, Hydrologic Unit 18040002, on left bank, 15 ft downstream from railroad bridge, 1.1 mi southeast of Ripon, and 15 mi upstream from mouth.

DRAINAGE AREA.—1,075 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1940 to current year. April to September 1940 in reports of California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is 0.72 ft above sea level. October 1940 to Nov. 17, 1953, at site 100 ft upstream at same datum.

REMARKS.—Records good. Flow regulated by reservoirs and powerplants upstream from station. South San Joaquin and Oakdale Canals (stations 11300500 and 11301000) divert at Goodwin Dam 34 mi upstream for irrigation in the vicinity of Oakdale. See REMARKS for "Stanislaus River below Goodwin Dam, near Knights Ferry" (station 11302000).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 62,500 ft^3/s, Dec. 24, 1955, gage height, 63.25 ft; minimum daily, 0.11 ft^3/s, Aug. 4–6, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Feb. 12, 1938, reached a stage of 64.4 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	401	488	411	365	349	351	457	1480	686	568	404	331
2	428	482	410	366	346	359	491	1490	666	583	372	340
3	411	461	410	366	343	362	506	1490	688	551	377	351
4	395	437	410	362	345	380	492	1490	700	534	375	344
5	378	430	410	358	344	580	530	1500	636	545	385	342
6	389	425	411	360	342	823	614	1490	600	551	411	324
7	391	421	e413	360	343	575	683	1510	584	544	390	323
8	413	420	e412	394	346	445	662	1490	572	551	381	322
9	423	421	e412	405	345	404	628	1480	567	579	372	328
10	417	417	e411	395	356	384	593	1490	574	566	374	330
11	431	414	e412	466	364	370	604	1510	577	556	379	327
12	454	410	413	477	434	362	606	1490	560	545	372	316
13	396	408	412	433	412	358	611	1500	564	553	371	320
14	389	407	418	406	377	352	609	1510	555	540	371	316
15	383	406	420	388	363	350	608	1510	568	572	367	328
16	382	411	416	376	354	341	615	1530	581	575	360	311
17	375	410	412	372	336	330	613	1530	587	544	353	327
18	588	411	411	368	333	345	593	1540	605	519	362	325
19	877	408	412	366	344	337	865	1530	558	470	369	303
20	1050	408	412	353	364	407	1340	1360	551	455	384	321
21	1020	411	410	353	382	382	1480	1140	552	456	383	328
22	1020	419	409	351	371	348	1440	923	567	455	361	308
23	989	412	407	350	374	342	1430	809	560	434	351	308
24	839	412	392	358	398	340	1410	744	554	411	347	312
25	699	412	390	392	535	345	1360	733	561	436	345	329
26	611	413	388	421	460	350	1390	701	552	412	361	334
27	562	414	386	450	382	332	1440	692	563	389	366	334
28	515	413	383	392	358	372	1460	706	560	385	368	314
29	530	412	380	367	---	365	1450	700	545	412	365	317
30	609	415	369	359	---	360	1490	693	550	407	370	308
31	531	---	368	355	---	381	---	686	---	400	337	---
TOTAL	17296	12628	12530	11884	10400	12132	27070	38447	17543	15498	11483	9721
MEAN	558	421	404	383	371	391	902	1240	585	500	370	324
MAX	1050	488	420	477	535	823	1490	1540	700	583	411	351
MIN	375	406	368	350	333	330	457	686	545	385	337	303
AC-FT	34310	25050	24850	23570	20630	24060	53690	76260	34800	30740	22780	19280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

MEAN	400	475	893	1217	1295	1426	1514	2017	1422	520	375	357
MAX	1951	4518	7602	6273	6499	5094	5047	7703	5531	3633	2834	2041
(WY)	1999	1951	1951	1997	1997	1943	1983	1952	1967	1983	1983	1983
MIN	6.34	20.3	26.0	77.8	64.3	47.5	41.0	42.8	25.1	9.88	.63	2.95
(WY)	1978	1978	1978	1977	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	319635		196632			
ANNUAL MEAN	873		539		991	
HIGHEST ANNUAL MEAN					2548	1983
LOWEST ANNUAL MEAN					44.9	1977
HIGHEST DAILY MEAN	3790	Mar 6	1540	May 18	47000	Dec 24 1955
LOWEST DAILY MEAN	352	Jan 7	303	Sep 19	.11	Aug 4 1977
ANNUAL SEVEN-DAY MINIMUM	356	Jan 4	315	Sep 18	.13	Aug 2 1977
MAXIMUM PEAK FLOW			1680	May 7	62500	Dec 24 1955
MAXIMUM PEAK STAGE			43.93	May 7	63.25	Dec 24 1955
ANNUAL RUNOFF (AC-FT)	634000		390000		717900	
10 PERCENT EXCEEDS	1620		949		2610	
50 PERCENT EXCEEDS	423		411		407	
90 PERCENT EXCEEDS	378		342		141	

e Estimated.

11303000 STANISLAUS RIVER AT RIPON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1985–88, 1993 to current year. Data for the period October 1985 to March 1987 are available in U.S. Geological Survey Open-File Report 88-479. Data for the period April 1987 to September 1988 are available in U.S. Geological Survey Open-File Report 91-74.
CHEMICAL DATA: Water years 1985–88, 1994.
SPECIFIC CONDUCTANCE: Water years 1986–89. July 1997 to current year.
WATER TEMPERATURE: Water years 1986–89. October 1994 to current year.
SEDIMENT DATA: Water year 1985–88, 1994.

PERIOD OF DAILY RECORD.—Water years 1986–89. October 1994 to current year.
SPECIFIC CONDUCTANCE: Water years 1986–89. July 1997 to current year.
WATER TEMPERATURE: Water years 1986–89. October 1994 to current year.

INSTRUMENTATION.—Water-temperature recorder from October 1994 to June 1997, water-quality monitor since July 1997.

REMARKS.—Specific conductance records rated excellent except for Dec. 13 to Jan. 5, Jan. 18 to Mar. 22, Mar. 28 to Apr. 10, May 12–17, July 6–8, Aug. 1–3, Aug. 8–11, Aug. 18–28, which are rated good; Jan 6, Mar. 23–27, May 18–21, July 9–11, July 29–31, Aug. 12–14, Aug. 29 to Sept. 7, which are rated fair; and Jan. 7–9, May 22 to June 2, July 12–28, Aug. 15–17, Sept. 8–30, which are rated poor. Water temperature records rated excellent except for Jan. 5–14, Jan. 18 to Feb. 8, Mar. 9 to May 9, Sept. 24–30, which are rated good; and Jan. 15–17, which are rated fair. Interruptions in record were due to malfunction of the recording instrument. Specific conductance and water temperature may be affected by upstream regulation.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 226 microsiemens, Feb. 26, 1988; minimum recorded, 38 microsiemens, Mar. 2, 1989.
WATER TEMPERATURE: Maximum recorded, 27.5°C, July 21, 1989; minimum recorded, 2.5°C, Dec. 11, 22, 1997.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 204 microsiemens, Mar. 20, but may have been higher during periods of missing record; minimum recorded, 53 microsiemens, May 20, June 2, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, 24.5°C, Aug. 8; minimum recorded, 6.5°C, Jan. 17, 18, but may have been lower during periods of missing record.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
JUL				
19...*	1335	72	20.5	3.00
19...*	1336	76	20.5	9.00
19...*	1337	75	20.5	15.0
19...*	1338	75	20.5	21.0
19...*	1339	75	20.5	27.0
19...*	1340	75	21.0	33.0
19...*	1341	75	21.0	39.0
19...*	1342	75	21.0	45.0
19...*	1343	75	21.0	51.0
19...*	1344	75	21.0	57.0

* Instantaneous discharge at time of cross-sectional measurement: 470 ft^3/s.

11303000 STANISLAUS RIVER AT RIPON, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	104	97	124	106	124	117	138	131	143	137	163	153
2	99	87	111	101	121	116	135	133	144	136	158	151
3	102	96	108	100	123	116	144	135	144	138	159	148
4	104	100	107	104	122	118	143	128	150	138	163	141
5	104	100	110	104	123	118	135	124	149	140	169	143
6	101	98	109	105	121	115	138	128	150	135	173	148
7	101	96	106	103	121	114	138	110	141	133	158	151
8	102	92	105	103	126	115	125	109	140	136	159	154
9	110	95	107	104	126	114	127	118	144	134	170	157
10	110	98	108	104	135	116	---	---	141	134	172	166
11	112	96	108	104	132	124	---	---	144	129	172	168
12	103	95	108	105	132	118	---	---	132	111	171	168
13	106	102	106	103	142	132	---	---	139	111	172	164
14	108	100	112	105	135	125	---	---	147	139	166	164
15	109	101	116	111	127	114	---	---	148	138	168	165
16	110	100	119	111	116	113	---	---	145	139	171	167
17	111	104	115	112	132	116	---	---	148	142	171	167
18	105	76	120	112	141	132	136	131	155	145	175	169
19	76	68	120	112	141	124	134	130	156	138	176	163
20	69	66	115	112	125	121	143	133	139	134	204	142
21	68	67	122	114	138	122	---	---	143	138	156	141
22	70	68	119	116	152	138	---	---	152	141	176	149
23	71	69	122	115	146	123	---	---	151	145	176	169
24	75	71	119	116	133	123	---	---	149	137	180	175
25	81	75	122	118	143	130	134	117	161	136	182	179
26	93	79	120	118	130	123	---	---	153	136	182	181
27	92	88	121	116	130	123	---	135	158	151	182	171
28	99	92	121	116	132	127	147	143	159	155	172	146
29	97	90	126	117	131	119	149	142	---	---	151	146
30	111	91	123	118	132	123	151	146	---	---	154	151
31	114	110	---	---	137	130	151	139	---	---	155	150
MONTH	114	66	126	100	152	113	---	---	161	111	204	141
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	151	134	72	69	59	54	---	---	101	95	94	85
2	134	131	70	68	57	53	---	---	119	94	91	84
3	131	128	70	69	---	---	---	---	143	119	90	82
4	131	128	71	69	---	---	---	---	132	100	89	82
5	128	118	70	67	---	---	---	---	103	94	93	81
6	118	110	70	68	---	---	88	73	103	98	94	85
7	111	95	69	67	---	---	88	74	108	96	90	84
8	100	94	69	67	---	---	84	74	109	101	90	82
9	101	95	68	66	---	---	87	75	115	103	87	81
10	103	100	67	64	---	---	85	75	117	104	92	82
11	103	101	65	62	---	---	79	75	117	104	99	82
12	103	100	63	61	---	---	81	75	117	106	112	99
13	111	95	61	59	---	---	78	73	119	108	112	103
14	104	95	60	58	---	---	75	72	118	110	104	97
15	101	95	59	57	---	---	77	70	119	112	100	88
16	101	94	58	56	---	---	75	68	125	116	88	82
17	101	97	57	55	---	---	71	66	126	83	83	78
18	105	99	56	54	---	---	72	65	100	81	84	76
19	101	71	56	54	---	---	76	71	88	81	86	84
20	76	71	55	53	---	---	79	73	89	80	89	86
21	72	69	58	54	---	---	81	75	86	79	94	85
22	72	69	63	58	---	---	91	79	96	85	98	94
23	70	68	72	62	---	---	86	80	97	87	99	94
24	71	68	66	63	---	---	90	81	98	88	102	99
25	71	68	64	60	---	---	90	78	97	86	107	101
26	70	67	70	62	---	---	90	83	89	84	111	107
27	69	68	65	60	---	---	95	85	99	84	115	111
28	70	67	71	59	---	---	98	87	95	83	116	114
29	70	68	69	62	---	---	91	86	89	83	117	115
30	71	68	63	56	---	---	94	89	94	82	118	114
31	---	---	60	57	---	---	99	90	90	84	---	---
MONTH	151	67	72	53	---	---	---	---	143	79	118	76

11303000 STANISLAUS RIVER AT RIPON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	18.0	13.5	13.0	---	---	---	---	9.5	8.0	12.5	11.0
2	19.5	18.0	14.0	13.0	---	---	---	---	9.5	8.5	12.0	11.5
3	19.0	17.5	14.0	13.0	---	---	---	---	10.5	8.5	12.0	11.5
4	19.0	17.5	14.0	13.0	---	---	---	---	11.0	9.5	11.5	11.5
5	18.5	17.0	14.0	13.0	---	---	8.5	7.5	11.5	10.0	12.0	11.0
6	19.0	17.0	13.5	13.0	---	---	8.5	7.5	11.0	10.0	12.5	11.0
7	18.5	17.0	13.0	12.0	---	---	8.5	7.5	10.5	9.0	14.0	12.0
8	18.5	17.0	13.0	12.0	---	---	9.5	8.5	9.5	8.0	15.0	13.0
9	18.0	17.0	13.0	12.0	---	---	9.5	9.0	9.5	8.5	14.0	13.0
10	17.0	15.5	12.5	11.5	---	---	9.5	9.0	9.5	8.5	14.0	12.0
11	16.0	15.0	11.5	11.0	---	---	9.5	9.0	10.0	9.0	14.5	12.5
12	16.0	14.5	11.0	10.0	---	---	10.0	9.0	9.5	8.5	15.0	12.5
13	16.0	14.5	10.5	9.5	---	---	10.0	9.0	9.0	8.0	15.5	13.0
14	16.5	14.5	---	---	---	---	9.5	9.0	9.5	8.0	16.0	13.5
15	16.5	15.0	---	---	---	---	9.0	8.0	10.5	8.5	15.0	14.0
16	16.5	15.0	---	---	---	---	8.5	7.0	11.0	9.5	15.5	13.5
17	17.0	15.0	---	---	---	---	7.5	6.5	10.5	10.0	16.0	13.5
18	16.5	15.5	---	---	---	---	8.0	6.5	12.0	10.5	17.0	14.5
19	16.0	14.0	---	---	---	---	9.0	7.5	12.0	11.0	18.0	15.5
20	15.0	14.5	---	---	---	---	8.5	7.5	12.0	11.0	19.5	17.0
21	14.5	14.0	---	---	---	---	8.5	7.5	12.5	11.5	19.5	17.0
22	14.0	13.0	---	---	---	---	9.5	8.0	12.0	11.0	19.0	17.0
23	13.5	12.5	---	---	---	---	10.0	8.5	12.0	11.0	18.5	16.5
24	14.0	13.0	---	---	---	---	10.5	9.5	11.5	10.0	18.5	16.5
25	14.0	13.5	---	---	---	---	9.5	9.0	11.5	10.0	18.5	17.0
26	14.0	13.5	---	---	---	---	10.0	9.0	12.5	11.0	18.0	16.0
27	14.5	13.5	---	---	---	---	9.5	8.5	13.5	11.5	18.0	15.5
28	14.5	13.5	---	---	---	---	9.5	8.5	13.0	11.5	18.5	16.5
29	14.5	13.5	---	---	---	---	10.0	8.5	---	---	19.0	16.5
30	14.0	13.0	---	---	---	---	9.5	8.0	---	---	19.0	17.0
31	14.0	13.0	---	---	---	---	9.5	8.0	---	---	19.0	17.0
MONTH	19.5	12.5	14.0	9.5	---	---	10.5	6.5	13.5	8.0	19.5	11.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.0	16.5	16.0	15.0	21.0	19.5	23.0	20.5	23.5	21.0	22.5	20.0
2	17.0	15.0	15.5	14.5	20.0	18.5	23.0	21.0	23.5	21.0	22.5	20.5
3	15.0	13.5	15.5	14.0	19.0	17.5	23.0	21.5	23.5	21.0	23.0	20.5
4	15.0	13.0	16.0	14.5	19.5	17.0	22.5	21.0	23.0	20.5	23.0	20.5
5	15.5	13.5	16.0	14.5	19.5	17.5	22.0	20.0	23.0	20.5	22.5	20.0
6	14.5	13.5	16.5	15.0	20.5	18.0	22.0	20.0	23.0	21.0	21.5	19.5
7	13.5	12.5	16.5	15.0	21.5	19.0	22.0	20.0	24.0	21.5	21.0	19.0
8	13.5	11.5	17.0	15.5	21.5	19.5	22.5	20.0	24.5	22.0	21.0	18.5
9	14.0	12.0	17.0	15.5	21.5	19.0	22.5	20.0	24.0	22.0	20.5	18.5
10	14.5	12.5	17.0	15.5	21.0	19.0	22.0	20.0	23.5	21.0	20.5	18.5
11	14.5	13.5	17.5	15.5	20.5	18.5	22.0	19.5	23.0	20.5	21.0	18.5
12	14.5	12.0	17.0	16.0	21.0	18.5	21.5	19.0	23.0	20.5	21.0	19.0
13	15.0	13.0	16.0	15.0	20.5	18.5	21.5	19.0	22.5	20.0	21.0	18.5
14	15.0	13.0	16.5	15.0	21.0	18.5	22.0	19.5	22.5	20.0	21.5	19.0
15	16.0	13.5	16.5	15.0	22.0	19.5	21.5	19.5	22.5	20.5	21.5	19.5
16	16.5	14.5	17.0	15.5	22.5	20.0	21.0	19.5	22.5	20.0	21.5	19.0
17	16.5	14.5	17.0	15.5	22.5	20.5	21.0	18.5	23.0	20.5	21.0	19.0
18	16.5	15.0	17.0	15.5	22.0	20.0	21.5	19.0	23.0	20.5	21.5	19.0
19	16.0	13.5	17.5	16.0	22.5	20.0	22.0	20.0	22.5	20.0	21.0	19.0
20	13.5	12.5	18.0	16.5	22.5	20.5	22.0	20.0	22.0	20.5	21.0	19.5
21	13.0	12.0	18.5	17.0	23.0	20.5	22.0	20.0	22.0	19.5	21.0	19.0
22	14.0	12.5	19.5	17.5	23.0	21.0	23.0	20.0	21.5	19.5	20.5	18.5
23	15.0	13.5	20.5	18.5	22.5	20.5	23.0	20.5	22.0	19.5	19.5	18.5
24	15.5	14.0	20.5	18.5	21.5	19.5	23.5	21.0	22.5	20.0	19.5	18.0
25	16.0	14.5	20.0	18.5	20.5	19.0	23.5	21.5	22.5	20.0	20.0	18.0
26	16.0	14.5	20.0	18.0	20.5	18.5	24.0	21.5	23.0	20.5	20.0	18.0
27	15.5	14.0	19.0	17.5	20.5	19.0	24.0	21.5	23.0	20.5	20.0	18.0
28	15.0	14.0	19.0	17.0	21.0	18.5	24.0	21.0	23.0	21.0	19.0	17.5
29	15.0	13.5	19.0	17.0	21.5	19.0	23.5	21.0	23.0	21.0	19.0	17.0
30	15.5	14.0	20.5	18.0	22.5	20.0	23.0	21.0	22.5	20.5	19.5	17.0
31	---	---	21.0	18.5	---	---	23.0	20.0	22.0	20.0	---	---
MONTH	18.0	11.5	21.0	14.0	23.0	17.0	24.0	18.5	24.5	19.5	23.0	17.0

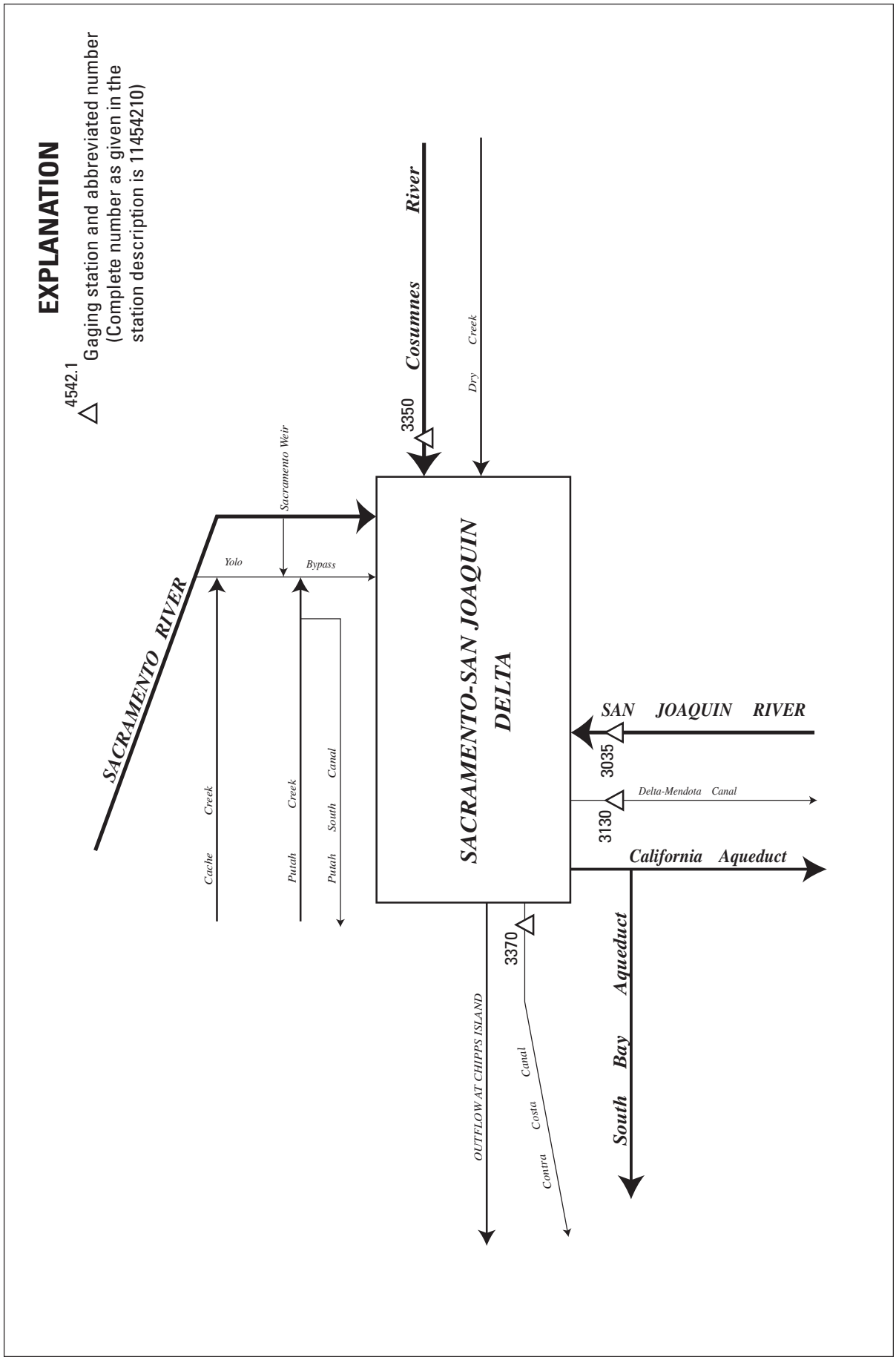

Figure 31. Principal inflows and diversions, Sacramento–San Joaquin Delta.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA

LOCATION.—Lat 37°40'34", long 121°15'55", in El Pescadero Grant, San Joaquin County, Hydrologic Unit 18040003, on left bank, 12 ft downstream from Durham Ferry highway bridge, 2.6 mi downstream from Stanislaus River, and 3.2 mi northeast of Vernalis.

DRAINAGE AREA.—13,536 mi^2, includes about 2,100 mi^2 in James Bypass.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1922 to current year (1922–23 and 1925–29, low-flow records only).

REVISED RECORDS.—WSP 831: 1936. WSP 931: 1940. WSP 1930: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is sea level. See WSP 2130 for history of changes prior to Nov. 30, 1967.

REMARKS.—Records good. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation; low flows consist mainly of return flow from irrigated areas. See schematic diagram of Sacramento–San Joaquin Delta.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge recorded, 79,000 ft^3/s, Dec. 9, 1950, elevation, 32.81 ft, present datum, including flow through breaks in levee; maximum elevation, 34.88 ft, Jan. 5, 1997; minimum discharge, 19 ft^3/s, Aug. 10, 1961.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	3140	2400	2090	2380	4940	2070	4160	1920	1490	1340	1230
2	2040	3040	2390	2070	2310	4330	2170	4180	1830	1440	1220	1360
3	1970	3090	2370	2040	2240	3790	2160	4230	1780	1390	1240	1570
4	2080	2870	2360	2020	2180	3500	2040	4110	1810	1350	1260	1450
5	2250	2740	2330	2020	2160	3950	1980	4050	e1780	1400	1310	1280
6	2270	2660	2280	2000	2150	5320	2080	4110	e1710	1400	1390	1240
7	2350	2590	2310	2010	2130	5900	2330	4110	e1660	1360	1350	1330
8	2450	2550	2290	2100	2100	5520	2610	4160	e1580	1410	1260	1370
9	2450	2540	2290	2280	2090	5660	2650	4130	e1570	1450	1180	1430
10	2500	2510	2280	2300	2110	5630	2580	4010	e1580	1440	1150	1450
11	2630	2460	2260	2580	2250	5060	2480	4170	e1550	1350	1220	1390
12	2770	2430	2230	2830	2470	4370	2430	4190	1540	1290	1290	1330
13	2640	2420	2240	2980	2750	3900	2430	4320	1530	1370	1340	1270
14	2570	2470	2230	3050	2900	3530	2420	4520	1510	1400	1290	1280
15	2620	2460	2230	3030	2900	3140	2420	4460	1470	1480	1290	1350
16	2570	2440	2230	2940	2980	2920	2490	4510	1500	1600	1280	1390
17	2520	2420	2200	2710	2920	2780	2280	4500	1540	1550	1260	1400
18	2730	2390	2190	2550	2820	2630	2130	4560	1520	1460	1330	1400
19	3020	2360	2180	2490	2780	2550	2200	4310	1390	1360	1450	1330
20	3350	2350	2180	2420	2760	2480	3450	3870	1320	1370	1470	1310
21	3390	2360	2210	2380	2700	2450	4410	3320	1340	1350	1390	1370
22	3300	2390	2230	2300	3090	2320	4530	2740	1340	1410	1340	1350
23	3290	2380	2210	2260	3850	2280	4440	2360	1310	1470	1370	1370
24	3410	2370	2190	2260	4960	2220	4420	2140	1400	1370	1340	1430
25	3340	2370	2170	2280	5480	2250	4310	2050	1520	1300	1360	1420
26	3390	2360	2170	2440	5980	2210	4100	2010	1520	1350	1480	1420
27	3870	2390	2180	2680	5750	2160	4130	2010	1480	1330	1530	1400
28	3800	2410	2170	2810	5390	2140	4200	2070	1470	1300	1470	1410
29	3450	2400	2150	2720	---	2140	4210	2100	1510	1360	1410	1450
30	3290	2410	2130	2580	---	2150	4090	1980	1490	1440	1330	1500
31	3280	---	2100	2470	---	2120	---	1910	---	1360	1280	---
TOTAL	87610	75770	69380	75690	86580	106340	90240	109350	46470	43400	41220	41280
MEAN	2826	2526	2238	2442	3092	3430	3008	3527	1549	1400	1330	1376
MAX	3870	3140	2400	3050	5980	5900	4530	4560	1920	1600	1530	1570
MIN	1970	2350	2100	2000	2090	2120	1980	1910	1310	1290	1150	1230
AC-FT	173800	150300	137600	150100	171700	210900	179000	216900	92170	86080	81760	81880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2001, BY WATER YEAR (WY)

MEAN	2304	2323	3624	5187	7335	7606	7205	7706	6529	2640	1442	1786
MAX	13320	10680	25130	30380	35060	40040	36450	31770	36650	19230	9035	11310
(WY)	1984	1984	1951	1997	1997	1983	1983	1983	1938	1983	1983	1983
MIN	246	430	506	804	758	444	200	380	118	92.8	124	179
(WY)	1978	1978	1978	1962	1991	1961	1961	1961	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1924 - 2001	
ANNUAL TOTAL	1472020		873330			
ANNUAL MEAN	4022		2393		4622	
HIGHEST ANNUAL MEAN					21280	1983
LOWEST ANNUAL MEAN					575	1977
HIGHEST DAILY MEAN	16700	Mar 7	5980	Feb 26	70000	Dec 9 1950
LOWEST DAILY MEAN	1570	Jan 8	1150	Aug 10	30	Aug 10 1961
ANNUAL SEVEN-DAY MINIMUM	1600	Jan 4	1250	Aug 8	59	Jul 19 1961
MAXIMUM PEAK FLOW			6050	Feb 26	79000	Dec 9 1950
MAXIMUM PEAK STAGE			13.51	Feb 26	34.88	Jan 5 1997
ANNUAL RUNOFF (AC-FT)	2920000		1732000		3349000	
10 PERCENT EXCEEDS	8440		4120		12700	
50 PERCENT EXCEEDS	2510		2230		2120	
90 PERCENT EXCEEDS	1860		1340		675	

e Estimated.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1951 to current year.
CHEMICAL DATA: Water years 1951 to 1999, October 2000 to September 2001.
BIOLOGICAL DATA: Water years 1974–81.
SEDIMENT DATA: Water years 1957 to current year.
SPECIFIC CONDUCTANCE: Water years 1951–63, 1973–82, 1985 to current year.
TURBIDITY: Water years 1972–84.
WATER TEMPERATURE: Water years 1951 to current year.

PERIOD OF DAILY RECORD.—March 1951 to current year.
CHEMICAL DATA: March 1951 to May 1963.
SPECIFIC CONDUCTANCE: March 1951 to May 1963, January 1973 to October 1981, June 1985 to current year.
WATER TEMPERATURE: March 1951 to current year.
SUSPENDED-SEDIMENT DISCHARGE: November 1956 to current year.

INSTRUMENTATION.—Conductivity recorder, January 1973 to October 1981. Temperature recorder, October 1961 to September 1963 and December 1972 to May 1985. Water-quality monitor since June 1985.

REMARKS.—Specific conductance records are rated excellent except for Nov. 27 to Dec. 2, Mar. 17–22, Apr. 4–6, July 10, July 15–19, Aug. 11–13, Aug. 23 to Sept. 11, Sept. 18, 19, Sept. 26–30, which are rated good; and July 11–14, Aug. 14, Sept. 20–25 which are rated fair. Water-temperature records rated excellent except for Oct. 1 to Jan. 22, Mar. 18–24, May 12–16, May 18–23, June 20–24. which are rated good; and May 17 which is rated fair. Mean daily specific-conductance records, January 1973 to October 1981, provided by U.S. Bureau of Reclamation. Maximum and minimum specific-conductance values, June 1985 to September 1988, are available in files of the U.S. Geological Survey. Interruptions in record were due to malfunction of recording instrument. Chemical Data for water year 2000 available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum daily, 2,350 microsiemens, Aug. 11, 1961; minimum daily, 60 microsiemens, June 21, 1953.
WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 9, 1990; minimum recorded, 2.0°C, Dec. 26, 1987.
SEDIMENT CONCENTRATION: Maximum daily mean, 1,590 mg/L, Dec. 25, 1964; minimum daily mean, 6 mg/L, Jan. 1, 1991.
SEDIMENT LOAD: Maximum daily, 54,100 tons, Dec. 25, 1964; minimum daily, 2 tons, Aug. 10, 1961.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,160 microsiemens, Mar. 19, 20, but may have been higher during periods of missing record; minimum recorded, 199 microsiemens, Oct. 26, but may have been lower during periods of missing record.
WATER TEMPERATURE: Maximum recorded, 29.0°C, July 3; minimum recorded, 7.5°C, Jan. 17, 18.
SEDIMENT CONCENTRATION: Maximum daily mean, 160 mg/L, Mar. 6; minimum daily mean, 16 mg/L, Jan. 5, 6.
SEDIMENT LOAD: Maximum daily, 2,470 tons, Mar. 7; minimum daily, 73 tons, June 16.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT													
	04...1000	2090	.078	.066	757	8.3	91.1	8.0	510	19.5	26	120	27.0
	18...1000	2690	.089	.068	761	8.1	85.8	7.8	490	18.0	24	110	25.3
NOV													
	29...1200	2400	--	--	763	10.0	90.7	7.7	649	11.0	47	143	31.7
DEC													
	13...1130	2240	--	--	764	9.5	87.1	7.5	748	11.5	49	159	35.2
JAN													
	04...1440	2020	--	--	--	--	--	8.1[1]	800	--	--	--	--
	08...1720	2120	--	--	--	--	--	7.9[1]	798	--	--	--	--
	09...0900	2290	--	--	--	--	--	7.9[1]	757	--	--	--	--
	09...1450	2290	--	--	--	--	--	7.8[1]	749	--	--	--	--
	11...1300	2620	--	--	--	--	--	7.9[1]	696	--	--	--	--
	11...1310	2630	--	--	753	9.6	85.2	7.9[1]	690	9.5	41	145	30.6
	18...0940	2560	--	--	--	--	--	7.9[1]	793	--	--	--	--
	26...0710	2390	--	--	--	--	--	7.8[1]	820	--	--	--	--
	26...1100	2440	--	--	--	--	--	7.8[1]	779	--	--	--	--
	26...1710	2490	--	--	--	--	--	7.9[1]	772	--	--	--	--
	26...2030	2520	--	--	--	--	--	7.9[1]	782	--	--	--	--
	27...0040	2540	--	--	--	--	--	7.9[1]	796	--	--	--	--
	27...0400	2570	--	--	--	--	--	7.9[1]	785	--	--	--	--
	27...0800	2620	--	--	--	--	--	7.8[1]	788	--	--	--	--
	27...1900	2780	--	--	--	--	--	7.9[1]	747	--	--	--	--
	28...0200	2830	--	--	--	--	--	7.9[1]	727	--	--	--	--
	28...0950	2840	--	--	--	--	--	7.9[1]	712	--	--	--	--
	28...2230	2770	--	--	--	--	--	7.7[1]	780	--	--	--	--
	29...0900	2740	--	--	--	--	--	--	--	--	--	--	--
	29...2020	2680	--	--	--	--	--	7.7[1]	739	--	--	--	--
	30...0900	2600	--	--	--	--	--	7.7[1]	760	--	--	--	--
	30...1800	2550	--	--	--	--	--	7.7[1]	777	--	--	--	--
FEB													
	01...0900	2400	--	--	--	--	--	7.8[1]	869	--	--	--	--
	08...1300	2110	--	--	--	--	--	7.5[1]	987	--	--	--	--
	12...1730	2500	--	--	--	--	--	8.0[1]	798	--	--	--	--
	13...1710	2850	--	--	--	--	--	7.9[1]	708	--	--	--	--
	14...1700	2890	--	--	--	--	--	7.9[1]	700	--	--	--	--
	15...1320	2890	--	--	--	--	--	7.8[1]	701	--	--	--	--
	15...1400	2890	--	--	--	--	--	7.8[1]	691	--	52	147	32.5
	21...1700	2700	--	--	--	--	--	7.9[1]	752	--	--	--	--
	22...0600	2960	--	--	--	--	--	7.8[1]	669	--	--	--	--
	22...1150	3060	--	--	--	--	--	7.8[1]	643	--	--	--	--
	25...0900	5380	--	--	--	--	--	7.6[1]	473[1]	--	--	--	--
	25...1300	5430	--	--	--	--	--	7.5[1]	476[1]	11.5	--	--	--
	25...1730	5580	--	--	--	--	--	7.5[1]	470[1]	--	--	--	--
	25...2110	5720	--	--	--	--	--	7.6[1]	467[1]	--	--	--	--
	26...0000	5820	--	--	--	--	--	7.6[1]	448[1]	--	--	--	--
	26...0110	5860	--	--	--	--	--	7.5[1]	467[1]	--	--	--	--
	26...0500	5970	--	--	--	--	--	7.3[1]	467[1]	--	--	--	--
	26...1200	6040	--	--	--	--	--	7.5[1]	414[1]	--	--	--	--
	26...1800	6000	--	--	--	--	--	7.5[1]	417[1]	--	--	--	--
	27...0700	5810	--	--	--	--	--	7.5[1]	458[1]	--	--	--	--
	27...1740	5680	--	--	--	--	--	7.8[1]	455[1]	--	--	--	--
	28...0730	5450	--	--	--	--	--	7.3[1]	470[1]	--	--	--	--
	28...1830	5320	--	--	--	--	--	7.5[1]	479[1]	--	--	--	--
MAR													
	08...1030	5480	--	--	765	8.5	80.4	7.4	513	13.0	33	115	25.5
APR													
	04...1030	2050	--	--	761	9.0	90.6	8.0	895	15.5	80	195	41.8
	11...1500	2460	--	--	--	--	--	7.9[1]	666[1]	--	--	--	--
	18...1420	2110	--	--	--	--	--	8.1[1]	686[1]	--	--	--	--
	25...1240	4300	--	--	--	--	--	8.0[1]	333[1]	19.0	--	--	--

[1] Laboratory value.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 GRAN T FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT													
04...	12.8	2.25	2.11	53.2	48.5	94	62.0	e.1	15.1	55.5	40	<10	.4
18...	11.2	2.59	2.32	55.7	51.8	86	57.2	e.1	14.9	53.9	61	<10	.4
NOV													
29...	15.4	2.63	2.69	73.9	52.4	96	86.5	e.2	15.1	76.4	--	--	.5
DEC													
13...	17.3	3.01	2.82	81.8	52.2	110	103	e.1	15.2	94.4	--	--	.6
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	16.6	3.18	2.93	81.0	54.3	100	93.4	e.1	13.5	92.9	--	--	.6
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
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30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
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13...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	15.9	3.29	2.92	81.1	53.9	95	86.7	e.1	12.6	103	--	--	.6
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
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28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
08...	12.6	4.32	2.28	56.3	50.3	82	55.4	e.1	13.1	72.9	--	--	.4
APR													
04...	21.9	3.38	3.34	107	53.9	120	120	e.1	14.1	133	--	--	.7
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, RESIDUE AT 180 DEG C DIS-OLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN,PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	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, INORG + ORGANIC PARTIC TOTAL (MG/L AS C) (00694)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT													
04...	295	293	<.020	.20	.52	1.96	.030	--	.119	.101	.200	--	2.6
18...	289	280	e.027	.28	.62	1.62	.017	--	.122	.102	.239	--	3.0
NOV													
29...	381	368	.094	.29	.53	1.85	.032	--	.105	.098	.187	--	--
DEC													
13...	444	425	e.024	.53	.66	1.98	.027	--	.148	.082	.198	--	--
JAN													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	417	403	.144	.50	.80	1.94	<.006	--	.150	.128	.294	--	3.3
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	.162	.56	.81	1.87	.025	--	.176	.165	.312	--	--
26...	--	--	.158	.55	1.1	1.93	.028	--	.178	.166	.351	--	--
26...	--	--	.165	.52	1.0	1.91	.027	--	.173	.167	.329	--	--
27...	--	--	.197	.64	1.0	1.89	.029	--	.174	.170	.350	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
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28...	--	--	--	--	--	--	--	--	--	--	--	--	--
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30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	436	392	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
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26...	--	--	--	--	--	--	--	--	--	--	--	--	--
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26...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
08...	325	298	.146	.71	1.2	1.66	.030	--	--	.214	.395	--	--
APR													
04...	541	521	.114	.47	.79	2.14	.060	.215	.149	.130	.238	1.0	4.4
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	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)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
OCT													
04...	.3	--	10.5	<.1	--	10	9.1	--	--	--	--	--	--
18...	--	--	7.2	e.2	235	10	5.6	<2.4	<.002	<.004	<.002	<.005	e.002
NOV													
29...	--	--	--	--	308	20	29.1	e2.0	<.002	<.004	<.002	<.005	<.007
DEC													
13...	--	--	--	--	--	e6.6	28.2	--	<.002	<.004	<.002	<.005	e.002
JAN													
04...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
08...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
09...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
09...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
11...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
11...	.9	--	--	--	379	60	29.0	<2.4	<.002	<.004	<.002	<.005	e.003
18...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	7.1	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
26...	--	7.7	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
27...	--	7.0	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
27...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
27...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
27...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
28...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
28...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
28...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005
29...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
29...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
30...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
30...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
FEB													
01...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
08...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
12...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
13...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
14...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
15...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003
15...	--	--	--	--	427	10	11.3	e2.2	<.002	<.004	<.002	<.005	e.003
21...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
22...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
22...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
25...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
25...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
25...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
25...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
26...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007
27...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.001
27...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
28...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
28...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002
MAR													
08...	--	--	--	--	313	40	11.8	<2.4	<.002	<.004	<.002	<.005	e.002
APR													
04...	--	--	--	--	531	e7.5	17.5	e1.3	<.002	<.004	<.002	<.005	e.002
11...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004
18...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	M	e.003
25...	--	--	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-AZINON, TOTAL (UG/L) (39570)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	<.005	--
NOV													
29...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	<.005	--
DEC													
13...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.009	--
JAN													
04...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.004	--	e.003	--
08...	<.010	<.002	<.041	<.020	--	e.003	--	<.018	<.003	<.006	--	e.004	--
09...	<.010	<.002	e.025	<.020	--	<.005	--	<.018	<.003	<.006	--	.024	--
09...	<.010	<.002	e.027	<.020	--	e.003	--	<.018	e.001	<.006	--	.041	--
11...	<.010	<.002	e.093	<.020	--	e.004	--	<.018	e.001	<.006	--	.031	--
11...	<.010	<.002	e.107	<.020	--	e.004	--	<.018	e.001	<.006	--	.033	--
18...	<.010	<.002	<.041	<.020	--	.006	--	<.018	e.002	<.006	--	.019	--
26...	<.010	<.002	<.041	<.020	--	.006	--	<.018	<.003	<.006	--	.020	--
26...	<.010	<.002	<.041	<.020	--	.007	--	<.018	<.003	<.006	--	.028	--
26...	<.010	<.002	e.002	<.020	--	.009	--	<.018	e.001	<.006	--	.104	--
26...	<.010	<.002	<.041	<.020	--	.008	--	<.018	<.003	<.006	--	.073	--
27...	<.010	<.002	e.011	<.020	--	e.004	--	<.018	<.003	<.006	--	.168	--
27...	<.010	<.002	e.111	<.020	<.02	.007	<.01	<.018	e.001	<.006	<.10	.172	.13
27...	<.010	<.002	e.211	<.020	--	.007	--	<.018	.002	<.006	--	.201	--
27...	<.010	<.002	e.010	<.020	--	.006	--	<.018	e.002	<.006	--	.206	--
28...	<.010	<.002	e.006	<.020	--	.005	--	<.018	e.001	<.006	--	.235	--
28...	<.010	<.002	e.003	<.020	--	.010	--	<.018	<.003	<.006	--	.200	--
28...	<.010	<.002	e.001	<.020	--	.007	--	<.018	<.003	<.006	--	.220	--
29...	<.010	<.002	<.041	<.020	--	.005	--	<.018	<.003	<.006	--	.224	--
29...	<.010	<.002	<.041	<.020	--	.006	--	<.018	<.003	<.006	--	.185	--
30...	<.010	<.002	<.041	<.020	--	.006	--	<.018	<.003	<.006	--	.141	--
30...	<.010	<.002	<.041	<.020	--	e.004	--	<.018	<.003	<.006	--	.126	--
FEB													
01...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.035	--
08...	e.002	<.002	<.090	<.020	--	e.002	--	e.011	e.001	e.002	--	.009	--
12...	<.010	<.002	e.008	<.020	--	e.002	--	<.018	<.003	<.006	--	.028	--
13...	<.010	<.002	<.041	<.020	--	.012	--	<.018	.004	<.006	--	.117	--
14...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.019	--
15...	<.010	<.002	<.041	<.020	--	<.005	--	e.007	<.003	<.006	--	.024	--
15...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.027	--
21...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.002	--	.012	--
22...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.012	--
22...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.002	--	.010	--
25...	<.010	<.002	<.041	<.020	<.02	<.005	<.01	<.018	e.002	<.006	<.02	.013	e.01
25...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.010	--
25...	<.010	<.002	<.041	<.020	<.02	<.005	<.01	<.018	<.003	<.006	<.02	.011	e.01
25...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	e.002	<.006	--	.010	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.007	--
26...	<.010	<.002	e.006	<.020	--	<.005	--	<.018	<.003	<.006	--	.009	--
26...	<.010	<.002	e.006	<.020	--	<.005	--	<.018	e.002	<.006	--	.013	--
26...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	<.006	--	.010	--
27...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.002	--	.006	--
27...	<.010	<.002	<.041	<.020	--	<.005	--	e.004	<.003	e.002	--	.007	--
28...	<.010	<.002	<.041	<.020	--	<.005	--	e.004	<.003	e.002	--	.011	--
28...	<.010	<.002	<.041	<.020	--	<.005	--	<.018	<.003	e.002	--	.012	--
MAR													
08...	<.010	<.002	<.041	<.020	--	e.003	--	e.004	<.003	e.002	--	.014	--
APR													
04...	<.010	<.002	e.008	e.009	--	<.005	--	e.006	e.001	<.006	--	.007	--
11...	<.010	<.002	e.114	e.023	--	<.005	--	<.018	<.003	<.006	--	.005	--
18...	<.010	<.002	e.043	e.037	--	<.005	--	<.018	<.003	e.003	--	.016	--
25...	<.010	<.002	<.041	e.010	--	<.005	--	<.018	<.003	<.006	--	e.004	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MALA-THION, TOTAL (UG/L) (39530)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.005	<.021	--	.015	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
NOV													
29...	<.005	<.021	--	.007	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
DEC													
13...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
JAN													
04...	<.005	<.021	--	<.002	<.009	--	.007	--	<.003	e.004	<.035	<.027	--
08...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
09...	<.005	<.021	--	e.004	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
09...	<.005	<.021	--	.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
11...	<.005	<.021	--	<.005	<.009	--	<.005	--	<.003	<.004	<.035	e.004	--
11...	<.005	<.021	--	.005	<.009	--	<.005	--	<.003	<.004	<.035	e.005	--
18...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	<.004	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
27...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
27...	<.005	<.021	--	e.004	<.009	<.01	<.005	<.01	<.003	<.004	<.035	e.007	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
28...	<.005	<.021	--	<.004	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
28...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
28...	<.005	<.021	--	<.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
29...	<.005	<.021	--	<.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
29...	<.005	<.021	--	<.006	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
30...	<.005	<.021	--	<.005	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
30...	<.005	<.021	--	<.004	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
FEB													
01...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
08...	<.005	<.021	--	e.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
12...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	e.003	<.035	<.027	--
13...	<.005	<.021	--	<.007	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
14...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
15...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
15...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
21...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
22...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
22...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
25...	<.005	<.021	<.07	<.002	<.009	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.06
25...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
25...	<.005	<.021	<.07	<.002	<.009	<.01	<.005	<.01	<.003	<.004	<.035	<.027	<.06
25...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
26...	<.005	<.021	--	e.002	<.009	--	<.005	--	<.003	<.004	<.035	e.005	--
26...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	e.006	--
27...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
27...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
28...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
28...	<.005	<.021	--	e.001	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
MAR													
08...	<.005	<.021	--	<.002	<.009	--	<.005	--	<.003	<.004	<.035	e.003	--
APR													
04...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	e.026	--
11...	<.005	<.021	--	e.003	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--
18...	<.005	<.021	--	.007	<.009	--	<.005	--	<.003	.005	<.035	<.027	--
25...	<.005	<.021	--	.045	<.009	--	<.005	--	<.003	<.004	<.035	<.027	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PARA-THION, TOTAL (UG/L) (39540)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.050	--	<.006	e.005	<.006	<.002	<.007	e.002	<.007	--	<.002	<.010	<.006
NOV													
29...	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
DEC													
13...	<.050	--	<.006	e.001	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
JAN													
04...	<.050	--	<.006	e.004	<.006	<.002	.087	e.001	<.007	--	<.002	<.010	<.006
08...	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
09...	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002	e.007	<.006
09...	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002	.011	<.006
11...	<.050	--	<.006	e.010	.010	<.002	<.007	<.003	<.007	--	<.002	.018	<.006
11...	<.050	--	<.006	e.010	.011	<.002	e.005	<.003	<.007	--	<.002	.018	<.006
18...	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
26...	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
26...	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	e.006	<.006
26...	<.050	--	<.006	e.007	<.006	<.002	<.007	<.003	<.007	--	<.002	.016	<.006
26...	<.050	--	<.006	e.002	<.006	<.002	<.007	<.003	<.007	--	<.002	.011	<.006
27...	<.050	--	<.006	e.003	<.006	<.002	.027	<.003	<.007	--	<.002	.027	<.006
27...	<.050	<.01	<.006	e.006	<.006	<.002	.142	<.003	<.007	<.01	<.002	.064	<.006
27...	<.050	--	<.006	e.006	<.006	<.002	.214	<.002	<.007	--	<.002	.052	<.006
27...	<.050	--	<.006	e.008	<.006	<.002	.332	<.003	<.007	--	<.002	.054	<.006
28...	<.050	--	<.006	e.007	<.006	<.002	.332	<.003	<.007	--	<.002	.065	<.006
28...	<.050	--	<.006	e.009	<.006	<.002	.146	<.003	<.007	--	<.002	.044	<.006
28...	<.050	--	<.006	e.008	<.006	<.002	.170	<.003	<.007	--	<.002	.030	<.006
29...	<.050	--	<.006	e.009	<.006	<.002	.090	<.003	<.007	--	<.002	.025	<.006
29...	<.050	--	<.006	e.007	<.006	<.002	.031	<.003	<.007	--	<.002	.021	<.006
30...	<.050	--	<.006	e.007	<.006	<.002	.019	<.003	<.007	--	<.002	.016	<.006
30...	<.050	--	<.006	e.007	<.006	<.002	.010	<.003	<.007	--	<.002	.011	<.006
FEB													
01...	<.050	--	<.006	<.013	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
08...	<.050	--	<.006	.013	<.006	<.002	e.003	e.001	<.007	--	<.002	e.006	<.006
12...	<.050	--	<.006	.013	<.006	<.002	<.007	<.003	<.007	--	<.002	.019	<.006
13...	<.050	--	<.006	<.013	<.006	<.002	.010	<.003	<.007	--	<.002	.042	<.006
14...	<.050	--	<.006	e.011	<.006	<.002	.010	<.003	<.007	--	<.002	.014	<.006
15...	<.050	--	<.006	e.013	<.006	<.002	e.006	<.003	<.007	--	<.002	.019	<.006
15...	<.050	--	<.006	.013	<.006	<.002	<.007	<.003	<.007	--	<.002	.017	<.006
21...	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
22...	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
22...	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002	.011	<.006
25...	<.050	<.01	<.006	e.005	<.006	<.002	e.006	<.003	<.007	<.01	<.002	.011	<.006
25...	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002	.010	<.006
25...	<.050	<.01	<.006	e.006	<.006	<.002	<.007	<.003	<.007	<.01	<.002	<.010	<.006
25...	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002	e.008	<.006
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
26...	<.050	--	<.006	e.007	<.006	<.002	.013	<.003	<.007	--	<.002	.012	<.006
26...	<.050	--	<.006	e.005	<.006	<.002	.010	<.003	<.007	--	<.002	.015	<.006
26...	<.050	--	<.006	e.005	<.006	<.002	.007	<.003	<.007	--	<.002	.012	<.006
27...	<.050	--	<.006	e.004	<.006	<.002	e.003	<.003	<.007	--	<.002	<.010	<.006
27...	<.050	--	<.006	e.003	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
28...	<.050	--	<.006	e.005	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
28...	<.050	--	<.006	e.004	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006
MAR													
08...	<.050	--	<.006	e.004	<.006	<.002	e.004	<.003	<.007	--	<.002	e.007	<.006
APR													
04...	<.050	--	<.006	.031	<.006	<.002	<.007	<.003	<.007	--	<.002	<.011	<.006
11...	<.050	--	<.006	e.011	<.006	<.002	<.007	<.003	<.007	--	<.002	e.010	<.006
18...	<.050	--	<.006	e.010	e.005	<.002	.008	<.003	<.007	--	<.015	<.010	<.006
25...	<.050	--	<.006	.016	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.006

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002
NOV													
29...	--	<.011	<.015	<.004	<.010	<.011	<.023	e.002	<.016	<.034	<.017	<.005	<.002
DEC													
13...	--	<.011	<.015	<.004	<.010	<.011	<.023	e.010	<.016	<.034	<.017	<.005	<.002
JAN													
04...	--	<.011	e.001	<.004	<.010	<.011	<.023	.011	<.016	<.034	<.017	<.005	<.002
08...	--	<.011	<.015	<.004	<.010	<.011	<.023	.048	<.016	<.034	<.017	<.005	<.002
09...	--	<.011	e.001	<.004	<.010	<.011	<.023	.197	<.016	<.034	<.017	<.005	<.002
09...	--	<.011	e.002	<.004	<.010	<.011	<.023	.143	<.016	<.034	<.017	<.005	<.002
11...	--	<.011	e.002	<.004	<.010	<.011	<.023	.526	<.016	<.034	<.017	<.005	<.002
11...	--	<.011	e.002	<.004	<.010	<.011	<.023	.584	<.016	<.034	<.017	<.005	<.002
18...	--	<.011	<.015	<.004	<.010	<.011	<.023	.081	<.016	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.025	<.016	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.033	<.016	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.251	<.016	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.240	<.016	<.034	<.017	<.005	<.002
27...	--	<.011	<.015	<.004	<.010	<.011	<.023	.161	<.016	<.034	<.017	<.005	<.002
27...	<.10	<.011	e.002	<.004	<.010	<.011	<.023	.155	<.016	<.034	<.017	<.005	<.002
27...	--	<.011	e.003	<.004	<.010	<.011	<.023	.176	<.016	<.034	<.017	<.005	<.002
27...	--	<.011	<.015	<.004	<.010	<.011	<.023	.212	<.016	<.034	<.017	<.005	<.002
28...	--	<.011	<.015	<.004	<.010	<.011	<.023	.326	<.016	<.034	<.017	<.005	<.002
28...	--	<.011	<.015	<.004	<.010	<.011	<.023	.373	<.016	<.034	<.017	<.005	<.002
28...	--	<.011	<.015	<.004	<.010	<.011	<.023	.350	<.016	<.034	<.017	<.005	<.002
29...	--	<.011	<.015	<.004	<.010	<.011	--	.683	<.016	<.034	<.017	<.005	<.002
29...	--	<.011	<.015	<.004	<.010	<.011	--	.756	<.016	<.034	<.017	<.005	<.002
30...	--	<.011	<.015	<.004	<.010	<.011	--	.449	<.016	<.034	<.017	<.005	<.002
30...	--	<.011	<.015	<.004	<.010	<.011	--	.410	<.016	<.034	<.017	<.005	<.002
FEB													
01...	--	<.011	<.015	<.004	<.010	<.011	<.023	.185	<.016	<.034	<.017	<.005	<.002
08...	--	<.011	e.002	<.004	<.010	<.011	<.023	.070	e.003	<.034	<.017	<.005	<.002
12...	--	<.011	<.015	<.004	<.010	<.011	<.023	.046	<.016	<.034	<.017	<.005	<.002
13...	--	<.011	<.015	<.004	<.010	<.011	<.023	.035	<.016	<.034	<.017	<.005	<.002
14...	--	<.011	<.015	<.004	<.010	<.011	<.023	.196	<.016	<.034	<.017	<.005	<.002
15...	--	<.011	<.015	<.004	<.010	<.011	<.023	.262	<.016	<.034	<.017	<.005	<.002
15...	--	<.011	<.015	<.004	<.010	<.011	<.023	.258	<.016	<.034	<.017	<.005	<.002
21...	--	<.011	<.015	<.004	<.010	<.011	<.023	.046	<.016	<.034	<.017	<.005	<.002
22...	--	<.011	<.015	<.004	<.010	<.011	<.023	.078	<.016	<.034	<.017	<.005	<.002
22...	--	<.011	<.015	<.004	<.010	<.011	<.023	.274	<.016	<.034	<.017	<.005	<.002
25...	<.02	<.011	<.015	<.004	<.010	<.011	<.023	.077	<.016	<.034	<.017	<.005	<.002
25...	--	<.011	<.015	<.004	<.010	<.011	<.023	.065	<.016	<.034	<.017	<.005	<.002
25...	<.02	<.011	<.015	<.004	<.010	<.011	<.023	.065	<.016	<.034	<.017	.005	<.002
25...	--	<.011	<.015	<.004	<.010	<.011	<.023	.074	.025	<.034	<.017	<.005	<.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.119	.065	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.187	.062	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.300	.027	<.034	<.017	<.005	<.002
26...	--	<.011	<.015	<.004	<.010	<.011	<.023	.155	<.016	<.034	<.017	<.005	<.002
27...	--	<.011	<.015	<.004	<.010	<.011	<.023	.061	<.016	<.034	<.017	<.005	<.002
27...	--	<.011	<.015	<.004	<.010	<.011	<.023	.086	<.016	<.034	<.017	<.005	<.002
28...	--	<.011	<.015	<.004	<.010	<.011	<.023	.116	<.016	<.034	<.017	<.005	<.002
28...	--	<.011	<.015	<.004	<.010	<.011	<.023	.074	<.016	<.034	<.017	<.005	<.002
MAR													
08...	--	<.011	e.003	<.004	<.010	<.011	<.023	.233	<.016	<.034	<.017	<.005	<.002
APR													
04...	--	<.011	e.001	<.004	<.010	<.011	<.023	.019	<.016	<.034	<.017	<.005	<.002
11...	--	<.011	<.015	<.004	<.010	<.011	<.023	.213	<.016	<.034	<.017	<.005	<.002
18...	--	<.011	e.002	<.004	<.010	<.011	<.023	.015	<.016	<.034	<.017	<.005	<.002
25...	--	<.011	<.015	<.004	<.010	<.011	<.023	.018	<.016	<.034	<.017	<.005	<.002

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
OCT		
04...	--	10
18...	<.009	--
NOV		
29...	e.003	--
DEC		
13...	<.009	--
JAN		
04...	<.009	--
08...	e.001	--
09...	e.001	--
09...	e.001	--
11...	e.002	--
11...	e.002	--
18...	<.009	--
26...	<.009	--
26...	<.009	--
26...	<.009	--
26...	<.009	--
27...	e.005	--
27...	<.009	--
27...	<.009	--
27...	<.009	--
28...	<.009	--
28...	<.009	--
28...	<.009	--
29...	e.005	--
29...	e.005	--
30...	e.005	--
30...	e.005	--
FEB		
01...	<.009	--
08...	e.003	--
12...	e.006	--
13...	e.005	--
14...	e.004	--
15...	e.005	--
15...	e.005	--
21...	e.005	--
22...	e.006	--
22...	e.005	--
25...	e.003	--
25...	e.004	--
25...	e.005	--
25...	e.005	--
26...	--	--
26...	e.005	--
26...	e.003	--
26...	e.003	--
26...	e.003	--
27...	e.005	--
27...	e.005	--
28...	e.005	--
28...	e.005	--
MAR		
08...	e.005	--
APR		
04...	e.004	--
11...	.011	--
18...	<.009	--
25...	e.008	--

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e Estimated.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
MAY													
	02...1300	4160	--	--	--	--	--	7.9[1]	352[1]	17.0	--	--	--
	07...1000	4120	--	--	765	9.2	97.9	7.7	334	18.5	26	76.9	17.0
	09...1200	4160	--	--	--	--	--	7.6[1]	323[1]	--	--	--	--
	16...1320	4510	--	--	--	--	--	7.8[1]	297[1]	--	--	--	--
	23...1210	2360	--	--	--	--	--	7.6	581	24.0	--	--	--
	30...1120	1990	--	--	--	--	--	8.0[1]	599[1]	23.5	--	--	--
JUN													
	06...1350	--	--	--	--	--	--	8.4[1]	662[1]	--	--	--	--
	12...1050	1560	--	--	452	7.9	152	8.2	749	21.0	--	--	--
	12...1140	1560	--	--	752	7.9	90.1	8.2	748	21.0	62	167	36.5
	14...1200	1550	.071	.054	758	10.2	119	8.6	752	22.5	78	178	39.1
	19...1220	1390	--	--	--	--	--	8.6[1]	640[1]	--	--	--	--
	21...1220	1370	--	--	--	--	--	--	--	--	--	--	--
	26...1140	1540	--	--	--	--	--	8.4	593	22.5	--	--	--
	28...1150	1480	.080	.060	763	9.4	109	8.4	659	22.5	50	145	31.6
JUL													
	03...1250	1410	--	--	--	--	--	9.0	577	--	--	--	--
	10...1330	1460	--	--	--	--	--	8.9	676	--	--	--	--
	12...1000	1300	.078	.059	761	11.3	131	8.9	661	22.5	51	154	34.2
	17...1300	1550	--	--	--	--	--	8.5	572	--	--	--	--
	24...1210	1380	--	--	--	--	--	8.1[1]	777[1]	--	--	--	--
	26...1030	1360	.082	.062	757	11.8	146	8.7	719	25.5	--	165	35.9
	31...1300	1350	--	--	--	--	--	8.2	665	--	--	--	--
AUG													
	01...1130	1360	--	--	762	9.6	117	8.5	705	25.0	--	159	35.0
	02...1040	1220	--	--	--	--	--	--	--	--	--	--	--
	07...1320	1370	--	--	--	--	--	8.7[1]	588[1]	--	--	--	--
	09...1100	1200	.080	.060	758	10.2	127	8.5	744	26.0	--	170	37.2
	14...1230	1290	--	--	--	--	--	8.7	625	--	--	--	--
	15...1020	1300	--	--	759	9.3	108	8.6	680	22.5	--	--	--
	21...1210	1410	--	--	--	--	--	8.3	704	--	--	--	--
	23...1030	1380	.073	.055	763	9.5	111	8.3	732	23.0	57	160	34.7
SEP													
	06...1030	1230	.076	.058	760	9.3	107	8.4	790	22.0	--	--	--
	11...1110	1420	--	--	759	8.2	93.5	8.3	736	21.5	--	--	--
	20...1030	1290	.080	.061	--	--	--	8.2	584	21.0	57	155	33.8

[1] Laboratory value.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	8.35	1.37	1.66	33.4	48.0	51	36.5	<.2	10.6	39.0	--	--	.3
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	18.4	2.45	2.59	77.0	49.6	100	89.4	e.2	14.1	90.8	--	--	.6
14...	19.5	2.49	2.76	84.8	50.5	100	98.7	e.1	13.9	104	43	5	.6
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	16.1	2.36	2.28	63.3	48.1	95	80.8	e.1	13.5	81.1	64	7	.5
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	16.7	2.53	2.50	71.2	49.6	100	83.7	e.1	12.9	79.2	63	12	.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	18.2	2.56	2.66	78.4	50.4	--	89.5	e.1	13.1	95.3	46	7	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	17.3	2.47	2.56	74.0	49.9	--	87.8	e.1	13.7	89.5	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	18.8	2.83	2.62	78.5	49.6	170	96.2	e.1	14.1	93.6	47	7	.6
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	17.9	2.69	2.66	77.5	50.8	100	97.3	e.1	14.5	91.2	121	11	.6
SEP													
06...	19.3	2.88	3.00	80.3	50.0	120	105	e.1	13.8	90.4	32	--	--
11...	--	--	--	--	--	88	--	--	--	--	--	--	--
20...	17.1	2.70	2.47	70.6	49.2	98	91.9	e.1	16.9	70.4	42	6	.5

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11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN,PAR TICULTE WAT FLT SUSP MG/L AS N) (49570)	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, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	190	180	e.022	.16	.35	.680	.017	.271	.050	.025	.126	e2.1	<.1
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	443	392	--	--	--	--	--	--	--	--	--	--	--
14...	454	431	<.040	.22	.83	2.03	.027	--	.107	.082	.236	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	376	355	<.040	.23	.85	2.01	.035	--	.122	.099	.225	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	387	371	<.040	.20	.92	1.86	.035	--	.105	.083	.243	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	430	--	<.040	.22	.97	2.17	.041	--	.087	.077	.210	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	421	--	<.040	.25	.97	2.21	.059	.518	.115	.099	.263	3.0	<.1
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	450	453	e.028	.27	.72	1.96	.038	--	.117	.094	.243	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	<.040	.27	.95	1.87	.039	--	.099	.088	.206	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	436	407	<.040	.24	.67	2.05	.037	--	.114	.088	.250	--	--
SEP													
06...	450	418	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	394	374	<.040	.22	.74	2.50	.030	--	.129	.111	.230	--	--

e Estimated.
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11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)
MAY													
02...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002
07...	2.0	e2.1	--	--	20	7.5	<.002	<.004	<.002	<.005	e.003	<.010	<.002
09...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
16...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
23...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
30...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
JUN													
06...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
12...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
12...	--	--	--	--	e8.6	13.2	<.002	<.004	<.002	<.005	e.005	<.010	<.002
14...	2.8	1.1	27	31.2	e8.6	9.2	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	<.002
21...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	<.002
26...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.007	<.010	.004
28...	2.7	1.8	26	21.7	e6.1	11.3	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.005	<.010	.008
10...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.006	<.010	.004
12...	2.7	3.0	34	25.4	10	9.1	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	.008	<.010	.004
24...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
26...	3.2	2.5	18	54.2	e6.6	e2.3	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002
AUG													
01...	2.6	3.0	--	--	e5.7	6.6	<.002	<.004	<.002	<.005	<.007	<.010	<.002
02...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002
07...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002
09...	2.7	7.9	23	49.8	e7.0	5.8	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002
15...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
21...	--	--	--	--	--	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002
23...	3.0	.8	29	31.5	e8.9	3.3	--	--	--	--	--	--	--
SEP													
06...	2.9	2.4	33	73.2	--	--	--	--	--	--	--	--	--
11...	2.8	--	--	--	--	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002
20...	2.6	1.1	17	14.1	10	15.4	--	--	--	--	--	--	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
MAY													
02...	e.012	<.020	.006	e.006	e.002	e.004	.010	<.005	<.021	.006	<.009	<.005	<.003
07...	e.447	<.020	<.005	<.018	<.003	<.006	.011	<.005	<.021	.007	<.009	<.005	<.003
09...	e.006	<.020	.005	<.018	<.003	<.006	.024	<.005	<.021	.014	<.009	<.005	<.003
16...	e.006	<.020	.007	<.018	<.003	<.006	.008	<.005	<.021	.007	<.009	<.005	<.003
23...	e.007	<.020	.007	<.018	<.003	<.006	.021	<.005	<.021	.005	<.009	<.005	<.003
30...	e.025	<.020	e.004	e.004	<.003	e.002	.005	<.005	<.021	.008	<.009	<.005	<.003
JUN													
06...	e.002	<.020	e.003	<.018	<.003	e.002	e.002	<.005	<.021	.003	<.009	<.005	<.003
12...	e.024	<.020	.006	<.018	<.003	e.003	e.002	<.005	<.021	e.002	<.009	<.005	<.003
12...	e.018	<.020	<.005	<.018	<.003	e.003	e.003	<.005	<.021	<.002	<.009	<.005	<.003
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.041	<.020	<.005	.020	<.003	e.003	e.005	<.005	<.021	.012	<.009	<.005	<.003
21...	<.041	<.020	.010	<.018	<.003	<.006	e.004	<.005	<.021	.004	<.009	<.005	<.003
26...	e.006	<.020	<.005	<.018	<.003	<.006	e.004	<.005	<.021	.013	<.009	<.005	<.003
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	<.041	<.020	e.003	<.018	<.003	<.006	.010	<.005	<.021	.013	<.009	<.005	<.003
10...	e.005	<.020	.006	e.011	<.003	<.006	e.004	<.005	<.021	.008	<.009	<.005	<.003
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.041	<.020	.007	e.006	<.003	<.006	e.004	<.005	<.021	.012	<.009	<.005	<.003
24...	<.041	<.020	.006	e.015	<.003	<.006	.005	<.005	<.021	.027	<.009	<.005	<.003
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.041	<.020	e.004	.034	<.003	<.006	.007	<.005	<.021	.021	<.009	<.005	<.003
AUG													
01...	<.041	<.020	.008	.019	<.003	<.006	.009	<.005	<.021	.012	<.009	<.005	<.003
02...	<.041	<.020	.008	.020	<.003	e.005	.012	<.005	<.021	.007	<.009	<.005	<.003
07...	<.041	<.020	e.004	e.017	<.003	<.006	.008	<.005	<.021	.006	<.009	<.005	<.003
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.041	<.020	.007	.025	<.003	e.002	.006	<.005	<.021	.012	<.009	<.005	<.003
15...	<.041	<.020	.005	.022	<.003	<.006	e.005	<.005	<.021	.016	<.009	<.005	<.003
21...	<.041	<.020	.006	e.013	<.003	<.006	e.004	<.005	<.021	.006	<.009	<.005	<.003
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.041	<.020	<.005	e.011	<.003	<.006	e.003	<.005	<.021	.185	<.009	<.005	<.003
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
MAY													
02...	e.002	<.035	<.027	<.050	<.006	e.013	e.005	e.002	e.006	<.003	<.007	e.003	<.010
07...	<.004	<.035	<.027	<.050	<.006	.027	<.006	<.002	.008	<.003	<.007	.019	e.007
09...	<.004	<.035	<.027	<.050	<.006	.022	<.006	<.002	e.003	<.003	<.007	.017	<.010
16...	<.004	<.035	<.027	<.050	<.006	.022	<.006	<.003	e.004	<.003	<.007	<.007	<.010
23...	<.004	<.035	e.007	<.050	<.006	.021	<.006	.046	<.007	<.003	<.007	<.002	<.010
30...	<.004	<.035	<.027	<.050	<.006	.037	<.006	.035	<.007	<.003	<.007	<.002	<.010
JUN													
06...	<.004	<.035	<.027	<.050	<.006	.053	<.006	.009	<.007	<.003	<.007	<.002	<.010
12...	<.004	<.035	e.007	<.050	<.006	.059	<.006	.005	<.007	M	<.007	<.002	<.010
12...	<.004	<.035	e.007	<.050	<.006	.050	<.006	.004	<.007	<.003	<.007	<.002	<.010
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.004	<.035	<.027	<.050	<.006	.072	<.006	<.002	<.007	<.003	<.007	<.002	<.010
21...	<.004	<.035	<.027	<.050	<.006	.048	<.006	.002	<.007	<.003	<.007	<.002	<.010
26...	<.004	<.035	<.027	<.050	<.006	.068	<.006	<.002	<.007	<.003	<.007	<.002	<.010
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	<.004	<.035	<.027	<.050	<.006	.069	<.006	.009	<.007	<.003	<.007	<.002	<.010
10...	e.002	<.035	<.027	<.050	.022	.051	<.006	.003	<.007	<.003	<.007	<.002	<.010
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.004	<.035	<.027	e.009	<.006	.071	<.006	<.002	<.007	<.003	<.007	<.002	e.008
24...	<.004	<.035	e.006	<.050	<.006	.045	<.006	<.002	<.007	<.003	<.007	<.002	<.010
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.004	<.035	<.027	<.050	<.006	.075	<.006	<.002	<.007	<.003	<.007	<.002	<.010
AUG													
01...	<.004	<.035	e.011	<.050	<.006	.045	<.006	<.002	<.007	<.003	<.007	<.002	<.010
02...	<.004	<.035	e.020	<.050	<.006	.052	<.006	<.002	<.007	<.003	<.007	<.002	<.010
07...	<.004	<.035	<.027	<.050	<.006	.038	<.006	<.002	<.007	<.003	<.007	<.002	<.010
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.004	<.035	e.006	<.050	<.006	.048	<.006	<.002	<.007	<.003	<.007	<.002	<.010
15...	<.004	<.035	<.027	<.050	<.006	.041	<.006	<.002	<.007	<.003	<.007	<.002	<.010
21...	<.004	<.035	e.004	<.050	<.006	.040	<.006	<.002	<.007	<.003	<.007	<.002	<.010
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.004	<.035	<.027	<.050	<.006	e.011	<.006	<.002	<.007	<.003	<.007	<.002	<.010
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

e Estimated.
< Actual value is known to be less than value shown.
M Presence of material verified, but not quantified.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
MAY													
02...	<.006	<.011	M	<.004	<.010	<.011	<.023	e.007	e.002	<.034	<.017	<.005	<.002
07...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.011	<.016	<.034	<.017	<.005	<.002
09...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.006	<.016	<.034	<.017	<.005	<.002
16...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002
23...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.013	<.016	<.034	<.017	<.005	<.002
30...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.011	<.016	<.034	<.017	e.002	<.002
JUN													
06...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002
12...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	.008	<.002
12...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	.008	<.002
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002
21...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002
26...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002
10...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.019	<.016	<.034	<.017	<.005	<.002
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.006	<.011	<.015	<.004	<.010	<.011	e.008	e.007	<.016	<.034	<.017	<.005	<.002
24...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.007	<.016	<.034	<.017	<.005	<.002
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.006	<.011	<.015	<.004	<.010	<.011	.044	e.005	<.016	<.034	<.017	<.005	<.002
AUG													
01...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.011	<.016	<.034	<.017	<.005	<.002
02...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.009	<.016	<.034	<.017	<.005	<.002
07...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002
15...	<.006	<.011	<.015	<.004	<.010	<.011	e.018	<.011	<.016	<.034	<.017	<.005	<.002
21...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	.012	<.016	<.034	<.017	<.005	<.002
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	e.005	<.016	<.034	<.017	<.005	<.002
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.
M Presence of material verified, but not quantified.
e Estimated.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
MAY		
02...	e.007	--
07...	<.009	--
09...	e.006	--
16...	.014	--
23...	e.005	--
30...	e.007	--
JUN		
06...	e.005	--
12...	e.008	--
12...	<.009	--
14...	--	--
19...	e.008	--
21...	e.006	--
26...	e.009	--
28...	--	13
JUL		
03...	e.003	--
10...	e.008	--
12...	--	15
17...	e.008	--
24...	e.008	--
26...	--	--
31...	<.009	--
AUG		
01...	<.009	--
02...	e.008	--
07...	e.004	--
09...	--	5
14...	e.005	--
15...	e.007	--
21...	e.004	--
23...	--	--
SEP		
06...	--	27
11...	<.009	--
20...	--	17

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BOTTOM AT SAMPLE LOC-ATION, (FEET) (81903)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL					
31...*	1001	4.00	719	23.0	12.0
31...*	1004	8.00	718	23.0	37.0
31...*	1008	6.00	702	23.0	62.0
31...*	1011	4.50	698	23.0	87.0
31...*	1013	4.30	698	23.0	112
31...*	1015	1.60	697	23.0	137
31...*	1017	2.00	699	23.0	162
31...*	1018	3.00	700	23.0	187
31...*	1020	2.00	703	23.5	212
31...*	1022	1.10	703	23.5	237

e Estimated.
< Actual value is known to be less than value shown.
* Instantaneous discharge at time of cross-sectional measurement: 1,360 ft^3/s.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
03...	1455	1940	21.5	90	42	220
04...N	1000	2090	19.5	78	43	243
18...N	1000	2690	18.0	88	72	523
NOV						
01...	1515	3110	14.0	79	64	537
29...N	1200	2400	11.0	85	44	285
DEC						
12...	1216	2230	12.5	80	39	235
13...N	1130	2240	11.5	76	30	181
JAN						
11...N	1310	2630	9.5	86	76	540
12...	1209	2850	10.0	89	118	908
FEB						
15...N	1400	2890	--	68	64	499
20...	1526	2750	12.5	79	68	505
MAR						
08...N	1030	5480	13.0	72	145	2150
20...	1142	2480	20.0	79	65	435
APR						
04...N	1030	2050	15.5	85	37	205
18...	1324	2110	19.0	72	46	262
MAY						
07...N	1000	4120	18.5	69	59	656
21...	1105	3350	20.0	78	56	507
JUN						
12...N	1140	1560	21.0	93	28	118
14...N	1200	1550	22.5	89	49	205
19...	1140	1390	24.5	85	50	188
28...N	1150	1480	22.5	87	63	252
JUL						
12...N	1000	1300	22.5	89	58	204
18...	1240	1480	24.0	90	60	240
26...N	1030	1360	25.5	93	63	231
AUG						
01...N	1130	1360	25.0	95	74	272
09...N	1100	1200	26.0	88	54	175
14...	1350	1290	24.5	46	60	209
15...N	1020	1300	22.5	84	38	133
SEP						
06...N	1030	1230	22.0	83	29	96
11...N	1110	1420	21.5	84	43	165
12...	1340	1360	23.0	81	42	154
20...N	1030	1290	21.0	73	50	174

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)
NOV										
01...	1555	3110	14.0	1	27	79	90	98	100	1
01...	1600	3110	14.0	2	44	95	100	--	--	1
01...	1605	3110	14.0	--	2	58	98	100	--	1
01...	1610	3110	14.0	2	53	98	99	100	--	1
01...	1615	3110	14.0	8	62	99	100	--	--	1
APR										
18...	1344	2110	19.0	1	23	83	97	100	--	1
18...	1347	2110	19.0	3	60	94	100	--	--	1
18...	1350	2110	19.0	2	53	96	100	--	--	1
18...	1355	2110	19.0	1	40	95	100	--	--	1
18...	1400	2110	19.0	5	55	98	100	--	--	1

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	459	414	677	660	799	787	---	---	524	441
2	---	---	458	435	689	659	799	781	---	---	546	494
3	---	---	435	403	712	683	799	789	---	---	621	546
4	547	451	481	423	746	712	808	789	---	---	662	557
5	456	413	493	474	749	719	809	798	---	---	657	559
6	466	421	580	493	719	701	825	800	---	---	625	476
7	436	411	589	578	702	692	831	819	---	---	517	438
8	453	425	602	585	742	691	832	792	---	---	513	433
9	453	420	589	577	748	734	793	735	---	---	507	445
10	464	401	601	588	744	724	---	745	---	---	588	507
11	417	384	607	594	741	725	761	---	---	---	717	578
12	394	358	629	605	740	729	697	635	---	---	786	709
13	445	394	634	616	784	740	689	636	---	---	831	771
14	486	441	---	---	770	746	668	638	---	---	925	826
15	460	394	647	632	748	732	690	664	---	---	1010	922
16	504	460	647	628	746	740	703	684	---	---	1060	980
17	562	504	636	628	753	746	775	695	---	---	1100	1050
18	546	395	629	623	757	749	805	775	---	---	1150	1090
19	395	334	660	621	751	734	820	799	---	---	1160	1130
20	334	271	662	644	790	737	822	806	---	---	1160	1050
21	307	280	658	634	793	777	827	811	---	---	1060	1000
22	332	306	642	623	786	766	833	814	727	584	1090	1010
23	334	324	633	623	774	757	---	---	584	460	1050	993
24	334	288	637	624	789	759	---	---	451	430	1000	973
25	299	285	641	631	793	780	---	---	463	410	993	903
26	311	199	660	617	800	788	---	---	460	411	916	886
27	315	275	673	660	793	767	---	---	449	433	913	864
28	319	287	673	653	780	770	---	---	458	441	864	837
29	373	315	682	649	789	769	---	---	---	---	849	832
30	419	373	684	669	795	781	---	---	---	---	993	849
31	423	400	---	---	801	788	---	---	---	---	977	879
MONTH	---	---	---	---	801	659	---	---	---	---	1160	433

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1000	899	357	322	766	717	---	---	---	---	811	769
2	1000	872	351	329	803	727	---	---	---	---	857	761
3	944	867	352	306	816	794	---	---	782	691	804	712
4	905	854	336	309	839	806	---	---	789	665	795	688
5	871	846	331	301	867	825	---	---	729	656	827	744
6	846	789	349	324	908	853	---	---	735	662	792	723
7	826	732	345	324	916	863	---	---	730	673	751	706
8	745	693	354	337	912	871	---	---	752	671	774	708
9	779	680	353	327	930	891	---	642	755	688	731	660
10	777	684	362	331	---	---	702	581	756	714	736	687
11	698	641	343	313	---	---	739	612	738	676	746	730
12	649	604	316	299	---	---	749	661	743	639	---	---
13	610	595	306	295	---	---	800	690	703	673	---	---
14	612	575	317	295	---	---	759	600	713	640	---	---
15	619	585	311	296	---	---	720	555	706	664	---	---
16	606	577	323	304	---	---	626	517	704	673	---	---
17	656	595	312	302	---	---	584	510	---	---	---	---
18	655	618	326	309	---	---	696	577	---	---	704	563
19	644	545	346	324	---	---	783	668	759	558	618	---
20	545	372	428	346	---	---	---	---	724	626	609	571
21	432	385	507	428	---	---	---	---	718	532	596	546
22	392	357	579	507	---	---	---	---	723	667	634	---
23	367	332	679	579	---	---	---	---	740	641	637	550
24	381	354	737	679	---	---	---	---	791	708	662	622
25	358	335	766	737	---	---	---	---	748	687	679	620
26	346	331	775	758	---	---	---	---	748	642	667	630
27	353	328	775	719	---	---	---	---	747	687	684	638
28	349	334	738	724	---	---	---	---	751	721	688	631
29	353	325	728	708	---	---	---	---	751	723	658	615
30	363	330	735	694	---	---	---	---	763	596	656	617
31	---	---	750	733	---	---	---	---	793	675	---	---
MONTH	1000	325	775	295	---	---	---	---	---	---	---	---

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	20.5	14.5	13.5	11.0	10.5	9.0	8.5	10.5	9.0	13.0	12.5
2	22.5	20.5	15.0	14.0	11.0	10.0	9.5	8.0	10.5	9.5	12.5	12.5
3	21.5	20.0	15.0	14.0	10.5	10.0	9.5	8.0	11.5	10.0	13.0	12.0
4	21.0	19.5	15.5	14.0	10.5	10.0	9.5	8.0	12.5	11.0	13.0	12.5
5	20.5	19.0	15.5	14.5	10.5	10.0	9.5	8.0	13.5	11.5	13.0	12.0
6	20.5	19.0	15.0	14.0	10.0	10.0	9.5	8.5	13.0	12.0	13.0	12.5
7	20.5	19.0	14.5	13.5	11.0	10.0	9.0	8.5	12.0	10.0	14.0	12.5
8	20.5	19.0	14.0	13.0	12.0	10.5	10.0	9.0	10.0	9.0	14.5	13.5
9	20.0	19.0	14.0	13.0	11.5	11.0	10.0	9.5	10.0	9.5	14.5	14.0
10	19.0	17.5	13.5	12.5	12.5	11.5	10.0	9.5	10.0	9.5	14.5	13.5
11	17.5	16.5	12.5	11.5	12.5	12.0	10.0	9.5	11.0	10.0	14.5	14.0
12	17.0	16.0	12.0	11.0	12.5	11.5	10.5	9.5	11.0	10.0	15.5	14.0
13	17.5	16.0	11.5	10.5	12.0	11.0	10.5	9.5	10.0	9.0	16.0	14.5
14	18.0	16.5	11.5	10.5	11.5	11.0	10.5	10.0	10.5	9.0	17.0	15.0
15	18.5	17.0	11.5	10.5	12.5	11.5	10.0	9.0	11.0	9.5	16.5	16.0
16	18.5	17.0	12.0	11.0	12.5	11.5	9.0	8.0	12.0	10.5	17.0	15.5
17	19.0	17.5	11.5	10.5	12.0	11.0	8.5	7.5	11.5	11.5	17.5	16.0
18	19.0	18.0	11.5	10.0	11.0	10.0	8.5	7.5	13.0	11.5	19.0	17.0
19	18.5	17.0	11.5	10.5	10.5	9.5	9.5	8.5	13.0	12.0	19.5	17.5
20	17.5	17.0	11.0	10.0	10.5	9.5	9.0	8.5	13.0	12.0	20.5	19.0
21	17.0	15.5	11.0	10.0	10.5	9.5	9.0	8.0	---	---	21.0	19.5
22	15.5	14.5	11.0	10.5	10.5	9.5	10.0	8.5	13.0	12.0	21.0	19.5
23	15.0	13.5	11.0	10.0	10.5	9.5	10.5	9.5	12.5	12.0	21.0	19.0
24	15.0	14.0	11.5	10.5	11.0	10.0	11.0	10.0	12.0	11.0	21.0	19.0
25	15.0	14.5	10.5	10.5	10.5	9.5	10.5	10.0	12.0	11.0	21.0	19.5
26	15.0	14.5	11.0	10.5	10.0	9.0	11.0	10.0	12.5	11.5	19.5	18.0
27	15.5	14.5	11.5	11.0	9.5	8.5	10.5	9.5	13.0	12.0	19.5	17.5
28	15.0	14.5	11.5	11.0	9.5	8.0	10.5	9.0	13.0	12.0	20.5	18.0
29	15.0	14.5	11.0	10.5	9.0	8.0	10.5	9.5	---	---	20.5	19.0
30	15.0	14.5	11.5	10.0	9.0	8.0	10.0	9.0	---	---	20.5	18.5
31	14.5	14.0	---	---	9.0	8.0	10.0	9.0	---	---	21.0	19.0
MONTH	22.5	13.5	15.5	10.0	12.5	8.0	11.0	7.5	---	---	21.0	12.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.0	19.5	19.0	17.5	26.5	24.0	27.0	24.0	27.0	23.5	26.5	23.0
2	19.5	17.5	18.0	16.5	24.5	22.5	28.0	24.0	27.0	23.5	26.0	23.5
3	17.5	16.0	17.5	15.5	23.0	21.0	29.0	25.5	26.5	24.0	26.0	23.5
4	17.5	15.5	18.0	16.0	23.0	20.0	27.5	25.5	26.0	23.0	26.0	23.5
5	18.0	16.0	19.0	17.0	23.0	20.5	27.5	24.5	26.5	23.0	25.5	22.5
6	16.5	15.0	19.5	17.5	24.0	20.5	27.5	24.5	27.0	23.5	24.5	21.5
7	15.5	14.5	20.0	18.0	25.0	22.0	27.5	24.5	27.5	24.0	24.0	21.5
8	15.0	14.0	21.0	19.0	25.5	22.5	27.5	25.0	28.5	25.0	24.5	21.5
9	16.0	14.0	21.5	19.5	25.0	22.0	27.0	24.0	28.0	25.5	24.0	21.5
10	16.0	13.5	21.5	20.0	24.5	21.5	26.5	24.0	27.0	24.5	24.0	21.0
11	16.0	15.0	22.5	20.5	24.0	21.5	26.0	23.0	26.5	23.5	24.0	21.0
12	16.5	14.5	21.5	20.5	24.5	21.5	26.0	22.5	26.0	23.5	24.0	21.5
13	17.5	15.5	21.0	19.5	23.5	21.5	26.0	22.5	25.5	22.5	23.5	21.5
14	17.5	15.5	20.0	19.0	25.0	21.0	26.0	23.0	26.0	22.5	---	---
15	18.5	16.0	20.5	19.0	26.5	22.5	26.0	23.0	26.0	22.5	---	---
16	19.0	17.0	21.0	19.5	27.0	23.5	25.5	23.0	26.5	23.0	---	---
17	19.5	17.5	21.0	19.5	27.0	24.0	25.5	22.0	26.5	23.5	24.0	21.0
18	20.0	18.0	21.5	20.0	27.0	23.5	25.5	22.5	26.5	23.5	24.0	21.5
19	18.5	17.0	22.0	20.0	---	---	26.0	23.0	26.5	23.5	24.5	21.5
20	17.0	14.0	22.5	20.5	---	---	25.5	22.5	26.0	23.0	24.0	21.5
21	15.0	13.5	24.0	21.5	---	---	25.5	22.5	25.0	22.5	23.5	21.5
22	16.5	14.5	24.5	22.0	---	---	25.5	22.0	25.0	22.0	23.5	21.0
23	17.5	15.5	25.0	22.5	---	---	26.5	23.0	25.0	22.0	22.5	21.0
24	18.5	16.5	25.0	22.5	25.5	23.0	27.5	24.0	25.5	22.5	22.5	20.5
25	20.0	18.0	25.0	22.5	24.0	22.0	28.0	24.5	26.0	22.5	22.5	20.0
26	20.5	19.0	25.0	22.5	24.5	21.5	28.0	24.5	26.0	23.0	22.5	20.0
27	20.0	18.5	23.5	21.5	24.0	22.0	28.0	24.5	26.5	23.5	22.5	20.5
28	19.0	18.0	23.0	20.5	25.0	22.0	28.0	24.5	26.5	24.0	21.5	19.5
29	18.5	17.0	23.5	21.0	25.5	22.5	27.5	24.5	26.5	24.0	21.5	19.0
30	19.0	17.0	25.0	21.5	27.0	23.0	26.5	24.0	26.5	23.5	22.5	19.5
31	---	---	26.5	23.0	---	---	26.0	23.0	26.0	23.0	---	---
MONTH	21.0	13.5	26.5	15.5	---	---	29.0	22.0	28.5	22.0	---	---

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2020	44	239	3140	66	558	2400	36	231
2	2040	43	237	3040	62	508	2390	35	229
3	1970	42	223	3090	63	528	2370	38	246
4	2080	43	243	2870	55	429	2360	39	248
5	2250	45	276	2740	58	428	2330	37	234
6	2270	48	291	2660	57	407	2280	34	212
7	2350	50	317	2590	50	351	2310	34	212
8	2450	52	343	2550	49	340	2290	32	198
9	2450	49	321	2540	47	324	2290	36	221
10	2500	51	345	2510	42	287	2280	40	249
11	2630	59	420	2460	44	293	2260	40	246
12	2770	63	470	2430	38	250	2230	38	231
13	2640	58	411	2420	35	231	2240	34	208
14	2570	56	386	2470	35	235	2230	35	210
15	2620	58	412	2460	38	254	2230	37	221
16	2570	63	435	2440	37	241	2230	33	201
17	2520	64	434	2420	34	225	2200	33	193
18	2730	74	549	2390	32	204	2190	30	178
19	3020	72	590	2360	28	175	2180	29	170
20	3350	68	618	2350	25	158	2180	27	157
21	3390	61	558	2360	24	154	2210	27	164
22	3300	54	477	2390	25	162	2230	31	187
23	3290	58	513	2380	30	190	2210	30	180
24	3410	69	632	2370	42	268	2190	28	167
25	3340	67	607	2370	33	212	2170	25	146
26	3390	78	715	2360	34	217	2170	22	127
27	3870	97	1020	2390	36	232	2180	19	114
28	3800	82	842	2410	36	236	2170	19	112
29	3450	70	649	2400	36	233	2150	20	115
30	3290	72	640	2410	34	221	2130	20	116
31	3280	65	571	---	---	---	2100	22	124
TOTAL	87610	---	14784	75770	---	8551	69380	---	5847
		JANUARY			FEBRUARY			MARCH	
1	2090	23	131	2380	38	244	4940	80	1070
2	2070	21	117	2310	35	218	4330	75	882
3	2040	21	118	2240	37	226	3790	76	774
4	2020	17	91	2180	40	234	3500	73	685
5	2020	16	86	2160	43	250	3950	104	1100
6	2000	16	85	2150	48	276	5320	160	2300
7	2010	21	113	2130	50	287	5900	155	2470
8	2100	24	136	2100	34	190	5520	128	1910
9	2280	30	186	2090	29	165	5660	115	1760
10	2300	34	214	2110	30	171	5630	102	1540
11	2580	51	357	2250	36	218	5060	87	1200
12	2830	105	800	2470	45	303	4370	75	885
13	2980	87	698	2750	56	416	3900	69	722
14	3050	73	603	2900	65	507	3530	72	687
15	3030	61	501	2900	60	473	3140	72	607
16	2940	48	384	2980	67	541	2920	65	512
17	2710	38	278	2920	62	492	2780	63	470
18	2550	32	224	2820	56	426	2630	62	438
19	2490	31	211	2780	50	375	2550	66	454
20	2420	35	227	2760	61	456	2480	61	409
21	2380	32	204	2700	58	422	2450	59	392
22	2300	33	203	3090	69	577	2320	64	402
23	2260	36	217	3850	95	989	2280	60	371
24	2260	38	229	4960	123	1650	2220	59	355
25	2280	41	253	5480	111	1640	2250	61	372
26	2440	59	389	5980	128	2060	2210	63	374
27	2680	56	407	5750	118	1830	2160	55	319
28	2810	68	519	5390	86	1260	2140	57	330
29	2720	63	463	---	---	---	2140	56	322
30	2580	55	382	---	---	---	2150	57	329
31	2470	44	294	---	---	---	2120	53	304
TOTAL	75690	---	9120	86580	---	16896	106340	---	24745

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	2070	55	307	4160	73	819	1920	56	289
2	2170	60	353	4180	71	800	1830	59	291
3	2160	46	270	4230	70	800	1780	56	269
4	2040	41	229	4110	68	752	1810	57	279
5	1980	45	239	4050	62	677	e1780	55	e265
6	2080	55	308	4110	66	734	e1710	55	e256
7	2330	54	339	4110	64	716	e1660	57	e257
8	2610	52	367	4160	66	744	e1580	57	e242
9	2650	51	364	4130	62	693	e1570	49	e208
10	2580	50	351	4010	61	665	e1580	60	e258
11	2480	57	385	4170	64	718	e1550	67	e280
12	2430	52	344	4190	73	823	1540	53	221
13	2430	50	330	4320	76	882	1530	47	196
14	2420	57	372	4520	80	981	1510	55	225
15	2420	58	377	4460	79	949	1470	28	109
16	2490	63	423	4510	73	891	1500	18	73
17	2280	59	363	4500	68	824	1540	25	102
18	2130	52	297	4560	68	834	1520	44	182
19	2200	54	322	4310	63	730	1390	45	169
20	3450	81	754	3870	61	632	1320	27	98
21	4410	112	1340	3320	61	551	1340	43	157
22	4530	92	1130	2740	58	428	1340	67	241
23	4440	85	1020	2360	58	366	1310	65	231
24	4420	83	994	2140	59	344	1400	72	272
25	4310	79	924	2050	70	386	1520	81	334
26	4100	75	831	2010	68	371	1520	78	320
27	4130	76	843	2010	65	355	1480	71	283
28	4200	72	811	2070	65	362	1470	64	254
29	4210	68	778	2100	60	341	1510	69	281
30	4090	69	759	1980	55	295	1490	69	279
31	---	---	---	1910	53	273	---	---	---
TOTAL	90240	---	16524	109350	---	19736	46470	---	6921
	JULY			AUGUST			SEPTEMBER		
1	1490	65	261	1340	68	246	1230	44	147
2	1440	55	214	1220	65	213	1360	47	173
3	1390	41	155	1240	68	229	1570	37	156
4	1350	52	189	1260	66	226	1450	57	221
5	1400	57	217	1310	70	248	1280	25	85
6	1400	53	201	1390	69	260	1240	48	160
7	1360	60	220	1350	60	217	1330	55	198
8	1410	66	253	1260	71	242	1370	58	216
9	1450	74	290	1180	58	184	1430	50	193
10	1440	70	274	1150	66	204	1450	58	227
11	1350	67	244	1220	59	194	1390	57	213
12	1290	55	191	1290	63	219	1330	46	167
13	1370	60	221	1340	65	235	1270	43	147
14	1400	61	231	1290	60	209	1280	47	162
15	1480	60	238	1290	55	193	1350	41	150
16	1600	64	275	1280	68	234	1390	43	160
17	1550	60	253	1260	68	231	1400	61	231
18	1460	58	228	1330	61	220	1400	60	226
19	1360	52	193	1450	64	249	1330	64	231
20	1370	59	217	1470	79	313	1310	60	211
21	1350	64	233	1390	78	294	1370	61	227
22	1410	68	258	1340	61	220	1350	58	210
23	1470	65	260	1370	69	253	1370	59	220
24	1370	77	284	1340	74	268	1430	63	245
25	1300	68	237	1360	71	259	1420	63	243
26	1350	61	224	1480	66	264	1420	71	273
27	1330	63	226	1530	70	291	1400	64	241
28	1300	61	216	1470	54	215	1410	61	232
29	1360	66	244	1410	59	226	1450	51	201
30	1440	69	268	1330	61	220	1500	51	206
31	1360	64	236	1280	61	211	---	---	---
TOTAL	43400	---	7251	41220	---	7287	41280	---	5972
YEAR	873330		143634						

e Estimated.

11313000 DELTA–MENDOTA CANAL AT TRACY PUMPING PLANT, NEAR TRACY, CA

LOCATION.—Lat 37°47'49", long 121°35'03", in SW 1/4 SW 1/4 sec.31, T.1 S., R.4 E., Alameda County, Hydrologic Unit 18040003, at Tracy Pumping Plant at intake to canal, 6 mi southeast of Byron, and 10 mi northwest of Tracy.

PERIOD OF RECORD.—June 1951 to current year. Prior to October 1959, published as "near Tracy."

GAGE.—Water-stage recorder on forebay, pressure gages on pump discharge lines, and operating time of pumps. Datum of gage is sea level (levels by U.S. Bureau of Reclamation).

REMARKS.—Discharge computed from records of operation of pumps. Water is diverted from Sacramento–San Joaquin Delta by way of Old River and a dredged channel to the Tracy Pumping Plant where it is lifted 200 ft into canal. Water, less intermediate diversions, flows into Mendota Pool on San Joaquin River to replace water diverted at Friant Dam. The canal is a part of the Central Valley Project. See schematic diagram of Sacramento–San Joaquin Delta.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation and are rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 4,940 ft^3/s, Aug. 11, 1969, Aug. 7, 1998; no flow for many days in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4170	4180	2580	4120	2880	4150	3300	743	1840	4220	4270	4210
2	4330	4220	2580	3940	2880	4160	3440	740	2180	4230	4280	4180
3	4090	4180	3060	4110	2880	4160	3420	740	2320	4200	4250	4160
4	4170	4210	3770	4090	2890	4130	3420	742	2310	4170	4180	4180
5	4150	4200	4080	4100	2880	4080	3430	742	2310	4070	4170	4300
6	4230	4200	4070	4100	2890	2350	2240	745	2860	4190	4200	4270
7	4200	4200	4020	3560	2900	801	2360	748	3240	4140	4240	4210
8	4210	4190	4090	2290	3640	1370	3430	894	3200	4170	4220	4240
9	4220	4170	4070	1250	4130	1720	3420	1460	3110	4170	4250	4250
10	4190	4170	4080	1010	4040	1120	3420	987	3150	4210	4260	4180
11	4170	4080	4090	1010	3970	861	3450	740	3270	4230	4240	4250
12	4220	4070	4140	1000	4040	859	3420	734	3170	4210	4260	4180
13	4230	4090	4140	1690	4140	857	2940	736	3080	4190	4190	4240
14	4210	4110	4150	2430	3540	804	2750	829	3750	4190	4180	3810
15	4260	4030	4150	3180	3260	744	2750	862	4210	4200	4140	3560
16	4240	4110	4160	3380	3260	743	2750	861	4250	4210	4220	3580
17	4220	4110	4150	1670	3260	744	2740	859	4230	4220	3770	3580
18	4250	4080	4150	986	3260	742	2680	861	2680	4220	3470	4070
19	4210	4100	4160	1020	3270	742	1800	864	1590	4220	3520	4240
20	4220	4100	4190	1020	3280	745	742	866	2680	4210	3950	4170
21	4230	4110	4170	1710	3270	745	744	866	2680	3690	4140	4130
22	4220	4110	4150	3100	3280	746	739	866	2430	3380	4130	4140
23	4220	4110	3710	3530	3960	1430	738	864	2430	3440	4160	4150
24	4190	4130	3500	3900	4150	1940	737	868	2430	4010	4130	4100
25	4210	4090	3500	4080	4120	1950	746	866	2440	4300	4130	4270
26	4190	4100	3620	4010	4190	1920	742	863	3100	4270	4130	3770
27	4180	4080	4160	3150	4100	1940	749	869	3370	4250	4140	3600
28	4170	3820	4140	2790	4170	2380	739	863	3370	4250	4160	4030
29	4340	3520	4130	2850	---	2690	744	845	3980	4250	4180	4200
30	4170	2980	4120	2900	---	3300	741	829	4240	4260	4240	4200
31	4160	---	4140	2890	---	3460	---	1210	---	4230	4260	---
TOTAL	130470	121850	121220	84866	98530	58383	65321	26562	89900	128200	128060	122450
MEAN	4209	4062	3910	2738	3519	1883	2177	857	2997	4135	4131	4082
MAX	4340	4220	4190	4120	4190	4160	3450	1460	4250	4300	4280	4300
MIN	4090	2980	2580	986	2880	742	737	734	1590	3380	3470	3560
AC-FT	258800	241700	240400	168300	195400	115800	129600	52690	178300	254300	254000	242900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

MEAN	2489	1909	1652	1954	2416	2615	2652	2511	2947	3713	3702	2959
MAX	4333	4239	4273	4271	4584	4563	4400	4540	4591	4740	4703	4591
(WY)	1996	1994	1996	1996	1976	1976	1976	1976	1973	1989	1989	1988
MIN	368	.000	.000	.000	.000	.000	99.6	58.3	113	354	977	539
(WY)	1952	1973	1953	1952	1952	1952	1952	1952	1951	1977	1952	1952

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	1290822.00		1175812			
ANNUAL MEAN	3527		3221		2646	
HIGHEST ANNUAL MEAN					4144	1976
LOWEST ANNUAL MEAN					230	1952
HIGHEST DAILY MEAN	4470	Aug 7	4340	Oct 29	4940	Aug 11 1969
LOWEST DAILY MEAN	.00	Apr 26	734	May 12	.00	Jun 1 1951
ANNUAL SEVEN-DAY MINIMUM	585	Apr 25	741	Apr 20	.00	Jun 1 1951
ANNUAL RUNOFF (AC-FT)	2560000		2332000		1917000	
10 PERCENT EXCEEDS	4340		4230		4420	
50 PERCENT EXCEEDS	4120		4020		2970	
90 PERCENT EXCEEDS	875		859		156	

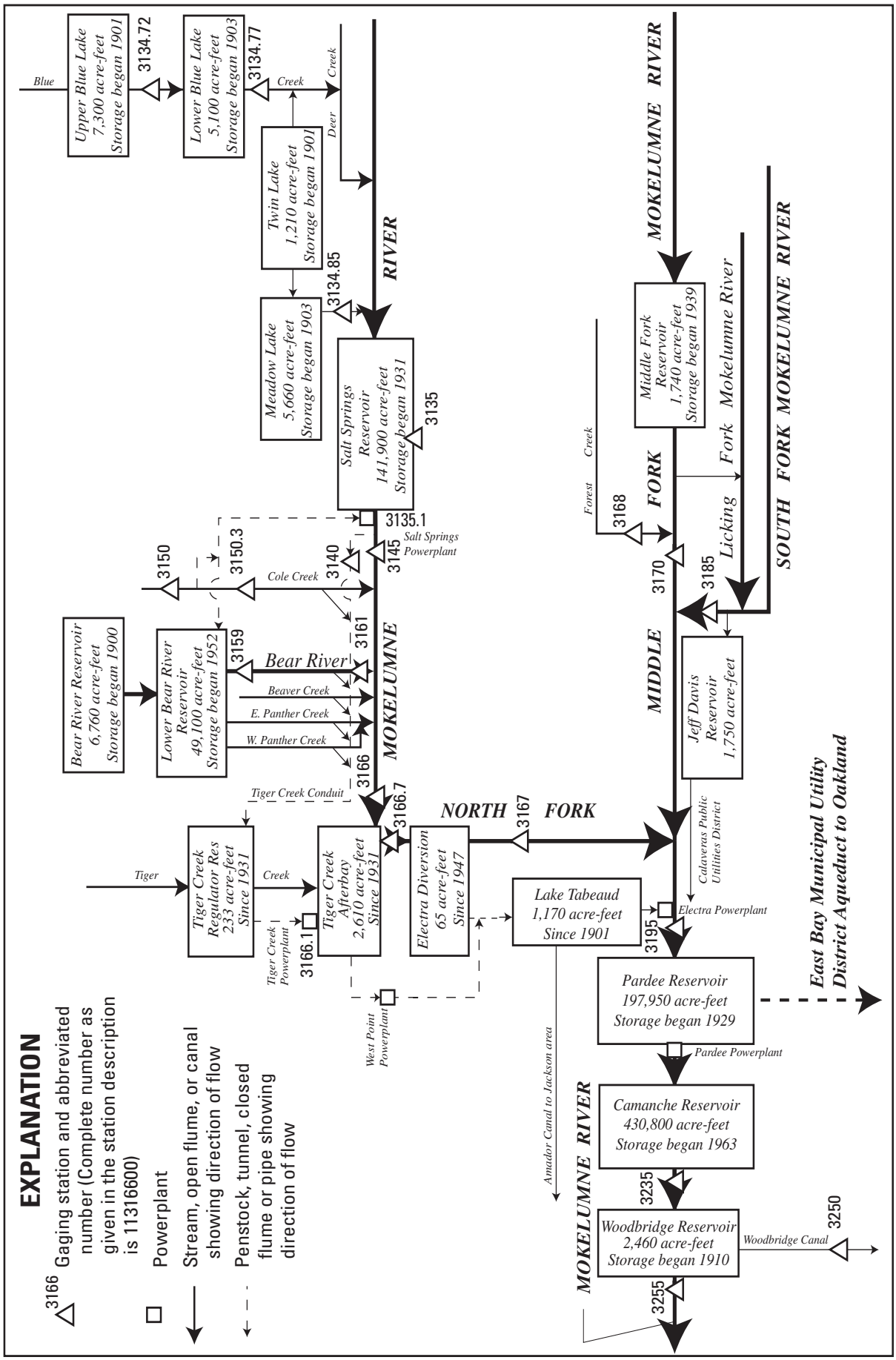

Figure 32. Diversions and storage in Mokelumne River Basin.

11313472 UPPER BLUE LAKE OUTLET NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°37'35", long 119°56'10", in NW 1/4 NW 1/4 sec.19, T.9 N., R.19 E., Alpine County, Hydrologic Unit 18040012, Eldorado National Forest, on left bank, 1,000 ft downstream from Upper Blue Lake Dam, and 9.8 mi southwest of Markleeville.

DRAINAGE AREA.—2.64 mi^2.

PERIOD OF RECORD.—October 1988 to current year. Unpublished records for water years 1981–88 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 8,100 ft above sea level, from topographic map. Prior to October 1987, nonrecording gage at same site at different datum.

REMARKS.—Records not computed for winter months or above 9.9 ft^3/s. Low and medium flow regulated by Upper Blue Lake (capacity, 7,300 acre-ft) 1,000 ft upstream. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6.1	.86	---	---	---	---	3.4	---	---	8.7	5.5
2	---	5.7	.86	---	---	---	---	3.4	---	---	8.7	5.4
3	---	5.3	.86	---	---	---	---	3.3	---	---	8.2	5.3
4	---	5.0	.86	---	---	---	---	3.3	---	---	8.0	5.2
5	---	4.7	.86	---	---	---	---	3.6	---	---	8.0	5.1
6	---	4.3	.86	---	---	---	---	3.8	---	---	7.9	5.0
7	---	4.0	.86	---	---	---	---	4.0	---	---	7.8	5.0
8	---	3.8	.86	---	---	---	---	4.4	---	---	7.6	4.9
9	---	3.7	.86	---	---	---	---	4.5	---	---	7.5	4.7
10	---	4.2	.86	---	---	---	---	4.7	---	---	7.6	4.1
11	---	4.1	.87	---	---	---	---	4.9	---	---	9.6	3.4
12	---	3.9	1.0	---	---	---	---	4.9	---	---	7.8	3.4
13	---	3.6	.98	---	---	---	---	5.2	---	---	7.2	3.4
14	---	2.1	3.0	---	---	---	---	4.9	---	---	7.1	3.3
15	---	.81	2.7	---	---	---	---	5.2	---	---	7.0	3.2
16	---	.79	2.0	---	---	---	---	5.5	---	---	6.9	3.2
17	---	.79	1.0	---	---	---	---	5.3	---	---	6.8	3.2
18	---	.79	---	---	---	---	---	5.3	---	---	6.7	3.1
19	---	.79	---	---	---	---	---	5.4	---	---	6.6	3.2
20	---	.79	---	---	---	---	---	5.5	---	---	6.5	2.9
21	---	.79	---	---	---	---	---	5.7	---	---	6.4	2.9
22	9.5	.79	---	---	---	---	---	5.9	---	---	6.3	3.6
23	8.8	.79	---	---	---	---	---	5.7	---	9.9	6.2	2.6
24	8.1	.79	---	---	---	---	---	5.5	---	9.6	6.1	2.6
25	7.5	.79	---	---	---	---	2.7	5.4	---	9.5	6.0	2.6
26	7.2	.79	---	---	---	---	2.8	5.3	---	9.4	5.9	2.5
27	6.9	.79	---	---	---	---	2.9	5.1	---	9.3	5.9	2.6
28	6.5	.79	---	---	---	---	3.0	5.0	---	9.2	5.8	2.6
29	7.3	1.4	---	---	---	---	3.0	5.0	---	9.0	5.7	2.6
30	7.0	.95	---	---	---	---	3.2	---	---	9.0	5.6	2.5
31	6.6	---	---	---	---	---	---	---	---	8.9	5.6	---
TOTAL	---	73.93	---	---	---	---	---	---	---	---	217.7	109.6
MEAN	---	2.46	---	---	---	---	---	---	---	---	7.02	3.65
MAX	---	6.1	---	---	---	---	---	---	---	---	9.6	5.5
MIN	---	.79	---	---	---	---	---	---	---	---	5.6	2.5
AC-FT	---	147	---	---	---	---	---	---	---	---	432	217

11313477 LOWER BLUE LAKE OUTLET NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°36'24", long 119°55'31", in SW 1/4 NE 1/4 sec.30, T.9 N., R.19 E., Alpine County, Hydrologic Unit 18040012, Eldorado National Forest, on left bank, 800 ft downstream from Lower Blue Lake Dam, and 10.0 mi southwest of Markleeville.

DRAINAGE AREA.—4.66 mi^2.

PERIOD OF RECORD.—October 1987 to current year. Unpublished records for water years 1981–87 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 7,870 ft above sea level, from topographic map. Prior to October 1987, nonrecording gage at same site and datum.

REMARKS.—Records not computed for winter months or above 75 ft^3/s. Low and medium flow regulated by Lower Blue Lake (capacity, 5,100 acre-ft) 800 ft upstream. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	15	3.4	---	---	---	---	23	18	9.5	8.6	8.3
2	26	15	3.3	---	---	---	---	24	18	9.8	8.6	8.2
3	25	14	3.2	---	---	---	---	23	18	9.8	8.6	8.2
4	25	14	3.2	---	---	---	---	23	18	9.8	8.6	8.2
5	25	13	3.1	---	---	---	---	24	18	9.8	8.6	8.2
6	25	13	3.0	---	---	---	---	24	18	9.8	8.6	8.2
7	25	12	2.9	---	---	---	---	25	18	9.8	8.6	8.2
8	24	12	2.7	---	---	---	---	25	18	9.8	8.6	8.2
9	24	12	2.6	---	---	---	---	26	18	9.9	8.6	8.2
10	24	11	2.6	---	---	---	---	27	18	10	8.6	8.2
11	24	11	2.4	---	---	---	---	28	15	10	8.6	8.2
12	24	10	2.4	---	---	---	---	28	8.4	10	8.6	8.2
13	23	10	2.4	---	---	---	---	28	8.6	10	8.6	8.0
14	23	7.7	2.4	---	---	---	---	29	8.6	10	8.6	8.0
15	23	5.0	2.6	---	---	---	---	29	8.6	10	8.6	8.0
16	22	5.0	2.4	---	---	---	---	29	8.6	10	8.6	8.0
17	22	5.0	2.4	---	---	---	---	29	8.6	10	8.6	7.9
18	22	5.0	2.4	---	---	---	---	29	8.6	9.4	8.6	8.0
19	21	5.0	2.3	---	---	---	---	29	8.7	8.6	8.6	8.2
20	21	5.0	2.2	---	---	---	---	29	8.8	8.6	8.6	8.2
21	20	5.0	2.1	---	---	---	---	29	8.8	8.6	8.6	8.2
22	19	4.9	2.1	---	---	---	---	29	8.8	8.6	8.6	8.2
23	19	4.6	2.1	---	---	---	---	29	8.9	8.6	8.6	8.2
24	18	4.2	2.0	---	---	---	---	29	9.0	8.6	8.6	8.1
25	18	3.8	2.0	---	---	---	23	29	9.2	8.6	8.6	8.1
26	18	3.7	2.0	---	---	---	23	28	9.3	8.6	8.6	8.0
27	17	3.7	---	---	---	---	23	28	9.3	8.6	8.4	8.2
28	17	3.6	---	---	---	---	23	28	9.3	8.6	8.4	8.2
29	17	3.5	---	---	---	---	22	27	9.3	8.6	8.4	8.1
30	16	3.5	---	---	---	---	22	27	9.5	8.6	8.4	8.0
31	16	---	---	---	---	---	---	22	---	8.6	8.4	---
TOTAL	669	240.2	---	---	---	---	---	836	363.9	289.2	265.6	244.1
MEAN	21.6	8.01	---	---	---	---	---	27.0	12.1	9.33	8.57	8.14
MAX	26	15	---	---	---	---	---	29	18	10	8.6	8.3
MIN	16	3.5	---	---	---	---	---	22	8.4	8.6	8.4	7.9
AC-FT	1330	476	---	---	---	---	---	1660	722	574	527	484

11313485 MEADOW LAKE OUTLET NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°35'53", long 119°58'40", in SE 1/4 SE 1/4 sec.27, T.9 N., R.18 E., Alpine County, Hydrologic Unit 18040012, Eldorado National Forest, on right bank, 700 ft downstream from Meadow Lake Dam, and 12.5 mi southwest of Markleeville.

DRAINAGE AREA.—5.66 mi^2.

PERIOD OF RECORD.—October 1987 to current year. Unpublished records for water years 1981–87 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 7,660 ft above sea level, from topographic map. Prior to October 1987, nonrecording gage at same site and datum.

REMARKS.—Records not computed for winter months or above 60 ft^3/s. Low and medium flow regulated by Meadow Lake, capacity, 5,660 acre-ft. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	9.5	4.4	---	---	---	---	13	20	18	17	17
2	22	9.3	4.1	---	---	---	---	13	20	17	17	17
3	22	13	4.0	---	---	---	---	13	20	17	17	17
4	21	17	4.0	---	---	---	---	13	20	17	17	17
5	21	17	3.9	---	---	---	---	14	20	18	17	17
6	21	17	3.8	---	---	---	---	14	20	18	17	17
7	21	23	3.7	---	---	---	---	14	20	18	19	17
8	21	32	3.7	---	---	---	---	15	20	18	20	17
9	21	31	3.7	---	---	---	---	15	20	18	20	16
10	21	31	3.9	---	---	---	---	15	20	18	20	11
11	20	30	3.8	---	---	---	---	16	20	18	20	7.6
12	20	29	4.4	---	---	---	---	16	20	18	20	7.6
13	20	29	4.0	---	---	---	---	17	20	18	20	7.6
14	20	29	2.7	---	---	---	---	17	20	18	21	7.5
15	20	28	6.8	---	---	---	---	17	20	17	21	7.5
16	20	27	5.3	---	---	---	---	18	19	17	21	7.5
17	19	26	4.4	---	---	---	---	18	19	17	20	8.7
18	16	25	4.0	---	---	---	---	18	19	17	20	9.7
19	13	24	3.9	---	---	---	---	18	19	17	20	9.7
20	12	17	3.9	---	---	---	---	18	18	17	20	9.6
21	12	7.1	3.7	---	---	---	---	19	18	17	20	9.6
22	12	5.1	3.8	---	---	---	---	19	18	17	20	9.6
23	12	4.2	3.8	---	---	---	---	19	18	18	20	9.5
24	12	3.9	3.7	---	---	---	---	19	18	18	20	9.5
25	12	3.9	3.6	---	---	---	11	20	18	18	20	9.5
26	13	3.9	3.4	---	---	---	11	20	18	18	20	9.5
27	13	3.8	12	---	---	---	12	20	18	18	20	9.4
28	11	3.9	---	---	---	---	12	20	18	18	19	9.4
29	10	4.2	---	---	---	---	12	20	18	18	17	9.6
30	10	4.8	---	---	---	---	12	20	18	18	17	9.5
31	9.6	---	---	---	---	---	---	20	---	18	17	---
TOTAL	519.6	508.6	---	---	---	---	---	528	574	547	594	341.1
MEAN	16.8	17.0	---	---	---	---	---	17.0	19.1	17.6	19.2	11.4
MAX	22	32	---	---	---	---	---	20	20	18	21	17
MIN	9.6	3.8	---	---	---	---	---	13	18	17	17	7.5
AC-FT	1030	1010	---	---	---	---	---	1050	1140	1080	1180	677

11313500 SALT SPRINGS RESERVOIR NEAR WEST POINT, CA

LOCATION.—Lat 38°29'55", long 120°12'52", in NW 1/4 SE 1/4 sec.33, T.8 N., R.16 E., Calaveras County, Hydrologic Unit 18040012, Eldorado National Forest, near center of Salt Springs Dam on North Fork Mokelumne River, 1.8 mi upstream from Cole Creek, and 18 mi northeast of West Point.

DRAINAGE AREA.—169 mi^2.

PERIOD OF RECORD.—March 1931 to current year. Prior to October 1964, records published as usable contents.

REVISED RECORDS.—WSP 1930: Drainage area, WDR CA-00-3: 1999 (month-end gage heights).

GAGE.—Water-stage recorder. Prior to Oct. 1, 1991, nonrecording gage read once daily. Datum of gage is sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Reservoir is formed by concrete-faced rockfill dam, completed in 1931; storage began in March 1931. Capacity, 141,857 acre-ft, between elevations 3,667.75 ft, outlet drain, and 3,958.0 ft, top of radial gates. Storage of 1,860 acre-ft available for release to river only. Water is released through Salt Springs Powerplant (station 11313510) just downstream from dam and discharged into Tiger Creek Powerplant Conduit (station 11314000). Figures given, including extremes, represent total contents. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 142,208 acre-ft, June 22, 1999, elevation, 3,958.36 ft; no contents at times in 1932–33, 1945, 1962.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 111,800 acre-ft, June 3, elevation, 3,925.19 ft; minimum, 5,920 acre-ft, Mar. 3, elevation unknown.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated October 1964)

3,700	1,251	3,720	3,519	3,740	7,324	3,800	28,017
3,705	1,679	3,725	4,324	3,750	9,799	3,850	54,852
3,710	2,199	3,730	5,229	3,760	12,689	3,900	90,786
3,715	2,812	3,735	6,230	3,780	19,632	3,960	143,788

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71400	52200	34800	14200	e6170	e6100	24100	43100	111100	e98700	77600	58000
2	71400	51600	34100	13700	e6020	e6110	25700	41700	111500	e97800	76500	57400
3	71200	50900	33400	13300	e6130	e5920	26800	e40900	111800	e97200	75500	56800
4	71200	50000	32900	12900	e6240	e6060	27500	e41200	111700	e96700	74700	56100
5	71200	49100	32500	12500	e6350	e6290	28100	e42400	111500	e96100	73700	55700
6	70700	48500	32100	12200	e6460	e6660	28300	e44400	111300	e95400	72900	55400
7	69600	48100	31700	11800	e6570	7090	28500	e48000	111100	e94400	72200	55100
8	68600	47600	31200	11400	e6660	7420	28700	e52300	110800	e93400	71500	54200
9	68000	47200	30500	11000	e6660	7580	28800	e56600	110400	e92200	70900	53300
10	67400	46800	29800	10700	e6660	7610	28900	e60700	110000	e91800	70300	52900
11	67700	46200	29100	10400	e6660	7580	e28400	e65000	109700	e91200	69800	52700
12	66300	45800	28500	10100	e6800	7570	e28500	e69000	109300	e90600	69200	52600
13	65600	45900	27800	9720	e7050	7590	e28600	e72800	108800	89900	68600	52400
14	64600	45800	27300	9400	e6830	7690	e28700	e76000	108400	88900	68000	52000
15	63600	45200	26700	9030	e6830	7770	e28900	e79100	108000	87900	67100	51100
16	62900	44700	26100	8660	e6900	7810	e29200	e82500	107300	87300	66500	50200
17	62300	44000	25400	8310	e6970	7940	e29800	e85600	106400	86500	65900	49700
18	61500	43100	24800	7960	e7030	8270	e30600	e88400	105900	86000	65500	49300
19	60900	42100	24100	7650	e7040	8760	31600	e90900	105600	85300	65000	48900
20	60100	41400	23400	7500	e7050	9600	32300	e93400	105200	84700	64500	48300
21	59000	40900	22800	7360	e7120	10500	32900	e95700	104800	83600	63900	47800
22	58200	40300	22100	7190	e7030	11500	33500	e97100	104400	82600	63500	46900
23	57900	39700	21400	e7140	e6660	12300	34800	e99400	104300	81800	62800	46000
24	57200	39000	20800	e7100	e6480	13100	36600	e101500	104500	81300	62200	45400
25	56500	38200	20100	e6950	e6310	14400	39800	e103300	104400	80800	61800	45300
26	55900	37300	19300	e6800	e6090	15500	42400	e104600	103800	80200	61500	45300
27	55000	36700	18000	e6650	e6090	16600	42800	e106000	103300	79500	61000	45300
28	54300	36100	17100	e6500	e6090	18000	42600	108300	102700	79500	60300	45200
29	53700	35700	16100	e6330	---	19600	42100	109300	102100	79600	59700	44200
30	53300	35200	15100	e6280	---	20900	42500	110100	101100	79200	59200	43300
31	52700	---	14600	e6230	---	22400	---	110900	---	78500	58600	---
MAX	71400	52200	34800	14200	7120	22400	42800	110900	111800	98700	77600	58000
MIN	52700	35200	14600	6230	6020	5920	24100	40900	101100	78500	58600	43300
a	3846.66	3815.09	3765.78			3786.97	3828.88	3924.13	3912.62	3884.07	3855.85	3830.46
b	-30400	-17500	-20600	-8370	-140	+16310	+20100	+68400	-9800	-22600	-19900	-15300
c	6850	8850	4340	286	300	3320	3900	6140	8630	8220	8040	8040

CAL YR 2000 MAX 142062 MIN 11896 b -25700 c 112700
WTR YR 2001 MAX 111800 MIN 5920 b -39800 c 66910

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Release, in acre-feet, through Salt Springs Powerplant (station 11313510), provided by Pacific Gas & Electric Co.

11314500 NORTH FORK MOKELUMNE RIVER BELOW SALT SPRINGS DAM, CA

LOCATION.—Lat 38°29'37", long 120°13'12", in NE 1/4 NW 1/4 sec.4, T.7 N., R.16 E., Calaveras County, Hydrologic Unit 18040012, Stanislaus National Forest, on left bank, 0.5 mi downstream from Salt Springs Dam, 1.3 mi upstream from Cole Creek, and 18 mi northeast of West Point.

DRAINAGE AREA.—170 mi^2.

PERIOD OF RECORD.—September 1926 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "above Moore Creek" 1926–30.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 3,590 ft above sea level, from topographic map. Prior to Sept. 12, 1928, at site 100 ft upstream and Sept. 12, 1928, to Sept. 23, 1940, at present site at datum 2.0 ft higher.

REMARKS.—Flow regulated since 1931 by Salt Springs Reservoir (station 11313500) 0.5 mi upstream. Water is imported from Bear River and Cole Creek to Salt Springs No. 2 Powerplant (station 11313510) upstream from station since December 1952. Then most of the water bypasses station through Tiger Creek Powerplant Conduit (station 11314000). See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 17,000 ft^3/s, May 16, 1996, gage height, 17.66 ft, from rating curve extended above 3,900 ft^3/s, on basis of computations of flow over dam and discharge through powerplant; minimum daily, 0.3 ft^3/s, Mar. 17, 23, 31, and Apr. 1, 1931.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	30	25	26	22	22	23	1010	32	34	34	33
2	36	25	26	26	22	22	24	1610	33	34	33	33
3	36	25	26	26	22	22	24	898	35	34	33	33
4	37	25	26	25	22	22	23	438	35	34	33	33
5	35	25	26	25	22	22	23	195	35	34	34	33
6	34	25	26	25	22	22	23	31	35	35	33	33
7	36	25	26	25	22	22	23	34	35	35	34	33
8	37	26	26	24	22	22	23	31	34	34	34	33
9	36	26	25	22	22	22	23	33	34	33	33	33
10	36	25	25	22	22	21	23	34	34	33	33	33
11	36	25	26	21	22	22	23	31	35	33	33	33
12	36	26	25	21	22	22	23	31	35	33	33	33
13	36	28	25	21	22	22	24	31	35	33	34	33
14	36	25	26	21	23	22	23	42	34	33	33	33
15	36	25	26	21	22	22	23	36	34	33	33	33
16	36	25	25	21	22	22	23	37	34	33	33	33
17	36	25	25	22	22	22	23	43	34	33	33	33
18	36	25	25	22	22	22	24	31	34	33	33	33
19	37	25	25	22	22	22	32	31	34	34	33	33
20	37	25	25	22	21	25	29	31	34	33	34	33
21	36	25	25	22	22	24	31	34	34	33	33	33
22	36	25	25	22	22	22	37	31	34	33	33	33
23	41	25	26	22	22	22	49	31	42	32	33	33
24	36	25	26	22	22	22	49	31	43	33	33	33
25	36	26	26	22	22	23	44	31	42	33	33	33
26	36	26	26	22	22	23	137	32	34	33	33	33
27	36	26	26	22	22	23	957	32	34	34	34	33
28	35	26	26	22	22	23	974	32	34	34	33	33
29	36	26	26	22	---	23	915	32	34	34	33	33
30	35	26	26	22	---	23	877	32	34	34	33	33
31	36	---	26	22	---	23	---	32	---	33	33	---
TOTAL	1120	767	794	702	616	693	4549	5008	1050	1037	1030	990
MEAN	36.1	25.6	25.6	22.6	22.0	22.4	152	162	35.0	33.5	33.2	33.0
MAX	41	30	26	26	23	25	974	1610	43	35	34	33
MIN	34	25	25	21	21	21	23	31	32	32	33	33
AC-FT	2220	1520	1570	1390	1220	1370	9020	9930	2080	2060	2040	1960
a	26290	29020	26850	10350	4960	11430	17180	13770	25120	29220	27630	26760

a Diversion, in acre-feet, to Tiger Creek Powerplant Conduit (station 11314000), provided by Pacific Gas & Electric Co.

11314500 NORTH FORK MOKELUMNE RIVER BELOW SALT SPRINGS DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.3	53.3	80.5	78.5	101	123	236	744	914	188	66.4	52.3
MAX	320	802	1390	665	710	969	1502	2473	3267	1887	406	330
(WY)	1996	1951	1951	1997	1942	1928	1938	1982	1983	1995	1983	1965
MIN	1.33	1.11	.73	.94	.91	1.87	1.55	3.11	3.77	3.02	2.89	2.80
(WY)	1941	1941	1944	1944	1944	1944	1944	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1927 - 2001	
ANNUAL TOTAL	62781		18356			
ANNUAL MEAN	172		50.3		223	
HIGHEST ANNUAL MEAN					710	1983
LOWEST ANNUAL MEAN					4.27	1977
HIGHEST DAILY MEAN	2600	May 25	1610	May 2	11400	May 16 1996
LOWEST DAILY MEAN	24	Feb 15	21	Jan 11	.30	Mar 17 1931
ANNUAL SEVEN-DAY MINIMUM	25	Nov 14	21	Jan 10	.39	Mar 19 1931
MAXIMUM PEAK FLOW			1830	May 2	17000	May 16 1996
MAXIMUM PEAK STAGE			6.84	May 2	17.66	May 16 1996
ANNUAL RUNOFF (AC-FT)	124500		36410		161800	
ANNUAL DIVERSION (AC-FT) a	299800		248600			
10 PERCENT EXCEEDS	512		36		598	
50 PERCENT EXCEEDS	35		31		22	
90 PERCENT EXCEEDS	25		22		4.5	

a Diversion, in acre-feet, to Tiger Creek Powerplant Conduit (station 11314000), provided by Pacific Gas & Electric Co.

11315000 COLE CREEK NEAR SALT SPRINGS DAM, CA

LOCATION.—Lat 38°31'09", long 120°12'42", in SW 1/4 NE 1/4 sec.28, T.8 N., R.16 E., Amador County, Hydrologic Unit 18040012, Eldorado National Forest, on left bank, 200 ft downstream from bridge, 0.3 mi upstream from diversion dam, 1.4 mi north of Salt Springs Dam, 3.2 mi upstream from mouth, and 6.5 mi southwest of Mokelumne Peak.

DRAINAGE AREA.—21.0 mi^2.

PERIOD OF RECORD.—July 1927 to November 1942, October 1943 to current year. Prior to October 1958, published as "Cold Creek near Mokelumne Peak." October 1958 to September 1960, published as "near Mokelumne Peak."

REVISED RECORDS.—WSP 1515: 1928, 1930–31, 1938(M), 1944, 1947. WSP 1930: Drainage area.

GAGE.—Water-stage recorder and concrete control since Oct. 30, 1974. Elevation of gage is 5,920 ft above sea level, from topographic map. Prior to Oct. 30, 1974, at site 0.4 mi upstream at different datum.

REMARKS.—Occasional pumping upstream from station for domestic use in summer-home tract began in September 1961. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 6,140 ft^3/s, Dec. 23, 1964, gage height, 10.21 ft, site and datum then in use, from rating curve extended above 900 ft^3/s, on basis of slope-area measurement at gage height 9.69 ft; no flow for many days in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	1.1	9.1	e5.5	7.1	8.8	175	251	26	.92	.26	.09
2	.09	2.5	7.2	5.5	7.7	8.6	131	193	22	.78	.25	.10
3	.09	7.7	6.7	e5.5	9.2	8.8	74	126	17	.93	.10	.07
4	.09	5.5	5.6	e5.5	e40	8.8	53	139	15	e.80	.11	.06
5	.09	4.1	5.7	e5.5	79	9.4	45	190	13	e.70	.09	.05
6	.09	3.4	5.5	e5.5	32	10	41	210	12	e.70	.09	.05
7	.09	3.2	4.3	e5.5	18	12	38	249	11	e.60	.12	.05
8	.30	2.4	4.2	5.3	14	21	36	288	9.9	e.60	.12	.05
9	.29	1.9	4.3	e5.5	12	157	38	250	9.1	e.50	.11	.04
10	.29	2.6	4.9	e6.0	10	46	36	229	7.9	.42	.08	.04
11	.28	2.5	e5.0	7.7	10	29	33	239	7.1	.38	.07	.04
12	.29	3.6	5.2	16	12	26	36	218	6.6	.35	.07	.04
13	.39	4.2	e5.0	8.8	13	33	36	209	6.1	.32	.07	.05
14	.50	3.7	5.2	6.8	11	61	39	173	5.5	.29	.07	.05
15	.55	3.4	e6.1	6.6	9.8	51	51	165	4.8	.27	.07	.05
16	.50	3.0	7.3	6.3	9.7	31	79	175	4.4	.25	.07	.05
17	.45	2.9	12	6.4	9.9	39	109	154	4.1	.23	.06	.05
18	.34	2.9	12	6.5	9.5	65	116	136	3.6	.23	.06	.05
19	.22	3.7	12	8.3	9.0	89	109	133	3.1	.23	.06	.05
20	.15	4.6	11	8.4	8.8	122	69	128	2.7	.22	.06	.05
21	.20	4.2	9.9	7.4	8.6	135	59	118	2.4	.19	.05	.05
22	.30	3.3	8.8	7.5	8.7	134	74	106	2.0	.18	.05	.05
23	.44	3.1	e7.0	8.8	9.0	120	120	95	1.7	.18	.06	.05
24	.61	2.8	e6.0	8.0	9.0	132	181	79	1.4	.18	.06	.05
25	1.2	2.9	e5.0	8.4	8.8	185	233	63	1.2	.16	.06	.30
26	2.2	3.3	e5.1	8.1	8.8	128	247	52	1.3	.14	.06	.18
27	1.4	3.5	e5.0	8.0	8.6	119	228	44	1.4	.13	.06	.11
28	1.1	4.6	e5.0	7.6	9.0	166	193	37	1.4	.11	.05	.09
29	2.4	5.9	e5.0	8.1	---	170	174	32	1.3	.11	.07	.08
30	.91	6.4	e6.0	7.6	---	156	238	30	1.1	.11	.07	.07
31	.93	---	e5.0	7.3	---	179	---	28	---	.11	.07	---
TOTAL	16.88	108.9	206.1	223.9	402.2	2460.4	3091	4539	206.1	11.32	2.65	2.11
MEAN	.54	3.63	6.65	7.22	14.4	79.4	103	146	6.87	.37	.085	.070
MAX	2.4	7.7	12	16	79	185	247	288	26	.93	.26	.30
MIN	.09	1.1	4.2	5.3	7.1	8.6	33	28	1.1	.11	.05	.04
AC-FT	33	216	409	444	798	4880	6130	9000	409	22	5.3	4.2

e Estimated.

11315000 COLE CREEK NEAR SALT SPRINGS DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.07	21.7	37.2	38.5	42.3	65.5	144	252	149	21.5	1.39	.90
MAX	88.3	368	361	292	228	212	242	509	564	263	25.2	15.6
(WY)	1983	1951	1965	1997	1982	1986	1936	1969	1983	1983	1983	1983
MIN	.045	.10	.14	.30	.30	1.87	38.9	50.1	5.22	.37	.013	.000
(WY)	1967	1960	1960	1933	1933	1933	1975	1934	1992	2001	1931	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	21606.33		11270.56			
ANNUAL MEAN	59.0		30.9		64.8	
HIGHEST ANNUAL MEAN					131	1983
LOWEST ANNUAL MEAN					16.6	1977
HIGHEST DAILY MEAN	981	May 8	288	May 8	3760	Dec 23 1964
LOWEST DAILY MEAN	.09	Aug 24	.04	Sep 9	.00	Aug 1 1931
ANNUAL SEVEN-DAY MINIMUM	.09	Oct 1	.04	Sep 6	.00	Aug 1 1931
MAXIMUM PEAK FLOW			471	May 8	6140	Dec 23 1964
MAXIMUM PEAK STAGE			3.24	May 8	10.21	Dec 23 1964
ANNUAL RUNOFF (AC-FT)	42860		22360		46980	
10 PERCENT EXCEEDS	198		129		201	
50 PERCENT EXCEEDS	6.1		5.5		15	
90 PERCENT EXCEEDS	.14		.07		.16	

11315030 COLE CREEK BELOW DIVERSION DAM, NEAR SALT SPRINGS DAM, CA

LOCATION.—Lat 38°30'54", long 120°12'53", in NW 1/4 SE 1/4 sec.28, T.8 N., R.16 E., Amador County, Hydrologic Unit 18040012, Eldorado National Forest, on right bank, 200 ft downstream from diversion dam, 1.1 mi north of Salt Springs Dam, and 6.7 mi southwest of Mokelumne Peak.

DRAINAGE AREA.—21.8 mi^2.

PERIOD OF RECORD.—December 1987 to current year (low-flow records only). Unpublished records for water years 1981–87 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and broad-crested weir. Elevation of gage is 5,830 ft above sea level, from topographic map. Prior to Dec. 3, 1987, nonrecording gage at same site and datum.

REMARKS.—No records computed above 3.9 ft^3/s. Flow regulated by Cole Creek Diversion Dam. Water is diverted for power since December 1952 to a tunnel from Lower Bear River Reservoir to Salt Springs Powerplant No. 2 (station 11313510) on North Fork Mokelumne River. Water diverted occasionally from Cole Creek into Lower Bear River Reservoir. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.74	---	3.3	3.4	3.3	3.5	---	2.8	1.1	.21	.09
2	.15	.74	---	3.3	3.4	3.2	3.4	3.4	2.8	.95	.19	.10
3	.15	3.0	---	3.3	3.3	3.2	3.3	3.2	2.8	.84	.18	.10
4	.16	3.4	---	3.3	3.4	3.2	3.2	3.2	2.7	.76	.16	.07
5	.16	3.4	---	3.3	3.5	3.2	3.2	3.2	2.7	.72	.16	.07
6	.15	3.5	---	3.4	3.5	3.2	3.1	3.8	2.7	.71	.15	.08
7	.14	3.5	---	3.3	3.5	3.2	3.1	---	2.7	.72	.15	.08
8	.13	2.9	---	3.3	3.5	3.2	3.1	---	2.7	.73	.14	.08
9	.16	2.1	---	3.4	3.4	3.3	3.1	---	2.7	.66	.13	.08
10	.72	2.6	---	3.4	3.5	3.2	3.0	---	2.7	.65	.12	.08
11	.55	2.9	3.7	3.3	3.4	3.2	3.0	---	2.7	.60	.10	.09
12	.50	3.2	3.4	3.4	3.4	3.2	3.0	3.1	2.7	.57	.10	.09
13	.39	3.7	3.4	3.4	3.4	3.3	3.0	2.9	2.7	.52	.09	.09
14	.37	3.8	3.3	3.4	3.4	3.3	3.0	2.9	2.7	.47	.09	.10
15	.37	3.5	3.3	3.4	3.4	3.3	3.0	2.9	2.7	.44	.09	.10
16	.38	3.4	3.4	3.4	3.4	3.3	2.8	---	2.7	.41	.09	.10
17	.40	3.3	3.4	3.4	3.2	3.3	2.8	2.9	2.7	.40	.09	.10
18	.43	3.2	3.4	3.4	3.2	3.4	2.9	2.9	2.7	.40	.08	.11
19	.49	3.4	3.4	3.4	3.2	3.5	2.9	2.9	2.7	.38	.08	.10
20	.48	3.6	3.4	3.4	3.2	3.6	2.8	2.9	2.7	.35	.08	.07
21	.41	3.7	3.4	3.4	3.2	3.6	2.7	2.9	2.5	.33	.08	.08
22	.36	3.8	3.4	3.4	3.3	3.6	2.7	2.9	2.0	.30	.10	.08
23	.35	3.6	3.4	3.4	3.3	3.6	2.7	2.9	1.8	.29	.11	.08
24	.35	3.4	3.4	3.5	3.3	3.6	2.9	2.9	1.7	.28	.11	.09
25	.36	3.3	3.3	3.5	3.3	---	3.5	2.8	1.5	.27	.11	.55
26	1.1	3.3	3.3	3.4	3.3	---	3.5	2.8	1.5	.24	.11	e.35
27	1.0	3.5	3.3	3.4	3.2	3.6	3.4	2.8	1.6	.22	.10	.26
28	.68	3.8	3.3	3.4	3.3	---	3.4	2.8	1.6	.19	.10	.21
29	2.3	---	3.3	3.4	---	---	3.3	2.7	1.4	.18	.09	.18
30	1.4	---	3.3	3.4	---	3.4	---	2.8	1.2	.17	.08	.16
31	.94	---	3.3	3.4	---	3.4	---	2.8	---	.19	.08	---
TOTAL	15.69	---	---	104.8	93.8	---	---	---	71.1	15.04	3.55	3.82
MEAN	.51	---	---	3.38	3.35	---	---	---	2.37	.49	.11	.13
MAX	2.3	---	---	3.5	3.5	---	---	---	2.8	1.1	.21	.55
MIN	.13	---	---	3.3	3.2	---	---	---	1.2	.17	.08	.07
AC-FT	31	---	---	208	186	---	---	---	141	30	7.0	7.6

e Estimated.

11315900 BEAR RIVER BELOW LOWER BEAR RIVER DAM, CA

LOCATION.—Lat 38°32'11", long 120°15'24", in NW 1/4 NW 1/4 sec.19, T.8 N., R.16 E., Amador County, Hydrologic Unit 18040012, Eldorado National Forest, on left bank, 250 ft downstream from outlet valve on Lower Bear River Reservoir, 0.2 mi below Lower Bear River Reservoir Dam, 1.4 mi upstream from Rattlesnake Creek, and 3.5 mi northwest of Salt Springs Dam.

DRAINAGE AREA.—37.4 mi^2.

PERIOD OF RECORD.—December 1987 to current year (low-flow records only). Unpublished records for water years 1981–87 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 5,500 ft above sea level, from topographic map. Prior to Dec. 3, 1987, nonrecording gage at same site and datum.

REMARKS.—No records computed above 9.3 ft^3/s. Flow regulated since 1900 by Bear River Reservoir, capacity, 6,760 acre-ft, and since December 1952 by Lower Bear River Reservoir 0.2 mi upstream, capacity, 49,100 acre-ft. Water diverted for power since December 1952 from Lower Bear River Reservoir through tunnel to Salt Springs Powerplant No. 2 (station 11313510) on North Fork Mokelumne River. Water diverted occasionally from Cole Creek into Lower Bear River Reservoir. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	4.0	5.4	2.4	2.5	2.5	3.2	5.1	5.6	5.2	5.1	4.8
2	6.1	2.4	5.3	2.4	2.5	2.6	3.2	5.1	5.6	5.1	5.3	4.9
3	6.1	2.5	5.3	2.4	2.7	2.5	3.1	5.1	5.5	5.2	5.3	4.8
4	6.1	2.6	5.3	2.4	2.7	2.8	3.1	5.1	5.5	5.1	5.3	4.8
5	6.1	2.6	5.2	2.4	2.7	3.0	2.9	5.1	5.5	5.2	5.3	4.7
6	6.1	2.6	4.9	2.4	2.6	3.4	3.0	5.1	5.4	5.1	5.3	4.7
7	6.1	2.6	4.4	2.4	2.6	3.3	3.1	5.1	5.4	5.1	5.2	4.7
8	6.0	2.5	4.4	2.4	2.5	3.4	3.1	5.1	5.4	5.1	5.2	4.7
9	6.1	2.5	4.4	2.5	2.5	3.2	3.0	5.1	5.4	5.1	5.2	4.7
10	6.2	2.6	3.5	2.5	2.5	3.0	3.0	5.2	5.4	5.1	5.2	4.7
11	6.1	4.4	2.5	2.5	2.6	2.9	3.0	5.2	5.4	5.0	5.2	4.7
12	6.0	6.1	2.5	2.5	2.5	3.0	3.1	5.2	5.4	5.0	5.2	4.7
13	6.2	6.0	2.5	2.5	2.5	3.1	3.3	5.3	5.3	4.9	5.1	4.7
14	6.3	6.0	2.5	2.5	2.5	3.1	3.3	5.4	5.3	4.9	5.1	4.7
15	6.5	6.0	2.5	2.5	2.5	3.0	3.3	5.4	5.3	4.9	5.1	4.7
16	6.6	6.0	2.5	2.5	2.5	3.1	3.3	5.4	5.3	4.8	5.1	4.7
17	6.7	5.9	2.5	2.5	2.5	3.3	3.3	5.5	5.2	4.8	5.0	4.7
18	6.8	5.9	2.5	2.5	2.5	3.5	3.4	5.5	5.2	4.8	5.0	4.7
19	6.2	5.9	2.5	2.5	2.5	3.8	4.1	5.5	5.2	4.7	5.0	4.7
20	5.5	5.8	2.5	2.5	2.5	4.1	3.6	5.5	5.2	4.6	5.0	4.9
21	5.8	5.8	2.5	2.5	2.6	3.7	3.7	5.5	5.2	4.8	5.1	5.3
22	5.8	5.8	2.5	2.5	2.6	3.6	3.8	5.5	---	4.8	5.1	5.2
23	5.8	5.7	2.5	2.5	2.6	3.4	4.0	5.5	---	4.9	5.1	5.2
24	5.8	5.7	2.5	2.5	2.5	3.6	3.6	5.4	---	4.9	5.0	5.2
25	5.6	5.7	2.4	2.5	2.6	4.3	3.5	5.5	5.2	4.9	5.0	5.4
26	5.7	5.6	2.4	2.5	2.5	3.4	3.6	5.6	5.2	4.9	5.0	5.2
27	5.8	5.6	2.4	2.5	2.6	3.2	3.7	5.6	5.2	4.8	4.9	5.2
28	6.4	5.6	2.4	2.5	2.6	3.4	3.6	5.6	5.2	4.9	4.9	5.1
29	5.6	5.8	2.4	2.5	---	3.3	3.5	5.6	5.2	4.9	4.9	5.1
30	5.6	5.6	2.4	2.5	---	3.2	4.4	5.6	5.2	4.9	4.9	5.1
31	5.6	---	2.4	2.5	---	3.2	---	5.6	---	4.9	4.9	---
TOTAL	187.4	141.8	99.9	76.7	71.5	100.9	101.8	166.0	---	153.3	158.0	146.7
MEAN	6.05	4.73	3.22	2.47	2.55	3.25	3.39	5.35	---	4.95	5.10	4.89
MAX	6.8	6.1	5.4	2.5	2.7	4.3	4.4	5.6	---	5.2	5.3	5.4
MIN	5.5	2.4	2.4	2.4	2.5	2.5	2.9	5.1	---	4.6	4.9	4.7
AC-FT	372	281	198	152	142	200	202	329	---	304	313	291

11316100 BEAR RIVER BELOW BEAR RIVER DIVERSION DAM, CA

LOCATION.—Lat 38°29'33", long 120°17'21", in NE 1/4 NW 1/4 sec.2, T.7 N., R.15 E., Amador County, Hydrologic Unit 18040012, Eldorado National Forest, on right bank, 200 ft downstream from diversion dam on Bear River and highway bridge, 1.4 mi upstream from mouth, and 3.5 mi northwest of Salt Springs Dam.

DRAINAGE AREA.—47.8 mi^2.

PERIOD OF RECORD.—December 1987 to current year (low-flow records only). Unpublished records for water years 1983–87 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and sharp-crested weir. Elevation of gage is 3,710 ft above sea level, from topographic map. Prior to Dec. 8, 1987, nonrecording gage at same site and datum.

REMARKS.—No records computed above 10 ft^3/s. Flow regulated since 1900 by Bear River Reservoir, capacity, 6,760 acre-ft, and since December 1952 by Lower Bear River Reservoir 4 mi upstream, capacity, 49,100 acre-ft. Water diverted for power since December 1952 from Lower Bear River Reservoir through tunnel to Salt Springs Powerplant No. 2 (station 11313510) on North Fork Mokelumne River. Water diverted at diversion dam 200 ft upstream to Tiger Creek Powerplant Conduit for use at Tiger Creek Powerplant (station 11316610). Spill at the diversion bypasses this site. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	5.5	---	---	---	5.2	---	---	---	---	---
3	---	---	5.5	---	---	---	---	---	---	---	---	---
4	---	---	5.4	---	---	---	---	---	---	---	---	5.5
5	---	---	5.4	---	---	---	---	---	5.5	---	---	5.2
6	---	---	5.3	---	---	---	---	---	5.5	5.5	---	5.3
7	5.4	---	5.3	---	---	---	---	---	5.5	5.5	---	---
8	5.4	---	5.3	---	---	---	---	---	---	5.5	---	---
9	---	---	5.3	---	---	---	---	---	---	5.5	5.4	5.4
10	---	---	---	---	---	---	5.5	---	---	5.5	---	---
11	---	---	---	---	---	---	5.5	---	---	5.5	---	---
12	---	---	---	---	---	---	5.5	---	---	5.5	5.4	---
13	---	---	---	---	---	---	---	---	---	5.5	---	---
14	5.5	4.9	5.4	---	---	---	---	---	---	5.5	---	---
15	5.5	---	5.4	---	---	---	5.5	---	---	5.5	5.5	---
16	---	---	5.5	---	---	---	5.5	---	---	5.5	5.5	---
17	---	---	---	---	---	---	5.5	---	---	5.5	---	---
18	---	---	---	---	---	---	---	---	---	5.5	---	---
19	---	---	---	---	---	---	---	5.5	---	5.5	---	---
20	---	---	---	---	---	---	---	5.5	---	5.5	---	5.5
21	5.5	---	---	---	---	---	---	---	---	---	---	5.5
22	5.1	---	---	---	---	---	5.4	---	---	---	---	5.5
23	---	---	---	---	---	---	---	5.5	---	---	---	5.5
24	---	---	---	---	---	---	---	5.5	---	---	---	5.5
25	---	---	---	---	---	---	---	---	---	---	4.9	5.5
26	---	---	---	---	---	---	---	---	---	---	5.3	5.5
27	---	---	---	---	---	---	---	---	---	5.5	5.4	5.5
28	---	---	---	---	---	---	---	---	---	---	5.4	5.5
29	---	5.5	---	---	---	---	---	---	---	---	5.4	5.5
30	---	---	---	---	---	---	---	---	---	---	5.4	5.5
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

11316600 NORTH FORK MOKELUMNE RIVER ABOVE TIGER CREEK, NEAR WEST POINT, CA

LOCATION.—Lat 38°26'48", long 120°29'21", in SW 1/4 NE 1/4 sec.24, T.7 N., R.13 E., Amador County, Hydrologic Unit 18040012, Eldorado National Forest, on right bank, 0.4 mi upstream from Tiger Creek and Tiger Creek Powerplant, 3.9 mi northeast of West Point, 18.3 mi downstream from Salt Springs Dam, and at mile 106.4.

DRAINAGE AREA.—333 mi^2.

PERIOD OF RECORD.—October 1985 to current year. Unpublished records for water years 1970–85 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,337.50 ft above sea level (levels by Pacific Gas & Electric Co.).

REMARKS.—Flow regulated since 1931 by Salt Springs Reservoir (station 11313500) 18.3 mi upstream. Some water is diverted through Tiger Creek Powerplant Conduit (station 11314000). Additional water is diverted out of the Bear River and several smaller tributaries into Tiger Creek Powerplant Conduit. All the water enters the North Fork Mokelumne River at Tiger Creek Powerplant (station 11316610) 0.4 mi downstream. Water is occasionally diverted at the weir for cooling at the Tiger Creek Powerplant (station 11316610). See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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, 38,500 ft^3/s, Jan. 2, 1997, gage height, 12.49 ft; minimum daily, 29 ft^3/s, Jul. 26, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	93	85	64	62	82	191	1250	87	62	56	52
2	64	77	70	64	63	90	187	1750	85	61	56	51
3	64	75	66	64	64	88	162	1170	84	61	55	51
4	64	70	66	64	72	104	144	667	82	61	55	50
5	62	69	68	63	77	201	132	474	81	61	55	49
6	64	68	66	63	77	192	126	220	80	61	55	49
7	63	67	66	63	75	158	151	230	78	61	54	49
8	64	66	64	67	65	154	128	247	77	61	54	50
9	62	67	64	67	69	158	118	273	76	61	53	49
10	62	78	64	69	73	141	113	259	74	61	53	50
11	63	75	66	112	97	127	128	223	73	61	54	51
12	73	71	80	78	72	121	137	215	72	61	53	52
13	69	69	70	68	69	116	125	204	71	59	53	51
14	65	71	89	65	68	118	121	213	71	58	54	51
15	65	73	104	62	70	118	121	199	71	57	53	51
16	68	71	85	58	68	116	128	193	71	57	53	51
17	66	69	74	65	68	115	137	191	69	57	53	51
18	66	70	71	66	69	123	145	166	68	57	54	51
19	65	69	68	63	85	138	222	142	67	57	51	51
20	65	70	68	59	114	166	244	133	66	57	51	49
21	66	71	68	59	124	184	235	127	65	57	53	49
22	66	71	68	59	128	185	230	121	64	57	53	49
23	66	71	68	62	109	194	275	113	93	57	53	49
24	68	71	68	92	106	189	321	108	101	57	54	51
25	67	71	68	76	120	257	352	101	78	57	52	59
26	66	71	66	72	108	235	381	98	78	56	51	57
27	66	71	66	68	98	200	1160	94	66	55	50	53
28	66	72	66	65	89	195	1300	92	65	56	51	53
29	66	88	66	66	---	228	1210	91	64	56	50	53
30	66	112	66	63	---	187	1140	89	64	55	50	52
31	78	---	66	63	---	186	---	88	---	60	51	---
TOTAL	2039	2207	2190	2089	2359	4866	9564	9541	2241	1815	1643	1534
MEAN	65.8	73.6	70.6	67.4	84.2	157	319	308	74.7	58.5	53.0	51.1
MAX	78	112	104	112	128	257	1300	1750	101	62	56	59
MIN	62	66	64	58	62	82	113	88	64	55	50	49
AC-FT	4040	4380	4340	4140	4680	9650	18970	18920	4450	3600	3260	3040
a	25120	28160	26720	13370	6630	15610	19940	15910	25010	28640	27330	24250

a Diversion, in acre-feet, to Tiger Creek Powerplant (station 11316610), provided by Pacific Gas & Electric Co.

11316600 NORTH FORK MOKELUMNE RIVER ABOVE TIGER CREEK, NEAR WEST POINT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	102	80.1	131	347	381	485	527	1070	1069	330	117	108
MAX	323	301	948	3242	1702	1855	1602	2796	4265	2303	340	323
(WY)	1996	1997	1997	1997	1986	1986	1986	1996	1995	1995	1993	1995
MIN	39.4	44.2	46.9	49.8	51.4	76.8	87.3	70.0	49.8	37.0	36.2	34.2
(WY)	1989	1992	1994	1991	1991	1988	1988	1992	1987	1987	1987	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	129157		42088			
ANNUAL MEAN	353		115		395	
HIGHEST ANNUAL MEAN					1052	1995
LOWEST ANNUAL MEAN					59.9	1988
HIGHEST DAILY MEAN	3470	May 25	1750	May 2	25200	Jan 2 1997
LOWEST DAILY MEAN	60	Jan 6	49	Sep 5	29	Jul 26 1996
ANNUAL SEVEN-DAY MINIMUM	61	Jan 4	49	Sep 4	32	Aug 4 1987
MAXIMUM PEAK FLOW			2050	May 2	38500	Jan 2 1997
MAXIMUM PEAK STAGE			4.90	May 2	12.49	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	256200		83480		286300	
ANNUAL DIVERSION (AC-FT) a	309800		256700			
10 PERCENT EXCEEDS	866		191		1090	
50 PERCENT EXCEEDS	136		68		85	
90 PERCENT EXCEEDS	65		53		45	

a Diversion, in acre-feet, to Tiger Creek Powerplant (station 11316610), provided by Pacific Gas & Electric Co.

11316670 NORTH FORK MOKELUMNE RIVER BELOW TIGER CREEK RESERVOIR, NEAR WEST POINT, CA

LOCATION.—Lat 38°26'25", long 120°30'14", in SE 1/4 SE 1/4 sec.23, T.7 N., R.13 E., Amador County, Hydrologic Unit 18040012, on right bank, 500 ft downstream from Tiger Creek Reservoir Dam, and 3.1 mi northeast of West Point.

DRAINAGE AREA.—357 mi^2.

PERIOD OF RECORD.—October 1985 to current year (low-flow records only). Unpublished records for water years 1982–85 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,220 ft above sea level, from topographic map.

REMARKS.—No records computed above 50 ft^3/s. Flow regulated since 1931 by Salt Springs Reservoir (station 11313500) 20 mi upstream. Most of the water is diverted at Tiger Creek Reservoir to West Point Powerplant. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	47	47	47	49	49	49	---	44	47	49	47
2	---	47	47	47	48	49	50	---	44	47	48	47
3	---	47	47	47	47	49	---	---	44	47	49	47
4	---	47	47	47	47	49	49	---	44	47	49	47
5	48	47	47	46	47	49	49	---	44	47	49	47
6	44	47	47	46	47	49	49	47	44	47	49	47
7	46	47	47	46	47	49	49	46	44	47	49	47
8	46	47	47	46	47	49	49	46	44	47	49	47
9	46	47	47	46	48	49	49	46	44	47	49	47
10	46	47	47	47	49	49	49	46	44	47	49	47
11	46	47	47	47	49	49	49	46	44	47	49	47
12	46	47	47	47	49	49	49	46	44	47	49	47
13	46	46	47	47	49	49	49	46	49	47	49	46
14	46	46	47	47	48	49	50	45	47	47	49	46
15	46	46	47	47	47	49	49	43	47	47	49	46
16	46	47	47	47	47	49	49	42	47	47	49	46
17	46	47	47	47	47	49	49	42	47	47	49	46
18	46	47	47	47	47	49	49	42	47	47	49	45
19	47	47	47	48	47	49	49	42	47	46	49	44
20	47	47	47	49	47	50	49	43	47	46	48	44
21	47	47	47	49	47	---	49	44	47	47	48	44
22	47	47	47	49	47	---	49	44	47	47	47	44
23	47	47	47	49	47	---	---	44	48	46	47	44
24	47	47	47	49	47	---	---	44	49	46	47	44
25	47	47	47	49	47	---	---	44	49	46	47	44
26	47	47	47	49	48	---	---	44	49	46	47	44
27	47	47	47	49	49	---	---	44	47	47	47	44
28	47	47	47	49	49	50	---	44	47	47	47	44
29	47	47	47	49	---	49	---	44	47	47	47	44
30	47	47	47	49	---	49	---	44	47	48	47	44
31	47	---	47	49	---	49	---	44	---	49	47	---
TOTAL	---	1407	1457	1477	1334	---	---	---	1383	1454	1496	1367
MEAN	---	46.9	47.0	47.6	47.6	---	---	---	46.1	46.9	48.3	45.6
MAX	---	47	47	49	49	---	---	---	49	49	49	47
MIN	---	46	47	46	47	---	---	---	44	46	47	44
AC-FT	---	2790	2890	2930	2650	---	---	---	2740	2880	2970	2710

11316700 NORTH FORK MOKELUMNE RIVER BELOW ELECTRA DIVERSION DAM, NEAR WEST POINT, CA

LOCATION.—Lat 38°25'15", long 120°32'56", in SW 1/4 NE 1/4 sec.33, T.7 N., R.13 E., Amador County, Hydrologic Unit 18040012, on right bank, 300 ft downstream from Electra Diversion Dam, and 2.0 mi northwest of West Point.

DRAINAGE AREA.—365 mi^2.

PERIOD OF RECORD.—October 1985 to current year (low-flow records only). Unpublished records for water years 1982–84 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder and sharp-crested weir since March 1987. Elevation of gage is 1,980 ft above sea level, from topographic map.

REMARKS.—No records computed above 33 ft^3/s. Flow regulated since 1931 by numerous reservoirs and diversions upstream. Most of the water is diverted at Electra Diversion Dam to Electra Powerplant. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Pacific Gas & Electric 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 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	21	13	13	12	12	12	---	17	17	17	17
2	17	16	13	13	12	12	12	---	17	17	17	17
3	17	14	13	13	12	12	12	---	17	17	17	17
4	17	13	13	13	12	12	12	---	17	17	17	17
5	17	12	13	13	12	12	12	---	17	17	17	17
6	17	12	13	13	12	12	12	17	17	17	17	17
7	17	12	13	13	12	12	12	17	17	17	17	17
8	17	12	13	13	12	12	12	18	18	17	17	17
9	17	12	13	13	13	12	12	17	17	17	17	17
10	17	12	13	13	13	12	12	17	17	17	17	17
11	17	12	13	13	13	12	12	17	17	17	17	17
12	17	12	13	13	13	12	12	18	17	17	17	17
13	17	12	13	12	12	12	12	17	17	17	17	17
14	17	12	13	12	12	12	12	17	17	17	17	17
15	17	12	13	12	12	12	12	17	17	17	17	17
16	17	12	13	12	12	12	12	17	17	17	17	17
17	17	12	13	12	12	12	12	17	17	17	17	17
18	17	13	13	12	12	12	12	18	17	17	17	17
19	17	13	13	12	12	12	12	17	17	17	17	17
20	17	13	13	12	12	12	12	17	17	17	17	17
21	17	13	13	12	12	12	12	17	17	17	17	17
22	17	13	13	12	12	12	12	17	17	17	17	17
23	17	13	13	13	12	13	12	17	17	17	17	17
24	17	13	13	13	12	12	13	17	17	17	17	17
25	17	13	13	13	13	12	14	17	17	17	17	17
26	17	13	13	13	12	12	---	17	17	17	17	17
27	19	13	13	12	12	12	---	17	17	17	17	17
28	21	13	13	12	12	12	---	17	17	17	17	17
29	22	13	13	12	---	12	---	17	17	17	17	17
30	23	13	13	12	---	12	---	17	17	17	17	17
31	23	---	13	12	---	12	---	17	---	17	17	---
TOTAL	550	389	403	388	341	373	---	---	511	527	527	510
MEAN	17.7	13.0	13.0	12.5	12.2	12.0	---	---	17.0	17.0	17.0	17.0
MAX	23	21	13	13	13	13	---	---	18	17	17	17
MIN	17	12	13	12	12	12	---	---	17	17	17	17
AC-FT	1090	772	799	770	676	740	---	---	1010	1050	1050	1010

11316800 FOREST CREEK NEAR WILSEYVILLE, CA

LOCATION.—Lat 38°24'12", long 120°26'45", in SW 1/4 NW 1/4 sec.4, T.6 N., R.14 E., Calaveras County, Hydrologic Unit 18040012, on left bank, 1.0 mi downstream from Lion Creek, 1.8 mi upstream from mouth, and 4 mi northeast of Wilseyville.

DRAINAGE AREA.—20.8 mi^2.

PERIOD OF RECORD.—July 1960 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 2,950 ft above sea level, from topographic map.

REMARKS.—No regulation. Minor diversions upstream from station for irrigation and domestic use. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,020 ft^3/s, Feb. 19, 1986, gage height, 8.12 ft, from rating curve extended above 500 ft^3/s, on basis of slope-area measurement at gage height 7.41 ft; minimum daily, 0.11 ft^3/s, Aug. 14, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 120 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 20	1820	56	3.92

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	6.2	7.7	5.3	7.5	14	31	37	7.5	4.8	2.4	2.0
2	3.9	5.8	6.8	5.3	7.8	16	30	35	7.9	4.2	2.4	1.9
3	3.4	5.5	6.6	5.7	8.3	16	27	31	7.6	3.2	2.4	1.7
4	2.8	5.2	6.5	5.4	8.4	22	26	29	7.3	3.4	2.5	1.4
5	3.0	5.2	5.9	5.3	8.3	41	25	28	7.0	3.5	2.5	1.3
6	3.2	5.3	5.8	5.2	7.9	35	24	26	7.2	3.2	2.2	1.3
7	3.6	5.0	5.5	5.0	7.4	29	26	25	7.0	3.9	1.8	1.4
8	3.6	5.4	5.5	5.9	6.4	28	23	25	6.6	3.8	1.8	1.6
9	4.1	5.4	5.5	5.7	6.9	29	22	23	6.4	3.4	1.8	1.5
10	6.5	7.5	5.2	8.5	6.3	27	21	22	6.2	2.8	1.9	1.3
11	5.4	7.2	5.0	14	8.2	25	26	19	5.9	3.0	2.1	1.1
12	4.6	6.6	6.9	9.2	8.1	24	28	17	5.7	3.1	2.0	1.2
13	4.1	7.1	6.1	7.8	11	22	24	16	5.3	3.0	1.8	1.2
14	3.8	7.4	11	6.8	11	21	23	16	5.3	3.5	1.4	1.2
15	3.6	7.0	12	5.9	10	22	23	15	5.2	3.5	1.4	1.7
16	3.3	6.9	8.6	5.2	12	22	23	14	5.1	3.2	1.4	1.7
17	3.1	6.3	7.2	5.5	11	22	24	14	5.2	2.8	1.5	1.7
18	3.2	6.8	6.6	6.4	12	23	26	13	5.1	2.8	1.8	1.2
19	3.0	6.9	6.5	6.3	18	25	42	13	4.9	2.8	1.8	1.3
20	2.9	6.5	6.5	6.2	22	28	49	12	4.6	2.8	1.8	1.5
21	3.2	6.7	6.5	6.2	23	29	51	11	4.5	3.0	1.4	1.4
22	3.5	6.7	6.5	6.1	23	30	48	11	4.3	3.0	1.6	1.6
23	3.8	6.5	6.6	6.8	20	32	46	11	4.3	2.8	1.6	1.7
24	3.9	6.5	6.3	10	20	32	47	10	4.8	2.4	1.7	1.7
25	5.4	6.7	6.1	9.8	24	43	50	10	4.4	2.6	2.0	2.0
26	8.6	6.9	6.1	9.4	21	39	50	10	4.2	2.5	2.0	1.7
27	6.6	6.5	6.1	8.9	18	34	48	10	5.0	2.6	1.8	1.3
28	7.0	6.5	5.9	8.5	16	33	44	9.7	5.2	2.8	1.4	1.6
29	20	10	5.6	8.7	---	34	41	9.0	4.8	2.7	1.4	1.9
30	8.6	10	5.4	7.4	---	32	38	8.3	5.2	2.6	1.4	1.8
31	6.9	---	5.4	7.7	---	31	---	7.8	---	2.4	1.6	---
TOTAL	152.5	198.2	203.9	220.1	363.5	860	1006	537.8	169.7	96.1	56.6	45.9
MEAN	4.92	6.61	6.58	7.10	13.0	27.7	33.5	17.3	5.66	3.10	1.83	1.53
MAX	20	10	12	14	24	43	51	37	7.9	4.8	2.5	2.0
MIN	2.8	5.0	5.0	5.0	6.3	14	21	7.8	4.2	2.4	1.4	1.1
AC-FT	302	393	404	437	721	1710	2000	1070	337	191	112	91

11316800 FOREST CREEK NEAR WILSEYVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.11	9.05	19.7	39.8	47.1	52.9	49.8	35.2	14.0	6.32	3.80	3.25
MAX	11.9	59.5	138	244	243	209	174	129	54.8	18.5	10.5	8.36
(WY)	1983	1984	1965	1997	1986	1983	1982	1995	1998	1998	1983	1983
MIN	.63	1.80	2.17	2.40	2.35	4.58	2.96	3.92	1.59	.46	.33	.50
(WY)	1978	1993	1977	1991	1991	1977	1977	1977	1977	1977	1977	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	8434.6		3910.3			
ANNUAL MEAN	23.0		10.7		23.6	
HIGHEST ANNUAL MEAN					67.9	1983
LOWEST ANNUAL MEAN					2.39	1977
HIGHEST DAILY MEAN	281	Feb 14	51	Apr 21	1550	Jan 2 1997
LOWEST DAILY MEAN	2.8	Oct 4	1.1	Sep 11	.11	Aug 14 1977
ANNUAL SEVEN-DAY MINIMUM	3.2	Oct 16	1.3	Sep 8	.15	Aug 11 1977
MAXIMUM PEAK FLOW			56	Apr 20	2020	Feb 19 1986
MAXIMUM PEAK STAGE			a3.94	Mar 5	8.12	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	16730		7760		17120	
10 PERCENT EXCEEDS	56		28		61	
50 PERCENT EXCEEDS	7.9		6.4		7.9	
90 PERCENT EXCEEDS	3.8		1.7		2.1	

a Backwater from log.

11317000 MIDDLE FORK MOKELUMNE RIVER AT WEST POINT, CA

LOCATION.—Lat 38°23'23", long 120°31'32", in SE 1/4 NE 1/4 sec.10, T.6 N., R.13 E., Calaveras County, Hydrologic Unit 18040012, on right bank, 200 ft downstream from highway bridge, 4.5 mi upstream from South Fork Mokelumne River, and 0.6 mi south of West Point.

DRAINAGE AREA.—68.4 mi^2.

PERIOD OF RECORD.—October 1911 to current year. Monthly discharge only for October 1911, published in WSP 1315-A.

REVISED RECORDS.—WSP 1515: 1919–20, 1927–28(M), 1936(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 2,450 ft above sea level, from topographic map. Prior to Oct. 6, 1926, nonrecording gage at site 1,200 ft upstream at different datum. Oct. 6, 1926, to Aug. 18, 1928, nonrecording gage at present site and datum.

REMARKS.—Flow slightly regulated by Schaads Reservoir, capacity, 1,740 acre-ft, 6 mi upstream from station, since January 1940. Maximum output of Schaads Powerplant is 35 ft^3/s and is operational only when reservoir level is within 4 ft of spill gates. Several small diversions upstream from station. At times water is diverted 4 mi upstream from station to Licking Fork Mokelumne River via Middle Fork Ditch, capacity, 10 ft^3/s; because of leakage, only 5 ft^3/s may reach Licking Fork Mokelumne River. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,040 ft^3/s, Jan. 2, 1997, gage height, 9.28 ft, from rating curve extended above 4,010 ft^3/s; no flow for many days in 1931 and Sept. 9, 1934.

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)
Apr 20	2220	195	2.82

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	15	12	17	62	88	107	13	7.4	7.4	8.8
2	11	12	14	12	17	55	87	102	14	6.8	7.3	9.6
3	11	12	14	12	18	33	78	89	14	5.5	12	11
4	9.3	11	13	12	23	40	70	80	14	5.7	13	6.6
5	9.8	12	13	11	37	111	68	75	15	7.3	13	5.8
6	10	12	12	11	49	128	66	73	19	8.2	13	5.7
7	11	11	12	11	48	92	70	70	21	9.9	11	5.6
8	11	11	11	27	45	83	70	69	26	11	9.6	7.4
9	13	11	11	44	36	87	68	69	24	11	10	7.8
10	34	18	11	50	19	87	65	65	34	7.3	11	7.9
11	42	16	11	59	22	78	72	61	26	8.1	11	6.5
12	42	15	16	23	19	70	94	60	7.0	8.7	12	6.3
13	30	15	13	17	21	65	79	60	11	8.3	10	5.8
14	10	14	20	15	24	68	75	58	10	8.1	7.7	5.9
15	9.7	13	23	14	24	67	73	57	10	8.8	5.7	7.5
16	10	13	17	25	26	67	72	56	9.5	9.0	6.2	7.6
17	11	12	15	44	28	65	72	57	9.0	7.3	6.6	7.3
18	9.2	12	21	35	27	65	74	55	9.6	7.3	8.4	6.2
19	9.3	13	16	14	42	66	100	53	11	7.8	9.4	5.1
20	9.5	12	17	13	67	69	135	53	9.7	8.3	9.0	5.6
21	10	12	17	14	78	71	169	52	8.9	9.5	7.0	5.6
22	15	13	17	13	89	72	153	52	21	9.6	6.2	6.8
23	17	13	17	14	80	73	139	52	38	9.0	6.7	7.2
24	14	13	17	36	83	73	140	52	37	6.6	6.9	6.5
25	16	13	17	26	95	96	140	41	25	6.0	9.1	10
26	37	13	17	26	77	108	151	16	4.6	6.4	11	9.9
27	59	25	29	24	63	96	140	16	5.2	8.0	11	6.1
28	59	45	45	22	65	90	130	15	5.6	9.3	8.0	5.1
29	72	50	33	22	---	94	118	15	5.6	9.7	6.6	6.6
30	46	40	13	18	---	90	109	14	7.4	10	6.4	6.6
31	15	---	13	18	---	88	---	13	---	8.5	7.0	---
TOTAL	673.8	495	530	694	1239	2409	2965	1707	465.1	254.4	279.2	210.4
MEAN	21.7	16.5	17.1	22.4	44.2	77.7	98.8	55.1	15.5	8.21	9.01	7.01
MAX	72	50	45	59	95	128	169	107	38	11	13	11
MIN	9.2	11	11	11	17	33	65	13	4.6	5.5	5.7	5.1
AC-FT	1340	982	1050	1380	2460	4780	5880	3390	923	505	554	417

11317000 MIDDLE FORK MOKELUMNE RIVER AT WEST POINT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	11.4	22.4	49.5	92.8	127	141	148	108	43.9	16.7	9.40	7.80
MAX	37.5	223	389	680	768	653	561	372	181	71.8	40.8	31.1
(WY)	1983	1951	1956	1997	1986	1983	1982	1983	1983	1998	1969	1969
MIN	.86	2.64	3.33	4.75	5.70	9.06	6.47	4.17	.95	.22	.071	.15
(WY)	1932	1930	1977	1977	1991	1977	1977	1931	1924	1924	1931	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	26482.6		11921.9			
ANNUAL MEAN	72.4		32.7		64.4	
HIGHEST ANNUAL MEAN					218	1983
LOWEST ANNUAL MEAN					5.25	1977
HIGHEST DAILY MEAN	940	Feb 14	169	Apr 21	3740	Jan 2 1997
LOWEST DAILY MEAN	6.6	Aug 17	4.6	Jun 26	.00	Aug 23 1931
ANNUAL SEVEN-DAY MINIMUM	8.8	Aug 24	6.1	Jun 26	.00	Aug 23 1931
MAXIMUM PEAK FLOW			195	Apr 20	5040	Jan 2 1997
MAXIMUM PEAK STAGE			a3.21	Oct 10	9.28	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	52530		23650		46690	
10 PERCENT EXCEEDS	173		79		168	
50 PERCENT EXCEEDS	30		15		21	
90 PERCENT EXCEEDS	10		7.0		4.0	

a Backwater from rock dam.

11318500 SOUTH FORK MOKELUMNE RIVER NEAR WEST POINT, CA

LOCATION.—Lat 38°22'06", long 120°32'40", in SE 1/4 SE 1/4 sec.16, T.6 N., R.13 E., Calaveras County, Hydrologic Unit 18040012, on right bank, 500 ft upstream from highway bridge, 2.5 mi upstream from mouth, and 2.4 mi southwest of West Point.

DRAINAGE AREA.—75.1 mi^2.

PERIOD OF RECORD.—October 1933 to current year.

REVISED RECORDS.—WSP 1315-A: 1934(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,950 ft above sea level, from topographic map. October 1933 to Sept. 19, 1957, at site 1,100 ft downstream at different datum.

REMARKS.—The Middle Fork Ditch can divert 10 ft^3/s from the Middle Fork Mokelumne River which, due to leakage, delivers about 5 ft^3/s to the Licking Fork Mokelumne River. There are two pumps with a combined capacity of 8.9 ft^3/s that can pump water to Jeff Davis Reservoir upstream from the station. There are other small diversions upstream from the station for irrigation and domestic use. See schematic diagram of Mokelumne River Basin.

COOPERATION.— Records were collected by East Bay Municipal Utility District, under general supervision of the U.S Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,610 ft^3/s, Jan. 2, 1997, gage height, 12.72 ft, from rating curve extended above 2,700 ft^3/s, on basis of slope-area measurement of peak flow; no flow many days during August and September 1934.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1505	324	4.21

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	22	23	18	27	50	110	133	21	10	4.4	e4.3
2	10	20	21	18	27	53	110	125	20	9.3	3.9	e3.9
3	13	20	20	18	27	51	95	109	20	9.5	e3.4	e3.6
4	13	18	20	17	30	78	84	99	20	8.8	e2.2	e3.2
5	12	18	19	17	31	253	76	93	19	9.2	e2.4	e3.2
6	13	18	19	17	29	182	71	88	18	8.8	e2.7	3.3
7	12	17	18	17	28	121	91	81	18	8.7	e2.2	3.6
8	12	17	18	21	25	102	73	74	19	8.7	e2.9	3.3
9	14	18	18	22	28	101	67	69	21	8.1	5.1	3.5
10	22	25	18	28	38	96	63	64	19	7.1	5.6	4.2
11	20	23	18	94	50	80	71	60	19	6.9	5.9	4.2
12	19	20	25	41	42	66	99	56	18	6.9	6.7	4.6
13	17	20	22	31	41	57	78	53	18	6.4	7.0	4.8
14	16	20	28	28	41	56	71	50	17	5.8	e4.1	4.8
15	15	20	34	26	39	56	70	47	17	5.7	e3.4	3.8
16	15	20	28	24	38	55	72	46	16	6.4	e3.1	3.8
17	15	20	25	22	38	53	76	44	15	6.8	e3.7	4.0
18	15	19	23	23	42	57	79	40	15	6.9	e3.3	3.4
19	14	19	22	23	75	67	137	36	14	6.7	e3.2	3.5
20	15	20	21	22	118	81	202	35	13	6.5	e3.1	3.1
21	15	19	20	21	111	89	224	34	13	7.5	e3.6	3.3
22	15	20	20	21	105	93	186	32	13	8.9	e4.1	3.2
23	15	19	20	23	86	101	174	30	12	8.8	e4.3	3.2
24	15	19	20	73	96	101	191	30	11	7.1	e4.5	2.9
25	16	19	19	46	113	143	203	29	11	4.4	e4.1	5.4
26	27	19	19	44	85	132	199	26	11	4.1	e3.7	7.1
27	24	19	19	38	67	113	185	25	13	4.1	e4.6	5.9
28	22	19	19	33	57	110	168	25	14	3.6	5.5	4.7
29	68	24	19	32	---	120	151	25	12	e3.2	e4.7	3.8
30	34	31	19	30	---	112	138	23	11	e3.6	e4.1	3.8
31	25	---	18	28	---	109	---	22	---	4.0	e3.3	---
TOTAL	566.9	602	652	916	1534	2938	3614	1703	478	212.5	124.8	119.4
MEAN	18.3	20.1	21.0	29.5	54.8	94.8	120	54.9	15.9	6.85	4.03	3.98
MAX	68	31	34	94	118	253	224	133	21	10	7.0	7.1
MIN	8.9	17	18	17	25	50	63	22	11	3.2	2.2	2.9
AC-FT	1120	1190	1290	1820	3040	5830	7170	3380	948	421	248	237

e Estimated.

11318500 SOUTH FORK MOKELUMNE RIVER NEAR WEST POINT, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.7	30.6	72.6	135	179	190	183	122	47.1	21.7	12.4	10.2
MAX	41.6	270	465	907	959	825	704	461	163	62.9	36.1	31.6
(WY)	1983	1951	1956	1997	1986	1983	1982	1995	1983	1983	1952	1983
MIN	1.65	3.21	2.83	1.85	2.53	11.3	7.48	10.9	4.49	1.00	.039	.13
(WY)	1989	1991	1991	1991	1991	1977	1977	1977	1992	1934	1934	1934

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001	
ANNUAL TOTAL	32996.3		13460.6			
ANNUAL MEAN	90.2		36.9		84.3	
HIGHEST ANNUAL MEAN					264	1983
LOWEST ANNUAL MEAN					6.14	1977
HIGHEST DAILY MEAN	1390	Feb 14	253	Mar 5	5780	Feb 17 1986
LOWEST DAILY MEAN	7.5	Sep 20	2.2	Aug 4	.00	Aug 6 1934
ANNUAL SEVEN-DAY MINIMUM	8.3	Sep 16	2.8	Aug 2	.00	Aug 12 1934
MAXIMUM PEAK FLOW			324	Mar 5	7610	Jan 2 1997
MAXIMUM PEAK STAGE			a4.27	Mar 5	12.72	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	65450		26700		61050	
10 PERCENT EXCEEDS	233		99		218	
50 PERCENT EXCEEDS	26		20		27	
90 PERCENT EXCEEDS	10		3.9		6.0	

a Backwater from log.

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CA

LOCATION.—Lat 38°18'46", long 120°43'09", in SW 1/4 SW 1/4 sec.1, T.5 N., R.11 E., Calaveras County, Hydrologic Unit 18040012, on downstream side of bridge, 1.2 mi northwest of Mokelumne Hill, and 8 mi downstream from confluence of north and south Forks of Mokelumne River.

DRAINAGE AREA.—544 mi^2.

PERIOD OF RECORD.—January to June 1901, May 1903 to December 1904, October 1927 to current year. Yearly estimate only for water year 1928 (incomplete), published in WSP 1315-A. Published as "at Electra" 1901, 1903–04.
CHEMICAL DATA: Water year 1980. Water years 1971–79 in files of California Department of Water Resources.
WATER TEMPERATURE: Water years 1961–79 (daily record).

REVISED RECORDS.—WSP 1445: 1903–04, 1928(M), 1936(M), 1938(M), 1940(M), 1943(M), 1945(M). WSP 1930: Drainage area. WDR CA-00-3: 1996 (maximum gage height).

GAGE.—Water-stage recorder. Datum of gage is 584.88 ft above sea level (levels by California Division of Highways). Jan. 1, to June 30, 1901, and May 11, 1903, to Dec. 31, 1904, nonrecording gage at site 3 mi upstream at different datum. Nov. 10, 1927, to Aug. 26, 1952, water-stage recorder at site 40 ft upstream at datum 5.00 ft higher. Aug. 27, 1952, to Oct. 14, 1977, at present site at datum 5.00 ft higher.

REMARKS.—Flow regulated by Salt Springs Reservoir (station 11313500) beginning in 1931, several smaller reservoirs, and four powerplants. Diversion upstream from station for irrigation and domestic use. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 41,300 ft^3/s, Jan. 2, 1997, gage height, 25.60 ft, present datum; minimum observed, 5 ft^3/s, Aug. 13–15, 17, 18, 1904.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	660	517	300	251	351	869	2160	525	569	696	337
2	79	719	604	322	202	293	781	2820	303	623	619	351
3	80	667	607	286	124	315	700	2470	277	632	569	434
4	82	642	531	295	107	315	629	1480	474	622	630	541
5	79	671	442	337	134	705	550	1340	718	620	568	471
6	80	679	574	308	180	743	627	924	637	612	516	329
7	576	601	445	332	181	463	730	831	562	609	567	443
8	688	559	450	343	197	520	553	337	727	553	575	377
9	643	621	435	380	208	625	576	421	418	541	573	382
10	677	515	488	325	236	613	653	401	417	751	565	607
11	774	581	587	535	293	589	592	547	534	568	223	297
12	686	508	729	341	303	458	691	595	723	548	324	345
13	645	141	705	394	210	440	574	601	649	643	550	447
14	638	235	647	411	199	474	641	373	640	621	549	533
15	690	594	642	343	214	469	659	369	595	592	587	290
16	647	609	559	351	200	529	665	310	529	611	592	499
17	677	615	548	275	209	424	596	383	523	577	532	453
18	754	580	516	379	247	509	654	469	553	564	231	443
19	636	601	584	242	296	489	771	456	568	605	178	609
20	708	609	558	177	443	489	900	447	578	470	511	468
21	671	669	458	260	391	543	1180	479	564	629	547	474
22	503	721	453	169	535	572	990	704	403	582	601	392
23	471	665	507	163	543	734	487	820	151	641	536	609
24	511	639	478	359	577	830	619	507	146	513	641	447
25	650	623	550	257	638	1010	717	404	219	648	296	453
26	632	693	485	328	592	958	833	195	703	605	265	640
27	743	567	528	338	601	831	1740	144	648	589	338	483
28	729	712	654	280	457	785	2510	178	586	94	388	495
29	882	627	724	193	---	794	2220	230	669	31	592	383
30	646	637	601	205	---	852	2020	170	553	46	585	478
31	627	---	540	325	---	885	---	227	---	290	474	---
TOTAL	16982	17960	17146	9553	8768	18607	26727	21792	15592	16599	15418	13510
MEAN	548	599	553	308	313	600	891	703	520	535	497	450
MAX	882	721	729	535	638	1010	2510	2820	727	751	696	640
MIN	78	141	435	163	107	293	487	144	146	31	178	290
AC-FT	33680	35620	34010	18950	17390	36910	53010	43220	30930	32920	30580	26800

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	514	585	766	924	1054	1177	1373	1906	1806	747	556	527
MAX	898	3275	4375	5659	4788	3950	4114	5092	6243	3384	1117	949
(WY)	1984	1951	1951	1997	1986	1983	1982	1952	1983	1983	1983	1983
MIN	8.97	25.3	70.1	65.5	100	115	221	273	262	106	77.5	67.7
(WY)	1978	1930	1931	1991	1977	1977	1977	1987	1977	1928	1930	1930

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	366673		198654			
ANNUAL MEAN	1002		544		993	
HIGHEST ANNUAL MEAN					2511	1983
LOWEST ANNUAL MEAN					208	1977
HIGHEST DAILY MEAN	5310	Feb 14	2820	May 2	31300	Jan 2 1997
LOWEST DAILY MEAN	78	Oct 1	31	Jul 29	6.6	Oct 2 1977
ANNUAL SEVEN-DAY MINIMUM	80	Sep 30	151	Oct 1	7.0	Sep 28 1977
MAXIMUM PEAK FLOW			3350	May 2	41300	Jan 2 1997
MAXIMUM PEAK STAGE			11.18	May 2	25.60	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	727300		394000		719700	
10 PERCENT EXCEEDS	1780		729		2170	
50 PERCENT EXCEEDS	742		549		622	
90 PERCENT EXCEEDS	464		221		244	

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CA

LOCATION.—Lat 38°13'34", long 121°01'24", in NE 1/4 SE 1/4 sec.6, T.4 N., R.9 E., San Joaquin County, Hydrologic Unit 18040005, at Camanche Dam, and 4.2 mi northeast of Clements.

DRAINAGE AREA.—621 mi^2.

PERIOD OF RECORD.—October 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A and 1735. Prior to October 1961, published as "near Clements."
CHEMICAL DATA: Water years 1906–07, 1965–66. Published as "at Clements" in 1906–07.
WATER TEMPERATURE: Water years 1962–68, 1970–76.
SEDIMENT DATA: Water years 1956–70. Prior to 1962 water year, published as "near Clements".

REVISED RECORDS.—WSP 751: Drainage area. WSP 881: 1905–09 (yearly summaries only). WSP 1445: 1911, 1917(M), 1925(M). WDR CA-94-3: 1993(M).

GAGE.—Ultrasonic flowmeters on outlet pipes at dam and water-stage recorder on spillway. Elevation of ultrasonic flowmeters is 140 ft above sea level, from topographic map. Datum of spillway gage is 235.50 ft above sea level. Auxiliary water-stage recorder 1 mi downstream, datum 82.71 ft above sea level. Oct. 1, 1961, to September 1999, water-stage recorder on left bank 1 mi downstream (present auxiliary gage). See WSP 1930 for history of changes prior to Oct. 1, 1961.

REMARKS.—Flow regulated by Camanche Reservoir (station 11322300) beginning December 1963, Salt Springs Reservoir (station 11313500) beginning March 1931, Pardee Reservoir (station 11320000) beginning March 1929, and several small reservoirs. East Bay Municipal Utility District aqueducts, maximum capacity, 511 ft^3/s with Pardee Reservoir full, are the largest of several diversions upstream from the station. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,800 ft^3/s, Nov. 21, 1950, gage height, 24.40 ft, site and datum then in use; no flow on several days in 1924. Maximum discharge since construction of Camanche Dam in 1963, 6,060 ft^3/s, Feb. 19, 1986, gage height, 11.21 ft; minimum daily, 23 ft^3/s, Oct. 6, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	330	340	328	327	331	328	334	367	369	291	248
2	327	326	337	328	327	333	278	349	364	353	287	253
3	333	322	338	334	331	332	278	363	359	339	283	254
4	331	323	338	331	334	328	280	380	360	321	283	250
5	334	325	335	336	329	329	278	385	361	336	277	246
6	333	327	336	329	327	328	279	386	362	333	273	240
7	330	333	341	330	328	329	280	384	360	332	269	247
8	329	328	346	330	330	337	282	390	362	331	271	246
9	336	331	340	332	332	332	278	392	359	329	265	243
10	332	329	335	332	333	327	273	396	360	326	268	240
11	337	333	336	334	334	325	274	411	368	325	269	233
12	338	339	333	324	333	329	278	422	376	326	265	226
13	331	333	333	325	339	331	281	421	375	328	259	218
14	331	335	343	328	330	332	284	427	374	332	261	215
15	332	335	336	329	334	333	287	435	377	334	251	201
16	340	331	338	333	334	330	280	441	383	333	245	201
17	335	328	334	330	335	331	277	432	388	330	253	204
18	330	328	329	337	336	332	279	437	388	319	255	201
19	331	329	324	333	332	331	277	433	389	313	254	200
20	332	334	320	333	331	327	278	434	390	316	253	204
21	332	344	322	331	330	326	282	451	390	314	254	206
22	330	335	327	335	331	329	281	464	390	313	251	199
23	335	329	331	339	331	329	283	462	393	308	257	202
24	340	334	330	335	330	330	283	459	397	303	255	206
25	334	332	333	337	330	331	284	461	399	302	239	204
26	331	333	330	331	330	329	283	466	401	298	231	194
27	332	332	334	330	330	330	280	459	392	295	234	183
28	333	325	338	330	330	331	279	465	386	296	231	184
29	334	335	338	334	---	332	287	460	382	298	234	210
30	335	339	333	337	---	331	310	454	377	298	240	236
31	331	---	334	332	---	337	---	457	---	291	244	---
TOTAL	10321	9937	10362	10287	9278	10242	8481	13110	11329	9941	8002	6594
MEAN	333	331	334	332	331	330	283	423	378	321	258	220
MAX	340	344	346	339	339	337	328	466	401	369	291	254
MIN	327	322	320	324	327	325	273	334	359	291	231	183
AC-FT	20470	19710	20550	20400	18400	20320	16820	26000	22470	19720	15870	13080

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, 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	450	543	710	745	883	913	1193	1608	1458	557	478	467
MAX	670	3188	4568	3529	2473	3155	3451	4217	3164	1194	691	678
(WY)	1939	1951	1951	1956	1938	1938	1938	1952	1952	1952	1962	1958
MIN	58.0	63.1	95.6	112	77.6	132	136	179	241	296	267	108
(WY)	1932	1932	1960	1962	1948	1931	1961	1961	1931	1961	1961	1931

SUMMARY STATISTICS	WATER YEARS 1931 - 1963	
ANNUAL MEAN	832	
HIGHEST ANNUAL MEAN	1669	1938
LOWEST ANNUAL MEAN	221	1961
HIGHEST DAILY MEAN	26900	Nov 21 1950
LOWEST DAILY MEAN	35	Apr 24 1955
ANNUAL SEVEN-DAY MINIMUM	49	Feb 12 1948
MAXIMUM PEAK FLOW	28800	Nov 21 1950
MAXIMUM PEAK STAGE	24.40	Nov 21 1950
ANNUAL RUNOFF (AC-FT)	603000	
10 PERCENT EXCEEDS	1890	
50 PERCENT EXCEEDS	551	
90 PERCENT EXCEEDS	213	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	552	477	511	831	1039	1075	956	1049	1018	821	651	537
MAX	2061	2157	2938	4978	4315	5117	3726	3889	3847	2932	1770	1447
(WY)	1966	1984	1984	1997	1997	1986	1983	1982	1995	1998	1998	1995
MIN	33.3	83.6	78.7	83.6	60.8	77.9	125	170	254	249	235	123
(WY)	1978	1989	1967	1967	1967	1989	1991	1988	1977	1991	1991	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	239617		117884			
ANNUAL MEAN	655		323		792	
HIGHEST ANNUAL MEAN					2400	1983
LOWEST ANNUAL MEAN					172	1988
HIGHEST DAILY MEAN	2400	Mar 2	466	May 26	5750	Feb 18 1986
LOWEST DAILY MEAN	320	Dec 20	183	Sep 27	23	Oct 6 1977
ANNUAL SEVEN-DAY MINIMUM	326	Dec 18	196	Sep 22	28	Oct 14 1977
MAXIMUM PEAK FLOW			481	May 23	6060	Feb 19 1986
MAXIMUM PEAK STAGE			a 4.16	May 24	11.21	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	475300		233800		573600	
10 PERCENT EXCEEDS	1350		386		2000	
50 PERCENT EXCEEDS	405		331		453	
90 PERCENT EXCEEDS	330		251		112	

a Auxiliary gage.

11325000 WOODBRIDGE CANAL AT WOODBRIDGE, CA

LOCATION.—Lat 38°09'07", long 121°18'00", in NE 1/4 SE 1/4 sec.34, T.4 N., R.6 E., San Joaquin County, Hydrologic Unit 18040005, on right bank at Woodbridge, at point of diversion from Woodbridge Reservoir.

PERIOD OF RECORD.—April 1926 to current year.

GAGE.—Water-stage recorder. Datum of gage is 32.18 ft above sea level (levels by East Bay Municipal Utility District). Prior to Mar. 15, 1931, water-stage recorder at site 0.2 mi downstream at different datum.

REMARKS.—Discharge computed from records of gate openings and effective head as shown by differential recorder. Canal diverts from Woodbridge Reservoir on Mokelumne River for irrigation south and west of Woodbridge. See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by Woodbridge Irrigation District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 482 ft^3/s, July 8, 1953; no flow at times in each year. Lowest daily mean, −64 ft^3/s, May 4, 1938 (the water level in Woodbridge Reservoir was drawn down and water from the canal drained back into the reservoir. In order that the figures may represent the net diverted flow, the reverse flow was indicated by negative figures).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	.00	.00	.00	.00	.00	53	70	218	255	173	112
2	116	.00	.00	.00	.00	.00	58	85	217	232	171	108
3	111	.00	.00	.00	.00	.00	67	113	218	220	168	106
4	113	.00	.00	.00	.00	.00	66	134	229	218	165	108
5	112	.00	.00	.00	.00	.00	65	133	239	212	160	107
6	108	.00	.00	.00	.00	.00	65	133	244	209	158	108
7	108	.00	.00	.00	.00	.00	66	135	247	207	155	109
8	105	.00	.00	.00	.00	.00	65	136	242	202	152	112
9	102	.00	.00	.00	.00	.00	63	138	241	201	147	108
10	100	.00	.00	.00	.00	.00	60	141	240	201	144	106
11	96	.00	.00	.00	.00	.00	58	143	239	203	144	106
12	93	.00	.00	.00	.00	.00	57	147	238	209	143	108
13	89	.00	.00	.00	.00	.00	57	156	242	206	142	101
14	89	.00	.00	.00	.00	.00	58	164	248	204	137	96
15	89	.00	.00	.00	.00	.00	58	175	249	203	136	95
16	84	.00	.00	.00	.00	.00	58	181	249	199	138	101
17	82	.00	.00	.00	.00	.00	59	187	245	199	133	98
18	75	.00	.00	.00	.00	.00	61	192	246	201	131	97
19	69	.00	.00	.00	.00	.00	66	194	252	202	131	98
20	74	.00	.00	.00	.00	.00	66	194	255	193	134	98
21	70	.00	.00	.00	.00	.00	64	195	258	184	132	98
22	70	.00	.00	.00	.00	.00	66	203	259	182	126	93
23	72	.00	.00	.00	.00	.00	67	208	257	182	123	95
24	75	.00	.00	.00	.00	.00	66	211	255	182	119	92
25	72	.00	.00	.00	.00	.00	63	213	254	173	111	83
26	70	.00	.00	.00	.00	.00	58	212	264	168	107	74
27	34	.00	.00	.00	.00	.00	56	212	269	164	105	73
28	.00	.00	.00	.00	.00	7.9	61	212	278	162	101	76
29	.00	.00	.00	.00	---	19	63	211	271	163	100	75
30	.00	.00	.00	.00	---	36	64	207	264	164	105	75
31	.00	---	.00	.00	---	54	---	208	---	168	109	---
TOTAL	2403.00	0.00	0.00	0.00	0.00	116.90	1854	5243	7427	6068	4200	2916
MEAN	77.5	.000	.000	.000	.000	3.77	61.8	169	248	196	135	97.2
MAX	125	.00	.00	.00	.00	54	67	213	278	255	173	112
MIN	.00	.00	.00	.00	.00	.00	53	70	217	162	100	73
AC-FT	4770	.00	.00	.00	.00	232	3680	10400	14730	12040	8330	5780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2001, BY WATER YEAR (WY)

MEAN	106	23.7	4.46	.23	.18	21.8	111	206	257	270	251	178
MAX	218	137	83.5	5.95	5.55	158	295	376	401	412	378	294
(WY)	1955	1959	1959	1931	1931	1953	1953	1950	1950	1953	1953	1948
MIN	.000	-.14	.000	.000	.000	.000	.000	64.6	95.9	63.0	66.8	5.37
(WY)	1978	1939	1927	1927	1927	1927	1927	1998	1926	1926	1926	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1926 - 2001	
ANNUAL TOTAL	34157.00		30227.90			
ANNUAL MEAN	93.3		82.8		120	
HIGHEST ANNUAL MEAN					206	1953
LOWEST ANNUAL MEAN					49.2	1928
HIGHEST DAILY MEAN	254	Jul 28	278	Jun 28	482	Jul 8 1953
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 28	-64	May 4 1938
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 28	-6.3	Oct 31 1938
ANNUAL RUNOFF (AC-FT)	67750		59960		87230	
10 PERCENT EXCEEDS	225		212		309	
50 PERCENT EXCEEDS	100		66		98	
90 PERCENT EXCEEDS	.00		.00		.00	

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CA

LOCATION.—Lat 38°09'31", long 121°18'09", in NW 1/4 NE 1/4 sec.34, T.4 N., R.6 E., San Joaquin County, Hydrologic Unit 18040005, on right bank at Woodbridge, 0.4 mi downstream from County Highway Bridge, and 0.5 mi downstream from dam and canal intake of Woodbridge Irrigation District.

DRAINAGE AREA.—661 mi^2.

PERIOD OF RECORD.—Water years 1924–94 (low-flow records only 1924–25). October 1996 to current year.
CHEMICAL DATA: Water years 1951–94.
SPECIFIC CONDUCTANCE: Water years 1952–58, 1975–77.
WATER TEMPERATURE: Water years 1951–58, 1961–86.
SEDIMENT: Water years 1975–94.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 14.9 ft above sea level (levels by East Bay Municipal Utility District). See WSP 2130 for history of changes prior to July 26, 1968.

REMARKS.—Concerning regulation and diversions see REMARKS for Mokelumne River below Camanche Dam (station 11323500). Between Woodbridge and Camanche Dam there are many additional diversions for irrigation, including Woodbridge Canal (station 11325000). See schematic diagram of Mokelumne River Basin.

COOPERATION.—Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 27,000 ft^3/s, Nov. 22, 1950, gage height, 29.58 ft, from rating curve extended above 6,200 ft^3/s, on basis of contracted-opening measurement of peak flow; minimum daily, 0.23 ft^3/s, Nov. 15, 1977. Maximum discharge since construction of Camanche Dam in 1963, 5,340 ft^3/s, Mar. 8, 1986, gage height, 23.19 ft; maximum gage height, 23.31 ft, Jan. 9, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	270	282	278	281	290	214	170	127	34	44	49
2	147	276	283	278	282	310	181	172	48	33	43	51
3	140	282	283	277	284	296	162	180	34	34	41	54
4	137	282	283	275	284	321	161	165	35	34	39	50
5	140	281	282	277	284	356	163	168	34	33	40	51
6	153	624	309	282	282	324	174	172	34	32	42	49
7	157	438	264	277	285	297	193	177	34	32	47	47
8	155	308	279	333	285	290	178	179	33	31	36	42
9	158	289	278	287	296	289	181	177	33	29	34	38
10	197	289	277	311	297	288	170	162	33	34	42	42
11	185	288	281	319	319	286	168	159	32	39	44	48
12	180	287	284	284	307	281	170	172	33	40	43	48
13	198	287	278	279	292	283	169	178	34	40	49	55
14	190	287	283	280	290	287	172	164	35	39	55	47
15	189	286	280	280	289	284	172	163	35	37	52	37
16	191	284	276	280	291	162	173	180	34	38	40	35
17	209	283	275	281	292	153	175	177	34	42	32	35
18	203	281	277	281	292	171	172	162	34	48	30	37
19	201	281	277	283	309	196	165	152	36	52	31	35
20	202	280	278	282	304	176	206	150	38	46	31	33
21	196	286	277	282	295	218	223	159	38	53	32	33
22	196	283	275	282	299	242	165	162	37	53	34	33
23	203	281	275	286	336	241	160	160	36	45	38	33
24	206	280	277	285	338	247	168	161	35	39	53	41
25	219	280	277	307	327	265	178	161	38	50	58	61
26	244	279	277	315	303	258	178	156	45	48	37	55
27	284	279	277	287	294	240	164	155	42	46	32	44
28	289	280	276	283	292	245	152	159	37	45	31	40
29	304	281	276	283	---	245	155	166	37	45	32	39
30	280	282	276	282	---	229	156	167	35	46	34	70
31	289	---	277	282	---	216	---	159	---	45	41	---
TOTAL	6170	8994	8649	8898	8329	7986	5218	5144	1170	1262	1237	1332
MEAN	199	300	279	287	297	258	174	166	39.0	40.7	39.9	44.4
MAX	304	624	309	333	338	356	223	180	127	53	58	70
MIN	128	270	264	275	281	153	152	150	32	29	30	33
AC-FT	12240	17840	17160	17650	16520	15840	10350	10200	2320	2500	2450	2640

11325500 MOKELUMNE RIVER AT WOODBRIDGE, 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	277	469	655	713	870	848	989	1282	1121	200	133	198
MAX	571	2529	4283	3435	2341	3032	3278	3990	2958	728	309	400
(WY)	1939	1951	1951	1956	1938	1938	1938	1952	1952	1952	1931	1958
MIN	3.76	13.6	29.4	56.6	45.0	34.5	7.02	11.3	11.3	17.1	17.2	10.0
(WY)	1932	1932	1960	1962	1948	1961	1931	1931	1931	1955	1955	1931

SUMMARY STATISTICS	WATER YEARS 1931 - 1963	
ANNUAL MEAN	644	
HIGHEST ANNUAL MEAN	1507	1938
LOWEST ANNUAL MEAN	62.2	1960
HIGHEST DAILY MEAN	19600	Dec 9 1950
LOWEST DAILY MEAN	2.4	Oct 2 1931
ANNUAL SEVEN-DAY MINIMUM	2.4	Oct 2 1931
MAXIMUM PEAK FLOW	27000	Nov 22 1950
MAXIMUM PEAK STAGE	29.58	Nov 22 1950
ANNUAL RUNOFF (AC-FT)	466700	
10 PERCENT EXCEEDS	1680	
50 PERCENT EXCEEDS	346	
90 PERCENT EXCEEDS	28	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	409	443	460	788	933	880	697	673	555	376	268	267
MAX	1716	1979	2825	4746	4285	4711	3641	3522	2736	2561	1462	1067
(WY)	1966	1984	1984	1997	1997	1986	1983	1982	1983	1998	1998	1983
MIN	2.12	23.3	38.5	33.1	20.2	9.34	9.02	8.66	8.34	9.24	6.58	5.13
(WY)	1978	1978	1990	1977	1977	1989	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	183717		64389			
ANNUAL MEAN	502		176		560	
HIGHEST ANNUAL MEAN					2170	1983
LOWEST ANNUAL MEAN					21.8	1977
HIGHEST DAILY MEAN	2330	Mar 5	624	Nov 6	5240	Mar 8 1986
LOWEST DAILY MEAN	52	Aug 6	29	Jul 9	.23	Nov 15 1977
ANNUAL SEVEN-DAY MINIMUM	65	Aug 2	32	Jul 3	.24	Nov 12 1977
MAXIMUM PEAK FLOW			1220	Nov 6	5340	Mar 8 1986
MAXIMUM PEAK STAGE			10.69	Nov 6	23.31	Jan 9 1997
ANNUAL RUNOFF (AC-FT)	364400		127700		406000	
10 PERCENT EXCEEDS	1340		290		1640	
50 PERCENT EXCEEDS	284		177		230	
90 PERCENT EXCEEDS	120		34		26	

11333000 CAMP CREEK NEAR SOMERSET, CA

LOCATION.—Lat 38°39'26", long 120°39'46", in SW 1/4 SW 1/4 sec.4, T.9 N., R.12 E., El Dorado County, Hydrologic Unit 18040013, on right bank, 0.2 mi upstream from mouth, 1.3 mi northeast of Somerset, and 5.6 mi south of Camino.

DRAINAGE AREA.—62.6 mi^2.

PERIOD OF RECORD.—February to May 1924 (published as "near Pleasant Valley"), October 1954 to current year.

REVISED RECORDS.—WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,820 ft above sea level, from topographic map. Feb. 1 to May 31, 1924, nonrecording gage at site 0.2 mi upstream at different datum.

REMARKS.—Records good. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft. Water is released from Jenkinson Lake through Camino Conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River Basins. Seepage from North Fork Extension Ditch siphon could constitute a major part or all the flow at low stages. Some water is released from Jenkinson Lake for irrigation downstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 22,400 ft^3/s, Jan. 2, 1997, gage height, 20.30 ft, from rating curve extended above 5,000 ft^3/s; no flow Aug. 7–18, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	9.1	9.2	8.3	11	18	11	13	8.3	6.6	5.7	4.2
2	6.6	9.1	8.7	8.3	11	21	11	13	8.3	6.6	5.4	4.1
3	6.6	8.8	8.4	8.1	11	21	11	13	8.3	6.5	5.2	4.1
4	6.6	8.6	8.3	8.1	12	22	11	12	8.3	6.4	5.2	4.1
5	6.6	8.4	8.2	8.1	12	32	11	12	8.2	6.4	5.1	4.1
6	6.6	8.3	8.1	8.1	11	30	11	12	8.2	6.4	5.2	3.8
7	6.6	8.3	8.1	8.1	12	25	18	12	8.1	6.4	5.0	3.8
8	6.6	8.3	8.1	8.7	10	22	15	12	8.0	6.5	4.9	3.8
9	7.2	8.4	8.0	9.0	13	20	14	12	7.9	6.1	4.8	3.8
10	14	12	8.1	10	15	19	13	11	7.9	4.6	4.8	3.7
11	8.9	10	8.2	22	17	17	16	11	7.8	6.3	4.7	3.8
12	8.6	9.0	12	14	15	16	25	11	7.8	6.4	4.6	3.8
13	7.7	8.9	9.8	11	15	15	18	11	7.6	6.4	4.6	3.8
14	7.6	9.6	16	10	15	14	16	11	7.6	6.4	4.6	3.7
15	7.5	9.0	20	9.8	14	14	15	11	7.6	6.4	4.6	3.6
16	7.3	8.8	13	9.2	13	13	14	11	7.3	6.4	4.6	3.6
17	7.3	8.6	11	8.6	14	13	13	11	7.3	6.5	4.5	3.4
18	7.3	8.6	9.8	8.8	14	13	13	10	7.1	6.4	4.4	3.4
19	7.3	8.5	9.3	8.7	20	13	25	10	7.1	6.4	4.3	3.4
20	7.3	8.6	9.0	8.6	38	13	43	9.7	7.0	6.4	4.4	3.4
21	7.3	8.6	9.1	8.6	35	13	45	9.3	7.0	6.3	4.4	3.3
22	6.9	9.5	9.7	8.6	33	13	33	9.1	6.9	6.3	4.3	3.2
23	7.0	8.4	9.1	9.4	28	13	26	9.0	6.9	6.2	4.4	3.2
24	7.1	8.1	9.0	25	27	13	22	9.1	6.7	6.2	4.5	3.2
25	8.5	8.1	8.9	19	32	18	19	9.2	6.8	6.0	4.5	4.0
26	14	8.1	8.6	18	27	11	18	9.1	7.1	5.9	4.4	4.1
27	9.5	7.9	8.6	15	23	9.5	17	9.0	7.2	5.8	4.3	4.0
28	9.5	8.1	8.6	13	20	11	16	9.0	7.2	5.6	4.3	3.8
29	25	12	8.6	12	---	12	15	9.0	7.1	5.5	4.2	3.6
30	14	12	8.4	12	---	12	15	8.8	6.9	5.5	4.2	3.4
31	9.5	---	8.3	11	---	11	---	8.6	---	5.6	4.2	---
TOTAL	269.2	269.7	298.2	347.1	518	507.5	550	327.9	225.5	191.4	144.3	111.2
MEAN	8.68	8.99	9.62	11.2	18.5	16.4	18.3	10.6	7.52	6.17	4.65	3.71
MAX	25	12	20	25	38	32	45	13	8.3	6.6	5.7	4.2
MIN	6.6	7.9	8.0	8.1	10	9.5	11	8.6	6.7	4.6	4.2	3.2
AC-FT	534	535	591	688	1030	1010	1090	650	447	380	286	221
a	-916	-353	-252	-74	+390	+2981	+3509	+624	-2384	-2928	-3061	-2375
b	1511	801	994	776	930	964	1142	2214	3142	3433	3550	2717
c	83	12	14	8	8	63	77	222	226	254	254	184

a Change in contents, in acre-feet, in Jenkinson Lake.
b Diversion, in acre-feet, from Jenkinson Lake provided by U.S. Bureau of Reclamation.
c Total evaporation, in acre-feet, from Jenkinson Lake provided by U.S. Bureau of Reclamation; not reviewed by U.S. Geological Survey.

11333000 CAMP CREEK NEAR SOMERSET, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.14	8.72	43.0	93.0	119	141	151	110	28.2	11.4	7.06	5.35
MAX	32.9	71.3	469	1095	820	745	621	452	220	37.2	23.7	17.2
(WY)	1983	1984	1984	1997	1986	1983	1982	1967	1998	1995	1972	1982
MIN	.71	1.62	2.01	2.82	2.43	2.84	1.59	2.42	.57	.51	.12	.67
(WY)	1978	1978	1977	1977	1977	1977	1977	1977	1977	1977	1977	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	24289.4		3760.0			
ANNUAL MEAN	66.4		10.3		60.1	
HIGHEST ANNUAL MEAN					215	1983
LOWEST ANNUAL MEAN					1.89	1977
HIGHEST DAILY MEAN	710	Feb 28	45	Apr 21	10700	Jan 2 1997
LOWEST DAILY MEAN	6.0	Aug 23	3.2	Sep 22	.00	Aug 7 1977
ANNUAL SEVEN-DAY MINIMUM	6.0	Aug 23	3.3	Sep 18	.00	Aug 7 1977
MAXIMUM PEAK FLOW			55	Apr 21	22400	Jan 2 1997
MAXIMUM PEAK STAGE			2.69	Apr 21	20.30	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	48180		7460		43540	
ANNUAL RUNOFF (AC-FT) a	60460		26200		63730	
10 PERCENT EXCEEDS	225		18		176	
50 PERCENT EXCEEDS	9.8		8.6		8.2	
90 PERCENT EXCEEDS	6.6		4.3		3.0	

a Adjusted for change in contents, evaporation, and diversion from Jenkinson Lake.

11335000 COSUMNES RIVER AT MICHIGAN BAR, CA

LOCATION.—Lat 38°30'01", long 121°02'39", in NW 1/4 SE 1/4 sec.36, T.8 N., R.8 E., Sacramento County, Hydrologic Unit 18040013, on downstream side of midstream pier of county bridge at Michigan Bar, 5.5 mi southwest of Latrobe, and 16.3 river mi downstream from confluence of north and middle Forks of Cosumnes River.

DRAINAGE AREA.—536 mi^2.

PERIOD OF RECORD.—October 1907 to current year. Monthly discharge only for some periods, published in WSP 1315-A.
CHEMICAL DATA: Water years 1953–80.
WATER TEMPERATURE: Water years 1963–79.
SEDIMENT DATA: Water years 1958–74.

REVISED RECORDS.—WSP 331: 1911–12. WSP 1315-A: 1908–9, 1911(M). WSP 1930: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 168.09 ft above sea level. Prior to July 10, 1930, nonrecording gage at same site and datum.

REMARKS.—Records good. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft. See REMARKS for Camp Creek near Somerset (station 11333000) for diversion out of basin. Numerous small diversions upstream from station for irrigation and domestic use. See schematic diagram of Sacramento–San Joaquin Delta.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 93,000 ft^3/s, Jan. 2, 1997, gage height, 18.54 ft, from rating curve extended above 34,000 ft^3/s on basis of slope-area determination of peak flow; no flow at times in many years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 1907 reached a stage of 16.3 ft, estimated discharge, 71,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 4,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 21	0645	1,180	5.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	96	106	60	131	331	441	488	83	27	8.0	4.8
2	26	78	81	59	121	337	429	476	78	25	7.3	4.8
3	26	69	72	60	115	412	395	437	74	23	7.7	4.5
4	26	64	67	60	113	428	354	396	70	21	8.2	4.4
5	25	60	60	59	114	858	327	374	68	21	8.1	4.7
6	23	56	60	55	119	841	303	369	66	19	7.6	4.8
7	23	54	58	55	127	612	385	362	61	18	8.0	4.8
8	23	52	56	69	125	518	411	365	57	18	7.2	4.8
9	24	51	54	78	112	483	333	374	53	18	6.7	5.0
10	40	52	54	83	185	474	301	363	51	18	6.8	4.6
11	67	66	54	214	497	423	297	347	48	17	6.3	5.2
12	71	70	61	244	529	387	466	336	48	16	5.3	5.3
13	56	61	77	154	362	358	381	326	45	14	5.6	5.6
14	48	61	85	118	282	343	337	309	43	14	5.1	6.4
15	43	63	117	103	239	339	317	287	43	14	4.7	6.6
16	41	62	155	95	209	338	309	268	41	14	4.8	6.7
17	40	59	116	84	190	329	317	255	38	14	4.6	6.5
18	42	58	96	73	185	328	335	242	37	14	4.7	6.7
19	41	54	89	75	241	344	393	222	35	13	3.9	6.9
20	40	54	82	80	736	377	616	207	33	13	4.3	6.8
21	38	54	77	77	622	419	984	195	31	12	4.1	6.3
22	36	56	70	74	711	440	762	183	29	12	4.0	5.9
23	36	58	71	74	807	457	642	168	27	12	4.0	6.0
24	36	58	71	268	730	459	614	157	24	12	4.3	6.3
25	37	56	69	395	808	544	631	145	23	11	4.8	7.3
26	42	55	67	542	581	635	639	134	25	11	4.4	8.0
27	79	55	65	313	454	531	620	122	26	9.6	5.8	9.4
28	77	55	63	218	377	481	583	112	30	9.2	5.6	10
29	182	57	61	179	---	484	539	105	31	9.2	5.3	11
30	233	85	61	169	---	470	499	97	30	8.7	5.4	12
31	137	---	60	147	---	447	---	91	---	7.8	5.2	---
TOTAL	1684	1829	2335	4334	9822	14227	13960	8312	1348	465.5	177.8	192.1
MEAN	54.3	61.0	75.3	140	351	459	465	268	44.9	15.0	5.74	6.40
MAX	233	96	155	542	808	858	984	488	83	27	8.2	12
MIN	23	51	54	55	112	328	297	91	23	7.8	3.9	4.4
AC-FT	3340	3630	4630	8600	19480	28220	27690	16490	2670	923	353	381

11335000 COSUMNES RIVER AT MICHIGAN BAR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	31.6	139	431	949	1204	1199	1059	688	254	60.8	20.6	14.9
MAX	335	2493	3380	7129	6610	5255	3992	2362	1111	346	114	82.0
(WY)	1963	1951	1965	1997	1986	1983	1982	1995	1998	1983	1983	1983
MIN	.000	7.90	18.3	21.4	35.9	43.5	33.7	48.5	4.42	.096	.000	.000
(WY)	1978	1930	1977	1991	1991	1977	1977	1977	1924	1977	1908	1924

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1908 - 2001	
ANNUAL TOTAL	188408		58686.4			
ANNUAL MEAN	515		161		500	
HIGHEST ANNUAL MEAN					1687	1983
LOWEST ANNUAL MEAN					21.8	1977
HIGHEST DAILY MEAN	9680	Feb 14	984	Apr 21	61600	Jan 2 1997
LOWEST DAILY MEAN	20	Aug 20	3.9	Aug 19	.00	Jul 25 1908
ANNUAL SEVEN-DAY MINIMUM	21	Aug 17	4.2	Aug 18	.00	Jul 25 1908
MAXIMUM PEAK FLOW			1180	Apr 21	93000	Jan 2 1997
MAXIMUM PEAK STAGE			5.47	Apr 21	18.54	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	373700		116400		362600	
10 PERCENT EXCEEDS	1170		462		1290	
50 PERCENT EXCEEDS	80		64		101	
90 PERCENT EXCEEDS	26		6.3		7.0	

11336580 MORRISON CREEK NEAR SACRAMENTO, CA

LOCATION.—Lat 38°29'55", long 121°27'06", in SW 1/4 SE 1/4 sec.32, T.8 N., R.5 E., Sacramento County, Hydrologic Unit 18020109, on right bank, 750 ft upstream from Florin Road, 1.6 mi upstream from Elder Creek, and 3.8 mi south of State Capitol Building in Sacramento.

DRAINAGE AREA.—53.4 mi^2.

PERIOD OF RECORD.—August 1959 to September 1987, October 1997 to current year.

REVISED RECORDS.— WDR CA-72-2: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 7.60 ft above sea level. Prior to June 29, 1960, at site 650 ft downstream at datum 1.55 ft higher. June 29, 1960, to Sept. 12, 1965, at site 475 ft upstream at datum 2.71 ft higher.

REMARKS.— Records fair. No regulation or diversion above station. Summer flow is sustained by wastewater from domestic and industrial use. During major storm events record can be affected by backwater from Beach Lake located 5.7 mi downstream from gage. Flow is diverted by pumps into the Sacramento River.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,730 ft^3/s, Feb. 17, 1986, gage height, 10.40 ft; no flow at times in 1960, 1962, 1965.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than a 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)
Oct. 28	1945	417	3.94	Feb. 23	0415	676	4.91
Jan. 8	0545	707	5.01	Mar. 5	0300	620	4.72
Jan. 25	1945	600	4.65	Apr. 20	1845	427	3.98

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.6	3.6	3.9	4.9	9.7	3.8	3.4	7.7	4.0	6.2	9.1
2	4.8	5.8	3.6	3.7	4.7	56	4.3	3.4	7.9	4.3	5.3	9.3
3	4.2	5.1	3.5	3.5	4.5	19	4.6	3.8	8.3	4.5	5.0	9.8
4	4.7	4.8	3.7	4.2	4.7	94	4.2	4.9	8.4	4.9	4.7	9.1
5	4.5	4.7	3.2	4.0	4.5	277	4.0	5.4	8.5	4.1	4.5	11
6	4.4	4.4	3.7	4.2	4.8	64	36	5.9	9.0	4.1	4.8	9.9
7	5.1	4.5	3.8	4.2	4.0	26	43	5.9	8.2	4.1	5.1	9.5
8	4.8	4.5	3.6	203	4.2	16	9.1	5.4	7.2	3.6	4.6	10
9	5.4	4.5	3.6	18	28	12	5.5	5.9	7.2	3.0	3.6	8.8
10	15	4.6	4.2	160	37	10	4.3	5.9	6.9	2.8	2.6	6.1
11	16	4.3	14	75	166	8.3	4.0	6.4	7.0	3.1	4.1	4.1
12	8.5	4.4	36	13	73	7.1	3.8	6.3	6.3	3.3	4.4	3.4
13	3.7	8.5	4.7	8.3	23	6.4	3.4	6.3	7.1	3.5	4.0	3.4
14	3.6	6.3	8.7	6.7	11	5.8	3.3	7.1	6.4	3.9	4.0	3.8
15	3.5	4.7	5.6	5.7	7.9	5.2	3.3	7.6	7.0	3.8	4.5	4.5
16	3.5	4.4	5.2	4.7	6.5	4.8	3.2	8.3	7.1	3.6	5.6	4.2
17	3.6	4.6	4.4	4.5	9.0	4.4	3.3	8.1	6.9	4.0	6.1	5.0
18	3.7	4.7	5.9	4.4	12	4.4	3.1	8.1	6.7	4.1	6.4	4.5
19	3.3	4.6	4.3	4.3	88	3.9	3.0	8.2	6.6	4.3	6.5	7.3
20	3.2	4.5	4.2	4.2	34	3.4	122	7.7	6.3	4.4	7.3	7.9
21	2.9	18	4.8	4.3	31	2.9	30	9.0	6.5	4.5	5.6	8.3
22	2.6	5.8	4.2	4.3	35	2.9	8.4	8.5	6.7	5.0	4.5	16
23	2.8	3.8	3.9	31	225	3.5	4.4	9.2	5.6	4.8	4.6	17
24	2.7	3.7	4.2	9.4	162	9.4	4.4	8.9	5.3	4.8	5.5	21
25	9.0	4.4	4.3	143	73	28	4.1	9.0	6.7	5.1	5.7	43
26	12	4.7	4.0	66	25	5.4	3.4	9.1	8.0	5.0	6.3	3.2
27	5.9	4.6	4.1	11	16	4.9	3.4	9.5	3.6	5.0	6.8	3.7
28	86	4.4	3.8	7.7	12	4.1	3.1	9.0	3.6	5.5	5.8	3.2
29	55	23	3.9	18	---	3.6	3.0	9.6	3.8	5.4	7.6	3.1
30	25	5.5	4.0	5.7	---	3.6	3.4	8.8	4.0	5.5	8.4	3.6
31	7.6	---	3.9	5.6	---	4.0	---	8.1	---	4.8	8.3	---
TOTAL	321.7	178.4	174.6	845.5	1110.7	709.7	338.8	222.7	200.5	132.8	168.4	262.8
MEAN	10.4	5.95	5.63	27.3	39.7	22.9	11.3	7.18	6.68	4.28	5.43	8.76
MAX	86	23	36	203	225	277	122	9.6	9.0	5.5	8.4	43
MIN	2.6	3.7	3.2	3.5	4.0	2.9	3.0	3.4	3.6	2.8	2.6	3.1
AC-FT	638	354	346	1680	2200	1410	672	442	398	263	334	521

11336580 MORRISON CREEK NEAR SACRAMENTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	10.2	20.4	25.9	58.5	71.8	31.5	14.9	6.34	5.65	6.09	5.85	6.31
MAX	77.8	67.5	106	212	415	213	91.4	17.6	8.71	17.6	12.4	21.9
(WY)	1963	1982	1984	1969	1986	1983	1982	1998	1970	1974	1959	1981
MIN	2.59	3.16	3.06	4.24	6.26	6.72	2.45	3.68	2.62	2.09	2.37	3.00
(WY)	1978	1960	2000	1976	1964	1960	1977	1979	1977	1977	1977	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1959 - 2001	
ANNUAL TOTAL	10208.41		4666.6			
ANNUAL MEAN	27.9		12.8		21.6	
HIGHEST ANNUAL MEAN					59.6	1983
LOWEST ANNUAL MEAN					4.76	1977
HIGHEST DAILY MEAN	990	Jan 24	277	Mar 5	1940	Jan 5 1982
LOWEST DAILY MEAN	.81	Sep 13	2.6	Oct 22	.00	Jul 12 1960
ANNUAL SEVEN-DAY MINIMUM	.92	Sep 12	3.0	Oct 18	.07	Jul 11 1960
MAXIMUM PEAK FLOW			707	Jan 8	2730	Feb 17 1986
MAXIMUM PEAK STAGE			5.01	Jan 8	10.40	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	20250		9260		15680	
10 PERCENT EXCEEDS	39		20		32	
50 PERCENT EXCEEDS	5.1		5.0		5.9	
90 PERCENT EXCEEDS	3.0		3.5		3.0	

11336585 LAGUNA CREEK NEAR ELK GROVE, CA

LOCATION.—Lat 38°25'24", long 121°21'08", in NE 1/4 NE 1/4 sec.31, T.7 N., R.6 E., Sacramento County, Hydrologic Unit 18020109, on left bank, 50 ft downstream from bridge on Waterman Road, at intersection with Bond Road, and 1 mi northeast of Elk Grove.

DRAINAGE AREA.—31.9 mi^2.

PERIOD OF RECORD.—October 1995 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.—Records good except for discharges during period of beaver activity at station, Oct. 1 through Nov. 16, May 22 through Sept. 30, and those below 1 ft^3/s, which are poor. Station is located 7.8 mi upstream of Morrison Creek. Low flow sustained by residential and agricultural wastewater.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,020 ft^3/s, Jan. 23, 1997, gage height, 7.54 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than a base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1000	339	4.84

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	1.5	.00	.00	1.8	3.8	.12	.09	.11	1.3	1.5	1.4
2	.05	1.1	.00	.00	1.4	6.2	.10	.13	.11	1.2	1.5	.84
3	.44	1.0	.00	.00	1.0	8.6	.09	.09	.01	2.2	1.8	.56
4	.71	1.0	.00	.00	.87	35	.09	.07	.02	2.2	1.7	.27
5	.87	1.3	.00	.00	.69	268	.10	.05	.04	2.0	1.5	.08
6	.45	1.3	.00	.00	.59	108	.13	.04	.00	1.8	1.2	.11
7	.26	.96	.00	.00	.54	30	2.9	.08	.01	1.7	1.7	.28
8	.18	.70	.01	8.7	.43	14	3.3	.30	.02	1.3	1.8	.59
9	.17	.53	.02	5.7	.63	9.5	.87	.13	.00	1.4	1.7	.19
10	.44	.35	.01	9.6	3.6	6.7	.31	.31	.00	1.7	1.7	.20
11	1.0	.28	.03	21	37	4.1	.19	.41	.00	1.7	1.6	.32
12	.63	.18	.04	4.6	76	3.6	.13	.17	.00	2.1	1.9	.24
13	.38	.13	.03	1.8	23	2.8	.11	.25	.00	2.0	1.9	.19
14	.33	.14	.04	1.3	11	2.6	.10	.30	.00	2.1	1.9	.22
15	.42	.06	.04	1.4	4.4	1.9	.10	.34	.00	2.4	2.2	.05
16	.39	.01	.02	1.1	3.2	1.8	.08	.31	.00	2.4	2.2	.03
17	.32	.00	.01	.96	2.0	1.5	.08	.32	.00	2.5	2.5	.17
18	.24	.00	.00	.96	1.4	.97	.08	.22	.00	3.7	2.8	.07
19	.22	.00	.00	.81	5.7	.65	.08	.18	.19	3.3	2.7	.05
20	.17	.00	.00	.62	21	.44	4.2	.35	.40	2.9	2.2	.13
21	.15	.00	.00	.65	22	.36	14	.20	1.2	3.3	2.6	.29
22	.12	.00	.00	.55	24	.31	2.7	.39	1.3	2.8	3.0	.18
23	.07	.00	.00	.50	107	.32	1.0	.94	.87	2.5	2.3	.05
24	.06	.00	.00	.85	150	.30	.50	.38	.54	2.4	2.0	.00
25	.07	.00	.00	5.4	171	.42	.33	.22	.33	2.2	1.5	.19
26	.09	.00	.00	28	35	.45	.23	.38	.55	2.1	1.1	.89
27	.11	.00	.00	6.8	14	.29	.13	.26	.91	1.8	.86	1.0
28	.54	.00	.00	6.5	7.6	.18	.09	.17	1.1	1.7	1.4	.84
29	9.7	.00	.00	4.0	---	.15	.06	.04	1.2	1.5	1.9	1.0
30	1.8	.00	.00	2.8	---	.12	.06	.02	1.4	1.3	1.9	.98
31	1.6	---	.00	1.9	---	.14	---	.02	---	1.1	1.7	---
TOTAL	22.31	10.54	0.25	116.50	726.85	513.20	32.26	7.16	10.31	64.6	58.26	11.41
MEAN	.72	.35	.008	3.76	26.0	16.6	1.08	.23	.34	2.08	1.88	.38
MAX	9.7	1.5	.04	28	171	268	14	.94	1.4	3.7	3.0	1.4
MIN	.05	.00	.00	.00	.43	.12	.06	.02	.00	1.1	.86	.00
AC-FT	44	21	.5	231	1440	1020	64	14	20	128	116	23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	.46	.68	17.9	61.1	106	11.3	2.87	.81	.26	.68	.90	.64
MAX	.79	1.67	92.1	206	263	21.9	8.91	2.24	.55	2.08	1.88	.95
(WY)	2000	1998	1997	1997	1998	1996	1998	1998	1997	2001	2001	1996
MIN	.000	.000	.008	3.76	3.51	.000	.38	.13	.000	.000	.048	.26
(WY)	1996	1996	2001	2001	1997	1997	2000	1999	1996	1996	1996	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	5978.59		1573.65			
ANNUAL MEAN	16.3		4.31		16.5	
HIGHEST ANNUAL MEAN					29.6	1998
LOWEST ANNUAL MEAN					4.31	2001
HIGHEST DAILY MEAN	697	Feb 14	268	Mar 5	1530	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Nov 17	.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Nov 17	.00	Oct 1 1995
MAXIMUM PEAK FLOW			339	Mar 5	2020	Jan 23 1997
MAXIMUM PEAK STAGE			4.84	Mar 5	7.54	Jan 23 1997
ANNUAL RUNOFF (AC-FT)	11860		3120		11940	
10 PERCENT EXCEEDS	10		4.1		13	
50 PERCENT EXCEEDS	.27		.42		.35	
90 PERCENT EXCEEDS	.00		.00		.00	

11337000 CONTRA COSTA CANAL NEAR OAKLEY, CA

LOCATION.—Lat 37°59'44", long 121°42'03", in NW 1/4 NE 1/4 sec.25, T.2 N., R.2 E., Contra Costa County, Hydrologic Unit 18040003, at Pumping Plant No. 1, 0.7 mi east of Oakley, and 2.6 mi northwest of Knightsen.

PERIOD OF RECORD.—February 1950 to September 1987, October 1993 to current year.

GAGE.—Water-stage recorder and acoustic-velocity meter. From Jan. 1, 1953, to Sept. 30, 1993, recording flow meters on pumps. Elevation of gage is 20 ft above sea level, from topographic map. Prior to Jan. 1, 1953, water-stage recorder at site 3.2 mi downstream at datum 121.72 ft above sea level (levels by U.S. Bureau of Reclamation).

REMARKS.—Water is diverted from Sacramento–San Joaquin Delta by way of Old River, Rock Slough, and a dredged channel. A series of four pumps lift the water 115 ft into the canal. Water is used for municipal, agricultural, and industrial purposes. The canal is a part of the Central Valley Project. See schematic diagram of Sacramento–San Joaquin Delta.

COOPERATION.—Records of daily discharge were provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 436 ft^3/s, Aug. 19, 1995; no flow on some days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	44	.00	29	8	.00	81	86	133	22	40	26
2	33	46	1	5	9	.00	78	91	168	28	30	21
3	.00	42	.00	5	8	.00	76	85	165	34	41	10
4	1	41	.00	3	15	.00	78	85	184	35	52	18
5	52	42	.00	7	18	6	74	88	178	33	46	13
6	76	39	.00	6	14	3	52	87	180	36	40	1
7	75	40	.00	6	19	.00	51	30	180	34	41	1
8	75	40	.00	6	20	.00	54	.00	183	33	34	6
9	67	40	.00	8	15	11	53	.00	180	34	38	10
10	51	42	.00	2	13	.00	54	.00	161	34	38	6
11	53	40	.00	3	17	.00	54	12	169	27	33	6
12	49	40	.00	3	17	6	54	29	169	35	25	7
13	53	40	.00	2	48	.00	55	33	168	34	41	4
14	50	40	.00	18	24	35	58	14	175	35	47	7
15	52	31	.00	25	34	52	55	.00	176	35	45	5
16	54	31	.00	12	43	21	65	.00	182	32	14	4
17	53	41	.00	10	47	.00	84	.00	176	31	9	7
18	51	40	16	8	37	2	84	22	178	33	10	18
19	51	41	32	8	30	31	82	52	176	30	13	12
20	50	40	30	8	11	51	83	59	180	29	27	3
21	53	42	31	4	4	56	79	62	174	25	35	12
22	50	41	29	8	.00	54	70	64	143	25	32	5
23	74	40	28	3	2	55	63	61	149	25	32	8
24	71	41	28	10	.00	54	75	64	150	19	37	8
25	70	42	29	9	.00	53	81	62	167	.00	38	5
26	50	41	28	3	1	53	82	60	164	.00	34	14
27	41	4	28	2	.00	64	79	57	164	11	35	11
28	43	.00	27	7	.00	79	65	57	164	35	24	2
29	53	2	28	12	---	89	75	62	164	31	15	12
30	44	.00	28	8	---	89	84	58	153	35	18	8
31	54	---	27	9	---	87	---	66	---	34	25	---
TOTAL	1659.00	1053.00	390.00	249	454.00	951.00	2078	1446.00	5053	884.00	989	270
MEAN	53.5	35.1	12.6	8.03	16.2	30.7	69.3	46.6	168	28.5	31.9	9.00
MAX	110	46	32	29	48	89	84	91	184	36	52	26
MIN	.00	.00	.00	2.0	.00	.00	51	.00	133	.00	9.0	1.0
AC-FT	3290	2090	774	494	901	1890	4120	2870	10020	1750	1960	536

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	115	88.5	72.0	68.7	68.4	73.9	98.9	125	165	175	175	146
MAX	305	218	213	182	167	185	246	238	350	339	398	359
(WY)	1995	1995	1995	1995	1995	1988	2000	1987	2000	1995	1995	1995
MIN	36.5	3.17	12.6	8.03	6.79	17.9	23.6	8.23	46.9	28.5	31.9	9.00
(WY)	1953	1998	2001	2001	1998	1951	1950	1999	1952	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	60416.00		15476.00			
ANNUAL MEAN	165		42.4		116	
HIGHEST ANNUAL MEAN					253	1995
LOWEST ANNUAL MEAN					41.0	1952
HIGHEST DAILY MEAN	401	Jun 2	184	Jun 4	436	Aug 19 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 3	.00	Mar 2 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 3	.00	Dec 3	.00	Jan 5 1999
ANNUAL RUNOFF (AC-FT)	119800		30700		83800	
10 PERCENT EXCEEDS	329		87		213	
50 PERCENT EXCEEDS	154		33		100	
90 PERCENT EXCEEDS	2.7		.00		39	

11337600 MARSH CREEK AT BRENTWOOD, CA

LOCATION.—Lat 37°57'46", long 121°41'11", in SE 1/4 NW 1/4 sec.6, T.1 N., R.2 E., Contra Costa County, Hydrologic Unit 18040003, on right bank, 25 ft upstream of County Flood Control drop structure, and 0.2 mi north of sewage disposal plant in the City of Brentwood.

DRAINAGE AREA.—38.3 mi^2.

PERIOD OF RECORD.—August 2000 to September 2001.

GAGE.—Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.—Records good. Flow is affected by numerous agricultural and municipal storm diversions upstream from station. Low flow is sustained by agricultural run-off and effluent from the City of Brentwood Sewage Disposal Plant. Marsh Creek Reservoir is located upstream, but acts primarily as a detention basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 811 ft^3/s, Jan. 10, 2001, gage height, 6.32; minimum daily, 1.2 ft^3/s, Jan. 17, Sept. 30, 2001.

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

DAILY MEAN VALUES

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	e6.7
2	---	---	---	---	---	---	---	---	---	---	---	e7.5
3	---	---	---	---	---	---	---	---	---	---	---	e7.5
4	---	---	---	---	---	---	---	---	---	---	---	e5.1
5	---	---	---	---	---	---	---	---	---	---	---	e4.6
6	---	---	---	---	---	---	---	---	---	---	---	e6.0
7	---	---	---	---	---	---	---	---	---	---	---	e7.0
8	---	---	---	---	---	---	---	---	---	---	---	e6.3
9	---	---	---	---	---	---	---	---	---	---	---	e8.1
10	---	---	---	---	---	---	---	---	---	---	---	e9.1
11	---	---	---	---	---	---	---	---	---	---	---	e6.8
12	---	---	---	---	---	---	---	---	---	---	---	e5.5
13	---	---	---	---	---	---	---	---	---	---	---	e6.4
14	---	---	---	---	---	---	---	---	---	---	---	e4.3
15	---	---	---	---	---	---	---	---	---	---	---	e3.1
16	---	---	---	---	---	---	---	---	---	---	---	e2.1
17	---	---	---	---	---	---	---	---	---	---	---	e1.9
18	---	---	---	---	---	---	---	---	---	---	---	e3.4
19	---	---	---	---	---	---	---	---	---	---	---	e2.9
20	---	---	---	---	---	---	---	---	---	---	---	3.3
21	---	---	---	---	---	---	---	---	---	---	---	3.3
22	---	---	---	---	---	---	---	---	---	---	---	3.8
23	---	---	---	---	---	---	---	---	---	---	---	3.0
24	---	---	---	---	---	---	---	---	---	---	---	3.8
25	---	---	---	---	---	---	---	---	---	---	---	3.4
26	---	---	---	---	---	---	---	---	---	---	e5.9	3.9
27	---	---	---	---	---	---	---	---	---	---	e9.2	4.8
28	---	---	---	---	---	---	---	---	---	---	e7.2	2.7
29	---	---	---	---	---	---	---	---	---	---	e5.9	3.7
30	---	---	---	---	---	---	---	---	---	---	e9.1	4.0
31	---	---	---	---	---	---	---	---	---	---	e9.2	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	144.0
MEAN	---	---	---	---	---	---	---	---	---	---	---	4.80
MAX	---	---	---	---	---	---	---	---	---	---	---	9.1
MIN	---	---	---	---	---	---	---	---	---	---	---	1.9
AC-FT	---	---	---	---	---	---	---	---	---	---	---	286

e Estimated

11337600 MARSH CREEK AT BRENTWOOD, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.1	1.9	1.4	1.3	8.9	2.0	3.3	6.8	4.6	5.5	7.3
2	2.7	2.0	1.6	1.4	1.3	19	5.2	6.0	5.3	7.3	5.1	4.3
3	3.4	2.8	1.5	1.4	1.3	10	3.9	4.3	5.0	6.3	4.1	4.3
4	3.4	1.8	1.4	1.4	1.4	121	2.5	3.7	3.9	6.0	3.1	4.8
5	4.3	1.4	2.0	1.4	1.4	171	1.9	5.3	5.2	7.3	6.3	8.7
6	2.7	1.4	2.5	1.4	1.4	35	13	5.3	6.8	5.3	7.3	6.1
7	2.3	1.4	e1.5	1.5	1.3	18	7.2	4.7	6.3	5.6	6.2	5.6
8	1.6	1.4	e1.5	9.6	1.4	13	4.6	4.6	5.0	5.2	6.6	5.2
9	2.3	1.8	e1.5	2.1	3.3	11	3.6	6.1	4.9	5.4	4.8	4.0
10	9.9	1.5	e1.5	147	8.1	9.3	2.4	7.8	5.4	2.6	3.0	3.9
11	6.5	1.6	e3.8	14	20	8.2	1.8	3.3	5.1	2.5	8.6	3.7
12	4.2	1.5	6.0	8.7	27	7.0	1.9	6.1	4.8	1.8	8.4	2.3
13	2.0	1.5	2.3	2.1	21	6.2	2.1	4.3	4.8	2.2	5.5	2.4
14	1.9	2.1	8.6	1.5	12	5.3	2.3	4.5	2.3	5.3	4.1	2.5
15	1.5	2.0	2.0	1.3	6.8	4.6	2.4	5.5	3.7	4.0	3.6	4.2
16	1.4	1.6	1.4	1.3	4.7	4.1	2.3	5.5	3.2	4.1	5.1	4.1
17	2.2	1.6	1.3	1.2	3.8	3.6	3.9	6.0	5.2	4.4	4.9	3.5
18	2.2	1.8	1.3	1.3	6.0	3.2	4.2	7.4	2.7	5.1	5.2	2.7
19	2.7	1.6	1.3	1.3	9.0	2.8	2.6	5.6	3.2	3.8	4.5	2.5
20	2.6	1.6	1.4	1.3	6.2	2.4	17	2.9	5.9	4.2	5.9	2.0
21	2.1	4.9	1.4	1.3	7.3	2.5	6.4	3.0	5.7	5.3	4.1	1.3
22	1.4	8.2	1.4	1.4	15	2.0	3.3	3.4	4.8	5.2	8.5	2.3
23	2.8	2.1	1.4	2.6	42	1.9	2.3	4.6	2.5	5.3	5.0	2.7
24	4.4	1.6	1.6	6.1	87	1.6	2.0	4.0	5.8	5.6	4.2	3.2
25	4.5	1.6	1.6	63	42	7.4	1.7	4.9	8.2	5.4	5.3	5.9
26	18	1.6	1.7	11	23	2.0	1.6	4.9	8.5	4.0	6.2	3.0
27	7.8	1.9	1.6	2.2	15	2.1	2.6	6.0	6.0	4.5	7.2	3.4
28	2.5	2.4	1.5	1.5	11	1.7	2.8	4.9	5.2	6.7	8.1	2.5
29	4.8	5.4	1.4	1.5	---	1.8	3.5	7.1	6.3	4.2	6.6	1.7
30	5.2	2.2	1.4	1.4	---	1.9	3.0	8.8	8.3	2.1	5.9	1.2
31	2.6	---	1.4	1.3	---	2.4	---	6.9	---	3.7	4.1	---
TOTAL	118.5	66.4	62.7	295.9	381.0	490.9	116.0	160.7	156.8	145.0	173.0	111.3
MEAN	3.82	2.21	2.02	9.55	13.6	15.8	3.87	5.18	5.23	4.68	5.58	3.71
MAX	18	8.2	8.6	147	87	171	17	8.8	8.5	7.3	8.6	8.7
MIN	1.4	1.4	1.3	1.2	1.3	1.6	1.6	2.9	2.3	1.8	3.0	1.2
AC-FT	235	132	124	587	756	974	230	319	311	288	343	221

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	3.82	2.21	2.02	9.55	13.6	15.8	3.87	5.18	5.23	4.68	5.58	4.26
MAX	3.82	2.21	2.02	9.55	13.6	15.8	3.87	5.18	5.23	4.68	5.58	4.80
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000
MIN	3.82	2.21	2.02	9.55	13.6	15.8	3.87	5.18	5.23	4.68	5.58	3.71
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	2278.2			
ANNUAL MEAN	6.24		6.24	
HIGHEST ANNUAL MEAN			6.24	2001
LOWEST ANNUAL MEAN			6.24	2001
HIGHEST DAILY MEAN	171	Mar 5	171	Mar 5 2001
LOWEST DAILY MEAN	1.2	Jan 17	.20	Aug 28 2000
ANNUAL SEVEN-DAY MINIMUM	1.3	Jan 15	1.3	Jan 15 2001
MAXIMUM PEAK FLOW	811	Jan 10	811	Jan 10 2001
MAXIMUM PEAK STAGE	6.32	Jan 10	6.32	Jan 10 2001
ANNUAL RUNOFF (AC-FT)	4520		4520	
10 PERCENT EXCEEDS	8.5		8.6	
50 PERCENT EXCEEDS	3.8		3.9	
90 PERCENT EXCEEDS	1.4		1.4	

e Estimated.

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 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.

Discharge measurements made at miscellaneous sites during water year 2001

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		CARSON RIVER BASIN				
103087898	Aspen Creek above Leviathan Creek, near Markleeville, CA	Lat 38°42'02", long 119°39'30", in NE 1/4 NW 1/4 sec.15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, 3.2 mi north of Highway 89 and 6.5 mi east of Markleeville	0.92	1999–2001	10-27-00	0.19
					11-28-00	.26
					12-28-00	.36
					01-25-01	.19
					02-28-01	.26
					03-27-01	.38
					04-25-01	.38
					06-01-01	.16
					06-27-01	.09
					07-26-01	.09
					08-24-01	.09
					09-28-01	.15

Records collected at crest-stage partial-record stations are presented in the following table:

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 2001

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Annual maximum	
						Gage height (ft)	Discharge (ft^3/s)
		TULARE LAKE BASIN					
11205690	Lewis Creek near Lindsay, CA	Lat 36°11'10", long 118°59'27", in NW 1/4 SW 1/4 sec.18, T.20 S., R.28 E., Tulare County, Hydrologic Unit 18030012, 0.3 mi upstream from culvert on Road 258, 40 ft upstream from unnamed tributary, and 7.3 mi southeast of the town of Lindsay.	21.5	1969a, 1974–01	unknown	unknown	e<30

a Published as a miscellaneous measurement.
e Estimated.
< Actual value is known to be less than value shown.

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.

SAN JOAQUIN RIVER BASIN

11274554 SPANISH GRANT COMBINED DRAIN NEAR PATTERSON, CA

LOCATION.—Lat 37°26'09", long 121°01'57", in NW 1/4 NW 1/4 sec.19, T.6 S, R.9 E, Stanislaus County, Hydrologic Unit 18040002, on right bank, 3.0 mi northeast of Crows Landing.

PERIOD OF RECORD.—October 1992 to January 1995, June 2001 to September 2001.
CHEMICAL DATA: October 1992 to December 1994, June 2001 to September 2001.
SPECIFIC CONDUCTANCE: April 1993 to January 1995, June 2001 to September 2001.
WATER TEMPERATURE: Aoril 1993 to January 1995, June 2001 to September 2001.
SEDIMENT DATA: October 1992 to January 1995, June 2001 to September 2001.

PERIOD OF DAILY RECORD.—.
SPECIFIC CONDUCTANCE: April 1993 to January 1995.
WATER TEMPERATURE: April 1993 to January 1995.

INSTRUMENTATION.—Water-quality monitor from April 1993 to January 1995.

REMARKS.—Flow consist mainly of irrigation-return water during summer and fall periods.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 3,640 microsiemens, Mar. 1, 2, 1994; minimum recorded, 413 microsiemens, Feb. 8, 1994.
WATER TEMPERATURE: Maximum recorded, 32.0°C, July 7, 1993, July 12, 1994; minimum recorded, 1.5°C, Dec. 10, 11, 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
JUN													
13	1300	13	4	.470	.436	760	6.9	81	7.9	1280	23.0	220	410
20	1350	21	--	--	--	--	--	--	--	977	--	--	--
JUL													
11	1230	28	3	--	--	760	7.2	--	7.8	971	--	--	260
AUG													
01	1320	29	--	--	--	--	--	--	7.9	--	--	--	--
06	1230	29	5	.111	.086	759	7.4	--	8.2[1]	927[1]	24.0	140	300
SEP													
04	1110	17	9	.176	.146	757	--	--	8.0	892	27.5	150	290

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)
JUN													
13	88.5	46.8	4.75	3	145	43	190	158	.3	18.6	284	168	13
20	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
11	57.4	29.2	3.73	2	92.9	43	--	99.0	.3	17.9	154	1740	134
AUG													
01	--	--	--	--	--	--	--	--	--	--	--	--	--
06	64.5	34.0	3.30	3	106	43	170	119	.3	18.9	175	332	26
SEP													
04	59.7	33.1	4.91	3	130	49	130	155	.2	16.0	198	150	16

[1] Laboratory value.

SAN JOAQUIN RIVER BASIN

11274554 SPANISH GRANT COMBINED DRAIN NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JUN													
13...	1.25	918	891	.075	.79	1.9	6.47	.117	.199	.176	.464	9.9	.2
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
11...	--	626	--	.311	.87	5.4	5.25	.095	.150	.131	1.74	4.2	>10
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	.91	666	648	.079	.62	2.6	6.19	.072	.162	.138	.462	3.8	2.5
SEP													
04...	1.00	736	677	e.079	e.90	--	e5.33	e.118	e.228	e.185	--	7.4	2.4

DATE	PHEO- PHYTIN A, PHYTO- PHYTON (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
JUN													
13...	18	11.6	M	22.0	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	<.002	<.004	<.002	<.005	.018	<.010	<.002	e.310	<.020
JUL													
11...	38	14.4	M	306	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	<.002	<.004	<.002	<.005	.008	<.010	<.002	e.064	<.020
06...	4.0	5.4	<10	6.5	--	--	--	--	--	--	--	--	--
SEP													
04...	8.3	4.5	10	20.4	--	--	--	--	--	--	--	--	--

DATE	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
JUN													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	.009	<.018	<.003	<.006	.029	.007	<.021	.072	<.009	.033	.004	<.004	<.035
JUL													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	.007	<.018	<.003	<.006	.034	.009	<.021	.047	<.009	<.005	<.003	<.004	<.035
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
JUN													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.027	e.013	.069	.820	<.112	<.002	.090	.010	<.007	<.002	<.010	<.006	<.011
JUL													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	e.006	<.050	<.006	.844	.016	<.006	.020	e.009	<.007	<.002	.087	<.006	<.011
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

> Actual value is known to be greater than value shown.
e Estimated.
M Presence of material verified, but not quantified.
< Actual value is known to be less than value shown.

SAN JOAQUIN RIVER BASIN

11274554 SPANISH GRANT COMBINED DRAIN NEAR PATTERSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.015	<.004	<.010	<.011	<.500	.026	<.016	<.034	<.017	<.005	<.002	.220
JUL												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
01...	<.015	<.004	<.010	<.011	.234	.016	<.016	<.034	<.017	<.005	<.002	.180
06...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
04...	--	--	--	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
13..N	1300	13	23.0	245	8.4	93
JUL						
11..N	1230	28	--	1920	145	98
AUG						
06..N	1230	29	24.0	464	36	91
SEP						
04..N	1110	17	27.5	177	7.9	88

< Actual value is known to be less than value shown.
N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

372006120571701 SAN JOAQUIN RIVER UPSTREAM OF MERCED RIVER, NEAR HILLS FERRY, CA

LOCATION.—Lat 37°20'06", long 120°57'17", in NE 1/4 NE 1/4 sec.11, T.7 S., R.9 E., Stanislaus County, Hydrologic Unit 18040002, 0.7 mi southeast of intersection of River Road and Hills Ferry Road, and 0.15 mi east of Newman Wasteway.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—October 2000 to September 2001.
CHEMICAL DATA: October 2000 to September 2001.
SEDIMENT DATA: October 2000 to September 2001.

INSTRUMENTATION.—None.

REMARKS.—Discharge values were calculated from flows at Department of Water Resources gaging station 11272500 and U.S. Geological Survey gaging station 11274000 with appropriate travel times taken into account. Chemical and Sediment Data for water year 2000 available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT													
03...	1230	e115	.182	.140	758	8.6	99.4	8.0	1440	22.0	140	303	66.4
17...	1230	e347	.240	.185	763	6.9	74.6	7.9	1180	19.0	72	239	52.1
JUN													
13...	0940	e265	--	--	756	8.1	92.3	8.2	2390	21.0	330	507	114
27...	1000	e242	.169	.126	761	6.7	78.7	8.0	1740	23.0	220	370	81.5
JUL													
11...	1020	e260	--	--	761	8.1	97.9	8.2	1860	24.5	240	392	88.1
25...	1050	e296	.149	.112	756	7.9	97.9	8.2	1680	25.5	--	354	79.4
AUG													
08...	1010	e243	.141	.105	759	7.4	93.9	8.3	1840	27.0	240	374	82.1
22...	1050	e286	.133	.100	759	7.5	90.0	8.2	1630	24.0	--	--	--
SEP													
05...	0930	e201	.161	.121	757	8.2	97.0	8.2	2270	23.0	260	442	93.6
19...	0930	e120	.160	.121	755	8.7	100	7.9	2260	21.5	280	460	97.5

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT													
03...	33.3	4.43	4.50	180	56.0	170	198	.2	17.2	266	--	--	1.2
17...	26.5	4.96	4.15	147	56.6	170	159	.2	19.0	172	74	<10	1.0
JUN													
13...	54.2	4.40	6.17	319	57.5	180	348	.4	14.8	521	--	--	2.2
27...	40.4	5.12	5.13	227	56.7	150	225	.3	17.7	355	--	--	1.5
JUL													
11...	41.9	4.19	5.43	247	57.5	150	257	.3	16.0	386	--	--	1.7
25...	37.8	3.79	5.00	216	56.7	--	223	.3	16.0	345	--	--	--
AUG													
08...	41.0	3.89	5.53	246	58.5	140	260	.3	15.3	397	--	--	1.6
22...	--	--	--	--	--	140	--	--	--	--	--	--	--
SEP													
05...	50.4	5.00	5.99	289	58.4	190	359	.3	15.0	441	--	--	2.0
19...	52.5	4.98	6.18	304	58.7	180	389	.2	16.4	428	61	8	2.0

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

SAN JOAQUIN RIVER BASIN

372006120571701 SAN JOAQUIN RIVER UPSTREAM OF MERCED RIVER, NEAR HILLS FERRY, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED MG/L (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)
OCT													
03...	908	874	.041	.62	1.1	1.56	.041	.204	.167	.445	6.7	1.7	--
17...	718	686	e.024	.66	.72	.826	.021	.231	M	.432	8.8	1.4	--
JUN													
13...	1620	1510	<.040	.69	1.6	5.63	.079	.123	.105	.351	6.3	2.9	16
27...	1110	1070	.169	.81	1.6	5.01	.081	.195	.168	.410	7.1	>3.3	14
JUL													
11...	1250	1150	<.040	.61	1.7	4.19	.114	.150	.122	.369	--	--	23
25...	1090	--	<.040	.41	1.0	2.90	.043	.127	.105	.359	5.2	>3.3	14
AUG													
08...	1190	1140	e.033	.44	1.3	2.49	.037	.095	.063	.345	4.7	2.4	18
22...	--	--	<.040	.46	.85	2.56	.062	.131	.109	.328	4.6	3.2	16
SEP													
05...	1480	1370	--	--	--	--	--	--	--	--	4.0	1.7	30
19...	1500	1400	--	--	--	--	--	--	--	--	4.6	2.5	11

DATE	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
OCT					
03...	24.0	.9	10	48.5	13
17...	14.1	.8	30	28.3	11
JUN					
13...	28.9	--	<30	37.1	--
27...	31.2	--	50	34.5	6
JUL					
11...	27.8	--	<10	3.6	5
25...	37.4	--	<10	e1.7	7
AUG					
08...	48.2	--	<10	e2.0	--
22...	29.4	--	--	--	12
SEP					
05...	32.4	--	M	113	17
19...	29.4	--	30	368	11

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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						
03..N	1230	e115	22.0	96	e30	90
17..N	1230	e347	19.0	74	e69	86
JUN						
13..N	0940	e265	21.0	124	e89	94
27..N	1000	e242	23.0	163	e107	84
JUL						
11..N	1020	e260	24.5	138	e97	86
25..N	1050	e296	25.5	158	e126	85
AUG						
08..N	1010	e243	27.0	114	e75	89
22..N	1050	e286	24.0	143	e111	85
SEP						
05..N	0930	e201	23.0	44	e24	86
19..N	0930	e120	21.5	58	e19	94

e Estimated.
M Presence of material verified, but not quantified
< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.
N Suspended-sediment data determined from a sample collected and processed accourding to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

373232121053900 WESTPORT DRAIN NEAR MODESTO, CA

LOCATION (REVISED).—Lat 37°32'32", long 121°05'39", in SW 1/4 NE 1/4, sec.33, T.4 S, R.8 E, Stanislaus County, Hydrologic Unit 18040002, 50 ft downstream of weir at Modesto sewage disposal ponds, and 4.5 mi southwest of Modesto.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—March 1993 to August 1993, June 2001 to September 2001.
CHEMICAL DATA: March 1993 to August 1993, June 2001 to September 2001.
SEDIMENT DATA: June 2001 to September 2001.

REMARKS.—Site identification was reported in 1993 as 373434121053900.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JUN													
14	1230	36	.076	.059	760	9.1	--	8.2	1230[1]	23.5	200	285	62.3
21	0940	21	--	--	--	--	--	--	--	--	--	--	--
JUL													
12	1300	76	.064	.049	760	8.4	100	8.0	307	24.0	--	92.1	25.2
AUG													
02	0930	29	--	--	--	--	--	--	--	--	--	--	--
07	1030	18	.069	.054	759	8.8	104	8.0	320	23.3	--	91.0	24.8
SEP													
05	1020	20	.052	.040	767	8.1	91.3	8.2	309	21.5	--	113	30.9

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	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)
JUN													
14	31.3	4.38	3.59	139	51.1	86	168	.3	14.9	185	1.0	750	680
21	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12	7.11	2.00	1.18	25.9	37.4	--	13.8	<.2	19.6	13.7	--	195	--
AUG													
02	--	--	--	--	--	--	--	--	--	--	--	--	--
07	7.04	1.85	1.20	26.2	37.9	94	15.2	e.1	19.0	14.2	.3	209	192
SEP													
05	8.62	2.08	1.48	36.0	40.5	120	25.7	<.2	23.3	17.0	.3	250	215

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JUN													
14	e.037	.25	.39	5.28	.071	.088	.073	.127	4.9	.8	3.1	1.7	<10
21	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12	.221	.51	.86	5.65	.059	.163	.145	.203	2.4	1.6	6.4	1.8	<10
AUG													
02	--	--	--	--	--	--	--	--	--	--	--	--	--
07	.048	.31	.43	5.95	.051	--	.120	.172	6.0	.3	2.3	2.5	<10
SEP													
05	--	--	--	--	--	--	--	--	3.1	.7	3.4	1.4	<10

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

SAN JOAQUIN RIVER BASIN

373232121053900 WESTPORT DRAIN NEAR MODESTO, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
JUN													
14...	4.3	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.002	<.020	<.005	<.018	<.003
JUL													
12...	26.0	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.006	<.020	.015	<.018	<.003
07...	18.9	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	26.2	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALATHION, DISSOLVED (UG/L) (39532)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.006	e.002	<.005	<.021	e.001	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	<.006	e.004	<.005	<.021	.002	<.009	<.005	<.003	<.004	<.035	e.005	<.050	<.006
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	e.004	<.006	<.002	.007	M	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	.031	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.

SAN JOAQUIN RIVER BASIN

373232121053900 WESTPORT DRAIN NEAR MODESTO, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRANS-PAR-ENCY- (SECCHI DISK) (IN) (00077)
JUN										
14...	--	--	--	--	--	--	--	--	--	>23
21...	<.011	<.069	e.006	<.016	<.034	<.017	<.005	<.002	.011	--
JUL										
12...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	<.011	.398	e.009	<.016	<.034	<.017	<.005	<.002	<.009	--
07...	--	--	--	--	--	--	--	--	--	>24
SEP										
05...	--	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
14..N	1230	36	23.5	21	2.1	63
JUL						
12..N	1300	76	24.0	44	9.0	89
AUG						
07..N	1030	18	23.3	10	.48	93
SEP						
05..N	1020	20	21.5	26	1.4	83

> Actual value is known to be greater than value shown.
< Actual value is known to be less than value shown.
e Estimated.
N Suspended-sediment data determined from a sample collected and proccessed according to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

373324121090401 SAN JOAQUIN RIVER AT LAIRD PARK, NEAR GRAYSON, CA

LOCATION.—Lat 37°33'24", long 121°09'04", in SW 1/4 NE 1/4 sec.25, T.4 S., R.7 E., El Pescadero Land Grant, Stanislaus County, Hydrologic Unit 18040002, 0.25 mi south of Grayson Road at Laird Park, and 0.3 mi upstream of Grayson Road Bridge.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—October 2000 to September 2001.
CHEMICAL DATA: October 2000 to September 2001.
SEDIMENT DATA: October 2000 to September 2001

INSTRUMENTATION.—None.

REMARKS.—Chemical and Sediment Data for water year 2000 available in the files of the U.S. Geological Survey. Estimated discharge value calculated from flow data at 11274570, San Joaquin River near Patterson (Department of Water Resources) gage, with appropriate travel times taken into account.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
OCT									
04...	1300	663	.102	.084	757	8.6	97.5	8.0	1090
18...	1230	1500	.110	.085	761	7.5	80.3	7.8	547
JUN									
13...	1130	761	--	--	756	9.1	104	8.3	1410
27...	0950	600	.107	.080	761	7.6	88.3	7.9	1270
JUL									
11...	1150	680	.106	.080	761	11.1	133	8.4	1110
25...	1300	665	.104	.078	756	10.7	134	8.5	1220
AUG									
08...	1330	575	.102	.076	758	13.6	171	8.4	1360
22...	1330	672	.091	.069	759	7.8	93.5	8.3	1240
SEP									
05...	1130	487	.095	.071	757	11.3	133	8.5	1300
19...	1130	e494	.090	.068	--	--	--	7.9	1180

DATE	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	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)	SODIUM PERCENT (00932)
OCT									
04...	21.0	78	244	53.1	27.0	3.18	3.72	133	53.9
18...	18.5	24	115	26.5	11.9	2.96	2.38	58.8	51.8
JUN									
13...	21.5	150	313	67.3	35.2	4.29	4.07	165	53.0
27...	22.5	140	297	62.1	34.5	3.62	3.84	152	52.3
JUL									
11...	24.0	120	260	55.7	29.4	3.30	3.48	129	51.5
25...	26.0	--	276	59.5	30.9	3.26	3.73	143	52.6
AUG									
08...	26.5	120	297	63.9	33.4	3.55	3.88	154	52.6
22...	24.0	120	265	56.7	29.9	3.61	3.88	145	54.0
SEP									
05...	23.0	110	274	58.1	31.4	3.45	3.73	142	52.6
19...	--	97	263	56.1	29.9	3.69	3.65	136	52.5

e Estimated.

SAN JOAQUIN RIVER BASIN

373324121090401 SAN JOAQUIN RIVER AT LAIRD PARK, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ALKALINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLATILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
OCT									
04...	170	149	.2	18.2	152	56	<10	.89	654
18...	91	64.8	e.1	13.7	63.4	102	<10	.44	320
JUN									
13...	160	190	.2	15.0	233	88	8	1.19	876
27...	160	163	.2	18.0	202	120	11	1.04	768
JUL									
11...	140	145	.2	13.5	175	121	20	.97	14
25...	--	156	.2	15.4	198	108	13	--	772
AUG									
08...	180	177	.2	14.9	209	129	16	1.13	834
22...	150	171	.2	15.1	183	94	14	1.01	744
SEP									
05...	160	178	e.2	15.5	182	40	10	1.07	788
19...	170	172	e.2	18.0	153	54	6	.98	720

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT									
04...	652	.060	.43	.88	3.50	.098	.316	.289	.472
18...	305	.095	.47	1.0	1.67	.044	.177	.148	.347
JUN									
13...	829	e.032	.50	1.2	4.70	.124	.320	.289	.557
27...	753	.052	.41	1.2	4.79	.114	.248	.223	.429
JUL									
11...	655	<.040	.37	1.5	4.20	.078	.158	.136	.357
25...	--	<.040	.34	1.1	4.70	.073	.120	.061	.312
AUG									
08...	780	e.024	.38	1.2	4.09	.073	.158	.128	.373
22...	710	<.040	.34	1.2	3.64	.098	.131	.095	.330
SEP									
05...	708	--	--	--	--	--	--	--	--
19...	688	<.040	.38	.99	4.27	.080	.201	.181	.339

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

SAN JOAQUIN RIVER BASIN

373324121090401 SAN JOAQUIN RIVER AT LAIRD PARK, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
OCT								
04...	3.7	.6	--	17.2	.4	<10	69.5	5
18...	4.0	.7	--	10.8	e.6	10	10.8	--
JUN								
13...	3.7	1.7	18	20.3	--	<10	34.0	--
27...	3.6	3.2	19	38.5	--	<10	17.1	11
JUL								
11...	3.7	>3.3	47	36.7	--	M	6.6	14
25...	3.4	>3.3	25	62.3	--	<10	9.6	19
AUG								
08...	3.6	>3.3	23	110	--	<10	13.0	14
22...	3.1	2.3	27	53.6	--	<10	17.2	12
SEP								
05...	2.7	2.0	18	59.1	--	M	51.7	35
19...	3.2	1.3	20	18.5	--	<10	55.0	13

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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						
04...N	1300	663	21.0	57	102	85
18...N	1230	1500	18.5	122	494	74
JUN						
13...N	1130	761	21.5	108	222	85
27...N	0950	600	22.5	116	188	86
JUL						
11...N	1150	680	24.0	115	211	88
25...N	1300	665	26.0	109	196	86
AUG						
08...N	1330	575	26.5	86	134	89
22...N	1330	672	24.0	111	201	82
SEP						
05...N	1130	487	23.0	38	50	69
19...N	1130	e494	--	59	e79	83

< Actual value is known to be less than value shown.
e Estimated.
M Presence of material verified, but not quantified.
N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

373701121121100 HOSPITAL CREEK BELOW CONFLUENCE OF INGRAM CREEK, NEAR GRAYSON, CA

LOCATION.—Lat 37°37'01", long 121°12'11", in El Pescadero Land Grant, in SE 1/4 NE 1/4, sec.4, T.4 S., R.7 E., Stanislaus County, Hydrologic Unit 18040002, 1,200 ft downstream of confluence of Ingram Creek, and 4.0 mi north of Westley.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—March 1993 to August 1993, June 2001 to September 2001.
CHEMICAL DATA: March 1993 to August 1993, June 2001 to September 2001.
SEDIMENT DATA: March 1993 to August 1993, June 2001 to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JUN													
14	1530	26	.119	.091	760	6.8	--	8.3	--	29.0	--	97.9	26.5
JUL													
11	0940	18	--	--	760	7.3	82.4	8.0	1070	21.0	--	--	--
AUG													
09	1030	23	.102	.077	759	8.4	--	8.0[1]	1120[1]	22.5	110	256	54.4
SEP													
07	1030	.86	.105	.080	758	7.6	82.9	8.1	1870	19.0	280	487	109

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
JUN													
14	7.72	1.69	1.42	32.3	41.2	140	16.2	<.2	20.2	17.2	2080	126	.3
JUL													
11	--	--	--	--	--	--	--	--	--	--	1030	66	--
AUG													
09	29.1	3.83	3.17	116	49.3	140	157	.2	14.9	160	647	46	.9
SEP													
07	52.3	4.92	3.69	187	45.2	210	282	.2	20.3	285	127	9	1.6

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)
JUN													
14	211	226	<.040	.39	5.3	4.08	.086	.247	.159	2.27	7.7	>10	57
JUL													
11	--	--	.606	2.4	4.5	5.90	.230	.180	.165	.907	--	--	18
AUG													
09	688	651	.462	1.0	3.1	6.25	.271	.189	.166	.867	3.4	>5.0	6.5
SEP													
07	1170	1070	--	--	--	--	--	--	--	--	4.3	3.5	6.2

[1] Laboratory value.
< Actual value is known to be less than value shown.
> Actual value is known to be greater than value shown.

SAN JOAQUIN RIVER BASIN

373701121121100 HOSPITAL CREEK BELOW CONFLUENCE OF INGRAM CREEK, NEAR GRAYSON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)
JUN				
14...	81.5	<10	28.1	1
JUL				
11...	16.7	--	--	2
AUG				
09...	12.1	<10	16.2	1
SEP				
07...	10	170	148	5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
14..N	1530	26	29.0	3460	246	95
JUL						
11..N	0940	18	21.0	1160	56	94
AUG						
09..N	1030	23	22.5	998	61	94
SEP						
07..N	1030	.86	19.0	134	.31	97

< Actual value is known to be less than value shown.
N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

373811120590001 DRY CREEK AT GALLO BRIDGE, BELOW HIGHWAY 132, AT MODESTO, CA

LOCATION.—Lat 37°38'11", long 120°59'00", Stanislaus County, Hydrologic Unit 18040002, at bridge upstream of Beard Brook Park.

PERIOD OF RECORD.—February 1995 to March 1995, June 2001 to September 2001.
CHEMICAL DATA: February 1995 to March 1995, June 2001 to September 2001.
SPECIFIC CONDUCTANCE: February 1995 to March 1995, June 2001 to September 2001.
WATER TEMPERATURE: February 1995 to March 1995, June 2001 to September 2001.
SEDIMENT DATA: February 1995 to March 1995, June 2001 to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
JUN													
15...	1000	93	10	.276	.218	760	7.7	85	7.7	104	20.0	--	33
JUL													
13...	0920	70	19	.285	.223	760	7.8	95	7.5	113	25.0	4	39
AUG													
07...	1440	92	--	.340	.266	759	7.2	89	7.4	759	25.5	--	38
SEP													
05...	1300	99	--	.240	.227	767	7.7	89	8.1	84	23.0	--	38

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)
JUN													
15...	7.50	3.54	4.80	.3	4.4	20	58	3.5	.1	12.6	2.9	42	6
JUL													
13...	9.06	3.97	5.28	.3	5.0	19	35	3.5	<.2	14.2	3.0	29	8
AUG													
07...	8.70	4.00	5.15	.4	5.1	20	44	3.9	e.1	15.5	2.9	19	3
SEP													
05...	8.58	3.91	4.23	.4	5.1	21	38	3.7	<.2	15.6	2.6	18	4

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JUN													
15...	.11	80	78	<.040	.69	1.1	.442	.043	.517	.496	.711	8.7	2.4
JUL													
13...	.13	95	70	<.040	.55	.75	.665	.033	.614	.579	.665	7.9	1.5
AUG													
07...	.11	83	75	e.040	.61	.76	.330	.011	.576	.528	.660	7.5	.6
SEP													
05...	.11	84	67	<.040	.49	.61	.350	.008	.472	.465	.557	7.0	.7

DATE	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
JUN				
15...	7.3	3.7	90	14.9
JUL				
13...	3.9	1.7	70	12.6
AUG				
07...	3.9	2.0	70	10.3
SEP				
05...	3.3	1.2	70	8.9

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

SAN JOAQUIN RIVER BASIN

373811120590001 DRY CREEK AT GALLO BRIDGE, BELOW HIGHWAY 132, AT MODESTO, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
15..N	1000	93	20.0	59	15	64
JUL						
13..N	0920	70	25.0	33	6.2	70
AUG						
07..N	1440	92	25.5	27	6.7	68
SEP						
05..N	1300	99	23.0	23	6.1	88

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAWQA) protocol.

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA

LOCATION.—Lat 37°42'09", long 121°10'38", in SE 1/4 SE 1/4 sec.3, T.3 S., R.7 E., Stanislaus County, Hydrologic Unit 18040002, 2.5 mi upstream of pumping station at park, and 3.5 mi southwest of Ripon.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—September 1994, October 2000 to September 2001.
CHEMICAL DATA: September 1994, October 2000 to September 2001.

INSTRUMENTATION.—None.

REMARKS.—Chemical and Sediment Data for water year 2000 available in the files of the U.S. Geological Survey. Discharge values calculated from U.S. Geological Survey gaging station 11303000, Stanislaus River at Ripon, with appropriate travel times taken into consideration.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JAN													
04	1520	e365	7.9[1]	131	--	--	--	--	--	--	--	--	--
11	1330	e458	7.7[1]	128	--	--	--	--	--	--	--	--	--
18	1430	e373	7.8[1]	145	--	--	--	--	--	--	--	--	--
26	0610	e405	7.8[1]	118	--	--	--	--	--	--	--	--	--
26	1010	e422	7.8[1]	119	--	.041	.21	.34	.573	.009	.042	.037	.082
26	1620	e428	7.8[1]	120	--	--	--	--	--	--	--	--	--
26	1930	e413	7.8[1]	118	--	--	--	--	--	--	--	--	--
27	0000	e452	7.7[1]	119	--	--	--	--	--	--	--	--	--
27	0300	e479	7.7[1]	121	--	--	--	--	--	--	--	--	--
27	0700	e493	7.7[1]	140	--	--	--	--	--	--	--	--	--
27	1020	e489	7.7[1]	134	--	--	--	--	--	--	--	--	--
27	2000	e437	7.7[1]	133	--	--	--	--	--	--	--	--	--
FEB													
01	1320	e358	7.9[1]	152	--	--	--	--	--	--	--	--	--
08	0850	e353	7.4[1]	148	--	--	--	--	--	--	--	--	--
15	0900	e375	7.7[1]	157	--	--	--	--	--	--	--	--	--
22	1120	e380	7.6[1]	148	--	--	--	--	--	--	--	--	--
24	2310	e425	7.7[1]	146	--	--	--	--	--	--	--	--	--
25	0300	e434	7.7[1]	147	--	--	--	--	--	--	--	--	--
25	0800	e445	7.6[1]	148	--	--	--	--	--	--	--	--	--
25	1200	e509	7.5[1]	143	--	--	--	--	--	--	--	--	--
25	1600	e599	7.4[1]	161	--	--	--	--	--	--	--	--	--
25	1950	e603	7.1[1]	157	--	--	--	--	--	--	--	--	--
26	0010	e596	7.0[1]	139	--	--	--	--	--	--	--	--	--
26	0400	e550	7.2[1]	135	--	--	--	--	--	--	--	--	--
26	1000	e517	7.3[1]	139	--	--	--	--	--	--	--	--	--
APR													
11	1540	e634	7.5[1]	90[1]	--	--	--	--	--	--	--	--	--
18	1500	e613	7.9[1]	94[1]	--	--	--	--	--	--	--	--	--
25	1350	e1430	7.9[1]	71[1]	--	--	--	--	--	--	--	--	--
MAY													
02	1350	e1540	7.7[1]	68[1]	15.0	--	--	--	--	--	--	--	--
09	1240	e1500	7.8[1]	63[1]	--	--	--	--	--	--	--	--	--
16	1400	e1540	7.6[1]	--	--	--	--	--	--	--	--	--	--
23	1300	e820	7.7	90	--	--	--	--	--	--	--	--	--
30	1150	e699	7.9[1]	79[1]	--	--	--	--	--	--	--	--	--
JUN													
06	1240	--	7.7[1]	--	--	--	--	--	--	--	--	--	--
12	1140	e558	7.5	80	20.5	--	--	--	--	--	--	--	--
19	1300	e558	7.9[1]	77[1]	--	--	--	--	--	--	--	--	--
21	1300	e550	--	--	--	--	--	--	--	--	--	--	--
26	1200	e556	8.0	76	19.5	--	--	--	--	--	--	--	--
JUL													
03	1350	e568	8.0	57	--	--	--	--	--	--	--	--	--
10	1410	e580	7.7	78	--	--	--	--	--	--	--	--	--
17	1300	e566	7.8	74	--	--	--	--	--	--	--	--	--
24	1600	e402	7.6[1]	95[1]	--	--	--	--	--	--	--	--	--
31	1330	e409	7.6	81	--	--	--	--	--	--	--	--	--
AUG													
02	1010	e367	--	--	--	--	--	--	--	--	--	--	--
07	1400	e407	7.8[1]	74[1]	--	--	--	--	--	--	--	--	--
14	1300	e378	7.9	73	--	--	--	--	--	--	--	--	--
21	1240	401	8.1	88	--	--	--	--	--	--	--	--	--

e Estimated.
[1] Laboratory value.

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISSOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBOPHENOTHION WATER UNFLTRD (UG/L) (39786)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CHLORPYRIFOS TOTAL RECOVER (UG/L) (38932)
JAN													
04...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.005	<.020	--	.038	--
11...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.032	<.020	--	.012	--
18...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.009	<.020	--	e.002	--
26...	4.3	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.045	<.020	<.02	.006	<.01
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	3.6	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.507	<.020	--	.006	--
27...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.731	<.020	--	.007	--
27...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	<.750	<.020	--	.007	--
27...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.047	<.020	--	.006	--
27...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.037	<.020	--	.007	--
27...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.019	<.020	--	.006	--
FEB													
01...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.192	<.020	--	<.005	--
08...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.037	<.020	--	<.005	--
15...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.008	<.020	--	<.005	--
22...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.083	<.020	--	<.005	--
24...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.007	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.006	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.006	<.020	<.02	<.005	<.01
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.006	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.009	<.020	<.02	.011	e.01
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.021	<.020	--	e.002	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.009	<.020	--	<.005	--
APR													
11...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.034	<.020	--	<.005	--
18...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	e.044	<.020	--	<.005	--
25...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.011	e.013	--	<.005	--
MAY													
02...	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	e.013	<.020	--	e.005	--
09...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--
16...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	e.006	<.020	--	.006	--
23...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.012	--
30...	--	<.002	<.004	<.002	<.005	e.002	<.010	<.002	<.041	<.020	--	e.003	--
JUN													
06...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--
12...	--	<.002	<.004	<.002	<.005	e.003	<.010	<.002	e.001	<.020	--	<.005	--
19...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.014	--
21...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.100	--
26...	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	e.001	<.020	--	e.003	--
JUL													
03...	--	<.002	<.004	<.002	<.005	e.004	<.010	<.002	e.008	<.020	--	e.003	--
10...	--	<.002	<.004	<.002	<.005	<.007	<.010	.005	e.010	<.020	--	.008	--
17...	--	<.002	<.004	<.002	<.005	e.006	<.010	.004	e.001	<.020	--	e.003	--
24...	--	<.002	<.004	<.002	<.005	e.001	<.010	<.002	<.041	<.020	--	e.002	--
31...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.005	--
AUG													
02...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.005	--
07...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	e.003	--
14...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	<.005	--
21...	--	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	--	.010	--

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

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DEF TOTAL (UG/L) (39040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN DISSOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DISULFOTON UNFILT RECOVER (UG/L) (39011)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHION, TOTAL (UG/L) (39398)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
JAN													
04...	<.018	<.003	<.006	--	.005	--	<.005	<.021	--	<.002	<.009	--	<.005
11...	<.018	e.001	<.006	--	.051	--	<.005	<.021	--	<.002	<.009	--	<.005
18...	<.018	<.003	e.003	--	.018	--	<.005	<.021	--	<.002	<.009	--	<.005
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.018	e.002	<.006	<.02	.067	.05	<.005	<.021	--	<.002	<.009	<.01	<.005
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.018	e.001	e.003	--	.054	--	<.005	<.021	--	<.002	<.009	--	<.005
27...	<.018	e.002	e.002	--	.072	--	<.005	<.021	--	<.002	<.009	--	<.005
27...	<.018	e.001	<.006	--	.053	--	<.005	<.021	--	<.002	<.009	--	<.005
27...	<.018	<.003	<.006	--	.081	--	<.005	<.021	--	<.002	<.009	--	<.005
27...	<.018	e.001	<.006	--	.083	--	<.005	<.021	--	<.002	<.009	--	<.005
27...	<.018	<.003	<.006	--	.058	--	<.005	<.021	--	<.002	<.009	--	<.005
FEB													
01...	<.018	<.003	<.006	--	.007	--	<.005	<.021	--	<.002	<.009	--	<.005
08...	<.018	e.001	e.002	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
15...	<.018	<.003	<.006	--	.007	--	<.005	<.021	--	<.002	<.009	--	<.005
22...	<.018	<.003	e.002	--	.007	--	<.005	<.021	--	<.002	<.009	--	<.005
24...	<.018	e.002	<.006	--	.026	--	<.005	<.021	--	<.002	<.009	--	<.005
25...	<.018	e.002	<.006	--	.018	--	<.005	<.021	--	<.002	<.009	--	<.005
25...	<.018	e.002	e.003	<.02	.017	e.01	<.005	<.021	<.07	<.002	<.009	<.01	<.005
25...	<.018	e.002	<.006	--	.026	--	<.005	<.021	--	<.002	<.009	--	<.005
25...	<.018	<.003	e.003	<.02	.014	e.01	<.005	<.021	<.07	<.002	<.009	<.01	<.005
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.018	e.001	e.002	--	.027	--	<.005	<.021	--	<.002	<.009	--	<.005
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.018	<.003	e.002	--	.010	--	<.005	<.021	--	<.002	<.009	--	<.005
APR													
11...	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009	--	<.005
18...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
25...	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	<.002	<.009	--	<.005
MAY													
02...	<.018	e.002	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009	--	<.005
09...	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009	--	<.005
16...	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	<.002	<.009	--	<.005
23...	<.018	<.003	<.006	--	e.001	--	<.005	<.021	--	<.002	<.009	--	<.005
30...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
JUN													
06...	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	<.002	<.009	--	<.005
12...	<.018	<.003	e.002	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
19...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
21...	<.018	<.003	<.006	--	.030	--	<.005	<.021	--	<.002	<.009	--	<.005
26...	<.018	<.003	<.006	--	e.003	--	<.005	<.021	--	<.002	<.009	--	<.005
JUL													
03...	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	<.002	<.009	--	<.005
10...	<.018	<.003	<.006	--	e.002	--	<.005	<.021	--	.003	<.009	--	<.005
17...	<.018	<.003	e.001	--	<.005	--	<.005	<.021	--	.038	<.009	--	<.005
24...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
31...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
AUG													
02...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
07...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005
14...	<.018	<.003	<.006	--	e.004	--	<.005	<.021	--	<.002	<.009	--	<.005
21...	<.018	<.003	<.006	--	<.005	--	<.005	<.021	--	<.002	<.009	--	<.005

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

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MALA-THION, TOTAL (UG/L) (39530)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, TOTAL (UG/L) (39600)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)
JAN													
04...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
11...	--	<.003	<.004	<.035	e.016	--	<.050	--	<.006	e.002	<.006	<.002	<.007
18...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.01	<.003	<.004	<.035	<.027	<.03	<.050	<.01	<.006	e.003	<.006	<.002	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.003	<.004	<.035	e.012	--	<.050	--	<.006	<.013	<.006	<.002	<.007
27...	--	<.003	<.004	<.035	e.013	--	<.050	--	<.006	e.003	<.006	<.002	e.003
27...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007
27...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007
27...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
27...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007
FEB													
01...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
08...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
15...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
22...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
24...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
25...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	.016
25...	<.01	<.003	<.004	<.035	<.027	<.06	<.050	<.01	<.006	<.013	<.006	<.002	e.007
25...	--	<.003	<.004	<.035	e.006	--	<.050	--	<.006	<.013	<.006	<.002	<.007
25...	<.01	<.003	<.004	<.035	<.027	<.06	<.050	<.01	<.006	<.013	<.006	<.002	<.007
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
APR													
11...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
18...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
25...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
MAY													
02...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.001	<.006	e.002	<.007
09...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	<.002	<.007
16...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.004	<.006	<.003	<.007
23...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	.004	<.007
30...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.003	<.006	.002	<.007
JUN													
06...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	.002	<.007
12...	--	<.003	<.004	<.035	e.006	--	<.050	--	<.006	<.013	<.006	<.002	<.007
19...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
21...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.004	<.006	<.002	<.007
26...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007
JUL													
03...	--	<.003	<.004	<.035	<.027	--	<.050	--	e.005	e.008	<.006	<.002	<.007
10...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.007	<.006	<.002	<.007
17...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	.015	<.006	<.002	<.007
24...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	e.002	<.006	<.002	<.007
31...	--	<.003	<.004	<.035	e.005	--	<.050	--	<.006	e.006	<.006	<.002	<.007
AUG													
02...	--	<.003	<.004	<.035	e.012	--	<.050	--	<.006	e.009	<.006	<.002	<.007
07...	--	<.003	<.004	<.035	e.004	--	<.050	--	<.006	e.001	<.006	<.002	<.007
14...	--	<.003	<.004	<.035	e.005	--	<.050	--	<.006	e.001	<.006	<.002	<.007
21...	--	<.003	<.004	<.035	<.027	--	<.050	--	<.006	<.013	<.006	<.002	<.007

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

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PARA-THION, TOTAL (UG/L) (39540)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE TOTAL (UG/L) (39023)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
JAN													
04...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
11...	<.003	<.007	--	<.002	.023	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023
18...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.003	<.007	<.01	<.002	e.033	<.006	<.02	<.011	e.002	<.004	<.010	<.011	<.023
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.003	<.007	--	<.002	e.019	<.006	--	<.011	e.002	<.004	<.010	<.011	<.023
27...	<.003	<.007	--	<.002	e.021	<.006	--	<.011	e.003	<.004	<.010	<.011	<.023
27...	<.003	<.007	--	<.002	e.018	<.006	--	<.011	e.003	<.004	<.010	<.011	<.023
27...	<.003	<.007	--	<.002	.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
27...	<.003	<.007	--	<.002	.013	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
27...	<.003	<.007	--	<.002	e.008	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
FEB													
01...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
08...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
15...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
22...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
24...	<.003	<.007	--	<.002	.012	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	.011	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	<.01	<.002	.011	<.006	<.02	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	e.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	<.01	<.002	e.006	<.006	<.02	<.011	e.004	.011	<.010	<.011	<.023
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.003	<.007	--	<.002	e.006	<.006	--	<.011	<.015	.005	<.010	<.011	<.023
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
APR													
11...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
18...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
25...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
MAY													
02...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
09...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
16...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
23...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
30...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
JUN													
06...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.111
12...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
19...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
21...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
26...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	e.004	<.023
JUL													
03...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
10...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.016
17...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.018
24...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
31...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023
AUG													
02...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	e.020
07...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.023
14...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	.049
21...	<.003	<.007	--	<.002	<.010	<.006	--	<.011	<.015	<.004	<.010	<.011	<.023

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

SAN JOAQUIN RIVER BASIN

374209121103800 STANISLAUS RIVER AT CASWELL STATE PARK, NEAR RIPON, CA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN							
04...	e.004	<.016	<.034	<.017	<.005	<.002	<.009
11...	.093	<.016	<.034	<.017	<.005	<.002	e.001
18...	.012	<.016	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--	--	--
26...	.092	<.016	<.034	<.017	<.005	<.002	<.009
26...	--	--	--	--	--	--	--
26...	.044	<.016	<.034	<.017	<.005	<.002	<.009
27...	.038	<.016	<.034	<.017	<.005	<.002	<.009
27...	.035	<.016	<.034	<.017	<.005	<.002	<.009
27...	.094	<.016	<.034	<.017	<.005	<.002	<.009
27...	.161	<.016	<.034	<.017	<.005	<.002	<.009
27...	.068	<.016	<.034	<.017	<.005	<.002	<.009
FEB							
01...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
08...	e.010	e.004	<.034	<.017	<.005	<.002	<.009
15...	.037	<.016	<.034	<.017	<.005	<.002	<.009
22...	.125	<.016	<.034	<.017	<.005	<.002	<.009
24...	.079	<.016	<.034	<.017	<.005	<.002	<.009
25...	.106	<.016	<.034	<.017	<.005	<.002	<.009
25...	.094	<.016	<.034	<.017	<.005	<.002	<.009
25...	.079	<.016	<.034	<.017	<.005	<.002	<.009
25...	.137	<.016	<.034	<.017	<.005	<.002	<.009
25...	--	--	--	--	--	--	--
26...	.612	<.016	<.034	<.017	<.005	<.002	e.003
26...	--	--	--	--	--	--	--
26...	.157	<.016	<.034	<.017	<.005	<.002	<.009
APR							
11...	.044	<.016	<.034	<.017	<.005	<.002	e.004
18...	e.005	<.016	<.034	<.017	<.005	<.002	<.009
25...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
MAY							
02...	e.003	<.016	<.034	<.017	<.005	<.002	e.001
09...	<.011	<.016	<.034	<.017	<.005	<.002	e.004
16...	e.004	<.016	<.034	<.017	<.005	<.002	<.009
23...	e.003	<.016	<.034	<.017	<.005	<.002	<.009
30...	e.003	<.016	<.034	<.017	<.005	<.002	<.009
JUN							
06...	e.003	<.016	<.034	<.017	<.005	<.002	<.009
12...	e.004	<.016	<.034	<.017	<.005	<.002	e.005
19...	e.004	<.016	<.034	<.017	<.005	<.002	<.009
21...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
26...	e.002	<.016	<.034	<.017	<.005	<.002	<.009
JUL							
03...	e.004	<.016	<.034	<.017	<.005	<.002	<.009
10...	e.005	<.016	<.034	<.017	<.005	<.002	<.009
17...	e.005	<.016	<.034	<.017	<.005	<.002	<.009
24...	e.003	<.016	<.034	<.017	<.005	<.002	<.009
31...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
AUG							
02...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
07...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
14...	<.011	<.016	<.034	<.017	<.005	<.002	<.009
21...	<.011	<.016	<.034	<.017	<.005	<.002	<.009

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

SAN JOAQUIN RIVER BASIN

375120121110300 LONE TREE CREEK AT AUSTIN ROAD, NEAR MANTECA, CA

LOCATION.—Lat 37°51'20", long 121°11'03", in SW 1/4 SW 1/4, sec.15, T.1 S, R.7 E, San Joaquin County, Hydrologic Unit 18040002, 50 ft downstream of Austin Road Bridge, and 3 mi northeast of Manteca.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—March 1993 to August 1993, June 2001 to September 2001.
CHEMICAL DATA: March 1993 to August 1993, June 2001 to September 2001.
SEDIMENT DATA: March 1993 to August 1993, June 2001 to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
JUN													
15...	1350	25	8	.129	.101	760	8.2	97	8.0	140	23.5	--	50
JUL													
13...	1330	59	6	.137	.106	760	7.2	91	7.6	118	27.0	2	43
AUG													
09...	1350	45	8	.176	.138	758	8.9	--	8.0[1]	151[1]	25.0	2	49
SEP													
07...	1320	65	7	.233	.184	758	7.1	82	7.5	154	22.0	5	50

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 GRAN T. FIELD CACO3 (MG/L) (29802)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)
JUN													
15...	12.2	4.86	3.37	.4	5.8	19	53	4.2	e.1	18.3	4.8	76	9
JUL													
13...	10.2	4.30	3.10	.3	4.8	18	41	3.3	<.2	17.7	4.3	102	15
AUG													
09...	11.7	4.83	4.68	.4	6.2	20	47	4.6	e.1	20.6	5.0	67	9
SEP													
07...	11.9	4.93	5.46	.4	6.1	19	45	5.0	e.1	19.7	4.4	80	10

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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)
JUN													
15...	.14	104	91	<.040	.65	.99	1.17	.077	.278	.249	.406	5.9	1.9
JUL													
13...	.12	91	72	.112	.47	.89	1.13	.057	.236	.227	.353	4.4	2.3
AUG													
09...	.14	102	92	.069	.53	.90	1.13	.063	.466	.427	.591	5.2	2.4
SEP													
07...	.15	112	85	.048	.70	1.0	1.03	.058	.519	.500	.657	7.3	2.1

DATE	PHEO-PHYTIN A, PHYTO-PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
JUN				
15...	6.9	2.8	20	18.3
JUL				
13...	4.1	2.2	10	8.2
AUG				
09...	4.8	3.0	90	10.1
SEP				
07...	4.8	2.2	50	10.5

[1] Laboratory Value.
e Estimated.
< Actual value is known to be less than value shown.

SAN JOAQUIN RIVER BASIN

375120121110300 LONE TREE CREEK AT AUSTIN ROAD, NEAR MANTECA, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)
JUN						
15...N	1350	25	23.5	93	6.3	97
JUL						
13...N	1330	59	27.0	107	17	95
AUG						
09...N	1350	45	25.0	80	9.7	83
SEP						
07...N	1320	65	22.0	86	15	82

N Suspended-sediment data determined from a sample collected and processed according to National Water-Quality Assessment (NAQWA) protocol.

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

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