

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.

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U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data California Water Year 2001

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

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

Water-Data Report CA-01-1



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



U.S. DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in California write to:
District Chief, Water Resources Division
U.S. Geological Survey
Placer Hall, Suite 2015
6000 J Street
Sacramento, California 95819-6129

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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 DIVISION

Robert R. Mason, Chief, Operations
James C. Bowers, Assistant Chief, Operations

Joshua L. Agozino, Hydrologic Technician
Kevin Bazar, Hydrologic Technician
Louis A. Caldwell, Hydrologic Technician
Frank A. Carson, Hydrologic Technician (Retired USGS)
Joanna M. Combs, Data Management Assistant
Michael J. DeGrand, Hydrologic Technician
Kimberly S. Engelking, Editorial Assistant
Christopher D. Farrar, Hydrologist
Ronald G. Fay, Hydrologic Technician
Ryan Gromer, Hydrologic Technician
Kim L. Hanson, Computer Specialist
Paul D. Hayes, Hydrologic Technician
J. Carlos Hernandez, Hydrologic Technician
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Kyle S. Swanson, Hydrologic Technician
Robert H. Taylor, Hydrologic Technician
Madeleine S. White, Hydrologic Clerk
M. Kay Witter, Editor
George S. Yamamoto, Scientific Illustrator
David K. Yancey, Computer Specialist

Richard A. Hunrichs, Surface Water Hydrologist
Robert W. Meyer, Surface Water Hydrologist

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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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Sespe Creek near Fillmore (d)	11113000	386
Santa Paula Creek near Santa Paula (d)	11113500	388
Santa Clara River at Montalvo (d)	11114000	390
VENTURA RIVER BASIN		
Ventura River near Ventura (ds)	11118500	392
CARPINTERIA CREEK BASIN		
Carpinteria Creek near Carpinteria (d)	11119500	396
MISSION CREEK BASIN		
Mission Creek at Rocky Nook Park, at Santa Barbara (d)	11119745	398
Mission Creek near Mission Street, at Santa Barbara (d)	11119750	399
ATASCADERO CREEK BASIN		
Atascadero Creek:		
Maria Ygnacio Creek at University Drive, near Goleta (d)	11119940	401
Atascadero Creek near Goleta (d)	11120000	403
SAN JOSE CREEK BASIN		
San Jose Creek near Goleta (d)	11120500	405
SANTA YNEZ RIVER BASIN		
Santa Ynez River at Jameson Lake, near Montecito (d)	11121000	408
Santa Ynez River above Gibraltar Dam, near Santa Barbara (d)	11122000	409
Santa Ynez River below Gibraltar Dam, near Santa Barbara (d)	11123000	410
Santa Ynez River below Los Laureles Canyon, near Santa Ynez (dc)	11123500	412
Lake Cachuma:		
Santa Cruz Creek near Santa Ynez (dc)	11124500	416
Lake Cachuma near Santa Ynez (l)	11125500	421
Santa Ynez River near Santa Ynez (dct)	11126000	422
Alamo Pintado Creek near Solvang (d)	11128250	428
Alisal Creek:		
Alisal Reservoir near Solvang (l)	11128300	430
Santa Ynez River at Solvang (ct)	11128500	431
Zaca Creek near Buellton (d)	11129800	436
Salsipuedes Creek near Lompoc (dc)	11132500	438
Santa Ynez River at Narrows, near Lompoc (dct)	11133000	443
Santa Ynez River at H Street, near Lompoc (d)	11134000	450

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

	Station No.	Page
<u>PACIFIC SLOPE BASINS IN CALIFORNIA—Continued</u>		
SANTA YNEZ RIVER BASIN—Continued		
Santa Ynez River—Continued:		
Miguelito Creek at Lompoc (d)	11134800	452
SAN ANTONIO CREEK BASIN		
San Antonio Creek near Casmalia (dc)	11136100	454
SANTA MARIA RIVER BASIN		
Cuyama River (head of Santa Maria River) below Buckhorn Canyon, near Santa Maria (dcs)	11136800	459
Sisquoc River near Sisquoc (c)	11138500	464
Sisquoc River near Garey (d)	11140000	467
Orcutt Creek near Orcutt (dc)	11141050	469

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS

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

Station No.	Station name	Drainage area (mi ²)	Period of record
09424050	Chemehuevi Wash Tributary near Needles	2.04	1960–62, 1966–68
09428530	Arch Creek near Earp	1.52	1961–71
10250600	Wildrose Creek near Wildrose Station	23.7	1961–73, 1975
10250800	Darwin Creek near Darwin	173	1963–89
10251000	Big Dip Creek near Stovepipe Wells	.95	1963–69
10251100	Salt Creek near Stovepipe Wells	—	1974–88
10251300	Amargosa River at Tecopa	3,090	1962–72, 1974–83
10251350	Horse thief Creek near Tecopa	3.06	1961–70
10251375	Amargosa River at Dumont Dunes, near Death Valley	3,284	1999–2001
10252300	China Spring Creek near Mountain Pass	.94	1961–72
10252330	Wheaton Wash near Mountain Pass	10.2	1965–68
10253080	Sunflower Wash near Essex	3.04	1963–70
10253320	Quail Wash near Joshua Tree	100	1964–71
10253350	Fortynine Palms Creek near Twentynine Palms	8.55	1963–71
10253540	Corn Springs Wash near Desert Center	24.1	1964–71
10253600	Eagle Creek at Eagle Mountain	7.74	1961–66
10255200	Myer Creek Tributary near Jacumba	.11	1966–70
10255700	San Felipe Creek near Julian	89.2	1958–83
10255800	Coyote Creek near Borrego Springs	144	1951–83
10255805	Coyote Creek below Box Canyon, near Borrego Springs	154	1984–94
10255820	Yaqui Pass Wash near Borrego	.041	1965–69
10255850	Vallecito Creek near Julian	39.7	1964–83
10255885	San Felipe Creek near Westmorland	1,693	1961–91
10256000	Whitewater River at White Water	57.5	1949–79
10256050	Whitewater Municipal West Company Diversion at White Water	—	1966–70, 1971–73, 1975–81
10256060	Whitewater River at White Water Cutoff at White Water	59.1	1985–93
10256200	San Gorgonio River near Banning	14.8	1976–81
10256300	San Gorgonio River at Banning	44.2	1981
10256400	San Gorgonio River near White Water	154	1966–73, 1975–78
10257710	Chino Canyon Creek near Palm Springs	3.88	1975–85
10257800	Long Creek near Desert Hot Springs	19.6	1963–71
10258030	Tahquitz Creek at Palm Springs	—	1983
10258100	Palm Canyon Creek Tributary near Anza	.47	1967–73
10259600	Cottonwood Wash near Cottonwood Spring	.71	1960–72
10259920	Wasteway No. 1 near Mecca	—	1966–81
10260200	Pipes Creek near Yucca Valley	15.1	1958–71
10260400	Cushenbury Creek near Lucerne Valley	6.36	1957–71
10260620	Houston Creek above Lake Gregory, at Crestline	.35	1979–93
10260630	Abondigas Creek above Lake Gregory, at Crestline	1.15	1979–93
10260650	Houston Creek below Lake Gregory, at Crestline	2.68	1979–93
10261000	West Fork Mojave River near Hesperia	70.3	1905–22, 1930–71
10261100	Mojave River below Mojave River Fork Reservoir, near Hesperia	211	1972–74, 1981–97
10261900	Mojave River at Wild Crossing, near Helendale	957	1966–70
10262000	Mojave River near Hodge	1,091	1930–32, 1970–93
10263675	Big Rock Creek Wash at Highway 138, near Llano	53.1	1989–92
10264500	Little Rock Creek near Palmdale	78.0	1968
10264502	Peach Tree Creek near Littlerock	.04	1989–94
10264508	Somerset Creek at Palmdale	.50	1989–94
10264510	Inn Creek at Palmdale	.03	1989–94
10264530	Pine Creek near Palmdale	1.78	1989–94
10264550	City Ranch Creek near Palmdale	.39	1989–94
10264555	Estates Creek near Quartz Hill	.11	1989–94
10264590	Cottonwood Creek near Rosamond	35.7	1965–72

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
10264600	Oak Creek near Mojave	15.8	1957–86
10264605	Joshua Creek near Mojave	3.83	1989–94
10264636	Sled Track Canal at Lancaster Boulevard, near Rogers Lake	—	1996–2001
10264640	Buckhorn Creek at East 120th Avenue, near Rogers Lake	—	1996–2001
10264658	Mojave Creek at Forbes Avenue, at Edwards Air Force Base	168	1996–2000
10264660	Mojave Creek at Rosamond Boulevard, at Edwards Air Force Base	174.85	1997–2001
10264675	Rogers Lake Tributary at Edwards Air Force Base	1.73	1988–2001
10264710	Goler Gulch near Randsburg	41.3	1966–72
10264740	Cache Creek near Mojave	96.5	1965–72
10264750	Pine Tree Creek near Mojave	33.5	1958–79
10264770	Cottonwood Creek near Cantil	163	1966–72
10264870	Little Lake Creek near Little Lake	8.60	1964–68
10264878	Ninemile Creek near Brown	10.4	1962–71
10265160	Little Hot Creek below Hot Springs, near Mammoth Lakes	6.37	1990–95
10265200	Convict Creek near Mammoth Lakes	18.2	1925–78
10265500	Owens River near Round Valley	425	1909–23, 1928–40
10265700	Rock Creek at Little Round Valley, near Bishop	35.8	1925–78
10267000	Pine Creek at Division Box, near Bishop	36.4	1922–79
10268000	Owens River at Pleasant Valley, near Bishop	583	1918–40
10268700	Silver Canyon Creek near Laws	19.7	1930–78
10270960	Coyote Creek near Bishop	25.8	1991–96
10271210	Bishop Creek below Powerplant No. 6, near Bishop	104	1936–90
10276000	Big Pine Creek near Big Pine	39.0	1921–78
10276002	Giroux Ditch lower below Big Pine	—	1975–78
10276500	Tinemaha Creek near Big Pine	27.3	1907–11
10277000	Birch Creek near Big Pine	11.7	1907–11
10277400	Owens River below Tinemaha Reservoir, near Big Pine	1,964	1975–84
10277500	Owens River near Big Pine	1,976	1912–74
10278000	Taboose Creek near Aberdeen	11.2	1906–11
10278500	Goodale Creek near Aberdeen	11.2	1906–11
10281500	Oak Creek near Independence	24.1	1906–11
10281800	Independence Creek below Pi Canyon Creek, near Independence	18.1	1923–78
10282000	Independence Creek near Independence	18.8	1907–11
10282480	Mazourka Creek near Independence	15.6	1961–72
10284800	Inyo Creek near Lone Pine	1.54	1968–73
10285500	Tuttle Creek near Lone Pine	14.0	1909–11
10285700	Owens River at Keeler Bridge, near Lone Pine	2,604	1961–79
10286000	Cottonwood Creek near Olancho	40.1	1906–11, 1914–18, 1920–38, 1960–78
10286001	Cottonwood Creek Penstock weir, near Lone Pine	—	1906–11, 1914–18, 1919–78
10286002	Cottonwood Creek Diversion to powerhouse	—	1939–50, 1974, 1975–78
10287070	Mill Creek below Lundy Lake, near Mono Lake	18.1	1942–90
10287290	Rush Creek below Agnew Lake, near June Lake	23.3	1960–66, 1986–90
10287400	Rush Creek above Grant Lake, near June Lake	51.3	1937–79
10287900	Lee Vining Creek near Lee Vining	34.9	1935–79
10290000	Summers Creek near Bridgeport	8.26	1954–59
11010900	Wilson Creek Tributary near Dulzura	.61	1968–73
11011900	Potrero Creek Tributary near Barrett Junction	.78	1966–69
11012100	Miller Creek near Live Oak Springs	1.00	1962–64
11013000	Tijuana River near Dulzura	481	1937–90
11013500	Tijuana River near Nestor	1,695	1937–82
11013600	Jamul Creek at Lee Valley, near Jamul	2.26	1984–85, 1987–88
11013700	Jamul Creek Tributary near Jamul	2.47	1973
11014700	Telegraph Canyon Creek at Chula Vista	6.23	1973

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11014850	Japacha Creek near Descanso	2.40	1965–67
11016000	Sweetwater River near Dehesa	112	1913–16
11021500	San Vicente Creek near Foster	66.0	1942
11022000	San Vicente Creek at San Vicente dam, at Foster	74.2	1937–41
11022350	Forester Creek at El Cajon	21.3	1983–93
11023200	San Clemente Canyon Creek at Miramar Naval Air Station	5.60	1973
11023250	Poway Creek near Poway	7.92	1978–87
11023310	Rattlesnake Creek at Poway	8.13	1978–89
11023315	Poway Creek Tributary at Oak Knoll Road, near Poway	.93	1972–75
11023318	Pomerado Creek at Glenoak Road, near Poway	2.43	1970–75
11023320	Pomerado Creek at Poway Road, near Poway	4.14	1971–75
11023330	Los Penasquitos Creek below Poway Creek, near Poway	31.2	1970–93
11023325	Beeler Creek at Pomerado Road, near Poway	5.46	1978–89
11023400	Carroll Creek near La Jolla	15.8	1985–86
11023450	Carmel Creek near Del Mar	1.11	1985–86
11023500	Santa Ysabel Creek near Santa Ysabel	12.5	1914
11024500	Black Canyon Creek near Mesa Grande	15.3	1914, 1923–24
11026000	Santa Ysabel Creek near San Pasqual	128	1957–80
11027000	Guejito Creek near San Pasqual	22.5	1947–82
11027500	Guejito Creek at San Pasqual	27.7	1915, 1917, 1947–56
11029000	San Dieguito River near San Pasqual	249	1956–65
11029500	San Dieguito River at Bernardo	269	1912–15
11030500	San Dieguito River near Del Mar	338	1984–89
11030730	Escondido Creek near Olivenhain	64.6	1973
11031000	San Luis Rey River near Warner Springs	33.6	1913–15
11031500	Agua Caliente Creek near Warner Springs	19.0	1961–87
11033000	West Fork San Luis Rey River near Warner Springs	25.5	1913–15, 1957–86
11035000	San Luis Rey River at Lake Henshaw, near Mesa Grande	206	1912–22
11037650	Pauma Valley Water Company diversion near Pauma Valley	—	1966–70, 1972–81
11037700	Pauma Creek near Pauma Valley	11.0	1965–81
11037701	Pauma Creek and Diversion near Pauma Valley	11.0	1965–81
11038500	San Luis Rey River near Pala	317	1909–11, 1913–15
11039100	San Luis Rey River Tributary near Pala	1.01	1966–73
11039600	Bubble-Up Creek near Pala	4.11	1991
11039800	San Luis Rey River at Couser Canyon Bridge, near Pala	364	1986–93
11040000	San Luis Rey River at Monserate Narrows, near Pala	373	1938–41, 1947–86
11040200	Keys Creek Tributary at Valley Center	7.65	1970–83, 1991
11040500	San Luis Rey River at Bonsall	456	1912–15
11040700	San Luis Rey River below Moosa Canyon, near Bonsall	499	1984–85
11041000	San Luis Rey River near Bonsall	513	1930–79
11042490	Wilson Creek above Vail Lake, near Radec	122	1990–94
11042520	Temecula Creek at Nigger Canyon, near Temecula	320	1923–48
11042600	Temecula Creek below Vail Dam	320	1978
11044500	Santa Margarita River near Fallbrook	644	1925–80
11044600	Santa Margarita River Tributary near Fallbrook	.52	1962–65
11044900	De Luz Creek near Fallbrook	47.5	1951–67, 1990–91
11045000	Santa Margarita River near De Luz Station	705	1925–26
11045050	Santa Margarita River at U.S. Marine Corps Diversion Dam, near Ysidora	710	1999–2001
11046200	San Onofre Creek near San Onofre	34.6	1951–67
11046310	San Mateo Creek near San Onofre	91.9	1951–52
11046350	Cristianitos Creek near San Clemente	29.0	1951–67
11046370	San Mateo Creek at San Onofre	132	1947–67, 1984–85
11046500	San Juan Creek near San Juan Capistrano	106	1929–69
11046501	San Juan Creek near San Juan Capistrano plus canal	106	1955–71
11046550	San Juan Creek at San Juan Capistrano	117	1970–85

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11047000	Arroyo Trabuco near San Juan Capistrano	35.7	1930–72, 1980–81
11047200	Oso Creek at Crown Valley Parkway, near Mission Viejo	14.0	1970–81
11047500	Aliso Creek at El Toro	7.92	1931–80
11047700	Aliso Creek at South Laguna	34.4	1983–87
11048000	Irvine Ranch Drainage Canal, near Tustin	92.0	1931–40
11048555	San Diego Creek at Campus Drive, near Irvine	—	1978–79, 1983–85
11049600	Greenspot Pipeline near Mentone	—	1972–73
11051600	Santa Ana River spreading diversion near Mentone	213	1952–77
11054000	Mill Creek near Yucaipa (REVISED RECORDS IN WDR CA-92-1)	42.4	1920–38, 1948–86
11054600	Crafton near Mentone	—	1972–79
11055000	Mill Creek near Mentone	50.5	1939–65
11056000	Santa Ana River near San Bernardino	306	1929–37, 1955–61
11056500	Little San Gorgonio River near Beaumont (REVISED RECORDS IN WDR CA-92-1)	1.74	1949–85
11057490	San Timoteo Creek at Loma Linda	125	1979–80
11058600	Waterman Canyon Creek near Arrowhead Springs	4.65	1912–14, 1920–85
11059000	Warm Creek Floodway at San Bernardino	75.1	1961–81
11059100	San Bernardino Water–Quality Control Plant at San Bernardino	—	1973–82
11060300	Lytle Creek at Channel, at San Bernardino	—	1929–30, 1932–57
11060500	Meeks and Daley Canal near Colton	—	1921–81
11062200	Fontana Union Water Co. Lytle Creek return flow channel near Fontana	—	1973–80
11062810	West San Bernardino County Water District Rialto Diversion near Fontana	—	1981
11063000	Cajon Creek near Keenbrook	40.6	1920–71, 1978–83
11064000	Lytle Creek (East Channel) at San Bernardino	—	1929–57
11065800	Warm Creek near Colton	198	1921–61
11065801	Warm Creek near Colton plus diversion	259	1920–61
11066050	Santa Ana River at Colton	740	1962–66
11066100	Lytle Creek West Channel at Colton	—	1929–45
11066440	Santa Ana River at Mission Boulevard, at Riverside	808	1971–82
11066478	Riverside Water–Quality Control Plant Weir No. 1	—	1973–81
11066479	Riverside Water–Quality Control Plant Weir No. 2	—	1973–81
11066480	Riverside Water–Quality Control Plant at Riverside Narrows, near Arlington	—	1966–81
11066500	Santa Ana River at Riverside Narrows, near Arlington	853	1929–73
11066550	Sheehan Diversion at Riverside Narrows, near Arlington	—	1964–65, 1967–68
11066950	Day Creek Diversion near Etiwanda	—	1966–69, 1971
11067000	Day Creek near Etiwanda	4.56	1929–72
11068000	Santa Ana River at Auburndale Bridge, near Corona	1,010	1961–68
11069300	South Fork San Jacinto River tributary near Valle Vista	2.20	1962–67
11069501	San Jacinto River near San Jacinto plus canals	141	1949–81, 1983–89
11070000	Bautista Creek near Hemet	39.6	1948–69
11070050	Bautista Creek at Valle Vista	48.5	1970–87
11070232	East Fork Pigeon Pass Creek at Heacock Street, near Sunnymead	.48	1970–75
11070240	Sunnymead Channel at Alessandro Boulevard, near Sunnymead	13.3	1970–75, 1990–93
11070256	Perris Valley Storm Drain at Nandino Avenue, near March Air Force Base	50.6	1970–75, 1990–93
11070262	Perris Valley Storm Drain Lateral "B" near March Air Force Base	10.6	1970–75, 1990–93
11070263	Unnamed creek tributary to Perris Reservoir near Moreno Valley	.46	1989–91
11070375	San Jacinto River at Railroad Canyon Weir, near Elsinore	562	1952–84
11070475	Salt Creek at Railroad Canyon Reservoir, near Elsinore	122	1970–78
11072000	Temescal Creek near Corona	164	1929–80
11072200	Temescal Creek at Corona	249	1968–74
11073000	San Antonio Creek near Claremont	16.5	1917–72
11073200	San Antonio Creek below San Antonio Dam	26.9	1963–80
11073440	Chino Creek near Chino	107	1968–69
11073470	Cucamonga Creek near Upland	9.68	1929–75
11073500	Chino Creek near Prado	218	1929–40
11074500	Santa Ana River at county line, below Prado Dam	1,510	1919–42, 1945–60

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11075610	Santa Ana River above spreading diversion, below Imperial Highway, near Anaheim	1545	1998–2001
11075620	Santa Ana River spreading diversion, below Imperial Highway near Anaheim	—	1974–85, 1990–2000
11075730	Carbon Creek at Olinda	19.7	1931–38
11075740	Carbon Creek near Yorba Linda	20.1	1950–61
11077000	Santiago Creek near Villa Park	84.6	1921–63
11077001	Santiago Creek plus diversion near Villa Park	83.8	1921–31
11078100	Santa Ana River at Adams Avenue, near Costa Mesa	1,701	1975–77
11078110	Rubio Wash at Glendon Way	—	1973–75
11078120	Compton Creek at 120th Street	—	1974–75
11078130	Arcadia Wash at Grand Avenue	—	1974–75
11078140	Eaton Wash at Loftas Drive	—	1974–75
11078150	Limekiln Creek above Aliso Creek	—	1973–74
11078170	Puddingstone Creek below Puddingstone Dam	—	1974
11078190	Santa Fe Diversion Channel	—	1974
11078191	West Fork San Gabriel River below Cogswell Dam	—	1975
11080000	East Fork San Gabriel River at Camp Bonita	58.2	1928–32
11080500	East Fork San Gabriel River near Camp Bonita	84.6	1933–79
11081000	Bear Creek near Camp Rincon	28.2	1930–36
11081500	North Fork San Gabriel River at Camp Rincon	18.6	1930–36
11082000	West Fork San Gabriel River at Camp Rincon	104	1928–78
11083500	San Gabriel River near Azusa	214	1894, 1896–1959, 1961–66
11084000	Rogers Creek near Azusa	6.64	1918–62
11084500	Fish Creek near Duarte	6.36	1916–79
11085019	San Gabriel River below Valley Boulevard	—	1973–74
11086000	Dalton Creek near Glendora	7.24	1913–62
11086300	San Dimas Creek below San Dimas Dam	16.3	1957–78
11086400	San Dimas Creek near San Dimas	18.3	1917–56
11086500	Little Dalton Creek near Glendora	2.72	1939–68, 1970–71
11086990	San Jose Creek near El Monte	87.8	1965–78
11087100	Rio Hondo Flood Flow Channel at Whittier Narrows Dam	—	1966–70
11087195	San Jose Creek near Whittier	88.7	1929–64
11087500	San Gabriel River at Pico	447	1929–78
11088000	San Gabriel River at Spring Street, near Los Alamitos	472	1937–51, 1953–79
11089000	Brea Creek at Fullerton	23.6	1931–69
11090000	Fullerton Creek at Fullerton	7.50	1936–64
11090200	Fullerton Creek at Richman Avenue, at Fullerton	12.1	1960–77, 1979–81
11090500	Coyote Creek near Artesia	120	1930–63
11090700	Coyote Creek at Los Alamitos	150	1964–78
11092450	Los Angeles River at Sepulveda Dam	158	1932–79
11093000	Pacoima Creek near San Fernando	28.3	1917–79
11093490	North Fork Mill Creek near La Canada	5.80	1966–73
11093500	Mill Creek near Colby Ranch	21.7	1931–34
11094000	Big Tujunga Creek below Mill Creek, near Colby Ranch (formerly Tujunga Creek)	64.9	1948–71
11094500	Big Tujunga Creek near Colby Ranch (formerly Tujunga Creek)	67.5	1931–50
11095000	Fox Creek near Colby Ranch	9.22	1931–37
11095500	Big Tujunga Creek near Sunland (formerly Tujunga Creek)	106	1917–77
11096000	Haines Creek near Tujunga	1.26	1917–34, 1936–61
11096500	Little Tujunga Creek near San Fernando	21.1	1929–73
11097500	Los Angeles River at Los Angeles	514	1930–79
11098500	Los Angeles River near Downey	599	1928–78
11099500	Sawpit Creek near Monrovia	5.21	1916–61

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11100000	Santa Anita Creek near Sierra Madre (REVISED RECORDS IN WDR CA-92-1)	9.71	1917–70
11100500	Little Santa Anita Creek near Sierra Madre	1.84	1916–62
11101000	Eaton Creek near Pasadena	6.47	1918–66
11101380	Alhambra Wash at Klingerman Street, near Montebello	15.2	1976–79
11101500	Rio Hondo near Montebello	116	1929–78
11102000	Mission Creek near Montebello	4.16	1930–77
11102500	Rio Hondo near Downey	143	1928–79
11103500	Ballona Creek near Culver City	89.5	1928–78
11105500	Malibu Creek at Crater Camp, near Calabasas	105	1982–88
11106000	Calleguas Creek at Camarillo	168	1929–31, 1955–58
11106400	Conejo Creek above Highway 101, near Camarillo	64	1973–83
11106500	Conejo Creek near Camarillo	69	1928–31
11107000	Honda Barranca near Somis	2.5	1955–63
11107500	Beardsley Wash near Somis	13	1954–58
11107745	Santa Clara River above railroad station, near Lang	157	1950–68, 1970–77
11107860	Bouquet Creek near Saugus	51.6	1971–73, 1975,
11107922	South Fork Santa Clara River at Saugus	43.4	1976–77
11108000	Santa Clara River near Saugus	411	1930–55
11108075	Castaic Creek above Fish Creek, near Castaic	37.0	1977–78, 1989–93
11108080	Fish Creek above Castaic Creek, near Castaic	27.2	1977–78, 1989–93
11108090	Elderberry Canyon Creek above Castaic Creek, near Castaic	2.50	1978, 1989–93
11108095	Necktie Canyon Creek above Castaic Creek, near Castaic	2.12	1977–78, 1989–93
11108130	Elizabeth Lake Canyon Creek above Castaic Lake, near Castaic	43.7	1977–78, 1989–93
11108135	Castaic Lagoon Parshall Flume near Castaic	138	1977–78, 1988–96
11108145	Castaic Creek near Saugus	184	1947–76
11108500	Santa Clara River at Los Angeles–Ventura County Line	625	1953–96
11109100	Piru Creek below Thorn Meadows, near Stauffer	22.5	1972–78
11109200	Middle Fork Lockwood Creek near Stauffer	5.50	1972–78
11109250	Lockwood Creek at gorge, near Stauffer	58.7	1972–81
11110000	Piru Creek near Piru	437	1912–13, 1928–56, 1969–74
11111500	Sespe Creek near Wheeler Springs	49.5	1948–97
11112500	Fillmore Irrigation Company Canal near Fillmore	—	1940–51, 1972–83
11113001	Sespe Creek and Fillmore Irrigation Company Canal	—	1927–85, 1990–93
11113900	Saticoy Diversion near Saticoy	—	1969–81, 1983–87
11114500	Matilija Creek above reservoir, near Matilija Hot Springs	50.7	1948–69
11115500	Matilija Creek at Matilija Hot Springs	54.6	1928–88
11116000	North Fork Matilija Creek at Matilija Hot Springs	15.6	1929–32, 1934–73, 1974–83
11116500	Ventura River near Ojai	70.7	1912–14, 1922–24, 1983–84
11116550	Ventura River near Meiners Oaks	76.4	1959–79, 1981–82, 1984–88
11117000	San Antonio Creek near Ojai	33.7	1928–32
11117600	Coyote Creek near Oak View	13.2	1959–88
11117800	Santa Ana Creek near Oak View	9.11	1959–88
11118000	Coyote Creek near Ventura	41.2	1928–32, 1934–58, 1970–82
11119660	San Ysidro Creek at Montecito	3.07	1980–83
11119700	Sycamore Creek at Santa Barbara	3.41	1971–72, 1980
11119760	Victoria Street drain at outlet, at Santa Barbara	0.625	1970–78
11119780	Arroyo Burro at Santa Barbara	6.65	1970–93
11119900	Atascadero Creek at Puente Road, near Goleta	3.86	1971–72
11120510	San Jose Creek at Goleta	9.42	1970–92, 1997–2000

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Period of record
11120520	San Pedro Creek at Goleta	3.21	1971–72
11120530	Tecolotito Creek near Goleta	4.42	1970–72, 1980–82, 1987–91
11120550	Gaviota Creek near Gaviota	18.8	1967–86
11120600	Jalama Creek near Lompoc	20.5	1966–82
11120700	Canada Honda Creek near Lompoc	3.09	1959–62
11120800	Canada Honda Creek near Point Arguello	8.47	1959–62
11124000	Santa Cruz Creek above Stuke Canyon	64.9	1947–52
11125000	Cachuma Creek near Santa Ynez	23.8	1951–62
11126500	Santa Agueda Creek near Santa Ynez	55.8	1941–71, 1977–78
11127000	San Lucas Creek near Santa Ynez	3.2	1953–54
11127500	Zanja de Cota Creek near Santa Ynez	13.8	1955–61
11128000	Santa Ynez River at Grand Avenue, near Santa Ynez	513	1955–65
11128400	Alisal Creek near Solvang	12.3	1955, 1957–72
11128500	Santa Ynez River at Solvang	579	1928–40, 1946–99
11129000	Nojoqui Creek near Buellton	15.1	1953–54
11129500	Santa Ynez River at Buellton	611	1955–59
11130000	Zaca Creek at Buellton	39.4	1941–63
11130500	Santa Ynez River near Buellton	668	1952–74
11131000	Santa Ynez River at Santa Rosa Dam site, near Buellton	700	1955–64
11131500	Santa Ynez River at Coopers East Fork, near Lompoc	708	1955–76
11132000	Santa Ynez River below Santa Rita Creek, near Lompoc	733	1955–62
11134500	Santa Ynez River at 13th Street, near Lompoc	820	1955–75
11135000	Santa Ynez River at Pine Canyon, near Lompoc	884	1941–46, 1964–83
11135500	Santa Ynez River at barrier, near Surf	895	1947–65
11135800	San Antonio Creek at Los Alamos	34.9	1970–92, 1998, 1999
11136000	San Antonio Creek at Harris	93.7	1941–55
11136050	San Antonio Creek above Barka slough, near Orcutt	114	1985–87
11136150	San Antonio Creek Tributary near Casmalia	.28	1947–70
11136400	Wagon Road Creek near Stauffer	17.9	1972–78
11136480	Reyes Creek near Ventucopa	4.62	1972–78
11136500	Cuyama River near Ventucopa	89.9	1945–58
11136650	Aliso Canyon Creek near New Cuyama	16.1	1964–72
11137000	Cuyama River near Santa Maria	904	1930–62
11137400	Alamo Creek near Nipomo	83.3	1959–77
11137500	Alamo Creek near Santa Maria	86.6	1944–62
11137900	Huasna River near Arroyo Grande	10.3	1959–86
11138000	Huasna River near Santa Maria	117	1930–62
11138100	Cuyama River below Twitchell Dam	1,132	1959–83
11138500	Sisquoc River near Sisquoc	281	1943–99
11139000	La Brea Creek near Sisquoc	93.6	1944–73
11139350	Foxen Creek near Sisquoc	16.8	1966–73
11139500	Tepusquet Creek near Sisquoc	28.7	1944–87
11140585	Santa Maria River at Suey Crossing, near Santa Maria	—	1999
11140600	Bradley Ditch near Donovan Road, at Santa Maria	5.47	1970–92, 1998, 1999
11140800	Blosser Ditch near Donovan Road, at Santa Maria	—	1972–76
11141000	Santa Maria River at Guadalupe	1,741	1940–87
11160020	San Lorenzo River near Boulder Creek	6.17	1968–92

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

DISCONTINUED LAKES AND RESERVOIRS

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

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

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS

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

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
10254670	Alamo River at Drop No. 3, near Calipatria	—	C,T	1981–85
10254970	New River at International Boundary, at Calexico	—	C,T	1973–81
10261500	Mojave River at Lower Narrows, near Victorville	513	C,T	1962–81
10263675	Big Rock Creek Wash at Highway 138, near Llano	53.1	P	1989–92
10264502	Peach Tree Creek near Littlerock	.04	P	1989–94
10264508	Somerset Creek at Palmdale	.50	P	1989–94
10264510	Inn Creek at Palmdale	.03	P	1989–94
10264530	Pine Creek near Palmdale	1.78	P	1989–94
10264550	City Ranch Creek near Palmdale	.39	P	1989–94
10264555	Estates Creek near Quartz Hill	.11	P	1989–94
10264605	Joshua Creek near Mojave	3.83	P	1989–94
10264636	Sled Track Canal at Lancaster Boulevard, near Rogers Lake	—	P	1996–2000
10264646	South Drainage Bissell/Rosamond Hills near Edwards AFB	9.25	P	1996–2001
10264658	Mojave Creek at Forbes Avenue, at Edwards Air Force Base	168	P	1996–2001
10264675	Rogers Lake Tributary at Edwards Air Force Base	1.73	P	1989–2001
10265150	Hot Creek at flume, near Mammoth	68.3	C,T	1983–88
10277400	Owens River below Tinemaha Reservoir, near Big Pine	1,964	C,T	1975–81
11013500	Tijuana River near Nestor	1,695	T,S	1970–71, 1976, 1978
11022500	San Diego River near Santee	377	T,S	1970–78
11023000	San Diego River at Fashion Valley, at San Diego	429	T,S	1984
11030500	San Dieguito River near Del Mar	338	S	1984
11042000	San Luis Rey River at Oceanside	557	T,S	1969–78, 1984
11046000	Santa Margarita River at Ysidora	723	T,S	1969–78
11046500	San Juan Creek near San Juan Capistrano	106	T,S	1967–68, 1971, 1982
11046530	San Juan Creek at La Novia Street Bridge, at San Juan Capistrano	109	T,S	1986–88
11046550	San Juan Creek at San Juan Capistrano	117	T,S	1972–82, 1987
11047000	Arroyo Trabuco near San Juan Capistrano	35.7	T,S	1967, 1978
11047300	Arroyo Trabuco at San Juan Capistrano	54.1	T,S	1971–77, 1984
11048500	San Diego Creek at Culver Drive, near Irvine	41.8	T,S	1972–85
11048530	El Modena Irvine Channel near Irvine	—	T,S	1975–79
11048540	Peters Canyon Wash at Barranca Road, near Irvine	—	T,S	1975–79, 1983–85

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
11048550	San Diego Creek at Lane Road, near Irvine	—	T,S	1972–76
11048555	San Diego Creek at Campus Drive, near Irvine	—	T,S	1972–76, 1978–79, 1983–85
11051500	Santa Ana River near Mentone	210	WQ,C,T, S	1998–2001
11056200	Santa Ana River at Waterman Avenue, at San Bernardino	339	T,S	1977, 1979
11057000	San Timoteo Creek near Redlands	118	T,S	1977–78
11059100	San Bernardino Water-Quality Control Plant at San Bernardino	—	C	1973–80
11059300	Santa Ana River at E Street, near San Bernardino	541	T,S	1968–72, 1982–83
11066460	Santa Ana River at MWD Crossing, near Arlington	852	C,T	1970–78, 1999–2000
11066480	Riverside Water-Quality Control Plant at Riverside Narrows, near Arlington	—	C	1970–82
11066500	Santa Ana River at Riverside Narrows, near Arlington	853	C,T	1968–69
11067890	Santa Ana River at Prado Park, near Corona	1,010	T,S	1976–80
11068000	Santa Ana River at Auburndale Bridge, near Corona	1,010	C,T	1968
11070240	Sunnymead Channel at Alessandro Boulevard near Sunnymead	13.3	P	1990–93
11070262	Perris Valley Storm Drain Lateral "B" near March Air Force Base	10.6	P	1991
11070263	Unnamed creek tributary to Perris Reservoir near Moreno	.46	P	1990–91
11070270	Perris Valley Storm Drain at Nuevo Road, Near Perris	93.3	P	1990–97
11073495	Cucamonga Creek near Mira Loma	75.8	C,T	1999–2000
11075600	Santa Ana River at Imperial Highway, near Anaheim	1,544	T,S	1973–77, 1979
11075610	Santa Ana River above spreading diversion below Imperial Highway, near Anaheim	1,545	C,T	1999
11075620	Santa Ana River spreading diversion below Imperial Highway, near Anaheim	1,493	WQ,C,T	1974–82, 1983–85, 1996–2001
11075755	Santa Ana River at Ball Road, at Anaheim	1,587	T,S	1977–80
11075760	Santa Ana River near Katella Avenue, at Orange	1,593	T,S	1974–76
11078000	Santa Ana River at Santa Ana	1,700	T,S	1968–69, 1971, 1973–80, 1982–87
11078100	Santa Ana River at Adams Avenue, near Costa Mesa	1,701	T,S	1974–76
11102250	Mission Creek below Whittier Narrows Dam	—	C	1956–70
11103000	Los Angeles River at Long Beach	827	C,T	1979–84
11103010	Los Angeles River at Willow Street Bridge, at Long Beach	831	C,T	1974–75, 1981
11105850	Arroyo Simi near Simi	70.6	T,S	1970–71, 1974–78
11108500	Santa Clara River at Los Angeles–Ventura County Line	625	WQ,B,T,S	1969–88
11109550	Piru Creek above Frenchmans Flat	308	C	1972–80
11109600	Piru Creek above Lake Piru	372	C	1972–80
11109800	Piru Creek below Santa Felicia Dam	425	C,T	1969, 1974–80
11110000	Piru Creek near Piru	437	C,T	1970–71
11110500	Hopper Creek near Piru	23.6	T,S	1977–78
11113000	Sespe Creek near Fillmore	251	C,S	1967–78
11113500	Santa Paula Creek near Santa Paula	38.4	C,T	1969–80
11113900	Saticoy Diversion near Saticoy	—	C,T	1969–71, 1982–87
11113910	Santa Clara River at diversion, near Saticoy	—	C	1971
11114000	Santa Clara River at Montalvo	1,577	T,S	1969–85, 1989–93
11117500	San Antonio Creek at Casitas Springs	51.2	T,S	1977–78
11118500	Ventura River near Ventura	188	WQ,T	1907–08, 1967–81, 1986
11119745	Mission Creek at Rocky Nook Park, at Santa Barbara	6.60	T,S	1984–86
11120000	Atascadero Creek near Goleta	18.9	T,S	1982
11120510	San Jose Creek at Goleta	9.42	S	1982–85
11120530	Tecolotito Creek near Goleta	4.42	S	1982
11120500	San Jose Creek near Goleta	5.51	WQ	1978–91
11120600	Jalama Creek near Lompoc	20.5	T	1981–83
11120900	Canada Honda Creek at Pt. Arguello	—	T	1981–83

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DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi ²)	Type of record	Period of record
11125500	Lake Cachuma near Santa Ynez	417	WQ	1998
11129800	Zaca Creek near Buellton	32.8	WQ	1997
11132500	Salsipuedes Creek near Lompoc	47.1	WQ,T	1982–98
11133000	Santa Ynez River at Narrows, near Lompoc	789	WQ	1978–88
11134800	Miguelito Creek at Lompoc	11.6	WQ	1980–86, 1988–97
11136100	San Antonio Creek near Casmalia	135	T	1981–83
11138500	Sisquoc River near Sisquoc	281	C	1978–99
11140585	Santa Maria River at Suey Crossing, near Santa Maria	—	S	1999–00
11141000	Santa Maria River at Guadalupe	1,741	T,S	1969–70

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

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WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001
VOLUME 1—SOUTHERN GREAT BASIN FROM MEXICAN BORDER TO MONO LAKE BASIN,
AND PACIFIC SLOPE BASINS FROM TIJUANA RIVER TO SANTA MARIA RIVER

By J. Agajanian, 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 13 partial-record stations; (2) stage and content records for 20 lakes and reservoirs; (3) gage-height records for 2 stations; (4) precipitation records for 4 stations; and (5) water-quality records for 37 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-01-1." For archiving and general distribution, the reports for 1971–74 water years also are identified as water-data reports. These water-data reports are for sale, in paper copy or on microfiche, by the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. For further ordering information, the Customer Inquiries telephone number is (703) 487-4650, between 8:30 a.m. and 5:30 p.m. Eastern Standard Time.

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

COOPERATION

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

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

Borrego Water District, Tom Weber, General Manager.

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

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

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Casitas Municipal Water District, John J. Johnson, General Manager.
 Chino Basin Water Conservation District, Barrett Kehl, General Manager.
 Coachella Valley Water District, Thomas E. Levy, General Manager-Chief Engineer.
 Desert Water Agency, Dan M. Ainsworth, General Manager.
 Eastern Municipal Water District, John B. Brudin, General Manager.
 Goleta Water District, Kevin D. Walsh, General Manager and Chief Engineer.
 Imperial County Department of Public Works, Timothy B. Jones, Director.
 Imperial Irrigation District, Michael King, Manager, Water Department.
 Lompoc, city of, Gary Keefe, Utility Director.
 Mojave Water Agency, John W. Norman, General Manager.
 Mono County, Energy Management Department, Daniel L. Lyster, Director.
 Montecito Water District, Fred J. Adjarian, General Manager.
 Oceanside, city of, Marla Doyle, City Engineer.
 Orange County Public Facilities and Resources Department, Vicki L. Wilson, Director.
 Orange County Water District, William R. Mills, Jr., General Manager.
 Padre Dam Municipal Water District, August A. Caires, General Manager.
 Pechanga Indian Reservation, Mark A. Macarro, Tribal Chairman.
 Riverside County Flood Control and Water Conservation District, David P. Zappe, General Manager-Chief Engineer.
 San Bernardino Environmental Public Works Agency-Flood Control District, Ken A. Miller, Director.
 San Bernardino Valley Municipal Water District, Robert L. Reiter, General Manager-Chief Engineer.
 San Diego, city of, Larry Gardner, Water Utilities Director.
 San Diego County Flood Control District, Doug Isbell, Manager.
 San Juan Basin Authority, Donald J. Martinson, Administrator.
 Santa Barbara, city of, Department of Public Works, David H. Johnson, Director.
 Santa Barbara County Flood Control and Water Conservation District and Water Agency, Thomas D. Fayram, Deputy Director.
 Santa Margarita River Watershed, James S. Jenks, Watermaster.
 Santa Maria Valley Water Conservation District, Debi Askew, Secretary.
 Santa Ynez River Water Conservation District, Bruce A. Wales, General Manager.
 Sweetwater Authority, Al R. Sorensen, General Manager.
 United Water Conservation District, Ms. Dana L. Wischart, General Manager.
 Ventura County Public Works Agency, Ronald C. Coons, Director.

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

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

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the 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 effects 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

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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 constituents 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 atmospheric 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

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1119750, which appears just to the left of the station name, includes the two-digit part number "11" plus the six-digit downstream-order number "19750." 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).

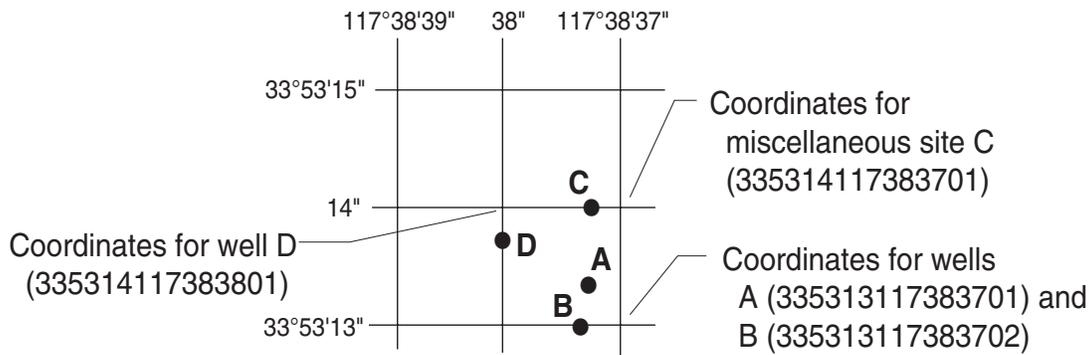


Figure 1. System for numbering miscellaneous sites (latitude and longitude).

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-

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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.

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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

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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.

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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 $1 \text{ ft}^3/\text{s}$, to the nearest tenth between 1.0 and $10 \text{ ft}^3/\text{s}$, to whole numbers between 10 and $1,000 \text{ ft}^3/\text{s}$, and to three significant figures for more than $1,000 \text{ ft}^3/\text{s}$. 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.

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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 ($\mu\text{g/L}$) 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

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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.

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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.

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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](#)”)

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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:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

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 ($\mu\text{m}^3/\text{mL}$) 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, ft³/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-foot" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/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, (ft³/s)/mi²] 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](#)")

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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 CaCO₃) 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:

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

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 faecalis*, *Streptococcus faecium*, *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 (*Pyrrophyta*) 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 (CaCO₃).

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>

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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:

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

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")

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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, $\mu\text{g/g}$) 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, $\mu\text{g/kg}$) 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, $\mu\text{g/L}$) 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, $\mu\text{S/cm}$) 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.

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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 (m²), 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
Silt004–.062	Sedimentation
Sand062–2.0	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 [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] 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 [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] 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](#)")

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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](#)")

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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	<i>Hexagenia</i>
Species	<i>Hexagenia limbata</i>

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

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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:

Filter 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 RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

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](#)")

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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.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

- 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 programmed 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.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

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.

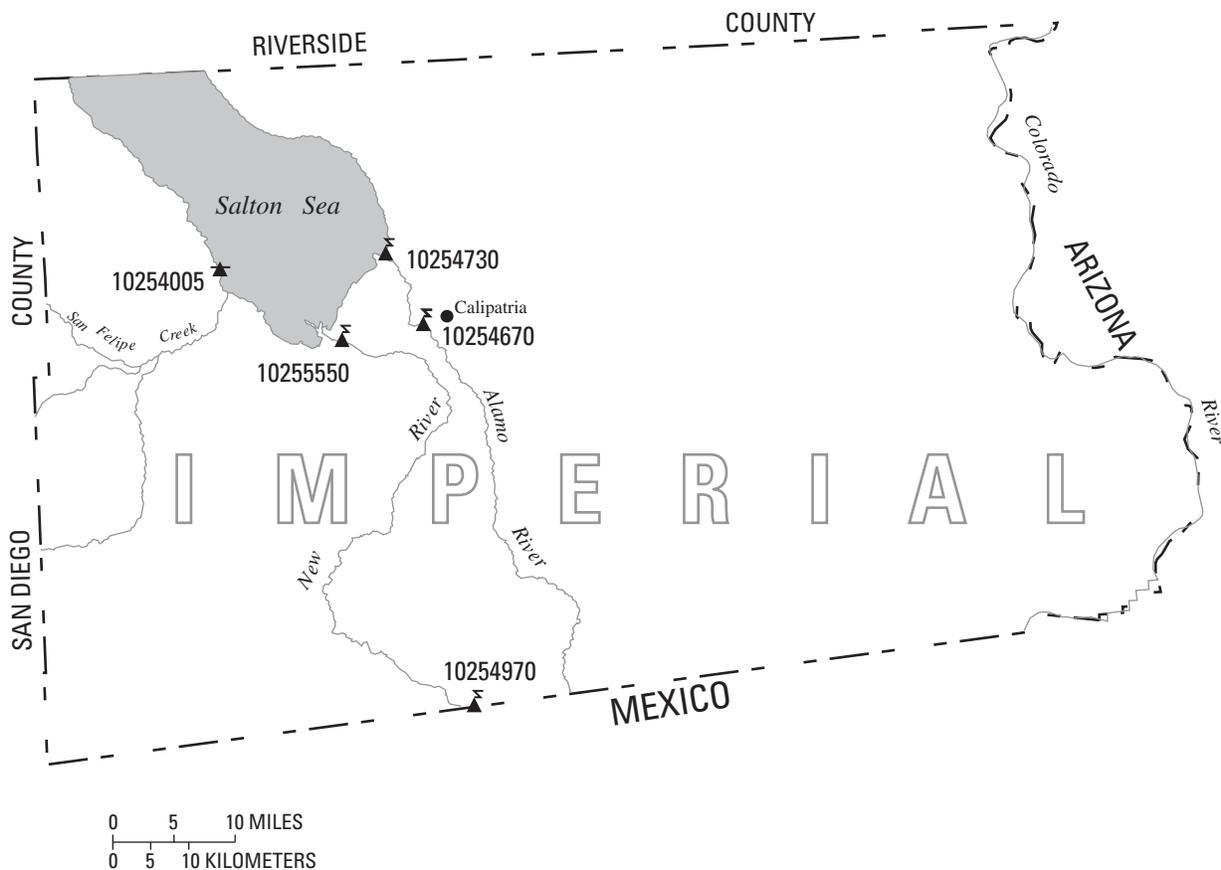
Section B. Instruments for Measurement of Discharge

- 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.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station (Telephone and Modem or Data-Collection Platform)
- ★ Reservoir Site and Elevations

Figure 2. Location of discharge stations in Imperial County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

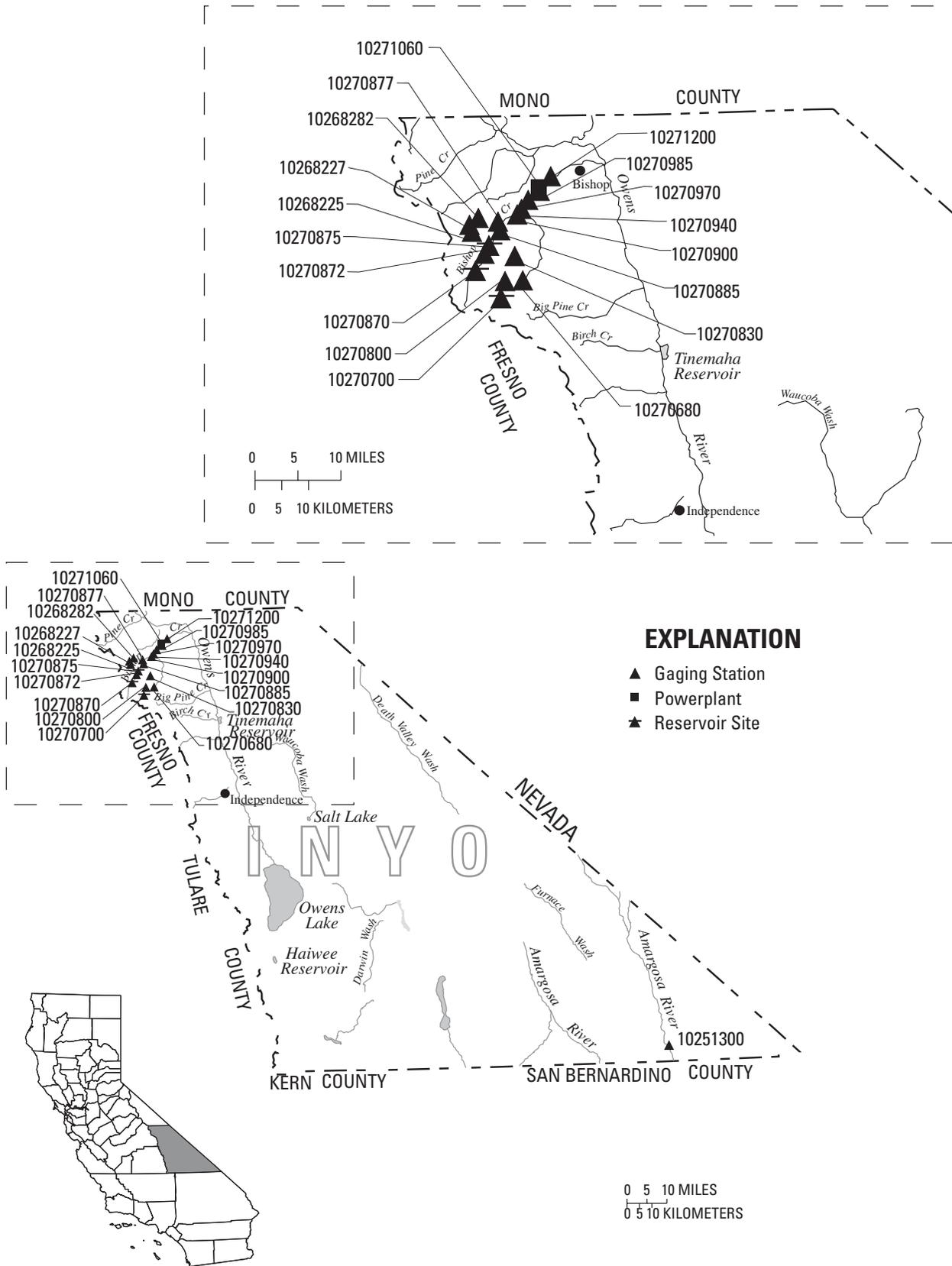


Figure 3. Location of discharge stations in Inyo County.

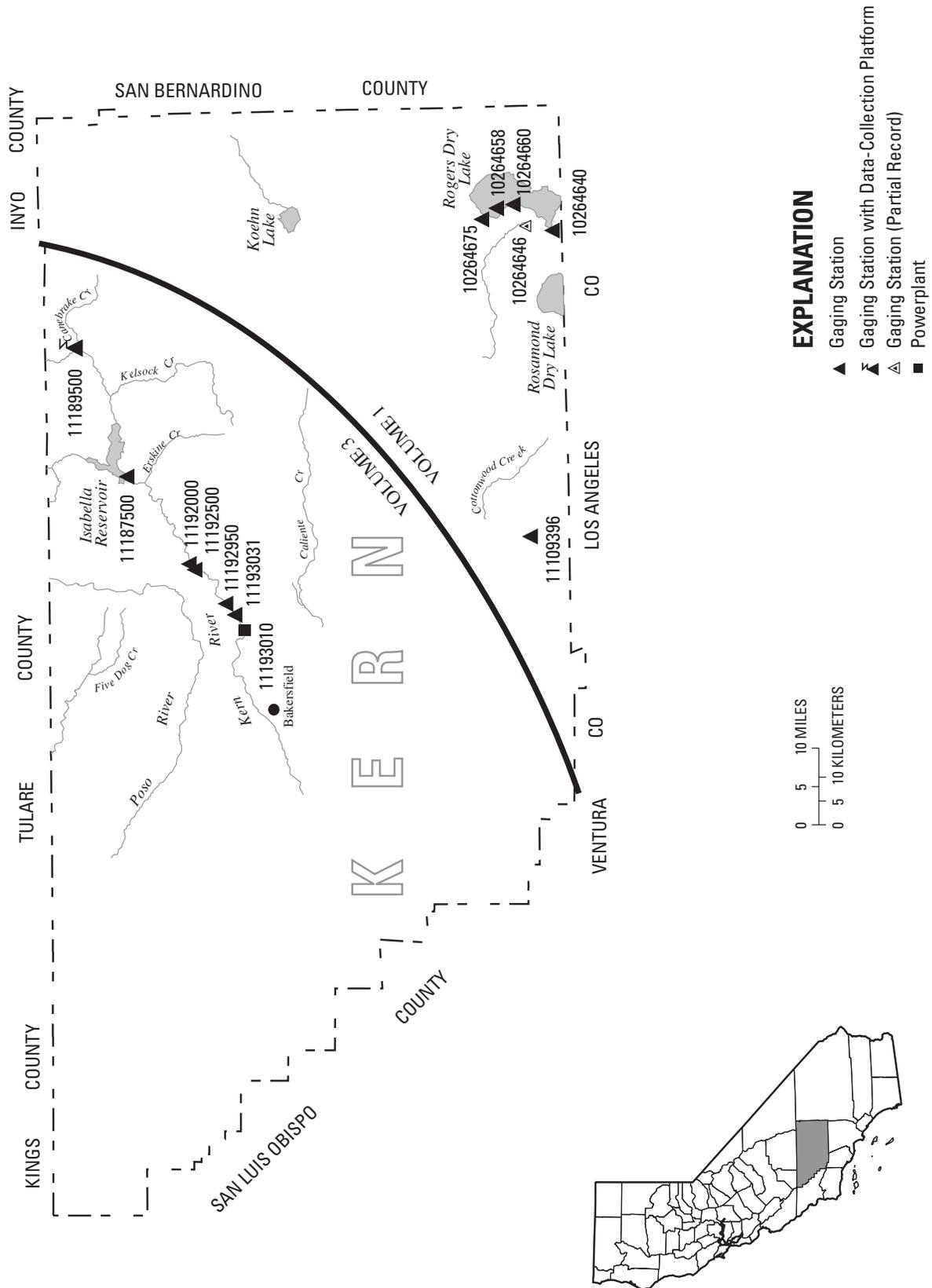


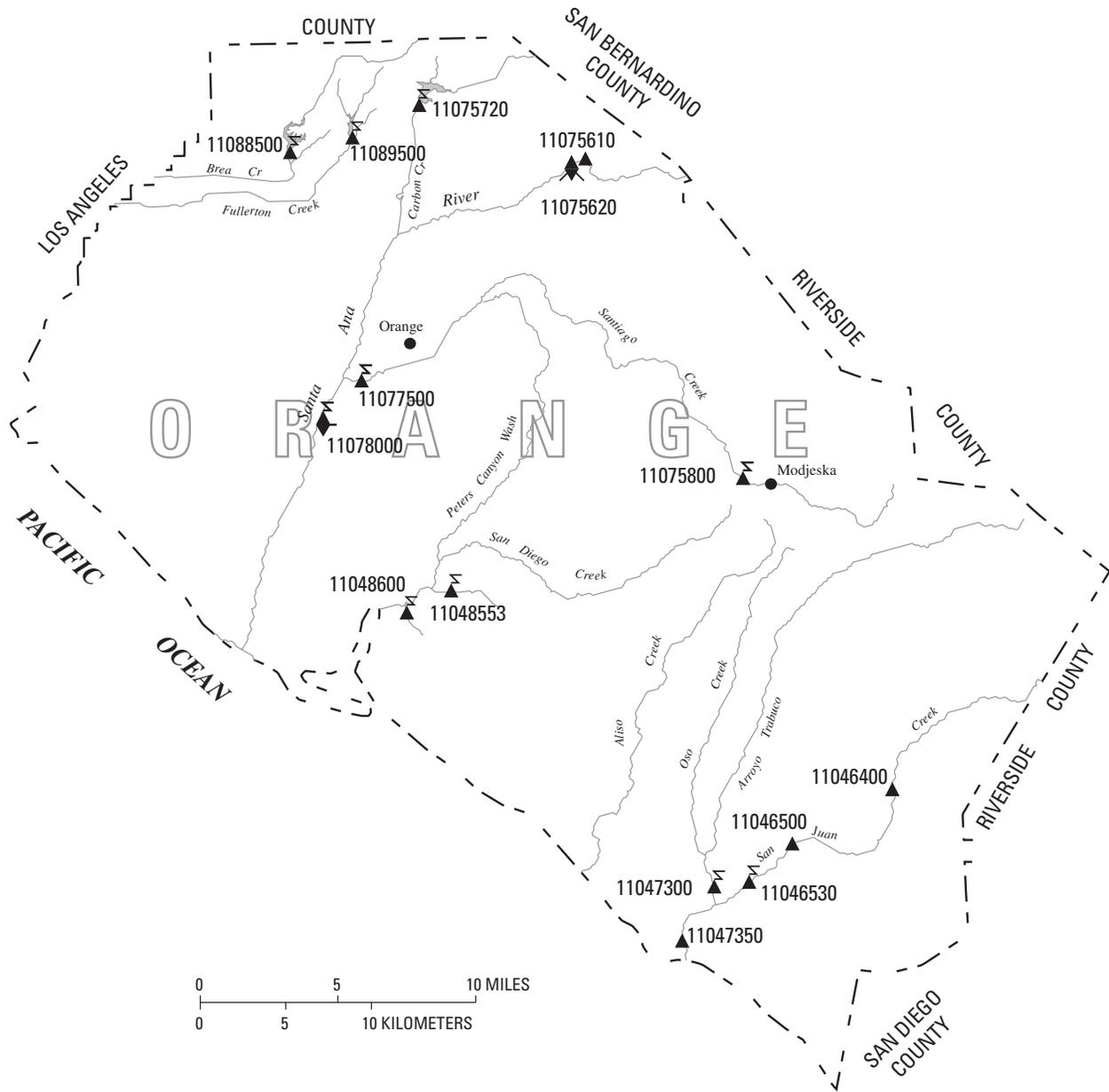
Figure 4. Location of discharge stations in Kern County.
 (NOTE: Records for stations 11187500 through 11193031 published in volume 3.)

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station
- ▲ (with telephone/modem icon) Gaging Station with Telephone and Modem or Data-Collection Platform
- ▲ (with diamond icon) Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Sediment)
- ▲ (with star icon) Gaging and Water-Quality Station (Chemical, Temperature)

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

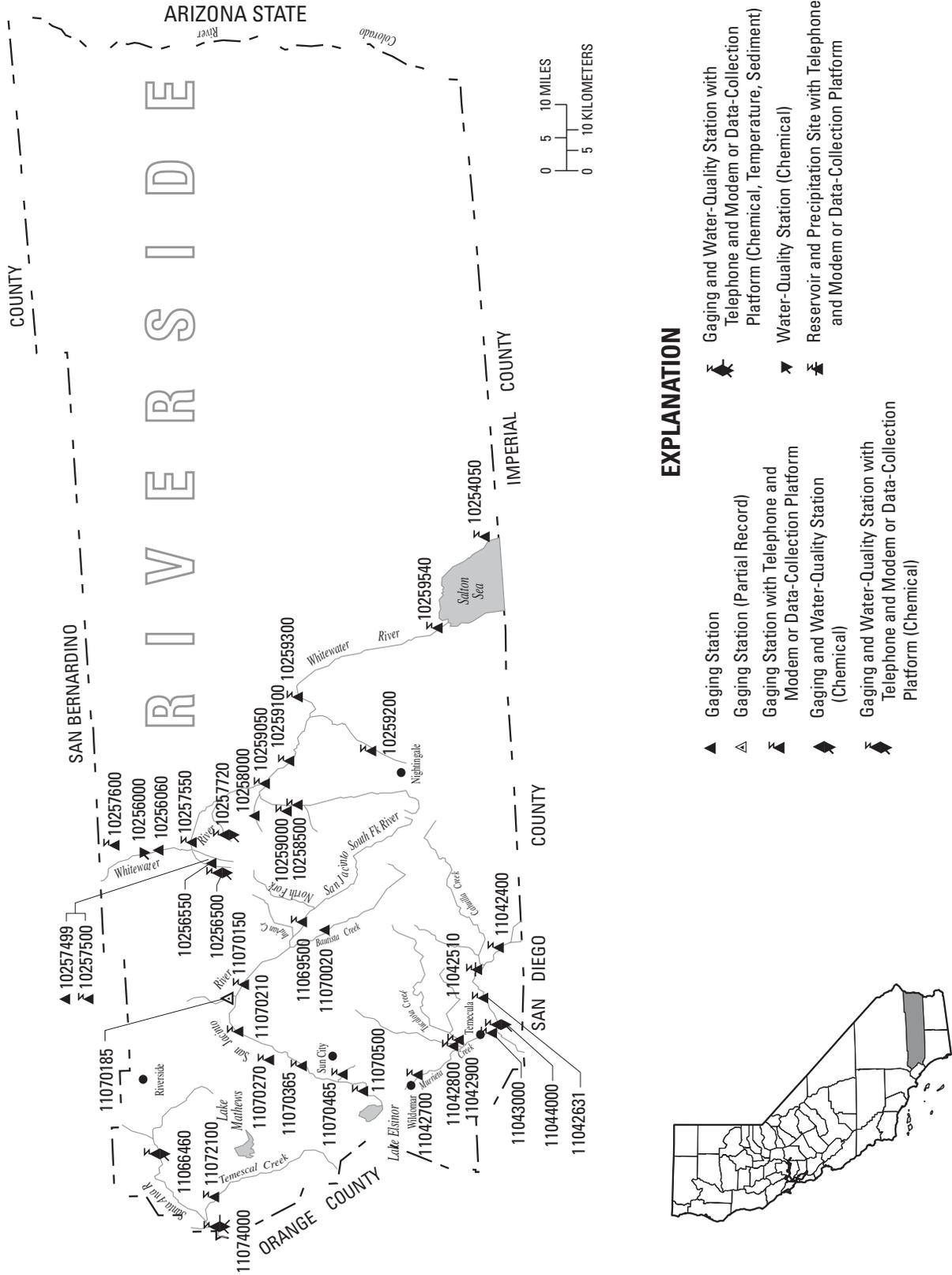
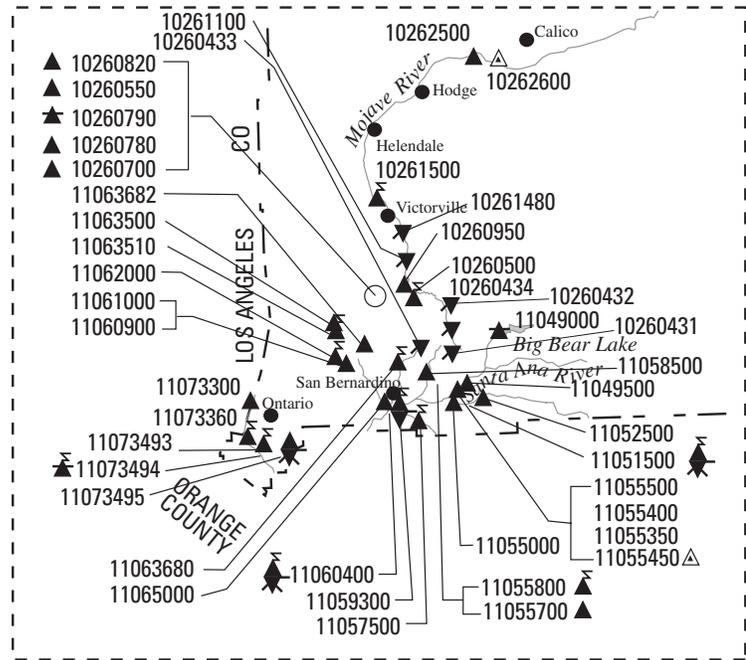


Figure 8. Location of discharge and water-quality stations in Riverside County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station
- △ Gaging Station (Partial Record)
- ▲ Gaging Station with Telephone and Modem or Data-Collection Platform
- ◆ Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Sediment)
- ▲ Gaging and Water-Quality Station (Sediment, Chemical, Temperature)
- ▲ Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Sediment, Chemical, Temperature)
- ▲ Water-Quality Station (Chemical)
- ▲ Reservoir Site
- ▲ Reservoir Site with Data-Collection Platform

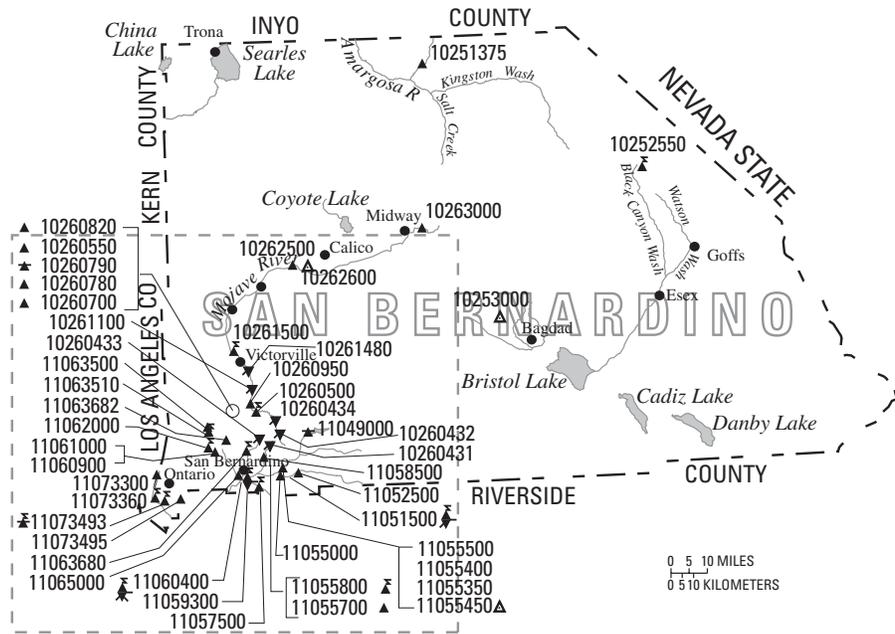


Figure 9. Location of discharge and water-quality stations in San Bernardino County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- ▲ Gaging Station
- ▲ Gaging Station with Telephone and Modem or Data-Collection Platform
- ▲ Gaging and Water-Quality Station (Chemical, Temperature)
- ▲ Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Chemical)
- ▲ Water-Quality Station (Chemical, Temperature)

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001



EXPLANATION

- | | |
|--|---|
| ▲ Gaging Station | ◆ Gaging and Water-Quality Station (Chemical, Temperature) |
| ▲ Gaging Station with Telephone and Modem or Data-Collection Platform | ◆ Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Chemical, Temperature) |
| ▲ Gaging Station (Partial Record) | ▲ Reservoir Site and Contents |
| ◆ Gaging and Water-Quality Station (Sediment) | ▲ Reservoir Site and Contents with Telephone and Modem or Data-Collection Platform |
| ◆ Gaging and Water-Quality Station (Chemical) | ◆ Reservoir Site and Contents and Water-Quality Station (Chemical) |
| ◆ Gaging and Water-Quality Station with Telephone and Modem or Data-Collection Platform (Chemical) | ✕ Water-Quality Station (Chemical, Temperature) |
| | ▼ Water-Quality Station (Chemical) |

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

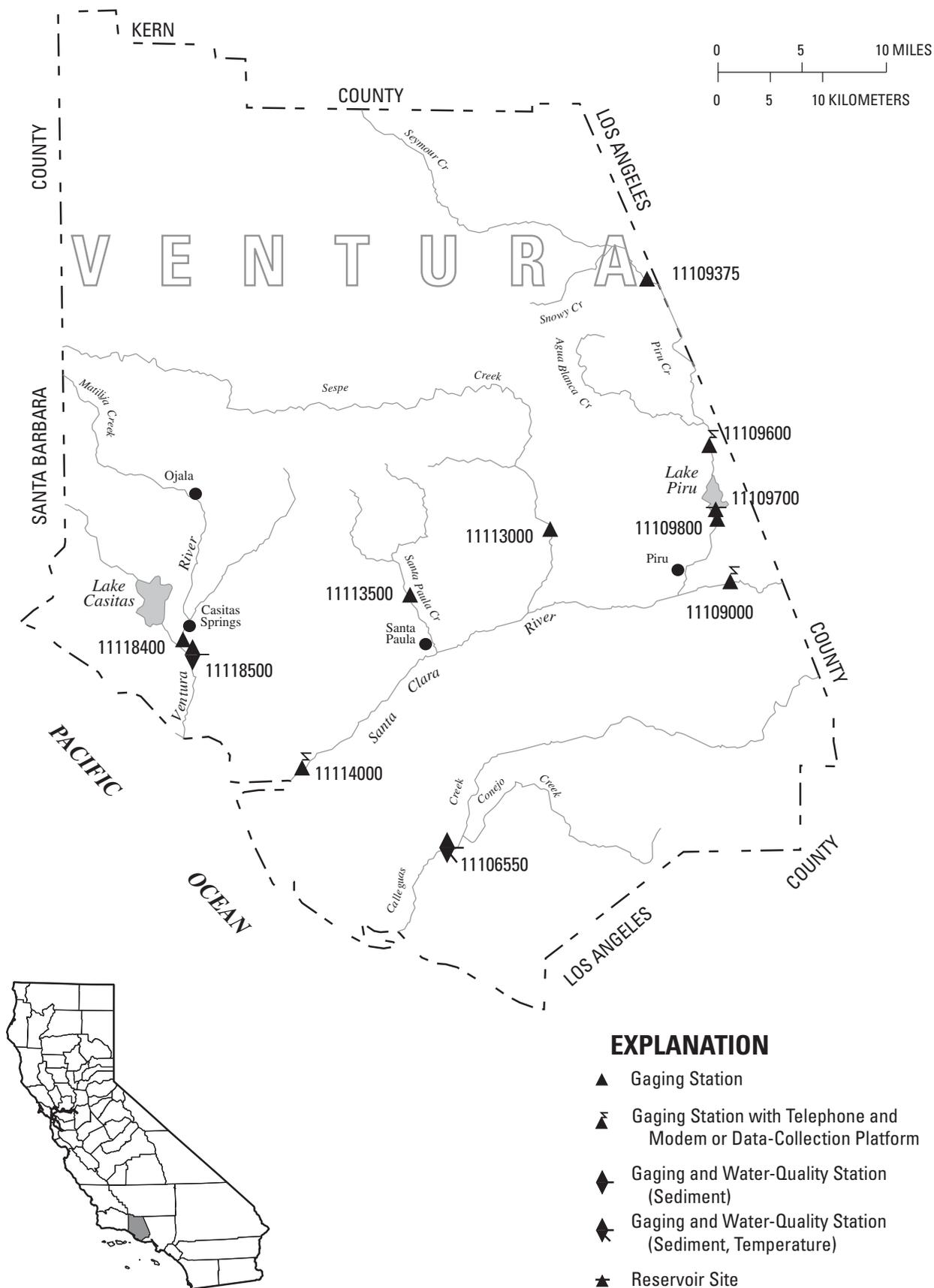


Figure 12. Location of discharge and water-quality stations in Ventura County.

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2001

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

Remark Codes

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
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 ($\mu\text{g/L}$) 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 $\mu\text{g/L}$ 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 available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

10251300 AMARGOSA RIVER AT TECOPA, CA

LOCATION.—Lat 35°50'53", long 116°13'43", in NW 1/4 NW 1/4 SE 1/4 sec.9, T.20 N., R.07 E., Inyo County, Hydrologic Unit 18090202, on right bank, 20 ft upstream from Old Spanish Trail Road, and 0.2 mi west of Tecopa.

DRAINAGE AREA.—3,090 mi², approximately, much of which is noncontributing.

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

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

REMARKS.—Records fair. City of Tecopa pumps water for municipal use upstream. These data are reviewed and provided by the Nevada District Office, U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,600 ft³/s, Aug. 19, 1983, determined from culvert computations and flow over road, gage height, 16.00 ft, datum then in use; no flow some days some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 11	1345	19	4.85	Jul 8	0330	40	4.91
Feb 26	1345	107	5.36	Jul 9	1630	46	4.95
Jul 6	2030	*188	*5.68				

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	.05	.09	.39	.91	.78	8.7	.71	.21	.10	.09	.11	.13
2	.06	.09	.40	.89	.81	5.1	.63	.21	.10	.09	.12	.12
3	.05	.10	.41	.76	.90	3.4	.58	.17	.09	.09	.11	.12
4	.05	.11	.44	.72	1.1	2.4	.61	.16	.09	.09	.10	.13
5	.06	.11	.51	.78	1.1	2.0	.69	.18	.09	.09	.11	.13
6	.05	.11	.53	.87	.93	1.7	.66	.20	.09	23	.12	.13
7	.05	.12	.56	.82	.79	2.3	.67	.20	.09	5.8	.10	.09
8	.05	.11	.60	.96	.87	1.6	.67	.17	e.09	10	.09	.09
9	.05	.12	.60	2.4	.55	1.2	.57	.16	e.09	17	.09	.09
10	.05	.13	.63	1.8	.78	1.1	.55	.15	e.09	15	.09	.10
11	.06	.14	.64	7.0	1.3	1.1	.51	.14	e.08	1.5	.08	.10
12	.06	.14	.66	3.1	1.2	1.1	.54	.14	e.08	.11	.08	.10
13	.06	.13	.62	2.1	1.5	.88	.49	.13	.08	.08	.08	.10
14	.06	.15	.69	1.8	1.6	.93	.46	.13	.08	.09	.09	.11
15	.06	.17	.69	1.7	1.2	.93	.46	.13	.08	.09	.09	.12
16	.06	.16	.71	1.6	1.0	.98	.45	.14	.08	.08	.09	.11
17	.07	.16	.68	1.1	.95	.89	.46	.13	.08	.08	.09	.10
18	.07	.17	.62	.88	.97	.78	.40	.11	.09	.09	.11	.11
19	.07	.19	.55	.98	.83	.85	.32	.11	.09	.09	.10	.12
20	.07	.19	.57	1.1	.74	1.0	.31	.11	.09	.09	.09	.12
21	.07	.21	.66	1.2	.70	.97	.36	.10	.09	.10	.09	.12
22	.07	.24	.73	1.4	.75	.92	.37	.10	.09	.11	.10	.13
23	.07	.25	.89	1.3	.71	.85	.34	.10	.09	.12	.10	.13
24	.08	.26	.89	1.2	.79	.80	.33	.10	.09	.11	.10	.13
25	.08	.32	1.1	1.2	1.5	.88	.32	.10	.09	.11	.10	.13
26	.08	.33	.77	1.5	46	.93	.30	.09	.09	.13	.10	.12
27	.08	.35	.63	2.1	8.8	.94	.30	.10	.09	.11	.10	.12
28	.09	.39	.70	1.6	10	.97	.22	.10	.09	.09	.10	.11
29	.09	.40	.81	1.4	---	.93	.19	.10	.09	.09	.10	.12
30	.09	.40	.85	1.4	---	.73	.21	.09	.09	.10	.10	.13
31	.09	---	.83	1.0	---	.73	---	.09	---	.10	.11	---
TOTAL	2.05	5.84	20.36	47.57	89.15	48.59	13.68	4.15	2.65	74.72	3.04	3.46
MEAN	.066	.19	.66	1.53	3.18	1.57	.46	.13	.088	2.41	.098	.12
MAX	.09	.40	1.1	7.0	46	8.7	.71	.21	.10	23	.12	.13
MIN	.05	.09	.39	.72	.55	.73	.19	.09	.08	.08	.08	.09
AC-FT	4.1	12	40	94	177	96	27	8.2	5.3	148	6.0	6.9

e Estimated.

UPPER AMARGOSA

10251300 AMARGOSA RIVER AT TECOPA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.54	.90	4.20	6.67	11.9	6.55	1.40	.48	.14	.60	6.07	4.30
MAX	39.1	11.4	65.3	56.2	95.6	54.2	13.4	3.19	2.55	3.52	103	93.1
(WY)	1977	1966	1966	1995	1993	1983	1978	1977	1969	1965	1983	1976
MIN	.000	.005	.39	.70	.69	.36	.074	.018	.000	.000	.000	.000
(WY)	1972	1993	1994	1994	1979	1994	1994	1993	1966	1963	1962	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	254.55		315.26			
ANNUAL MEAN	.70		.86		3.76	
HIGHEST ANNUAL MEAN					14.9	
LOWEST ANNUAL MEAN					.22	
HIGHEST DAILY MEAN	26	Feb 17	46	Feb 26	1500	Feb 26 1969
LOWEST DAILY MEAN	.05	Aug 31	.05	Oct 1	.00	Jul 23 1962
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 31	.05	Oct 3	.00	Aug 1 1962
MAXIMUM PEAK FLOW			188	Jul 6	10600	Aug 19 1983
MAXIMUM PEAK STAGE			5.68	Jul 6	16.00	Aug 19 1983
ANNUAL RUNOFF (AC-FT)	505		625		2720	
10 PERCENT EXCEEDS	1.3		1.2		2.4	
50 PERCENT EXCEEDS	.13		.15		.21	
90 PERCENT EXCEEDS	.06		.08		.00	

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

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

DRAINAGE AREA.—3,284 mi².

PERIOD OF RECORD.—February 1999 to September 2001 (discontinued).

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 800 ft³/s, Sep. 12, 1999, gage height, 9.83 ft; no flow at times, many years.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 154 ft³/s, Jan. 11, gage height, 8.85 ft; no flow 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	.16	.14	e.80	1.9	2.0	7.6	2.0	e1.0	.00	.00	.00	.00
2	.13	.14	e.80	1.4	2.0	6.0	1.9	e1.0	.00	.00	.00	.00
3	.11	.13	e.80	.93	2.1	3.2	2.0	e1.0	.00	.00	.00	.00
4	.14	.14	e.80	.84	2.6	2.3	2.0	1.1	.00	1.2	.00	.00
5	.15	.15	e.80	1.1	2.9	1.9	2.3	.74	.00	37	.00	.00
6	.14	.16	e.80	.94	2.3	1.8	2.3	e.50	.00	15	.00	.00
7	.14	.14	e.80	2.1	2.2	3.6	2.5	e.40	.00	e6.0	.00	.00
8	.14	.16	e.80	2.8	2.0	1.9	2.6	.20	.00	2.9	.00	.00
9	.13	.19	e.80	4.0	2.0	1.7	2.4	.03	.00	1.5	.00	.00
10	.12	.23	e.80	4.6	2.2	1.6	2.4	.19	.00	2.1	.00	.00
11	.20	.22	e.80	15	2.5	1.5	2.4	.06	.00	1.7	.00	.00
12	.22	.19	e.90	6.6	2.5	1.5	2.2	.18	.00	.35	.00	.00
13	.21	.21	e.90	2.5	2.7	1.5	2.2	.49	.00	.00	.00	.00
14	.19	.23	e.90	2.4	3.0	1.4	2.3	.31	.00	.00	.00	.00
15	.19	.23	e.90	2.7	2.9	1.4	2.0	.07	.00	.00	.00	.00
16	.18	.22	e.90	2.0	2.9	1.4	1.8	.00	.00	.00	.00	.00
17	.15	.26	e.90	1.5	3.1	1.4	e1.2	.00	.00	.00	.00	.00
18	.14	.28	e.90	1.5	2.5	1.4	e1.2	.00	.00	.00	.00	.00
19	.15	.26	e.90	1.9	2.1	1.3	e1.2	.00	.00	.00	.00	.00
20	.12	.26	e.90	2.3	2.0	1.3	e1.1	.00	.00	.00	.00	.00
21	.12	.26	e.90	2.3	2.0	1.3	e1.1	.00	.00	.00	.00	.00
22	.42	.29	e.90	2.4	1.9	1.3	e1.0	.00	.00	.00	.00	.00
23	.53	.38	e1.0	2.3	1.8	1.3	e1.0	.00	.00	.00	.00	.00
24	.94	.30	e1.0	2.3	1.9	1.3	e1.0	.00	.00	.00	.00	.00
25	.37	.40	e1.0	2.3	2.0	1.5	e1.0	.00	.00	.00	.00	.00
26	.15	.43	e1.0	2.5	13	1.9	e.90	.00	.00	.00	.00	.00
27	.13	.46	.96	3.1	12	1.9	e.90	.00	.00	.00	.00	.00
28	.14	.51	1.6	3.0	11	1.8	.97	.00	.00	.00	.00	.00
29	.20	.70	1.9	2.6	---	1.8	1.3	.00	.00	.00	.00	.00
30	.23	e.80	2.3	2.2	---	1.8	e1.0	.00	.00	.00	.00	.00
31	.13	---	2.7	2.1	---	1.9	---	.00	.00	.00	.00	---
TOTAL	6.47	8.47	32.16	86.11	94.1	63.5	50.17	7.27	0.00	67.75	0.00	0.00
MEAN	.21	.28	1.04	2.78	3.36	2.05	1.67	.23	.000	2.19	.000	.000
MAX	.94	.80	2.7	15	13	7.6	2.6	1.1	.00	37	.00	.00
MIN	.11	.13	.80	.84	1.8	1.3	.90	.00	.00	.00	.00	.00
AC-FT	13	17	64	171	187	126	100	14	.00	134	.00	.00

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

MEAN	.62	.80	1.50	2.60	5.82	3.01	2.31	1.02	.39	1.18	.27	1.49
MAX	1.03	1.31	1.96	2.78	8.19	4.56	3.84	2.15	.97	2.19	.68	4.29
(WY)	2000	2000	2000	2001	2000	2000	1999	1999	1999	2001	1999	1999
MIN	.21	.28	1.04	2.43	3.36	2.05	1.42	.23	.000	.016	.000	.000
(WY)	2001	2001	2001	2000	2001	2001	2000	2001	2001	2000	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001
ANNUAL TOTAL	580.95	416.00	
ANNUAL MEAN	1.59	1.14	1.48
HIGHEST ANNUAL MEAN			1.82
LOWEST ANNUAL MEAN			1.14
HIGHEST DAILY MEAN	40	37	40
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		154	800
MAXIMUM PEAK STAGE		8.85	9.83
ANNUAL RUNOFF (AC-FT)	1150	825	1070
10 PERCENT EXCEEDS	3.0	2.4	2.5
50 PERCENT EXCEEDS	.45	.28	.99
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

BRISTOL LAKE BASIN

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION.—Lat 35°14'42", long 115°17'53", in NW 1/4 NE 1/4 sec.6, T.13 N., R.16 E., San Bernardino County, Hydrologic Unit 15030102, on left bank, and 6.6 mi south of Ivanpah.

DRAINAGE AREA.—0.84 mi².

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

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

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 814 ft³/s, Aug. 12, 1979, gage height, 5.75 ft, from rating curve extended above 2.5 ft³/s, on basis of slope-conveyance studies, maximum gage height, 9.75 ft, July 15, 1996; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10 ft³/s, from rating curve extended above 2.5 ft³/s, on basis of slope-conveyance studies, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 7	0245	4.0	1.03

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	.05	1.3	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.04	.57	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.06	.47	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.20	.23	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.18	.32	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.14	.36	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.10	2.5	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.08	.62	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.07	.31	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.06	.22	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.07	.07	.11	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.09	.07	.07	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.07	.07	.05	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.06	.08	.03	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.06	.08	.02	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.06	.08	.02	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.06	.08	.01	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.06	.08	.01	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.04	.08	.01	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.05	.08	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.05	.07	.01	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.06	.07	.01	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.06	.07	.01	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.06	.07	.01	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.05	.09	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.04	.20	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.04	.64	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.06	1.5	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.06	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.06	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.05	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1.21	4.46	7.28	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.039	.16	.23	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.09	1.5	2.5	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	2.4	8.8	14	.00	.00	.00	.00	.00	.00

10252550 CARUTHERS CREEK NEAR IVANPAH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.080	.030	.11	.18	.20	.32	.075	.001	.001	.14	.24	.031
MAX	2.81	.67	1.27	2.22	1.44	2.23	.95	.010	.054	2.45	2.70	.34
(WY)	1977	1966	1966	1993	1980	1992	1965	1983	1972	1984	1979	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1964	1964	1964	1964	1967	1964	1965	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL TOTAL	12.59		12.95			
ANNUAL MEAN	.034		.035		.12	
HIGHEST ANNUAL MEAN					.36	
LOWEST ANNUAL MEAN					.001	
HIGHEST DAILY MEAN	3.0	Feb 21	2.5	Mar 7	80	Aug 12 1979
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1963
MAXIMUM PEAK FLOW			4.0	Mar 7	814	Aug 12 1979
MAXIMUM PEAK STAGE			1.03	Mar 7	9.75	Jul 15 1996
ANNUAL RUNOFF (AC-FT)	25		26		84	
10 PERCENT EXCEEDS	.07		.07		.07	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

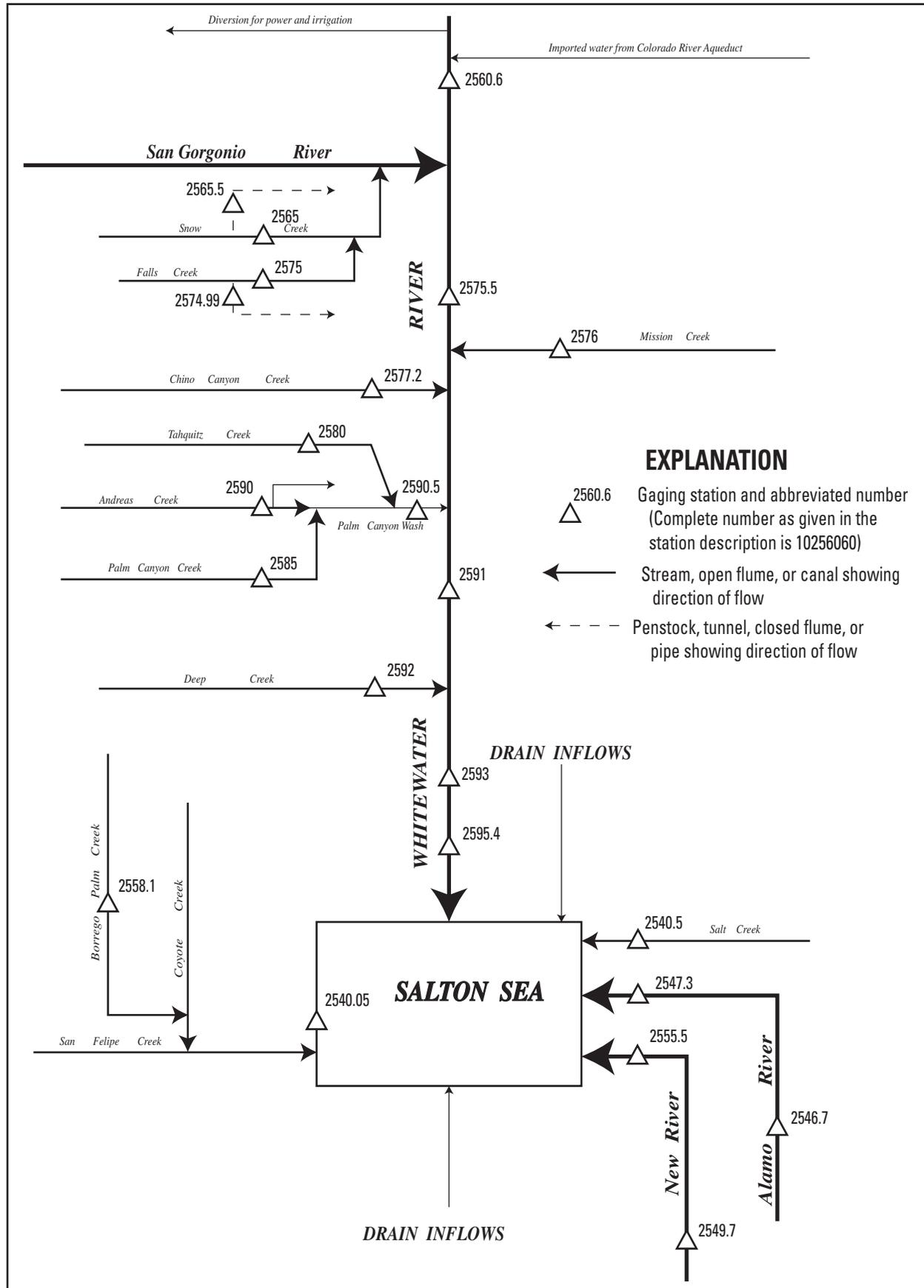


Figure 13. Diversions and storage in Salton Sea Basin.

SALTON SEA BASIN

FLOW FROM MEXICO AT INTERNATIONAL BOUNDARY

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

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Alamo River	170	192	216	239	202	216	187	169	146	159	130	85
New River	12,410	11,640	13,520	14,930	14,170	18,240	14,420	12,160	9,870	10,730	10,750	9,770

CAL YR 2000:	Alamo River	2,060 acre-ft	WTR YR 2001:	2,110 acre-ft
CAL YR 2000:	New River	163,400 acre-ft	WTR YR 2001:	152,600 acre-ft

10254050 SALT CREEK NEAR MECCA, CA

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

DRAINAGE AREA.—269 mi².

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

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

REMARKS.—Records fair above 1 ft³/s and poor below. No regulation or diversion upstream from station. No discharge records computed above 20 ft³/s since October 1990. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge (January 1961 to September 1990), 9,900 ft³/s, Sept. 24, 1976, gage height, 16.8 ft, present datum, from floodmarks, from rating curve extended above 20 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 19.4 ft, present datum, Mar. 2, 1983 (backwater from Salton Sea and channel vegetation); no flow for many days since 1994.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.3	1.7	2.0	5.3	1.6	.30	.00	.00	.00	.00
2	.00	.00	1.4	1.8	1.9	3.8	1.6	.25	.00	.00	.00	.00
3	.00	.00	1.5	1.8	1.8	3.1	1.5	.17	.00	.00	.00	.00
4	.00	.00	1.4	1.8	1.9	2.9	1.5	.14	.00	.00	.00	.00
5	.00	.00	1.5	1.8	2.1	2.7	1.4	.11	.00	.00	.00	.00
6	.00	.00	1.5	1.9	2.2	2.7	1.4	.03	.00	.00	.00	.00
7	.00	.00	1.5	1.9	2.2	3.0	1.4	.00	.00	.00	.00	.00
8	.00	.00	1.6	2.0	2.2	3.6	1.4	.00	.00	.00	.00	.00
9	.00	.00	1.6	2.0	2.0	3.3	1.2	.00	.00	.00	.00	.00
10	.00	.15	1.6	2.1	1.9	3.0	1.3	.00	.00	.00	.00	.00
11	.00	.39	1.7	2.2	2.0	2.8	1.3	.00	.00	.00	.00	.00
12	.00	.51	1.6	2.7	2.1	2.6	1.3	.00	.00	.00	.00	.00
13	.00	.58	1.6	3.2	2.4	2.5	1.3	.00	.00	.00	.00	.00
14	.00	.64	1.6	2.7	2.7	2.4	1.3	.00	.00	.00	.00	.00
15	.00	.69	1.6	2.5	2.8	2.4	1.2	.00	.00	.00	.00	.00
16	.00	.74	1.6	2.4	2.5	2.3	1.2	.00	.00	.00	.00	.00
17	.00	.80	1.6	3.1	2.4	2.3	1.1	.00	.00	.00	.00	.00
18	.00	.80	1.6	2.6	2.4	2.3	1.0	.00	.00	.00	.00	.00
19	.00	.78	1.5	2.1	2.4	2.2	.95	.00	.00	.00	.00	.00
20	.00	.78	1.4	1.9	2.2	2.2	.92	.00	.00	.00	.00	.00
21	.00	.89	1.5	1.9	2.2	2.2	.94	.00	.00	.00	.00	.00
22	.00	.96	1.5	2.0	2.2	2.1	.84	.00	.00	.00	.00	.00
23	.00	1.0	1.6	2.0	2.2	2.0	.82	.00	.00	.00	.00	.00
24	.00	1.0	1.6	2.0	2.2	2.0	.81	.00	.00	.00	.00	.00
25	.00	1.1	1.6	1.9	2.1	1.9	.78	.00	.00	.00	.00	.00
26	.00	1.1	1.6	2.0	2.9	1.9	.69	.00	.00	.00	.00	.00
27	.00	1.2	1.4	2.0	5.6	1.8	.58	.00	.00	.00	.00	.00
28	.00	1.2	1.4	2.2	6.0	1.8	.50	.00	.00	.00	.00	.00
29	.00	1.3	1.6	2.1	---	1.8	.42	.00	.00	.00	.00	.00
30	.00	1.3	1.7	2.1	---	1.7	.35	.00	.00	.00	.00	.00
31	.00	---	1.7	2.1	---	1.6	---	.00	---	.00	.00	---
TOTAL	0.00	17.91	47.9	66.5	69.5	78.2	32.60	1.00	0.00	0.00	0.00	0.00
MEAN	.000	.60	1.55	2.15	2.48	2.52	1.09	.032	.000	.000	.000	.000
MAX	.00	1.3	1.7	3.2	6.0	5.3	1.6	.30	.00	.00	.00	.00
MIN	.00	.00	1.3	1.7	1.8	1.6	.35	.00	.00	.00	.00	.00
AC-FT	.00	36	95	132	138	155	65	2.0	.00	.00	.00	.00

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

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	
MEAN	5.61	7.45	8.05	9.86	11.6	13.5	5.56	3.86	2.85	3.40	5.05	7.02																		
MAX	12.6	22.1	14.8	18.8	45.5	137	11.9	12.7	7.50	21.0	55.6	76.5																		
(WY)	1964	1981	1966	1977	1980	1983	1980	1980	1975	1986	1983	1976																		
MIN	1.55	1.05	1.59	4.13	4.26	3.79	2.37	1.49	.86	.41	.70	.59																		
(WY)	1990	1979	1979	1990	1990	1990	1986	1986	1989	1989	1989	1978																		

SUMMARY STATISTICS

WATER YEARS 1962 - 1990

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

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

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

PERIOD OF RECORD.—October 1979 to current year. Records prior to October 1979 in files of the Imperial Irrigation District.

CHEMICAL DATA: Water years 1969–70, 1975–77, 1979–94.

BIOLOGICAL DATA: Water years 1979–81.

SPECIFIC CONDUCTANCE: Water years 1969–70, 1975–77, 1979–84.

WATER TEMPERATURE: Water years 1969–70, 1975–77, 1979–84.

SEDIMENT DATA: Water years 1979–94.

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

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

REMARKS.—Records excellent below 950 ft³/s and good above. Flow is mainly return from irrigated areas. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,980 ft³/s, Mar. 27, 1992, gage height, 6.56 ft, from rating curve extended above 1,000 ft³/s; maximum gage height, 7.20 ft, Jan. 17, 1993 (affected by backwater); minimum daily, 259 ft³/s, Jan. 2, 1985.

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	910	639	623	506	537	423	865	906	839	865	800	741
2	884	669	614	404	522	361	856	910	847	876	844	746
3	902	640	598	522	548	348	829	884	821	831	838	750
4	907	665	523	625	531	358	889	879	766	819	783	757
5	855	662	563	704	484	357	893	898	734	840	788	785
6	871	644	556	708	543	366	874	914	768	865	777	817
7	844	596	586	645	595	470	894	881	790	863	731	809
8	786	626	628	556	622	479	913	877	811	869	745	831
9	837	653	616	417	610	461	890	891	813	824	763	780
10	839	677	615	408	623	450	923	907	779	815	734	758
11	831	728	582	402	620	442	922	944	726	800	714	761
12	797	720	569	388	606	401	941	911	745	774	719	843
13	782	662	588	352	631	442	979	924	789	777	716	865
14	790	658	561	365	657	529	940	958	759	782	696	847
15	803	719	573	424	635	663	974	929	775	786	709	841
16	756	672	583	456	622	750	914	946	783	807	785	796
17	751	676	595	516	652	709	928	972	813	751	758	717
18	820	658	556	491	656	673	931	936	783	774	779	763
19	786	660	579	488	639	704	925	904	755	795	693	844
20	817	635	608	473	620	817	940	894	734	818	675	841
21	791	668	585	507	647	790	953	889	773	854	666	841
22	729	689	606	495	686	805	946	867	853	809	685	859
23	732	641	607	503	731	841	850	888	865	828	697	840
24	723	580	551	528	783	856	848	882	835	787	752	785
25	637	581	419	506	738	871	896	885	736	830	835	796
26	624	607	371	540	743	881	903	900	747	807	840	817
27	638	569	461	565	642	880	955	878	765	760	822	816
28	633	621	614	519	648	870	958	822	847	828	747	813
29	608	652	637	435	---	883	950	837	850	813	678	840
30	595	645	651	487	---	895	899	879	859	785	648	797
31	625	---	605	551	---	901	---	893	---	764	674	---
TOTAL	23903	19512	17823	15486	17571	19676	27378	27885	23760	25196	23091	24096
MEAN	771	650	575	500	628	635	913	900	792	813	745	803
MAX	910	728	651	708	783	901	979	972	865	876	844	865
MIN	595	569	371	352	484	348	829	822	726	751	648	717
AC-FT	47410	38700	35350	30720	34850	39030	54300	55310	47130	49980	45800	47790

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, 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	780	667	553	530	603	815	951	846	710	707	706	730
MAX	895	809	666	640	718	947	1208	1000	888	888	846	847
(WY)	1992	1991	1991	1993	1991	1995	1994	1994	1994	1994	1994	1994
MIN	655	569	379	392	445	635	812	706	515	556	593	632
(WY)	1982	1982	1986	1995	1980	2001	1986	1982	1982	1982	1982	1986

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	266544		265377			
ANNUAL MEAN	728		727		717	
HIGHEST ANNUAL MEAN					833	
LOWEST ANNUAL MEAN					628	
HIGHEST DAILY MEAN	991	Apr 9	979	Apr 13	4670	Mar 27 1992
LOWEST DAILY MEAN	348	Jan 3	348	Mar 3	259	Jan 2 1985
ANNUAL SEVEN-DAY MINIMUM	514	Dec 21	383	Mar 1	277	Dec 31 1984
MAXIMUM PEAK FLOW			1070		5980	
MAXIMUM PEAK STAGE			2.72		(a)7.20	
ANNUAL RUNOFF (AC-FT)	528700		526400		519300	
10 PERCENT EXCEEDS	908		899		922	
50 PERCENT EXCEEDS	719		758		708	
90 PERCENT EXCEEDS	586		512		515	

(a) Affected by backwater.

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA

LOCATION.—Lat 32°39'57", long 115°30'08", in SW 1/4 SE 1/4 sec.14, T.17 S., R.14 E., Imperial County, Hydrologic Unit 18100200, on left bank, 200 ft downstream from bridge on Second Street, and 0.2 mi downstream from International Boundary in Calexico.

PERIOD OF RECORD.—October 1979 to current year. October 1945 to September 1979, in files of Imperial Irrigation District.

CHEMICAL DATA: Water years 1969–71, 1973–85.

BIOLOGICAL DATA: Water years 1973–81.

SPECIFIC CONDUCTANCE: Water years 1974–81.

WATER TEMPERATURE: Water years 1974–81.

SEDIMENT DATA: Water years 1975–85.

GAGE.—Water-stage recorder. Elevation of gage is 35 ft below sea level, from topographic map.

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

COOPERATION.—Gage height record provided by Imperial Irrigation District for the following dates: July 22, July 30 to Aug. 8, and Aug. 20, 21.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 833 ft³/s, Dec. 9, 1982, Sept. 25, 1997, gage height, 14.73 ft; minimum daily, 98 ft³/s, Nov. 23, 28, 29, 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	181	184	207	199	261	479	247	247	163	163	154	166
2	177	190	205	204	236	493	243	261	165	170	152	170
3	174	195	214	221	224	447	245	273	167	178	169	174
4	182	186	225	212	224	379	244	267	172	176	174	173
5	187	181	247	211	226	333	237	237	171	172	166	180
6	188	184	269	209	225	335	226	227	178	195	168	181
7	190	180	248	206	225	315	226	216	176	192	170	169
8	191	178	239	211	228	311	225	214	171	191	185	166
9	204	183	221	227	222	305	242	218	165	194	189	165
10	199	187	215	234	216	285	232	219	160	206	182	171
11	207	189	210	224	219	287	240	209	156	214	175	172
12	199	183	226	229	223	282	237	198	158	207	173	174
13	189	184	219	236	239	269	230	184	157	197	182	168
14	191	189	215	259	253	276	217	181	158	188	190	164
15	196	197	221	322	249	270	217	180	155	181	198	164
16	200	201	228	360	245	263	225	173	159	187	198	164
17	206	192	218	288	236	259	254	170	160	194	184	168
18	205	188	233	243	238	254	261	175	159	187	172	172
19	202	183	222	230	256	250	229	176	161	179	167	161
20	194	186	211	225	284	251	221	171	163	166	163	147
21	189	193	218	220	289	259	216	174	164	163	171	140
22	193	175	219	241	267	259	248	174	167	156	203	146
23	232	103	212	231	250	261	275	193	170	147	199	149
24	224	261	205	242	239	260	278	194	166	151	178	152
25	124	311	198	241	259	258	269	183	162	153	175	158
26	119	202	197	229	311	249	272	174	163	150	160	164
27	326	210	220	240	368	259	260	164	180	153	158	164
28	408	224	224	251	433	264	252	166	185	155	166	169
29	204	233	211	277	---	261	254	175	177	151	170	163
30	191	217	213	310	---	265	250	173	166	148	167	154
31	187	---	206	295	---	256	---	165	---	147	163	---
TOTAL	6259	5869	6816	7527	7145	9194	7272	6131	4974	5411	5421	4928
MEAN	202	196	220	243	255	297	242	198	166	175	175	164
MAX	408	311	269	360	433	493	278	273	185	214	203	181
MIN	119	103	197	199	216	249	216	164	155	147	152	140
AC-FT	12410	11640	13520	14930	14170	18240	14420	12160	9870	10730	10750	9770

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

MEAN	221	213	254	258	265	282	286	261	220	228	258	238
MAX	370	334	374	366	375	395	452	389	321	394	441	399
(WY)	1984	1985	1987	1987	1987	1986	1986	1984	1984	1984	1984	1983
MIN	126	108	112	162	179	190	188	177	154	139	139	152
(WY)	1997	1997	1997	1996	1991	1995	1996	1990	1992	1994	1996	1992

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1980 - 2001
ANNUAL TOTAL	82368	76947	
ANNUAL MEAN	225	211	249
HIGHEST ANNUAL MEAN			362
LOWEST ANNUAL MEAN			181
HIGHEST DAILY MEAN	408	Oct 28	493
LOWEST DAILY MEAN	103	Nov 23	103
ANNUAL SEVEN-DAY MINIMUM	174	Nov 17	150
MAXIMUM PEAK FLOW			632
MAXIMUM PEAK STAGE			13.20
ANNUAL RUNOFF (AC-FT)	163400	152600	180000
10 PERCENT EXCEEDS	272	267	360
50 PERCENT EXCEEDS	218	199	231
90 PERCENT EXCEEDS	185	163	161

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, CA

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

DRAINAGE AREA.—21.8 mi².

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

REVISED RECORDS.—WSP 2128: Drainage area.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,640 ft³/s, Aug. 16, 1979, gage height, 9.8 ft, from floodmarks, on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15 ft³/s, or maximum, from rating curve extended above 72 ft³/s on basis of slope-area measurements at gage heights 7.50 and 9.80 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	1515	14	2.79

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	.22	.55	2.0	.45	.19	.00	.00	.00	.00
2	.00	.00	.00	.22	.52	1.4	.48	.16	.00	.00	.00	.00
3	.00	.00	.00	.22	.52	1.0	.47	.16	.00	.00	.00	.00
4	.00	.00	.00	.22	.49	.88	.48	.14	.00	.00	.00	.00
5	.00	.00	.00	.22	.47	.77	.48	.14	.00	.00	.00	.00
6	.00	.00	.00	.23	.46	1.2	.48	.13	.00	.00	.00	.00
7	.00	.00	.02	.24	.48	2.1	.56	.12	.00	.00	.00	.00
8	.00	.00	.11	.25	.48	1.2	.88	.11	.00	.00	.00	.00
9	.00	.00	.12	.26	.47	1.0	.71	.09	.00	.00	.00	.00
10	.00	.00	.12	.27	.49	1.3	.76	.08	.00	.00	.00	.00
11	.00	.00	.13	1.2	.53	1.3	.71	.07	.00	.00	.00	.00
12	.00	.00	.14	.93	.53	1.0	.68	.08	.00	.00	.00	.00
13	.00	.00	.13	.61	.87	.95	.61	.07	.00	.00	.00	.00
14	.00	.00	.14	.52	.98	.87	.54	.06	.00	.00	.00	.00
15	.00	.00	.14	.49	.75	.78	.47	.05	.00	.00	.00	.00
16	.00	.00	.14	.52	.68	.70	.41	.04	.00	.00	.00	.00
17	.00	.00	.15	.50	.67	.67	.37	.03	.00	.00	.00	.00
18	.00	.00	.15	.47	.63	.62	.34	.02	.00	.00	.00	.00
19	.00	.00	.15	.46	.60	.55	.33	.02	.00	.00	.00	.00
20	.00	.00	.16	.47	.63	.50	.36	.02	.00	.00	.00	.00
21	.00	.00	.16	.48	.66	.47	1.1	.01	.00	.00	.00	.00
22	.00	.00	.17	.49	.60	.45	1.3	.00	.00	.00	.00	.00
23	.00	.00	.18	.51	.68	.46	.72	.00	.00	.00	.00	.00
24	.00	.00	.18	.52	.76	.46	.54	.00	.00	.00	.00	.00
25	.00	.00	.18	.54	1.3	.45	.44	.00	.00	.00	.00	.00
26	.00	.00	.19	.60	3.3	.45	.38	.00	.00	.00	.00	.00
27	.00	.00	.19	.71	7.7	.42	.35	.00	.00	.00	.00	.00
28	.00	.00	.20	.62	3.9	.40	.31	.00	.00	.00	.00	.00
29	.00	.00	.20	.64	---	.39	.24	.00	.00	.00	.00	.00
30	.00	.00	.22	.61	---	.39	.20	.00	.00	.00	.00	.00
31	.00	---	.22	.60	---	.43	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	3.89	14.84	30.70	25.56	16.15	1.79	0.00	0.00	0.00	0.00
MEAN	.000	.000	.13	.48	1.10	.82	.54	.058	.000	.000	.000	.000
MAX	.00	.00	.22	1.2	7.7	2.1	1.3	.19	.00	.00	.00	.00
MIN	.00	.00	.00	.22	.46	.39	.20	.00	.00	.00	.00	.00
AC-FT	.00	.00	7.7	29	61	51	32	3.6	.00	.00	.00	.00

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, 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	.17	.33	.79	1.69	2.86	3.03	1.65	.69	.23	.19	.45	.15
MAX	2.83	2.97	5.29	27.4	32.5	29.3	11.2	7.55	3.96	4.46	10.6	3.27
(WY)	1984	1984	1984	1993	1980	1983	1980	1980	1980	1979	1979	1983
MIN	.000	.000	.000	.000	.030	.073	.007	.000	.000	.000	.000	.000
(WY)	1951	1951	1963	1972	1972	1972	1972	1961	1954	1952	1951	1951

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	109.93		92.93			
ANNUAL MEAN	.30		.25		1.01	
HIGHEST ANNUAL MEAN					7.61 1980	
LOWEST ANNUAL MEAN					.009 1972	
HIGHEST DAILY MEAN	3.5	Feb 22	7.7	Feb 27	277	Aug 16 1979
LOWEST DAILY MEAN	.00	May 23	.00	Oct 1	.00	Oct 1 1950
ANNUAL SEVEN-DAY MINIMUM	.00	May 23	.00	Oct 1	.00	Oct 1 1950
MAXIMUM PEAK FLOW			14	Feb 27	2640	Aug 16 1979
MAXIMUM PEAK STAGE			2.79	Feb 27	9.80	Aug 16 1979
ANNUAL RUNOFF (AC-FT)	218		184		731	
10 PERCENT EXCEEDS	.84		.68		2.0	
50 PERCENT EXCEEDS	.00		.00		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

10256000 WHITEWATER RIVER AT WHITE WATER, CA

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

DRAINAGE AREA.—57.5 mi².

PERIOD OF RECORD.—Water years 1967–1981, 1997 to current year.

CHEMICAL DATA: Water years 1967–1981, 1997 to current year.

SEDIMENT DATA: Water year 1972.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	HARD-NESS NONCARB DISSOLV LAB AS (MG/L) (00905)	HARD-NESS TOTAL AS (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L) (00930)	
NOV	14...	0810	2.6	8.5	386	14.0	15	169	48.6	11.5	4.48	.436	13.0

DATE	SODIUM PERCENT (00932)	ALKA-LINITY WAT TOT FIELD (00932)	BICAR-BONATE WATER DIS IT FIELD (39086)	CAR-BONATE WATER DIS IT FIELD (00453)	BROMIDE DIS-SOLVED (MG/L) (00452)	CHLO-RIDE, DIS-SOLVED (MG/L) (71870)	FLUO-RIDE, DIS-SOLVED (MG/L) (00940)	SILICA, DIS-SOLVED (MG/L) (00950)	SULFATE DIS-SOLVED (MG/L) (00955)	SOLIDS, DIS-SOLVED (MG/L) (00945)	SOLIDS, RESIDUE AT 180 DEG. C PER SOLVED (70303)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)
NOV	14...	14.0	175	200	6	.02	3.7	.9	17.3	32.3	.3	227	238

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-ORTHOPHOS DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC TOTAL (MG/L) (00680)	ARSENIC DIS-SOLVED (UG/L) (01000)	BORON, DIS-SOLVED (UG/L) (01020)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	
NOV	14...	<.041	<.10	.421	e.003	<.060	<.018	2.5	<2.0	e13	<10	<3.2

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

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

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

DRAINAGE AREA.—59.1 mi².

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

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

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

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

EXTREMES FOR PERIOD OF RECORD (1986–87 and 1989–90).—Maximum discharge, 2,020 ft³/s, Feb. 15, 1986, gage height, 11.97 ft, from rating curve extended above 900 ft³/s; no flow for many days in some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	Discharge (ft ³ /s)
Oct. 4	1005	1.3
Dec. 7	1350	3.5
Jan. 4	1625	4.3
Feb. 7	1400	3.7
Mar. 5	1705	5.2
Apr. 3	1735	2.2
May 2	1140	2.0
June 5	0945	2.0
July 3	0835	1.5
Aug. 6	1310	1.9
Sept. 5	1420	3.2

10256500 SNOW CREEK NEAR WHITE WATER, CA

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

DRAINAGE AREA.—10.9 mi².

WATER-DISCHARGE RECORDS

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

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

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

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

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

EXTREMES FOR PERIOD OF RECORD (Combined creek and diversion).—Maximum discharge, 9,900 ft³/s, Jan. 25, 1969, gage height, 13.8 ft, from floodmarks, site and datum then in use, from rating curve extended above 55 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 2.1 ft³/s, June 23–27, Sept. 5–11, 1961.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 29.9 ft³/s, on basis of broad-crested weir computations:

Date	Time	Creek only		Combined creek and diversion
		Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)
Jan. 11	0815	27	2.99	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	.35	1.0	.30	.32	.11	6.6	2.7	2.2	.21	.28	.57	.94
2	.38	.87	.31	.33	.10	6.6	2.3	2.7	.14	.25	.43	2.9
3	.41	.75	.31	.34	.13	6.1	1.8	2.5	.08	.24	.11	2.9
4	.49	.71	.32	.32	.32	5.8	1.3	1.7	.07	.33	.08	1.2
5	.34	.68	.30	1.2	.49	5.6	.98	1.4	.04	.53	.08	.21
6	.09	.62	.30	3.6	.55	e6.5	.74	1.2	.02	1.9	.11	.04
7	.27	.58	.34	3.6	.64	e7.5	4.2	1.3	.00	3.4	1.2	.20
8	.26	.58	.40	3.6	.50	e7.0	6.4	1.8	.00	3.2	2.9	.53
9	.30	.56	.39	3.7	.47	e7.2	6.0	2.1	.00	1.6	1.6	.51
10	1.1	1.9	.33	3.3	2.0	e7.5	6.0	2.4	.00	.30	.71	.54
11	3.2	3.8	.33	14	4.1	e6.8	3.7	2.1	.00	.24	.65	.54
12	1.6	3.7	2.2	6.1	4.3	e6.5	.47	2.3	.09	.21	1.1	.53
13	.39	2.5	3.7	5.0	4.7	e3.6	.38	2.0	.42	.17	2.8	.53
14	.36	.76	2.3	4.6	4.6	1.6	.32	1.5	.34	.15	2.8	.69
15	.35	.75	.33	4.5	1.9	1.3	.29	1.3	.31	.13	2.7	.62
16	.33	.60	.32	4.5	.39	1.0	.27	1.1	.27	.14	1.3	.54
17	.32	.33	.31	2.1	.37	1.1	.32	1.3	.23	.14	.59	.56
18	.35	.29	.29	.61	.42	1.2	.41	1.4	.18	.14	.59	.56
19	.36	.32	.28	.44	.39	1.8	.58	1.2	.16	.26	.56	.56
20	.37	.31	.28	.43	1.2	2.6	3.7	1.1	.15	.55	.54	.56
21	.40	.31	.28	.42	.87	3.7	7.2	.82	.25	.54	.51	.54
22	.43	.34	.27	.43	.61	3.4	5.9	.64	.46	.53	.59	.55
23	1.6	.34	.26	.42	2.0	2.5	3.3	.50	.43	.52	.59	.55
24	3.5	.30	.27	2.1	4.4	2.0	1.2	.38	.36	.54	.58	.53
25	3.5	.29	.30	4.3	5.9	1.8	1.5	.28	.41	.54	.55	.56
26	3.5	.30	.33	4.3	8.1	1.6	1.9	.19	.43	.54	.56	.58
27	3.6	.30	.32	4.2	7.7	1.5	2.5	.16	.39	.54	.56	.59
28	3.5	.32	.32	4.1	6.7	1.5	2.6	.05	.39	.48	.53	.56
29	3.6	.31	.32	2.3	---	2.3	2.2	.23	.34	.52	.41	.57
30	5.1	.29	.32	.22	---	2.9	2.0	.34	.30	.50	.04	.61
31	2.6	---	.32	.15	---	2.5	---	.22	---	.53	.04	---
TOTAL	42.95	24.71	16.95	85.53	63.96	119.6	73.16	38.41	6.47	19.94	26.38	21.30
MEAN	1.39	.82	.55	2.76	2.28	3.86	2.44	1.24	.22	.64	.85	.71
MAX	5.1	3.8	3.7	14	8.1	7.5	7.2	2.7	.46	3.4	2.9	2.9
MIN	.09	.29	.26	.15	.10	1.0	.27	.05	.00	.13	.04	.04
AC-FT	85	49	34	170	127	237	145	76	13	40	52	42

e Estimated.

SALTON SEA BASIN

10256500 SNOW CREEK NEAR WHITE WATER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.15	3.37	5.29	13.8	21.2	16.2	10.8	10.9	6.35	3.58	2.87	2.20
MAX	6.55	13.3	24.0	131	173	71.5	28.6	40.8	31.7	14.4	18.0	7.55
(WY)	1993	1984	1984	1993	1980	1995	1983	1983	1983	1983	1983	1983
MIN	.008	.30	.000	.85	1.72	.52	1.09	.29	.14	.000	.001	.17
(WY)	1985	1982	1982	1999	1999	1999	1984	1984	1984	1981	1981	1981

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	647.61		539.36			
ANNUAL MEAN	1.77		1.48		8.16	
HIGHEST ANNUAL MEAN					28.4 1980	
LOWEST ANNUAL MEAN					1.35 1999	
HIGHEST DAILY MEAN	27	Feb 21	14	Jan 11	909	Jan 7 1993
LOWEST DAILY MEAN	.06	May 31	.00	Jun 7	.00	Nov 8 1978
ANNUAL SEVEN-DAY MINIMUM	.18	Jul 14	.01	Jun 5	.00	Oct 5 1979
MAXIMUM PEAK FLOW			27	Jan 11	1910	Jan 7 1993
MAXIMUM PEAK STAGE			2.99	Jan 11	7.35	Jan 7 1993
ANNUAL RUNOFF (AC-FT)	1280		1070		5910	
10 PERCENT EXCEEDS	4.6		4.1		19	
50 PERCENT EXCEEDS	.48		.55		3.0	
90 PERCENT EXCEEDS	.25		.21		.20	

10256500 SNOW CREEK NEAR WHITE WATER, CA—Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: Water years 1972–76, 1978 to current year.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 13...	1310	a3.7	7.8	115	9.5	33.6	12.0	.885	1.84	.680	9.1

DATE	SODIUM PERCENT (00932)	ALKA- LINITY WAT 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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
NOV 13...	35.4	53	64	<.01	1.5	e.1	20.7	1.4	.1	80	78.9

DATE	NITRO- GEN, 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 TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)
NOV 13...	<.041	<.10	<.047	<.006	<.060	<.018	V.72	<2.0	e7	M	<3.2

a Discharge represents total flow (creek plus diversion).

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

e Estimated.

V Analyte was detected in both the environmental sample and the associated blanks.

M Presence of material verified, not quantified.

10256501 SNOW CREEK NEAR WHITE WATER, CA—Continued

SNOW CREEK AND SNOW CREEK DIVERSION NEAR WHITE WATER, 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	4.2	4.1	4.2	3.5	3.8	6.6	7.7	7.0	4.4	3.2	3.8	3.5
2	3.8	4.7	4.2	3.6	3.8	6.6	7.3	7.6	4.5	3.3	3.1	2.9
3	3.3	4.0	3.6	3.6	3.9	6.1	6.8	7.2	4.5	3.2	3.2	2.9
4	4.0	3.9	4.1	3.6	4.0	5.8	6.2	6.3	4.5	3.5	3.2	3.0
5	3.5	4.0	3.5	3.7	4.2	5.6	6.0	6.1	4.4	3.4	3.4	3.3
6	3.6	4.0	3.7	3.6	4.3	e6.5	5.6	5.9	4.3	3.5	3.2	2.8
7	3.8	3.8	3.6	3.6	4.2	e7.5	6.6	6.0	4.3	3.4	3.0	3.3
8	3.4	4.0	3.6	3.6	4.1	e7.0	6.4	6.5	4.3	3.2	2.9	3.0
9	3.4	4.2	3.8	3.7	4.0	e7.2	6.0	6.8	4.3	3.0	3.0	2.7
10	3.4	3.9	3.7	3.3	4.1	e7.5	6.0	7.2	4.3	3.2	2.9	2.7
11	3.2	3.8	3.7	14	4.1	e6.8	5.6	6.8	4.4	3.4	4.4	4.0
12	3.6	3.7	3.6	6.1	4.3	e6.5	5.0	7.0	4.4	3.3	3.4	2.7
13	3.8	3.7	3.7	5.0	4.7	e5.9	4.9	6.7	3.5	3.2	2.8	2.8
14	3.5	3.7	3.7	4.6	4.6	5.5	4.8	6.2	3.5	3.1	2.8	3.0
15	4.3	3.8	3.5	4.5	4.2	5.3	4.8	6.0	3.5	3.3	2.7	2.4
16	3.9	3.6	3.6	4.5	4.2	5.2	4.8	5.8	3.5	3.9	2.9	2.9
17	3.5	3.6	3.7	4.1	4.2	5.5	4.8	6.0	3.4	3.2	2.9	3.3
18	3.3	3.6	3.5	3.9	4.2	5.5	4.9	6.2	3.4	3.0	3.1	3.2
19	3.4	3.6	3.5	3.9	4.2	6.3	5.1	6.0	3.4	3.7	3.1	3.3
20	3.7	3.6	3.5	4.0	5.1	7.1	5.4	5.8	3.4	3.2	3.4	3.2
21	3.8	3.6	3.5	4.0	4.8	8.2	7.2	5.5	3.5	4.1	3.0	3.5
22	3.7	3.5	3.5	4.0	4.5	8.0	5.9	5.3	3.7	3.2	3.1	2.8
23	3.9	3.6	3.6	3.9	4.4	7.3	6.1	5.2	3.6	3.4	3.1	2.5
24	3.5	3.6	3.6	4.2	4.4	7.0	5.7	5.1	3.6	3.6	4.0	2.3
25	3.5	3.6	3.6	4.3	5.9	6.8	6.0	5.0	3.5	3.4	3.0	2.6
26	3.5	3.5	3.6	4.3	8.1	6.5	6.5	4.9	3.6	3.0	3.2	2.4
27	3.6	3.8	3.5	4.2	7.7	6.4	7.3	4.9	3.6	3.0	2.9	2.4
28	3.5	3.6	3.6	4.1	6.7	6.4	7.4	4.5	3.3	3.0	3.0	3.1
29	3.6	3.9	3.5	4.0	---	7.3	7.0	4.9	3.2	3.0	3.1	3.0
30	5.1	3.7	3.6	3.9	---	7.9	6.8	4.3	3.3	3.4	2.7	2.4
31	4.7	---	3.6	4.0	---	7.5	---	4.2	---	3.9	2.9	---
TOTAL	115.0	113.7	113.2	135.3	130.7	205.3	180.6	182.9	115.1	103.2	97.2	87.9
MEAN	3.71	3.79	3.65	4.36	4.67	6.62	6.02	5.90	3.84	3.33	3.14	2.93
MAX	5.1	4.7	4.2	14	8.1	8.2	7.7	7.6	4.5	4.1	4.4	4.0
MIN	3.2	3.5	3.5	3.3	3.8	5.2	4.8	4.2	3.2	3.0	2.7	2.3
AC-FT	228	226	225	268	259	407	358	363	228	205	193	174

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2001, BY WATER YEAR (WY)

MEAN	4.75	7.23	10.2	14.6	16.2	14.1	12.5	12.7	9.20	6.22	5.29	5.28
MAX	10.7	82.5	76.7	178	173	72.0	36.7	45.7	37.6	20.2	20.7	32.5
(WY)	1984	1966	1967	1969	1980	1995	1969	1983	1983	1983	1983	1976
MIN	2.76	2.75	3.11	3.30	3.40	3.39	3.16	2.55	2.35	2.31	2.35	2.40
(WY)	1962	1963	1963	1961	1961	1961	1961	1961	1961	1961	1960	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1921 - 2001
ANNUAL TOTAL	1750.3	1580.1	
ANNUAL MEAN	4.78	4.33	9.97
HIGHEST ANNUAL MEAN			33.0
LOWEST ANNUAL MEAN			2.96
HIGHEST DAILY MEAN	27	14	3490
LOWEST DAILY MEAN	2.8	2.3	2.1
ANNUAL SEVEN-DAY MINIMUM	3.0	2.6	2.1
MAXIMUM PEAK FLOW		27	9900
MAXIMUM PEAK STAGE			13.80
ANNUAL RUNOFF (AC-FT)	3470	3130	7220
10 PERCENT EXCEEDS	7.2	6.6	16
50 PERCENT EXCEEDS	3.8	3.8	5.7
90 PERCENT EXCEEDS	3.3	3.0	3.2

e Estimated.

10257500 FALLS CREEK NEAR WHITE WATER, CA

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

DRAINAGE AREA.—4.14 mi².

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

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

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

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

EXTREMES FOR PERIOD OF RECORD (Combined creek and diversion).—Maximum discharge, 154 ft³/s, Jan. 10, 1995, gage height, 6.14 ft (creek gage; no diversion at peak), from rating curve extended above 6.5 ft³/s on basis of critical depth computations; maximum gage height, 6.24 ft, Feb. 14, 1998; minimum daily, 0.10 ft³/s, Sept. 11, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended as noted above:

Date	Time	Creek only Discharge (ft ³ /s)	Creek only Gage height (ft)	Combined creek and diversion Discharge (ft ³ /s)
Jan. 11	0645	6.0	4.60	6.0

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	.53	.70	.46	.40	1.1	1.1	.47	.20	.19	.13	.12
2	.26	.51	.71	.46	.41	.87	1.0	.56	.34	.19	.13	.12
3	.27	.49	.71	.46	.46	.77	e1.0	.46	.34	.19	.13	.11
4	.30	.49	.71	.46	.62	.73	e.95	.28	.34	.19	.13	.11
5	.31	.51	.61	.46	.66	.69	.90	.21	.32	.20	.13	.11
6	.31	.49	.46	.49	.60	1.3	.77	.19	.31	.49	.13	.11
7	.31	.48	.50	.47	.52	1.3	e1.0	.20	.28	.51	.13	.11
8	.30	.48	.50	.48	.49	1.1	e.85	.28	.27	.41	.12	.12
9	.33	.49	.52	.54	.46	1.1	e.75	.33	.26	.30	.13	.11
10	.34	.54	.50	.57	.46	1.0	e.70	.36	.25	.27	.13	.11
11	.38	.56	.52	2.8	.45	.82	e.50	.32	.24	.26	.13	.11
12	.42	.58	.48	.95	.49	.79	.05	.47	.24	.22	.14	.11
13	.41	.58	.48	.76	.80	.71	.07	.36	.27	.20	.13	.11
14	.37	.58	.50	.68	.57	.68	.08	.22	.24	.20	.13	.12
15	.35	.58	.50	.65	.50	.67	.06	.18	.24	.19	.13	.11
16	.34	.57	.48	.66	.47	.68	.04	.17	.22	.19	.13	.12
17	.32	.57	.46	.60	.46	.68	.03	.19	.21	.19	.13	.12
18	.31	.53	.46	.53	.51	.68	.04	.23	.20	.19	.13	.14
19	.29	.53	.46	.53	.49	.86	.10	.19	.19	.18	.12	.14
20	.30	.54	.46	.53	.51	.96	.58	.15	.19	.18	.12	.15
21	.31	.54	.46	.53	.49	1.0	.98	.11	.20	.17	.12	.15
22	.33	.57	.46	.57	.47	1.1	.83	.11	.20	.16	.12	.15
23	.58	.64	.46	.56	.45	1.0	.48	.04	.20	.16	.12	.15
24	.56	.64	.46	.57	.45	.96	.17	.03	.19	.16	.11	.15
25	.48	.64	.46	.55	.81	.92	.20	.02	.19	.16	.11	.14
26	.44	.64	.46	.57	1.0	.86	.33	.01	.20	.16	.11	.14
27	.46	.64	.46	.56	2.4	.79	.51	.01	.20	.16	.11	.14
28	.45	.65	.46	.53	1.3	.80	.51	.21	.20	.15	.11	.14
29	.45	.68	.46	.52	---	.97	.46	.01	.19	.13	.11	.14
30	.99	.70	.46	.50	---	.97	.41	.03	.19	.13	.11	.14
31	.62	---	.46	.46	---	1.0	---	.01	---	.13	.11	---
TOTAL	12.15	16.97	15.78	19.46	17.70	27.86	15.45	6.41	7.11	6.61	3.82	3.80
MEAN	.39	.57	.51	.63	.63	.90	.51	.21	.24	.21	.12	.13
MAX	.99	.70	.71	2.8	2.4	1.3	1.1	.56	.34	.51	.14	.15
MIN	.26	.48	.46	.46	.40	.67	.03	.01	.19	.13	.11	.11
AC-FT	24	34	31	39	35	55	31	13	14	13	7.6	7.5

e Estimated.

SALTON SEA BASIN

10257500 FALLS CREEK NEAR WHITE WATER, 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	1.04	1.27	1.59	1.67	2.08	1.81	1.84	1.66	1.26	.91	.82	.93
MAX	2.52	2.81	5.68	4.58	8.08	8.75	7.90	4.25	3.33	2.37	2.67	2.23
(WY)	1923	1923	1927	1995	1998	1995	1926	1926	1998	1926	1926	1926
MIN	.36	.51	.50	.31	.38	.15	.15	.13	.23	.21	.12	.13
(WY)	2000	2000	1999	1999	1999	1997	1997	1997	1996	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1923 - 2001
ANNUAL TOTAL	188.04	153.12	
ANNUAL MEAN	.51	.42	1.39
HIGHEST ANNUAL MEAN			2.77
LOWEST ANNUAL MEAN			.42
HIGHEST DAILY MEAN	5.0 Feb 21	2.8 Jan 11	50 Mar 5 1995
LOWEST DAILY MEAN	.00 May 17	.01 May 26	.00 Apr 16 1997
ANNUAL SEVEN-DAY MINIMUM	.11 May 12	.04 May 25	.00 Apr 13 1997
MAXIMUM PEAK FLOW		6.0 Jan 11	154 Jan 10 1995
MAXIMUM PEAK STAGE		4.60 Jan 11	6.24 Feb 14 1998
ANNUAL RUNOFF (AC-FT)	373	304	1000
10 PERCENT EXCEEDS	.84	.80	2.6
50 PERCENT EXCEEDS	.45	.42	1.1
90 PERCENT EXCEEDS	.21	.11	.24

10257501 FALLS CREEK NEAR WHITE WATER, CA—Continued

FALLS CREEK AND FALLS CREEK DIVERSION NEAR WHITE WATER, CA

COMBINED 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	.53	.70	.46	.40	1.1	1.1	1.2	.51	.19	.13	.12
2	.26	.51	.71	.46	.41	.87	1.0	1.3	.34	.19	.13	.12
3	.27	.49	.71	.46	.46	.77	e1.0	1.2	.34	.19	.13	.11
4	.30	.49	.71	.46	.62	.73	e.95	1.1	.34	.19	.13	.11
5	.31	.51	.61	.46	.66	.69	.90	.99	.32	.20	.13	.11
6	.31	.49	.46	.49	.60	1.3	.77	.97	.31	.49	.13	.11
7	.31	.48	.50	.47	.52	1.3	e1.0	.98	.28	.51	.13	.11
8	.30	.48	.50	.48	.49	1.1	e.85	1.1	.27	.41	.12	.12
9	.33	.49	.52	.54	.46	1.1	e.75	1.1	.26	.30	.13	.11
10	.34	.54	.50	.57	.46	1.0	e.70	1.1	.25	.27	.13	.11
11	.38	.56	.52	2.8	.45	.82	e.72	1.1	.24	.26	.13	.11
12	.42	.58	.48	.95	.49	.79	.70	1.2	.24	.22	.14	.11
13	.41	.58	.48	.76	.80	.71	.72	1.1	.27	.20	.13	.11
14	.37	.58	.50	.68	.57	.68	.73	1.0	.24	.20	.13	.12
15	.35	.58	.50	.65	.50	.67	.71	.96	.24	.19	.13	.11
16	.34	.57	.48	.66	.47	.68	.69	.95	.22	.19	.13	.12
17	.32	.57	.46	.60	.46	.68	.68	.97	.21	.19	.13	.12
18	.31	.53	.46	.53	.51	.68	.69	1.0	.20	.19	.13	.14
19	.29	.53	.46	.53	.49	.86	.75	.97	.19	.18	.12	.14
20	.30	.54	.46	.53	.51	.96	.88	.93	.19	.18	.12	.15
21	.31	.54	.46	.53	.49	1.0	.98	.89	.20	.17	.12	.15
22	.33	.57	.46	.57	.47	1.1	.83	.89	.20	.16	.12	.15
23	.58	.64	.46	.56	.45	1.0	.81	.82	.20	.16	.12	.15
24	.56	.64	.46	.57	.45	.96	.82	.81	.19	.16	.11	.15
25	.48	.64	.46	.55	.81	.92	.85	.80	.19	.16	.11	.14
26	.44	.64	.46	.57	1.0	.86	.98	.79	.20	.16	.11	.14
27	.46	.64	.46	.56	2.4	.79	1.2	.79	.20	.16	.11	.14
28	.45	.65	.46	.53	1.3	.80	1.2	.99	.20	.15	.11	.14
29	.45	.68	.46	.52	---	.97	1.1	.79	.19	.13	.11	.14
30	.99	.70	.46	.50	---	.97	1.1	.81	.19	.13	.11	.14
31	.62	---	.46	.46	---	1.0	---	.79	---	.13	.11	---
TOTAL	12.15	16.97	15.78	19.46	17.70	27.86	26.16	30.39	7.42	6.61	3.82	3.80
MEAN	.39	.57	.51	.63	.63	.90	.87	.98	.25	.21	.12	.13
MAX	.99	.70	.71	2.8	2.4	1.3	1.2	1.3	.51	.51	.14	.15
MIN	.26	.48	.46	.46	.40	.67	.68	.79	.19	.13	.11	.11
AC-FT	24	34	31	39	35	55	52	60	15	13	7.6	7.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

MEAN	.71	1.01	.99	1.57	2.63	2.27	1.38	1.63	1.19	.89	.69	.79
MAX	1.40	1.64	1.71	4.58	8.08	8.75	2.92	4.05	3.33	2.32	1.76	1.52
(WY)	1996	1997	1997	1995	1998	1995	1995	1998	1998	1995	1995	1995
MIN	.36	.51	.51	.63	.61	.34	.31	.29	.25	.21	.12	.13
(WY)	2000	2000	2001	2001	1997	1997	1997	1997	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	215.50	188.12		
ANNUAL MEAN	.59	.52	1.31	
HIGHEST ANNUAL MEAN			2.99	1995
LOWEST ANNUAL MEAN			.52	2001
HIGHEST DAILY MEAN	5.0	Feb 21	2.8	Jan 11
LOWEST DAILY MEAN	.19	Aug 9	.11	Aug 24
ANNUAL SEVEN-DAY MINIMUM	.20	Aug 8	.11	Aug 24
MAXIMUM PEAK FLOW			6.0	Jan 11
ANNUAL RUNOFF (AC-FT)	427		373	946
10 PERCENT EXCEEDS	1.0		.99	2.8
50 PERCENT EXCEEDS	.52		.48	.79
90 PERCENT EXCEEDS	.23		.13	.24

e Estimated.

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

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

DRAINAGE AREA.—264 mi².

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

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

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

REMARKS.—Records fair except for discharges below 50 ft³/s and estimated daily discharges, which are poor. Imported water is released to the Whitewater River from the Colorado River Aqueduct at a point 2.75 mi upstream for ground-water recharge in the upper Coachella Valley. Water is diverted out of the basin 18.5 mi upstream to the San Geronio River Basin and to an area north of Banning for irrigation and domestic use. See schematic diagram of [Salton Sea Basin](#).

COOPERATION.—Records of Colorado River Aqueduct releases provided by Metropolitan Water District.

EXTREMES FOR PERIOD OF RECORD.—Maximum computed discharge, 2,530 ft³/s, Jan. 10, 1995, gage height, 8.32 ft, main channel, from rating curve extended above 400 ft³/s, on basis of critical-depth computation (flow in overflow channel at peak); maximum probably exceeded during flood of Jan. 16, 1993, but discharge is unknown; no flow for several days in most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	320	.00	.00	.00	.42	.00	.00	.00	.00	.00	.00
2	.00	335	.00	.00	.00	.17	.00	.00	.00	.00	.00	1.5
3	.00	331	.00	.00	.00	.39	.00	.00	.00	.00	.00	12
4	.00	334	.00	.00	.00	.10	.00	.00	.00	.00	.00	4.7
5	.00	331	.00	.00	.00	.12	.00	.00	.00	.00	.00	1.7
6	.00	333	.00	.00	.00	.92	.00	.00	.00	e2.0	.00	1.2
7	.00	336	.00	.00	.00	1.2	.00	.00	.00	e1.8	.00	.75
8	.00	338	.00	.00	.00	.22	.22	.00	.00	e1.5	.00	.84
9	.00	336	.00	.00	.00	.00	.00	.00	.00	e1.0	.00	.75
10	.00	338	.00	.00	.00	4.2	.00	.00	.00	1.0	.00	.75
11	.00	337	.00	28	.00	2.1	.00	.00	.00	1.6	.00	.33
12	.00	339	.00	8.0	.00	.29	.00	.00	.00	2.6	.00	.37
13	.00	339	.00	4.7	.93	.00	.00	.00	.00	.08	.00	.39
14	.00	334	.00	3.2	.41	.00	.00	.00	.00	.00	.00	.51
15	.00	336	.00	1.5	.00	.00	.00	.00	.00	.00	.00	2.9
16	.00	342	.00	1.2	.00	.00	.00	.00	.00	.54	.00	4.1
17	.00	278	.00	1.1	.00	.00	.84	.00	.00	.00	.00	2.1
18	43	224	.00	1.1	.00	.00	149	.00	.00	.00	.00	.47
19	142	224	.00	.76	.00	.00	60	.00	.00	.00	.00	.25
20	143	120	.00	.34	.00	.00	.00	.00	.00	.00	.00	1.2
21	138	.00	.00	.03	.31	.00	.14	.00	.00	.00	.00	.62
22	141	.00	40	.00	.00	.00	.00	.00	.00	.00	.00	.66
23	127	.00	146	.00	.00	.00	.00	.00	.00	.00	.00	.73
24	142	.00	147	.00	.00	.00	.00	.00	.00	.00	.00	.67
25	207	.00	147	.00	.00	.00	.00	.00	.00	.22	.00	.71
26	293	.00	147	.00	3.0	.00	.00	.00	.00	.00	.00	.30
27	266	.00	146	.00	2.7	.00	.00	.00	.00	.11	.00	.05
28	265	.00	92	.00	2.4	.00	.00	.00	.00	.00	.00	.32
29	263	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.46
30	283	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.63
31	305	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2758.00	6205.00	865.00	49.93	9.75	10.13	293.36	0.00	0.00	12.45	0.00	41.96
MEAN	89.0	207	27.9	1.61	.35	.33	9.78	.000	.000	.40	.000	1.40
MAX	305	342	147	28	3.0	4.2	149	.00	.00	2.6	.00	12
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	5470	12310	1720	99	19	20	582	.00	.00	25	.00	83
a	6870	15750	2000	0	0	0	707	0	0	0	0	0

e Estimated.

a Discharge, in acre-feet, of imported water released to river 2.75 mi upstream.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	138	129	95.1	101	121	141	135	114	133	87.8	93.6	112
MAX	596	499	477	598	595	464	316	390	516	417	378	463
(WY)	1987	1987	1987	1987	1987	2000	1986	1998	1998	1986	1986	1986
MIN	.025	.000	.000	.000	.35	.33	.026	.000	.000	.000	.000	.000
(WY)	1992	1992	1990	1992	2001	2001	1991	1987	1987	1989	1987	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1985 - 2001	
ANNUAL TOTAL	30694.77		10245.58			
ANNUAL MEAN	83.9		28.1		123	
HIGHEST ANNUAL MEAN					308	
LOWEST ANNUAL MEAN					11.9	
HIGHEST DAILY MEAN	551	Mar 5	342	Nov 16	2600	Jan 7 1993
LOWEST DAILY MEAN	.00	Apr 6	.00	Oct 1	.00	Mar 4 1985
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 6	.00	Oct 1	.00	Feb 16 1986
MAXIMUM PEAK FLOW			352	Nov 11	2530	Jan 10 1995
MAXIMUM PEAK STAGE			4.99	Nov 11	8.32	Jan 10 1995
ANNUAL RUNOFF (AC-FT)	60880		20320		89180	
10 PERCENT EXCEEDS	350		139		349	
50 PERCENT EXCEEDS	.00		.00		14	
90 PERCENT EXCEEDS	.00		.00		.00	

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA

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

DRAINAGE AREA.—35.7 mi².

PERIOD OF RECORD.—October 1967 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,750 ft³/s, Aug. 17, 1983, gage height, 3.33 ft, on basis of slope-conveyance study of peak flow, maximum gage height, 6.40 ft, Jan. 25, 1969; maximum gage height since November 1988, 5.80 ft, from crest-stage gage, Jan. 16, 1993, discharge not determined; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended above 36 ft³/s, on basis of critical depth computations:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0515	4.8	1.79

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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.45	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.45	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.015	.001	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.45	.02	.01	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.9	.06	.02	.00	.00	.00	.00	.00	.00

10257600 MISSION CREEK NEAR DESERT HOT 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	.83	1.04	1.12	3.32	8.19	6.46	5.24	4.26	2.73	1.83	1.40	.91
MAX	3.83	4.54	4.51	29.2	174	49.6	31.6	25.8	16.4	10.1	5.42	4.74
(WY)	1970	1984	1979	1980	1980	1980	1993	1993	1993	1980	1983	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1968	1969	1969	1968	1968	1989	1968	1968	1968	1972	1968	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1968 - 2001	
ANNUAL TOTAL	57.37		0.49			
ANNUAL MEAN	.16		.001		3.08	
HIGHEST ANNUAL MEAN					28.3	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	2.5	Mar 5	.45	Jan 11	540	Feb 18 1980
LOWEST DAILY MEAN	.00	May 22	.00	Oct 1	.00	Oct 1 1967
ANNUAL SEVEN-DAY MINIMUM	.00	May 27	.00	Oct 1	.00	Oct 1 1967
MAXIMUM PEAK FLOW			4.8		1750	Aug 17 1983
MAXIMUM PEAK STAGE			1.79		6.40	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	114		1.0		2230	
10 PERCENT EXCEEDS	.49		.00		5.8	
50 PERCENT EXCEEDS	.00		.00		.50	
90 PERCENT EXCEEDS	.00		.00		.00	

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

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

DRAINAGE AREA.—4.71 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1986 to current year.

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

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 153 ft³/s, Jan. 7, 1993, gage height, 10.18 ft, from rating curve extended above 35 ft³/s on basis of critical depth computations; maximum gage height, 10.32 ft, Feb. 14, 1998; no flow for many days in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.22	.29	.26	.32	.54	.31	.15	.07	.04	.08	.07
2	.08	.22	.29	.25	.29	.52	.33	.16	.08	.03	.07	.06
3	.09	.22	.30	.26	.31	.49	.34	.20	.09	.03	.07	.05
4	.10	.22	.32	.23	.28	.46	.36	.20	.08	.04	.08	.05
5	.11	.22	.31	.23	.29	.41	.35	.20	.07	.06	.08	.06
6	.11	.21	.30	.23	.31	.56	.32	.17	.07	.28	.06	.07
7	.11	.24	.29	.24	.31	.50	.36	.13	.06	.17	.07	.07
8	.11	.24	.29	.23	.31	.46	.33	.12	.06	.07	.06	.07
9	.13	.28	.31	.22	.31	.50	.36	.11	.06	.07	.04	.07
10	.15	.28	.31	.26	.31	.50	.36	.11	.06	.09	.04	.06
11	.18	.25	.29	.88	.31	.51	.33	.12	.06	.10	.05	.07
12	.19	.25	.28	.38	.32	.50	.33	.16	.07	.10	.08	.07
13	.18	.25	.28	.30	.42	.44	.29	.14	.08	.09	.06	.07
14	.17	.29	.28	.29	.35	.38	.31	.12	.08	.09	.06	.11
15	.16	.29	.27	.31	.33	.38	.29	.11	.07	.10	.07	.05
16	.17	.29	.27	.30	.33	.38	.26	.11	.07	.10	.07	.06
17	e.18	.29	.27	.31	.35	.36	.22	.11	.06	.09	.07	.07
18	e.17	.29	.28	.32	.32	.37	.21	.11	.05	.09	.07	.05
19	e.17	.28	.29	.29	.35	.35	.24	.11	.06	.09	.08	.07
20	e.18	.27	.29	.28	.35	.34	.27	.11	.06	.09	.07	.07
21	e.17	.26	.26	.30	.33	.32	.41	.09	.06	.10	.08	.07
22	e.17	.25	.25	.29	.36	.34	.31	.09	.05	.09	.10	.07
23	e.17	.26	.28	.31	.39	.33	.27	.09	.06	.09	.09	.07
24	e.18	.27	.28	.29	.37	.34	.24	.09	.06	.09	.07	.06
25	e.17	.28	.28	.27	.51	.34	.21	.09	.05	.08	.08	.07
26	e.17	.27	.28	.29	.54	.33	.21	.09	.06	.08	.07	.07
27	.18	.27	.28	.27	.80	.30	.20	.10	.06	.07	.06	.08
28	.17	.27	.25	.26	.59	.32	.20	.10	.06	.08	.07	.07
29	.18	.27	.24	.29	---	.31	.20	.08	.05	.09	.05	.08
30	.21	.28	.24	.29	---	.28	.18	.08	.05	.08	.07	.08
31	.19	---	.26	.34	---	.31	---	.08	---	.09	.07	---
TOTAL	4.79	7.78	8.71	9.27	10.36	12.47	8.60	3.73	1.92	2.76	2.14	2.04
MEAN	.15	.26	.28	.30	.37	.40	.29	.12	.064	.089	.069	.068
MAX	.21	.29	.32	.88	.80	.56	.41	.20	.09	.28	.10	.11
MIN	.08	.21	.24	.22	.28	.28	.18	.08	.05	.03	.04	.05
AC-FT	9.5	15	17	18	21	25	17	7.4	3.8	5.5	4.2	4.0

e Estimated.

10257720 CHINO CANYON CREEK BELOW TRAMWAY, NEAR PALM SPRINGS, 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	.28	.40	.49	1.73	2.43	1.95	1.23	.64	.24	.071	.097	.22
MAX	1.19	1.32	1.49	14.0	17.8	8.82	3.85	2.34	.88	.28	.65	1.38
(WY)	1994	1987	1994	1993	1993	1993	1993	1998	1998	1987	1993	1993
MIN	.000	.000	.000	.031	.095	.022	.047	.002	.000	.000	.000	.000
(WY)	1991	1991	1991	1991	1999	1999	1999	1999	1992	1989	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001
ANNUAL TOTAL	58.99	74.57	
ANNUAL MEAN	.16	.20	.81
HIGHEST ANNUAL MEAN			4.02 1993
LOWEST ANNUAL MEAN			.086 1999
HIGHEST DAILY MEAN	.71 Feb 21	.88 Jan 11	49 Jan 17 1993
LOWEST DAILY MEAN	.00 Jan 8	.03 Jul 2	.00 Jun 15 1989
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 8	.04 Jun 28	.00 Jun 15 1989
MAXIMUM PEAK FLOW		1.8 Jul 6	153 Jan 7 1993
MAXIMUM PEAK STAGE		9.58 Jul 6	10.32 Feb 14 1998
ANNUAL RUNOFF (AC-FT)	117	148	584
10 PERCENT EXCEEDS	.29	.35	1.7
50 PERCENT EXCEEDS	.13	.20	.22
90 PERCENT EXCEEDS	.06	.06	.00

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1987 to current year.

CHEMICAL DATA: Water years 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 13...	1550	.22	8.1	203	10.5	72.7	25.5	2.16	4.74	.525	10.3
DATE	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)	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)
NOV 13...	22.1	98	119	<.01	2.6	e.1	18.9	4.3	.2	127	127
DATE	NITRO- GEN, 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 TOTAL MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)
NOV 13...	<.041	<.10	<.047	<.006	<.060	<.018	V1.2	<2.0	e9	<10	<3.2

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

V Analyte was detected in both the environmental sample and the associated blanks.

e Estimated.

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA

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

DRAINAGE AREA.—16.9 mi².

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

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

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

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,900 ft³/s, Nov. 22, 1965, Jan. 25, 1969, gage height, 12.34 ft, from rating curve extended above 70 ft³/s on basis of slope-area measurements at gage heights 10.45 and 12.34 ft; maximum gage height, 15.78 ft, Sept. 7, 1981, from debris wave produced by thunderstorm following a brushfire; no flow for parts of most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 85 ft³/s, or maximum, from rating curve extended above 147 ft³/s on basis of slope-area measurements at gage heights 10.45 and 12.34 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	1600	3.0	3.83

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	.14	.24	.54	1.2	2.0	1.3	e.08	.00	.00	.00
2	.00	.00	.15	.24	.53	.98	2.0	1.3	e.06	.00	.00	.00
3	.00	.00	.16	.25	.53	.84	1.9	1.3	e.03	.00	.00	.00
4	.00	.00	.16	.24	.53	.77	1.6	1.2	e.02	.00	.00	.00
5	.00	.00	.18	.24	.53	.73	1.4	1.0	e.01	.00	.00	.00
6	.00	.00	.19	.24	.53	.98	1.3	.89	e.01	.00	.00	.00
7	.00	.00	.19	.25	.53	1.3	1.1	.77	e.01	.00	.00	.00
8	.00	.00	.20	.25	.51	.99	1.2	.69	e.01	.00	.00	.00
9	.00	.00	.20	.26	.48	.93	1.1	.65	e.01	.00	.00	.00
10	.00	.00	.21	.27	.48	.90	1.1	.61	e.01	.00	.00	.00
11	.00	.00	.22	1.2	.50	.85	.96	.58	e.01	.00	.00	.00
12	.00	.00	.22	1.1	.51	.79	.93	.57	e.01	.00	.00	.00
13	.00	.00	.22	.67	.54	.76	.85	.58	e.01	.00	.00	.00
14	.00	.00	.23	.61	.57	.75	.79	.59	e.00	.00	.00	.00
15	.00	.00	.23	.58	.58	.72	.74	.54	e.00	.00	.00	.00
16	.00	.00	.23	.66	.55	.70	.70	.51	e.00	.00	.00	.00
17	.00	.00	.24	.62	.55	.68	.68	.48	e.00	.00	.00	.00
18	.00	.00	.25	.58	.55	.68	.69	.45	.00	.00	.00	.00
19	.00	.00	.25	.56	.55	.68	.81	.40	.00	.00	.00	.00
20	.00	.00	.25	.55	.55	.65	.91	.39	.00	.00	.00	.00
21	.00	.00	.24	.55	.55	.64	1.3	.35	.00	.00	.00	.00
22	.00	.05	.23	.55	.55	.63	1.3	.32	.00	.00	.00	.00
23	.00	.07	.24	.55	.55	.63	1.1	.28	.00	.00	.00	.00
24	.00	.09	.24	.55	.55	.62	1.1	.26	.00	.00	.00	.00
25	.00	.09	.23	.55	.61	.59	1.1	.25	.00	.00	.00	.00
26	.00	.09	.25	.55	1.6	.79	1.1	.21	.00	.00	.00	.00
27	.00	.10	.25	.55	2.1	1.1	1.2	.20	.00	.00	.00	.00
28	.00	.12	.25	.56	1.7	1.2	1.4	.17	.00	.00	.00	.00
29	.00	.12	.24	.55	---	1.5	1.4	.15	.00	.00	.00	.00
30	.00	.13	.25	.55	---	1.8	1.3	.13	.00	.00	.00	.00
31	.00	---	.25	.55	---	1.9	---	e.10	---	.00	.00	---
TOTAL	0.00	0.86	6.79	15.67	18.85	28.28	35.06	17.22	0.28	0.00	0.00	0.00
MEAN	.000	.029	.22	.51	.67	.91	1.17	.56	.009	.000	.000	.000
MAX	.00	.13	.25	1.2	2.1	1.9	2.0	1.3	.08	.00	.00	.00
MIN	.00	.00	.14	.24	.48	.59	.68	.10	.00	.00	.00	.00
AC-FT	.00	1.7	13	31	37	56	70	34	.6	.00	.00	.00

e Estimated.

SALTON SEA BASIN

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA—Continued

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	.56	1.70	3.36	6.00	7.39	8.32	10.7	13.9	7.25	2.33	.97	.70
MAX	8.64	43.1	72.5	81.3	117	72.0	57.3	78.3	58.0	24.9	6.36	4.88
(WY)	1984	1966	1967	1993	1980	1995	1969	1969	1980	1980	1980	1976
MIN	.000	.000	.000	.000	.21	.17	.063	.000	.000	.000	.000	.000
(WY)	1948	1948	1948	1948	1964	1961	1961	1961	1961	1956	1948	1948

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001	
ANNUAL TOTAL	107.23		123.01			
ANNUAL MEAN	.29		.34		5.25	
HIGHEST ANNUAL MEAN					32.9	
LOWEST ANNUAL MEAN					.088	
HIGHEST DAILY MEAN	1.9	Feb 21	2.1	Feb 27	1080	Jan 25 1969
LOWEST DAILY MEAN	.00	Jun 3	.00	Oct 1	.00	Oct 1 1947
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 3	.00	Oct 1	.00	Oct 1 1947
MAXIMUM PEAK FLOW			3.0	Feb 27	2900	Nov 22 1965
MAXIMUM PEAK STAGE			3.83	Feb 27	15.78	Sep 7 1981
ANNUAL RUNOFF (AC-FT)	213		244		3800	
10 PERCENT EXCEEDS	.91		1.0		11	
50 PERCENT EXCEEDS	.09		.12		.92	
90 PERCENT EXCEEDS	.00		.00		.00	

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

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

DRAINAGE AREA.—93.1 mi².

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

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

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,000 ft³/s, Feb. 21, 1980, gage height, 7.29 ft, from rating curve extended above 650 ft³/s on basis of slope-area measurements at gage heights 6.38 ft and 6.81 ft; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 950 ft³/s on basis of slope-area measurement at gage height 6.81 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 6	1415	666	4.28

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	2.2	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.94	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.54	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.42	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.2	.00	.00	.00	23	.00	.00
7	.00	.00	.00	.00	.00	4.3	.00	.00	.00	e1.0	.00	.00
8	.00	.00	.00	.00	.00	2.5	.05	.00	.00	e.03	.00	.00
9	.00	.00	.00	.00	.00	1.8	.00	.00	.00	e.00	.00	.00
10	.00	.00	.00	.00	.00	1.7	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.62	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.67	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.48	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.36	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.27	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.19	.03	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.14	.03	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	3.0	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	3.3	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	6.30	24.82	0.11	0.00	0.00	24.03	0.00	0.00
MEAN	.000	.000	.000	.000	.23	.80	.004	.000	.000	.78	.000	.000
MAX	.00	.00	.00	.00	3.3	4.3	.05	.00	.00	23	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	12	49	.2	.00	.00	48	.00	.00

e Estimated.

SALTON SEA BASIN

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.34	.81	3.71	8.54	19.0	18.7	7.25	2.20	.67	.76	.96	.82
MAX	5.95	20.6	39.6	203	318	188	80.8	24.1	9.87	15.1	33.0	19.5
(WY)	1984	1966	1983	1993	1980	1983	1958	1983	1980	1979	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1933	1950	1951	1951	1951	1934	1934	1931	1931	1932	1930

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1930 - 2001	
ANNUAL TOTAL	83.25		55.26			
ANNUAL MEAN	.23		.15		5.27	
HIGHEST ANNUAL MEAN					47.4	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	35	Aug 25	23	Jul 6	2040	Feb 21 1980
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Jul 16 1930
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Jul 16 1930
MAXIMUM PEAK FLOW			666		7000	
MAXIMUM PEAK STAGE			4.28		7.29	
ANNUAL RUNOFF (AC-FT)	165		110		3820	
10 PERCENT EXCEEDS	.11		.00		6.4	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA

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

DRAINAGE AREA.—8.65 mi².

PERIOD OF RECORD.—October 1948 to current year.

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

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

REMARKS.—Records good above 1 ft³/s and fair below. No regulation upstream from station. One small diversion for domestic use about 1 mi upstream from station. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,960 ft³/s, Aug. 31, 1954, gage height, 7.11 ft, from rating curve extended above 80 ft³/s, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended above 98 ft³/s, by theoretical computations of flow over weir:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	1530	7.5	2.60

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	.77	1.3	1.5	1.4	1.6	2.2	2.0	1.6	.63	.28	.38	.68
2	.79	1.3	1.6	1.4	1.5	2.0	2.0	1.5	.62	.26	.42	1.2
3	.80	1.3	1.4	1.4	1.6	1.9	2.0	1.5	.67	.26	.38	.68
4	.86	1.3	1.4	1.4	1.6	1.9	2.0	1.5	.69	.38	.27	.59
5	.89	1.3	1.4	1.4	1.6	1.8	1.9	1.5	.67	.59	.29	.52
6	.90	1.3	1.4	1.5	1.6	2.4	1.9	1.5	.66	1.1	.41	.45
7	.99	1.2	1.4	1.5	1.5	2.3	2.1	1.4	.61	1.0	.39	.44
8	.87	1.3	1.5	1.5	1.6	2.1	2.0	1.3	.57	.73	.41	.45
9	.92	1.3	1.5	1.5	1.6	2.0	2.0	1.2	.53	.55	.50	.45
10	.97	1.3	1.5	1.5	1.7	2.3	2.0	1.2	.52	.48	.51	.49
11	1.1	1.4	1.5	3.5	1.6	2.0	2.0	1.1	.52	.44	.38	.50
12	1.1	1.4	1.4	1.8	1.6	2.0	1.9	1.4	.56	.41	.40	.46
13	1.1	1.4	1.5	1.6	1.8	1.8	1.9	1.3	.58	.38	.59	.47
14	1.0	1.4	1.5	1.5	1.6	1.7	1.8	1.2	.54	.33	.71	.78
15	.97	1.4	1.5	1.6	1.5	1.7	1.8	1.2	.53	.33	.50	.81
16	.95	1.4	1.5	1.9	1.5	1.7	1.7	1.1	.50	.37	.39	.62
17	.93	1.4	1.5	1.6	1.5	1.7	1.7	1.1	.47	.40	.41	.55
18	.96	1.4	1.4	1.6	1.5	1.7	1.6	1.1	.43	.39	.44	.55
19	.99	1.4	1.4	1.6	1.5	1.8	1.7	1.0	.43	.38	.44	.54
20	.98	1.4	1.5	1.6	1.5	1.9	1.8	1.1	.43	.35	.39	.52
21	1.1	1.4	1.5	1.6	1.5	2.0	2.3	1.0	.50	.35	.31	.51
22	1.1	1.3	1.5	1.6	1.5	2.0	1.9	.89	.51	.34	.35	.48
23	1.3	1.4	1.5	1.6	1.5	1.9	1.8	.86	.46	.33	.40	.50
24	1.4	1.4	1.5	1.6	1.6	1.9	1.8	.81	.39	.34	.37	.48
25	1.3	1.4	1.4	1.6	2.1	1.9	1.7	.78	.43	.35	.34	.53
26	1.3	1.4	1.4	1.7	2.7	2.0	1.7	.73	.46	.36	.32	.55
27	1.3	1.4	1.4	1.6	4.2	2.0	1.7	.77	.44	.37	.33	.57
28	1.3	1.5	1.4	1.6	2.7	1.9	1.7	.84	.41	.34	.36	.56
29	1.3	1.5	1.4	1.6	---	2.0	1.7	.85	.37	.36	.42	.54
30	1.6	1.5	1.4	1.6	---	2.0	1.6	.76	.32	.43	.44	.59
31	1.3	---	1.4	1.6	---	2.0	---	.67	---	.36	.44	---
TOTAL	33.14	41.1	45.1	50.5	49.3	60.5	55.7	34.76	15.45	13.34	12.69	17.06
MEAN	1.07	1.37	1.45	1.63	1.76	1.95	1.86	1.12	.51	.43	.41	.57
MAX	1.6	1.5	1.6	3.5	4.2	2.4	2.3	1.6	.69	1.1	.71	1.2
MIN	.77	1.2	1.4	1.4	1.5	1.7	1.6	.67	.32	.26	.27	.44
AC-FT	66	82	89	100	98	120	110	69	31	26	25	34

SALTON SEA BASIN

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.36	2.17	3.06	4.65	5.61	5.87	4.34	3.01	1.93	1.38	1.36	1.26
MAX	5.60	19.2	30.2	46.5	56.4	33.7	20.0	17.4	12.4	7.51	9.52	6.05
(WY)	1984	1966	1967	1993	1980	1980	1983	1983	1983	1983	1983	1983
MIN	.38	.60	.96	.95	1.02	.99	.68	.51	.23	.087	.14	.24
(WY)	1966	1963	1963	1976	1961	1961	1961	1961	1961	1961	1963	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1949 - 2001
ANNUAL TOTAL	509.45	428.64	
ANNUAL MEAN	1.39	1.17	2.99
HIGHEST ANNUAL MEAN			12.4
LOWEST ANNUAL MEAN			.66
HIGHEST DAILY MEAN	6.7 Feb 21	4.2 Feb 27	395 Dec 6 1966
LOWEST DAILY MEAN	.34 Jul 26	.26 Jul 2	.00 Jun 27 1961
ANNUAL SEVEN-DAY MINIMUM	.37 Jul 24	.33 Jun 28	.00 Jul 13 1963
MAXIMUM PEAK FLOW		7.5 Feb 27	1960 Aug 31 1954
MAXIMUM PEAK STAGE		2.60 Feb 27	7.11 Aug 31 1954
ANNUAL RUNOFF (AC-FT)	1010	850	2160
10 PERCENT EXCEEDS	2.4	1.9	5.3
50 PERCENT EXCEEDS	1.4	1.3	1.7
90 PERCENT EXCEEDS	.54	.39	.59

10259050 PALM CANYON WASH NEAR CATHEDRAL CITY, CA

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

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—January 1988 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,280 ft³/s, Jan. 16, 1993, gage height, 8.70 ft, from rating curve extended above 1,350 ft³/s; no flow for most of 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	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.4	.00	.00	.00	16	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	7.2	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	8.83	1.40	0.00	0.00	0.00	16.06	0.00	0.00
MEAN	.000	.000	.000	.000	.32	.045	.000	.000	.000	.52	.000	.000
MAX	.00	.00	.00	.00	7.2	1.4	.00	.00	.00	16	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	18	2.8	.00	.00	.00	32	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

MEAN	.000	.002	.043	16.3	4.46	7.77	.27	1.54	1.58	.18	.45	.23
MAX	.000	.023	.45	202	35.2	93.3	3.81	18.3	22.1	1.32	1.77	2.23
(WY)	1988	1997	1993	1993	1993	1995	1993	1998	1998	1999	1989	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1988	1988	1988	1989	1988	1988	1988	1988	1988	1990	1988

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1988 - 2001

ANNUAL TOTAL	45.02	26.29	
ANNUAL MEAN	.12	.072	2.75
HIGHEST ANNUAL MEAN			20.4
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	31	Aug 25	16
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
MAXIMUM PEAK FLOW			358
MAXIMUM PEAK STAGE			7.70
ANNUAL RUNOFF (AC-FT)	89	52	1990
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

10259100 WHITEWATER RIVER AT RANCHO MIRAGE, CA

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

DRAINAGE AREA.—588 mi².

PERIOD OF RECORD.—March 1989 to current year.

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

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,060 ft³/s, Jan. 7, 1993, gage height, 5.93 ft, datum then in use, from rating curve extended above 1,460 ft³/s, on basis of critical depth computations, maximum gage height, 8.09 ft (present datum), Feb. 14, 1998; no flow for many days in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.26	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.07	.00	.00
7	.00	.00	.00	.00	.01	.00	.00	.00	.00	.02	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	2.7	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	1.9	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.03	0.00	0.00	0.02	5.19	1.26	0.00	0.00	0.00	0.09	0.00	0.00
MEAN	.001	.000	.000	.001	.19	.041	.000	.000	.000	.003	.000	.000
MAX	.02	.00	.00	.02	2.7	1.0	.00	.00	.00	.07	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.06	.00	.00	.04	10	2.5	.00	.00	.00	.2	.00	.00

10259100 WHITEWATER RIVER AT RANCHO MIRAGE, 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	.003	.003	.027	27.4	6.16	6.28	.032	.029	.007	.022	.11	.15
MAX	.016	.021	.18	310	52.3	66.0	.21	.27	.051	.23	.78	1.30
(WY)	1993	1990	1993	1993	1993	1995	1993	1993	1998	1999	1989	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1991	1994	1994	1997	1990	1989	1989	1989	1989	1990	1989

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	7.70		6.59			
ANNUAL MEAN	.021		.018		3.36	
HIGHEST ANNUAL MEAN					30.4	
LOWEST ANNUAL MEAN					.002	
HIGHEST DAILY MEAN	4.9	Aug 25	2.7	Feb 26	2950	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Mar 30 1989
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 8	.00	Oct 1	.00	Mar 30 1989
MAXIMUM PEAK FLOW			9.5		9060	
MAXIMUM PEAK STAGE			6.91		8.09	
ANNUAL RUNOFF (AC-FT)	15		13		2440	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10259200 DEEP CREEK NEAR PALM DESERT, CA

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

DRAINAGE AREA.—30.6 mi².

PERIOD OF RECORD.—May 1962 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,100 ft³/s, Sept. 10, 1976, gage height, 7.84 ft inside, 11.5 ft from floodmarks, from rating curve extended above 40 ft³/s on basis of slope-area measurement at gage heights 2.68, 5.15, and 7.84 ft; maximum gage height, 10.27 ft, Aug. 14, 1984; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 20 ft³/s, or maximum, from rating curve extended above 52 ft³/s on basis of slope-area measurement at gage heights 5.15 and 10.27 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 7	1700	2.0	1.58

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	.50	.25	.08	.02	.00	.00	.00
2	.00	.00	.00	.00	.00	.47	.23	.08	.02	.00	.00	.00
3	.00	.00	.00	.00	.00	.43	.22	.07	.02	.00	.00	.00
4	.00	.00	.00	.00	.00	.42	.22	.07	.02	.00	.00	.00
5	.00	.00	.00	.00	.00	.41	.21	.07	.02	.00	.00	.00
6	.00	.00	.00	.00	.00	.56	.20	.07	.02	.06	.00	.00
7	.00	.00	.00	.00	.00	1.2	.20	.07	.02	.09	.00	.00
8	.00	.00	.00	.00	.00	1.2	.20	.07	.02	.06	.00	.00
9	.00	.00	.00	.00	.00	.72	.19	.06	.02	.03	.00	.00
10	.00	.00	.00	.00	.00	.78	.19	.05	.02	.02	.00	.00
11	.00	.00	.00	.00	.00	.61	.17	.05	.02	.01	.00	.00
12	.00	.00	.00	.00	.00	.57	.17	.05	.02	.01	.00	.00
13	.00	.00	.00	.00	.00	.53	.17	.04	.02	.00	.00	.00
14	.00	.00	.00	.00	.00	.50	.16	.03	.02	.00	.00	.00
15	.00	.00	.00	.00	.00	.48	.15	.03	.02	.00	.00	.00
16	.00	.00	.00	.00	.00	.46	.15	.03	.02	.00	.00	.00
17	.00	.00	.00	.00	.00	.44	.15	.03	.02	.00	.00	.00
18	.00	.00	.00	.00	.00	.42	.14	.03	.02	.00	.00	.00
19	.00	.00	.00	.00	.00	.40	.12	.03	.01	.00	.00	.00
20	.00	.00	.00	.00	.00	.38	.11	.03	.01	.00	.00	.00
21	.00	.00	.00	.00	.00	.38	.13	.03	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.36	.11	.02	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.36	.10	.02	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.35	.09	.02	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.34	.09	.02	.00	.00	.00	.00
26	.00	.00	.00	.00	.20	.31	.09	.02	.00	.00	.00	.00
27	.00	.00	.00	.00	.67	.31	.09	.02	.00	.00	.00	.00
28	.00	.00	.00	.00	.60	.29	.08	.02	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.28	.08	.02	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.26	.08	.02	.00	.00	.00	.00
31	.00	---	.00	.00	---	.26	---	.02	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	1.47	14.98	4.54	1.27	0.38	0.28	0.00	0.00
MEAN	.000	.000	.000	.000	.053	.48	.15	.041	.013	.009	.000	.000
MAX	.00	.00	.00	.00	.67	1.2	.25	.08	.02	.09	.00	.00
MIN	.00	.00	.00	.00	.00	.26	.08	.02	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	2.9	30	9.0	2.5	.8	.6	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

MEAN	.22	.83	1.85	4.37	7.69	5.90	2.07	.82	.32	.76	.99	1.23
MAX	4.62	16.3	23.5	88.6	101	49.3	12.4	7.15	3.97	11.8	15.3	38.1
(WY)	1984	1966	1983	1993	1980	1983	1983	1983	1983	1979	1984	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1963	1963	1963	1963	1963	1963	1963	1962	1962	1962	1962	1962

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1962 - 2001
ANNUAL TOTAL	65.43	22.92	
ANNUAL MEAN	.18	.063	2.24
HIGHEST ANNUAL MEAN			15.1
LOWEST ANNUAL MEAN			.002
HIGHEST DAILY MEAN	36	1.2	850
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		2.0	7100
MAXIMUM PEAK STAGE		1.65	10.27
ANNUAL RUNOFF (AC-FT)	130	45	1620
10 PERCENT EXCEEDS	.28	.22	2.8
50 PERCENT EXCEEDS	.00	.00	.04
90 PERCENT EXCEEDS	.00	.00	.00

10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION.—Lat 33°44'14", long 116°14'07", in SE 1/4 NE 1/4 sec.15, T.5 S., R.7 E., [Riverside County](#), Hydrologic Unit 18100200, on right bank of concrete drop structure, 1,000 ft upstream from Monroe Street Bridge, and 1.7 mi northwest of Indio.

DRAINAGE AREA.—1,073 mi².

PERIOD OF RECORD.—March 1966 to current year.

REVISED RECORDS.—WDR CA-72-1: 1971.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,400 ft³/s, Jan. 25, 1969, gage height, 14.41 ft, site and datum then in use, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement at gage height 15.3 ft for flood of Nov. 22, 1965; no flow for all or most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2 or 3, 1938, reached a discharge of 29,000 ft³/s, on basis of slope-area measurement, at site 5.0 mi upstream. Flood of Nov. 22, 1965, reached a stage of 15.3 ft, from floodmark, at site and datum used prior to Oct. 1, 1979, discharge, 14,100 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum, from rating curve extended above 480 ft³/s on basis of critical-depth computations:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	1115	2.6	7.21

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	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.07	1.12	0.21	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.002	.040	.007	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.07	.49	.11	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.1	2.2	.4	.00	.00	.00	.00	.00	.00

SALTON SEA BASIN

10259300 WHITEWATER RIVER AT INDIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.010	.078	2.24	20.8	12.8	4.55	.018	.010	.008	1.06	1.06	2.48
MAX	.17	.88	61.3	513	278	56.2	.17	.35	.19	32.1	29.4	86.2
(WY)	1979	1979	1967	1993	1980	1978	1984	1972	1968	1979	1983	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1967	1967	1968	1967	1967	1966	1966	1966	1966	1967	1966	1966

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1966 - 2001
ANNUAL TOTAL	0.27	1.40	
ANNUAL MEAN	.001	.004	3.74
HIGHEST ANNUAL MEAN			47.4 1993
LOWEST ANNUAL MEAN			.000 1973
HIGHEST DAILY MEAN	.17 Mar 5	.49 Feb 27	5000 Jan 16 1993
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Mar 1 1966
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Mar 1 1966
MAXIMUM PEAK FLOW		2.6 Feb 27	11400 Jan 25 1969
MAXIMUM PEAK STAGE		7.21 Feb 27	14.41 Jan 25 1969
ANNUAL RUNOFF (AC-FT)	.5	2.8	2710
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

10259540 WHITEWATER RIVER NEAR MECCA, CA

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

DRAINAGE AREA.—1,495 mi².

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

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

REMARKS.—Records fair. Most flow represents seepage and return flow from irrigated areas. No discharge records computed above 200 ft³/s since October 1992. See schematic diagram of Salton Sea Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,500 ft³/s (estimated), Jan. 25, 1969; minimum daily, 37 ft³/s, Nov. 25–29, 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	64	68	71	71	70	88	75	73	68	67	69	71
2	65	64	67	71	72	88	73	73	68	65	67	67
3	65	64	72	72	72	86	76	73	64	65	68	67
4	65	64	74	72	72	80	78	73	62	69	67	66
5	66	64	75	73	71	80	77	73	63	71	68	64
6	67	64	75	73	72	74	74	69	62	72	69	65
7	71	61	75	72	75	80	77	67	62	80	69	63
8	69	60	77	73	75	77	75	67	60	70	71	64
9	69	60	75	70	78	76	73	65	60	67	76	67
10	65	60	71	69	77	75	73	70	58	67	71	65
11	64	64	77	72	78	76	74	72	61	69	72	63
12	67	64	75	74	80	75	75	70	60	70	77	63
13	64	65	67	71	81	75	77	74	59	73	74	61
14	64	68	65	68	78	76	79	78	59	74	75	63
15	64	65	66	69	75	74	78	77	58	69	71	64
16	65	68	67	71	75	75	74	78	72	67	76	65
17	67	70	67	72	75	80	73	74	64	71	91	64
18	63	69	66	72	78	86	75	74	63	66	74	63
19	63	69	65	74	79	85	76	69	62	73	71	63
20	63	70	66	73	78	82	77	67	63	73	69	62
21	63	67	65	73	77	81	76	68	64	69	73	61
22	64	67	69	70	82	78	76	67	65	66	102	61
23	65	66	71	67	78	78	73	67	64	68	100	63
24	85	66	73	70	77	79	74	66	62	67	72	60
25	87	67	68	70	79	78	72	66	63	65	66	58
26	84	65	67	70	85	74	71	69	60	67	67	56
27	85	66	68	72	87	76	74	71	60	67	69	58
28	99	66	67	72	83	80	76	65	62	71	67	59
29	97	66	69	73	---	77	79	63	64	70	67	61
30	81	69	68	71	---	74	75	65	68	68	66	62
31	69	---	68	70	---	73	---	65	---	70	65	---
TOTAL	2189	1966	2166	2210	2159	2436	2255	2168	1880	2146	2259	1889
MEAN	70.6	65.5	69.9	71.3	77.1	78.6	75.2	69.9	62.7	69.2	72.9	63.0
MAX	99	70	77	74	87	88	79	78	72	80	102	71
MIN	63	60	65	67	70	73	71	63	58	65	65	56
AC-FT	4340	3900	4300	4380	4280	4830	4470	4300	3730	4260	4480	3750

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

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

SUMMARY STATISTICS

WATER YEARS 1961 - 1992

ANNUAL MEAN	111
HIGHEST ANNUAL MEAN	156
LOWEST ANNUAL MEAN	68.4
HIGHEST DAILY MEAN	e2500
LOWEST DAILY MEAN	37
ANNUAL SEVEN-DAY MINIMUM	37
ANNUAL RUNOFF (AC-FT)	80380
10 PERCENT EXCEEDS	140
50 PERCENT EXCEEDS	108
90 PERCENT EXCEEDS	76

e Estimated.

10260431 DEEP CREEK NEAR ARROWBEAR LAKE, CA

LOCATION.—Lat 34°13'01", long 117°04'28", in SW 1/4 NE 1/4 sec.34, T.2 N., R.2 W., San Bernardino County, Hydrologic Unit 18090208, 6.7 mi east of Lake Arrowhead, and 15.3 mi northeast of San Bernardino.

DRAINAGE AREA.—4.09 mi².

PERIOD OF RECORD.—July to September 2001.

CHEMICAL DATA.—July to September 2001.

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)
JUL 18...	1510	e.05	614	3.3	43.0	6.9	226	17.5
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	BORON, DIS- SOLVED (UG/L AS B) (01020)
JUL 18...	28.9	e.1	.1	159	.09	<.050	e.004	<13

e Estimated.

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

10260432 CRAB CREEK AT CRAB FLATS ROAD, NEAR LAKE ARROWHEAD, CA

LOCATION.—Lat 34°15'32", long 117°05'00", in SW 1/4 NW 1/4 sec.15, T.2 N., R.2 W., San Bernardino County, Hydrologic Unit 18090208, 6.1 mi east of Lake Arrowhead, and 16.5 mi southeast of Hesperia.

DRAINAGE AREA.—2.16 mi².

PERIOD OF RECORD.—July to September 2001.

CHEMICAL DATA.—July to September 2001.

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)	
JUL 18...	1340	e.01	617	6.7	88.9	7.5	228	18.5	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	BORON, DIS- SOLVED (UG/L AS B) (01020)
JUL 18...	2.9	e.1	<.1	176	.19	<.050	e.004	<13	

e Estimated.

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

10260433 SHEEP CREEK BELOW LAKE ARROWHEAD SCOUT CAMP, NEAR LAKE ARROWHEAD, CA

LOCATION.—Lat 34°15'12", long 117°07'24", in SE 1/4 SE 1/4 sec.18, T.2 N., R.2 W., San Bernardino County, Hydrologic Unit 18090208, 3.8 mi east of Lake Arrowhead, and 15.0 mi southeast of Hesperia.

DRAINAGE AREA.—1.25 mi².

PERIOD OF RECORD.—July to September 2001.

CHEMICAL DATA.—July to September 2001.

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)
		JUL 19...	1135	e.01	633	5.0	57.4	7.2

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	BORON, DIS- SOLVED (UG/L AS B) (01020)
	JUL 19...	7.4	e.1	1.3	131	e.05	.054	e.003

e Estimated.

10260434 HOLCOMB CREEK AT CRAB FLATS ROAD, NEAR LAKE ARROWHEAD, CA

LOCATION.—Lat 34°16'32", long 117°02'58", in SW 1/4 NW 1/4 sec.12, T.2 N., R.2 W., San Bernardino County, Hydrologic Unit 18090208, 8.2 mi east of Lake Arrowhead, and 17.3 mi southeast of Hesperia.

DRAINAGE AREA.—25.4 mi².

PERIOD OF RECORD.—July to September, 2001.

CHEMICAL DATA.—July to September, 2001.

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 (PER- CENT SOLVED SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	
		JUL 18...	1225	.02	626	5.5	67.0	7.7	294
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	BORON, DIS- SOLVED (UG/L AS B) (01020)
JUL 18...	3.8	3.2	1.9	188	.09	e.034	e.003	28	

e Estimated.

MOJAVE RIVER BASIN

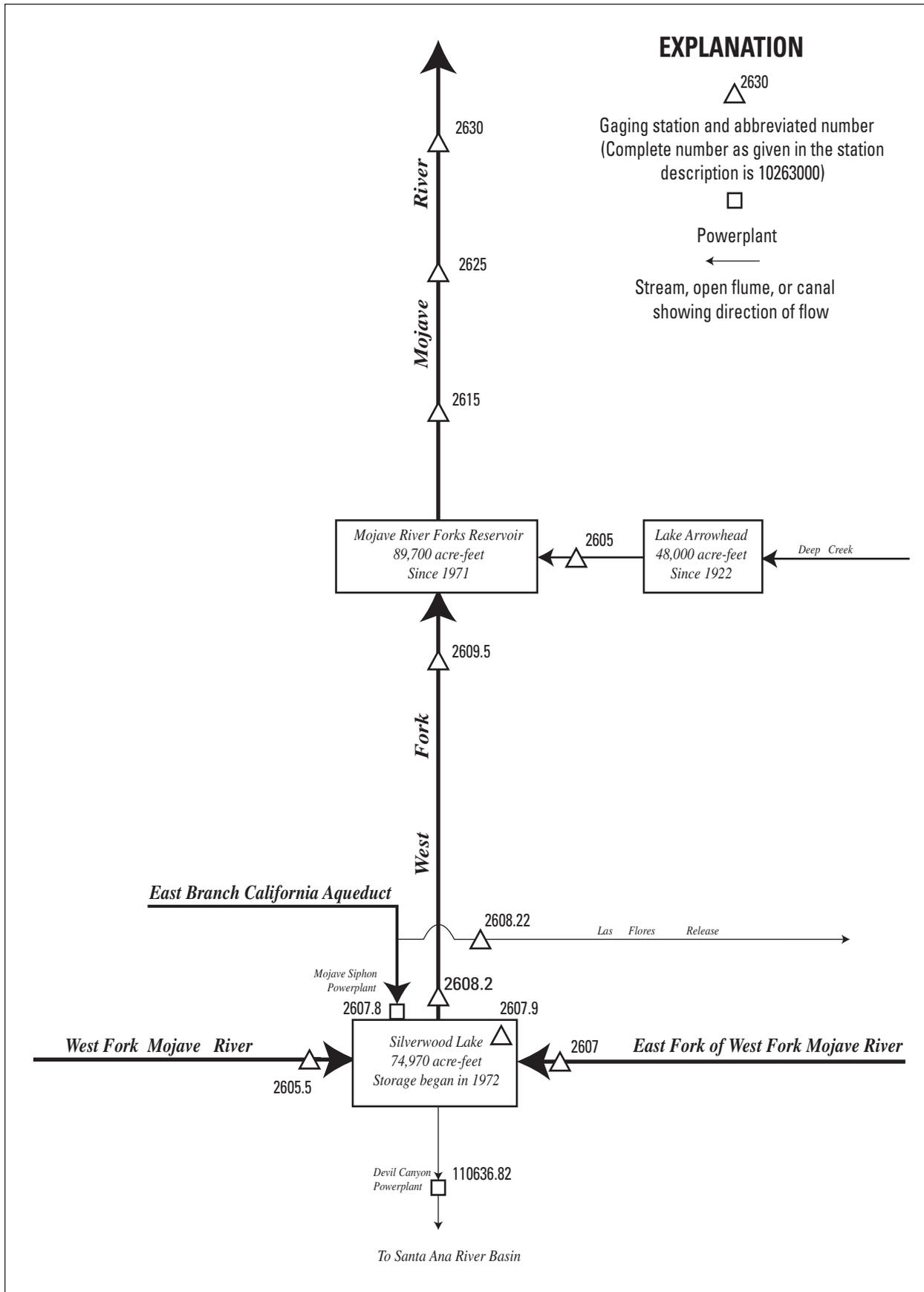


Figure 14. Diversions and storage in Mojave River Basin.

10260500 DEEP CREEK NEAR HESPERIA, CA

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

DRAINAGE AREA.—134 mi².

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

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

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,600 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow, maximum gage height, 23.81 ft, Feb. 10, 1978 (backwater from Mojave River Forks Reservoir); no flow July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 400 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 20	0545	150	2.37

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	1.7	5.1	4.8	5.3	9.7	65	75	41	5.6	1.2	.28	.56
2	1.7	4.3	4.9	5.2	9.3	52	68	39	5.2	1.0	.35	.70
3	1.6	3.9	4.9	5.3	9.3	44	59	35	5.1	.94	.29	.76
4	1.8	3.9	4.9	5.4	9.7	40	49	31	5.0	.97	.25	1.1
5	1.8	3.8	5.0	5.6	11	40	42	27	5.1	.96	.25	1.3
6	1.9	3.8	4.9	5.8	15	51	37	25	5.1	1.1	.26	.90
7	2.0	3.8	4.9	5.9	19	85	40	24	4.7	1.2	.31	.74
8	2.2	3.8	5.0	e5.9	18	76	52	22	4.4	1.2	.30	.69
9	2.1	3.7	5.0	e6.0	15	73	48	21	4.0	1.6	.22	.63
10	2.2	3.8	5.0	e6.2	14	76	44	19	3.3	1.7	.18	.68
11	2.3	4.0	5.1	e28	15	68	43	18	2.8	1.5	.22	.67
12	2.6	4.3	5.1	24	24	63	39	17	2.8	1.2	.22	.69
13	3.0	4.3	5.2	16	67	54	49	18	2.7	1.1	.24	.66
14	3.1	4.3	5.4	13	37	53	60	16	2.6	.95	.33	.67
15	3.1	4.3	5.5	11	28	62	64	15	2.5	e.95	.33	.66
16	3.1	4.1	5.5	11	26	70	65	14	2.5	.34	.28	.63
17	3.1	4.1	5.2	9.9	27	74	65	13	2.3	.28	.29	.59
18	3.0	4.2	5.2	8.8	26	80	62	12	2.0	.26	.28	.63
19	3.1	4.3	5.1	8.6	31	103	58	11	1.8	.30	.25	.62
20	3.1	4.4	5.1	8.5	105	123	55	e10	1.6	.28	.25	.61
21	3.2	4.5	5.3	8.5	101	124	62	e9.5	1.6	.26	.28	.63
22	3.2	4.4	5.3	8.6	74	118	58	9.0	1.5	.25	.33	.64
23	3.3	4.5	5.1	8.9	66	104	61	8.4	1.4	.24	.43	.65
24	3.6	4.5	5.2	9.4	48	90	68	8.0	1.2	.24	.45	.65
25	3.7	4.7	5.2	11	39	91	66	7.6	1.3	.29	.44	.63
26	4.1	4.7	5.2	11	72	87	63	7.3	1.3	.30	.42	.64
27	4.2	4.7	5.2	11	62	80	59	7.1	1.3	.29	.42	.64
28	4.4	4.6	5.1	12	64	80	54	6.9	1.2	.24	.40	.65
29	4.7	4.6	5.3	11	---	91	48	6.8	1.2	.23	.40	.66
30	5.1	4.6	5.3	11	---	97	43	6.5	1.3	.23	.39	.72
31	7.4	---	5.3	10	---	81	---	6.1	---	.28	.46	---
TOTAL	95.4	128.0	159.2	307.8	1042.0	2395	1656	511.2	84.4	21.88	9.80	21.00
MEAN	3.08	4.27	5.14	9.93	37.2	77.3	55.2	16.5	2.81	.71	.32	.70
MAX	7.4	5.1	5.5	28	105	124	75	41	5.6	1.7	.46	1.3
MIN	1.6	3.7	4.8	5.2	9.3	40	37	6.1	1.2	.23	.18	.56
AC-FT	189	254	316	611	2070	4750	3280	1010	167	43	19	42

e Estimated

MOJAVE RIVER BASIN

10260500 DEEP CREEK NEAR HESPERIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.22	19.2	55.0	132	210	214	143	64.6	17.5	5.63	3.21	3.56
MAX	42.0	606	843	2062	2028	1539	747	456	80.4	25.9	29.2	54.3
(WY)	1984	1966	1922	1993	1993	1978	1958	1998	1998	1969	1983	1976
MIN	.23	1.14	2.53	4.56	6.07	4.87	3.20	2.37	1.14	.14	.13	.10
(WY)	1934	1957	1905	1951	1951	1956	1951	1934	1956	1961	1933	1933

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1905 - 2001	
ANNUAL TOTAL	7156.62		6431.68			
ANNUAL MEAN	19.6		17.6		71.9	
HIGHEST ANNUAL MEAN					411	
LOWEST ANNUAL MEAN					3.06	
HIGHEST DAILY MEAN	560	Feb 21	124	Mar 21	14700	Jan 25 1969
LOWEST DAILY MEAN	.51	Jul 29	.18	Aug 10	.00	Jul 17 1961
ANNUAL SEVEN-DAY MINIMUM	.55	Jul 25	.24	Aug 7	.07	Jul 12 1961
MAXIMUM PEAK FLOW			150	Mar 20	46600	Mar 2 1938
MAXIMUM PEAK STAGE			2.37	Mar 20	23.81	Feb 10 1978
ANNUAL RUNOFF (AC-FT)	14200		12760		52120	
10 PERCENT EXCEEDS	66		63		139	
50 PERCENT EXCEEDS	4.9		5.0		9.9	
90 PERCENT EXCEEDS	.89		.34		.96	

10260550 WEST FORK MOJAVE RIVER ABOVE SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°17'06", long 117°22'16", in NW 1/4 SE 1/4 sec.2, T.2 N., R.5 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, on left bank, 1.5 mi upstream from Silverwood Lake, and 10.6 mi southwest of Hesperia.

DRAINAGE AREA.—3.22 mi².

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1961–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 3,550 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of the Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 584 ft³/s, Feb. 23, 1998, gage height, 3.88 ft; no flow for many days in each year.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.02	.41	9	1.7	2	.55	.01	.00	.00
2	.00	.00	.01	.01	.39	7.2	1.6	2	.54	.01	.00	.00
3	.00	.00	.01	.01	.39	6.2	1.6	1.9	.59	.00	.00	.00
4	.00	.00	.01	.01	.39	5.6	1.6	1.8	.54	.00	.00	.00
5	.00	.00	.01	.02	.4	5.9	1.5	1.7	.5	.00	.00	.00
6	.00	.00	.02	.02	.5	10	1.5	1.7	.47	.00	.00	.00
7	.00	.00	.02	.02	.64	9.2	11	1.5	.42	.00	.00	.00
8	.00	.00	.02	.03	.58	7.6	6.1	1.4	.38	.00	.00	.00
9	.00	.00	.02	.03	.53	7.5	4.4	1.4	.37	.00	.00	.00
10	.00	.00	.02	.13	.59	7.9	3.7	1.3	.35	.00	.00	.00
11	.00	.00	.02	2.3	.51	7.1	3.8	1.3	.42	.00	.00	.00
12	.00	.00	.02	.82	15	6	3.9	1.3	.47	.00	.00	.00
13	.00	.00	.02	.57	22	5.4	4	1.3	.45	.00	.00	.00
14	.00	.00	.03	.48	5.3	5	3.9	1.2	.36	.00	.00	.00
15	.00	.00	.03	.44	3.4	4.7	3.5	1.2	.35	.00	.00	.00
16	.00	.00	.03	.37	2.7	4.4	3.1	1.2	.28	.00	.00	.00
17	.00	.00	.02	.31	2.5	4	2.9	1.1	.24	.00	.00	.00
18	.00	.00	.02	.28	2.4	3.8	2.6	1.1	.22	.00	.00	.00
19	.00	.00	.02	.27	15	3.6	2.6	1.1	.19	.00	.00	.00
20	.00	.00	.02	.26	25	3.5	2.6	1	.16	.00	.00	.00
21	.00	.00	.02	.26	8.7	3.4	7.6	.97	.15	.00	.00	.00
22	.00	.00	.02	.26	6.7	3.1	4.7	.89	.14	.00	.00	.00
23	.00	.00	.02	.26	5.6	2.8	3.9	.82	.12	.00	.00	.00
24	.00	.00	.02	.42	4.8	2.7	3.4	.77	.08	.00	.00	.00
25	.00	.00	.02	.45	13	2.5	3.1	.74	.05	.00	.00	.00
26	.00	.00	.02	.48	19	2.3	2.8	.7	.05	.00	.00	.00
27	.00	.00	.02	.46	13	2.2	2.6	.73	.05	.00	.00	.00
28	.00	.00	.02	.44	12	2.1	2.5	.76	.04	.00	.00	.00
29	.00	.00	.02	.44	---	2	2.3	.7	.02	.00	.00	.00
30	.00	.00	.02	.46	---	1.9	2.2	.65	.02	.00	.00	.00
31	.00	---	.02	.44	---	1.8	---	.59	---	.00	.00	---
TOTAL	0.00	0.00	0.60	10.77	181.43	150.4	102.7	36.82	8.57	0.02	0.00	0.00
MEAN	.000	.000	.019	.35	6.48	4.85	3.42	1.19	.29	.001	.000	.000
MAX	.00	.00	.03	2.3	25	10	11	2.0	.59	.01	.00	.00
MIN	.00	.00	.01	.01	.39	1.8	1.5	.59	.02	.00	.00	.00
AC-FT	.00	.00	1.2	21	360	298	204	73	17	.04	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	.054	.13	.98	2.64	8.65	5.14
MAX	.25	.41	4.49	12.8	26.5	12.5
MIN	.000	.000	.019	.042	1.10	.74

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	318.79		491.31			
ANNUAL MEAN	.87		1.35		2.15	
HIGHEST ANNUAL MEAN					6.29	
LOWEST ANNUAL MEAN					.57	
HIGHEST DAILY MEAN	29	Feb 23	25	Feb 20	278	Feb 23 1998
LOWEST DAILY MEAN	.00	Jun 25	.00	Oct 1	.00	Jul 7 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 25	.00	Oct 1	.00	Jul 7 1996
MAXIMUM PEAK FLOW			63		584	
MAXIMUM PEAK STAGE			2.84		3.88	
ANNUAL RUNOFF (AC-FT)	632		975		1560	
10 PERCENT EXCEEDS	2.0		3.9		5.7	
50 PERCENT EXCEEDS	.02		.02		.31	
90 PERCENT EXCEEDS	.00		.00		.00	

10260700 EAST FORK OF WEST FORK MOJAVE RIVER ABOVE SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°16'13", long 117°17'31", in NW 1/4 SW 1/4 sec.10, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, on right bank, 0.8 mi downstream from Houston Creek, 1.5 mi upstream from Silverwood Lake, and 10.8 mi south of Hesperia.

DRAINAGE AREA.—11.2 mi².

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1961–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 3,590 ft above sea level, from topographic map.

REMARKS.—Flow slightly regulated by Lake Gregory 3.2 mi upstream. See schematic diagram of the [Mojave River Basin](#).

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,440 ft³/s, Feb. 23, 1998, gage height, 6.92 ft; no flow for many days in each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.08	.18	.71	17	3.9	4.2	.55	.01	.00	.00
2	.00	.00	.09	.18	.67	14	3.4	3.9	.56	.00	.00	.00
3	.00	.00	.1	.18	.67	12	3.2	3.5	.66	.00	.00	.00
4	.00	.00	.11	.18	.71	11	3.1	3.1	.65	.00	.00	.00
5	.00	.00	.11	.18	.83	11	3	3	.55	.00	.00	.00
6	.00	.00	.11	.23	.89	24	2.8	2.9	.5	.00	.00	.00
7	.00	.00	.11	.22	1.2	28	14	2.6	.43	.00	.00	.00
8	.00	.00	.11	.24	1	21	9.2	2.4	.37	.00	.00	.00
9	.00	.00	.12	.5	.88	18	7	2.3	.33	.00	.00	.00
10	.00	.00	.13	1.1	1.1	19	6.4	2.2	.3	.00	.00	.00
11	.00	.00	.13	8.8	1	16	6.3	2	.28	.00	.00	.00
12	.00	.00	.14	1.9	15	14	6.5	2.2	.29	.00	.00	.00
13	.00	.00	.15	1.2	24	12	6.4	2.1	.28	.00	.00	.00
14	.00	.00	.15	.89	19	11	6.2	1.8	.23	.00	.00	.00
15	.00	.00	.15	.73	13	10	5.9	1.7	.22	.00	.00	.00
16	.00	.00	.15	.69	8.8	9.5	5.7	1.6	.19	.00	.00	.00
17	.00	.00	.15	.58	6.9	9.1	5.4	1.5	.17	.00	.00	.00
18	.00	.00	.15	.55	6.4	8.6	5	1.5	.15	.00	.00	.00
19	.00	.00	.15	.5	14	8.5	4.8	1.4	.13	.00	.00	.00
20	.00	.00	.16	.5	43	8.8	5	1.3	.11	.00	.00	.00
21	.00	.00	.18	.5	19	8.7	12	1.1	.09	.00	.00	.00
22	.00	.00	.18	.5	14	8.2	7.3	1.1	.08	.00	.00	.00
23	.00	.00	.18	.5	12	7.1	6.5	.99	.07	.00	.00	.00
24	.00	.00	.18	1	11	6.5	6	.93	.05	.00	.00	.00
25	.00	.00	.17	.99	22	6.1	5.8	.88	.04	.00	.00	.00
26	.00	.00	.15	.83	34	5.7	5.9	.81	.04	.00	.00	.00
27	.00	.00	.15	.84	22	5.2	5.3	.81	.03	.00	.00	.00
28	.00	.00	.16	.86	20	4.9	5.3	.91	.02	.00	.00	.00
29	.00	.03	.17	.88	---	4.7	4.8	.85	.02	.00	.00	.00
30	.00	.06	.18	.85	---	4.5	4.3	.69	.01	.00	.00	.00
31	.00	---	.18	.77	---	4.3	---	.6	---	.00	.00	---
TOTAL	0.00	0.09	4.43	28.05	313.76	348.4	176.4	56.87	7.40	0.01	0.00	0.00
MEAN	.000	.003	.14	.90	11.2	11.2	5.88	1.83	.25	.000	.000	.000
MAX	.00	.06	.18	8.8	43	28	14	4.2	.66	.01	.00	.00
MIN	.00	.00	.08	.18	.67	4.3	2.8	.60	.01	.00	.00	.00
AC-FT	.00	.2	8.8	56	622	691	350	113	15	.02	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	.11	.61	2.12	6.48	24.4	14.3	10.7	10.1	3.20	.88	.18	.43
MAX	.45	2.10	9.36	29.5	84.8	38.0	43.0	53.2	17.5	5.18	1.11	2.56
(WY)	1999	1997	1997	1997	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.080	.26	5.11	1.64	1.89	.65	.17	.000	.000	.000
(WY)	1998	2000	2000	2000	1999	1999	1997	1997	1997	2000	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	835.00		935.41			
ANNUAL MEAN	2.28		2.56		6.02	
HIGHEST ANNUAL MEAN					20.5	
LOWEST ANNUAL MEAN					1.47	
HIGHEST DAILY MEAN	70	Feb 23	43	Feb 20	577	Feb 23 1998
LOWEST DAILY MEAN	.00	Jul 1	.00	Oct 1	.00	Jul 12 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 1	.00	Oct 1	.00	Jul 12 1996
MAXIMUM PEAK FLOW			73	Feb 20	1440	Feb 23 1998
MAXIMUM PEAK STAGE			3.86	Feb 20	6.92	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	1660		1860		4360	
10 PERCENT EXCEEDS	5.6		8.8		14	
50 PERCENT EXCEEDS	.16		.15		.57	
90 PERCENT EXCEEDS	.00		.00		.00	

10260776 EAST BRANCH CALIFORNIA AQUEDUCT AT ALAMO POWERPLANT, NEAR GORMAN, CA

LOCATION.—Lat 34°48'56", long 118°41'03", in NW 1/4 NE 1/4 sec.4, T.8 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, in powerplant 2.2 mi downstream from Tehachapi Tunnel on the East Branch California Aqueduct, and 9 mi east of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources. Published as "Alamo Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meter in pen stock and water-stage recorder in bypass flume. Elevation of gage is 2,932.5 ft above sea level (levels by California Department of Water Resources).

REMARKS.—Upstream the flow splits as it leaves the Tehachapi Tunnel. Flow at this site represents East Branch California Aqueduct water flowing southeast to Silverwood Lake. Flow at this site has three components which are combined for publication: flow through the powerplant, occasional bypass flow through the Alamo Bypass (Cottonwood Chute) and estimated leakage. The West Branch California Aqueduct flows through William Warne Powerplant (station 11109398). See schematic of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,510 ft³/s, July 12, 1997; no flow at times 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	1860	1470	1780	1190	708	589	1320	605	1020	2100	1420	1010
2	1200	1250	1730	1430	713	585	931	881	895	1360	971	2000
3	1010	879	2070	1070	597	608	899	869	832	1350	1140	2040
4	1640	1230	1510	1110	792	1200	676	776	909	1300	1030	1020
5	888	1620	569	1170	614	610	886	760	983	1260	2330	1020
6	1100	1170	1920	1200	524	615	1100	1820	1120	1220	1250	1290
7	1130	1100	1700	1150	426	1090	1210	716	978	926	1100	1080
8	1800	1320	2110	1100	501	931	2120	847	920	2120	1160	1060
9	971	1680	2010	1230	465	729	896	736	828	1160	1110	1560
10	1040	1440	1990	1170	529	623	1000	906	1180	1140	1100	1110
11	1540	1580	1550	661	699	726	863	1020	1030	1250	1130	1120
12	1390	1960	1580	1140	458	812	815	1140	1040	1180	2290	1130
13	1160	1540	2150	1060	560	497	958	2170	1040	1060	1150	1070
14	1210	1630	1520	822	716	654	814	1380	1090	1150	1020	1120
15	1330	1190	1630	936	424	628	1810	1430	1030	2050	1140	910
16	1100	1130	1640	983	424	770	653	1320	941	1020	1030	1460
17	1100	1090	1430	687	487	832	893	1340	1540	1040	1150	979
18	1930	1560	1380	641	628	1920	872	1310	1020	1060	1120	994
19	1400	2100	1430	939	525	819	905	1050	1100	1060	1720	1070
20	1330	1050	963	756	576	530	596	1610	1130	988	1120	1050
21	1060	1150	1550	20	755	790	710	1140	1020	995	882	752
22	1290	1350	1360	232	626	862	1480	987	1090	1930	1090	969
23	1250	2100	1290	227	546	992	703	1260	1050	1000	975	1320
24	1150	1340	1380	648	360	1280	713	1400	1790	1040	1040	232
25	1100	1320	1640	136	975	2080	707	1360	1050	1170	1120	792
26	1200	1880	1540	602	446	1420	711	1110	1200	1160	1850	1400
27	973	1240	1050	422	467	1240	644	985	1170	1170	772	1510
28	1450	1060	1110	281	565	1140	526	1470	1130	1060	1120	1150
29	2050	824	1230	182	---	1120	1360	1220	1210	1450	1040	912
30	1060	1220	1310	301	---	1170	789	1250	1180	1060	1180	1600
31	1210	---	1180	1080	---	752	---	1020	---	1160	945	---
TOTAL	39922	41473	47302	24576	16106	28614	28560	35888	32516	38989	37495	34730
MEAN	1288	1382	1526	793	575	923	952	1158	1084	1258	1210	1158
MAX	2050	2100	2150	1430	975	2080	2120	2170	1790	2120	2330	2040
MIN	888	824	569	20	360	497	526	605	828	926	772	232
AC-FT	79190	82260	93820	48750	31950	56760	56650	71180	64500	77330	74370	68890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	1996	1997	1998	1999	2000	2001
MEAN	675	412	623	438	334	686	1061	1076	1121	1254	1253	1143
MAX	1366	1382	1526	1177	1071	1308	1367	1328	1415	1560	1479	1343
(WY)	2000	2001	2001	2000	2000	2000	1997	1997	2000	1997	2000	2000
MIN	28.0	51.3	94.7	62.1	1.46	217	683	722	922	852	1044	820
(WY)	1996	1997	1997	1999	1998	1998	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	488093		406171			
ANNUAL MEAN	1334		1113		842	
HIGHEST ANNUAL MEAN					1227	
LOWEST ANNUAL MEAN					603	
HIGHEST DAILY MEAN	2270	Aug 27	2330	Aug 5	2510	Jul 12 1997
LOWEST DAILY MEAN	569	Dec 5	20	Jan 21	.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	847	Feb 24	327	Jan 21	.00	Feb 4 1997
ANNUAL RUNOFF (AC-FT)	968100		805600		610300	
10 PERCENT EXCEEDS	1780		1640		1470	
50 PERCENT EXCEEDS	1280		1100		936	
90 PERCENT EXCEEDS	997		607		12	

10260780 EAST BRANCH CALIFORNIA AQUEDUCT AT MOJAVE SIPHON POWERPLANT, NEAR HESPERIA, CA

LOCATION.—Lat 34°16'25", long 117°19'24", in SE 1/4 NW 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in powerplant and bypass channel, 0.2 mi north of Silverwood Lake, and 8.3 mi south of Hesperia.

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1975–94 available in files of the California Department of Water Resources. Published as "Mojave Siphon Powerplant" prior to October 1999.

REVISED RECORDS.—WDR CA-00-1: 1997–1999.

GAGE.—Acoustic-velocity meters on intake pipes. Water stage recorder in stilling well on bypass flume. Elevation of powerplant is 3,182 ft above sea level. Elevation of bypass gage is 3,372.5 ft above sea level (from California Department of Water Resources).

REMARKS.—Flow at this site represents East Branch California Aqueduct water to Silverwood Lake. Flow at this site has two components which are combined for publication: flow through the powerplant, and bypass flow through the flume. See schematic diagram of Mojave River Basin.

COOPERATION.—Records collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,200 ft³/s, July 14, 1997; 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	1550	1450	1350	1080	637	484	1020	357	927	1830	1100	881
2	1130	1030	1740	1370	545	610	803	860	808	1320	724	1800
3	827	982	1950	1050	544	511	794	714	688	1100	956	1670
4	1250	1080	1510	1140	697	1130	711	787	975	1090	823	1080
5	904	1620	582	1310	457	590	893	755	922	1040	1850	1060
6	948	918	1710	978	484	584	827	1510	1040	1130	1240	1010
7	1050	1030	1690	1080	449	1010	1250	651	809	795	963	915
8	1490	1100	1810	1140	419	833	1720	628	891	1840	865	992
9	951	1430	1910	1150	373	746	831	845	658	1150	907	1390
10	961	1360	1950	1010	427	509	1070	780	1020	984	850	883
11	1000	1460	1790	458	619	682	970	909	1120	1060	819	1030
12	1350	1810	1420	1240	486	702	774	849	903	916	1930	909
13	1110	1520	1710	926	697	511	759	1800	837	1000	1220	949
14	896	1400	1670	899	720	540	870	1620	1030	982	1090	884
15	970	1170	1460	1010	569	645	1570	1340	910	1420	993	950
16	1130	1070	1510	842	328	520	732	1020	825	997	908	964
17	965	1110	1250	732	497	699	663	1180	1200	878	869	1030
18	1830	1300	1240	684	731	1620	875	1170	1120	964	871	879
19	1220	1810	1320	476	502	829	840	991	871	976	1490	880
20	1170	1120	1150	678	510	485	406	1380	864	808	1040	896
21	869	955	1460	.07	396	565	594	906	988	726	875	640
22	1100	1280	1220	128	515	799	1280	746	996	1350	850	745
23	1150	1710	1150	289	500	952	741	1230	913	1030	897	796
24	1090	1550	1200	593	378	1250	574	1250	1760	817	730	.00
25	1020	1220	1500	172	907	1850	694	1210	849	935	862	748
26	1050	1630	1510	544	349	1220	544	997	1030	1050	1450	1360
27	1010	1110	1120	314	409	1230	529	921	1100	851	842	1330
28	1110	954	1170	309	477	1240	487	1190	1090	951	884	896
29	1790	852	1290	208	---	1210	1340	871	1020	1220	912	806
30	1120	1090	1100	268	---	867	496	1150	1260	1020	882	1370
31	995	---	922	812	---	769	---	1060	---	925	841	---
TOTAL	35006	38121	44364	22890.07	14622	26192	25657	31677	29424	33155	31533	29743.00
MEAN	1129	1271	1431	738	522	845	855	1022	981	1070	1017	991
MAX	1830	1810	1950	1370	907	1850	1720	1800	1760	1840	1930	1800
MIN	827	852	582	.07	328	484	406	357	658	726	724	.00
AC-FT	69430	75610	88000	45400	29000	51950	50890	62830	58360	65760	62550	59000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	576	332	544	373	300	580
MAX	1187	1271	1431	1102	1016	1195
(WY)	2000	2001	2001	2000	2000	2000
MIN	22.6	.000	.95	7.89	.52	1.69
(WY)	1996	1997	1997	1997	1997	1996

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	430863	362384.07	
ANNUAL MEAN	1177	993	715
HIGHEST ANNUAL MEAN			1073
LOWEST ANNUAL MEAN			502
HIGHEST DAILY MEAN	1950	1950	2200
LOWEST DAILY MEAN	538	.00	.00
ANNUAL SEVEN-DAY MINIMUM	785	291	.00
ANNUAL RUNOFF (AC-FT)	854600	718800	517700
10 PERCENT EXCEEDS	1550	1510	1310
50 PERCENT EXCEEDS	1130	964	788
90 PERCENT EXCEEDS	865	511	4.0

10260790 SILVERWOOD LAKE NEAR HESPERIA, CA

LOCATION.—Lat 34°18'15", long 117°19'05", in SW 1/4 NE 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in control structure, near spillway of Cedar Springs Dam, and 8.7 mi south of Hesperia.

DRAINAGE AREA.—34.0 mi².

PERIOD OF RECORD.—October 1995 to current year. Unpublished records for water years 1972–95 available in files of the California Department of Water Resources.

GAGE.—Water-stage recorder. Elevation of gage is sea level.

REMARKS.—Lake is formed by earthfill dam completed in 1972. Capacity, 74,970 acre-ft, at spillway crest of 3,355 ft. Dead storage at invert of outlet structure, 3,967 acre-ft, elevation, 3,235 ft. Lake is a holding basin for East Branch California Aqueduct. See REMARKS for station 10260820. See schematic diagram of Mojave River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 74,843 acre-ft, Oct. 24, 1999, elevation, 3,354.87 ft; minimum, 38,006 acre-ft, Mar. 22, 1996, elevation, 3,310.24 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 73,600 acre-ft, Jan. 16, elevation, 3,353.59 ft; minimum, 65,183 acre-ft, Dec. 1, elevation, 3,344.59.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by California Department of Water Resources, dated January 1978)

3,300	31,395	3,325	48,732	3,345	65,554	3,355	74,970
3,315	41,311	3,335	56,811				

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	70828	69913	65183	72178	70903	68521	71987	68567	72734	70694	70252	68940
2	71036	69482	65873	72513	70412	68048	71349	68474	72734	71235	69566	70554
3	70610	68744	66969	72140	70030	67604	71026	68512	72255	71188	69547	71796
4	70761	68279	67024	72035	70073	68447	70384	67937	72274	71026	69454	71787
5	70459	68968	65772	71863	70195	68595	69913	67613	72255	70979	71055	71968
6	70223	67946	66328	71577	70705	68530	69182	69136	72456	71159	71416	71873
7	70167	67595	66722	71017	70657	69397	69960	68558	69911	70535	71226	71825
8	71074	67061	67309	70865	70970	69998	71710	67835	72111	71930	70903	71549
9	70733	66923	68651	70932	70771	70582	71625	67623	71834	72207	70450	72676
10	70525	67024	69707	71112	69772	70242	71568	67144	71977	71720	70261	72379
11	70459	67153	70233	71169	69725	70214	71340	67015	71949	71264	69678	72523
12	70913	68168	70355	72609	69866	70346	70856	66868	71539	70970	71625	72475
13	71121	68215	70894	72926	70695	69678	70620	68512	70989	70865	71653	72561
14	70469	68605	71074	73022	70667	69033	70506	69369	70742	70941	71796	72465
15	69960	68066	71558	73214	70922	68781	72111	69998	70393	71768	71806	72743
16	69978	67641	71548	73600	69782	67595	71435	70176	69922	71663	71368	72926
17	69369	67245	71545	73330	69472	67217	71140	70979	70431	71501	70799	73032
18	70629	67300	71368	73349	69472	68261	70847	71454	70790	71425	70421	72762
19	70761	68094	71359	73176	69660	67918	70639	71473	70374	71482	71615	72446
20	70761	67826	71283	73369	69707	67282	70431	72039	70223	71045	71549	72638
21	69885	66887	71663	72878	69566	66484	70667	71777	70337	70799	71444	72092
22	69425	66529	71568	72264	69472	66438	71691	71406	69763	71473	71292	71663
23	69108	67429	71197	71949	69575	66703	71939	71501	69341	71644	71112	71568
24	68958	67632	71378	72350	68772	67780	71672	72226	70563	71330	70308	70610
25	68502	67530	72312	71920	69491	69248	71777	72513	69829	71045	70092	69810
26	68168	67863	72897	72475	69454	69716	71178	72676	69528	71055	70941	70884
27	67199	67401	72609	72647	68865	71045	70771	72350	69192	70733	70761	71653
28	67309	66804	72561	72638	68837	71672	69810	72935	69080	70639	70374	71283
29	69266	65954	73032	71997	---	72178	70809	72734	68707	70951	69707	70771
30	69397	65273	73166	70922	---	72073	69603	72878	69323	70761	69351	71557
31	69276	---	72542	71026	---	71796	---	73032	---	70337	69005	---
MAX	71121	69913	73166	73600	70970	72178	72111	73032	72734	72207	71806	73032
MIN	67199	65273	65183	70865	68772	66438	69182	66868	68707	70337	69005	68940
a	3349.04	3344.69	3352.49	3350.90	3348.57	3351.71	3349.39	3353.00	3349.09	3350.17	3348.75	3351.78
b	-675	-4003	+7269	-1516	-2189	+2959	-2193	+3429	-3709	+1014	-1332	+2552

CAL YR 2000 b +2874
WTR YR 2001 b +1606

a Elevation, in feet, at end of month.
b Change in contents, in acre feet.

10260820 WEST FORK MOJAVE RIVER BELOW SILVERWOOD LAKE, NEAR HESPERIA, CA

LOCATION.—Lat 34°18'15", long 117°19'06", in SW 1/4 NE 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, San Bernardino National Forest, in control room under spillway at Cedar Springs Dam, and 8.7 mi south of Hesperia.

DRAINAGE AREA.—34.0 mi².

PERIOD OF RECORD.—October 1980 to September 1983, October 1995 to current year. Unpublished records for water years 1973–95 available in files of the California Department of Water Resources.

GAGE.—Flowmeter on release valve and theoretical rating on two slide gates. Elevation of gage is 3,180 ft above sea level, from topographic map. Prior to October 1983, at recording site 0.3 mi downstream, at different datum.

REMARKS.—Flow regulated by Silverwood Lake (station 10260790). Lake stores water received from the East Branch California Aqueduct through Mojave Siphon Powerplant (station 10260780) until it is transferred to Santa Ana River Basin area through Devil Canyon Powerplant (station 11063682). Las Flores Release from East Branch California Aqueduct (station 10260822) delivers water to vicinity of West Fork Mojave River. See schematic diagram of [Mojave River Basin](#).

COOPERATION.—Records collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,290 ft³/s, Mar. 2, 1983, gage height, 7.51 ft, site and datum then in use; no flow for most of every year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	44	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	37	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	15	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	20	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	51	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	51	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	14	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	17	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	30	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	50	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	24	18	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	18	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	24	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	52	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	52	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	26	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	50	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	50	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	296.00	316.00	31.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	10.6	10.2	1.03	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	52	51	17	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	587	627	61	.00	.00	.00	.00	.00
a	0	0	0	84	280	1320	758	649	187	63	58	74

a Flow, in acre-feet, through Las Flores Release (station 10260822), provided by California Department of Water Resources.

10260820 WEST FORK MOJAVE RIVER BELOW SILVERWOOD LAKE, NEAR HESPERIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.040	.60	8.36	16.5	75.6	105	25.4	24.0	4.31	.59	1.67	.14
MAX	.19	4.03	50.8	73.9	403	739	87.8	126	28.9	2.65	14.6	1.18
(WY)	1983	1983	1983	1997	1983	1983	1998	1998	1998	1997	1997	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1996	1996	1996	1999	1999	1999	1997	1997	1981	1996	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001	
ANNUAL TOTAL	776.00		643.00			
ANNUAL MEAN	2.12		1.76		21.6	
HIGHEST ANNUAL MEAN					118	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	88	Feb 25	52	Feb 21	1990	Mar 3 1983
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1980
MAXIMUM PEAK FLOW			52	Feb 21	2290	Mar 2 1983
MAXIMUM PEAK STAGE					7.51	Mar 2 1983
ANNUAL RUNOFF (AC-FT)	1540		1280		15630	
TOTAL FLOW (AC-FT) a	2710		3470			
10 PERCENT EXCEEDS	.00		.00		40	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

a Flow, in acre-feet, through Las Flores Release (station 10260822), provided by California Department of Water Resources.

10260950 WEST FORK MOJAVE RIVER ABOVE MOJAVE RIVER FORKS RESERVOIR, NEAR HESPERIA, CA

LOCATION.—Lat 34°20'20", long 117°15'25", in NW 1/4 NW 1/4 sec.24, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, on upstream wingwall of concrete double-box culvert on Arrowhead Lake Road, 0.1 mi northeast of junction with Highway 174, 4.5 mi downstream from Cedar Springs Dam on Silverwood Lake, and 6.5 mi southeast of Hesperia.

DRAINAGE AREA.—70.3 mi².

PERIOD OF RECORD.—October 1974 to current year. October 1974 to September 1991 published incorrectly as station 10261000. Records for station 10261000 are not equivalent due to difference in drainage area.

REVISED RECORDS.—WDR CA-84: 1983.

GAGE.—Water-stage recorder. Elevation of gage is 3,040 ft above sea level, from topographic map.

REMARKS.—Records poor. Regulated by Silverwood Lake (holding basin for imported water from East Branch California Aqueduct), total capacity, 74,970 acre-ft, 4.5 mi upstream, which releases all natural inflow as soon as possible after a storm. See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,300 ft³/s, Feb. 10, 1978, gage height unknown, on basis of slope-area measurement of peak flow, maximum gage height, 23.2 ft, Feb. 10, 1978, backwater from Mojave River Forks Reservoir; no flow for several months in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 26,100 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow for station 10261000 at site 1.5 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	86	17	7.2	.08	.00	.00	.00
2	.00	.00	.00	.00	.00	78	14	7.1	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	55	13	6.6	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	22	13	6.7	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	20	13	6.8	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	36	11	6.5	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	112	17	6.8	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	112	15	6.6	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	50	20	6.7	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	30	71	6.7	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	27	13	6.6	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	25	11	7.7	.00	.00	.00	.00
13	.00	.00	.00	.00	98	53	10	8.0	.00	.00	.00	.00
14	.00	.00	.00	.00	15	110	9.6	7.2	.00	.00	.00	.00
15	.00	.00	.00	.00	21	72	9.5	6.5	.00	.00	.00	.00
16	.00	.00	.00	.00	38	24	8.7	6.7	.00	.00	.00	.00
17	.00	.00	.00	.00	6.0	21	3.6	6.6	.00	.00	.00	.00
18	.00	.00	.00	.00	3.8	21	7.8	6.5	.00	.00	.00	.00
19	.00	.00	.00	.00	5.6	21	8.5	4.2	.00	.00	.00	.00
20	.00	.00	.00	.00	52	21	8.5	4.0	.00	.00	.00	.00
21	.00	.00	.00	.00	73	20	13	3.6	.00	.00	.00	.00
22	.00	.00	.00	.01	68	20	10	3.6	.00	.00	.00	.00
23	.00	.00	.00	.00	25	20	9.9	3.3	.00	.00	.00	.00
24	.00	.00	.00	.00	8.7	19	9.5	3.0	.00	.00	.00	.00
25	.00	.00	.00	.00	8.7	17	9.0	3.6	.00	.00	.00	.00
26	.00	.00	.00	.00	27	17	8.4	1.4	.00	.00	.00	.00
27	.00	.00	.00	.00	75	16	8.0	.54	.00	.00	.00	.00
28	.00	.00	.00	.00	94	17	7.4	.67	.00	.00	.00	.00
29	.00	.00	.00	.00	---	17	7.4	.49	.00	.00	.00	.00
30	.00	.00	.00	.00	---	17	7.3	.26	.00	.00	.00	.00
31	.00	---	.00	.00	---	18	---	.09	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.01	618.80	1194	384.1	152.25	0.08	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	22.1	38.5	12.8	4.91	.003	.000	.000	.000
MAX	.00	.00	.00	.01	98	112	71	8.0	.08	.00	.00	.00
MIN	.00	.00	.00	.00	.00	16	3.6	.09	.00	.00	.00	.00
AC-FT	.00	.00	.00	.02	1230	2370	762	302	.2	.00	.00	.00

10260950 WEST FORK MOJAVE RIVER ABOVE MOJAVE RIVER FORKS RESERVOIR, NEAR HESPERIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.51	4.57	13.4	68.9	152	145	50.4	32.0	13.4	1.36	.53	.64
MAX	41.8	50.4	68.6	810	883	948	253	296	169	10.1	11.4	8.29
(WY)	1994	1993	1984	1993	1993	1983	1980	1978	1978	1998	1997	1993
MIN	.000	.000	.000	.000	.055	.24	.000	.000	.000	.000	.000	.000
(WY)	1975	1975	1976	1975	1999	1977	1987	1984	1975	1975	1975	1975

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1975 - 2001	
ANNUAL TOTAL	2441.71		2349.24			
ANNUAL MEAN	6.67		6.44		39.8	
HIGHEST ANNUAL MEAN					183	
LOWEST ANNUAL MEAN					.94	
HIGHEST DAILY MEAN	163	Feb 21	112	Mar 7	4900	Feb 10 1978
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1974
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1974
MAXIMUM PEAK FLOW			347	Feb 13	11300	Feb 10 1978
MAXIMUM PEAK STAGE			1.62	Feb 13	23.20	Feb 10 1978
ANNUAL RUNOFF (AC-FT)	4840		4660		28840	
10 PERCENT EXCEEDS	13		18		63	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10261100 MOJAVE RIVER BELOW FORKS RESERVOIR, NEAR HESPERIA, CA

LOCATION.—Lat 34°20'45", long 117°14'14", in NW 1/4 NW 1/4 sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, 6.0 mi southeast of Hesperia, and 10.4 mi south of Apple Valley.

DRAINAGE AREA.—211 mi².

PERIOD OF RECORD.—July to September 2001.

CHEMICAL DATA.—July to September 2001.

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 (PER- CENT OF SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT OF 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)		
JUL 17...	1500	.38	685	6.3	78.4	8.4	492	20.5	11.9		
DATE		FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	BORON, DIS- SOLVED (UG/L AS B) (01020)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)
JUL 17...	3.6	73.2	330	.053	.009	225	<.10	<.10	<.10	<.2	
DATE		1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- WATER ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BROMO- METHANE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)
JUL 17...	<.10	<.10	<.10	<.10	<.10	<.10	<.20	<.20	<.10	<.2	
DATE		CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)
JUL 17...	<.10	<.10	<.10	<.2	<.2	<.2	<.10	<.2	<.10	<.10	
DATE		METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
JUL 17...	<.2	<.2	<.20	<.10	<.10	<.1	<.10	<.10	<.20	<.20	

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

10261480 MOJAVE RIVER AT UPPER NARROWS, AT VICTORVILLE, CA

LOCATION.—Lat 34°31'59", long 117°17'10", in SW 1/4 SE 1/4 sec.10, T.5 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, 3.3 mi southeast of U.S. Geological Survey station 10261500, and 6.9 mi northwest of Apple Valley.

DRAINAGE AREA.—315 mi².

PERIOD OF RECORD.—July to September 2001.

CHEMICAL DATA.—July to September 2001.

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, (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)		
JUL 17...	1215	4.2	692	5.7	70.0	7.5	639	20.5	44.8		
DATE	TIME	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	BORON, DIS-SOLVED (UG/L AS B) (01020)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYLENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)
JUL 17...	.5	46.8	397	.332	.012	161	<.10	<.10	<.10	<.2	
DATE	TIME	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)
JUL 17...		<.10	<.10	<.10	<.10	<.10	<.10	<.20	<.20	<.10	<.2
DATE	TIME	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHER METHYL BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)
JUL 17...		<.10	<.10	<.10	<.2	<.2	<.2	<.10	<.2	<.10	<.10
DATE	TIME	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL CHLO-RIDE TOTAL (UG/L) (34423)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)
JUL 17...		<.2	<.2	<.20	<.10	<.10	<.1	<.10	<.10	<.20	<.20

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

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA

LOCATION.—Lat 34°34'23", long 117°19'11", in SW 1/4 SE 1/4 sec.29, T.6 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, 650 ft upstream from bridge on county road (formerly U.S. Highway 66), 0.6 mi downstream from Atchison, Topeka, & Santa Fe Railway bridge, and 3 mi northwest of Victorville.

DRAINAGE AREA.—513 mi².

PERIOD OF RECORD.—February 1899 to September 1906, October 1930 to current year. Monthly discharge only for January to September 1906, October, November 1930, published in WSP 1314. Prior to October 1936, published as "at Victorville" and as "near Victorville" in 1937.

CHEMICAL DATA: Specific conductance 1975–81.

WATER TEMPERATURE: Water years 1962–80.

REVISED RECORDS.—WSP 1927: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 2,643.01 ft above sea level. See WSP 1314 for history of gage changes prior to Mar. 28, 1938. Mar. 28, 1938, to Apr. 14, 1966, at site 350 ft upstream at datum 5.00 ft higher; Apr. 15, 1966, to July 17, 1969, at site 350 ft upstream at datum 3.00 ft higher.

REMARKS.—Records poor. Flow regulated by Mojave River Forks Reservoir, capacity, 89,700 acre-ft, since 1971, 17.8 mi upstream; Silverwood Lake, capacity, 74,970 acre-ft, since 1972; and Lake Arrowhead, capacity, 48,000 acre-ft, since 1922. Some water is imported into basin. Diversions and pumping for irrigation and for Mojave State Fish Hatchery upstream from station. See schematic diagram of [Mojave River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 70,600 ft³/s, Mar. 2, 1938, gage height, 23.7 ft, present datum, from rating curve extended above 10,000 ft³/s, on basis of slope-area measurement of peak flow; no flow Sept. 21–23, 1995.

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	1.4	6.7	9.3	15	14	14	9.2	5.5	2.5	1.6	e1.0	.66
2	1.3	6.4	8.7	15	13	13	10	6.4	2.7	1.4	e.98	.68
3	1.2	8.5	10	15	13	14	11	6.5	2.2	e1.3	e.98	.70
4	1.4	7.7	11	15	13	15	12	6.3	2.4	e1.2	e.96	.80
5	1.3	7.2	11	14	13	16	13	5.4	2.0	e1.2	e.96	.77
6	1.5	8.1	10	14	13	19	13	4.9	2.1	1.5	e.98	.75
7	1.4	7.8	11	13	13	26	13	5.3	2.2	1.7	.79	.88
8	1.5	e8.0	11	14	17	16	14	4.8	2.2	1.8	.73	.90
9	1.5	e8.2	11	17	16	15	13	3.7	2.0	1.6	.69	.81
10	e1.6	e8.4	11	15	17	16	13	3.9	2.0	1.2	.67	.76
11	e1.8	e8.6	13	66	20	17	12	3.7	1.8	1.1	.85	.67
12	2.1	e8.8	14	15	24	16	10	4.0	1.7	1.1	.92	.76
13	2.4	9.1	14	13	42	16	8.7	5.1	1.8	.99	.84	.83
14	2.3	8.8	13	12	14	15	7.6	4.9	e1.9	.93	1.1	.87
15	e2.3	10	13	14	13	16	9.4	4.4	e1.9	.89	.90	.97
16	e2.1	11	13	17	13	16	11	3.7	1.8	.93	1.1	.86
17	e2.2	12	13	15	12	17	11	4.1	e1.6	.97	1.3	.95
18	e2.3	11	12	14	13	16	11	4.0	e1.5	1.0	1.1	1.0
19	e2.6	11	12	15	14	17	11	4.1	1.4	.95	.86	.75
20	e3.1	13	12	14	15	15	12	4.4	1.4	.92	e.93	.86
21	e3.5	13	14	16	16	15	13	e4.0	1.3	.91	e.90	.78
22	e4.1	13	13	16	15	18	11	e3.5	e1.3	.80	1.1	.71
23	e4.6	12	12	15	17	16	9.9	3.0	e1.3	.99	1.1	.72
24	5.2	12	12	14	16	14	9.1	2.7	e1.2	1.0	1.2	.80
25	e4.9	11	14	15	17	e14	10	2.5	e1.4	e1.0	1.1	.62
26	5.3	12	14	15	25	e14	9.7	2.0	e1.5	e1.0	1.1	.45
27	10	12	14	16	20	13	8.6	2.1	1.5	1.0	.82	.41
28	9.8	11	14	16	36	12	e7.6	2.5	1.5	e1.1	.82	.40
29	8.7	9.0	14	15	---	11	e6.5	2.9	2.0	e1.1	.85	.68
30	8.8	8.9	14	14	---	10	5.7	2.9	1.7	e1.1	.91	.93
31	7.6	---	14	14	---	9.5	---	2.7	---	e1.0	.77	---
TOTAL	109.8	294.2	382.0	508	484	471.5	316.0	125.9	53.8	35.28	29.31	22.73
MEAN	3.54	9.81	12.3	16.4	17.3	15.2	10.5	4.06	1.79	1.14	.95	.76
MAX	10	13	14	66	42	26	14	6.5	2.7	1.8	1.3	1.0
MIN	1.2	6.4	8.7	12	12	9.5	5.7	2.0	1.2	.80	.67	.40
AC-FT	218	584	758	1010	960	935	627	250	107	70	58	45

e Estimated.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.4	34.8	50.5	96.3	207	219	125	47.7	21.1	14.5	14.6	16.5
MAX	58.2	222	376	1487	2334	2229	1015	312	157	32.5	29.3	41.7
(WY)	1977	1966	1967	1993	1993	1938	1958	1998	1978	1969	1969	1976
MIN	3.19	9.81	12.3	16.0	17.3	12.6	10.5	4.06	1.79	1.14	.95	.76
(WY)	1998	2001	2001	1998	2001	1990	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL TOTAL	3264.4		2832.52			
ANNUAL MEAN	8.92		7.76		71.7	
HIGHEST ANNUAL MEAN					402	
LOWEST ANNUAL MEAN					7.76	
HIGHEST DAILY MEAN	104	Feb 21	66	Jan 11	21000	Feb 25 1969
LOWEST DAILY MEAN	1.1	Aug 26	.40	Sep 28	.00	Sep 21 1995
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 22	.58	Sep 23	.37	Sep 20 1995
MAXIMUM PEAK FLOW			301	Jan 11	70600	Mar 2 1938
MAXIMUM PEAK STAGE			3.81	Jan 11	23.70	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	6470		5620		51930	
10 PERCENT EXCEEDS	18		15		53	
50 PERCENT EXCEEDS	7.5		6.7		26	
90 PERCENT EXCEEDS	1.4		.88		10	

10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.—Lat 34°54'25", long 117°01'19", in SW 1/4 SE 1/4 sec.31, T.10 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, 75 ft upstream from bridge on U.S. Highway 91, at Barstow.

DRAINAGE AREA.—1,291 mi².

PERIOD OF RECORD.—October 1930 to current year.

REVISED RECORDS.—WSP 1564: 1932.

GAGE.—Water-stage recorder. Elevation of gage is 2,089.34 ft above sea level.

REMARKS.—Flow regulated by Mojave River Forks Reservoir, capacity, 89,700 acre-ft, since 1971, 60 mi upstream; Silverwood Lake, capacity, 74,970 acre-ft, since 1972; and Lake Arrowhead, capacity, 48,000 acre-ft, since 1922. Some water is imported into basin. Diversions and pumping for irrigation of about 15,000 acres upstream from station. Southern California Water Company releases discharge from Crook Plant Pumping Station into the river 600 ft upstream of the gage. See schematic diagram of [Mojave River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 64,300 ft³/s, Mar. 3, 1938, gage height, 8.60 ft, on basis of slope-area measurement of peak flow; no flow for all or most of each year. No natural flow for 2001 Water Year.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001, BY WATER YEAR (WY)

MEAN	.001	.35	3.31	24.4	94.2	109	40.0	5.29	.001	.004	.021	.016
MAX	.061	20.2	116	747	1640	1962	547	93.5	.080	.090	1.31	.71
(WY)	1959	1966	1967	1969	1993	1938	1941	1941	1972	1958	1979	1984
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL MEAN					22.7	
HIGHEST ANNUAL MEAN					202	1969
LOWEST ANNUAL MEAN					.000	1931
HIGHEST DAILY MEAN					18100	Mar 3 1938
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1930
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1930
MAXIMUM PEAK FLOW					64300	Mar 3 1938
MAXIMUM PEAK STAGE					8.60	Mar 3 1938
ANNUAL RUNOFF (AC-FT)					16440	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.—Lat 35°02'14", long 116°23'00", in NW 1/4 SE 1/4 sec.18, T.11 N., R.6 E., San Bernardino County, Hydrologic Unit 18090208, on right bank side of right pier of Union Pacific Railroad bridge, 0.3 mi west of Afton, and 63 mi east of Barstow.

DRAINAGE AREA.—2,121 mi².

PERIOD OF RECORD.—October 1929 to September 1932, October 1952 to current year. Records for water year 1930 incomplete; yearly estimate published in WSP 1314. Records for water years 1979 and 1980 incomplete; discharge measurements only were published at that time.

REVISED RECORDS.—WSP 1564: 1931. WDR CA-00-1: 1982(M).

GAGE.—Water-stage recorder. Datum of gage is 1,398.15 ft above sea level. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi downstream at different datum; October 1952 to May 1978, at datum 2 ft higher.

REMARKS.—Records poor. Natural flow affected by ground-water withdrawals, diversions, municipal use, and storage in reservoirs 100 mi upstream. For description of upstream reservoirs see "Mojave River at Barstow" (station 10262500). See schematic diagram of Mojave River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,000 ft³/s, Jan. 26, 1969, gage height, 12.40 ft (present datum), from rating curve extended above 3,200 ft³/s, on basis of slope-area measurement of peak flow; no flow at times during many years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 13	0037	191	4.28

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	.43	.57	.63	.60	.56	.51	.29	.08	.05	.05	.08
2	.18	.44	.58	.60	.61	.47	.49	.26	.07	.05	.05	.08
3	.17	.44	.57	.57	.61	.46	.50	.27	.06	.05	.05	.08
4	.20	.45	.58	.57	.61	.45	.53	.29	.06	.04	.05	.10
5	.22	.46	.59	.59	.63	.44	.54	.27	.07	.05	.04	.09
6	.23	.47	.58	.59	.63	.44	.52	.25	.07	.60	.04	.07
7	.23	.44	.60	.59	.59	1.9	.53	.23	.08	10	.05	.08
8	.24	.45	.61	.64	.57	4.8	.50	.22	.07	.25	.11	.08
9	.24	.48	.59	.76	.53	.60	.49	.20	.06	.14	.08	.09
10	.26	.47	.61	.65	.56	.53	.51	.17	.06	.10	.06	.09
11	.28	.47	.59	.99	.51	.49	.48	.17	.05	.08	.06	.09
12	.30	.48	.62	.70	.52	.50	.47	.19	.05	.08	5.9	.09
13	.31	.51	.59	.62	.56	.51	.46	.24	.05	.08	33	.08
14	.32	.52	.60	.59	.52	.49	.49	.19	.05	.07	.18	.10
15	.32	.52	.57	.64	.50	.47	.48	.17	.06	.06	.11	.10
16	.33	.53	.54	.63	.46	.48	.46	.16	.06	.06	.09	.09
17	.34	.53	.56	.59	.46	.49	.44	.15	.06	.06	.08	.09
18	.35	.54	.55	.58	.46	.49	.42	.15	.05	.06	.08	.11
19	.36	.56	.56	.60	.46	.49	.41	.14	.05	.06	.08	.11
20	.34	.56	.57	.60	.45	.48	.40	.15	.05	.06	.08	.11
21	.34	.54	.57	.60	.41	.49	.48	.13	.05	.06	.07	.12
22	.34	.53	.57	.61	.42	.51	.44	.12	.05	.06	.07	.13
23	.43	.51	.58	.60	.41	.50	.40	.11	.05	.06	.07	.14
24	.45	.52	.59	.62	.41	.49	.39	.10	.05	.06	.08	.14
25	.42	.53	.59	.59	.45	.49	.38	.08	.05	.06	.08	.13
26	.41	.54	.58	.62	.69	.50	.37	.07	.05	.06	.08	.14
27	.43	.55	.58	.76	.58	.50	.34	.07	.05	.06	.07	.14
28	.42	.55	.61	.70	1.2	.50	.31	.08	.05	.06	.07	.15
29	.43	.57	.62	.63	---	.49	.31	.08	.05	.05	.07	.16
30	.50	.56	.62	.60	---	.47	.31	.09	.05	.05	.07	.17
31	.43	---	.62	.60	---	.53	---	.09	---	.05	.07	---
TOTAL	10.02	15.15	18.16	19.66	15.41	21.01	13.36	5.18	1.71	12.63	41.04	3.23
MEAN	.32	.50	.59	.63	.55	.68	.45	.17	.057	.41	1.32	.11
MAX	.50	.57	.62	.99	1.2	4.8	.54	.29	.08	10	33	.17
MIN	.17	.43	.54	.57	.41	.44	.31	.07	.05	.04	.04	.07
AC-FT	20	30	36	39	31	42	26	10	3.4	25	81	6.4

MOJAVE RIVER BASIN

10263000 MOJAVE RIVER AT AFTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.74	.93	2.68	13.1	42.5	17.2	2.77	.65	.39	.67	1.33	.85
MAX	2.97	2.29	63.9	347	876	415	56.4	1.80	1.58	3.83	18.0	5.46
(WY)	1993	1981	1966	1969	1993	1978	1969	1931	1981	1999	1984	1998
MIN	.000	.000	.21	.34	.55	.22	.20	.099	.000	.000	.000	.000
(WY)	1967	1969	1978	1976	2001	1975	1977	1977	1976	1966	1966	1966

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1930 - 2001	
ANNUAL TOTAL	136.58		176.56			
ANNUAL MEAN	.37		.48		6.77	
HIGHEST ANNUAL MEAN					100	
LOWEST ANNUAL MEAN					.22	
HIGHEST DAILY MEAN	2.8	Aug 15	33	Aug 13	10000	Feb 20 1993
LOWEST DAILY MEAN	.00	Jul 25	.04	Jul 4	.00	Jun 28 1961
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 25	.05	Jul 31	.00	Jul 14 1961
MAXIMUM PEAK FLOW			191	Aug 13	18000	Jan 26 1969
MAXIMUM PEAK STAGE			4.28	Aug 13	12.40	Jan 26 1969
ANNUAL RUNOFF (AC-FT)	271		350		4910	
10 PERCENT EXCEEDS	.70		.60		1.6	
50 PERCENT EXCEEDS	.41		.41		.72	
90 PERCENT EXCEEDS	.02		.06		.05	

10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.—Lat 34°25'15", long 117°50'19", in SE 1/4 NE 1/4 sec.20, T.4 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank, 0.1 mi upstream from Punchbowl Canyon, and 1.9 mi southeast of Valyermo.

DRAINAGE AREA.—22.9 mi².

PERIOD OF RECORD.—January 1923 to current year. Monthly discharge only for June 1938 to January 1939, published in WSP 1314. Prior to October 1954, published as "Rock Creek near Valyermo."

REVISED RECORDS.—WSP 1314: 1938–39. WSP 1564: 1932, 1937, 1939(M). WSP 1927: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 4,050 ft above sea level, from topographic map. Prior to May 4, 1938, at same site at different datums. May 4, 1938, to Jan. 26, 1939, at site 0.2 mi downstream (below Punchbowl Canyon) at different datum.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,300 ft³/s, Mar. 2, 1938, gage height, unknown, on basis of slope-area measurement of peak flow, maximum gage height, 7.70 ft, Jan. 25, 1969; minimum daily, 0.70 ft³/s, Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 21	0145	53	2.35

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	e3.3	3.8	2.3	3.4	12	44	34	14	7.0	e8.5	4.0
2	3.0	e2.9	3.6	2.4	3.5	11	40	36	13	6.1	e7.7	7.8
3	2.9	e2.6	3.3	2.4	3.7	11	34	32	13	7.0	e6.7	9.7
4	3.0	e2.5	3.2	2.4	3.6	10	28	27	13	7.5	e6.3	4.8
5	3.2	e2.3	2.7	2.4	3.6	12	24	26	13	5.0	e6.4	4.8
6	3.2	2.4	2.6	2.5	3.6	27	21	26	12	5.3	e7.4	4.5
7	3.2	2.5	2.7	2.4	3.7	32	23	28	12	5.7	e7.7	4.8
8	3.4	2.4	3.0	2.4	4.2	28	19	31	11	7.3	e9.6	4.6
9	3.4	2.4	3.3	2.6	4.3	27	18	33	11	11	e9.1	4.6
10	3.8	2.3	3.3	3.0	4.3	24	17	33	11	11	e8.2	4.9
11	4.1	2.4	3.2	8.8	4.0	21	16	32	11	11	e8.6	4.8
12	4.3	2.6	3.6	4.3	5.8	19	15	31	11	11	e9.4	4.6
13	4.1	2.6	3.8	3.6	6.7	18	15	35	10	10	e8.7	4.5
14	4.0	2.8	3.7	3.4	5.5	18	16	42	10	e10	e7.8	4.4
15	3.8	3.6	3.5	3.4	5.2	19	17	33	9.5	e10	e8.2	4.9
16	3.8	4.5	3.3	3.3	5.1	21	18	32	9.4	e11	e6.9	5.3
17	3.6	5.4	3.0	3.2	5.2	22	20	34	10	e11	e4.2	4.8
18	3.7	5.7	2.8	3.2	5.7	24	22	34	12	e9.5	e6.0	4.5
19	3.7	6.0	2.8	3.2	6.7	33	22	34	15	e7.9	e5.2	4.3
20	3.8	5.9	2.7	3.2	7.5	42	21	31	19	e7.5	4.3	4.3
21	3.6	6.1	2.6	3.2	7.2	49	21	29	19	e7.1	3.8	4.3
22	3.9	6.1	2.6	3.2	7.3	45	19	29	19	e6.7	e4.5	3.9
23	4.3	5.9	2.6	3.0	7.1	42	19	27	16	e6.5	e12	3.9
24	4.6	5.7	2.6	3.2	6.4	41	20	25	13	e6.5	e18	4.4
25	e4.7	5.2	2.6	3.2	6.7	40	23	23	9.6	e7.2	11	4.5
26	e4.5	4.9	2.5	3.2	7.5	39	28	20	11	e7.8	9.3	4.7
27	e4.4	4.7	2.4	3.5	12	38	30	19	11	e8.4	6.9	4.9
28	e3.9	4.4	2.5	3.5	13	38	33	17	10	e8.7	5.4	5.4
29	3.7	4.2	2.5	3.6	---	43	31	16	8.3	e7.0	4.6	5.4
30	e4.0	3.9	2.3	3.6	---	45	31	15	8.0	e8.5	4.5	4.7
31	e3.6	---	2.3	3.5	---	45	---	14	---	e8.8	4.4	---
TOTAL	116.4	118.2	91.4	101.1	162.5	896	705	878	364.8	255.0	231.3	147.0
MEAN	3.75	3.94	2.95	3.26	5.80	28.9	23.5	28.3	12.2	8.23	7.46	4.90
MAX	4.7	6.1	3.8	8.8	13	49	44	42	19	11	18	9.7
MIN	2.9	2.3	2.3	2.3	3.4	10	15	14	8.0	5.0	3.8	3.9
AC-FT	231	234	181	201	322	1780	1400	1740	724	506	459	292

e Estimated.

10263500 BIG ROCK CREEK NEAR VALYERMO, 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	5.13	7.34	10.2	18.3	30.8	37.7	30.8	28.0	18.9	10.9	7.90	6.24
MAX	19.0	116	67.0	245	303	432	144	120	91.4	42.2	26.5	19.7
(WY)	1984	1966	1947	1969	1980	1978	1978	1941	1978	1983	1983	1983
MIN	1.05	1.09	1.80	2.10	2.39	2.40	2.67	2.35	1.61	1.15	1.09	1.01
(WY)	1952	1952	1991	1951	1951	1951	1951	1951	1961	1961	1961	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1923 - 2001	
ANNUAL TOTAL	2413.3		4066.7			
ANNUAL MEAN	6.59		11.1		17.7	
HIGHEST ANNUAL MEAN					90.9	
LOWEST ANNUAL MEAN					1.91	
HIGHEST DAILY MEAN	64	Feb 21	49	Mar 21	3300	Mar 2 1938
LOWEST DAILY MEAN	2.0	Feb 7	2.3	Nov 5	.70	Nov 5 1951
ANNUAL SEVEN-DAY MINIMUM	2.1	Feb 4	2.4	Dec 30	.87	Nov 3 1951
MAXIMUM PEAK FLOW			53		8300	
MAXIMUM PEAK STAGE			2.35		7.70	
ANNUAL RUNOFF (AC-FT)	4790		8070		12810	
10 PERCENT EXCEEDS	13		30		37	
50 PERCENT EXCEEDS	4.2		6.4		7.4	
90 PERCENT EXCEEDS	2.4		2.8		2.6	

10264636 SLED TRACK CANAL AT LANCASTER BOULEVARD, NEAR ROGERS LAKE, CA

LOCATION.—Lat 34°49'19", long 117°52'20", in NE 1/4 NW 1/4 sec.6, T.8 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank at culvert under Lancaster Boulevard, 1.1 mi northeast of intersection of East 120th Avenue and Lancaster Boulevard, approximately 0.25 mi south of Rogers Lake.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—July 1996 to September 2001 (discontinued).

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,275 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 66 ft³/s, Mar. 14, 1998, gage height, 2.95 ft, datum then in use, maximum gage height, 11.14 ft, Feb. 13, 2001; 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	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	e.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00
8	.00	e.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00
9	.00	e.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
10	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	e.00	.00	6.6	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	e.00	.00	.54	.31	.00	.00	.00	.00	.00	.00	.00
13	.00	e.00	.00	.05	15	.00	.00	.00	.00	.00	.00	.00
14	.00	e.00	.00	.00	.75	.00	.00	.00	.00	.00	.00	.00
15	.00	e.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00
16	.00	e.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.04	.75	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.01	.16	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	7.24	27.31	0.62	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.23	.98	.020	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	6.6	15	.25	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	14	54	1.2	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	.000	.028	.053	.047	.39	.14	.000	.000	.000	.000	.000	.001
MAX	.000	.14	.26	.23	.98	.65	.000	.000	.000	.000	.000	.008
(WY)	1997	1997	1998	2001	2001	1998	1996	1996	1996	1996	1996	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1998	1999	1997	1997	1997	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	9.84	35.17	
ANNUAL MEAN	.027	.096	.050
HIGHEST ANNUAL MEAN			.13 1998
LOWEST ANNUAL MEAN			.000 1996
HIGHEST DAILY MEAN	3.6 Feb 23	15 Feb 13	20 Mar 14 1998
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Apr 11 1996
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Apr 11 1996
MAXIMUM PEAK FLOW		37 Feb 13	66 Mar 14 1998
MAXIMUM PEAK STAGE		11.14 Feb 13	11.14 Feb 13 2001
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 Oct 1 2000
ANNUAL RUNOFF (AC-FT)	20	70	36
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

10264640 BUCKHORN CREEK AT EAST 120TH AVENUE, NEAR ROGERS LAKE, CA

LOCATION.—Lat 34°50'18", long 117°54'59", in SE 1/4 SW 1/4 sec.27, T.9 N., R.10 W., Kern County, Hydrologic Unit 18090206, on left bank, on west side of 120th Avenue, 250 ft south of Lancaster Boulevard, and approximately 0.25 mi southwest of Rogers Lake.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—May 1996 to September 2001 (discontinued).

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,270 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 118 ft³/s, Feb. 23, 1998, gage height, 2.81 ft, datum then in use, maximum gage height, 4.57 ft, Feb. 13, 2001; 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	.00	.00	.00	.07	.46	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.07	1.0	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.06	.59	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.06	.12	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.05	.07	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.05	.07	.00	.00	.00	.00	e.00	.00
7	.00	.00	.00	.00	.04	.61	.00	.00	.00	.00	e.00	.00
8	.00	.00	.00	.00	e.03	.19	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	e.02	.76	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	e.00	.37	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	9.7	e.00	.21	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.98	e1.2	.19	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.38	23	.08	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.31	2.3	.06	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.14	.41	.05	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.11	.23	.05	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.08	.11	.04	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.07	.09	e.03	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.07	.30	e.01	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.06	.58	e.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.06	.28	e.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.06	.14	e.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.05	.30	e.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.10	.16	e.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.26	.68	e.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.15	12	e.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.31	2.9	e.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.15	1.4	e.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.37	---	e.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.24	---	e.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.10	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	13.75	46.53	4.96	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.44	1.66	.16	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	9.7	23	1.0	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	27	92	9.8	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	2001	1998	2001	1999	1997	1996	1996	2000	1997
MEAN	.001	.010	.078	.091	.70	.062	.002	.000	.000	.000	.003	.048
MAX	.003	.050	.32	.44	1.79	.16	.011	.000	.000	.000	.018	.28
(WY)	1997	1997	1998	2001	1998	2001	1999	1997	1996	1996	2000	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1998	1997	1997	1997	1997	1996	1996	1996	1996

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	7.53		65.24			
ANNUAL MEAN	.021		.18		.080	
HIGHEST ANNUAL MEAN					.18	
LOWEST ANNUAL MEAN					.001	
HIGHEST DAILY MEAN	1.6	Feb 23	23	Feb 13	45	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	May 10 1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	May 10 1996
MAXIMUM PEAK FLOW			37		118	
MAXIMUM PEAK STAGE			4.57		4.57	
ANNUAL RUNOFF (AC-FT)	15		129	Feb 13	58	Feb 13 2001
10 PERCENT EXCEEDS	.01		.11		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264646 SOUTH DRAINAGE BISSELL/ROSAMOND HILLS NEAR EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°53'18", long 117°58'23", in NE 1/4 NW 1/4 sec.7, T.9 N., R.10 W., Kern County, Hydrologic Unit 18090206, 1.8 mi southwest of intersection of Forbes Avenue and Rosamond Boulevard, and 2.3 mi southwest of Edwards Air Force Base.

DRAINAGE AREA.—9.25 mi².

PERIOD OF RECORD.—June 1996 to September 2001 (discontinued).

INSTRUMENTATION.—Recording tipping-bucket rain gage since June 1996.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 2.39 in., Feb. 23, 1998; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall, 1.03 in., Feb. 12; no rainfall 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	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00
6	.00	.00	.00	.00	.00	.25	.00	.00	.00	.02	.00	.00
7	.00	.00	.00	.00	.00	.27	.21	.00	.00	.00	.00	.00
8	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.03	.00	.10	.02	.00	.00	.00	.00	.00
10	.23	.00	.00	.27	.06	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.87	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	1.03	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.01	.48	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.03	.05	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.46	.00	.00	.00	.00	.00	.00	.00
26	.02	.00	.00	.05	.56	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.15	.12	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.27	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.52	0.00	0.00	1.47	2.79	0.62	0.39	0.00	0.00	0.12	0.00	0.00
MAX	.27	.00	.00	.87	1.03	.27	.21	.00	.00	.10	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 2000 TOTAL 3.24 MAX .60 MIN .00
 WTR YR 2001 TOTAL 5.91 MAX 1.03 MIN .00

10264658 MOJAVE CREEK AT FORBES AVENUE, AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°56'20", long 117°56'25", in NW 1/4 NE 1/4 sec.28, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, 38 ft north of intersection of Forbes Avenue and Mojave Boulevard in Edwards Air Force Base.

DRAINAGE AREA.—168 mi².

PERIOD OF RECORD.—June 1996 to September 2001 (discontinued).

INSTRUMENTATION.—Recording tipping-bucket rain gage since June 1996.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 2.23 in., Feb. 23, 1998; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall, 0.90 in., Feb. 12; no rainfall 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	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	e.00	.02	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	.00
6	.00	.00	.00	.00	.00	.46	.01	.00	.00	.07	.00	.00
7	.00	.00	.00	.00	.00	.19	.23	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
9	.00	.00	.00	.04	.00	.01	.01	.00	.00	.00	.00	.00
10	.02	.00	.00	.25	.08	.00	.00	.00	.00	.00	.00	.00
11	.02	.00	.00	.74	.00	.00	.00	.00	e.00	.00	.00	.00
12	.00	.00	.00	.00	.90	.00	.00	.00	e.00	.00	.00	.00
13	.00	.00	.00	.00	.36	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.02	.04	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.02	.55	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.18	.05	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
29	.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.06	0.00	0.00	1.30	2.50	0.67	0.40	0.00	0.02	0.15	0.00	0.00
MAX	.02	.00	.00	.74	.90	.46	.23	.00	.02	.08	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 2000 TOTAL 1.75 MAX .50 MIN .00

WTR YR 2001 TOTAL 5.10 MAX .90 MIN .00

e Estimated.

10264660 MOJAVE CREEK AT ROSAMOND BOULEVARD, AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°54'51", long 117°55'00", in SE 1/4 SE 1/4 sec.34, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, on left bank, corner of Rosamond Boulevard and Lancaster Boulevard, and 0.8 mi southeast of Edwards Air Force Base.

DRAINAGE AREA.—174.85 mi².

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

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,310 ft above sea level, from topographic map.

REMARKS.—Records rated poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 42 ft³/s, July 10, 1999, gage height, 5.34 ft; no flow for many days in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.00	e.00	.00	.00	2.0	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	1.9	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	5.6	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.98	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	6.8	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	4.5	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	1.1	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	5.60	12.43	3.90	0.00	0.00	1.10	2.00	0.00	0.00
MEAN	.000	.000	.000	.18	.44	.13	.000	.000	.037	.065	.000	.000
MAX	.00	.00	.00	5.6	6.8	2.0	.00	.00	1.1	2.0	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	11	25	7.7	.00	.00	2.2	4.0	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	.000	.000	.001	.045	.28	.093	.000	.000	.009	.044	.025	.012
MAX	.000	.000	.005	.18	.53	.13	.000	.002	.037	.11	.10	.047
(WY)	1998	1998	1998	2001	1998	2000	1998	1998	2001	1999	2000	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1998	1999	1999	1998	1999	1998	1998	1998	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1998 - 2001

ANNUAL TOTAL	11.33	25.03	
ANNUAL MEAN	.031	.069	.041
HIGHEST ANNUAL MEAN			.069
LOWEST ANNUAL MEAN			.010
HIGHEST DAILY MEAN	3.9 Mar 5	6.8 Feb 13	6.8 Feb 13 2001
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1997
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1997
MAXIMUM PEAK FLOW		25 Jan 11	42 Jul 10 1999
MAXIMUM PEAK STAGE		4.80 Jan 11	5.34 Jul 10 1999
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 Oct 1 1997
ANNUAL RUNOFF (AC-FT)	22	50	30
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

10264675 ROGERS LAKE TRIBUTARY AT EDWARDS AIR FORCE BASE, CA

LOCATION.—Lat 34°58'06", long 117°53'29", in NE 1/4 NW 1/4 sec.13, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, on right bank, at culvert on U.S. Government Railroad, 330 ft east of Rosamond Boulevard, and 0.75 mi west of Rogers Lake.

DRAINAGE AREA.—1.73 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1988 to September 2001 (discontinued).

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Elevation of gage is 2,340 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation or diversion upstream from station. Inflow can occur from artificial ditch 10 ft upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11 ft³/s, Apr. 14, 1989, Feb. 12, 1992, gage height, 4.82 ft, from rating curve on basis of culvert computations; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.12	0.30	0.29	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.004	.011	.009	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.12	.17	.15	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.2	.6	.6	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	.000	.000	.004	.006	.018	.006	.001	.000	.000	.000	.000	.001
MAX	.003	.000	.028	.052	.13	.029	.018	.004	.001	.001	.002	.010
(WY)	1993	1989	1993	1993	1998	1991	1989	1991	1991	1999	1995	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1989	1989	1989	1990	1990	1989	1989	1989	1989	1989

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	0.16		0.71			
ANNUAL MEAN	.000		.002		.003	
HIGHEST ANNUAL MEAN					.012 1998	
LOWEST ANNUAL MEAN					.000 1990	
HIGHEST DAILY MEAN	.09	Mar 5	.17	Feb 26	2.5	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1988
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1988
MAXIMUM PEAK FLOW			3.6	Mar 6	11	Apr 14 1989
MAXIMUM PEAK STAGE			4.38	Mar 6	4.82	Apr 14 1989
ANNUAL RUNOFF (AC-FT)	.3		1.4		2.2	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

10264675 ROGERS LAKE TRIBUTARY AT EDWARDS AIR FORCE BASE, CA—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD. January 1989 to September 2001 (discontinued).

INSTRUMENTATION. Recording tipping-bucket rain gage since Feb. 21, 1989.

EXTREMES FOR PERIOD OF RECORD. Maximum daily rainfall, 1.03 in., Feb. 12, 1992; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR. Maximum daily rainfall recorded, 0.83 in., Feb. 12; no rainfall 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	.03	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.79	.00	.00	.00	.01	.00	.00
7	.00	.00	.00	.00	.00	.25	.19	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.01	.00	.00	.01	.00	.00	.00	.00	.00
10	.06	.00	.00	.21	.12	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.59	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.83	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	e.00	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.01	.03	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.35	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.04	.54	.00	.00	.00	.00	.00	.00	.00
27	.01	.00	.00	.17	.01	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.06	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.13	0.00	0.00	1.11	2.12	1.07	0.31	0.00	0.00	0.01	0.00	0.00
MAX	.06	.00	.00	.59	.83	.79	.19	.00	.00	.01	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 2000 TOTAL 1.24 MAX .18 MIN .00
 WTR YR 2001 TOTAL 4.75 MAX .83 MIN .00

e Estimated.

10265125 MAMMOTH CREEK AT TWIN LAKES, NEAR MAMMOTH LAKES, CA

LOCATION.—Lat 37°37'26", long 119°00'17", in SW 1/4 SW 1/4 sec.4, T.4 S., R.27 E., Mono County, Hydrologic Unit 18090102, 2.7 mi southwest of Mammoth Lakes, and 19.1 mi west of Tom's Place.

DRAINAGE AREA.—10.61 mi².

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 CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)			
AUG	15...	0945	8.2	1.8	6.8	7.6	122	15.0	51.0	14.1	14.1		
DATE	TIME	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, 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	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 RECOV- ERABLE (UG/L AS SB) (01097)	
AUG	15...	3.87	3.85	.2	62	.23	<.050	<.006	<1	3	.13	<.9	
DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL RECOV- ERABLE (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)	
AUG	15...	2.7	3	<.06	<.06	<.04	<.04	<.8	<1	.07	<1	<.2	
DATE	TIME	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	
AUG	15...	e.3	120	200	<.08	<1	8.1	10	<.01	<.01	2.0	2.0	
DATE	TIME	NICKEL, DIS- SOLVED (UG/L as ni) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L as ni) (01067)	SELE- NIUM, DIS- SOLVED (UG/L as se) (01145)	SELE- NIUM, TOTAL RECOV- ERABLE (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 RECOV- ERABLE (UG/L as tl) (01059)	VANA- DIUM, TOTAL RECOV- ERABLE (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	15...	<.06	<1	<.3	<.4	<1.0	<.05	<.04	<.9	<10	<8.0	<1	1

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

e Estimated.

10265125 MAMMOTH CREEK AT TWIN LAKES, NEAR MAMMOTH LAKES, CA—Continued

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, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
AUG 15...	0945	8.2	15.0	<.5	<.01

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

10265128 MAMMOTH CREEK AT OLD MAMMOTH ROAD, AT MAMMOTH LAKES, CA

LOCATION.—Lat 37°38'07", long 118°57'53", in NE 1/4 NW 1/4 sec.2, T.4 S., R.27 E., Mono County, Hydrologic Unit 18090102, 0.85 mi south of the intersection of Highway 203 and Old Mammoth Road, and 16.5 mi west of Tom's Place.

DRAINAGE AREA.—13.38 mi².

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)	TURBIDITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)		
AUG 15...	1300	7.3	2.1	6.5	8.1	161	15.5	60.1	13.9	13.9		
DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA + ORGANIC (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095)	ANTIMONY, TOTAL RECOVERABLE (UG/L AS SB) (01097)	
AUG 15...	6.12	6.06	.2	88	.18	<.050	<.006	2	22	.10	<.9	
DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM, WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	
AUG 15...	4.1	5	<.06	<.06	<.04	<.04	<.8	<1	.05	<1	<.2	
DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	
AUG 15...	<.6	110	280	<.08	<1	22.6	74	<.01	.03	2.4	2.3	
DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	THALLIUM, DIS-SOLVED (UG/L AS TL) (01057)	THALLIUM, TOTAL (UG/L AS TL) (01059)	VANADIUM, DIS-SOLVED (UG/L AS V) (01087)	VANADIUM, TOTAL RECOVERABLE (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
AUG 15...	<.06	<1	<.3	<.4	<1.0	<.05	<.04	<.9	<10	<8.0	<1	3

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

10265128 MAMMOTH CREEK AT OLD MAMMOTH ROAD, AT MAMMOTH LAKES, CA—Continued

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
AUG 15...	1300	7.3	15.5	2	.04

10265130 MAMMOTH CREEK AT HIGHWAY 395, CA

LOCATION.—Lat 37°38'17", long 118°54'28", in SE 1/4 SE 1/4 sec.32, T.3 S., R.28 E., Mono County, Hydrologic Unit 18090102, at Highway 395 southbound bridge.

DRAINAGE AREA.—33.8 mi².

PERIOD OF RECORD.—August to September 2001. Water years 1987–93 published in U.S. Geological Survey Open-File Report 96-382. Water years 1994–96 published in U.S. Geological Survey Open-File Report 00-230. Unpublished data for water years 1997–2000 in the files of the U.S. Geological Survey.

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)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	
AUG 15...	1600	7.7	2.5	6.6	8.0	111	16.0	10.2	9.54	3.88	3.90	
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS N) (70300)	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)	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 RECOV- ERABLE (UG/L AS SB) (01097)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS) (01002)
AUG 15...	.2	66	.13	e.032	<.006	5	35	.06	<.9	3.6	3	
DATE	TIME	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 15...		<.06	<.06	<.04	<.04	<.8	<1	.02	<1	.3	<.6	50
DATE	TIME	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
AUG 15...	130	<.08	<1	2.4	38	<.01	.04	4.7	4.6	<.06	<1	
DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SELE- NIUM, TOTAL RECOV- ERABLE (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 RECOV- ERABLE (UG/L AS TL) (01059)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01087)	VANA- DIUM, TOTAL RECOV- ERABLE (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	
AUG 15...		<.3	<.4	<1.0	<.05	<.04	<.9	<10	<8.0	<1	2	

e Estimated.

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

10265130 MAMMOTH CREEK AT HIGHWAY 395, CA—Continued

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
AUG 15...	1600	7.7	16.0	3	.06

10265150 HOT CREEK AT FLUME, NEAR MAMMOTH, CA

LOCATION.—Lat 37°40'08", long 118°49'00", in SW 1/4 SE 1/4 sec.19, T.3 S., R.29 E., Mono County, Hydrologic Unit 18090102, on right bank, 2.6 mi north of Whitmore Hot Springs, and 8.4 mi east of Mammoth.

DRAINAGE AREA.—68.3 mi².

PERIOD OF RECORD.—November 1982 to current year. Daily discharges for 1986 published in Water-Resources Investigations Report 89-4033 as "Hot Creek Flume."

SPECIFIC CONDUCTANCE: Water years 1983–88.

WATER TEMPERATURE: Water years 1983–88.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 6,950 ft above sea level, from topographic map.

REMARKS.—Records good. Minor diversions for domestic and agricultural use upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 433 ft³/s, Jan. 2, 1997, gage height, 4.38 ft; minimum daily, 29 ft³/s, several days in 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 80 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	1045	120	1.99

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	48	47	45	42	43	43	49	52	100	55	49	46
2	47	47	45	42	44	44	49	52	110	55	49	46
3	47	47	45	42	44	43	47	51	110	54	48	46
4	46	47	45	42	44	43	46	50	85	54	47	46
5	46	47	45	42	44	45	46	52	73	55	46	46
6	46	47	45	42	44	45	46	52	73	55	46	46
7	46	48	46	42	43	45	45	51	71	57	46	45
8	46	47	46	43	42	45	47	49	68	58	47	45
9	47	47	46	43	43	46	45	61	69	59	47	44
10	51	45	46	42	43	46	46	77	70	58	46	44
11	49	43	44	42	44	44	47	80	71	58	46	44
12	49	44	45	42	43	44	47	87	70	55	46	44
13	48	44	44	43	44	44	46	86	68	53	46	44
14	48	44	45	44	44	44	45	86	67	52	46	44
15	48	44	46	44	44	45	44	79	67	52	46	44
16	47	44	45	44	44	45	45	80	64	52	47	44
17	47	43	45	43	44	47	45	100	63	51	47	43
18	47	43	43	43	44	49	45	110	63	51	47	43
19	47	44	44	43	44	51	46	110	62	51	47	43
20	47	44	45	44	44	55	46	98	61	52	47	43
21	46	44	45	44	44	59	46	100	61	51	47	44
22	46	45	44	44	44	59	46	100	59	51	47	44
23	46	45	44	44	43	58	45	100	56	52	47	44
24	47	46	44	44	44	57	46	110	56	51	47	44
25	46	46	42	44	44	52	46	110	55	51	47	44
26	47	46	41	44	44	49	47	110	55	51	47	45
27	47	46	42	44	44	48	48	110	56	51	46	45
28	47	46	43	44	43	48	49	110	57	50	46	45
29	48	46	43	44	---	49	49	110	56	50	46	44
30	48	45	43	43	---	49	50	100	55	49	46	44
31	48	---	42	43	---	49	---	96	---	49	46	---
TOTAL	1463	1361	1373	1336	1223	1490	1394	2619	2051	1643	1448	1333
MEAN	47.2	45.4	44.3	43.1	43.7	48.1	46.5	84.5	68.4	53.0	46.7	44.4
MAX	51	48	46	44	44	59	50	110	110	59	49	46
MIN	46	43	41	42	42	43	44	49	55	49	46	43
AC-FT	2900	2700	2720	2650	2430	2960	2760	5190	4070	3260	2870	2640

10265150 HOT CREEK AT FLUME, NEAR MAMMOTH, 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	46.7	45.5	42.8	46.2	43.8	45.1	47.9	71.4	97.7	87.2	63.2	53.3
MAX	68.3	64.6	57.7	94.7	58.2	55.2	60.4	113	159	214	135	92.7
(WY)	1999	1999	1996	1997	1997	1997	1996	1996	1995	1995	1995	1995
MIN	31.8	32.4	29.6	31.9	32.7	35.0	35.4	38.4	44.5	38.4	35.6	32.6
(WY)	1995	1995	1993	1993	1993	1992	1992	1991	1992	1990	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	20491		18734			
ANNUAL MEAN	56.0		51.3		57.6	
HIGHEST ANNUAL MEAN					79.1	
LOWEST ANNUAL MEAN					37.5	
HIGHEST DAILY MEAN	140	May 29	110	May 18	310	Jan 3 1997
LOWEST DAILY MEAN	41	Dec 26	41	Dec 26	29	Nov 23 1992
ANNUAL SEVEN-DAY MINIMUM	42	Dec 25	42	Dec 31	29	Dec 8 1992
MAXIMUM PEAK FLOW			120	May 26	433	Jan 2 1997
MAXIMUM PEAK STAGE			1.99	May 26	4.38	Jan 2 1997
ANNUAL RUNOFF (AC-FT)	40640		37160		41740	
10 PERCENT EXCEEDS	85		67		94	
50 PERCENT EXCEEDS	48		46		49	
90 PERCENT EXCEEDS	44		43		34	

10265360 HILTON CREEK AT LAKE CROWLEY, CA

LOCATION.—Lat 37°34'46", long 118°44'26", in SW 1/4 SE 1/4 sec.23, T.4 S., R.29 E., Mono County, Hydrologic Unit 18090102, 6.5 mi southeast of Tom's Place, and 10.7 mi east of Mammoth Lakes.

DRAINAGE AREA.—13.0 mi².

PERIOD OF RECORD.—August to September 2001.

CHEMICAL 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)	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)	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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
AUG 14...	1305	2.7	6.5	7.7	25	21.0	18	.32	<.050	<.006

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

10265702 ROCK CREEK ABOVE DIVERSION, NEAR TOM'S PLACE, CA

LOCATION.—Lat 37°33'00", long 118°41'08", unsurveyed, T.5 S., R.30 E., Mono County, Hydrologic Unit 18090102, 0.8 mi southwest of Tom's Place, and 16.5 mi southeast of Mammoth Lakes.

DRAINAGE AREA.—35.6 mi².

PERIOD OF RECORD.—August to September 2001.

CHEMICAL 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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, PH 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)	SOLIDS, RESIDUE AT 180 DEG. C 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
AUG												
14...	1100	19	586	7.8	96.9	7.5	29	13.0	18	e.08	<.050	<.006

e Estimated.

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

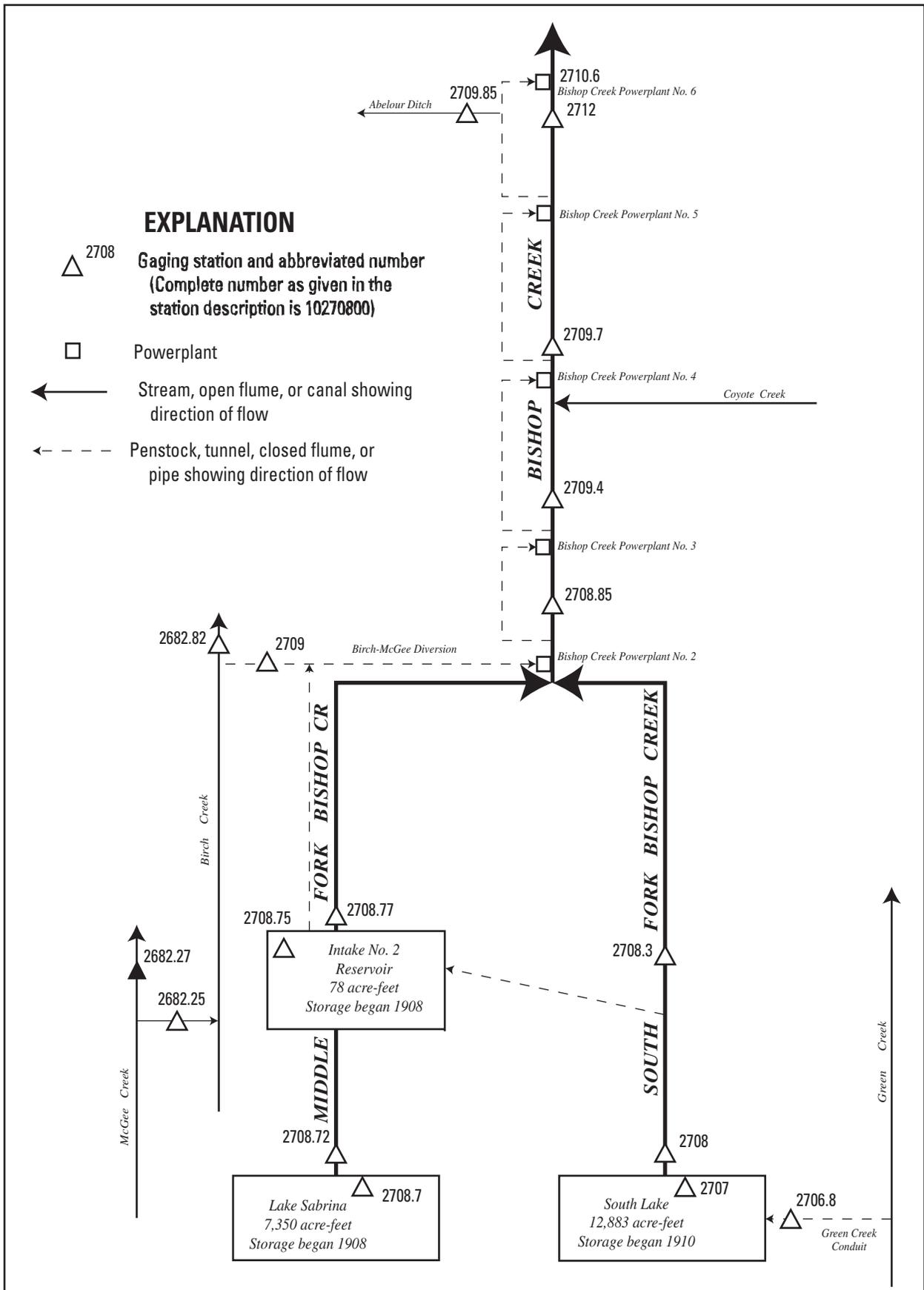


Figure 15. Diversions and storage in Bishop Creek Basin.

10268225 MCGEE CREEK DIVERSION NEAR BISHOP, CA

LOCATION.—Lat 37°16'32", long 118°37'09", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 5 ft downstream from outlet of diversion pipe, 80 ft upstream from tributary to Birch Creek, and 13.5 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Cipolletti weir. Elevation of gage is 8,630 ft above sea level, from topographic map.

REMARKS.—Records not computed for the winter months. Flow limited by size of diversion pipe from McGee Creek. Water flows down Birch Creek and then is diverted to Bishop Creek Powerplant No. 2 Conduit via Birch–McGee Creek Diversion (station 10270900). See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	---	---	---	---	---	---	---	e3.7	6.9	5.8	3.2
2	2.5	---	---	---	---	---	---	---	e3.5	7.4	5.8	3.1
3	2.3	---	---	---	---	---	---	---	e3.5	8.0	5.6	3.2
4	2.2	---	---	---	---	---	---	---	e3.2	8.6	5.3	3.1
5	2.2	---	---	---	---	---	---	---	e2.8	8.6	5.0	2.8
6	2.1	---	---	---	---	---	---	---	3.0	9.3	4.9	3.7
7	2.0	---	---	---	---	---	---	e1.8	3.1	11	5.0	3.7
8	1.9	---	---	---	---	---	---	e4.6	6.9	12	5.1	3.4
9	1.8	---	---	---	---	---	---	e5.1	8.7	10	4.9	3.3
10	1.8	---	---	---	---	---	---	e6.1	9.0	10	5.0	3.2
11	1.7	---	---	---	---	---	---	e6.1	9.0	11	5.1	3.2
12	1.6	---	---	---	---	---	---	e5.1	9.1	10	5.2	3.2
13	1.5	---	---	---	---	---	---	e5.1	8.1	9.9	5.1	3.2
14	1.4	---	---	---	---	---	---	e6.3	7.2	9.3	5.0	3.1
15	1.3	---	---	---	---	---	---	e6.9	7.1	8.7	5.0	3.0
16	1.3	---	---	---	---	---	---	e6.9	7.8	8.2	4.9	2.8
17	1.1	---	---	---	---	---	---	e7.4	8.0	7.8	5.0	2.9
18	1.1	---	---	---	---	---	---	e7.6	8.2	7.5	4.9	3.0
19	.94	---	---	---	---	---	---	e7.8	8.5	7.3	4.8	2.9
20	.69	---	---	---	---	---	---	e8.0	8.6	7.0	4.6	2.6
21	.41	---	---	---	---	---	---	e8.2	8.6	6.6	4.3	2.4
22	.35	---	---	---	---	---	---	e8.5	8.8	6.4	3.9	2.4
23	.28	---	---	---	---	---	---	e8.7	9.6	6.3	3.7	2.4
24	.20	---	---	---	---	---	---	e8.9	9.7	5.9	3.5	2.4
25	---	---	---	---	---	---	---	e9.2	8.8	5.8	3.5	2.3
26	---	---	---	---	---	---	---	e9.6	8.2	5.8	3.6	2.3
27	---	---	---	---	---	---	---	e9.6	7.3	5.6	3.7	2.3
28	---	---	---	---	---	---	---	e9.6	7.1	5.7	3.7	2.2
29	---	---	---	---	---	---	---	e9.4	7.0	5.6	3.6	2.2
30	---	---	---	---	---	---	---	e9.2	6.8	5.5	3.5	2.2
31	---	---	---	---	---	---	---	e9.4	---	5.6	3.4	---
TOTAL	---	---	---	---	---	---	---	---	210.9	243.3	142.4	85.7
MEAN	---	---	---	---	---	---	---	---	7.03	7.85	4.59	2.86
MAX	---	---	---	---	---	---	---	---	9.7	12	5.8	3.7
MIN	---	---	---	---	---	---	---	---	2.8	5.5	3.4	2.2
AC-FT	---	---	---	---	---	---	---	---	418	483	282	170

e Estimated.

10270680 GREEN CREEK CONDUIT OUTLET NEAR BISHOP, CA

LOCATION.—Lat 37°10'14", long 118°33'50", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, 75 ft downstream from outlet of diversion pipe, 0.1 mi upstream from South Lake, and 16.2 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,800 ft above sea level, from topographic map. Prior to June 2001, at same site at different datum.

REMARKS.—Records not computed for the winter months. Flow limited by size of diversion pipe from Green Creek. Water is used for power development downstream from South Lake. See schematic diagram of [Bishop Creek Basin](#).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e.55	3.7	.66	.09	.00
2	---	---	---	---	---	---	---	e.50	3.6	.62	.09	.00
3	---	---	---	---	---	---	---	e.40	3.1	.67	.08	.00
4	---	---	---	---	---	---	---	e.30	2.7	.72	.07	---
5	---	---	---	---	---	---	---	e.25	2.3	.79	.07	---
6	---	---	---	---	---	---	---	e.30	2.3	1.0	.07	---
7	---	---	---	---	---	---	---	e.40	2.7	1.3	.07	---
8	---	---	---	---	---	---	---	e.50	2.7	1.4	.07	---
9	---	---	---	---	---	---	---	e.60	2.4	1.3	.07	---
10	---	---	---	---	---	---	---	e.70	2.3	1.1	.10	---
11	---	---	---	---	---	---	---	e.80	2.2	.99	.06	---
12	---	---	---	---	---	---	---	e.85	2.1	.83	.00	---
13	---	---	---	---	---	---	---	e.90	1.8	.69	.00	---
14	---	---	---	---	---	---	---	e.93	1.5	.62	.00	---
15	---	---	---	---	---	---	---	1.4	1.2	.55	.00	---
16	---	---	---	---	---	---	---	1.2	1.2	.45	.00	---
17	---	---	---	---	---	---	---	1.2	1.4	.36	.00	---
18	---	---	---	---	---	---	---	1.2	1.5	.33	.00	---
19	---	---	---	---	---	---	---	1.1	1.4	.31	.00	---
20	---	---	---	---	---	---	---	1.1	1.2	.27	.00	---
21	---	---	---	---	---	---	---	2.2	1.2	.23	.00	---
22	---	---	---	---	---	---	---	3.2	1.1	.22	.00	---
23	---	---	---	---	---	---	---	3.3	1.1	.21	.00	---
24	---	---	---	---	---	---	---	3.6	1.1	.19	.00	---
25	---	---	---	---	---	---	---	4.1	1.1	.16	.00	---
26	---	---	---	---	---	---	---	4.3	.98	.14	.00	---
27	---	---	---	---	---	---	---	4.1	.85	.13	.00	---
28	---	---	---	---	---	---	---	3.7	.80	.12	.00	---
29	---	---	---	---	---	---	---	3.4	.78	.12	.00	---
30	---	---	---	---	---	---	e.60	3.3	.72	.10	.00	---
31	---	---	---	---	---	---	---	3.5	---	.09	.00	---
TOTAL	---	---	---	---	---	---	---	53.88	53.03	16.67	0.84	---
MEAN	---	---	---	---	---	---	---	1.74	1.77	.54	.027	---
MAX	---	---	---	---	---	---	---	4.3	3.7	1.4	.10	---
MIN	---	---	---	---	---	---	---	.25	.72	.09	.00	---
AC-FT	---	---	---	---	---	---	---	107	105	33	1.7	---

e Estimated.

10270700 SOUTH LAKE NEAR BISHOP, CA

LOCATION.—Lat 37°10'21", long 118°33'52", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, near spillway, at right abutment of Hillside Dam, on South Fork Bishop Creek, and 16.0 mi southwest of Bishop.

DRAINAGE AREA.—12.9 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1910. Usable capacity, 12,883 acre-ft, between elevations 9,621.20 ft, invert of outlet tunnel, and 9,751.31 ft, crest of spillway. Water is received from Green Creek via Green Creek Conduit (station 10270680). Figures given represent usable contents. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 13,038 acre-ft, Aug. 4, 1993, elevation, 9,752.21 ft; minimum, 280 acre-ft, Apr. 18–25, 1993, elevation, unknown.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 13,000 acre-ft, July 8, 9, elevation, 9,751.71 ft; minimum, 4,840 acre-ft, Apr. 24–26, minimum elevation, 9,692.34 ft, Apr. 25.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 5, 1981)

9,621.2	0	9,650	1,493	9,690	4,533	9,730	9,392
9,630	417	9,670	2,820	9,710	6,654	9,756	13,704

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	10500	9830	8350	6960	6220	5750	5180	5030	9860	12500	12600	11900
2	10500	9810	8310	6920	6210	5730	5170	5080	10000	12600	12600	11900
3	10400	9780	8260	6870	6200	5720	e5150	5120	10200	12600	12600	11900
4	10400	9770	8210	6840	6180	5720	5140	5170	10300	12700	12600	11900
5	10400	9750	8170	6820	6160	5720	5110	5210	10400	12700	12500	11900
6	10300	9620	8130	6790	6130	e5700	5100	5280	10500	12800	12500	11900
7	10300	9510	8070	6760	6100	e5690	5090	5370	10700	12900	12500	11800
8	10300	9480	8030	6730	e6080	e5680	5070	5500	10800	13000	12500	11800
9	10300	9410	7990	6710	e6060	e5660	5070	5630	10900	13000	12500	11800
10	10200	9360	7940	6690	e6030	e5650	5100	5790	11100	12900	12500	11800
11	10200	9310	7890	6670	e6010	e5640	5040	5950	11200	12900	12500	11800
12	10200	9200	7840	6640	e5990	5630	5030	6090	11300	12900	12400	11800
13	10200	9130	7800	6630	e5960	5600	5000	6200	11400	12900	12400	11800
14	10200	9130	7760	6610	e5940	5580	4970	6290	11400	12900	12400	11800
15	10100	9080	7720	6580	e5920	5550	4960	6440	11500	12900	12400	11800
16	10100	9020	7680	6560	5900	5520	4950	6600	11600	12900	12400	11800
17	10100	8980	7630	6540	5880	5500	4940	6760	11700	12900	12300	11700
18	10100	8940	7590	6520	5870	5470	4920	6930	11800	12900	12300	11700
19	10100	8900	7550	6500	5860	5450	4950	7090	11800	12900	12300	11700
20	10100	8860	7510	6480	5850	5420	4880	7250	11900	12900	12300	11700
21	10000	8800	7460	6460	5840	5390	4870	7440	12000	12900	12200	11700
22	10000	8750	7410	6430	5820	5370	4930	7640	12100	12900	12200	11700
23	10000	8710	7370	6400	5810	5340	4860	7860	12200	12900	12200	11700
24	9990	8670	7320	6380	5800	5310	4840	8090	12300	12900	12200	11600
25	9960	8630	7270	6360	5790	5290	4840	8350	12300	12900	12100	11600
26	9950	8580	7240	6330	5790	5270	4840	8600	12400	12800	12100	11600
27	9920	8540	7190	6300	5770	5240	4860	8820	12400	12800	12100	11600
28	9900	8490	7150	6290	5750	5220	4880	9020	12500	12800	12000	11600
29	9880	8440	7100	6270	---	5200	4910	9220	12500	12700	12000	11600
30	9860	8400	7060	6250	---	5190	4960	9420	12500	12700	12000	11500
31	9850	---	7010	6230	---	5180	---	9640	---	12600	11900	---
MAX	10500	9830	8350	6960	6220	5750	5180	9640	12500	13000	12600	11900
MIN	9850	8400	7010	6230	5750	5180	4840	5030	9860	12500	11900	11500
a	9732.92	9723.44	9713.00	9706.22	9701.88	9696.46	9694.33	9731.58	9749.27	9749.94	9745.83	9743.36
b	-680	-1450	-1390	-780	-480	-570	-220	+4680	+2860	+100	-700	-400

CAL YR 2000 MAX 11763 MIN 1853 b +590
WTR YR 2001 MAX 13000 MIN 4840 b +970

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

10270800 SOUTH FORK BISHOP CREEK BELOW SOUTH LAKE, NEAR BISHOP, CA

LOCATION.—Lat 37°10'38", long 118°33'44", unsurveyed, T.9 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, near weir on Weir Lake, 0.3 mi downstream from South Lake, and 15.7 mi southwest of Bishop.

DRAINAGE AREA.—13.4 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and sharp-crested weir. Elevation of gage is 9,580 ft above sea level, from topographic map.

REMARKS.—Flow regulated by South Lake (station 10270700). Green Creek Conduit (station 10270680) diverts water into basin at South Lake. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 142 ft³/s, July 31, 1995, gage height, 1.44 ft; minimum daily, 6.7 ft³/s, Apr. 4, 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	24	19	28	26	15	16	19	16	15	28	36	28
2	24	19	28	26	15	16	17	16	16	28	31	28
3	24	19	28	26	15	16	17	16	16	26	29	26
4	24	18	28	20	15	16	19	16	17	22	31	21
5	19	18	28	16	15	16	21	16	17	19	30	17
6	17	61	28	18	15	16	21	16	14	17	29	15
7	17	66	28	18	15	16	21	16	14	24	29	15
8	17	20	28	18	15	16	21	16	14	53	29	15
9	17	27	28	18	15	16	21	16	14	58	30	15
10	18	32	28	18	16	16	21	17	15	60	30	15
11	18	30	28	18	16	16	20	18	15	58	30	16
12	18	36	28	15	16	21	20	18	15	50	29	16
13	18	35	28	20	16	23	20	18	16	43	29	16
14	18	35	28	16	16	23	20	17	16	38	29	16
15	18	35	27	15	15	23	20	17	16	35	29	16
16	18	35	27	17	15	22	20	17	16	32	29	16
17	18	30	27	19	15	22	15	17	16	30	29	16
18	15	29	27	19	15	22	20	17	16	29	29	16
19	15	29	27	19	15	22	21	17	16	27	29	16
20	15	29	27	19	15	22	21	17	16	26	29	16
21	14	28	27	19	16	22	21	15	16	25	29	16
22	14	28	27	19	16	22	21	15	16	25	29	16
23	14	28	27	19	16	23	21	15	16	24	29	16
24	14	28	27	19	16	24	22	16	16	23	29	16
25	14	28	27	19	16	23	22	16	16	27	28	15
26	14	28	27	19	16	23	22	15	16	36	28	15
27	15	28	26	19	16	23	23	15	20	38	28	15
28	16	28	25	19	16	23	20	15	22	39	28	15
29	16	28	26	19	---	23	18	15	23	41	28	15
30	16	28	25	17	---	24	16	15	24	39	28	15
31	20	---	26	15	---	24	---	15	---	37	28	---
TOTAL	539	902	844	584	433	630	601	501	495	1057	907	509
MEAN	17.4	30.1	27.2	18.8	15.5	20.3	20.0	16.2	16.5	34.1	29.3	17.0
MAX	24	66	28	26	16	24	23	18	24	60	36	28
MIN	14	18	25	15	15	16	15	15	14	17	28	15
AC-FT	1070	1790	1670	1160	859	1250	1190	994	982	2100	1800	1010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

MEAN	25.3	24.3	24.4	23.7	28.4	29.6	28.4	21.2	18.0	33.4	41.0	31.9
MAX	41.6	41.1	35.7	35.8	54.2	61.6	57.4	36.7	28.8	61.4	87.7	47.6
(WY)	1998	1998	1999	1993	1993	1997	1996	1996	1996	1995	1995	1998
MIN	10.8	10.6	9.98	7.59	7.45	7.75	7.74	10.6	7.70	9.45	20.5	17.0
(WY)	1991	1991	1991	1991	1991	1991	1992	1994	1991	1991	1991	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1991 - 2001

ANNUAL TOTAL	8849	8002	
ANNUAL MEAN	24.2	21.9	27.5
HIGHEST ANNUAL MEAN			38.7
LOWEST ANNUAL MEAN			12.4
HIGHEST DAILY MEAN	66	Nov 7	139
LOWEST DAILY MEAN	14	May 5	6.7
ANNUAL SEVEN-DAY MINIMUM	14	May 24	6.9
MAXIMUM PEAK FLOW		88	Nov 6
MAXIMUM PEAK STAGE		1.06	Nov 6
ANNUAL RUNOFF (AC-FT)	17550	15870	19920
10 PERCENT EXCEEDS	37	29	52
50 PERCENT EXCEEDS	18	19	22
90 PERCENT EXCEEDS	15	15	10

10270830 SOUTH FORK BISHOP CREEK BELOW SOUTH FORK DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°14'27", long 118°33'52", in SE 1/4 NW 1/4 sec.22, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, at diversion dam and aqueduct, and 10.5 mi southwest of Bishop.

DRAINAGE AREA.—27.8 mi².

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 7,130 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft³/s. Flow regulated by South Lake (station 10270700). Most of the water is diverted by South Fork Diversion Dam to Intake No. 2 Reservoir (station 10270875) for power development downstream. South Fork Diversion Dam spill bypasses this station. See schematic diagram of [Bishop Creek Basin](#).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.6	7.2	7.3	7.3	7.4	7.6	10	11	11	10	e11
2	10	7.3	7.2	7.3	7.3	7.5	7.5	10	10	11	11	e11
3	11	7.3	7.3	7.3	7.5	7.4	7.5	10	10	10	11	e11
4	11	7.3	7.2	7.4	7.5	7.4	7.5	10	10	10	11	e11
5	10	7.3	7.2	7.4	7.5	7.4	7.5	10	11	10	11	11
6	10	7.4	7.2	7.3	7.4	7.4	7.5	10	11	10	11	11
7	10	7.5	7.3	7.2	7.5	7.4	7.5	10	11	10	11	11
8	10	7.5	7.2	7.4	7.4	7.5	7.5	10	10	10	11	11
9	10	7.3	7.2	7.3	7.3	7.5	7.4	10	11	11	11	12
10	10	7.5	7.2	7.4	7.3	7.4	7.5	11	11	11	11	11
11	10	7.5	7.2	7.3	7.5	7.4	7.5	11	11	11	11	12
12	10	7.4	7.2	7.3	7.4	7.4	7.5	10	11	11	11	12
13	10	7.3	7.2	7.5	7.3	7.4	7.5	10	11	11	11	11
14	10	7.6	7.2	7.4	7.4	7.4	7.4	10	11	11	11	12
15	10	7.5	7.2	7.3	7.4	7.4	7.4	10	11	11	11	11
16	10	7.5	7.4	7.3	7.6	7.4	7.5	10	11	11	11	11
17	10	7.4	7.3	7.5	7.6	7.4	7.4	10	11	11	11	11
18	10	7.4	7.3	7.3	7.6	7.4	7.4	10	10	11	11	11
19	11	7.3	7.6	7.3	7.5	7.3	7.4	10	10	11	11	11
20	11	7.2	7.5	7.4	7.5	7.5	7.4	10	10	11	11	12
21	10	7.3	7.5	7.3	7.5	7.5	7.5	10	10	11	11	11
22	10	8.1	7.5	7.3	7.4	7.5	7.5	10	10	11	11	12
23	10	7.4	7.5	7.3	7.4	7.6	7.5	10	10	11	e10	12
24	10	7.3	7.4	7.3	7.6	7.6	7.1	10	10	11	e11	12
25	10	7.3	7.4	7.3	7.6	7.6	7.3	10	10	11	e11	11
26	10	7.5	7.3	7.2	7.5	7.6	8.8	10	10	11	e11	11
27	10	7.5	7.3	7.4	7.5	7.6	11	10	10	11	e11	11
28	10	7.4	7.2	7.3	7.5	7.6	11	10	10	11	e11	11
29	10	7.4	7.2	7.3	---	7.6	10	10	10	12	e11	11
30	10	7.3	7.2	7.3	---	7.6	10	10	11	11	e11	11
31	10	---	7.2	7.3	---	7.6	---	11	---	11	e11	---
TOTAL	314	222.6	226.0	227.2	208.8	231.7	237.1	313	314	336	339	338
MEAN	10.1	7.42	7.29	7.33	7.46	7.47	7.90	10.1	10.5	10.8	10.9	11.3
MAX	11	8.1	7.6	7.5	7.6	7.6	11	11	11	12	11	12
MIN	10	7.2	7.2	7.2	7.3	7.3	7.1	10	10	10	10	11
AC-FT	623	442	448	451	414	460	470	621	623	666	672	670

CAL YR 2000 TOTAL 3349.6 MEAN 9.15 MAX 12 MIN 7.2 AC-FT 6640
WTR YR 2001 TOTAL 3307.4 MEAN 9.06 MAX 12 MIN 7.1 AC-FT 6560

e Estimated.

10270870 LAKE SABRINA NEAR BISHOP, CA

LOCATION (REVISED).—Lat 37°12'44", long 118°36'42", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in valve house, at base of dam, on Middle Fork Bishop Creek, and 15.8 mi southwest of Bishop.

DRAINAGE AREA.—16.5 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1908. Usable capacity, 7,350 acre-ft, between elevations 9,068.42 ft, invert of outlet, and 9,131.62 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 7,598 acre-ft, July 10, 1995, elevation, 9,132.89 ft; minimum, no storage on several days in 1994 and 2000.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 7,475 acre-ft, July 8, elevation, 9,132.26; minimum, 1,068 acre-ft, Apr. 24, elevation, 9,093.99 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 12, 1981)

9,068.42	0	9,080	15	9,100	1,926	9,120	5,196
9,070	1	9,090	558	9,110	3,501	9,135	7,912

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	5840	5208	3840	2517	1911	1599	1337	1241	6487	7361	7173	6342
2	5816	5173	3800	2472	1893	1587	1336	1303	6712	7367	7167	6294
3	5784	5133	3766	2421	1877	1572	1330	1330	6861	7397	7155	6260
4	5762	5076	3724	2390	1861	1574	1322	1362	6984	7420	7150	6232
5	5741	5024	3679	2370	1843	1573	1320	1399	7103	7445	7126	6206
6	5724	4913	3638	2353	1828	1576	1307	1460	7204	7447	7107	6199
7	5717	4787	3603	2333	1809	1569	1309	1557	7305	7469	7096	6168
8	5703	4746	3562	2322	1791	1560	1303	1687	7385	7475	7088	6131
9	5699	4703	3521	2302	1777	1559	1296	1827	7422	7445	7078	6094
10	5694	4662	3480	2294	1762	1547	1286	1977	7440	7453	7076	6057
11	5681	4626	3440	2288	1756	1538	1277	2154	7440	7457	7071	6019
12	5665	4585	3396	2268	1752	1524	1260	2317	7424	7430	7061	5980
13	5644	4549	3358	2248	1753	1511	1244	2442	7414	7408	7048	5934
14	5626	4504	3317	2230	1749	1500	1224	2557	7399	7387	7028	5893
15	5602	4465	3273	2211	1736	1482	1203	2707	7395	7371	7011	5851
16	5581	e4425	3233	2190	1724	1477	1193	2889	7400	7359	7017	5807
17	5561	e4380	3190	2164	1717	1455	1179	3075	7404	7340	6997	5762
18	5540	4336	3150	2143	1702	1441	1167	3256	7410	7324	6969	5715
19	5519	4299	3111	2125	1696	1427	1143	3427	7412	7307	6938	5663
20	5492	4260	3067	2106	1683	1416	1130	3608	7412	7287	6898	5611
21	5467	4224	3023	2087	1677	1407	1110	3814	7412	7264	6857	5558
22	5451	4182	2972	2070	1663	1391	1093	4038	7412	7243	6819	5496
23	5425	4145	2934	2051	1652	1379	1074	4302	7416	7219	6779	5432
24	5404	4105	2879	2040	1644	1369	1068	4566	7426	7200	6733	5361
25	5386	4068	2831	2021	1636	1352	1069	4851	7424	7173	6685	5292
26	5361	4031	2789	2015	1635	1345	1081	5142	7408	7159	6634	5222
27	5337	3994	2746	1998	1632	1330	1101	5393	7389	7163	6585	5149
28	5315	3957	2697	1982	1612	1326	1117	5606	7379	7167	6534	5074
29	5301	3917	2653	1967	---	1323	1139	5797	7367	7171	6485	5001
30	5277	3879	2606	1947	---	1323	1175	6004	7365	7177	6436	4932
31	5240	---	2559	1929	---	1327	---	6238	---	7175	6391	---
MAX	5840	5208	3840	2517	1911	1599	1337	6238	7440	7475	7173	6342
MIN	5240	3879	2559	1929	1612	1323	1068	1241	6487	7159	6391	4932
a	9120.25	9112.28	9104.14	9100.02	9097.86	9095.87	9094.81	9125.92	9131.70	9130.72	9126.70	9118.48
b	-625	-1361	-1320	-630	-317	-285	-152	+5063	+1127	-190	-784	-1459
CAL YR 2000	MAX 7406	MIN .00	b -459									
WTR YR 2001	MAX 7475	MIN 1068	b -933									

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre feet.

10270872 MIDDLE FORK BISHOP CREEK BELOW LAKE SABRINA, NEAR BISHOP, CA

LOCATION.—Lat 37°12'50", long 118°36'34", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on right bank, 800 ft downstream from Lake Sabrina Dam, and 15.6 mi southwest of Bishop.

DRAINAGE AREA.—16.7 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and sharp-crested weir. Elevation of gage is 9,050 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Lake Sabrina (station 10270870). Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 270 ft³/s, July 10, 1995, gage height, 2.15 ft; minimum daily, 6.5 ft³/s, Mar. 19–27, 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	24	26	24	27	15	15	14	22	17	49	31	45
2	24	26	24	27	15	15	14	18	18	48	35	45
3	24	31	24	27	15	15	14	19	19	58	36	44
4	24	36	28	22	15	15	14	20	20	69	37	39
5	20	36	26	14	15	15	15	20	29	85	38	38
6	17	66	26	14	14	15	15	20	33	94	38	38
7	15	71	26	14	14	15	15	19	40	106	38	38
8	15	29	26	14	14	15	15	16	44	117	38	38
9	14	27	26	14	14	15	15	16	60	100	37	38
10	14	27	26	14	14	15	15	16	76	87	37	37
11	15	25	26	14	14	15	15	17	82	95	37	37
12	20	27	26	16	14	15	17	17	80	86	37	37
13	20	27	26	16	14	15	18	18	73	73	40	37
14	20	27	26	16	14	15	18	18	67	62	40	36
15	20	27	26	16	14	15	18	18	61	55	40	36
16	20	27	26	16	14	15	18	16	59	50	40	36
17	20	27	26	19	14	15	18	16	61	48	40	36
18	20	26	26	16	14	15	19	16	64	47	40	38
19	20	26	26	15	14	15	21	16	66	47	43	40
20	20	26	26	15	15	15	21	16	66	46	43	40
21	19	26	27	15	15	15	21	15	66	46	43	39
22	19	26	27	15	15	15	21	15	67	45	42	43
23	19	26	27	15	15	15	21	15	69	44	43	45
24	19	26	27	15	15	15	21	16	73	44	43	45
25	19	26	27	15	15	14	21	16	73	43	44	47
26	19	26	27	15	15	14	21	17	67	33	47	48
27	19	26	27	15	15	14	21	18	60	27	47	48
28	19	26	27	15	15	14	21	19	55	27	46	48
29	19	25	27	15	---	14	21	20	52	27	46	48
30	20	24	27	15	---	14	21	20	51	27	46	48
31	28	---	27	15	---	14	---	17	---	30	46	---
TOTAL	605	897	813	511	406	458	539	542	1668	1815	1258	1232
MEAN	19.5	29.9	26.2	16.5	14.5	14.8	18.0	17.5	55.6	58.5	40.6	41.1
MAX	28	71	28	27	15	15	21	22	82	117	47	48
MIN	14	24	24	14	14	14	14	15	17	27	31	36
AC-FT	1200	1780	1610	1010	805	908	1070	1080	3310	3600	2500	2440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

MEAN	21.3	21.0	18.8	22.0	27.6	25.5	21.8	23.2	41.2	77.6	53.3	34.9
MAX	40.9	36.4	30.3	35.2	46.1	43.1	41.1	43.4	91.1	147	107	49.4
(WY)	1998	1999	1999	1994	1997	2000	1996	1996	1996	1995	1995	1995
MIN	11.8	8.56	10.2	7.63	7.11	6.91	10.4	9.28	9.14	30.6	33.8	22.7
(WY)	1991	1993	1993	1991	1991	1991	1993	1994	1994	1994	1992	1994

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1991 - 2001

ANNUAL TOTAL	10811.8	10744	
ANNUAL MEAN	29.5	29.4	32.4
HIGHEST ANNUAL MEAN			47.8
LOWEST ANNUAL MEAN			18.4
HIGHEST DAILY MEAN	95	Jul 1	117
LOWEST DAILY MEAN	8.2	Apr 1	14
ANNUAL SEVEN-DAY MINIMUM	8.5	Mar 31	14
MAXIMUM PEAK FLOW			119
MAXIMUM PEAK STAGE			1.25
ANNUAL RUNOFF (AC-FT)	21450	21310	23470
10 PERCENT EXCEEDS	55	51	63
50 PERCENT EXCEEDS	26	24	24
90 PERCENT EXCEEDS	14	15	11

10270875 INTAKE NO. 2 RESERVOIR NEAR BISHOP, CA

LOCATION.—Lat 38°14'53", long 118°34'53", in SE 1/4 SW 1/4 sec.16, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in outlet structure, 50 ft upstream from Bishop Creek Dam, on Middle Fork Bishop Creek, and 13.0 mi southwest of Bishop.

DRAINAGE AREA.—31.6 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed by rock-fill dam completed in 1908. Capacity, 78 acre-ft, between elevations 8,077 ft, invert of outlet, and 8,098.81 ft, crest of spillway, all of which are available for release. Water is received from South Fork Bishop Creek via conduit on right bank. Most of the water is diverted through conduit to Bishop Creek Powerplant No. 2 for power development on Bishop Creek. Figures given represent total contents at 2400 hours. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 101 acre-ft, July 9, 1995, elevation, 8,100.67 ft; minimum, 8.6 acre-ft, Nov. 2, 1998, elevation, 8,088.36 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 91 acre-ft, Nov. 6, elevation, 8,099.89 ft; minimum, 14 acre-ft, Nov. 2, elevation, 8,090.61 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 12, 1981)

8,077	0	8,086	5	8,094	32	8,102	120
8,082	1	8,090	12	8,098	68		

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	70	52	69	69	71	73	76	75	69	66	72	65
2	72	14	68	69	72	72	70	77	73	70	72	66
3	75	34	67	71	74	71	68	63	67	75	73	76
4	76	59	72	71	75	75	72	69	62	76	71	73
5	70	78	73	69	67	71	74	71	62	80	72	70
6	73	91	73	71	65	69	68	70	68	83	71	70
7	69	85	73	70	66	68	70	76	69	87	71	68
8	68	83	73	70	70	69	69	78	73	88	73	69
9	71	85	73	70	76	71	73	81	80	85	73	72
10	74	83	73	72	71	73	70	84	81	86	73	71
11	65	75	72	74	70	72	67	78	81	86	71	70
12	69	74	71	71	70	74	68	73	80	83	68	70
13	73	73	73	76	72	71	72	68	78	81	68	69
14	72	69	75	75	65	70	75	65	71	78	68	69
15	69	72	75	76	70	71	75	66	71	71	67	69
16	68	75	74	72	74	73	75	76	70	69	69	70
17	74	72	72	76	75	75	62	74	71	68	69	70
18	76	75	70	73	72	74	62	71	74	67	69	73
19	72	73	71	69	70	75	65	73	73	67	72	75
20	70	73	71	69	68	76	67	73	73	67	71	70
21	70	73	74	68	67	72	68	73	72	69	69	66
22	70	73	75	69	72	69	68	72	74	68	68	65
23	71	72	76	69	75	67	71	75	77	68	69	68
24	72	72	72	70	75	66	76	76	78	68	67	68
25	72	72	70	75	74	68	74	71	76	69	66	69
26	71	71	69	76	75	69	72	76	67	72	67	72
27	71	71	68	75	72	72	74	78	66	69	69	73
28	74	71	69	75	72	76	76	75	66	70	70	72
29	76	71	70	75	---	74	76	71	67	73	70	70
30	70	70	70	74	---	71	75	66	64	72	69	69
31	80	---	70	71	---	74	---	72	---	73	68	---
MAX	80	91	76	76	76	76	76	84	81	88	73	76
MIN	65	14	67	68	65	66	62	63	62	66	66	65
a	8099.07	8098.19	8098.19	8098.31	8098.33	8098.55	8098.62	8098.35	8097.59	8098.43	8097.96	8098.13
b	+9	-10	0	+1	+1	+2	+1	-3	-8	+9	-5	+1

CAL YR 2000 MAX 91 MIN 14 b -1
WTR YR 2001 MAX 91 MIN 14 b -2

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

10270877 MIDDLE FORK BISHOP CREEK BELOW INTAKE NO. 2 RESERVOIR, NEAR BISHOP, CA

LOCATION.—Lat 37°15'16", long 118°34'39", unsurveyed, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 0.1 mi upstream from bridge on South Lake Road, 0.7 mi downstream from Bishop Creek Dam, 0.9 mi upstream from confluence with South Fork Bishop Creek, and 12.6 mi southwest of Bishop.

DRAINAGE AREA.—31.9 mi².

PERIOD OF RECORD.—October 1990 to current year (low-flow records only). Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 7,830 ft above sea level, from topographic map.

REMARKS.—No records computed above 30 ft³/s. Flow regulated by Intake No. 2 Reservoir (station 10270875), where most of the water is diverted to Bishop Creek Powerplant No. 2. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	---	8.1	8.0	8.1	8.3	8.5	5.2	5.0	6.1	6.2	6.1
2	11	---	8.1	8.0	8.1	8.3	8.4	5.8	5.2	6.1	6.2	6.1
3	11	---	8.1	8.0	8.1	8.3	8.2	5.1	5.0	6.5	6.1	6.1
4	11	---	8.1	8.0	8.1	8.3	8.1	5.1	5.0	6.3	6.1	6.2
5	11	---	8.1	8.0	8.1	8.3	8.4	5.1	5.6	17	6.1	6.1
6	11	---	8.1	8.0	8.1	8.3	8.3	5.1	6.1	---	6.1	6.0
7	11	---	8.1	8.0	e8.2	8.3	8.3	5.7	6.1	---	6.1	6.0
8	11	---	8.2	8.0	e8.2	8.3	8.3	12	6.1	---	6.1	6.0
9	11	---	8.3	8.1	e8.2	8.3	8.3	---	11	---	6.1	6.0
10	11	---	8.3	8.0	8.3	8.3	8.3	---	28	---	6.1	6.0
11	11	26	8.2	e8.0	8.3	8.3	8.3	5.7	---	---	6.1	6.0
12	11	12	8.1	e8.1	8.3	8.3	8.2	5.1	29	---	6.1	6.0
13	11	9.9	8.1	e8.1	8.3	8.3	8.1	5.1	15	---	6.0	6.0
14	11	8.1	8.2	e8.1	8.2	8.3	8.3	5.1	7.0	21	6.1	6.0
15	11	8.1	8.4	e8.0	8.1	8.3	8.3	5.1	6.2	8.0	6.1	6.0
16	11	8.1	8.3	e8.1	8.1	8.3	8.3	5.3	6.1	6.4	6.1	6.0
17	11	8.1	8.3	e8.0	8.1	8.3	8.2	5.1	6.1	6.3	6.1	6.0
18	12	8.1	8.1	e8.1	8.1	8.3	8.0	5.1	6.1	6.3	6.0	6.0
19	11	8.1	8.1	e8.1	8.1	8.4	8.1	5.1	6.1	6.3	6.0	6.0
20	11	8.1	8.1	e8.0	8.1	8.5	8.1	5.1	6.1	6.3	6.0	6.0
21	11	8.1	8.1	8.1	8.1	8.5	8.3	5.1	6.1	6.3	6.0	6.0
22	11	8.1	8.3	8.1	8.1	8.5	8.3	5.1	6.1	6.3	6.0	6.0
23	11	8.1	8.2	8.1	8.1	8.3	8.2	7.6	6.6	6.3	6.0	6.0
24	11	8.1	8.3	8.1	8.1	8.3	8.3	5.4	8.3	6.3	6.0	6.0
25	11	8.1	8.1	8.1	8.1	8.3	8.3	5.2	8.2	6.3	6.0	6.0
26	11	8.0	8.1	8.1	8.3	8.3	8.3	11	6.2	6.3	6.0	6.0
27	11	8.1	8.1	8.1	8.3	8.3	8.3	7.1	6.1	6.3	6.1	6.0
28	12	8.1	8.0	8.1	8.3	8.4	8.3	5.2	6.1	6.2	6.0	6.0
29	13	8.1	8.0	8.1	---	8.5	8.3	5.1	6.1	6.1	6.1	6.0
30	11	8.1	8.0	8.1	---	8.4	6.4	5.1	6.1	6.1	6.1	6.0
31	26	---	8.0	8.1	---	8.3	---	5.1	---	6.1	6.1	---
TOTAL	360	---	252.6	249.8	228.6	258.4	246.0	---	---	---	188.2	180.6
MEAN	11.6	---	8.15	8.06	8.16	8.34	8.20	---	---	---	6.07	6.02
MAX	26	---	8.4	8.1	8.3	8.5	8.5	---	---	---	6.2	6.2
MIN	11	---	8.0	8.0	8.1	8.3	6.4	---	---	---	6.0	6.0
AC-FT	714	---	501	495	453	513	488	---	---	---	373	358

e Estimated.

10270885 BISHOP CREEK BELOW INTAKE NO. 3 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°16'27", long 118°34'17", in NE 1/4 NE 1/4 sec.9, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 125 ft downstream from dam, 0.7 mi downstream from confluence of South Fork and Middle Fork Bishop Creek, and 9.5 mi southwest of Bishop.

DRAINAGE AREA.—64.5 mi².

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 7,130 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft³/s. Flow regulated by Intake No. 3 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 3. Water is used for power development downstream. See schematic diagram of [Bishop Creek Basin](#).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	---	15	15	14	14	14	14	14	14	14	14
2	14	---	15	15	14	14	14	14	14	14	14	14
3	14	---	15	15	14	14	14	14	14	14	13	14
4	14	---	15	15	14	14	14	14	14	14	13	14
5	14	---	15	15	14	14	14	14	14	14	13	14
6	14	---	15	15	14	14	14	14	14	---	13	14
7	14	---	15	15	14	14	14	14	14	---	13	14
8	14	---	15	15	14	14	14	14	14	---	13	14
9	14	---	15	15	14	14	14	20	14	---	13	14
10	14	---	15	15	14	14	14	---	14	---	13	14
11	15	---	15	15	14	14	15	14	14	---	13	14
12	16	19	15	15	14	14	15	14	14	---	13	14
13	16	17	15	15	14	14	15	14	14	---	13	14
14	16	16	15	15	14	14	15	14	14	14	13	14
15	16	16	15	15	14	14	15	14	14	14	13	14
16	16	16	15	15	14	14	15	14	14	14	13	14
17	16	16	15	15	14	14	15	14	14	14	13	14
18	16	16	15	15	14	14	15	14	14	14	13	14
19	16	16	15	15	14	14	15	14	14	14	13	14
20	16	15	15	15	14	14	15	14	14	14	13	14
21	16	15	15	15	14	14	15	14	14	14	13	14
22	16	15	15	15	14	14	15	14	14	14	13	14
23	---	15	15	15	14	14	15	14	14	14	13	14
24	---	15	15	14	14	14	14	14	14	14	13	14
25	---	15	15	14	14	14	14	14	14	14	13	14
26	---	15	15	14	14	14	14	14	14	14	13	14
27	---	15	15	14	14	14	14	14	14	14	13	14
28	---	15	15	14	14	14	14	14	14	14	13	14
29	---	15	15	14	---	14	14	14	14	14	13	14
30	---	15	15	14	---	14	14	14	14	14	13	14
31	---	---	15	14	---	14	---	14	---	14	13	---
TOTAL	---	---	465	457	392	434	433	---	420	---	405	420
MEAN	---	---	15.0	14.7	14.0	14.0	14.4	---	14.0	---	13.1	14.0
MAX	---	---	15	15	14	14	15	---	14	---	14	14
MIN	---	---	15	14	14	14	14	---	14	---	13	14
AC-FT	---	---	922	906	778	861	859	---	833	---	803	833

10270900 BIRCH-MCGEE DIVERSION TO BISHOP CREEK POWERPLANT NO. 2, NEAR BISHOP, CA

LOCATION.—Lat 37°16'26", long 118°34'45", in NW 1/4 NE 1/4 sec.9, T.8 S., R.31 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, in conduit, 100 ft upstream from penstock to Bishop Creek Powerplant No. 2, and 11.9 mi southwest of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 7,950 ft above sea level, from topographic map.

REMARKS.—Conduit diverts water from Birch Creek and discharges into penstock to Bishop Creek Powerplant No. 2. Birch Creek receives water from McGee Creek via McGee Creek Diversion (station 10268225). See schematic diagram of [Bishop Creek Basin](#).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	2.0	4.0	3.8	3.7	3.4	4.0	3.4	19	17	14	9.1
2	7.6	2.0	3.9	3.7	3.7	3.4	3.7	3.3	19	18	14	9.0
3	7.6	2.0	3.9	3.7	3.7	3.4	3.5	3.2	17	19	14	9.3
4	7.5	2.0	3.9	3.7	3.7	3.4	3.4	3.2	16	20	13	9.1
5	7.4	2.0	3.9	3.7	3.7	3.4	3.4	3.2	15	21	13	8.8
6	7.3	1.9	3.9	3.7	3.6	3.4	3.5	3.2	15	23	13	9.5
7	7.2	1.9	4.0	3.7	3.6	3.4	3.5	4.7	15	28	13	9.4
8	7.0	2.9	4.0	3.7	3.6	3.5	3.4	7.6	19	30	13	9.0
9	6.9	4.2	4.0	3.7	3.6	3.5	3.3	8.9	22	24	13	8.9
10	6.8	4.2	3.9	3.7	3.6	3.4	3.4	9.6	22	23	13	8.9
11	6.9	3.7	3.9	3.8	3.6	3.4	3.4	11	22	27	13	8.9
12	6.9	3.7	3.9	3.8	3.6	3.4	3.4	12	22	25	13	8.9
13	6.7	4.1	3.9	3.7	3.6	3.4	3.3	11	20	23	13	8.7
14	6.6	4.0	3.8	3.7	3.6	3.4	3.4	9.7	18	22	13	8.5
15	6.5	4.0	3.9	3.7	3.6	3.4	3.6	11	17	20	12	8.4
16	6.3	4.0	3.9	3.7	3.5	3.5	3.8	13	18	19	12	8.2
17	6.2	4.0	3.8	3.7	3.5	3.6	3.8	13	18	19	12	8.1
18	6.1	4.0	3.8	3.7	3.5	3.7	3.7	13	19	18	12	8.0
19	5.9	4.0	3.8	3.7	3.5	3.8	3.5	13	19	18	12	7.8
20	5.6	4.0	3.8	3.7	3.6	3.9	3.4	13	19	17	12	7.7
21	5.3	4.0	3.9	3.7	3.5	3.8	3.4	14	19	17	11	7.6
22	5.2	4.0	3.8	3.7	3.5	3.8	3.5	15	20	16	11	7.5
23	5.2	4.0	3.9	3.7	3.5	3.8	3.7	17	21	16	10	7.5
24	5.1	4.1	3.8	3.6	3.5	3.9	3.9	19	21	15	9.9	7.4
25	4.9	4.0	3.8	3.6	3.4	3.8	4.0	21	20	15	9.7	7.1
26	4.7	4.1	3.8	3.7	3.5	3.9	3.9	23	19	15	9.6	7.5
27	4.7	4.1	3.8	3.7	3.4	3.9	3.7	24	18	14	9.7	7.4
28	4.6	4.0	3.8	3.7	3.4	4.3	3.6	24	18	14	9.7	7.3
29	4.7	4.0	3.8	3.7	---	4.1	3.4	23	17	14	9.6	7.3
30	3.0	4.0	3.8	3.7	---	4.0	3.4	23	17	14	9.6	7.2
31	2.0	---	3.8	3.6	---	4.1	---	21	---	14	9.4	---
TOTAL	186.1	104.9	119.9	114.7	99.8	113.1	106.9	394.0	561	595	366.2	248.0
MEAN	6.00	3.50	3.87	3.70	3.56	3.65	3.56	12.7	18.7	19.2	11.8	8.27
MAX	7.7	4.2	4.0	3.8	3.7	4.3	4.0	24	22	30	14	9.5
MIN	2.0	1.9	3.8	3.6	3.4	3.4	3.3	3.2	15	14	9.4	7.1
AC-FT	369	208	238	228	198	224	212	781	1110	1180	726	492

10270940 BISHOP CREEK BELOW INTAKE NO. 4 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°18'10", long 118°31'45", in NW 1/4 NW 1/4 sec.36, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 300 ft downstream from dam, 1.6 mi upstream from Coyote Creek, and 7.5 mi southwest of Bishop.

DRAINAGE AREA.—72.7 mi².

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.—No records computed above 20 ft³/s. Flow regulated by Intake No. 4 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 4. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	18	6.3	e6.3	5.4	6.0	5.3	6.0	5.7	6.0	6.4	6.5
2	5.8	---	6.3	e6.3	5.4	6.0	5.3	5.9	9.7	6.0	6.5	6.5
3	6.1	---	6.3	e6.4	5.4	6.0	5.3	5.8	6.4	7.9	6.6	6.6
4	6.1	---	6.3	6.6	5.5	6.0	5.3	5.8	5.8	11	6.5	6.5
5	6.1	---	6.3	6.6	5.5	6.0	5.3	5.9	5.7	---	6.6	6.6
6	6.1	---	6.3	6.6	5.5	6.0	5.2	6.0	5.8	---	6.6	6.5
7	6.1	---	e6.3	6.5	5.4	6.0	5.2	6.0	5.8	---	6.5	6.6
8	6.1	---	e6.3	6.4	5.4	6.1	5.2	6.0	5.8	---	6.4	6.5
9	6.1	---	e6.3	6.4	5.4	6.3	5.2	5.8	16	---	6.4	6.6
10	6.1	---	e6.3	6.4	5.4	6.3	5.6	6.7	---	---	6.4	6.5
11	6.1	8.6	e6.3	6.3	5.4	6.3	6.0	6.0	---	---	6.5	6.5
12	6.1	8.2	e6.3	6.3	5.4	6.4	6.0	7.4	---	---	6.4	6.5
13	6.1	7.1	e6.3	6.5	5.4	6.3	6.0	5.7	---	---	6.4	6.5
14	6.1	6.1	e6.3	6.2	5.4	6.3	6.0	5.7	12	---	6.3	6.5
15	6.1	6.1	e6.3	6.3	5.4	6.4	6.1	5.7	5.8	15	5.9	6.5
16	6.1	6.1	e6.3	6.2	5.4	6.3	6.1	5.8	5.7	5.7	5.5	6.5
17	6.1	6.1	e6.3	6.2	5.4	6.4	6.0	5.8	6.9	5.6	5.3	6.5
18	6.1	6.2	e6.3	6.3	5.4	6.4	6.0	5.8	6.4	6.0	5.7	6.4
19	6.1	6.3	e6.3	6.3	5.4	6.4	6.0	5.8	9.1	6.4	6.1	6.5
20	6.1	6.3	e6.3	6.3	5.4	6.4	6.0	5.8	6.3	6.5	6.0	6.5
21	6.1	6.3	e6.3	6.3	5.6	6.4	6.0	5.8	6.5	6.5	6.3	6.5
22	6.1	6.3	e6.3	6.3	5.8	6.3	6.0	5.8	12	6.4	6.5	6.5
23	6.5	6.2	e6.3	5.9	5.8	6.3	6.1	7.2	---	6.5	6.5	6.5
24	6.1	6.3	e6.3	5.4	5.8	6.3	6.1	13	---	6.5	6.5	6.5
25	6.1	6.3	e6.3	5.4	5.9	6.3	6.1	13	---	6.5	6.5	6.5
26	6.1	6.3	e6.3	5.4	6.0	15	6.1	18	11	6.5	6.4	6.5
27	6.1	6.3	e6.3	5.4	6.0	---	6.0	14	6.0	6.5	6.5	6.7
28	6.1	6.3	e6.3	5.4	6.0	---	6.1	12	6.0	6.6	6.5	6.7
29	6.1	6.3	e6.3	5.4	---	5.9	6.0	7.6	6.0	6.5	6.5	6.6
30	5.9	6.3	e6.3	5.4	---	5.4	6.0	5.7	6.0	6.5	6.5	6.7
31	7.3	---	e6.3	5.4	---	5.4	---	5.7	---	6.4	6.5	---
TOTAL	189.6	---	195.3	189.1	155.2	---	173.6	227.2	---	---	196.2	196.0
MEAN	6.12	---	6.30	6.10	5.54	---	5.79	7.33	---	---	6.33	6.53
MAX	7.3	---	6.3	6.6	6.0	---	6.1	18	---	---	6.6	6.7
MIN	5.5	---	6.3	5.4	5.4	---	5.2	5.7	---	---	5.3	6.4
AC-FT	376	---	387	375	308	---	344	451	---	---	389	389

e Estimated.

10270970 BISHOP CREEK BELOW INTAKE NO. 5 DIVERSION DAM, NEAR BISHOP, CA

LOCATION.—Lat 37°19'27", long 118°29'57", in NE 1/4 SE 1/4 sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, Inyo National Forest, on left bank, 400 ft downstream from dam, 1.0 mi downstream from Coyote Creek, and 6.0 mi southwest of Bishop.

DRAINAGE AREA.—100 mi².

PERIOD OF RECORD.—October 1994 to current year (low-flow records only). Unpublished records prior to October 1994 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 5,280 ft above sea level, from topographic map.

REMARKS.—No records computed above 30 ft³/s. Flow regulated by Intake No. 5 Reservoir, where most of the water is diverted to Bishop Creek Powerplant No. 5. Water is used for power development downstream. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	---	19	19	19	19	19	20	20	20	19	19
2	20	---	19	19	19	19	19	19	20	20	19	19
3	20	---	19	19	19	19	19	19	20	---	19	19
4	20	---	19	19	19	19	19	19	20	21	19	19
5	20	---	19	19	19	19	19	20	20	23	19	19
6	20	---	19	19	19	19	19	20	20	---	19	19
7	20	---	21	19	19	19	20	20	20	---	19	19
8	20	---	19	19	19	19	19	25	21	---	19	19
9	20	---	19	19	19	19	19	---	21	---	19	19
10	21	---	19	19	19	19	19	---	21	---	19	19
11	21	26	19	19	19	19	19	27	25	---	19	19
12	21	26	19	19	19	19	19	20	25	---	19	19
13	22	22	19	19	e20	20	19	20	20	---	19	19
14	21	20	19	19	e19	22	19	20	20	25	19	19
15	21	19	19	19	e19	26	19	20	20	19	19	19
16	21	20	19	19	19	25	19	20	20	19	19	19
17	21	19	19	20	19	26	19	20	20	19	19	19
18	21	19	19	19	19	30	19	20	20	19	19	19
19	21	19	20	19	19	---	19	20	20	19	19	19
20	21	19	19	19	19	---	19	20	20	19	19	19
21	21	19	19	19	19	---	20	20	20	19	19	19
22	21	19	19	19	19	24	20	20	20	19	---	19
23	21	19	19	19	19	19	---	20	21	19	19	19
24	21	20	19	19	19	19	---	20	20	27	19	19
25	21	19	19	19	19	19	---	20	20	19	19	19
26	21	19	19	19	19	19	27	20	20	19	19	19
27	21	19	19	19	19	19	20	20	20	19	19	19
28	21	19	19	19	19	20	20	20	20	19	19	19
29	21	19	19	19	---	19	20	20	20	19	19	19
30	21	19	19	19	---	19	21	20	20	19	19	19
31	23	---	19	19	---	19	---	20	---	19	19	---
TOTAL	645	---	592	590	533	---	---	---	614	---	---	570
MEAN	20.8	---	19.1	19.0	19.0	---	---	---	20.5	---	---	19.0
MAX	23	---	21	20	20	---	---	---	25	---	---	19
MIN	20	---	19	19	19	---	---	---	20	---	---	19
AC-FT	1280	---	1170	1170	1060	---	---	---	1220	---	---	1130

e Estimated.

10270985 ABELOUR DITCH NEAR BISHOP, CA

LOCATION.—Lat 37°20'30", long 118°28'41", in SE 1/4 NE 1/4 sec.17, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, on left bank, 400 ft upstream from Highway 168 road crossing, 0.6 mi downstream from outlet in penstock to Bishop Creek Powerplant No. 6, and 4.8 mi west of Bishop.

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 4,750 ft above sea level, from topographic map.

REMARKS.—Ditch diverts water from Bishop Creek Powerplant No. 6 Penstock for irrigation and domestic use. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3.3 ft³/s, May 7, 1995; no flow Nov. 3, 4, 1998, Nov. 2, 3, 1999, Nov. 6, 7, 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	2.0	.03	1.7	1.6	1.8	1.8	1.8	1.7	1.9	2.7	2.0	2.0
2	2.0	.02	1.7	1.6	1.8	1.8	1.9	1.6	1.9	2.7	1.9	2.0
3	2.0	.02	1.7	1.9	1.8	1.8	1.9	1.7	2.0	2.7	2.0	2.0
4	2.0	.01	1.7	2.3	1.8	1.8	1.9	1.7	2.2	2.7	1.9	2.0
5	2.0	.01	1.7	2.0	1.8	1.8	1.9	1.7	2.2	2.7	2.0	2.1
6	2.0	.00	1.7	2.0	1.8	1.8	1.9	1.7	2.2	2.8	2.0	2.1
7	2.2	.00	1.7	2.0	1.8	1.8	1.9	1.6	2.0	2.8	1.9	2.1
8	2.4	1.5	1.7	2.0	1.9	1.8	1.9	1.5	1.9	2.8	1.9	2.1
9	2.2	2.2	1.7	2.0	1.9	1.8	1.9	1.8	1.9	2.8	2.0	2.1
10	2.2	1.9	1.7	2.0	1.8	1.8	2.0	2.0	1.9	2.6	2.0	2.1
11	2.2	2.6	1.7	2.0	1.8	1.8	1.9	2.0	2.0	2.2	2.0	2.1
12	2.2	2.7	1.7	2.0	1.8	1.8	1.9	2.0	2.0	2.1	2.0	2.1
13	2.2	2.3	1.7	2.1	1.8	1.7	1.9	2.0	2.0	1.9	2.0	2.1
14	2.2	2.0	1.7	2.1	1.8	1.7	1.9	2.0	2.0	1.8	1.9	2.1
15	2.2	1.8	1.6	2.1	1.8	1.8	1.9	2.0	2.0	1.8	1.9	2.1
16	2.2	1.6	1.6	2.1	1.8	2.0	2.0	1.6	1.9	1.8	2.0	2.1
17	2.2	1.5	1.6	2.1	1.8	2.0	1.9	1.6	1.9	1.8	1.9	2.1
18	2.2	1.6	1.6	2.1	1.8	2.0	1.9	1.6	1.9	1.8	2.0	2.1
19	2.2	1.6	1.6	2.1	1.8	1.9	1.9	1.6	1.9	1.8	1.9	2.1
20	2.2	1.6	1.5	2.1	1.8	1.9	1.9	1.6	1.9	1.8	1.9	2.1
21	2.2	1.6	1.5	2.1	1.8	1.9	2.0	1.6	1.9	1.9	2.0	2.1
22	2.2	1.6	1.5	2.0	1.8	1.9	2.0	1.6	1.9	1.9	1.9	2.1
23	2.3	1.6	1.6	2.0	1.8	1.9	2.2	1.8	1.9	1.9	1.9	2.1
24	2.5	1.7	1.6	2.0	1.8	1.9	2.2	2.0	1.9	1.9	1.9	2.0
25	2.2	1.7	1.6	1.8	1.8	1.9	2.2	2.0	1.9	1.9	1.9	1.8
26	1.8	1.7	1.6	1.8	1.8	1.9	1.8	2.0	1.9	1.9	1.9	1.8
27	1.9	1.7	1.6	1.8	1.8	1.9	1.8	2.0	1.8	1.9	1.9	1.9
28	1.9	1.7	1.6	1.8	1.8	1.8	1.8	2.0	1.9	1.9	1.9	1.9
29	1.9	1.7	1.6	1.8	---	1.8	1.8	2.0	2.6	1.9	2.0	1.9
30	1.9	1.7	1.6	1.8	---	1.8	1.8	2.0	2.7	1.9	2.0	1.9
31	1.1	---	1.6	1.8	---	1.8	---	1.9	---	1.9	2.0	---
TOTAL	64.9	41.69	50.7	60.9	50.6	57.1	57.7	55.9	60.0	67.0	60.4	61.1
MEAN	2.09	1.39	1.64	1.96	1.81	1.84	1.92	1.80	2.00	2.16	1.95	2.04
MAX	2.5	2.7	1.7	2.3	1.9	2.0	2.2	2.0	2.7	2.8	2.0	2.1
MIN	1.1	.00	1.5	1.6	1.8	1.7	1.8	1.5	1.8	1.8	1.9	1.8
AC-FT	129	83	101	121	100	113	114	111	119	133	120	121

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	2000	1994	1998	1997	1997	1997	1996	1995	1993	1995	1996	1995
MEAN	2.05	1.75	1.84	1.93	1.90	1.92	2.00	2.06	2.15	2.16	2.20	2.18
MAX	2.32	2.20	2.01	2.30	2.11	2.06	2.41	2.42	2.47	2.62	2.73	2.52
(WY)	2000	1994	1998	1997	1997	1997	1996	1995	1993	1995	1996	1995
MIN	1.87	1.04	1.64	1.75	1.70	1.70	1.83	1.80	1.90	1.91	1.85	1.89
(WY)	1991	1997	2001	2000	2000	1991	1999	2001	1992	1992	1991	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1991 - 2001
ANNUAL TOTAL	683.49	687.99	
ANNUAL MEAN	1.87	1.88	2.01
HIGHEST ANNUAL MEAN			2.19
LOWEST ANNUAL MEAN			1.85
HIGHEST DAILY MEAN	2.7 Jun 15	2.8 Jul 6	3.3 May 7 1995
LOWEST DAILY MEAN	.00 Nov 6	.00 Nov 6	.00 Nov 3 1998
ANNUAL SEVEN-DAY MINIMUM	.01 Nov 1	.01 Nov 1	.01 Nov 1 2000
ANNUAL RUNOFF (AC-FT)	1360	1360	1460
10 PERCENT EXCEEDS	2.2	2.2	2.4
50 PERCENT EXCEEDS	1.9	1.9	2.0
90 PERCENT EXCEEDS	1.6	1.6	1.8

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA

LOCATION.—Lat 37°21'00", long 118°27'42", in SE 1/4 SE 1/4 sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, on left bank, adjacent to Powerplant No. 6 tailrace, and 3.8 mi west of Bishop.

DRAINAGE AREA.—104 mi².

PERIOD OF RECORD.—October 1990 to current year. If records for Bishop Creek Powerplant No. 6 Conduit (station 10271060) are combined with this record, a record equivalent to that published since October 1936 as "Bishop Creek below Powerplant No. 6, near Bishop", discontinued September 1990, can be obtained. Monthly and yearly mean discharge prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 4,510 ft above sea level, from topographic map.

REMARKS.—Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir (stations 10270700, 10270870, and 10270875), combined capacity, 20,311 acre-ft, and five powerplants. Water is diverted into basin via Birch-McGee Diversion (station 10270900). Water is diverted out of basin via Abelour Ditch (station 10270985) for irrigation and domestic use. Diversion to Bishop Creek Powerplant No. 6 (station 10271060) bypasses this station and is published as a line item below. See schematic diagram of Bishop Creek Basin.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 453 ft³/s, July 23, 1998, gage height, 3.77 ft; no flow on many days in July and August 1992.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	39	14	.69	1.7	1.7	1.7	1.2	.99	113	1.3	.96
2	.32	86	14	.69	1.7	1.7	1.7	1.1	1.3	112	1.3	.96
3	.94	73	15	.69	1.7	1.7	1.5	1.1	1.8	120	1.3	.94
4	.96	63	14	.89	1.7	1.7	1.4	1.1	.98	135	1.3	.96
5	.96	63	14	1.6	1.7	1.7	1.3	1.1	.96	145	1.3	.96
6	.93	72	14	1.7	1.7	1.8	1.3	1.1	1.0	167	1.3	.96
7	1.5	183	13	1.7	1.6	1.8	1.3	1.3	.99	203	1.3	.96
8	46	88	12	1.7	2.1	1.7	1.3	1.3	.96	264	1.3	.96
9	52	16	13	1.7	1.7	1.7	1.3	73	5.6	251	1.4	.97
10	56	3.7	11	1.7	1.7	1.7	1.3	126	25	172	1.3	.95
11	61	2.9	11	1.7	1.7	1.5	1.3	131	31	115	1.3	.90
12	58	2.4	11	1.7	1.7	1.3	1.3	131	31	82	1.3	.96
13	57	2.7	11	1.7	1.7	1.6	1.3	119	22	56	1.3	.96
14	64	2.4	8.3	1.7	1.7	1.4	1.3	108	13	34	1.3	.96
15	61	2.1	.96	1.7	1.7	1.5	1.3	63	2.8	20	1.3	.96
16	59	1.2	.96	1.7	1.7	1.5	1.3	1.9	1.1	6.5	3.0	.96
17	55	1.1	.93	2.3	1.7	1.5	1.3	1.1	.96	1.5	1.4	.99
18	56	1.1	.82	1.7	1.7	1.5	1.3	1.1	3.4	1.1	1.3	.95
19	53	1.1	1.3	1.7	1.7	1.5	1.3	1.1	5.8	1.4	1.3	1.0
20	2.4	1.1	.84	1.7	1.7	1.5	1.3	1.0	4.5	1.4	1.7	.96
21	1.4	1.1	.82	1.7	1.7	1.5	1.3	1.0	3.7	1.4	1.8	.96
22	1.3	.96	.69	1.7	1.6	1.4	1.3	.99	3.6	1.4	1.5	.96
23	1.3	9.7	.69	1.7	1.5	1.4	54	3.4	6.2	1.4	1.1	.96
24	1.3	25	.69	1.7	1.5	1.4	70	12	12	2.9	1.1	.93
25	1.3	25	.69	1.7	1.5	1.5	64	15	14	1.3	1.0	.90
26	1.3	23	.69	1.7	1.7	1.5	1.5	20	8.2	1.3	.96	.96
27	1.3	20	.69	1.7	1.6	1.5	1.3	17	1.7	1.4	.96	.96
28	1.3	15	.69	1.7	1.5	1.5	1.3	15	3.8	1.3	.96	.96
29	1.1	14	.69	1.6	---	1.6	1.4	9.5	92	1.3	.93	.96
30	1.1	14	.69	1.6	---	1.6	1.3	1.2	112	1.3	.96	.96
31	1.6	---	.69	1.7	---	1.7	---	1.0	---	1.3	.96	---
TOTAL	700.52	852.56	188.83	49.16	46.9	48.6	224.5	862.59	412.34	2017.2	40.53	28.69
MEAN	22.6	28.4	6.09	1.59	1.68	1.57	7.48	27.8	13.7	65.1	1.31	.96
MAX	64	183	15	2.3	2.1	1.8	70	131	112	264	3.0	1.0
MIN	.21	.96	.69	.69	1.5	1.3	1.3	.99	.96	1.1	.93	.90
AC-FT	1390	1690	375	98	93	96	445	1710	818	4000	80	57
a	2450	3460	4690	3720	3060	4100	4170	6110	7680	5280	6610	5330

a Diversion, in acre-feet, to Bishop Creek Powerplant No. 6 (station 10271060), provided by Southern California Edison Co.

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.02	9.99	1.92	5.09	2.36	2.53	3.01	9.18	31.6	75.1	33.8	6.19
MAX	37.4	32.3	6.09	38.6	10.9	7.54	15.9	29.9	86.7	240	171	37.5
(WY)	1998	2000	2001	1997	1998	1994	1996	1996	1997	1995	1995	1998
MIN	.11	.19	.19	.17	.21	.19	.18	.12	.064	.035	.048	.082
(WY)	1993	1991	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1991 - 2001	
ANNUAL TOTAL	3768.63		5472.42			
ANNUAL MEAN	10.3		15.0		15.9	
HIGHEST ANNUAL MEAN					43.2	
LOWEST ANNUAL MEAN					.34	
HIGHEST DAILY MEAN	183	Nov 7	264	Jul 8	420	Jul 24 1998
LOWEST DAILY MEAN	.21	Oct 1	.21	Oct 1	.00	Jul 27 1992
ANNUAL SEVEN-DAY MINIMUM	.26	Jul 24	.69	Dec 22	.00	Jul 27 1992
MAXIMUM PEAK FLOW			367	Jul 8	453	Jul 23 1998
MAXIMUM PEAK STAGE			3.36	Jul 8	3.77	Jul 23 1998
ANNUAL RUNOFF (AC-FT)	7480		10850		11490	
ANNUAL DIVERSION (AC-FT) a	61230		56650			
10 PERCENT EXCEEDS	44		56		53	
50 PERCENT EXCEEDS	.99		1.5		1.5	
90 PERCENT EXCEEDS	.42		.96		.19	

a Diversion, in acre-feet, to Bishop Creek Powerplant No. 6 (station 10271060), provided by Southern California Edison Co.

10287060 LUNDY LAKE NEAR LEE VINING, CA

LOCATION.—Lat 38°01'56", long 119°13'11", in NW 1/4 SE 1/4 sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, near right abutment of spillway of Lundy Lake Dam, on Mill Creek, and 7.6 mi northwest of Lee Vining.

DRAINAGE AREA.—16.3 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1910. Usable capacity, 4,113 acre-ft, between elevations 7,766.43 ft, invert of outlet, and 7,807.81 ft, crest of spillway. Figures given represent usable contents. Water is used for power development and irrigation downstream.

COOPERATION.—Records were collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 4,191 acre-ft, July 22, 1998, elevation, 7,808.40 ft; minimum, 440 acre-ft, Apr. 19, 1993, elevation, 7,773.08 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 3,600 acre-ft, June 2, elevation, 7,803.83 ft; minimum, 583 acre-ft, Apr. 30, elevation, 7,774.84 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 17, 1981)

7,766.43	0	7,780	1,027	7,800	3,126	7,810	4,406
7,770	213	7,790	2,001				

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	2530	2430	2190	1880	1800	1680	1610	608	3560	3010	2490	1840
2	2530	2420	2180	1870	1800	1670	1590	639	3600	3000	2470	1820
3	2520	2420	2170	1860	1800	1670	1580	665	3580	3000	2460	1800
4	2520	2420	2160	1850	1800	1660	1580	684	3570	3000	2440	1780
5	2520	2410	2150	1850	1790	1660	1570	679	3520	3010	2420	1760
6	2520	2400	2140	1830	1800	1660	1560	697	3480	3040	2390	1730
7	2520	2400	2140	1820	1800	1650	1550	756	3460	3050	2430	1710
8	2520	2400	2120	1820	1800	1650	1540	842	3420	3060	2360	1680
9	2520	2380	2110	1810	1790	1640	1530	959	3370	3070	2340	1660
10	2520	2380	2110	1820	1800	1640	1520	1080	3330	3080	2320	1640
11	2510	2370	2100	1830	1800	1620	1510	1210	3290	3060	2300	1620
12	2500	2370	2090	1820	1800	1620	1500	1360	3240	3070	2280	1590
13	2500	2370	2080	1820	1800	1610	1480	1440	3180	3050	2250	1580
14	2500	2360	2070	1820	1800	1610	1470	1540	3130	3060	2230	1570
15	2500	2340	2050	1820	1790	1600	1450	1660	3060	3060	2210	1570
16	2490	2330	2040	1820	1790	1590	1440	1860	3000	3040	2190	1550
17	2490	2320	2030	1810	1770	1590	1410	1990	2940	3020	2170	1550
18	2480	2320	2030	1810	1770	1590	1360	2070	2930	2980	2150	1550
19	2470	2310	2020	1820	1760	1590	1310	2130	2950	2950	2130	1530
20	2470	2290	2010	1810	1750	1590	1240	2190	2980	2920	2110	1520
21	2470	2280	2000	1810	1750	1590	1150	2250	3000	2900	2090	1500
22	2470	2270	1980	1810	1740	1590	1070	2310	3010	2930	2070	1490
23	2470	2260	1970	1810	1730	1600	943	2460	3040	2840	2040	1490
24	2460	2260	1960	1810	1720	1610	851	2660	3060	2810	2020	1470
25	2460	2240	1950	1810	1710	1610	770	2820	3060	2780	2000	1460
26	2450	2230	1940	1810	1710	1620	700	3010	3060	2770	1980	1460
27	2450	2220	1930	1810	1700	1630	687	3180	3060	2700	1950	1450
28	2440	2220	1920	1810	1690	1630	655	3270	3060	2650	1930	1440
29	2440	2210	1910	1810	---	1620	610	3380	3050	2610	1910	1420
30	2440	2200	1900	1800	---	1610	583	3450	3040	2560	1890	1410
31	2430	---	1890	1800	---	1600	---	3490	---	2530	1860	---
MAX	2530	2430	2190	1880	1800	1680	1610	3490	3600	3080	2490	1840
MIN	2430	2200	1890	1800	1690	1590	583	608	2930	2530	1860	1410
a	7793.97	7791.84	7788.98	7788.09	7786.95	7786.11	7774.84	7802.99	7799.29	7794.83	7788.66	7784.17
b	-100	-230	-310	-90	-110	-90	-1017	+2907	-450	-510	-670	-450
CAL YR 2000	MAX 3395	MIN 908	b +140									
WTR YR 2001	MAX 3600	MIN 583	b -1120									

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

10287069 MILL CREEK FLUME BELOW LUNDY LAKE, NEAR LEE VINING, CA

LOCATION.—Lat 38°01'59", long 119°12'56", in SE 1/4 NE 1/4 sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, on left bank, 20 ft upstream from Deer Creek, 70 ft downstream from road culvert, 1,400 ft downstream from Lundy Lake Dam, and 7.5 mi northwest of Lee Vining.

DRAINAGE AREA.—18.1 mi².

PERIOD OF RECORD.—October 1990 to current year. If records for Upper Conway Ditch and Lundy Powerplant Tailrace (stations 10287145 and 10287195) are combined with this record, a record equivalent to that published since October 1942 as "Mill Creek below Lundy Lake, near Mono Lake" can be obtained. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and 5-ft Cipolletti weir (since May 12, 1992) set in Parshall flume. Elevation of gage is 7,760 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Lundy Lake (station 10287060). Most of the water is diverted at Lundy Lake via Lundy Powerplant to Upper Conway Ditch and Lundy Powerplant Tailrace for power development and irrigation.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 154 ft³/s, July 21, 1998, gage height, 2.65 ft; 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	1.6	1.7	e.95	.25	e.06	.00	.00	.00	e3.8	3.3	2.1	.61
2	1.6	1.6	e.93	.22	e.06	.00	.00	.00	e3.9	3.3	2.0	.56
3	1.6	1.6	e.90	.19	e.05	.00	.00	.00	e4.1	3.3	1.9	.53
4	1.6	1.6	e.85	e.18	e.04	.00	.00	.00	e4.4	3.3	1.9	e.50
5	1.6	1.6	e.83	e.18	e.02	.00	.00	.00	e4.4	3.3	1.8	e.61
6	1.6	1.6	.79	e.17	e.01	.00	.00	.00	e4.3	3.3	1.7	e.70
7	1.6	1.6	.74	e.17	.00	.00	.00	.00	e4.2	3.3	1.7	e.61
8	1.6	1.5	.70	e.16	.00	.00	.00	.00	e3.9	3.4	1.7	e.45
9	1.6	1.5	.70	e.16	.00	.00	.00	.00	e3.9	3.5	1.7	e.38
10	1.7	1.5	.70	e.15	.00	.00	.00	.00	e3.8	3.5	1.6	e.31
11	1.7	1.5	.63	e.15	.00	.00	.00	.00	e3.8	3.5	1.6	e.31
12	1.8	1.5	.61	e.15	.00	.00	.00	.00	e3.8	3.5	1.6	e.19
13	1.9	1.5	.61	e.14	.00	.00	.00	.00	e3.6	3.5	1.5	e.14
14	2.0	e1.5	.61	e.14	.00	.00	.00	.00	e3.6	3.5	1.4	e.09
15	1.9	e1.5	.53	e.13	.00	.00	.00	.00	e3.6	3.5	1.4	e.05
16	1.9	e1.5	.53	e.13	.00	.00	.00	.00	e3.6	3.5	1.4	e.00
17	1.9	e1.5	.53	e.13	.00	.00	.00	.00	e3.6	3.4	1.3	e.00
18	2.0	1.5	.51	e.12	.00	.00	.00	.00	e3.6	3.3	1.3	e.00
19	2.0	1.5	.45	e.12	.00	.00	.00	.00	e3.5	3.3	1.2	.00
20	2.0	1.5	.45	e.12	.00	.00	.00	.00	e3.5	3.3	1.2	.00
21	1.9	1.4	.45	e.12	.00	.00	.00	.00	e3.5	3.2	1.1	.00
22	1.9	1.4	.41	e.11	.00	.00	.00	.09	e3.5	3.1	1.1	.00
23	1.9	1.4	.38	e.11	.00	.00	.00	.19	e3.5	3.0	1.0	.00
24	1.9	1.3	.38	e.11	.00	.00	.00	.31	e3.5	2.9	.98	.00
25	1.9	1.3	.38	e.11	.00	.00	.00	.45	e3.3	2.9	.93	.00
26	1.9	1.3	.32	e.10	.00	.00	.00	.61	e3.3	2.8	.85	.00
27	1.8	1.3	.31	e.10	.00	.00	.00	.88	3.3	2.7	.79	.00
28	1.7	e1.2	.31	e.10	.00	.00	.00	1.3	3.3	2.6	.79	.00
29	1.9	e1.1	.30	e.09	---	.00	.00	1.9	3.3	2.4	.75	.00
30	1.8	e1.0	.25	e.08	---	.00	.00	2.9	3.3	2.4	.70	.00
31	1.7	---	.25	e.08	---	.00	---	e3.6	---	2.3	.67	---
TOTAL	55.5	43.5	17.29	4.27	0.24	0.00	0.00	12.23	110.7	98.1	41.66	6.04
MEAN	1.79	1.45	.56	.14	.009	.000	.000	.39	3.69	3.16	1.34	.20
MAX	2.0	1.7	.95	.25	.06	.00	.00	3.6	4.4	3.5	2.1	.70
MIN	1.6	1.0	.25	.08	.00	.00	.00	.00	3.3	2.3	.67	.00
AC-FT	110	86	34	8.5	.5	.00	.00	24	220	195	83	12
a	0	0	0	0	0	0	112	181	447	104	0	0
b	458	514	614	409	435	702	1840	1760	2320	1380	1200	867

e Estimated.

a Diversion, in acre-feet, to Upper Conway Ditch (station 10287145), provided by Southern California Edison Co.

b Diversion, in acre-feet, to Lundy Powerplant Tailrace (station 10287195), provided by Southern California Edison Co.

10287069 MILL CREEK FLUME BELOW LUNDY LAKE, NEAR LEE VINING, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.93	1.39	.57	1.04	.41	.11	.007	.22	9.53	23.6	6.52	2.76
MAX	5.04	4.40	2.17	8.57	1.79	.70	.044	1.23	35.8	98.2	31.4	5.74
(WY)	2000	2000	1996	1997	1997	1996	1994	1997	1997	1995	1995	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.61	1.72	.17	.000
(WY)	1991	1991	1991	1991	1991	1991	1991	1991	1993	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1991 - 2001
ANNUAL TOTAL	450.66	389.53	
ANNUAL MEAN	1.23	1.07	4.04
HIGHEST ANNUAL MEAN			14.1 1995
LOWEST ANNUAL MEAN			.69 1992
HIGHEST DAILY MEAN	4.6 Jul 1	4.4 Jun 4	137 Jul 21 1998
LOWEST DAILY MEAN	.00 Jan 1	.00 Feb 7	.00 Oct 1 1990
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Feb 7	.00 Oct 1 1990
MAXIMUM PEAK FLOW		Unknown Jun 4	154 Jul 21 1998
MAXIMUM PEAK STAGE		Unknown Jun 4	2.65 Jul 21 1998
ANNUAL RUNOFF (AC-FT)	894	773	2930
ANNUAL DIVERSION (AC-FT) a	935	844	
ANNUAL DIVERSION (AC-FT) b	15300	12500	
10 PERCENT EXCEEDS	3.6	3.3	5.7
50 PERCENT EXCEEDS	.61	.51	.53
90 PERCENT EXCEEDS	.00	.00	.00

a Diversion, in acre-feet, to Upper Conway Ditch (station 10287145), provided by Southern California Edison Co.
 b Diversion, in acre-feet, to Lundy Powerplant Tailrace (station 10287195), provided by Southern California Edison Co.

10287260 WAUGH LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'04", long 119°10'52", unsurveyed, T.2 S., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, near outlet, at base of Rush Creek Meadows Dam, on Rush Creek, and 6.0 mi southwest of town of June Lake.

DRAINAGE AREA.—15.3 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—No records computed during the winter months. Reservoir is formed by concrete dam completed in 1925. Total capacity, 5,277 acre-ft, between elevations 9,368.60 ft, invert of outlet, and 9,415.61 ft, crest of spillway, all of which are available for release. Figures given represent total contents at 2400 hours. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 18, 1981)

9,375	0	9,390	1,283	9,400	2,670	9,410	4,277
9,380	148	9,395	1,948	9,405	3,447	9,418	5,727
9,385	681						

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	1310	---	---	---	---	---	---	---	5440	5260	5050	5080
2	1170	---	---	---	---	---	---	---	5370	5270	5060	5070
3	998	---	---	---	---	---	---	---	5330	5290	5070	5070
4	840	---	---	---	---	---	---	6	5320	5300	5080	5060
5	686	---	---	---	---	---	---	149	5320	5330	5080	5040
6	505	---	---	---	---	---	---	250	5340	5370	5080	4990
7	366	---	---	---	---	---	---	384	5400	5380	5090	4930
8	217	---	---	---	---	---	---	556	5390	5340	5100	4880
9	81	---	---	---	---	---	---	707	5390	5350	5110	4830
10	---	---	---	---	---	---	---	844	5380	5330	5120	4780
11	---	---	---	---	---	---	---	1010	5370	5310	5130	4720
12	---	---	---	---	---	---	---	1100	5350	5290	5140	4670
13	---	---	---	---	---	---	---	1170	5340	5270	5140	4610
14	---	---	---	---	---	---	---	1220	5330	5250	5150	4560
15	---	---	---	---	---	---	---	1370	5340	5230	5160	4500
16	---	---	---	---	---	---	---	1720	5340	5200	5170	4440
17	---	---	---	---	---	---	---	1900	5340	5170	5150	4390
18	---	---	---	---	---	---	---	1980	5330	5140	5160	4330
19	---	---	---	---	---	---	---	2020	5330	5110	5150	4270
20	---	---	---	---	---	---	---	2070	5330	5080	5150	4220
21	---	---	---	---	---	---	---	2140	5330	5040	5150	4160
22	---	---	---	---	---	---	---	2210	5330	5010	5140	4110
23	---	---	---	---	---	---	---	2580	5340	4980	5140	4050
24	---	---	---	---	---	---	---	3050	5320	4980	5130	3990
25	---	---	---	---	---	---	---	3520	5310	5000	5120	3950
26	---	---	---	---	---	---	---	3900	5290	5010	5110	3840
27	---	---	---	---	---	---	---	4200	5280	5020	5110	3670
28	---	---	---	---	---	---	---	4460	5280	5030	5110	3510
29	---	---	---	---	---	---	---	4740	5270	5030	5100	3350
30	---	---	---	---	---	---	---	5040	5260	5040	5090	3190
31	---	---	---	---	---	---	---	5340	---	5040	5090	---
MAX	---	---	---	---	---	---	---	---	5440	5380	5170	5080
MIN	---	---	---	---	---	---	---	---	5260	4980	5050	3190
a								9415.94	9415.54	9414.35	9414.59	9403.39
b									-80	-220	+50	-1900

WTR YR 2001 b +1730

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

10287280 GEM LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'07", long 119°08'25", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, 100 ft downstream from left abutment of dam, on Rush Creek, and 4.0 mi southwest of town of June Lake.

DRAINAGE AREA.—22.0 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by concrete dam completed in 1916. Usable capacity, 17,798 acre-ft, between elevations 8,964.33 ft, invert of outlet, and 9,053.64 ft, crest of upper spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 17,763 acre-ft, June 19, 2000, elevation, 9,053.51 ft; minimum, 128 acre-ft, several days in 2000, elevation, 8,970.38 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 17,300 acre-ft, July 7, 8, maximum elevation, 9,051.76 ft, July 7; minimum, 3,070 acre-ft, Mar. 21, elevation, 8,993.89 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Sept. 1, 1981)

8,980	441	8,990	2,300	9,010	6,547	9,040	14,023
8,985	1,348	9,000	4,345	9,025	10,121	9,055	18,187

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	16600	13600	8610	5520	3940	3400	e3580	5920	15900	17000	16800	17000
2	16600	13500	8440	5450	3920	3390	e3610	6270	16100	17000	16800	17000
3	16600	13300	8280	5390	3890	3360	e3630	6500	16200	17000	16800	17000
4	16500	13100	8110	5340	3870	3360	e3650	6680	16300	17000	16800	17000
5	16500	13000	7930	5270	3850	3370	e3660	6930	16400	17000	16800	17000
6	16500	e12800	7770	5210	3820	3350	e3670	7270	16400	17100	16800	17000
7	16400	e12600	7610	5140	3800	3340	e3680	7680	16500	17300	16900	16900
8	16400	e12500	7440	5090	3780	3310	e3690	8120	16500	17300	16900	16900
9	16300	e12300	7270	5030	3760	3300	e3700	8530	16600	17200	16900	16800
10	16200	e12100	7100	5000	3760	3290	e3710	8970	16600	17200	16900	16800
11	16100	e12000	6950	4950	3760	3260	e3720	9440	16700	17100	16900	16700
12	15900	e11800	6770	4900	3740	3240	e3730	9890	16700	17000	16900	16700
13	15900	e11600	6660	4840	3730	3210	e3740	10300	16700	17000	16900	16600
14	15800	e11500	6610	4770	3710	3190	e3750	10800	16700	17000	16900	16600
15	15700	e11300	6550	4720	3680	3170	e3760	11300	16800	17000	16900	16600
16	15700	e11100	6490	4660	3650	3150	3900	11800	16900	17000	16900	16500
17	15700	e11000	6420	4610	3630	3130	3940	12300	16900	17000	16900	16500
18	15700	e10800	6370	4540	3610	3110	3980	12800	17000	17000	16900	16400
19	15700	e10600	6310	4480	3600	3090	4020	13300	17100	16900	16900	16400
20	15600	10500	6250	4420	3590	3080	4060	13700	17100	16900	16900	16300
21	15400	10300	6190	4360	3570	3070	4070	14200	17100	16800	16900	16300
22	15200	10100	6130	4300	3550	e3090	4080	14700	17100	16800	16900	16200
23	15100	9940	6060	4230	3520	e3120	4100	15100	17200	16800	17000	16200
24	14900	9770	6010	4190	3520	e3170	4180	15300	17100	16800	17000	16100
25	14700	9610	5940	4140	3490	e3220	4340	15300	17100	16800	17000	16100
26	14600	9440	5880	4090	3470	e3270	4580	15400	17100	16800	17000	16100
27	14400	9270	5820	4060	3450	e3320	4840	15400	17100	16800	17000	16200
28	14200	9110	5760	4040	3430	e3380	5080	15500	17000	16800	17000	16200
29	14100	8940	5700	4020	---	e3440	5290	15500	17000	16800	17000	16300
30	14000	8780	5640	3990	---	e3500	5570	15500	17000	16800	17000	16300
31	13800	---	5580	3970	---	e3550	---	15600	---	16800	17000	---
MAX	16600	13600	8610	5520	3940	3550	5570	15600	17200	17300	17000	17000
MIN	13800	8780	5580	3970	3430	3070	3580	5920	15900	16800	16800	16100
a	9039.11	9019.52	9005.69	8998.22	8995.63		9005.64	9045.76	9050.78	9050.17	9050.74	9048.39
b	-2890	-5020	-3200	-1610	-540	+120	+2020	+10030	+1400	-200	+200	-700

CAL YR 2000 MAX 17763 MIN 128 b -1140
WTR YR 2001 MAX 17300 MIN 3070 b -390

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

10287281 RUSH CREEK BELOW GEM LAKE, NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'05", long 119°08'26", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, 100 ft downstream from left abutment of dam on Rush Creek, and 4.0 mi southwest of town of June Lake.

DRAINAGE AREA.—22.0 mi².

PERIOD OF RECORD.—October 18, 1999, to current year. Unpublished records prior to October 1999 available in files of Southern California Edison Co.

GAGE.—Acoustic-velocity meter. Elevation of gage is 8,979 ft above sea level (from topographic map).

REMARKS.—Flow regulated by Gem Lake (station 10287280) 100 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3.8 ft³/s, May 20, 2001, gage height, 3.82 ft; no flow for several days in April 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	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.3
2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.3
3	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.3
4	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.3
5	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.3
6	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	1.3	1.3	1.2	1.2	1.3
7	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	2.4	1.3	1.3	1.2	1.3
8	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.1	1.3	1.3	1.2	1.3
9	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.1	1.3	1.3	1.2	1.3
10	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.1	1.3	1.2	1.2	1.3
11	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.2	1.3	1.2	1.2	1.3
12	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.3	1.3	1.2	1.2	1.3
13	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.3	1.3	1.2	1.2	1.3
14	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.4	1.3	1.2	1.2	1.3
15	1.2	1.2	1.2	1.2	1.2	1.2	e1.3	3.5	1.3	1.2	1.2	1.3
16	1.2	1.1	1.2	1.2	1.2	1.2	e1.3	3.5	1.3	1.2	1.3	1.3
17	1.2	1.1	1.2	1.2	1.2	1.2	1.3	3.6	1.3	1.2	1.3	1.3
18	1.2	1.1	1.2	1.2	1.2	1.2	1.3	3.6	1.3	1.2	1.3	1.2
19	1.2	1.1	1.2	1.2	1.2	1.2	1.3	3.7	1.3	1.2	1.3	1.2
20	1.2	1.2	1.2	1.2	1.2	1.2	1.3	3.8	1.3	1.2	1.3	1.2
21	1.2	1.2	1.2	1.2	1.2	1.2	1.3	2.0	1.3	1.2	1.3	1.2
22	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.3	1.2
23	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
24	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
25	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
26	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
27	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
28	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2
29	1.3	1.2	1.2	1.2	---	1.3	1.3	1.3	1.2	1.2	1.3	1.2
30	1.2	1.2	1.2	1.2	---	1.3	1.4	1.3	1.2	1.2	1.3	1.3
31	1.2	---	1.2	1.2	---	1.3	---	1.3	---	1.2	1.3	---
TOTAL	37.3	35.6	37.2	37.2	33.6	37.5	39.1	69.2	38.1	37.5	38.8	37.8
MEAN	1.20	1.19	1.20	1.20	1.20	1.21	1.30	2.23	1.27	1.21	1.25	1.26
MAX	1.3	1.2	1.2	1.2	1.2	1.3	1.4	3.8	1.3	1.3	1.3	1.3
MIN	1.2	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2
AC-FT	74	71	74	74	67	74	78	137	76	74	77	75

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

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	1.20	1.17	1.20	1.20	1.21	1.20	.87	1.75	1.25	1.20	1.23	1.23
MAX	1.20	1.19	1.21	1.21	1.21	1.21	1.30	2.23	1.27	1.21	1.25	1.26
(WY)	2001	2001	2000	2000	2000	2001	2001	2001	2001	2001	2001	2001
MIN	1.20	1.15	1.20	1.20	1.20	1.19	.43	1.27	1.24	1.20	1.20	1.20
(WY)	2001	2000	2001	2001	2001	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	419.35		478.9			
ANNUAL MEAN	1.15		1.31		1.31	
HIGHEST ANNUAL MEAN					1.31	
LOWEST ANNUAL MEAN					1.31	
HIGHEST DAILY MEAN	1.3	Jan 7	3.8	May 20	3.8	May 20 2001
LOWEST DAILY MEAN	.00	Apr 5	1.1	Nov 16	.00	Apr 5 2000
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 5	1.1	Nov 13	.00	Apr 5 2000
MAXIMUM PEAK FLOW			3.8		3.8	
MAXIMUM PEAK STAGE			3.82		3.82	
ANNUAL RUNOFF (AC-FT)	832		950		951	
10 PERCENT EXCEEDS	1.3		1.3		1.3	
50 PERCENT EXCEEDS	1.2		1.2		1.2	
90 PERCENT EXCEEDS	1.2		1.2		1.2	

e Estimated.

10287285 AGNEW LAKE NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'30", long 119°07'52", unsurveyed, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in boat house, at left abutment of dam on Rush Creek, and 3.3 mi southwest of town of June Lake.

DRAINAGE AREA.—23.3 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by concrete dam completed in 1916. Usable capacity, 810 acre-ft, between elevations 8,470.00 ft, invert of outlet, and 8,495.88 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 871 acre-ft, Aug. 30, 1995, elevation, 8,497.40 ft; minimum, 22 acre-ft, Feb. 28, 1991, elevation, 8,470.97 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 821 acre-ft, May 25, 29, 30, elevation, 8,496.15 ft; minimum, 65 acre-ft, Mar. 15–19, minimum elevation, 8,472.73 ft, Mar. 17, 18.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 25, 1981)

8,470	0	8,480	260	8,490	587	8,498	896
8,475	122	8,485	415				

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	789	160	132	99	79	68	97	225	819	805	795	786
2	788	159	131	97	77	68	101	239	817	806	795	786
3	787	158	130	96	76	67	103	246	818	807	795	786
4	787	157	128	95	75	68	105	254	818	809	794	786
5	787	157	127	94	74	71	107	262	816	810	793	785
6	787	156	127	93	73	71	108	275	818	811	793	785
7	787	155	125	92	73	71	112	294	818	813	793	785
8	787	153	124	91	73	70	113	319	816	814	793	786
9	786	153	123	90	72	70	114	347	816	814	793	785
10	786	152	123	92	74	70	114	375	815	812	792	785
11	786	151	121	94	76	69	114	405	815	810	792	785
12	738	150	120	93	76	68	116	434	815	810	792	785
13	646	149	119	92	76	67	118	462	817	809	791	784
14	559	148	119	91	75	66	119	488	815	807	791	784
15	474	147	117	91	74	65	121	519	815	805	791	784
16	391	146	117	90	74	65	124	558	815	803	790	783
17	309	145	115	89	72	65	126	596	813	803	790	784
18	228	144	114	88	72	65	129	631	814	803	790	784
19	182	143	113	88	72	65	133	664	815	801	789	784
20	165	142	112	86	73	66	137	696	815	800	789	783
21	164	141	111	85	72	67	139	726	814	799	789	783
22	163	140	110	84	72	69	142	755	812	800	788	783
23	162	139	109	83	71	70	145	789	809	800	788	783
24	161	138	108	84	71	71	149	819	806	801	788	783
25	160	137	106	84	71	73	156	821	805	801	787	778
26	160	136	105	84	71	74	167	819	803	801	787	778
27	160	135	104	83	70	77	179	818	801	801	787	777
28	160	134	103	83	69	80	189	820	802	799	786	777
29	161	133	102	81	---	83	198	821	804	796	787	777
30	161	132	101	81	---	87	211	821	805	795	787	777
31	161	---	100	79	---	92	---	820	---	795	786	---
MAX	789	160	132	99	79	92	211	821	819	814	795	786
MIN	160	132	100	79	69	65	97	225	801	795	786	777
a	8476.47	8475.40	8474.14	8473.34	8472.93	8473.83	8478.27	8496.12	8495.75	8495.51	8495.28	8495.06
b	-628	-29	-32	-21	-10	+23	+119	+609	-15	-10	-9	-9

CAL YR 2000 MAX 849 MIN 37 b +24
WTR YR 2001 MAX 821 MIN 65 b -12

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

10287289 RUSH CREEK FLUME BELOW AGNEW LAKE, NEAR JUNE LAKE, CA

LOCATION.—Lat 37°45'33", long 119°07'47", in NE 1/4 SW 1/4 sec.20, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 600 ft downstream from Agnew Lake Dam, and 3.4 mi southwest of town of June Lake.

DRAINAGE AREA.—23.3 mi².

PERIOD OF RECORD.—October 1990 to current year. If records for Rush Creek Powerplant Tailrace (station 10287300) are combined with this record, a record equivalent to that published since October 1951 as "Rush Creek below Agnew Lake" (station 10287290) can be obtained. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.—Water-stage recorder and Parshall flume. A 4-ft Cipolletti weir is set in the Parshall flume at times. Elevation of gage is 8,440 ft above sea level, from topographic map.

REMARKS.—Flow regulated for power development by Waugh, Gem, and Agnew Lakes (stations 10287260, 10287280, and 10287285, respectively). Most of the water is diverted at either Gem or Agnew Lakes to Rush Creek Powerplant Tailrace via Rush Creek Powerplant.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 441 ft³/s, July 30, 1995, gage height, 4.90 ft; no flow for many days in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.0	1.9	2.0	1.9	e1.9	2.0	1.7	12	1.8	1.5	1.5
2	1.7	2.0	1.9	2.0	1.9	e1.9	2.0	1.5	11	1.7	1.5	1.5
3	1.9	2.0	1.9	2.0	1.9	e1.9	2.0	1.5	6.9	1.7	1.6	1.5
4	1.7	2.0	1.9	2.0	1.9	e1.9	2.0	1.5	7.7	2.1	1.8	1.5
5	1.7	2.0	1.9	2.0	1.9	e1.9	2.0	1.6	7.1	1.9	1.5	1.5
6	1.7	1.9	1.9	2.0	1.8	e1.9	1.9	1.7	6.3	1.7	1.5	1.5
7	1.7	2.0	2.0	2.0	1.9	e1.9	2.0	1.7	7.3	2.1	1.5	1.5
8	1.7	2.0	2.0	1.9	1.9	e1.9	2.0	1.7	7.1	2.8	1.5	1.5
9	e1.8	2.0	2.0	2.0	1.9	e1.9	2.0	1.5	5.2	2.7	1.5	1.5
10	1.8	2.0	2.0	1.9	1.9	e1.9	2.0	1.4	6.1	2.9	1.5	1.5
11	1.7	2.0	2.0	2.0	1.9	e1.9	1.5	1.4	5.4	2.9	1.5	1.5
12	2.2	2.0	2.0	2.0	1.9	e1.9	1.4	1.4	4.8	2.1	1.6	1.5
13	2.4	2.0	1.9	2.0	1.9	e1.9	1.3	1.4	4.2	2.4	1.5	1.5
14	2.2	2.0	1.9	2.0	1.9	e1.9	1.4	1.4	5.2	2.5	1.5	1.5
15	2.2	2.0	1.9	2.0	1.9	e1.9	1.4	1.4	4.4	2.4	1.5	1.5
16	2.0	2.0	2.0	2.0	1.9	e1.9	1.2	1.5	4.2	2.3	1.5	1.5
17	2.1	2.0	2.0	2.1	1.9	e1.9	1.3	1.5	4.1	1.8	1.5	1.5
18	2.2	2.0	2.0	2.0	e1.9	1.9	1.4	1.5	3.1	1.8	1.6	1.5
19	2.2	2.0	2.0	2.0	e1.9	1.9	1.3	1.5	3.3	2.3	1.6	1.5
20	2.0	2.0	2.0	1.9	e1.9	2.0	1.4	1.5	3.2	2.0	1.7	1.5
21	2.0	2.0	1.9	1.9	e1.9	2.0	1.4	1.5	3.8	1.8	1.6	1.5
22	2.0	2.0	1.9	1.9	e1.9	2.0	1.4	1.5	3.9	1.6	1.5	1.5
23	2.0	2.0	2.0	1.9	e1.9	2.0	1.5	1.5	4.0	1.6	1.5	1.5
24	2.0	2.0	2.0	1.9	e1.9	2.0	1.6	3.1	3.9	1.5	1.5	1.5
25	1.9	2.0	2.0	1.9	e1.9	1.9	1.7	13	2.9	1.5	1.5	2.9
26	2.0	2.0	2.0	1.9	e1.9	2.0	1.8	12	3.4	1.5	1.5	1.4
27	2.0	2.0	2.0	1.9	e1.9	2.0	1.6	11	2.7	1.7	1.5	1.4
28	2.0	2.0	2.0	1.9	e1.9	2.0	1.5	10	1.9	2.1	1.5	1.4
29	2.0	1.7	2.0	1.9	---	2.0	1.5	10	1.7	2.3	1.5	1.5
30	2.0	2.0	2.0	1.9	---	2.1	1.7	11	2.1	1.7	1.5	1.5
31	2.0	---	2.0	1.9	---	2.2	---	11	---	1.6	1.5	---
TOTAL	60.5	59.6	60.9	60.7	53.1	60.3	49.2	115.9	148.9	62.8	47.5	46.1
MEAN	1.95	1.99	1.96	1.96	1.90	1.95	1.64	3.74	4.96	2.03	1.53	1.54
MAX	2.4	2.0	2.0	2.1	1.9	2.2	2.0	13	12	2.9	1.8	2.9
MIN	1.7	1.7	1.9	1.9	1.8	1.9	1.2	1.4	1.7	1.5	1.5	1.4
AC-FT	120	118	121	120	105	120	98	230	295	125	94	91
a	4640	4640	3020	1640	807	906	867	2450	3440	2230	349	2450

e Estimated.

a Diversion, in acre-feet, to Rush Creek Powerplant Tailrace (station 10287300), provided by Southern California Edison Co.

10287289 RUSH CREEK FLUME BELOW AGNEW LAKE, NEAR JUNE LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.92	2.03	1.04	1.23	.97	1.06	1.46	1.62	20.6	44.2	9.80	1.13
MAX	3.06	4.89	2.31	4.72	2.11	2.01	2.99	3.89	81.8	218	89.8	2.47
(WY)	1996	1999	2000	1997	2000	2000	1996	1998	1995	1995	1995	2000
MIN	.085	.39	.23	.27	.19	.13	.040	.045	.049	.031	.005	.015
(WY)	1995	1994	1991	1991	1991	1995	1994	1994	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1991 - 2001	
ANNUAL TOTAL	2885.1		825.5			
ANNUAL MEAN	7.88		2.26		7.31	
HIGHEST ANNUAL MEAN					33.6	
LOWEST ANNUAL MEAN					.41	
HIGHEST DAILY MEAN	219	Jun 20	13	May 25	397	Jul 30 1995
LOWEST DAILY MEAN	1.2	Apr 10	1.2	Apr 16	.00	Oct 27 1990
ANNUAL SEVEN-DAY MINIMUM	1.3	Apr 6	1.3	Apr 13	.00	Mar 12 1991
MAXIMUM PEAK FLOW			19	Jun 1	441	Jul 30 1995
MAXIMUM PEAK STAGE			1.25	Jun 1	4.90	Jul 30 1995
ANNUAL RUNOFF (AC-FT)	5720		1640		5300	
ANNUAL DIVERSION (AC-FT) a	34240		27440			
10 PERCENT EXCEEDS	9.1		2.9		4.6	
50 PERCENT EXCEEDS	2.0		1.9		1.2	
90 PERCENT EXCEEDS	1.6		1.5		.09	

a Diversion, in acre-feet, to Rush Creek Powerplant Tailrace (station 10287300), provided by Southern California Edison Co.

10287650 SADDLEBAG LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°57'56", long 119°16'18", unsurveyed, T.1 N., R.24 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, near left abutment of dam, on Lee Vining Creek, and 8.2 mi west of Lee Vining.

DRAINAGE AREA.—4.55 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

REVISED RECORDS.—WDR CA-98-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1921. Usable capacity, 9,789 acre-ft, between elevations 10,048.80 ft, invert of outlet, and 10,090.40 ft, crest of spillway. At times, a cofferdam 600 ft upstream affects the storage below about 800 acre-ft, due to the constriction of flow past the cofferdam. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 9,454 acre-ft, Aug. 24, 25, 1995, elevation, 10,089.26 ft; minimum, 558 acre-ft, Apr. 5, 23, 24, 27, 1995, elevation, 10,051.84 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 4,840 acre-ft, Oct. 1, elevation, 10,071.88 ft; minimum, 1,270 acre-ft, Apr. 6, 9, 10, minimum elevation, 10,055.55 ft, Apr. 10.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Feb. 8, 1985)

10,050	217	10,060	2,172	10,080	6,890	10,091	9,970
10,055	1,163	10,070	4,392				

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	4840	4310	3680	2970	2250	e1750	1290	e1520	3620	4180	4410	4700
2	4820	4300	3660	2950	2230	e1740	1290	e1560	3680	4200	4420	4660
3	4820	4270	3640	2920	2200	e1720	1280	e1600	3720	4220	4430	4640
4	4830	4250	3620	2890	2180	e1710	1280	e1630	3770	4250	4430	4630
5	4810	4230	3600	2860	2160	e1690	1280	e1670	3790	4300	4430	4620
6	4790	4210	3580	2830	2130	e1680	1270	e1710	3820	4330	4430	4600
7	4770	4180	3560	2800	2110	e1660	1280	e1750	3840	4360	4440	4600
8	4750	4180	3540	2780	2080	e1650	1290	e1820	3870	4370	4450	4600
9	4740	4150	3520	2750	2070	e1630	1270	e1890	3900	4380	4460	4600
10	4720	4130	3500	2750	2080	e1620	1270	e1950	3920	4380	4470	4600
11	4700	4110	3490	2730	2070	e1600	1280	e2020	3940	4380	4480	4620
12	4680	4090	3460	2700	2050	e1590	1280	e2090	3960	4390	4490	4610
13	4660	4060	3450	2680	2040	e1570	1300	e2160	3970	4400	4500	4620
14	4640	4050	3440	2650	2020	e1560	1300	e2230	3980	4400	4510	4640
15	4620	4020	3420	2620	1990	e1540	e1320	e2320	3990	4410	4530	4630
16	4600	4000	3400	2600	1970	e1530	e1330	e2420	4010	4410	4540	4650
17	4580	3970	3380	2570	1940	e1510	e1330	e2520	4020	4550	4570	4580
18	4560	3950	3360	2550	1930	e1500	e1340	e2620	4040	4550	4590	4500
19	4540	3930	3340	2530	1910	e1480	e1350	e2710	4050	4560	4600	4350
20	4520	3910	3320	2500	1900	e1460	e1360	e2810	4060	4570	4590	4320
21	4500	3890	3300	2480	1880	e1450	e1380	e2880	4090	4570	4570	4300
22	4470	3870	3270	2460	1870	e1430	e1390	e2970	4100	4590	4560	4300
23	4450	3840	3240	2430	1850	e1420	e1390	e3070	4130	4610	4580	4320
24	4430	3820	3210	2420	1840	e1400	e1400	e3160	4150	4620	4570	4320
25	4410	3800	3180	2410	1820	e1380	e1410	3230	4150	4550	4580	4330
26	4400	3780	3150	2390	1800	e1370	e1430	3290	4170	4540	4580	4330
27	4380	3760	3120	2370	1790	e1350	e1440	3350	4170	4540	4610	4320
28	4370	3740	3090	2350	1770	1340	e1450	3400	4170	4550	4620	4300
29	4370	3720	3060	2320	---	1320	e1460	e3490	4180	4530	4660	4290
30	4350	3700	3030	2300	---	1300	1480	3520	4170	4540	4680	3990
31	4330	---	3000	2270	---	1310	---	3570	---	4540	4680	---
MAX	4840	4310	3680	2970	2250	1750	1480	3570	4180	4620	4680	4700
MIN	4330	3700	3000	2270	1770	1300	1270	1520	3620	4180	4410	3990
a	10069.74	10067.02	10063.89	10060.48	10058.03	10055.76	10056.59	10066.40	10069.06	10070.63	10071.20	10068.30
b	-560	-630	-700	-730	-500	-460	+170	+2090	+600	+370	+140	-690

CAL YR 2000 MAX 5366 MIN 2000 b -1380
WTR YR 2001 MAX 4840 MIN 1270 b -900

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287655 LEE VINING CREEK BELOW SADDLEBAG LAKE, NEAR LEE VINING, CA

LOCATION.—Lat 37°57'52", long 119°16'20", in SE 1/4 SE 1/4 sec.12, T.1 N., R.24 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 500 ft downstream from Saddlebag Lake Dam, and 8.1 mi west of Lee Vining.

DRAINAGE AREA.—4.43 mi².

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 10,050 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Saddlebag Lake (station 10287650) 500 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33 ft³/s, Mar. 23, 1998, gage height, 2.99 ft; minimum daily, 3.0 ft³/s, May 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	8.0	11	12	15	14	e13	13	e3.1	3.2	3.4	3.3	3.1
2	8.0	11	12	15	14	e13	13	e3.1	3.2	3.4	3.2	3.1
3	7.9	11	12	15	14	e13	13	e3.1	3.3	3.5	3.2	3.1
4	10	11	12	15	14	e13	13	e3.1	3.4	3.5	3.2	3.1
5	12	11	12	15	14	e13	12	e3.1	3.4	3.5	3.2	3.1
6	12	11	12	15	14	e13	12	e3.2	3.4	3.5	3.1	3.1
7	12	11	12	15	14	e13	11	e3.2	3.5	3.5	3.1	3.1
8	12	11	12	15	14	e13	11	e3.2	3.5	3.5	3.1	3.1
9	12	11	12	15	14	e13	11	e3.2	3.6	3.5	3.1	3.1
10	12	11	12	15	14	e13	11	e3.2	3.6	3.5	3.1	3.1
11	12	11	12	15	14	e13	11	e3.2	3.6	3.5	3.1	3.1
12	12	11	12	15	14	e13	10	e3.2	3.6	3.5	3.1	4.6
13	12	11	12	15	14	e13	6.4	e3.2	3.6	3.5	3.1	5.8
14	12	11	12	15	14	e13	4.9	e3.2	3.6	3.5	3.1	5.7
15	12	14	11	15	14	e13	4.9	e3.3	3.7	3.5	3.1	5.6
16	12	14	11	15	14	e13	4.9	e3.3	3.7	3.5	3.1	5.6
17	12	12	11	15	14	e13	4.9	e3.3	3.7	3.5	3.1	5.5
18	12	12	11	15	14	e13	4.9	e3.3	3.7	3.5	3.1	5.3
19	12	12	11	14	13	e13	4.9	e3.3	3.5	3.5	3.1	5.3
20	12	12	11	14	13	e13	4.9	e3.3	3.3	3.4	3.1	13
21	12	12	11	14	13	e13	4.9	e3.3	3.4	3.4	3.1	18
22	12	12	14	14	13	e13	4.9	e3.3	3.4	3.4	3.1	18
23	12	12	16	14	13	e13	4.9	e3.3	3.4	3.4	3.1	18
24	12	12	16	14	13	e13	4.9	e3.3	3.4	3.4	3.1	18
25	12	12	16	14	13	e12	4.9	e3.3	3.4	3.4	3.1	14
26	12	12	16	14	13	e12	5.0	3.5	3.4	3.3	3.1	11
27	12	12	16	14	13	e12	5.0	3.6	3.4	3.3	3.1	11
28	12	12	15	14	13	e12	5.1	3.6	3.4	3.3	3.1	11
29	12	12	15	14	---	12	5.0	3.5	3.4	3.3	3.1	11
30	12	12	15	14	---	13	5.1	3.2	3.4	3.3	3.1	11
31	11	---	15	14	---	12	---	3.0	---	3.3	3.1	---
TOTAL	356.9	350	399	452	382	397	231.4	101.0	104.1	106.5	96.7	231.5
MEAN	11.5	11.7	12.9	14.6	13.6	12.8	7.71	3.26	3.47	3.44	3.12	7.72
MAX	12	14	16	15	14	13	13	3.6	3.7	3.5	3.3	18
MIN	7.9	11	11	14	13	12	4.9	3.0	3.2	3.3	3.1	3.1
AC-FT	708	694	791	897	758	787	459	200	206	211	192	459

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	1999	2001	2001	2001	2001	2001	2001
MEAN	10.9	11.3	13.0	14.8	13.1	13.5	13.1	8.17	9.05	8.58	7.93	8.91
MAX	13.6	13.8	15.6	15.1	14.1	16.8	22.6	10.5	11.1	10.8	10.2	10.0
(WY)	1999	1999	2000	1998	2000	1998	1998	1999	1998	2000	1999	1998
MIN	9.09	9.73	9.15	14.4	11.0	9.92	7.71	3.26	3.47	3.44	3.12	7.72
(WY)	1998	2000	1998	1999	1999	1999	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	4273.2		3208.1			
ANNUAL MEAN	11.7		8.79		11.0	
HIGHEST ANNUAL MEAN					12.2	
LOWEST ANNUAL MEAN					8.79	
HIGHEST DAILY MEAN	16	Mar 14	18	Sep 21	33	Mar 24 1998
LOWEST DAILY MEAN	7.9	Sep 23	3.0	May 31	3.0	May 31 2001
ANNUAL SEVEN-DAY MINIMUM	7.9	Sep 23	3.1	Aug 6	3.1	Aug 6 2001
MAXIMUM PEAK FLOW			19		33	
MAXIMUM PEAK STAGE			.94		2.99	
ANNUAL RUNOFF (AC-FT)	8480		6360		7980	
10 PERCENT EXCEEDS	15		14		15	
50 PERCENT EXCEEDS	12		11		10	
90 PERCENT EXCEEDS	8.5		3.1		4.9	

e Estimated.

10287700 TIOGA LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°55'41", long 119°15'01", in SE 1/4 SE 1/4 sec.19, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, at left abutment of dam, on Glacier Creek, and 7.4 mi west of Lee Vining.

DRAINAGE AREA.—3.67 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1928. Usable capacity, 1,254 acre-ft, between elevations 9,626.72 ft, invert of outlet, and 9,650.28 ft, crest of spillway. Figures given represent usable contents. Water is used for power development downstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 1,284 acre-ft, June 13, 1996, elevation, 9,650.68 ft; minimum, 88 acre-ft, several days in 1992, elevation, 9,628.95 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 1,270 acre-ft, several days in June and July, maximum elevation, 9,650.50 ft, July 7; minimum, 108 acre-ft, Jan. 23, Feb. 6, 9, minimum elevation, 9,629.42 ft, Feb. 6.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 19, 1981)

9,626.72	0	9,635	356	9,646	962	9,652	1,383
9,630	131	9,640	609				

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	1040	815	328	109	110	111	131	285	1190	1250	1260	1200
2	1040	807	310	110	110	113	139	309	1220	1260	1260	1190
3	1030	799	292	110	110	112	139	320	1240	1260	1260	1190
4	1030	791	275	110	110	113	141	331	1250	1260	1260	1190
5	1030	782	258	110	110	116	142	348	1260	1270	1260	1180
6	1020	773	242	109	108	117	143	376	1270	1270	1250	1180
7	1010	765	226	109	110	115	147	412	1270	1270	1260	1170
8	1000	759	212	110	110	115	147	459	1270	1270	1260	1170
9	997	750	197	110	108	113	147	520	1270	1270	1260	1160
10	988	743	183	114	114	113	147	576	1270	1260	1250	1160
11	979	735	169	113	117	111	147	632	1260	1260	1250	1150
12	972	727	158	112	117	111	146	696	1260	1260	1250	1150
13	963	719	142	112	116	111	145	732	1260	1260	1250	1150
14	954	713	136	111	114	111	144	769	1260	1260	1250	1150
15	946	694	125	111	113	110	144	816	1260	1260	1250	1160
16	938	668	119	111	113	111	144	890	1260	1260	1250	1160
17	929	641	116	110	112	111	142	974	1260	1260	1250	1160
18	921	616	115	110	112	111	144	1020	1260	1260	1250	1160
19	913	591	113	111	113	111	146	1050	1260	1260	1240	1160
20	904	566	113	111	112	111	149	1080	1260	1260	1240	1160
21	896	543	113	110	113	112	149	1100	1260	1260	1240	1160
22	886	519	112	110	113	113	149	1130	1260	1260	1240	1160
23	879	495	111	108	113	113	149	1150	1260	1260	1230	1160
24	870	471	111	113	114	114	154	1170	1260	1260	1230	1160
25	863	449	111	113	113	112	163	1200	1260	1260	1220	1160
26	856	428	111	113	113	113	178	1210	1260	1260	1220	1160
27	849	407	111	112	113	114	194	1220	1250	1260	1220	1160
28	843	387	110	111	112	115	210	1210	1250	1260	1210	1160
29	839	368	110	111	---	117	226	1190	1250	1260	1210	1160
30	831	348	110	111	---	121	253	1180	1250	1260	1210	1160
31	823	---	109	110	---	128	---	1170	---	1260	1200	---
MAX	1040	815	328	114	117	128	253	1220	1270	1270	1260	1200
MIN	823	348	109	108	108	110	131	285	1190	1250	1200	1150
a	9643.75	9634.83	9629.46	9629.48	9629.52	9629.93	9632.78	9649.07	9650.24	9650.35	9649.58	9648.94
b	-217	-475	-239	+1	+2	+16	+125	+917	+80	+10	-60	-40
CAL YR 2000	MAX 1238	MIN 109	b -24									
WTR YR 2001	MAX 1270	MIN 108	b +120									

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

10287720 GLACIER CREEK BELOW TIOGA LAKE, NEAR LEE VINING, CA

LOCATION (REVISED).—Lat 37°55'41", long 119°15'01", in SE 1/4 SE 1/4 sec.19, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 300 ft downstream from Tioga Lake Dam, and 7.3 mi west of Lee Vining.

DRAINAGE AREA.—3.67 mi².

PERIOD OF RECORD.—October 1997 to current year. Unpublished records prior to October 1997 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,620 ft above sea level, from topographic map.

REMARKS.—Records not computed for the winter months. Flow regulated by Tioga Lake (station 10287700) 300 ft upstream.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	6.0	11	---	---	---	---	2.1	7.9	4.0	4.5	4.5
2	3.1	5.9	10	---	---	---	---	2.3	7.9	4.2	4.8	4.5
3	3.1	5.9	10	---	---	---	---	2.4	7.9	7.9	4.7	4.5
4	2.9	5.9	9.8	---	---	---	---	2.5	5.9	7.7	4.7	4.5
5	4.8	5.9	9.5	---	---	---	---	2.7	3.9	8.3	4.6	4.4
6	6.5	5.9	9.2	---	---	---	---	2.9	4.6	11	4.6	4.5
7	6.5	5.8	8.9	---	---	---	---	3.1	8.1	13	4.6	4.5
8	6.5	5.7	8.7	---	---	---	---	3.3	8.6	11	4.6	4.5
9	6.4	5.7	8.4	---	---	---	---	3.6	7.9	8.8	4.6	4.4
10	6.4	5.7	8.1	---	---	---	---	3.9	7.6	8.1	4.6	4.4
11	6.4	5.7	7.7	---	---	---	---	4.1	7.0	7.4	4.6	4.4
12	6.4	5.7	7.3	---	---	---	---	4.0	6.4	6.8	4.6	3.1
13	6.4	5.6	6.9	---	---	---	---	4.1	5.5	6.6	4.8	1.9
14	6.3	5.6	6.5	---	---	---	---	4.2	5.1	6.4	4.7	1.9
15	6.3	11	6.0	---	---	---	---	6.4	5.0	6.0	4.7	1.9
16	6.3	15	---	---	---	---	---	10	5.2	5.8	4.7	1.9
17	6.2	14	---	---	---	---	---	14	5.3	5.5	4.7	1.9
18	6.2	14	---	---	---	---	---	20	4.8	5.6	4.7	1.9
19	6.2	14	---	---	---	---	---	20	4.5	5.6	4.7	1.9
20	6.1	13	---	---	---	---	---	20	4.4	5.3	4.7	1.9
21	6.1	13	---	---	---	---	1.3	21	4.5	5.1	4.6	1.9
22	6.1	13	---	---	---	---	1.3	21	4.7	5.1	4.5	2.0
23	6.1	13	---	---	---	---	1.4	21	5.1	5.0	4.5	2.0
24	6.1	12	---	---	---	---	1.4	21	4.9	4.8	4.5	2.0
25	6.1	12	---	---	---	---	1.4	24	4.1	4.8	4.5	2.0
26	6.1	12	---	---	---	---	1.5	27	4.2	4.9	4.5	2.0
27	6.1	12	---	---	---	---	1.6	27	4.2	4.8	4.5	2.0
28	6.0	12	---	---	---	---	1.7	27	4.0	4.6	4.5	2.0
29	6.0	11	---	---	---	---	1.8	26	4.0	4.4	4.5	2.1
30	6.0	11	---	---	---	---	2.0	16	4.0	4.3	4.5	2.1
31	6.0	---	---	---	---	---	---	7.8	---	4.1	4.5	---
TOTAL	178.8	283.0	---	---	---	---	---	374.4	167.2	196.9	142.8	87.5
MEAN	5.77	9.43	---	---	---	---	---	12.1	5.57	6.35	4.61	2.92
MAX	6.5	15	---	---	---	---	---	27	8.6	13	4.8	4.5
MIN	2.9	5.6	---	---	---	---	---	2.1	3.9	4.0	4.5	1.9
AC-FT	355	561	---	---	---	---	---	743	332	391	283	174

10287760 ELLERY LAKE NEAR LEE VINING, CA

LOCATION.—Lat 37°56'08", long 119°13'50", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, in valve house, at base of Rhinedollar Dam, on Lee Vining Creek, and 6.3 mi west of town of Lee Vining.

DRAINAGE AREA.—16.7 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Southern California Edison Co.).

REMARKS.—Reservoir is formed on natural lake by rock-fill dam completed in 1927. Usable capacity, 493 acre-ft, between elevations 9,478.53 ft, invert of outlet, and 9,492.53 ft, crest of spillway. Radial gates are occasionally closed, which increases elevation to 9,496.53 ft and capacity to 749 acre-ft. Lake receives water from Saddlebag and Tioga Lakes (stations 10287650 and 10287700) and releases it via Poole Powerplant Conduit (station 10287762) to Poole Powerplant. Figures given represent usable contents.

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 677 acre-ft, Jan. 2, 1997, elevation, 9,495.43 ft; minimum, 195 acre-ft, Aug. 13, 1996, elevation, 9,487.17 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 550 acre-ft, May 16, elevation, 9,493.44 ft; minimum, 214 acre-ft, June 10, elevation, 9,487.55 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Southern California Edison Co., dated Aug. 18, 1981)

	9,485	96	9,489	290	9,493	522	9,497	780				
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	465	463	449	444	436	453	485	493	472	443	437	438
2	462	464	445	446	437	455	468	445	431	465	437	444
3	460	464	444	448	437	453	442	403	403	484	436	451
4	463	464	447	449	437	456	423	417	397	462	435	459
5	473	465	449	451	437	462	419	460	406	477	433	465
6	467	463	451	452	435	463	424	487	407	474	430	468
7	460	462	452	455	437	467	428	492	380	457	434	473
8	453	462	452	455	442	469	435	504	342	440	442	477
9	452	462	453	458	451	470	441	509	285	427	447	480
10	456	463	453	457	454	469	444	506	214	416	442	480
11	451	461	453	465	460	467	446	514	219	408	437	475
12	447	462	450	468	471	465	444	486	259	407	431	469
13	447	468	448	471	483	463	434	456	295	409	430	463
14	447	473	445	471	487	462	428	448	324	412	430	456
15	446	481	443	475	483	460	425	496	361	412	428	451
16	445	475	435	475	478	458	427	550	401	412	427	444
17	446	e465	433	475	471	457	433	530	442	417	425	437
18	447	e450	435	476	465	458	440	522	461	423	424	433
19	448	e445	438	480	459	462	446	520	465	430	422	430
20	449	427	439	480	452	468	451	520	455	434	421	439
21	448	431	441	480	448	475	452	520	449	435	420	459
22	448	439	448	480	443	482	452	522	449	438	421	481
23	447	447	460	480	447	486	459	530	451	440	420	501
24	447	455	471	473	448	469	482	532	444	440	418	509
25	446	462	482	458	451	455	488	526	430	441	417	511
26	448	468	483	447	452	442	476	514	423	444	416	512
27	450	475	483	442	453	433	482	499	421	446	416	512
28	452	470	465	434	453	434	471	485	418	445	416	511
29	459	462	448	434	---	441	453	479	425	442	418	511
30	461	456	442	434	---	454	471	487	434	440	425	511
31	462	---	442	434	---	479	---	476	---	438	431	---
MAX	473	481	483	480	487	486	488	550	472	484	447	512
MIN	445	427	433	434	435	433	419	403	214	407	416	430
a	9492.02	9491.92	9491.68	9491.54	9491.86	9492.29	9492.16	9492.25	9491.54	9491.60	9491.48	9492.82
b	-8	-6	-14	-8	+19	+26	-8	+5	-42	+4	-7	+80

CAL YR 2000 MAX 562 MIN 396 b -12
WTR YR 2001 MAX 550 MIN 214 b +41

e Estimated.
a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10287770 LEE VINING CREEK BELOW RHINEDOLLAR DAM, NEAR LEE VINING, CA

LOCATION.—Lat 37°56'10", long 119°13'48", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, 100 ft downstream from Rhinedollar Dam Spillway, and 6.3 mi west of Lee Vining.

DRAINAGE AREA.—16.7 mi².

PERIOD OF RECORD.—October 1990 to current year. Unpublished records prior to October 1990 available in files of Southern California Edison Co.

GAGE.—Water-stage recorder and Parshall flume. Elevation of gage is 9,450 ft above sea level, from topographic map. Prior to Oct. 1, 1994, at datum 1.00 ft lower.

REMARKS.—Flow regulated for power development by Saddlebag, Tioga, and Ellery Lakes (stations 10287650, 10287700, and 10287760). Most of the water is diverted at Ellery Lake to Poole Powerplant via Poole Powerplant Conduit intake (station 10287762).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 310 ft³/s, July 9, 1995, gage height, 4.63 ft, maximum gage height, 5.52 ft, Mar. 22, 1993, (backwater from snow); no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.90	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	7.1	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	7.1	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	7.6	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	9.0	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	45	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	42	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	28	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	21	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	19	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	19	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	19	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	27	.00	.00	.00	.84
24	.00	.00	.00	.00	.00	.00	.00	31	.00	.00	.00	7.4
25	.00	.00	.00	.00	.00	.00	.00	30	.00	.00	.00	13
26	.00	.00	.00	.00	.00	.00	.00	24	.00	.00	.00	13
27	.00	.00	.00	.00	.00	.00	.00	8.8	.00	.00	.00	14
28	.00	.00	.00	.00	.00	.00	.00	1.4	.00	.00	.00	13
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	13
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	13
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	346.90	0.00	0.00	0.00	87.24
MEAN	.000	.000	.000	.000	.000	.000	.000	11.2	.000	.000	.000	2.91
MAX	.00	.00	.00	.00	.00	.00	.00	45	.00	.00	.00	14
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	688	.00	.00	.00	173
a	1050	1230	1060	962	770	986	1430	5120	2060	1350	669	415

a Diversion, in acre-feet, to Poole Powerplant (station 10287762), provided by Southern California Edison Co.

10287770 LEE VINING CREEK BELOW RHINEDOLLAR DAM, NEAR LEE VINING, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.26	.24	.000	1.75	.54	.46	1.38	8.66	28.8	22.7	1.30	.85
MAX	5.65	1.49	.000	19.3	5.40	2.62	14.1	41.1	58.1	130	9.89	5.53
(WY)	1995	2000	1991	1997	1996	1992	1996	1997	1995	1995	1995	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1992	1991	1991	1991	1992	1991	1991	1994	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1991 - 2001
ANNUAL TOTAL	1653.80	434.14	
ANNUAL MEAN	4.52	1.19	5.68
HIGHEST ANNUAL MEAN			17.3 1995
LOWEST ANNUAL MEAN			.27 1994
HIGHEST DAILY MEAN	79 May 28	45 May 16	271 Jul 9 1995
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1990
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1990
MAXIMUM PEAK FLOW		75 May 16	310 Jul 9 1995
MAXIMUM PEAK STAGE		2.56 May 16	5.52 Mar 22 1993
ANNUAL RUNOFF (AC-FT)	3280	861	4110
ANNUAL DIVERSION (AC-FT) a	21210	17100	
10 PERCENT EXCEEDS	15	.00	10
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a Diversion, in acre-feet, to Poole Powerplant (station 10287762), provided by Southern California Edison Co.

10287780 LEE VINING CREEK BELOW POOLE POWERPLANT, NEAR LEE VINING, CA

LOCATION.—Lat 37°56'41", long 119°12'42", in SW 1/4 NW 1/4 sec.21, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, on left bank, at culvert 0.2 mi downstream from Poole Powerplant, and 4.9 mi west of town of Lee Vining.

DRAINAGE AREA.—26.3 mi².

PERIOD OF RECORD.—April 1999 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 7,820 ft above sea level, from topographic map.

REMARKS.—Records not computed above 50 ft³/s. Flow regulated by Poole Powerplant (station 10287762) and Ellery Lake (station 10287760).

COOPERATION.—Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	22	29	21	20	19	39	---	---	21	e19	e8.4
2	14	22	27	21	20	19	42	---	---	e21	e19	e8.4
3	14	22	25	20	20	19	42	---	---	e29	e19	e8.4
4	16	22	25	20	20	19	36	---	---	---	e19	e8.4
5	17	22	25	20	20	19	29	---	---	---	e19	e8.3
6	31	22	23	20	20	19	24	---	---	---	e18	e8.3
7	28	22	24	20	18	19	23	---	---	---	e15	e8.3
8	25	22	25	20	17	19	23	---	---	e49	e15	8.3
9	23	22	25	20	17	19	23	---	---	e42	e16	8.3
10	22	23	25	20	17	19	23	---	---	e37	e18	11
11	28	24	25	20	17	19	23	---	48	e33	e18	13
12	29	21	25	21	17	19	23	---	28	e27	e15	13
13	25	20	25	20	17	19	22	---	23	e25	e14	13
14	26	20	24	21	21	19	20	---	22	e24	e13	13
15	27	25	26	21	22	19	20	---	22	e24	e13	13
16	27	33	25	21	22	19	20	---	22	e22	e13	13
17	25	42	22	20	22	19	20	---	21	e19	e13	13
18	24	35	18	21	22	19	20	---	25	e19	e13	11
19	24	30	18	20	22	20	20	---	35	e19	e12	11
20	23	30	18	20	22	20	20	---	42	e19	e12	11
21	23	26	17	21	22	20	20	---	39	e19	e11	11
22	23	24	17	20	20	21	20	---	39	e19	e11	11
23	23	25	18	20	19	23	20	---	38	e19	e11	11
24	23	25	18	25	19	29	21	---	40	e19	e11	12
25	23	25	20	26	19	29	37	---	34	e19	e11	9.7
26	24	24	23	26	19	30	---	---	29	e19	e11	6.0
27	23	24	23	23	19	30	---	---	27	e19	e11	6.0
28	23	28	28	23	19	30	---	---	29	e19	e11	6.0
29	23	28	27	20	---	30	---	---	22	e19	e8.9	6.4
30	22	29	25	20	---	30	---	---	22	e19	e8.4	6.8
31	23	---	21	20	---	30	---	---	---	e19	e8.4	---
TOTAL	715	759	716	651	549	684	---	---	---	---	426.7	296.0
MEAN	23.1	25.3	23.1	21.0	19.6	22.1	---	---	---	---	13.8	9.87
MAX	31	42	29	26	22	30	---	---	---	---	19	13
MIN	14	20	17	20	17	19	---	---	---	---	8.4	6.0
AC-FT	1420	1510	1420	1290	1090	1360	---	---	---	---	846	587

e Estimated.

TIJUANA RIVER BASIN

11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.—Lat 32°34'30", long 116°45'11", in NW 1/4 SW 1/4 sec.26, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on right bank, 0.8 mi upstream from confluence with Tecate Creek, 5.1 mi south of Dulzura, and 11.3 mi downstream from Barrett Lake.

DRAINAGE AREA.—310 mi².

PERIOD OF RECORD.—October 1936 to current year.

REVISED RECORDS.—WSP 1245: 1937–1938. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 569.40 ft above sea level (levels by International Boundary and Water Commission).

REMARKS.—Records fair. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft, and Barrett Lake (station 11011000), capacity, 44,760 acre-ft. Water diverted from Barrett Lake through San Diego and Dulzura Conduits to Lower Otay Lake (station 11014550).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,700 ft³/s, Feb. 21, 1980, gage height, 11.15 ft, from rating curve extended above 8,700 ft³/s; no flow for part of 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	.00	.00	5.1	.69	.10	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	3.8	.72	.15	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	3.0	.68	.32	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	2.4	.67	.32	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	2.1	.66	.35	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	3.6	.80	.19	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	3.9	.84	.12	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	4.0	.91	.09	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	3.9	.80	.05	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	7.1	1.2	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	8.1	.93	.01	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	5.8	.98	.02	.00	.00	.00	.00
13	.00	.00	.00	.00	.17	4.4	.88	.06	.00	.00	.00	.00
14	.00	.00	.00	.00	.50	3.5	.78	.03	.00	.00	.00	.00
15	.00	.00	.00	.00	.12	2.9	.73	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.04	2.5	.69	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.03	2.0	.61	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	1.6	.54	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	1.3	.58	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.04	1.0	.53	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.91	1.2	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.89	.91	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.30	.77	.69	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.29	.73	.48	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.38	.71	.31	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	1.1	.71	.22	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	6.9	.68	.22	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	7.9	.69	.21	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.70	.18	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.72	.12	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.68	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	17.77	80.19	19.76	1.81	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.63	2.59	.66	.058	.000	.000	.000	.000
MAX	.00	.00	.00	.00	7.9	8.1	1.2	.35	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.68	.12	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	35	159	39	3.6	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2001, BY WATER YEAR (WY)

MEAN	1.13	.74	2.39	18.4	51.2	69.0	35.1	12.4	4.47	1.38	1.07	1.08
MAX	66.0	18.8	40.5	605	1200	1443	676	296	99.5	47.5	24.4	57.4
(WY)	1994	1984	1984	1993	1980	1983	1941	1983	1980	1980	1980	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1937	1937	1950	1951	1951	1951	1955	1947	1940	1939	1938	1937

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1937 - 2001

ANNUAL TOTAL	54.32	119.53	
ANNUAL MEAN	.15	.33	16.3
HIGHEST ANNUAL MEAN			243
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	5.2 Mar 6	8.1 Mar 11	8430 Feb 21 1980
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1936
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1936
MAXIMUM PEAK FLOW		15 Feb 27	11700 Feb 21 1980
MAXIMUM PEAK STAGE		2.67 Feb 27	11.15 Feb 21 1980
ANNUAL RUNOFF (AC-FT)	108	237	11830
10 PERCENT EXCEEDS	.61	.77	10
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11014000 JAMUL CREEK NEAR JAMUL, CA

LOCATION.—Lat 32°38'15", long 116°53'00", in NW 1/4 NE 1/4 sec.4, T.18 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on right bank, 300 ft upstream from Otay Road crossing, at upper end of Lower Otay Lake, 1.4 mi downstream from Dulzura Creek, and 5.5 mi south of Jamul.

DRAINAGE AREA.—70.1 mi².

PERIOD OF RECORD.—April 1940 to December 1940, April 1941 to September 1978, October 1985 to current year.

REVISED RECORDS.—WSP 1565: 1952, 1954. WSP 1715: 1944, 1946. WDR CA-93-1: Drainage area. WDR CA-94-1: Datum of gage.

GAGE.—Water-stage recorder and broad-crested weir control with low-water venturi-type flume. Datum of gage is 511.89 ft above sea level. Prior to Oct. 1, 1951, at datum 1.00 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation upstream from station. Water is diverted from Cottonwood Creek at Barrett Lake (station 11011000) via San Diego and Dulzura Conduit into Dulzura Creek, a tributary to Jamul Creek, and is included in discharge for this station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,870 ft³/s, Mar. 5, 1995, gage height, 7.59 ft, present datum, from rating curve extended above 1,200 ft³/s on basis of critical-depth computations; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 1,200 ft³/s on basis of critical-depth computations:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 13	1030	47	2.52

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	28	25	29	31	6.5	22	25	19	17	6.1	e.00
2	26	28	25	30	31	4.9	22	25	19	17	2.8	e.00
3	27	28	22	31	30	4.0	22	25	18	17	4.6	e.00
4	27	28	6.8	32	30	3.4	22	25	17	17	10	e.00
5	27	28	e5.7	32	29	3.0	21	25	17	17	11	e.00
6	27	29	e5.0	32	29	8.6	23	25	17	17	12	.00
7	27	28	e4.4	32	29	12	23	25	16	17	12	.00
8	26	28	e3.8	34	29	15	23	25	16	17	12	.00
9	26	28	e3.3	34	29	7.0	23	25	16	17	12	.00
10	26	29	e2.8	32	28	11	24	25	16	17	12	.00
11	26	29	e2.4	17	28	19	24	25	16	17	12	.00
12	26	28	e2.0	8.1	28	17	24	26	16	17	12	.00
13	26	28	e1.7	6.1	32	15	24	26	16	17	12	.00
14	25	28	e1.3	2.7	13	7.0	24	26	16	17	12	.00
15	24	27	e1.1	5.4	17	4.8	24	26	16	17	11	.00
16	24	27	.74	18	16	8.4	24	26	16	17	4.0	.00
17	24	27	.56	28	17	20	24	26	16	17	e.75	.00
18	24	27	2.8	32	26	25	24	27	16	18	e.30	.00
19	24	26	5.4	33	26	26	24	27	16	18	e.10	.00
20	23	26	12	33	26	25	24	27	16	18	e.00	.00
21	23	26	14	35	26	25	27	27	16	18	e.00	.00
22	23	26	14	35	26	25	26	27	16	18	e.00	.00
23	23	26	14	34	27	24	25	27	16	18	e.00	.00
24	23	26	16	34	26	24	25	27	16	18	e.00	.00
25	26	26	21	34	10	24	25	16	16	18	e.00	.00
26	27	26	24	35	7.4	23	25	16	16	18	e.00	.00
27	29	26	25	36	13	23	25	17	16	18	e.00	.00
28	29	25	24	33	11	23	25	21	16	18	e.00	.00
29	29	25	25	32	---	23	25	20	16	18	e.00	.00
30	30	26	25	32	---	23	25	19	16	18	e.00	.00
31	28	---	26	32	---	22	---	19	---	17	e.00	---
TOTAL	801	813	361.80	873.3	670.4	501.6	718	748	491	540	158.65	0.00
MEAN	25.8	27.1	11.7	28.2	23.9	16.2	23.9	24.1	16.4	17.4	5.12	.000
MAX	30	29	26	36	32	26	27	27	19	18	12	.00
MIN	23	25	.56	2.7	7.4	3.0	21	16	16	17	.00	.00
AC-FT	1590	1610	718	1730	1330	995	1420	1480	974	1070	315	.00

e Estimated.

OTAY RIVER BASIN

11014000 JAMUL CREEK NEAR JAMUL, 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	7.48	9.57	10.2	18.2	20.3	29.5	19.7	15.6	15.4	13.1	11.3	9.00
MAX	40.2	45.6	62.5	415	188	254	101	49.1	49.6	51.7	44.4	37.4
(WY)	1948	1946	1946	1993	1998	1995	1958	1954	1952	1995	1995	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1950	1951	1951	1958	1961	1959	1955	1956	1953	1950	1949	1949

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	9988.10		6676.75			
ANNUAL MEAN	27.3		18.3		14.8	
HIGHEST ANNUAL MEAN					55.2	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	40	May 1	36	Jan 27	2320	Jan 16 1993
LOWEST DAILY MEAN	.56	Dec 17	.00	Aug 20	.00	Jul 17 1949
ANNUAL SEVEN-DAY MINIMUM	1.4	Dec 11	.00	Aug 20	.00	Jul 17 1949
MAXIMUM PEAK FLOW			47	Feb 13	5870	Mar 5 1995
MAXIMUM PEAK STAGE			2.52	Feb 13	7.59	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	19810		13240		10700	
10 PERCENT EXCEEDS	37		29		38	
50 PERCENT EXCEEDS	28		21		.50	
90 PERCENT EXCEEDS	12		.00		.00	

11015000 SWEETWATER RIVER NEAR DESCANSO, CA

LOCATION.—Lat 32°50'05", long 116°37'20", in NW 1/4 SE 1/4 sec.25, T.15 S., R.3 E., San Diego County, Hydrologic Unit 18070304, near right bank, at Los Terrenitos Road Bridge, 0.7 mi downstream from unnamed tributary, and 1.3 mi south of Descanso.

DRAINAGE AREA.—45.4 mi².

PERIOD OF RECORD.—October 1905 to September 1927 (monthly discharge only for some months, published in WSP 1315-B), October 1956 to current year. Prior to October 1927, records unadjusted for diversion. October 1956 to September 1977, both unadjusted records and combined records of river plus diversion (station 11015001) were published. No diversion since November 1976.

REVISED RECORD.—WSP 1315-B: 1922(M). WDR CA-73-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 3,269.24 ft above sea level. Prior to June 25, 1927, nonrecording gages at several sites and datums, upstream about 0.1 mi. Diversion gage at site 0.3 mi upstream, October 1956 to September 1984, at different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,200 ft³/s, Feb. 16, 1927, gage height, 13.2 ft, from floodmarks, site and datum then in use, on basis of slope-area measurement of peak flow; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 1,150 ft³/s, on basis of slope area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	0900	4.6	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	.04	.10	1.1	.82	.94	.01	.00	.00	.00
2	.00	.00	.00	.04	.10	.83	.83	.93	.02	.00	.00	.00
3	.00	.00	.00	.05	.10	.68	.87	.87	.05	.00	.00	.00
4	.00	.00	.00	.04	.10	.54	.88	.82	.04	.00	.00	.00
5	.00	.00	.00	.04	.10	.44	.90	.79	.03	.00	.00	.00
6	.00	.00	.00	.05	.10	.95	.90	.78	.02	.00	.00	.00
7	.00	.00	.00	.05	.14	.83	1.3	.70	.00	.00	.00	.00
8	.00	.00	.00	.07	.18	.65	1.4	.64	.00	.00	.00	.00
9	.00	.00	.00	.06	.16	.55	1.3	.61	.00	.00	.00	.00
10	.00	.00	.00	.05	.16	2.9	1.5	.57	.00	.00	.00	.00
11	.00	.00	.00	1.1	.15	1.5	1.4	.55	.00	.00	.00	.00
12	.00	.00	.00	.60	.12	1.2	1.5	.58	.00	.00	.00	.00
13	.00	.00	.00	.23	.85	1.1	1.3	.58	.00	.00	.00	.00
14	.00	.00	.00	.16	.47	1.0	1.3	.55	.00	.00	.00	.00
15	.00	.00	.00	.12	.33	.95	1.2	.47	.00	.00	.00	.00
16	.00	.00	.00	.12	.25	.99	1.2	.37	.00	.00	.00	.00
17	.00	.00	.00	.11	.20	1.0	1.1	.33	.00	.00	.00	.00
18	.00	.00	.00	.10	.20	.93	1.1	.30	.00	.00	.00	.00
19	.00	.00	.00	.10	.17	.93	1.1	.27	.00	.00	.00	.00
20	.00	.00	.00	.10	.20	.90	1.1	.24	.00	.00	.00	.00
21	.00	.00	.00	.10	.17	.87	2.7	.21	.00	.00	.00	.00
22	.00	.00	.00	.10	.17	.87	1.9	.16	.00	.00	.00	.00
23	.00	.00	.00	.10	.37	.87	1.6	.13	.00	.00	.00	.00
24	.00	.00	.00	.01	.29	.86	1.4	.08	.00	.00	.00	.00
25	.00	.00	.03	.12	.65	.83	1.3	.07	.00	.00	.00	.00
26	.00	.00	.04	.23	1.2	.85	1.2	.07	.00	.00	.00	.00
27	.00	.00	.04	.21	1.8	.85	1.2	.10	.00	.00	.00	.00
28	.00	.00	.04	.16	1.4	.83	1.1	.12	.00	.00	.00	.00
29	.00	.00	.04	.12	---	.86	1.0	.08	.00	.00	.00	.00
30	.00	.00	.04	.12	---	.83	.97	.05	.00	.00	.00	.00
31	.00	---	.04	.12	---	.79	---	.03	---	.00	.00	---
TOTAL	0.00	0.00	0.28	4.72	10.23	29.28	37.37	12.99	0.17	0.00	0.00	0.00
MEAN	.000	.000	.009	.15	.37	.94	1.25	.42	.006	.000	.000	.000
MAX	.00	.00	.04	1.1	1.8	2.9	2.7	.94	.05	.00	.00	.00
MIN	.00	.00	.00	.04	.10	.44	.82	.03	.00	.00	.00	.00
AC-FT	.00	.00	.6	9.4	20	58	74	26	.3	.00	.00	.00

SWEETWATER RIVER BASIN

11015000 SWEETWATER RIVER NEAR DESCANSO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.20	1.45	4.55	12.4	28.1	37.4	19.6	7.82	3.01	.84	.45	.31
MAX	3.53	24.0	83.5	304	336	382	138	68.5	25.5	8.68	8.45	6.16
(WY)	1984	1966	1967	1993	1980	1983	1983	1983	1983	1980	1983	1978
MIN	.000	.000	.000	.000	.000	.042	.010	.000	.000	.000	.000	.000
(WY)	1957	1957	1957	1961	1961	1961	1961	1961	1959	1957	1957	1957

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1957 - 2001
ANNUAL TOTAL	142.34	95.04	
ANNUAL MEAN	.39	.26	9.58
HIGHEST ANNUAL MEAN			71.2
LOWEST ANNUAL MEAN			.004
HIGHEST DAILY MEAN	9.5 Feb 21	2.9 Mar 10	2500 Feb 20 1980
LOWEST DAILY MEAN	.00 Jun 6	.00 Oct 1	.00 Oct 1 1956
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 12	.00 Oct 1	.00 Oct 1 1956
MAXIMUM PEAK FLOW		4.6 Feb 27	8600 Mar 5 1995
MAXIMUM PEAK STAGE		4.75 Mar 10	13.22 Mar 5 1995
ANNUAL RUNOFF (AC-FT)	282	189	6940
10 PERCENT EXCEEDS	1.1	.96	12
50 PERCENT EXCEEDS	.00	.00	.30
90 PERCENT EXCEEDS	.00	.00	.00

11022200 LOS COCHES CREEK NEAR LAKESIDE, CA

LOCATION.—Lat 32°50'10", long 116°53'58", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on upstream right bank side of bridge, on Old Highway 8, 2.7 mi upstream from mouth, and 1.9 mi southeast of Lakeside.

DRAINAGE AREA.—12.2 mi².

PERIOD OF RECORD.—October 1983 to current year.

REVISED RECORDS.—WDR CA-86-1: Drainage area.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 560 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,090 ft³/s, Mar. 5, 1995, gage height, 9.74 ft, from rating curve extended above 209 ft³/s, on basis of critical-depth computations; minimum daily, 0.04 ft³/s, several days in 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 12	1300	86	4.13

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	.18	.22	.32	.39	.56	2.2	1.1	.83	.55	.31	.24	.17
2	.14	.22	.33	.38	.54	1.7	1.2	1.2	.56	.30	.25	.16
3	.11	.21	.32	.35	.53	1.4	1.1	.65	.57	.28	.27	.19
4	.16	.22	.30	.40	.51	1.3	1.1	.58	.54	.27	.27	.18
5	.12	.23	.29	.33	.52	1.2	1.2	.56	.54	.27	.26	.15
6	.13	.24	.29	.34	.53	1.9	1.1	.53	.51	.26	.24	.16
7	.12	.23	.29	.34	5.4	3.7	5.1	.49	.50	.25	.25	.16
8	.12	.23	.33	.58	1.8	1.5	1.6	.49	.49	.24	.24	.17
9	.15	.25	.32	.98	.67	1.3	1.5	.49	.49	.25	.23	.18
10	.30	1.4	.37	.41	.67	21	2.5	.51	.46	.25	.24	.18
11	.17	.60	.38	27	.63	3.0	.97	.53	.45	.24	.24	.20
12	.14	.35	.42	13	.97	2.4	.95	.59	.46	.23	.24	.20
13	.15	.34	.44	1.3	1.9	2.0	.89	.57	.47	.23	.25	.17
14	.14	.49	.41	.80	5.1	1.9	.89	.55	.45	.23	.23	.18
15	.13	.35	.41	.70	1.1	1.8	.89	.56	.44	.24	.21	.18
16	.13	.34	.42	.61	.89	1.8	.80	.54	.43	.23	.20	.18
17	.15	.33	.40	.55	.85	1.6	.79	.57	.42	.23	.21	.18
18	.16	.30	.37	.54	.80	1.5	.78	.62	.41	.23	.21	.16
19	.16	.30	.36	.54	.77	1.4	.78	.66	.40	.24	.21	.16
20	.17	.28	.39	.51	1.6	1.4	.76	.63	.39	.25	.23	.19
21	.17	.28	.42	.49	.74	1.3	8.7	.60	.39	.27	.25	.23
22	.16	.30	.43	.48	.73	1.3	1.3	.57	.36	.26	.24	.21
23	.16	.31	.40	.49	6.5	1.2	.96	.51	.35	.25	.22	.17
24	.15	.32	.42	.69	1.0	1.2	.81	.50	.32	.26	.19	.15
25	.16	.32	.40	.51	7.5	1.2	.74	.51	.32	.26	.18	.14
26	.19	.31	.38	7.7	8.8	1.2	.71	.62	.33	.24	.18	.13
27	.24	.30	.39	3.8	25	1.2	.68	.80	.32	.23	.16	.14
28	.20	.29	.39	.84	3.8	1.2	.68	1.9	.32	.25	.18	.12
29	.20	.29	.38	.71	---	1.2	.62	.73	.31	.26	.19	.11
30	1.9	.30	.38	.65	---	1.1	.61	.62	.31	.28	.18	.12
31	.23	---	.39	.59	---	1.1	---	.56	---	.27	.19	---
TOTAL	6.79	10.15	11.54	67.00	97.51	86.3	41.81	20.07	12.86	7.86	6.88	5.02
MEAN	.22	.34	.37	2.16	3.48	2.78	1.39	.65	.43	.25	.22	.17
MAX	1.9	1.4	.44	.27	.25	.21	8.7	1.9	.57	.31	.27	.23
MIN	.11	.21	.29	.33	.51	1.1	.61	.49	.31	.23	.16	.11
AC-FT	13	20	23	133	193	171	83	40	26	16	14	10

SAN DIEGO RIVER BASIN

11022200 LOS COCHES CREEK NEAR LAKESIDE, 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	.45	1.15	1.76	4.68	5.93	5.77	2.87	1.37	.78	.38	.25	.27
MAX	1.37	4.58	6.09	40.2	28.3	31.1	13.5	6.25	3.67	1.31	.69	.64
(WY)	1988	1984	1985	1993	1998	1995	1998	1998	1995	1995	1998	1998
MIN	.066	.17	.32	.66	1.09	.78	.45	.25	.16	.096	.079	.077
(WY)	1998	1993	1990	1989	1989	1989	1989	1984	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	278.77		373.79			
ANNUAL MEAN	.76		1.02		2.12	
HIGHEST ANNUAL MEAN					6.77	
LOWEST ANNUAL MEAN					.50	
HIGHEST DAILY MEAN	48	Feb 21	27	Jan 11	248	Mar 5 1995
LOWEST DAILY MEAN	.11	Aug 9	.11	Oct 3	.04	Oct 26 1997
ANNUAL SEVEN-DAY MINIMUM	.12	Aug 12	.13	Oct 2	.04	Oct 31 1997
MAXIMUM PEAK FLOW			86	Jan 12	1090	Mar 5 1995
MAXIMUM PEAK STAGE			4.13	Jan 12	9.74	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	553		741		1540	
10 PERCENT EXCEEDS	1.2		1.4		3.4	
50 PERCENT EXCEEDS	.30		.39		.55	
90 PERCENT EXCEEDS	.14		.17		.16	

11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA

LOCATION.—Lat 32°50'25", long 117°01'30", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, near right bank, at Mast Road Bridge, 0.7 mi upstream from Old Mission Damsite, 2.8 mi west of Santee, and 14.2 mi downstream from El Capitan Reservoir.

DRAINAGE AREA.—368 mi².

PERIOD OF RECORD.—May 1912 to December 1915, April 1916 to current year. Monthly discharge only for some periods and yearly estimates only for 1924–25, published in WSP-1315-B. Prior to September 1981 published as "near Santee" (station 11022500).

REVISED RECORDS.—WSP 1565: 1955–56. WSP 1635: 1922, 1926(M), 1927. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 300 ft above sea level, from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 0.7 mi downstream at different datum. Nov. 10, 1920, to Jan. 19, 1982, at site 2.6 mi downstream at different datum.

REMARKS.—Records fair. Flow regulated by Cuyamaca Reservoir, capacity, 11,740 acre-ft, El Capitan Reservoir (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 45,400 ft³/s, Feb. 16, 1927, gage height, 18.1 ft, site and datum then in use, from floodmarks, on basis of slope-area measurement of peak flow; no flow for many days some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 70,200 ft³/s, Jan. 27, 1916, gage height, 25.1 ft, site and datum in use prior to Nov. 10, 1920, from floodmarks, based on slope-conveyance computation of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.1	3.4	4.1	11	37	11	7.4	6.1	2.0	1.4	.75
2	1.5	6.1	3.5	3.7	11	31	12	7.4	5.9	1.9	1.4	.71
3	1.5	5.4	3.4	3.8	12	28	11	7.3	5.7	2.0	1.4	.71
4	1.9	4.9	4.1	4.7	11	24	11	7.1	5.4	2.1	1.3	.74
5	1.8	4.6	3.7	4.2	9.5	22	10	6.8	5.2	3.1	1.2	.79
6	1.8	4.6	3.8	4.1	8.9	175	10	7.0	7.4	2.4	1.1	.79
7	1.8	4.5	3.5	4.6	62	52	43	6.9	5.7	2.2	1.2	.75
8	1.8	4.5	3.3	11	29	29	13	7.0	4.6	2.0	1.4	.73
9	1.7	4.0	4.2	23	13	26	13	7.2	4.3	2.0	1.2	.75
10	2.4	34	4.2	6.9	12	84	24	6.8	4.2	1.7	1.2	.79
11	7.1	10	3.8	291	11	54	13	6.8	4.1	1.7	1.1	.76
12	2.5	5.3	5.9	193	12	39	11	6.6	4.4	1.6	1.0	.76
13	1.8	4.3	4.7	40	193	31	11	6.4	4.6	1.6	1.0	.82
14	1.7	3.9	4.4	26	68	26	10	6.1	4.2	1.7	1.0	1.1
15	1.9	3.7	4.0	22	24	23	9.3	6.3	3.9	1.6	1.1	1.2
16	2.7	3.7	3.4	18	20	21	9.0	6.4	3.7	1.6	1.0	1.0
17	2.5	3.4	3.0	14	17	18	9.0	6.0	3.5	1.4	1.0	.91
18	3.1	3.4	3.1	12	16	17	8.9	6.0	3.2	1.4	.99	.89
19	2.6	3.4	4.0	11	14	16	8.4	6.0	3.1	1.4	.92	1.0
20	2.2	3.6	4.2	10	22	15	7.3	6.1	2.9	1.5	.84	1.0
21	2.2	4.1	4.4	10	13	14	69	9.0	2.9	1.5	.89	.99
22	2.0	3.8	4.6	10	12	14	11	5.9	3.0	1.5	.99	.99
23	1.8	3.7	3.9	9.6	70	13	9.7	5.9	2.9	1.5	1.0	1.1
24	1.8	3.4	4.3	12	14	14	9.7	9.4	2.8	1.5	.88	1.2
25	1.8	3.6	4.0	9.4	90	13	9.3	5.8	2.6	1.5	.88	1.2
26	2.4	3.4	3.8	93	70	12	8.5	5.8	2.4	1.5	.81	1.2
27	60	3.3	4.3	57	170	12	8.2	6.3	2.4	1.4	.80	1.2
28	13	4.3	4.7	20	56	12	7.7	11	2.2	1.5	.83	1.1
29	5.8	4.2	4.9	17	---	12	7.3	7.1	2.1	1.4	.89	1.1
30	67	3.7	4.4	15	---	12	7.1	6.3	2.1	1.3	.83	1.1
31	6.7	---	4.3	13	---	12	---	6.4	---	1.3	.82	---
TOTAL	210.4	160.9	125.2	973.1	1071.4	908	402.4	212.5	117.5	52.8	32.37	28.13
MEAN	6.79	5.36	4.04	31.4	38.3	29.3	13.4	6.85	3.92	1.70	1.04	.94
MAX	67	34	5.9	291	193	175	69	11	7.4	3.1	1.4	1.2
MIN	1.5	3.3	3.0	3.7	8.9	12	7.1	5.8	2.1	1.3	.80	.71
AC-FT	417	319	248	1930	2130	1800	798	421	233	105	64	56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

MEAN	2.20	5.83	20.7	32.4	93.9	80.4	48.2	17.9	4.80	3.03	2.73	1.90
MAX	20.8	78.8	728	410	1871	683	1324	379	181	156	139	38.3
(WY)	1988	1986	1922	1993	1927	1941	1941	1915	1980	1980	1980	1980
MIN	.000	.000	.000	.000	.000	.019	.000	.000	.000	.000	.000	.000
(WY)	1913	1913	1913	1951	1951	1951	1951	1913	1913	1912	1913	1913

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	3229.67		4294.70			
ANNUAL MEAN	8.82		11.8		25.7	
HIGHEST ANNUAL MEAN					219	
LOWEST ANNUAL MEAN					.002	
HIGHEST DAILY MEAN	572	Feb 21	291	Jan 11	27300	Feb 16 1927
LOWEST DAILY MEAN	.68	Aug 14	.71	Sep 2	.00	Jun 19 1912
ANNUAL SEVEN-DAY MINIMUM	.72	Aug 11	.75	Sep 2	.00	Jun 19 1912
MAXIMUM PEAK FLOW			819		45400	
MAXIMUM PEAK STAGE			7.65		18.10	
ANNUAL RUNOFF (AC-FT)	6410		8520		18640	
10 PERCENT EXCEEDS	13		23		28	
50 PERCENT EXCEEDS	3.7		4.3		1.6	
90 PERCENT EXCEEDS	.85		1.0		.00	

11023000 SAN DIEGO RIVER AT FASHION VALLEY, AT SAN DIEGO, CA

LOCATION.—Lat 32°45'54", long 117°10'04", in Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on left bank, 2.6 mi upstream from mouth, 500 ft upstream from Fashion Valley Road crossing, 0.4 mi downstream from unnamed tributary, and 26.4 mi downstream from El Capitan Reservoir.

DRAINAGE AREA.—429 mi².

PERIOD OF RECORD.—October 1912 to January 1916 published as San Diego River at San Diego (monthly discharge only, published in WSP 1315-B), January 1982 to current year. Records for Oct. 1, 1981, to Jan. 17, 1982, published in WDR CA-82-1, are in error and should not be used.

WATER TEMPERATURE: Water year 1984.

SEDIMENT DATA: Water year 1984.

REVISED RECORDS.—See PERIOD OF RECORD.

GAGE.—Water-stage recorder. Elevation of gage is 20 ft above sea level, from topographic map. See WSP 1315-B for history of changes for period October 1912 to January 1916.

REMARKS.—Records fair. Flow regulated by Cuyamaca Reservoir, capacity, 11,740 acre-ft; El Capitan Reservoir (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 75,000 ft³/s, Jan. 27, 1916, gage height, 19.3 ft, site and datum then in use, estimated on basis of upstream station, San Diego River near Santee; no flow at times during some years. Maximum discharge recorded since storage began in El Capitan Reservoir and San Vicente Reservoir, 9,430 ft³/s, Mar. 6, 1995, gage height, 13.47 ft, from rating curve extended above 5,800 ft³/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	1.2	21	3.8	6.6	20	101	16	10	6.2	3.1	1.7	1.0
2	1.1	13	4.3	6.4	18	71	16	9.6	5.5	3.0	1.5	1.1
3	.97	9.5	4.5	8.1	16	60	15	8.6	5.6	2.5	1.7	1.2
4	.94	7.5	4.7	5.8	16	54	15	8.8	4.9	2.2	1.9	1.1
5	1.0	7.0	5.1	4.8	14	48	14	8.7	4.8	2.4	1.7	.98
6	1.5	6.5	4.4	4.3	13	202	14	8.5	4.6	2.6	1.7	.80
7	1.7	7.8	4.3	5.4	13	175	63	7.9	4.0	2.6	1.3	.78
8	1.8	8.9	4.2	11	71	70	69	8.0	3.7	2.5	1.4	.94
9	1.7	6.7	4.4	24	59	49	40	7.2	3.9	2.3	1.3	1.0
10	1.8	10	4.5	13	28	88	65	6.8	4.2	1.9	1.2	1.2
11	3.5	27	4.9	376	21	111	42	6.2	3.9	1.9	1.2	1.1
12	4.1	21	6.7	493	18	72	26	5.9	3.6	1.9	1.4	1.3
13	2.8	15	6.5	236	223	56	21	6.6	3.4	1.8	1.5	1.3
14	2.1	11	5.6	74	227	47	19	6.7	3.2	1.7	1.2	1.1
15	1.8	8.6	6.2	52	88	42	17	6.8	3.5	1.8	1.2	1.3
16	1.6	7.1	6.5	50	53	36	16	6.6	3.5	1.8	1.1	1.5
17	1.5	6.0	5.8	38	40	31	13	6.2	3.4	1.7	1.0	1.4
18	1.1	4.9	4.6	28	32	28	13	5.9	3.0	1.5	1.0	1.2
19	1.1	4.3	4.7	22	26	25	13	5.8	2.7	1.5	1.2	1.1
20	1.2	3.9	4.6	19	40	23	12	6.4	2.7	1.5	1.3	.97
21	1.4	3.8	4.7	16	33	23	67	6.7	2.8	1.6	1.1	1.1
22	1.5	3.9	4.2	14	28	22	75	6.9	2.6	1.5	1.2	1.2
23	1.7	4.1	5.3	14	103	21	35	6.5	2.9	1.8	1.1	1.3
24	1.4	4.1	7.3	15	114	20	19	6.4	3.2	1.9	1.1	1.4
25	1.4	4.2	6.8	18	102	19	16	6.0	3.2	1.6	1.1	1.2
26	1.9	4.2	5.6	69	262	19	14	5.1	2.4	1.6	1.3	1.1
27	22	2.2	4.5	201	252	18	13	6.5	2.0	1.5	1.2	1.0
28	26	1.8	4.0	83	210	17	13	7.1	1.9	1.4	1.1	.87
29	17	3.2	4.7	45	---	17	12	7.0	2.4	1.5	.96	.94
30	146	3.7	4.4	32	---	18	11	6.7	3.2	1.9	.79	1.0
31	46	---	5.0	24	---	17	---	7.1	---	2.0	.86	---
TOTAL	300.81	241.9	156.8	2008.4	2140	1600	794	219.2	106.9	60.5	39.31	33.48
MEAN	9.70	8.06	5.06	64.8	76.4	51.6	26.5	7.07	3.56	1.95	1.27	1.12
MAX	146	27	7.3	493	262	202	75	10	6.2	3.1	1.9	1.5
MIN	.94	1.8	3.8	4.3	13	17	11	5.1	1.9	1.4	.79	.78
AC-FT	597	480	311	3980	4240	3170	1570	435	212	120	78	66

11023000 SAN DIEGO RIVER AT FASHION VALLEY, AT SAN DIEGO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.47	26.4	41.0	98.2	119	141	47.7	17.4	6.85	3.03	2.42	3.32
MAX	31.2	144	143	683	668	777	242	135	21.3	8.93	9.47	20.0
(WY)	1987	1986	1985	1993	1998	1983	1983	1983	1983	1983	1983	1986
MIN	.62	.87	5.06	6.51	20.5	8.38	7.69	2.45	1.30	.25	.54	.033
(WY)	1990	1990	2001	2000	1989	1984	1989	1996	1985	1985	1985	1984

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1982 - 2001	
ANNUAL TOTAL	5699.54		7701.30			
ANNUAL MEAN	15.6		21.1		42.2	
HIGHEST ANNUAL MEAN					125	
LOWEST ANNUAL MEAN					11.5	
HIGHEST DAILY MEAN	806	Feb 21	493	Jan 12	4760	Mar 3 1983
LOWEST DAILY MEAN	.81	Aug 24	.78	Sep 7	.00	Sep 7 1984
ANNUAL SEVEN-DAY MINIMUM	.91	Sep 14	.97	Sep 3	.00	Sep 13 1984
MAXIMUM PEAK FLOW			813	Jan 12	9430	Mar 6 1995
MAXIMUM PEAK STAGE			8.71	Jan 12	13.47	Mar 6 1995
ANNUAL RUNOFF (AC-FT)	11310		15280		30600	
10 PERCENT EXCEEDS	23		52		77	
50 PERCENT EXCEEDS	4.6		5.3		7.1	
90 PERCENT EXCEEDS	1.0		1.2		.82	

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA

LOCATION.—Lat 32°56'35", long 117°07'15", in Los Penasquitos Grant, San Diego County, Hydrologic Unit 18070304, on left bank, 1.0 mi downstream from Cypress Creek, and 5.5 mi southwest of Poway.

DRAINAGE AREA.—42.1 mi².

PERIOD OF RECORD.—October 1964 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 260 ft above sea level, from topographic map.

REMARKS.—Records fair. Flow partly regulated by several conservation reservoirs upstream from station. Pumping from wells along stream for irrigation. Flow augmented by reclaimed water from Poway area.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,750 ft³/s, Feb. 21, 1980, gage height, 10.26 ft, from rating curve extended above 1,400 ft³/s; maximum gage height, 10.92 ft, Jan. 4, 1995; no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 400 ft³/s, or maximum, from rating curve extended above 2,130 ft³/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 30	0030	906	6.17	Feb. 13	2300	835	6.00
Jan. 11	0730	1,900	7.99	Feb. 27	1545	3,160	9.55
Jan. 27	0045	400	4.68	Mar. 10	1145	411	4.72

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	3.2	5.8	3.4	1.9	2.7	34	6.1	4.9	3.2	2.8	3.3	1.6
2	3.7	4.2	3.7	2.2	2.9	20	6.7	3.9	3.0	3.0	3.6	1.5
3	2.6	3.8	3.8	1.8	2.9	15	6.2	3.9	3.0	3.4	3.7	1.9
4	2.9	3.5	3.9	2.1	2.5	12	6.2	3.7	2.7	3.6	3.5	2.0
5	2.9	3.1	3.7	2.2	2.5	11	6.5	3.4	2.8	3.8	3.2	2.0
6	2.9	3.4	3.8	2.3	2.6	119	6.3	3.3	2.7	4.0	3.4	1.8
7	2.8	3.2	3.2	2.4	14	34	98	3.2	2.6	3.6	3.6	1.8
8	2.9	2.9	3.5	33	20	14	23	3.2	2.9	3.5	4.0	1.8
9	2.2	2.9	3.0	22	3.5	18	14	3.3	2.5	3.3	4.4	2.1
10	10	42	2.4	4.7	5.8	213	54	3.5	2.4	3.3	3.9	2.0
11	9.7	44	2.4	454	6.8	41	8.9	3.7	2.3	3.1	3.4	2.1
12	4.2	9.3	4.8	185	6.3	23	11	4.0	2.6	3.0	3.2	2.7
13	3.1	5.2	3.8	22	358	18	6.3	3.9	2.3	2.6	3.5	2.3
14	2.8	4.8	3.9	7.2	93	14	5.1	3.9	2.7	2.7	3.8	2.1
15	2.7	4.9	2.9	5.3	11	12	4.7	3.7	2.3	2.6	3.4	1.9
16	3.6	4.6	2.8	3.9	6.9	11	4.3	3.7	2.2	2.5	3.1	1.9
17	2.4	4.0	1.8	3.1	5.8	9.8	4.2	3.6	2.1	2.8	3.1	1.8
18	3.0	3.4	1.6	2.8	4.8	8.9	4.4	3.4	2.1	2.7	2.9	1.9
19	2.2	3.2	3.0	2.5	4.2	8.6	4.4	3.6	2.1	2.7	2.7	1.9
20	2.0	3.3	2.8	2.4	21	8.4	4.6	3.6	2.3	2.8	2.4	2.1
21	2.1	3.2	2.8	2.2	4.7	8.2	89	3.8	2.5	2.8	3.2	2.3
22	2.2	3.2	1.7	2.2	3.9	7.6	11	3.7	2.6	2.7	2.7	2.1
23	2.1	3.1	1.8	2.3	83	7.4	4.9	3.4	2.3	2.5	2.7	2.0
24	2.2	3.0	1.7	8.2	13	7.4	4.0	3.4	2.2	2.9	2.3	1.9
25	2.3	2.8	1.7	5.3	122	6.9	3.7	3.4	2.1	3.1	2.5	1.9
26	3.8	2.6	2.1	89	119	6.5	3.6	3.5	2.2	2.9	2.0	2.0
27	48	2.7	2.0	98	610	6.8	3.6	5.1	2.2	3.0	1.9	2.6
28	14	2.8	1.9	7.3	109	6.6	3.7	6.8	2.4	2.8	2.4	2.1
29	24	3.0	2.1	4.2	---	6.9	3.5	4.7	2.8	2.6	2.1	2.1
30	180	3.0	2.1	3.4	---	6.8	3.7	3.9	3.1	2.9	1.8	2.2
31	11	---	2.0	2.9	---	6.1	---	3.3	---	3.0	1.7	---
TOTAL	363.5	190.9	86.1	987.8	1641.8	721.9	415.6	118.4	75.2	93.0	93.4	60.4
MEAN	11.7	6.36	2.78	31.9	58.6	23.3	13.9	3.82	2.51	3.00	3.01	2.01
MAX	180	44	4.8	454	610	213	98	6.8	3.2	4.0	4.4	2.7
MIN	2.0	2.6	1.6	1.8	2.5	6.1	3.5	3.2	2.1	2.5	1.7	1.5
AC-FT	721	379	171	1960	3260	1430	824	235	149	184	185	120

11023340 LOS PENASQUITOS CREEK NEAR POWAY, 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	1.92	6.06	8.94	24.8	34.9	33.5	9.58	3.24	1.67	1.18	1.09	1.65
MAX	11.7	28.7	51.6	233	277	213	50.0	22.0	6.58	3.25	3.59	13.9
(WY)	2001	1986	1966	1993	1998	1983	1998	1998	1998	1999	1998	1997
MIN	.030	.10	.23	.23	.41	.75	.27	.14	.056	.009	.020	.028
(WY)	1976	1978	1974	1976	1965	1965	1977	1974	1974	1977	1975	1975

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	2987.7		4848.0			
ANNUAL MEAN	8.16		13.3		10.6	
HIGHEST ANNUAL MEAN					39.4 1998	
LOWEST ANNUAL MEAN					.80 1965	
HIGHEST DAILY MEAN	424	Feb 21	610	Feb 27	1400	Mar 1 1978
LOWEST DAILY MEAN	1.1	Aug 6	1.5	Sep 2	.00	May 16 1968
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 5	1.8	Aug 30	.00	Jul 18 1977
MAXIMUM PEAK FLOW			3160	Feb 27	4750	Feb 21 1980
MAXIMUM PEAK STAGE			9.55	Feb 27	10.92	Jan 4 1995
ANNUAL RUNOFF (AC-FT)	5930		9620		7680	
10 PERCENT EXCEEDS	8.4		14		12	
50 PERCENT EXCEEDS	2.5		3.3		1.6	
90 PERCENT EXCEEDS	1.6		2.1		.27	

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

LOCATION.—Lat 33°06'25", long 116°51'55", in NW 1/4 NE 1/4 sec.27, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank, 1.6 mi downstream from Temescal Creek, 4.5 mi north of Ramona, and 5.0 mi downstream from Sutherland Reservoir.

DRAINAGE AREA.—112 mi².

PERIOD OF RECORD.—February 1912 to February 1923 (monthly discharge only for November and December 1919), October 1943 to current year.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 847.88 ft above sea level (levels by city of San Diego Water Department). See WSP 1315-B for history of changes prior to Feb. 3, 1923.

REMARKS.—Records good. Flow regulated by Sutherland Reservoir, capacity, 29,680 acre-ft, since July 1954. Some small diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,400 ft³/s, Jan. 27, 1916, gage height, 14.0 ft, datum then in use, from rating curve extended above 1,500 ft³/s on basis of slope-conveyance study of peak flow; maximum gage height, 14.25 ft, Feb. 21, 1980; no flow at times in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.15	.47	5.6	1.0	1.0	.07	.00	.00	.00
2	.00	.00	.01	.14	.45	4.0	1.0	.98	.07	.00	.00	.00
3	.00	.00	.02	.12	.45	3.2	1.0	.89	.06	.00	.00	.00
4	.00	.00	.02	.13	.42	2.7	1.1	.70	.04	.00	.00	.00
5	.00	.00	.02	.15	.39	2.4	1.4	.63	.03	.00	.00	.00
6	.00	.00	.02	.18	.41	4.7	1.5	.53	.02	.00	.00	.00
7	.00	.00	.02	.19	.56	4.1	3.2	.45	.02	.00	.00	.00
8	.00	.00	.03	.21	.68	3.4	3.5	.40	.01	.00	.00	.00
9	.00	.01	.04	.27	.50	2.9	3.0	.34	.01	.00	.00	.00
10	.00	.02	.05	.27	.54	9.9	3.9	.31	.00	.00	.00	.00
11	.00	.01	.08	3.9	.60	6.3	3.3	.31	.00	.00	.00	.00
12	.00	.00	.09	1.8	.60	3.9	3.4	.41	.00	.00	.00	.00
13	.00	.01	.09	.89	4.5	3.1	2.8	.37	.00	.00	.00	.00
14	.00	.01	.09	.64	3.9	2.6	2.3	.35	.00	.00	.00	.00
15	.00	.02	.09	.63	2.3	2.4	1.9	.33	.00	.00	.00	.00
16	.00	.02	.09	1.2	1.8	2.3	1.7	.31	.00	.00	.00	.00
17	.00	.02	.09	.67	1.4	2.1	1.5	.28	.00	.00	.00	.00
18	.00	.02	.09	.60	1.3	2.0	1.4	.23	.00	.00	.00	.00
19	.00	.02	.09	.60	1.2	1.8	1.3	.24	.00	.00	.00	.00
20	.00	.02	.09	.56	1.8	1.6	1.5	.23	.00	.00	.00	.00
21	.00	.01	.11	.47	1.6	1.5	7.4	.19	.00	.00	.00	.00
22	.00	.01	.12	.46	1.5	1.5	5.8	.16	.00	.00	.00	.00
23	.00	.01	.12	.47	2.5	1.5	3.5	.11	.00	.00	.00	.00
24	.00	.01	.12	.56	2.3	1.5	2.5	.11	.00	.00	.00	.00
25	.00	.01	.12	.56	4.7	1.3	1.8	.10	.00	.00	.00	.00
26	.00	.01	.12	1.9	8.4	1.3	1.5	.12	.00	.00	.00	.00
27	.00	.01	.12	1.6	10	1.3	1.3	.19	.00	.00	.00	.00
28	.00	.01	.12	.89	8.8	1.3	1.2	.25	.00	.00	.00	.00
29	.00	.01	.13	.72	---	1.4	1.2	.22	.00	.00	.00	.00
30	.01	.01	.15	.66	---	1.4	1.1	.13	.00	.00	.00	.00
31	.00	---	.15	.55	---	1.1	---	.09	---	.00	.00	---
TOTAL	0.01	0.28	2.51	22.14	64.07	86.1	69.0	10.96	0.33	0.00	0.00	0.00
MEAN	.000	.009	.081	.71	2.29	2.78	2.30	.35	.011	.000	.000	.000
MAX	.01	.02	.15	3.9	10	9.9	7.4	1.0	.07	.00	.00	.00
MIN	.00	.00	.01	.12	.39	1.1	1.0	.09	.00	.00	.00	.00
AC-FT	.02	.6	5.0	44	127	171	137	22	.7	.00	.00	.00

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.76	4.16	28.3	106	70.6	72.7	38.9	27.8	9.07	2.83	1.53	.98
MAX	16.9	17.3	330	1690	345	249	153	221	47.0	15.6	10.5	8.63
(WY)	1917	1947	1922	1916	1916	1922	1922	1915	1915	1915	1916	1916
MIN	.000	.000	.000	1.70	3.54	6.37	4.75	1.10	.037	.000	.000	.000
(WY)	1948	1949	1951	1948	1912	1951	1951	1947	1951	1946	1921	1921

SUMMARY STATISTICS

WATER YEARS 1912 - 1954

ANNUAL MEAN	30.7
HIGHEST ANNUAL MEAN	206 1916
LOWEST ANNUAL MEAN	1.77 1951
HIGHEST DAILY MEAN	14100 Jan 27 1916
LOWEST DAILY MEAN	.00 Aug 16 1912
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 17 1912
MAXIMUM PEAK FLOW	28400 Jan 27 1916
MAXIMUM PEAK STAGE	14.00 Jan 27 1916
ANNUAL RUNOFF (AC-FT)	22250
10 PERCENT EXCEEDS	50
50 PERCENT EXCEEDS	4.1
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

MEAN	.48	2.04	5.15	15.1	40.7	42.1	19.4	8.18	3.43	1.07	.66	.38
MAX	6.30	43.5	124	220	795	425	207	110	42.2	13.8	11.9	7.07
(WY)	1981	1966	1967	1993	1980	1980	1983	1983	1983	1980	1983	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1959	1961	1961	1961	1959	1956	1955	1955	1955

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1955 - 2001

ANNUAL TOTAL	253.69	255.40	
ANNUAL MEAN	.69	.70	11.4
HIGHEST ANNUAL MEAN			131 1980
LOWEST ANNUAL MEAN			.000 1961
HIGHEST DAILY MEAN	13 Mar 6	10 Feb 27	6190 Feb 21 1980
LOWEST DAILY MEAN	.00 Jun 6	.00 Oct 1	.00 Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 6	.00 Oct 1	.00 Oct 1 1954
MAXIMUM PEAK FLOW		21 Feb 27	10700 Feb 21 1980
MAXIMUM PEAK STAGE		2.65 Feb 27	14.25 Feb 21 1980
ANNUAL RUNOFF (AC-FT)	503	507	8250
10 PERCENT EXCEEDS	2.0	2.3	12
50 PERCENT EXCEEDS	.02	.02	.12
90 PERCENT EXCEEDS	.00	.00	.00

11028500 SANTA MARIA CREEK NEAR RAMONA, CA

LOCATION.—Lat 33°03'08", long 116°56'41", in SE 1/4 SE 1/4 sec.11, T.13 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank, 3.8 mi northwest of Ramona, and 4.6 mi upstream from mouth.

DRAINAGE AREA.—57.6 mi².

PERIOD OF RECORD.—December 1912 to September 1920, October 1946 to current year.

REVISED RECORDS.—WSP 1285: 1952. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Concrete control since October 1946. Datum of gage is 1,294.44 ft above sea level. Prior to Oct. 1, 1946, at same site, at datum 1.78 ft lower.

REMARKS.—Records good. No regulation upstream from station. Land application of treated sewage effluent upstream from the gage beginning December 1972 contributes to low flows.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,200 ft³/s, Feb. 21, 1980, gage height, 14.39 ft, from rating curve extended above 166 ft³/s on basis of slope-area measurements at gage heights 4.56 ft and 14.39 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft³/s, or maximum, from rating curve extended above 955 ft³/s on basis of slope-area measurement at gage height 14.39 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 10	1300	83	2.31

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	.01	3.3	.38	.14	.00	.00	.00	.00
2	.00	.00	.00	.00	.01	1.2	.44	.09	.00	.00	.00	.00
3	.00	.00	.00	.00	.01	.80	.41	.06	.00	.00	.00	.00
4	.00	.00	.00	.00	.01	.60	.44	.04	.00	.00	.00	.00
5	.00	.00	.00	.00	.03	.53	.39	.03	.00	.00	.00	.00
6	.00	.00	.00	.00	.13	5.0	.33	.03	.00	.00	.00	.00
7	.00	.00	.00	.00	.11	13	1.8	.03	.00	.00	.00	.00
8	.00	.00	.00	.00	.21	4.0	2.8	.02	.00	.00	.00	.00
9	.00	.00	.00	.00	.09	1.4	1.0	.02	.00	.00	.00	.00
10	.00	.00	.00	.00	.10	37	1.7	.02	.00	.00	.00	.00
11	.00	.00	.00	.74	.11	15	.90	.02	.00	.00	.00	.00
12	.00	.00	.00	.69	.10	5.2	.82	.07	.00	.00	.00	.00
13	.00	.00	.00	.39	7.7	2.4	.71	.08	.00	.00	.00	.00
14	.00	.00	.00	.01	6.9	1.6	.45	.06	.00	.00	.00	.00
15	.00	.00	.00	.00	.72	1.3	.34	.04	.00	.00	.00	.00
16	.00	.00	.00	.00	.30	1.2	.30	.03	.00	.00	.00	.00
17	.00	.00	.00	.00	.17	.98	.26	.02	.00	.00	.00	.00
18	.00	.00	.00	.00	.12	.77	.24	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.11	.61	.24	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.41	.60	.24	.01	.00	.00	.00	.00
21	.00	.00	.00	.00	.21	.59	3.7	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.21	.59	4.3	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	1.1	.51	.87	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.97	.50	.45	.00	.00	.00	.00	.00
25	.00	.00	.00	.04	1.8	.47	.27	.00	.00	.00	.00	.00
26	.00	.00	.00	.09	11	.45	.22	.00	.00	.00	.00	.00
27	.00	.00	.00	.56	17	.39	.19	.00	.00	.00	.00	.00
28	.00	.00	.00	.18	14	.38	.19	.01	.00	.00	.00	.00
29	.00	.00	.00	.04	---	.44	.33	.01	.00	.00	.00	.00
30	.00	.00	.00	.02	---	.44	.19	.00	.00	.00	.00	.00
31	.00	---	.00	.01	---	.39	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	2.77	63.64	101.64	24.90	0.83	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.089	2.27	3.28	.83	.027	.000	.000	.000	.000
MAX	.00	.00	.00	.74	17	37	4.3	.14	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.01	.38	.19	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	5.5	126	202	49	1.6	.00	.00	.00	.00

11028500 SANTA MARIA CREEK NEAR RAMONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.053	.43	1.33	23.0	24.9	25.6	6.50	2.24	.56	.071	.095	.032
MAX	.45	10.9	26.5	545	443	288	63.2	31.0	7.66	1.28	4.03	.22
(WY)	1987	1966	1967	1916	1980	1983	1998	1915	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1914	1916	1920	1920	1951	1951	1950	1949	1920	1913	1913	1913

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1913 - 2001	
ANNUAL TOTAL	80.77		193.78			
ANNUAL MEAN	.22		.53		7.10	
HIGHEST ANNUAL MEAN					78.2	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	17	Feb 24	37	Mar 10	4960	Jan 27 1916
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Dec 17 1912
ANNUAL SEVEN-DAY MINIMUM	.00	May 8	.00	Oct 1	.00	Dec 17 1912
MAXIMUM PEAK FLOW			83	Mar 10	15200	Feb 21 1980
MAXIMUM PEAK STAGE			2.31	Mar 10	14.39	Feb 21 1980
ANNUAL RUNOFF (AC-FT)	160		384		5150	
10 PERCENT EXCEEDS	.25		.70		2.9	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA

LOCATION.—Lat 33°13'05", long 117°21'34", in SE 1/4 SW 1/4 sec.13, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070303, on left bank, 1.9 mi upstream from bridge on Interstate Highway 5, 2.4 mi upstream from mouth, and 1.9 mi northeast of Oceanside.

DRAINAGE AREA.—557 mi².

PERIOD OF RECORD.—April 1912 to September 1914 (published as "near Oceanside"), January 1916, October 1929 to January 1942, October 1946 to current year. Discharge measurements only Oct. 1, 1992, to Aug. 16, 1993, and Nov. 10, 1997, to Apr. 28, 1998.

CHEMICAL DATA: Water years 1978–92.

SPECIFIC CONDUCTANCE: Water years 1978–81.

WATER TEMPERATURE: Water years 1971–81.

BIOLOGICAL DATA: Water years 1978–81.

SEDIMENT DATA: Water years 1969–93.

REVISED RECORDS.—WSP 2128: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 20 ft above sea level, from topographic map. April 1912 to September 1914, nonrecording gage at site 0.4 mi downstream at different datum. January 1916, nonrecording gage 1.4 mi downstream at different datum. October 1929 to Nov. 9, 1981, at site 0.8 mi downstream at different datum.

REMARKS.—Records poor. Gage out of operation for channel work from Nov. 10, 1997, to Apr. 28, 1998. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft, since 1923. Several diversions for irrigation and domestic use upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 95,600 ft³/s, Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years. Since regulation by Lake Henshaw, maximum discharge, 25,700 ft³/s, Jan. 16, 1993, gage height, 21.70 ft, on basis of slope-area measurement of peak flow.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.99	.12	.31	21	221	42	27	12	5.2	.70	3.1
2	.00	.74	.12	.46	18	184	40	26	12	5.1	.65	3.2
3	.00	.82	.12	.56	17	159	37	24	12	5.1	.58	3.3
4	.00	.59	.09	.69	16	152	35	21	12	5.0	.57	3.4
5	.00	.48	.06	1.2	15	137	32	19	12	4.8	.53	2.6
6	.00	.46	.01	1.3	14	140	29	17	12	4.4	.45	2.5
7	.00	.39	.05	1.2	14	144	45	15	13	3.9	.42	3.1
8	.00	.30	.01	1.3	13	137	96	14	11	3.5	.45	3.3
9	.00	.30	.01	1.6	12	122	95	13	14	3.3	.49	3.5
10	.00	.28	.04	1.7	12	135	79	12	13	3.2	.41	3.7
11	.00	.26	.05	16	12	149	63	12	12	3.0	.42	3.9
12	.00	.22	.05	47	14	145	57	11	9.4	2.9	.40	3.8
13	.00	.18	.00	57	40	127	53	11	9.1	2.7	.34	2.9
14	.00	.18	.00	44	180	110	48	11	8.7	2.6	.39	2.9
15	.00	.17	.00	33	144	102	45	11	8.6	2.5	.75	2.8
16	.00	.18	.00	26	88	96	42	11	8.2	2.3	1.1	2.8
17	.00	.16	.00	22	60	90	40	11	7.8	2.0	1.3	2.6
18	.00	.12	.00	19	46	85	39	10	7.5	1.9	1.5	2.0
19	.00	.12	.00	18	39	82	39	9.4	7.2	1.8	1.7	1.7
20	.00	.12	.01	17	46	79	38	9.3	6.7	1.7	1.8	1.6
21	.00	.11	.00	16	48	75	42	9.6	6.7	1.6	1.9	1.7
22	.00	.11	.00	15	42	71	47	9.9	6.5	1.5	1.8	1.7
23	.00	.10	.01	15	40	68	51	9.8	6.1	1.4	1.8	1.8
24	.00	.21	.03	13	45	65	50	9.4	5.8	1.3	1.9	1.8
25	.00	.25	.04	12	65	62	44	9.7	5.5	1.2	2.0	1.7
26	.00	.25	.00	17	170	59	38	9.8	5.2	1.1	2.1	1.6
27	.07	.22	.00	33	261	56	35	10	5.1	1.0	2.1	1.6
28	.13	.18	.01	30	244	54	33	11	5.2	.89	2.1	1.7
29	.46	.13	.04	28	---	52	30	11	5.3	.85	2.2	1.7
30	4.1	.12	.08	26	---	49	28	11	5.3	.81	2.2	1.6
31	2.0	---	.10	23	---	45	---	11	---	.74	2.9	---
TOTAL	6.76	8.74	1.05	537.32	1736	3252	1392	406.9	264.9	79.29	37.95	75.6
MEAN	.22	.29	.034	17.3	62.0	105	46.4	13.1	8.83	2.56	1.22	2.52
MAX	4.1	.99	.12	57	261	221	96	27	14	5.2	2.9	3.9
MIN	.00	.10	.00	.31	12	45	28	9.3	5.1	.74	.34	1.6
AC-FT	13	17	2.1	1070	3440	6450	2760	807	525	157	75	150

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.64	8.66	20.0	45.5	99.0	135	54.4	28.5	14.2	7.24	5.46	3.27
MAX	54.6	144	196	451	1858	1211	432	346	293	207	213	85.9
(WY)	1984	1984	1979	1980	1980	1995	1980	1980	1980	1980	1980	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1930	1930	1930	1930	1931	1931	1930	1930	1930

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1930 - 2001	
ANNUAL TOTAL	2907.01		7798.51			
ANNUAL MEAN	7.94		21.4		34.8	
HIGHEST ANNUAL MEAN					415	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	124	Feb 22	261	Feb 27	11300	Mar 3 1938
LOWEST DAILY MEAN	.00	Aug 20	.00	Oct 1	.00	Oct 1 1929
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 20	.00	Oct 1	.00	Oct 1 1929
MAXIMUM PEAK FLOW			278		25700	
MAXIMUM PEAK STAGE			9.53		21.70	
ANNUAL RUNOFF (AC-FT)	5770		15470		25210	
10 PERCENT EXCEEDS	23		61		56	
50 PERCENT EXCEEDS	1.0		3.5		1.5	
90 PERCENT EXCEEDS	.00		.00		.00	

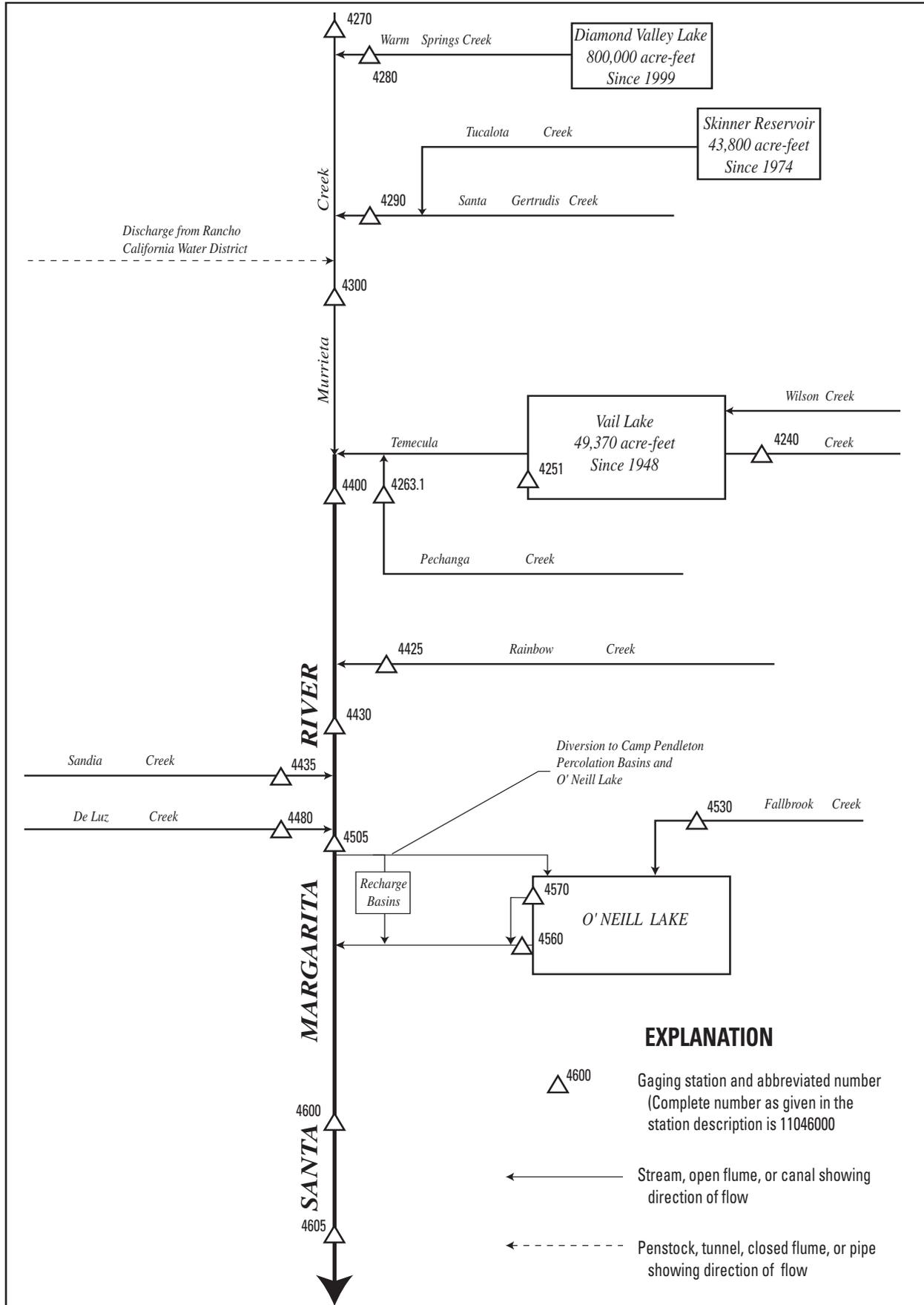


Figure 16. Diversions and storage in Santa Margarita River Basin.

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.—Lat 33°27'33", long 116°55'22", in SW 1/4 SW 1/4 sec.19, T.8 S., R.1 E., Riverside County, Hydrologic Unit 18070302, on right bank, 1.6 mi downstream from Long Canyon, and 3.5 mi northwest of Aguanga.

DRAINAGE AREA.—131 mi².

PERIOD OF RECORD.—August 1957 to current year.

REVISED RECORDS.—WDR CA-89-1: 1958(P), 1966(M), 1979(M), 1980(M), 1986(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,590 ft above sea level, from topographic map.

REMARKS.—Records good. No regulation upstream from station. Pumping upstream from station for irrigation of less than 1,000 acres. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,100 ft³/s, Jan. 16, 1993, gage height, 14.6 ft, from flood mark, from rating curve extended above 1,200 ft³/s on basis of critical depth computation; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 28	0130	14	2.10

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	1.2	2.1	2.1	2.8	8.2	2.7	2.9	.87	.45	.71	.56
2	.77	1.2	2.1	2.0	2.8	6.3	3.2	2.9	.91	.46	.74	.54
3	.77	1.2	2.1	1.8	2.7	5.3	3.1	2.9	.97	.49	.58	.55
4	.86	1.2	2.1	1.8	1.6	4.7	3.0	2.6	1.0	.51	.45	.54
5	.85	1.3	1.9	1.9	1.6	4.4	3.1	2.5	1.0	.52	.42	.51
6	.87	1.3	2.0	2.0	1.8	5.0	3.1	2.5	.94	.61	.42	.51
7	.91	1.3	2.1	2.0	1.9	6.1	3.5	2.3	.87	.66	.44	.56
8	1.0	1.3	2.1	2.0	2.0	5.2	6.9	2.1	.81	.58	.44	.58
9	1.0	1.3	2.2	2.0	2.0	4.7	4.6	2.0	.78	.55	.43	.60
10	.95	1.5	2.2	2.0	2.1	7.3	5.0	1.9	.76	.57	.43	.61
11	1.1	1.6	2.2	6.8	2.2	7.3	4.5	1.8	.77	.56	.45	.61
12	1.2	1.5	2.3	5.9	2.3	6.4	4.2	2.0	.78	.56	.47	.60
13	1.2	1.4	2.3	4.2	5.4	5.7	4.0	2.3	.81	.57	.47	.59
14	1.2	1.4	2.3	3.7	5.9	5.2	3.8	2.2	.74	.59	.44	.54
15	1.2	1.4	2.3	3.5	4.3	4.8	3.6	2.1	.67	.67	.42	.52
16	1.1	1.5	2.2	3.3	3.8	4.6	3.4	2.0	.64	.73	.40	.51
17	1.1	1.5	2.2	3.2	3.5	4.5	3.3	1.8	.62	.70	.42	.53
18	1.2	1.5	2.1	3.1	3.4	4.2	3.1	1.9	.60	.71	.44	.61
19	1.3	1.3	2.1	2.9	3.4	4.0	3.1	1.9	.57	.71	.46	.63
20	1.2	1.4	2.2	2.9	3.7	3.8	3.1	1.8	.54	.72	.47	.59
21	1.2	1.5	2.2	2.8	4.0	3.7	5.8	1.8	.53	.71	.52	.65
22	1.2	1.6	2.1	2.8	3.7	3.7	6.4	1.5	.52	.69	.59	.59
23	1.1	1.6	2.1	2.8	3.7	3.3	4.6	.84	.48	.64	.62	.56
24	1.1	1.7	2.2	2.8	3.8	2.8	3.2	.75	.46	.61	.62	.53
25	1.1	1.7	2.2	2.8	4.7	2.7	2.8	.76	.47	.69	.59	.54
26	1.2	1.6	2.1	3.3	9.7	2.7	2.6	.83	.48	.72	.57	.54
27	1.2	1.6	2.1	3.6	11	2.7	2.5	.96	.49	.67	.53	.54
28	1.3	1.6	2.1	3.2	11	2.6	2.5	1.1	.49	.63	.52	.58
29	1.3	1.6	2.2	3.0	---	2.6	2.8	1.2	.48	.53	.56	.56
30	1.4	1.7	2.2	3.0	---	2.7	3.1	1.1	.48	.68	.64	.53
31	1.3	---	2.2	2.9	---	2.5	---	.99	---	.67	.61	---
TOTAL	34.01	43.5	66.8	92.1	110.8	139.7	110.6	56.23	20.53	19.16	15.87	16.91
MEAN	1.10	1.45	2.15	2.97	3.96	4.51	3.69	1.81	.68	.62	.51	.56
MAX	1.4	1.7	2.3	6.8	11	8.2	6.9	2.9	1.0	.73	.74	.65
MIN	.77	1.2	1.9	1.8	1.6	2.5	2.5	.75	.46	.45	.40	.51
AC-FT	67	86	132	183	220	277	219	112	41	38	31	34

SANTA MARGARITA RIVER BASIN

11042400 TEMECULA CREEK NEAR AGUANGA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.54	3.40	5.63	17.0	26.6	21.2	11.2	5.12	2.72	1.56	1.33	1.31
MAX	7.94	47.9	66.0	361	266	105	87.3	25.5	13.1	8.19	9.40	6.93
(WY)	1984	1966	1967	1993	1980	1991	1958	1998	1980	1980	1983	1980
MIN	.000	.000	.000	.094	.70	.41	.34	.16	.067	.000	.000	.000
(WY)	1958	1963	1963	1963	1965	1965	1961	1961	1966	1964	1957	1957

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1957 - 2001
ANNUAL TOTAL	1057.70	726.21	
ANNUAL MEAN	2.89	1.99	8.13
HIGHEST ANNUAL MEAN			56.1 1993
LOWEST ANNUAL MEAN			.28 1961
HIGHEST DAILY MEAN	37 Feb 21	11 Feb 27	3600 Jan 16 1993
LOWEST DAILY MEAN	.56 Sep 14	.40 Aug 16	.00 Aug 1 1957
ANNUAL SEVEN-DAY MINIMUM	.62 Sep 14	.43 Aug 4	.00 Aug 1 1957
MAXIMUM PEAK FLOW		14 Feb 28	8100 Jan 16 1993
MAXIMUM PEAK STAGE		2.10 Feb 28	14.60 Jan 16 1993
ANNUAL RUNOFF (AC-FT)	2100	1440	5890
10 PERCENT EXCEEDS	5.3	4.1	12
50 PERCENT EXCEEDS	1.7	1.5	1.8
90 PERCENT EXCEEDS	.80	.52	.00

11042510 VAIL LAKE NEAR TEMECULA, CA

LOCATION.—Lat 33°29'44", long 116°58'33", in Pauba Grant, Riverside County, Hydrologic Unit 18070302, near center of Vail Dam on Temecula Creek, 0.2 mi downstream from Arroyo Seco, and 10 mi east of Temecula.

DRAINAGE AREA.—320 mi².

RESERVOIR-STORAGE RECORDS

PERIOD OF RECORD.—October 1960 to September 1985 (monthend contents only). Prior to October 1977, published with Temecula Creek at Vail Dam. October 1987 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by the U.S. Bureau of Reclamation). June 4, 1969, to September 1985, nonrecording gage.

REMARKS.—Reservoir is formed by concrete arch-type dam, completed in June 1949. Total capacity, 49,370 acre-ft, between elevations 1,352.5 ft, bottom of lowest outlet, and 1,470 ft, crest of spillway, all of which is available for release. There had been no spill from Nov. 13, 1948, date of closure, to Feb. 20, 1980, when a peak spill of about 8,000 ft³/s occurred (from theoretical discharge curve). Water is released down Temecula Creek for diversion about 1 mi downstream. Figures given, excluding extremes, represent total contents at 2400 hours. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents observed, 52,670 acre-ft, spilling, Feb. 21, 1980, elevation, 1,473.0 ft, from highwater mark; minimum observed, 1,038 acre-ft, Oct. 31, 1960, elevation, 1,379.44 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 21,970 acre-ft, Apr. 24, 25, elevation, 1,438.84 ft; minimum observed, 20,160 acre-ft, Sept. 30, elevation, 1,436.15 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated Dec. 22, 1953)

1,390	2,400	1,420	11,400	1,440	22,780	1,460	39,280
1,400	4,530	1,430	16,390	1,450	30,420	1,475	54,940
1,410	7,560						

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	21160	20970	20870	20820	21040	21500	21830	21950	21750	21320	20920	20510
2	21160	20970	20870	20820	21040	21520	21830	21950	21740	21310	20900	20500
3	21160	20950	20870	20810	21050	21530	21830	21940	21730	21300	20890	20490
4	21140	20940	20860	20820	21050	21550	21830	21920	21720	21290	20870	20480
5	21140	20940	20860	20820	21060	21560	21830	21900	21710	21290	20860	20470
6	21140	20940	20860	20820	21070	21590	21830	21890	21710	21280	20840	20450
7	21130	20930	20860	20810	21080	21600	21850	21890	21680	21260	20830	20450
8	21120	20920	20870	20830	21080	21620	21850	21880	21670	21260	20820	20440
9	21120	20920	20870	20830	21080	21650	21860	21880	21660	21240	20810	20420
10	21110	20940	20870	20840	21080	21690	21860	21870	21650	21230	20800	20420
11	21100	20940	20860	20940	21090	21710	21860	21870	21630	21220	20780	20410
12	21090	20920	20860	20950	21100	21720	21870	21870	21620	21190	20780	20390
13	21060	20920	20860	20960	21160	21720	21870	21860	21610	21180	20770	20370
14	21050	20910	20860	20960	21160	21740	21870	21860	21590	21170	20750	20360
15	21050	20900	20860	20970	21170	21740	21870	21850	21570	21160	20730	20350
16	21040	20900	20850	20970	21180	21760	21870	21850	21550	21150	20730	20350
17	21030	20890	20860	20980	21180	21770	21870	21850	21540	21120	20710	20330
18	21030	20880	20840	20980	21180	21770	21880	21850	21520	21120	20700	20320
19	21020	20870	20830	20970	21190	21780	21880	21840	21500	21100	20690	20310
20	21020	20870	20830	20980	21200	21780	21880	21840	21490	21080	20660	20300
21	21010	20880	20820	20980	21210	21800	21940	21830	21480	21060	20660	20290
22	21000	20870	20830	20980	21220	21800	21930	21830	21460	21040	20640	20270
23	21000	20870	20830	20980	21250	21800	21930	21810	21450	21040	20620	20270
24	21000	20870	20830	20990	21260	21810	21950	21820	21430	21020	20610	20250
25	21000	20860	20820	21000	21330	21810	21950	21800	21410	21020	20600	20250
26	20990	20860	20820	21020	21370	21820	21960	21800	21390	20990	20580	20240
27	20980	20860	20820	21030	21440	21830	21960	21790	21370	20990	20560	20230
28	20980	20860	20820	21030	21480	21830	21960	21780	21350	20980	20550	20210
29	20980	20860	20820	21040	---	21830	21950	21780	21340	20960	20540	20200
30	20980	20860	20820	21040	---	21830	21950	21760	21330	20940	20540	20200
31	20980	---	20820	21050	---	21830	---	21760	---	20930	20520	---
MAX	21160	20970	20870	21050	21480	21830	21960	21950	21750	21320	20920	20510
MIN	20980	20860	20820	20810	21040	21500	21830	21760	21330	20930	20520	20200
a	1437.38	1437.21	1437.15	1437.49	1438.12	1438.64	1438.81	1438.54	1437.90	1437.31	1436.69	1436.20
b	-190	-120	-40	+230	+430	+350	+120	-190	-430	-400	-410	-320
CAL YR 2000	MAX 23270	MIN 20820	b -960									
WTR YR 2001	MAX 21960	MIN 20200	b -970									

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11042510 VAIL LAKE NEAR TEMECULA, CA—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.—October 2000 to September 2001.

INSTRUMENTATION.—Recording tipping-bucket rain gage since Oct. 1, 2000.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily rainfall, 0.67 in., Jan. 11, 2001; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum daily rainfall, 0.67 in., Jan. 11; no rainfall 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	.00	.00	.00	.00	.00	.00
2	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
5	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.21	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.02	.04	.26	.00	.00	.00	.00	.00
8	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.12	.06	.00	.00	.00	.00	.00
10	.00	.23	.00	.09	.01	.13	.00	.00	.00	.00	.00	.00
11	.00	.05	.00	.67	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.04	.03	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.46	.01	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.05	.00	.00	.00	.00	.03	.00	.00
21	.00	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.01	.08	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.43	.00	.00	.00	.00	.00	.00	.00
26	.01	.00	.00	.24	.12	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.02	.27	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.01	.11	.00	.00	.00	.00	.00	.00	.00
29	.18	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.07	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.26	0.29	0.00	1.12	1.80	0.51	0.56	0.00	0.00	0.04	0.00	0.00
MAX	.18	.23	.00	.67	.46	.21	.26	.00	.00	.03	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

WTR YR 2001 TOTAL 4.58 MAX .67 MIN .00

11042631 PECHANGA CREEK NEAR TEMECULA, CA

LOCATION.—Lat 33°28'06", long 117°07'40", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, on upstream side of Highway S-16 Bridge, 0.4 mi upstream from Temecula Creek, and 2.1 mi southeast of Temecula.

DRAINAGE AREA.—13.8 mi².

PERIOD OF RECORD.—October 1987 to current year. Discharge measurements only, October 1991 to September 1992.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,010 ft above sea level, from topographic map.

REMARKS.—Records fair except for discharges above 100 ft³/s, which are poor. No regulation or diversion upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,120 ft³/s, Jan. 16, 1993, gage height, 8.12 ft, from rating curve extended above 400 ft³/s on basis of step-backwater analysis; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0830	136	3.89	Feb. 26	1700	257	4.34

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	.02	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.16	.01	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	4.7	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	11	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	5.5	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	9.9	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.01	13	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	11.01	40.05	5.25	0.01	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.36	1.43	.17	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	11	13	4.7	.01	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	22	79	10	.02	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

MEAN	.000	.006	.025	4.95	3.02	2.30	.36	.16	.041	.018	.013	.000
MAX	.003	.050	.15	63.4	24.4	16.5	2.63	.95	.51	.23	.18	.006
(WY)	1988	1997	1993	1993	1993	1995	1998	1993	1993	1993	1993	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1990	1991	1992	1989	1989	1988	1988	1988	1988	1988

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	1.98		56.32			
ANNUAL MEAN	.005		.15		.90	
HIGHEST ANNUAL MEAN					8.27	1993
LOWEST ANNUAL MEAN					.000	1992
HIGHEST DAILY MEAN	1.6	Feb 21	13	Feb 26	900	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
MAXIMUM PEAK FLOW			257		Feb 26	3120
MAXIMUM PEAK STAGE			4.34		Feb 26	8.12
ANNUAL RUNOFF (AC-FT)	3.9		112		652	
10 PERCENT EXCEEDS	.00		.00		.19	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042700 MURRIETA CREEK AT TENAJA ROAD, NEAR MURRIETA, CA

LOCATION.—Lat 33°33'20", long 117°13'50", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank, at Tenaja Road crossing, and 1.0 mi northwest of Murrieta.

DRAINAGE AREA.—30.0 mi².

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete road crossing. Elevation of gage is 1,105 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation or diversion upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,390 ft³/s, Feb. 23, 1998, gage height, 10.35 ft, from rating curve extended above 304 ft³/s; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 130 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 27	1745	114	6.47

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	.00	.00	.00	.00	.00	9.8	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	1.3	e.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.65	e.00	.00	.00	.00	e.00
6	.00	.00	.00	.00	.00	1.8	.00	e.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	1.7	.00	e.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.86	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.25	1.2	.00	.00	.00	.00	.00
10	.00	.00	.01	.00	.00	6.9	1.7	.00	.00	.00	.00	.00
11	.00	.00	.00	23	.00	4.4	.18	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	2.2	1.1	.00	.00	.00	.00	.00	.00
13	.00	.00	.43	.00	18	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.11	.71	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	17	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	27	.00	e.00	.00	.00	.00	.00	.00
27	.00	2.7	.00	.00	46	.00	e.00	.00	.00	.00	.00	.00
28	.00	2.8	.00	.00	22	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	5.50	0.44	23.00	143.20	28.42	6.84	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.18	.014	.74	5.11	.92	.23	.000	.000	.000	.000	.000
MAX	.00	2.8	.43	23	46	9.8	1.7	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	11	.9	46	284	56	14	.00	.00	.00	.00	.00

e Estimated.

11042700 MURRIETA CREEK AT TENAJA ROAD, NEAR MURRIETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.046	.86	.90	26.6	4.06	2.30	2.35	.083	.000	.000	.000
MAX	.000	.18	3.42	2.87	97.5	13.4	8.95	9.40	.33	.000	.000	.000
(WY)	1998	2001	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1998	1998	1999	1999	1999	1999	1999	1999	1999	1998	1998	1998

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1998 - 2001

ANNUAL TOTAL	199.56	207.40	
ANNUAL MEAN	.55	.57	2.95
HIGHEST ANNUAL MEAN			10.7
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	85	Feb 21	46
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
MAXIMUM PEAK FLOW			114
MAXIMUM PEAK STAGE			6.47
ANNUAL RUNOFF (AC-FT)	396		411
10 PERCENT EXCEEDS	.00		.00
50 PERCENT EXCEEDS	.00		.00
90 PERCENT EXCEEDS	.00		.00

11042800 WARM SPRINGS CREEK NEAR MURRIETA, CA

LOCATION.—Lat 33°31'56", long 117°10'34", in Temecula Grant, [Riverside County](#), Hydrologic Unit 18070302, on left bank, at upstream end of Jefferson Road Bridge, 0.6 mi upstream from mouth, and 2.8 mi southeast of Murrieta.

DRAINAGE AREA.—55.4 mi².

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 1,040 ft above sea level, from topographic map.

REMARKS.—Records fair. Gage out of operation for channel work from Nov. 5, 1991, to June 10, 1992. Rancho California Water District can discharge into creek from automated pump, approximately 0.1 mi upstream from station. Beginning in water year 1999, flows partly regulated by Diamond Valley Lake, capacity, 800,000 acre-ft. Diamond Valley Lake is used to store imported water. Construction of Diamond Valley Lake, beginning in 1996, permanently rerouted 2.4 mi² of drainage area in Goodhart Canyon out of the Warm Springs Creek Basin and into the Santa Ana River Basin. Compensatory releases to Warm Springs Creek from Diamond Valley Lake may occur at times. See schematic diagram of [Santa Margarita River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,570 ft³/s, Jan. 17, 1993, gage height, 8.59 ft, from rating curve extended above 2,190 ft³/s; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0830	144	4.69	Feb. 27	1915	192	4.65
Feb. 13	2300	161	4.66				

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	.01	.21	.00	.44	.00	22	.03	.00	.00	.00	.03	.01
2	.08	.31	.17	.00	.00	2.8	.06	.00	.00	.00	.02	.00
3	.04	.00	.27	.00	.00	1.2	.03	.00	.00	.01	.05	.00
4	.00	.00	.23	.00	.00	.53	.01	.00	.00	.00	.01	.01
5	.13	.00	.16	.00	.00	.10	.01	.00	.02	.00	.01	.05
6	.18	.00	.22	.20	.00	.38	.01	.00	.00	.00	.02	.06
7	.18	.00	.24	.02	.00	.12	.66	.00	.00	.00	.03	.00
8	.12	.00	.00	.55	.00	.15	.03	.00	.00	.00	.04	.00
9	.13	.00	.39	.47	.00	.11	.05	.00	.00	.00	.04	.00
10	.14	.22	.07	.54	.00	1.3	.03	.00	.00	.02	.02	.00
11	.26	.28	.55	36	.00	.14	.09	.00	.00	.05	.00	.00
12	.04	.04	.22	.22	.11	.03	.08	.00	.00	.05	.00	.00
13	.00	.21	.12	.00	26	.00	.05	.04	.00	.05	.02	.00
14	.00	.05	.20	.00	10	.02	.05	.01	.00	.00	.04	.00
15	.00	.09	.20	.00	.02	.02	.00	.00	.00	.00	.04	.00
16	.00	.00	.19	.00	.00	.05	.00	.00	.00	.01	.05	.00
17	.00	.00	.00	.01	.01	.06	.00	.00	.00	.06	.04	.00
18	.00	.00	.00	.00	.03	.06	.00	.00	.00	.00	.00	.00
19	.00	.16	.00	.00	.02	.05	.00	.00	.00	.00	.00	.00
20	.00	.28	.00	.00	.27	.00	.00	.00	.00	.00	.01	.00
21	.00	.09	.00	.00	.00	.00	.15	.05	.00	.00	.05	.00
22	.05	.00	.00	.01	.00	.00	.05	.01	.00	.00	.05	.00
23	.30	.00	.00	.00	.07	.00	.05	.00	.00	.00	.06	.00
24	.08	.28	.00	.00	.04	.00	.00	.00	.00	.00	.06	.00
25	.00	.20	.00	.00	43	.02	.03	.00	.01	.00	.01	.00
26	.39	.00	.00	.04	33	.06	.00	.00	.00	.02	.00	.00
27	.36	.00	.23	.00	66	.03	.03	.03	.00	.04	.01	.00
28	.27	.00	.35	.00	64	.01	.00	.00	.00	.01	.01	.00
29	.82	.00	.03	.00	---	.00	.03	.00	.00	.00	.06	.00
30	.46	.00	.17	.00	---	.04	.00	.00	.00	.01	.03	.00
31	.18	---	.34	.00	---	.02	---	.00	---	.04	.07	---
TOTAL	4.22	2.42	4.35	38.50	242.57	29.30	1.53	0.14	0.03	0.37	0.88	0.13
MEAN	.14	.081	.14	1.24	8.66	.95	.051	.005	.001	.012	.028	.004
MAX	.82	.31	.55	36	66	22	.66	.05	.02	.06	.07	.06
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	8.4	4.8	8.6	76	481	58	3.0	.3	.06	.7	1.7	.3

11042800 WARM SPRINGS CREEK NEAR MURRIETA, 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	.074	.13	.54	20.1	19.1	10.4	.87	.41	.25	.071	.038	.016
MAX	.46	.68	2.27	226	116	74.0	6.19	2.99	2.93	.71	.41	.13
(WY)	1993	1997	1993	1993	1998	1991	1998	1998	1998	1998	1999	2000
MIN	.000	.000	.000	.036	.004	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1989	1990	1994	1989	1988	1989	1989	1988	1989	1988	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	280.80		324.44			
ANNUAL MEAN	.77		.89		4.27	
HIGHEST ANNUAL MEAN					27.6	
LOWEST ANNUAL MEAN					.063	
HIGHEST DAILY MEAN	93	Feb 21	66	Feb 27	2070	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 5	.00	Oct 4	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 5	.00	Oct 13	.00	Oct 1 1987
MAXIMUM PEAK FLOW			192	Feb 27	5570	Jan 17 1993
MAXIMUM PEAK STAGE			4.69	Jan 11	8.59	Jan 17 1993
ANNUAL RUNOFF (AC-FT)	557		644		3090	
10 PERCENT EXCEEDS	.61		.23		.99	
50 PERCENT EXCEEDS	.03		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11042900 SANTA GERTRUDIS CREEK NEAR TEMECULA, CA

LOCATION.—Lat 33°31'28", long 117°09'50", in Temecula Grant, [Riverside County](#), Hydrologic Unit 18070302, on left bank, 0.85 mi upstream from Murrieta Creek, 1.65 mi downstream from Tualota Creek, and 2.2 mi northeast of Temecula.

DRAINAGE AREA.—90.2 mi².

PERIOD OF RECORD.—October 1987 to current year. Discharge measurements only, October 1991 to September 1992.

REVISED RECORDS.—WDR CA-94-1: Drainage area. WDR CA-96-1: 1993(M).

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1.045 ft above sea level, from topographic map. Prior to Oct. 11, 1994, at site 800 ft upstream at different datum.

REMARKS.—Records fair. Flow partly regulated by Skinner Reservoir, capacity, 43,800 acre-ft. See schematic diagram of [Santa Margarita River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,200 ft³/s, estimated, Jan. 16, 1993, gage height, 8.47 ft, site and datum then in use, based on critical depth computation; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	2.6	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.57	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.78	3.3	.00	.00	.00	.00	.00
8	.00	.00	.00	.57	.00	.00	.20	.00	.00	.00	.00	.00
9	.00	.00	.00	.39	.00	.17	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.28	.00	16	.00	.00	.00	.00	.00	.00
11	.00	.46	.00	50	.00	3.4	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	5.0	3.0	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.07	36	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	12	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	2.7	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.93	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	45	.00	.00	.00	.00	.00	.00	.00
26	.27	.00	.00	2.3	32	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.71	56	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.32	30	.00	.00	.00	.00	.00	.00	.00
29	.30	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	1.1	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1.67	0.46	0.00	59.64	218.22	25.16	6.22	0.00	0.00	0.00	0.00	0.00
MEAN	.054	.015	.000	1.92	7.79	.81	.21	.000	.000	.000	.000	.000
MAX	1.1	.46	.00	50	56	16	3.3	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3.3	.9	.00	118	433	50	12	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	.021	.34	.74	13.4	14.0	11.1	6.09	2.88	.011	.036	.000	.054		
MAX	.12	1.94	4.93	108	77.8	50.7	46.7	28.3	.077	.39	.000	.67		
(WY)	1994	1997	1998	1993	1998	1995	1993	1993	1999	1999	1988	1997		
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
(WY)	1988	1988	1990	1991	1988	1988	1989	1988	1988	1988	1988	1988		

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	201.19		311.37			
ANNUAL MEAN	.55		.85		4.01	
HIGHEST ANNUAL MEAN					23.2	
LOWEST ANNUAL MEAN					.006	
HIGHEST DAILY MEAN	77	Feb 21	56	Feb 27	1340	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
MAXIMUM PEAK FLOW			242		e7200	
MAXIMUM PEAK STAGE			2.55		8.47	
ANNUAL RUNOFF (AC-FT)	399		618		2910	
10 PERCENT EXCEEDS	.00		.03		2.9	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11043000 MURRIETA CREEK AT TEMECULA, CA

LOCATION.—Lat 33°28'47", long 117°08'35", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on right bank, 0.4 mi upstream from confluence with Temecula Creek, 1.0 mi south of Temecula, and 12 mi downstream from Skinner Reservoir on Tualota Creek.

DRAINAGE AREA.—222 mi².

PERIOD OF RECORD.—October 1924 to current year. Prior to September 1930 monthly discharges only, published in WSP 1315-B.

REVISED RECORDS.—WSP 1345: 1952. WSP 1635: 1932, 1937. WSP 1928: Drainage area. WDR CA-93-1: 1991 (P), 1992 (M).

GAGE.—Water-stage recorder. Concrete control since Aug. 30, 1981. Elevation of gage is 970 ft above sea level, from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.—Records poor. Flow partly regulated since 1974 by Skinner Reservoir, capacity, 43,800 acre-ft. Beginning in water year 1999, flows on Warm Springs Creek, a tributary to Murrieta Creek, are slightly regulated by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Pumping upstream from station for irrigation. Rancho California Water District can discharge into creek, approximately 0.1 mi upstream, to supplement low flow. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,000 ft³/s, Jan. 16, 1993, gage height, 17.24 ft, on basis of slope-area measurement of peak flow; no flow on Dec. 11, 1976, many days in 1989–93, and on Dec. 30, 1999.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft³/s, or maximum, from rating curve extended above 6,430 ft³/s, on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0630	e1,020	4.94	Feb. 25	2030	868	4.70
Feb. 14	0100	805	4.59	Mar. 10	0515	213	2.72

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	e2.4	e1.4	e1.6	e.95	1.9	81	1.2	3.5	2.7	e2.9	e3.1	e3.1
2	e2.4	e1.0	e1.7	e1.1	1.8	19	1.7	3.4	2.4	e2.8	e2.7	e3.3
3	e2.4	e1.7	e1.4	e1.1	2.1	7.4	3.2	3.8	3.5	e3.1	e2.7	e3.3
4	e2.3	e2.1	e1.3	e.97	1.7	3.9	2.7	2.8	3.1	e3.0	e2.8	e3.2
5	e2.6	e1.3	e1.0	e1.3	2.0	2.8	3.2	3.7	3.1	e3.1	e2.6	e3.2
6	e2.5	e1.1	e.31	e.73	2.5	19	2.9	3.5	2.8	e3.0	e1.7	e3.6
7	e4.0	e.81	e.27	e1.6	3.7	14	38	3.5	3.5	e3.5	e2.3	e3.4
8	e3.4	e1.0	e.27	e2.5	2.8	5.8	17	4.4	3.4	e2.7	e3.1	e3.5
9	e2.7	e1.3	e.34	e9.7	2.5	3.6	7.8	3.4	3.5	e2.8	e2.2	e3.2
10	e2.5	e3.6	e.31	e1.9	3.2	70	16	2.8	3.1	e3.0	e1.2	e3.4
11	e2.4	e11	e.45	e393	4.5	14	4.4	2.6	2.4	e2.9	e2.5	e3.0
12	e2.5	e3.7	e.95	e49	35	5.6	3.1	3.8	3.4	e2.9	e2.1	e2.3
13	e2.4	e2.1	e.95	e17	226	3.2	3.0	4.6	3.5	e2.3	e2.4	e2.2
14	e2.3	e2.1	e1.6	e8.5	183	2.9	2.4	4.2	3.1	e2.7	e3.1	e1.9
15	e2.3	e2.2	e.93	e6.3	12	3.8	2.9	3.6	2.9	e2.6	e3.1	1.9
16	e2.8	e2.5	e.72	e3.1	5.3	2.5	2.9	3.5	2.8	e2.6	e3.1	2.2
17	e2.3	e2.2	e1.1	e2.1	3.7	1.8	3.0	3.7	2.8	e2.6	e3.3	2.8
18	e1.0	e1.3	e1.1	e2.9	3.3	1.7	3.5	3.2	2.8	e2.7	e3.2	3.3
19	e1.9	e1.0	e1.0	e4.7	6.4	1.8	3.5	3.6	2.9	e2.6	e3.1	3.2
20	e2.9	e.96	e1.0	e3.9	25	1.5	4.0	4.5	2.9	e2.1	e3.1	3.6
21	e3.3	e2.2	e1.1	e4.5	4.8	1.5	24	3.9	2.8	e2.7	e3.2	3.0
22	e3.4	e2.0	e.84	e4.4	2.9	2.4	8.6	3.0	2.8	e2.7	e3.3	3.5
23	e2.9	e2.0	e.45	e4.8	19	2.5	4.3	3.5	2.8	e2.9	e3.1	2.6
24	e3.3	e1.5	e1.2	e7.8	10	2.5	3.2	2.2	2.9	e2.8	e3.2	3.1
25	e3.2	e1.8	e1.1	e8.5	236	2.2	3.5	1.1	2.9	e2.9	e3.5	2.6
26	e3.5	e1.4	e1.1	e23	240	2.4	3.3	1.9	2.8	e2.8	e3.3	3.1
27	e5.7	e5.2	e1.1	8.9	287	2.8	2.9	2.1	2.9	e2.4	e3.3	2.7
28	e3.8	e5.7	e.92	3.4	217	1.6	2.8	3.2	2.9	e2.8	e3.3	3.0
29	e3.5	e2.5	e.99	1.6	---	2.3	2.4	3.6	2.9	e2.9	e3.1	3.0
30	e24	e1.5	e.99	1.5	---	2.3	2.8	2.2	2.9	e3.1	e3.5	2.3
31	e4.0	---	e1.1	2.0	---	1.9	---	2.9	---	e3.1	e3.0	---
TOTAL	110.6	70.17	29.19	582.75	1545.1	289.7	184.2	101.7	89.2	87.0	89.2	88.5
MEAN	3.57	2.34	.94	18.8	55.2	9.35	6.14	3.28	2.97	2.81	2.88	2.95
MAX	24	11	1.7	393	287	81	38	4.6	3.5	3.5	3.5	3.6
MIN	1.0	.81	.27	.73	1.7	1.5	1.2	1.1	2.4	2.1	1.2	1.9
AC-FT	219	139	58	1160	3060	575	365	202	177	173	177	176

e Estimated.

SANTA MARGARITA RIVER BASIN

11043000 MURRIETA CREEK AT TEMECULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1973, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.58	2.57	7.27	18.2	36.5	32.0	7.85	.92	.55	.41	.40	.65
MAX	1.87	47.3	63.2	289	604	479	167	9.65	1.73	1.20	1.23	9.40
(WY)	1969	1966	1941	1943	1969	1938	1958	1941	1941	1941	1941	1939
MIN	.10	.055	.11	.078	.20	.21	.18	.20	.13	.10	.092	.12
(WY)	1971	1970	1970	1970	1968	1965	1970	1968	1970	1970	1969	1970

SUMMARY STATISTICS

WATER YEARS 1931 - 1973

ANNUAL TOTAL	
ANNUAL MEAN	8.86
HIGHEST ANNUAL MEAN	56.9 1969
LOWEST ANNUAL MEAN	.39 1964
HIGHEST DAILY MEAN	7200 Mar 2 1938
LOWEST DAILY MEAN	.02 Jun 10 1969
ANNUAL SEVEN-DAY MINIMUM	.03 Nov 16 1969
MAXIMUM PEAK FLOW	17500 Jan 23 1943
MAXIMUM PEAK STAGE	13.80 Jan 23 1943
ANNUAL RUNOFF (AC-FT)	6420
10 PERCENT EXCEEDS	2.9
50 PERCENT EXCEEDS	.60
90 PERCENT EXCEEDS	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
MEAN	1.58	1.73	3.73	62.5	94.5	63.9	10.7	5.37	1.63	1.36	1.40	2.05
MAX	3.57	11.1	28.6	818	838	420	85.4	44.2	4.96	2.90	3.05	10.6
(WY)	2001	1997	1998	1993	1980	1978	1980	1980	1978	2000	1985	1976
MIN	.18	.000	.000	.12	.55	.093	.073	.19	.13	.13	.15	.17
(WY)	1994	1990	1990	2000	1977	1990	1989	1988	1994	1994	1993	1977

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1974 - 2001

ANNUAL TOTAL	2083.94	3267.31	
ANNUAL MEAN	5.69	8.95	20.5
HIGHEST ANNUAL MEAN			121 1993
LOWEST ANNUAL MEAN			1.02 1977
HIGHEST DAILY MEAN	516 Feb 21	393 Jan 11	7790 Jan 16 1993
LOWEST DAILY MEAN	.02 Jan 4	.27 Dec 7	.00 Dec 11 1976
ANNUAL SEVEN-DAY MINIMUM	.02 Jan 4	.41 Dec 6	.00 Nov 28 1988
MAXIMUM PEAK FLOW		e1020 Jan 11	25000 Jan 16 1993
MAXIMUM PEAK STAGE		4.94 Jan 11	17.24 Jan 16 1993
ANNUAL RUNOFF (AC-FT)	4130	6480	14850
10 PERCENT EXCEEDS	3.5	6.3	8.5
50 PERCENT EXCEEDS	2.2	2.9	1.0
90 PERCENT EXCEEDS	.35	1.1	.14

e Estimated.

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA

LOCATION.—Lat 33°28'26", long 117°08'29", in Temecula Grant, [Riverside County](#), Hydrologic Unit 18070302, on left bank, at upper end of Temecula Canyon, 0.1 mi downstream from confluence of Murrieta and Temecula Creeks, 1.4 mi south of Temecula, 10 mi downstream from Vail Dam, and about 12 mi downstream from Skinner Reservoir.

DRAINAGE AREA.—588 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1923 to current year. Prior to October 1952, published as "Temecula Creek at Railroad Canyon, near Temecula."

REVISED RECORDS.—WSP 981: 1927(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Concrete control since Nov. 3, 1966; buried by sand Nov. 19, 1985, uncovered by high flow in March 1991. Elevation of gage is 950 ft above sea level, from topographic map. Prior to Nov. 3, 1966, at site 100 ft downstream at same datum.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow partly regulated since November 1948 by Vail Lake (station 11042510) on Temecula Creek, and since 1974 by Skinner Reservoir. Rancho California Water District can discharge into Murrieta Creek, approximately 1.0 mi upstream, to supplement low flow. Beginning in water year 1999, flows on Warm Springs Creek, a tributary to Murrieta Creek, are slightly regulated by Diamond Valley Lake, capacity, 800,00 acre-ft (see station 11042800). See schematic diagram of [Santa Margarita River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 31,000 ft³/s, Jan. 16, 1993, gage height, 22.5 ft, from rating curve extended above 4,000 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 0.16 ft³/s, Mar. 31, Apr. 1, 11, 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	3.0	2.7	2.4	1.4	4.1	83	1.7	3.8	3.3	3.3	3.6	3.7
2	3.0	2.3	2.8	1.6	3.9	25	2.1	3.4	3.0	3.2	3.1	4.1
3	3.0	2.3	2.2	1.5	4.3	9.6	3.6	4.0	4.7	3.7	3.2	3.9
4	2.9	2.3	2.3	1.4	3.5	5.5	3.4	2.8	3.9	3.5	3.5	3.8
5	3.0	2.0	.96	1.6	3.6	4.5	3.7	3.7	3.8	3.8	3.3	4.0
6	3.1	2.0	.64	.98	4.3	23	3.3	3.6	3.4	3.4	2.3	4.3
7	5.8	1.3	.56	2.2	6.0	23	51	3.5	4.0	4.2	3.0	3.9
8	4.0	1.6	.54	3.1	4.7	7.6	31	4.5	4.0	3.3	3.7	4.2
9	3.3	2.1	.51	15	4.0	5.4	9.6	3.5	4.1	3.6	2.7	3.8
10	3.1	3.7	.54	2.4	4.9	111	17	2.6	3.9	4.1	1.6	4.4
11	2.7	13	.76	546	7.0	19	5.4	2.4	3.2	3.5	2.9	3.5
12	2.8	4.2	1.2	68	34	7.2	3.9	3.8	3.9	3.6	2.6	2.9
13	3.0	2.7	1.1	24	274	4.5	3.7	5.3	4.2	3.5	2.9	2.6
14	2.9	2.6	1.9	9.4	232	4.1	2.9	4.8	3.8	3.9	4.1	2.6
15	2.9	2.6	1.1	6.8	22	5.2	3.5	4.3	3.5	3.6	4.5	2.4
16	3.5	2.8	.96	4.3	9.2	3.7	3.4	4.1	2.5	3.8	4.6	2.5
17	3.0	2.7	1.6	3.0	6.3	3.1	3.5	4.3	2.8	3.7	4.0	3.2
18	1.5	1.9	1.6	3.7	4.9	2.9	4.0	4.6	e2.9	3.6	4.3	3.7
19	2.5	1.5	1.4	4.9	6.2	2.9	4.0	4.7	e2.8	3.4	4.4	3.7
20	3.5	1.5	1.5	4.4	34	2.3	4.6	4.6	2.7	2.8	4.3	3.9
21	4.0	3.0	1.7	e4.9	8.5	2.3	31	4.1	3.4	3.5	4.4	3.7
22	4.2	2.9	1.1	e5.2	5.6	3.1	12	3.5	3.7	3.6	4.5	4.0
23	3.6	3.0	.76	e5.4	27	3.1	6.2	3.9	3.3	3.5	3.9	3.3
24	4.0	2.5	2.0	e10	17	3.2	5.0	3.2	3.1	3.5	3.8	3.8
25	4.0	2.7	1.8	e9.0	359	2.8	6.4	2.5	3.3	3.4	4.6	3.3
26	4.4	2.5	1.7	e44	318	3.1	4.0	2.7	3.3	4.2	4.1	3.7
27	8.4	7.3	1.8	19	409	3.6	3.5	2.7	3.3	3.0	4.1	3.3
28	5.8	8.6	1.4	8.9	243	2.3	3.4	4.0	3.4	3.7	4.4	3.8
29	5.3	3.7	1.5	3.9	---	2.8	2.9	4.1	3.5	3.0	4.3	4.0
30	38	2.6	1.5	3.8	---	2.8	3.1	2.7	3.3	3.5	4.7	3.0
31	5.8	---	1.8	4.0	---	2.4	---	3.1	---	3.8	4.1	---
TOTAL	150.0	96.6	43.63	823.78	2060.0	384.0	242.8	114.8	104.0	110.2	115.5	107.0
MEAN	4.84	3.22	1.41	26.6	73.6	12.4	8.09	3.70	3.47	3.55	3.73	3.57
MAX	38	13	2.8	546	409	111	51	5.3	4.7	4.2	4.7	4.4
MIN	1.5	1.3	.51	.98	3.5	2.3	1.7	2.4	2.5	2.8	1.6	2.4
AC-FT	298	192	87	1630	4090	762	482	228	206	219	229	212

e Estimated.

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1948, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.04	10.4	21.4	32.6	114	90.3	26.7	10.2	7.01	5.41	5.01	5.93
MAX	11.8	39.3	99.9	369	1205	1007	226	40.2	15.1	9.90	9.65	19.4
(WY)	1942	1945	1941	1943	1927	1938	1941	1941	1941	1941	1941	1939
MIN	3.77	3.11	4.97	8.03	7.59	5.90	4.19	3.62	3.12	1.55	1.90	2.31
(WY)	1925	1930	1930	1936	1925	1931	1928	1929	1929	1929	1926	1926

SUMMARY STATISTICS

WATER YEARS 1923 - 1948

ANNUAL MEAN	28.2
HIGHEST ANNUAL MEAN	101 1927
LOWEST ANNUAL MEAN	6.22 1925
HIGHEST DAILY MEAN	19900 Feb 16 1927
LOWEST DAILY MEAN	.90 Aug 9 1929
ANNUAL SEVEN-DAY MINIMUM	.99 Aug 8 1929
MAXIMUM PEAK FLOW	25000 Feb 16 1927
MAXIMUM PEAK STAGE	14.60 Feb 16 1927
ANNUAL RUNOFF (AC-FT)	20390
10 PERCENT EXCEEDS	21
50 PERCENT EXCEEDS	8.5
90 PERCENT EXCEEDS	3.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1973, BY WATER YEAR (WY)

MEAN	3.39	6.24	8.90	21.8	36.7	18.6	12.4	3.97	3.35	2.79	3.01	3.06
MAX	6.04	53.3	41.4	251	638	212	177	6.70	5.59	4.69	6.38	6.55
(WY)	1954	1966	1966	1952	1969	1952	1958	1949	1949	1949	1953	1953
MIN	2.05	2.22	2.69	2.73	2.54	2.57	2.35	2.39	2.19	1.51	1.28	1.45
(WY)	1967	1967	1965	1965	1965	1965	1972	1970	1973	1972	1972	1970

SUMMARY STATISTICS

WATER YEARS 1949 - 1973

ANNUAL MEAN	10.2
HIGHEST ANNUAL MEAN	62.5 1969
LOWEST ANNUAL MEAN	2.96 1964
HIGHEST DAILY MEAN	7730 Feb 25 1969
LOWEST DAILY MEAN	.30 Aug 18 1966
ANNUAL SEVEN-DAY MINIMUM	.67 Aug 17 1966
MAXIMUM PEAK FLOW	14600 Feb 25 1969
MAXIMUM PEAK STAGE	15.32 Feb 25 1969
ANNUAL RUNOFF (AC-FT)	7390
10 PERCENT EXCEEDS	7.3
50 PERCENT EXCEEDS	3.7
90 PERCENT EXCEEDS	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

MEAN	3.14	4.40	6.24	85.8	123	82.1	14.5	8.25	3.29	2.62	2.75	3.34
MAX	10.8	32.8	32.4	1255	1105	438	85.6	46.6	6.87	4.55	9.99	13.9
(WY)	1994	1986	1998	1993	1980	1978	1980	1978	1978	1980	1993	1976
MIN	1.25	.27	.33	.59	1.84	.36	.32	.58	.72	.58	.91	1.33
(WY)	1982	1989	2000	2000	1989	1988	1989	1988	1984	1984	1984	1987

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1974 - 2001

ANNUAL TOTAL	2997.68	4352.31	
ANNUAL MEAN	8.19	11.9	27.8
HIGHEST ANNUAL MEAN			183 1993
LOWEST ANNUAL MEAN			2.17 1987
HIGHEST DAILY MEAN	829 Feb 21	546 Jan 11	13000 Jan 16 1993
LOWEST DAILY MEAN	.38 Jan 6	.51 Dec 9	.16 Mar 31 1988
ANNUAL SEVEN-DAY MINIMUM	.39 Jan 5	.64 Dec 5	.18 Mar 31 1988
MAXIMUM PEAK FLOW		1550 Jan 11	31000 Jan 16 1993
MAXIMUM PEAK STAGE		5.28 Jan 11	22.50 Jan 16 1993
ANNUAL RUNOFF (AC-FT)	5950	8630	20120
10 PERCENT EXCEEDS	5.1	8.9	14
50 PERCENT EXCEEDS	3.1	3.6	2.7
90 PERCENT EXCEEDS	.68	1.8	1.1

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1999 to current year.

DISSOLVED OXYGEN: December 1999 to current year.

pH: December 1999 to current year.

SPECIFIC CONDUCTANCE: December 1999 to current year.

WATER TEMPERATURE: December 1999 to current year.

PERIOD OF DAILY RECORD.—December 1999 to current year.

DISSOLVED OXYGEN: December 1999 to current year.

pH: December 1999 to current year.

SPECIFIC CONDUCTANCE: December 1999 to current year.

WATER TEMPERATURE: December 1999 to current year.

INSTRUMENTATION.—Water-quality monitor since December 1999.

REMARKS.—Dissolved oxygen records rated poor. pH records rated poor through Mar. 29 and fair thereafter. Specific conductance records rated good. Temperature records rated good through Feb. 7 and excellent thereafter. Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 17.4 mg/L, Mar. 25, 2000; minimum recorded, 4.4 mg/L, Sept. 1, 2000, May 24, 2001.

pH: Maximum recorded, 8.8 standard units, Mar. 23, 2000; minimum recorded, 6.4 standard units, July 27–29, 2001.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,440 microsiemens, Apr. 4, 2001; minimum recorded, 220 microsiemens, Jan. 11, 2001.

WATER TEMPERATURE: Maximum recorded, 27.5°C, July 19, 27, Aug. 1, 4, 10, 2000; minimum recorded, 4.5°C, Jan. 8, 2000.

EXTREMES FOR CURRENT YEAR.—

DISSOLVED OXYGEN: Maximum recorded, 12.3 mg/L, Jan. 7; minimum recorded, 4.4 mg/L, May 24.

pH: Maximum recorded, 8.7 standard units, Mar. 5; minimum recorded, 6.4 standard units, July 27–29.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,440 microsiemens, Apr. 4; minimum recorded, 220 microsiemens, Jan. 11.

WATER TEMPERATURE: Maximum recorded, 26.5°C, Aug. 14; minimum recorded, 6.0°C, Dec. 28.

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, (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)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAY								
03...*	1420	720	9.1	111	8.1	1240	22.0	.20
03...*	1422	720	9.2	113	8.1	1240	22.5	.60
03...*	1425	720	9.3	114	8.1	1240	22.5	1.10
03...*	1427	720	9.4	115	8.1	1240	22.5	1.70
03...*	1429	720	9.4	115	8.1	1240	22.5	2.30
03...*	1431	720	9.4	115	8.1	1240	22.5	2.90
03...*	1433	720	9.4	115	8.1	1240	22.5	3.50
03...*	1435	720	9.4	115	8.1	1240	22.5	4.10
03...*	1437	720	9.3	114	8.1	1240	22.5	4.70
03...*	1439	720	9.2	113	8.1	1240	22.5	5.30
03...*	1441	720	9.2	113	8.1	1240	22.5	5.90
03...*	1443	720	9.2	113	8.1	1240	22.5	6.50

* Instantaneous discharge at the time of cross-sectional measurements: 3.6 ft³/s.

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, 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	8.1	7.7	7.8	7.8	8.1	8.0	8.0	7.9	8.4	8.2	8.4	8.3
2	8.0	7.7	8.0	7.7	8.2	8.0	7.9	7.9	8.4	8.3	8.5	8.4
3	8.0	7.8	8.0	7.7	8.2	8.1	8.1	7.9	8.4	8.1	8.6	8.4
4	7.8	7.7	8.0	7.8	8.1	8.1	8.1	7.9	8.4	8.1	8.6	8.4
5	8.0	7.7	8.0	7.8	8.2	8.1	8.1	7.9	8.4	8.1	8.7	8.5
6	8.0	7.7	7.8	7.6	8.5	8.1	8.2	7.9	8.4	8.1	8.6	8.1
7	8.2	7.9	7.8	7.6	8.5	8.1	8.3	7.9	8.3	8.0	8.3	8.1
8	8.2	7.8	7.8	7.6	8.5	8.0	8.2	8.0	8.3	7.9	8.5	8.2
9	8.2	7.7	7.7	7.6	8.3	8.0	8.0	7.7	8.3	7.9	8.5	8.3
10	8.3	7.8	7.7	7.6	8.3	8.1	7.7	7.5	8.3	8.1	8.5	8.3
11	8.2	7.7	8.1	7.5	8.1	8.1	8.5	7.5	8.5	8.1	8.4	8.2
12	8.2	7.7	7.5	7.5	8.2	8.1	7.9	7.7	8.3	7.7	8.2	8.1
13	8.3	7.7	7.7	7.5	8.2	8.0	7.9	7.8	8.5	7.6	8.2	8.1
14	8.1	7.7	7.7	7.6	8.2	8.0	7.9	7.8	8.2	7.9	8.3	8.0
15	8.3	7.8	7.8	7.6	8.3	8.2	8.0	7.9	8.2	8.0	8.4	8.0
16	8.3	7.8	7.8	7.7	8.2	8.2	8.0	7.9	8.3	8.1	8.2	7.9
17	8.5	7.9	7.9	7.7	8.2	8.1	7.9	7.8	8.3	8.1	8.2	7.9
18	8.3	7.9	7.9	7.8	8.2	8.1	8.0	7.8	8.3	8.2	8.3	7.8
19	8.1	7.8	8.0	7.9	8.1	8.0	8.1	7.9	8.4	8.2	8.1	7.8
20	8.2	7.8	8.0	7.9	8.2	8.0	8.1	8.0	8.3	7.9	8.1	7.7
21	8.2	7.8	7.9	7.8	8.1	8.1	8.2	8.1	8.4	7.9	8.0	7.7
22	8.0	7.8	7.8	7.7	8.1	7.9	8.3	8.0	8.4	8.2	8.0	7.8
23	8.1	7.8	7.9	7.8	8.0	7.9	8.1	8.0	8.3	8.0	8.1	7.8
24	8.1	7.9	8.0	7.9	8.0	7.9	8.2	7.9	8.0	7.9	8.2	7.8
25	8.1	7.9	8.0	7.8	8.0	7.9	8.2	8.0	8.5	8.0	8.1	7.8
26	8.1	7.8	8.0	7.9	8.1	8.0	8.1	7.9	8.6	8.1	8.3	8.0
27	8.1	7.8	8.0	7.8	8.1	7.9	7.9	7.8	8.5	8.2	8.3	8.0
28	8.0	7.8	7.9	7.7	7.9	7.9	8.2	7.9	8.3	8.1	8.3	7.9
29	8.4	7.9	7.9	7.8	7.9	7.8	8.2	8.1	---	---	8.1	7.6
30	8.1	7.8	8.0	7.8	7.9	7.8	8.2	8.1	---	---	8.1	7.9
31	7.9	7.8	---	---	8.0	7.8	8.3	8.1	---	---	8.1	7.9
MONTH	8.5	7.7	8.1	7.5	8.5	7.8	8.5	7.5	8.6	7.6	8.7	7.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.8	7.7	7.3	7.6	7.2	7.9	7.5	7.7	7.5	7.9	7.5
2	8.0	7.8	7.8	7.6	7.5	7.2	7.9	7.6	7.7	7.5	7.9	7.5
3	8.1	7.9	8.1	7.6	7.7	7.1	8.0	7.5	7.7	7.5	8.0	7.6
4	8.2	8.0	8.0	7.6	7.9	7.4	8.0	7.5	7.9	7.6	7.9	7.6
5	8.2	7.9	8.0	7.6	8.0	7.4	7.8	7.3	7.9	7.5	7.9	7.6
6	8.2	7.9	7.9	7.6	7.9	7.3	7.6	7.2	8.0	7.5	7.9	7.6
7	8.2	7.5	8.0	7.5	7.6	7.3	7.8	7.3	8.1	7.6	8.0	7.6
8	7.7	7.5	8.1	7.5	7.7	7.3	7.9	7.4	8.0	7.7	7.8	7.6
9	7.8	7.7	8.1	7.6	7.4	7.1	7.6	7.3	7.9	7.6	7.8	7.5
10	7.8	7.7	8.1	7.6	7.8	7.2	7.8	7.3	7.8	7.7	7.7	7.4
11	7.9	7.7	8.0	7.6	7.8	7.2	7.7	7.4	7.9	7.8	7.5	7.3
12	7.9	7.7	7.9	7.5	8.2	7.2	7.7	7.4	7.9	7.7	7.4	7.3
13	7.9	7.7	8.0	7.5	8.1	7.5	7.6	7.4	8.0	7.8	7.5	7.3
14	8.0	7.7	8.1	7.5	8.0	7.5	7.5	7.3	8.0	7.6	7.5	7.4
15	7.9	7.7	8.1	7.5	8.3	7.5	7.4	7.3	8.0	7.6	7.6	7.3
16	7.9	7.7	8.2	7.4	8.1	7.5	7.5	7.2	7.7	7.5	7.6	7.3
17	7.8	7.6	8.2	7.4	8.0	7.6	7.5	7.3	7.5	7.0	7.6	7.4
18	7.7	7.4	8.1	7.3	8.1	7.5	7.6	7.4	7.7	6.9	7.7	7.4
19	7.6	7.5	8.2	7.5	8.3	7.3	7.6	7.4	8.0	7.6	7.7	7.4
20	7.6	7.4	8.2	7.5	7.9	7.4	7.6	7.4	8.0	7.6	7.7	7.5
21	---	---	8.1	7.5	7.9	7.4	7.7	7.4	8.1	7.6	7.6	7.4
22	---	---	8.2	7.5	8.3	7.5	7.8	7.5	8.0	7.6	7.6	7.4
23	---	---	8.3	7.5	8.3	7.5	7.8	7.6	8.0	7.6	7.5	7.4
24	---	---	8.2	7.4	7.8	7.5	7.8	7.5	8.0	7.6	7.6	7.4
25	---	---	8.0	7.4	8.1	7.5	7.9	7.1	8.0	7.6	7.5	7.3
26	---	---	7.8	7.4	8.1	7.7	7.2	6.6	8.0	7.6	7.5	7.3
27	7.8	7.6	7.7	7.4	8.3	7.8	6.7	6.4	8.0	7.6	7.6	7.3
28	7.8	7.6	7.9	7.3	8.1	7.7	6.5	6.4	8.0	7.6	7.6	7.3
29	7.8	7.5	7.7	7.2	8.0	7.7	7.0	6.4	8.0	7.6	7.6	7.3
30	7.6	7.4	7.6	7.2	7.8	7.5	7.4	7.0	7.9	7.6	7.4	7.2
31	---	---	7.6	7.1	---	---	7.5	7.1	7.9	7.5	---	---
MONTH	---	---	8.3	7.1	8.3	7.1	8.0	6.4	8.1	6.9	8.0	7.2

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, 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	950	835	1000	831	1100	1080	1320	1290	1160	1150	---	---
2	911	843	1080	1000	1110	1080	1310	1280	1180	1150	---	---
3	911	862	1110	1070	1150	1110	1300	1270	1200	1180	---	---
4	895	847	1140	1100	1150	1130	1310	1270	1260	1200	---	---
5	929	865	1150	1100	1190	1130	1310	1270	1270	1250	---	---
6	1040	928	1160	1120	1220	1180	1320	1290	1280	1250	---	---
7	1250	952	1140	1120	1230	1160	1360	1230	1310	1270	---	---
8	1090	1020	1150	1090	1230	1180	1390	1300	1290	1190	---	---
9	1050	966	1100	1080	1210	1140	1300	733	1190	1160	---	---
10	1020	967	1110	1060	1200	1150	802	722	1210	1170	---	---
11	1030	983	1120	840	1170	1070	827	220	1240	1170	---	---
12	1000	964	842	798	1230	1060	478	372	---	---	---	---
13	997	946	943	840	1370	1230	550	478	---	---	---	---
14	971	916	1030	934	1390	1310	599	550	---	---	---	---
15	992	946	1100	1030	1380	1340	658	599	---	---	1320	1230
16	1010	940	1120	1100	1340	1300	730	658	---	---	1310	1170
17	1050	986	1140	1120	1300	1230	802	730	---	---	1270	1210
18	1150	988	1160	1140	1330	1260	852	802	---	---	1320	1270
19	1180	1020	1170	1150	1350	1330	897	852	---	---	1350	1310
20	1050	936	1170	1120	1340	1320	941	897	---	---	1370	1330
21	1040	931	1140	1100	1340	1310	1020	941	---	---	1370	1340
22	1020	935	1160	1100	1340	1320	1050	1020	---	---	1390	1340
23	1040	930	1160	1140	1340	1310	1100	1050	---	---	1400	1370
24	1040	930	1150	1130	1330	1220	1130	1100	---	---	1400	1360
25	1030	942	1160	1120	1340	1300	1190	1130	---	---	1380	1340
26	1050	927	1140	1130	1350	1310	1220	1140	---	---	1360	1330
27	1110	944	1150	802	1350	1300	1220	1190	---	---	1370	1330
28	1050	964	1180	810	1330	1290	1220	1200	---	---	1380	1360
29	1050	892	1110	1030	1310	1280	1200	1190	---	---	1360	1320
30	914	469	1080	1040	1310	1280	1200	1180	---	---	1380	1360
31	831	611	---	---	1300	1280	1180	1160	---	---	1410	1380
MONTH	1250	469	1180	798	1390	1060	1390	220	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1390	1380	1160	1110	1170	1110	1240	1160	1240	1160	1140	1060
2	1390	1340	1150	1130	1140	1090	1250	1170	1220	1120	1180	1080
3	1430	1360	1180	1130	1200	1120	1250	1130	1220	1120	1200	1100
4	1440	1390	1160	1110	1210	1170	1270	1180	1230	1120	1140	1070
5	1390	1280	1160	1060	1230	1130	1260	1170	1240	1160	1140	1070
6	1280	1250	1200	1110	1190	1130	1270	1180	1200	1130	1160	1080
7	1300	400	1190	1120	1200	1140	1260	1120	1190	988	1180	1070
8	412	383	1200	1100	1220	1150	1270	1190	1220	1020	1140	1050
9	547	408	1140	1080	1230	1160	1240	1120	1170	1050	1150	1060
10	676	546	1080	1010	1210	1160	1240	1190	1110	1060	1150	1040
11	794	676	1010	976	1210	1150	1280	1160	1220	1110	1270	1130
12	894	794	1090	937	1220	1080	1230	1140	1310	1200	1280	1270
13	1040	894	1220	1090	1250	1160	1230	1140	1330	1160	1300	1280
14	1140	1040	1250	1110	1240	1150	1280	1150	1200	1010	1300	1270
15	1200	1140	1170	1090	1230	1150	1250	1150	1140	1010	1320	1280
16	1240	1200	1120	1070	1150	1130	1200	1140	1140	1000	1320	1290
17	1260	1240	1140	1080	1210	1120	1210	1150	1100	979	1320	1230
18	1260	1250	1160	1070	1200	1080	1220	1130	1130	963	1230	1120
19	1250	1240	1210	1120	1230	1150	1220	1130	1120	998	1200	1130
20	1250	1230	1160	1110	1210	1060	1200	1140	1110	982	1170	1130
21	1230	559	1180	1120	1270	1160	1210	1100	1120	982	1220	1140
22	727	683	1230	1170	1260	1160	1230	1170	1110	989	1180	1120
23	774	727	1220	1140	1280	1200	1240	1180	1140	1030	1210	1150
24	847	774	1290	1220	1230	1150	1230	1130	1080	1010	1190	1140
25	924	847	1320	1290	1270	1170	1220	1130	1130	1020	1210	1160
26	1150	924	1290	1280	1240	1160	1210	1120	1140	1060	1190	1130
27	1200	1150	1300	1290	1220	1170	1210	1130	1150	1030	1230	1140
28	1200	1180	1320	1300	1230	1150	1180	1060	1120	1020	1210	1160
29	1180	1170	1320	1290	1230	1140	1210	1150	1140	1050	1240	1160
30	1170	1150	1290	1290	1260	1160	1210	1110	1170	1050	1230	1140
31	---	---	1290	1140	---	---	1370	1150	1200	1060	---	---
MONTH	1440	383	1320	937	1280	1060	1370	1060	1330	963	1320	1040

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, 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	19.5	15.5	12.5	11.5	10.0	8.5	7.0	10.5	7.0	15.0	9.5
2	24.0	20.5	15.5	13.0	12.5	10.5	9.0	7.0	11.5	8.0	14.0	10.5
3	23.0	20.5	15.0	12.5	11.5	10.0	10.0	8.0	12.5	9.0	16.0	11.5
4	22.0	20.5	15.0	13.0	11.5	9.5	10.0	8.5	14.5	10.5	14.5	12.0
5	23.0	20.0	14.0	12.5	12.0	10.5	9.0	8.5	15.0	12.0	16.5	12.0
6	22.0	20.5	15.5	14.0	12.0	10.0	10.0	8.0	14.5	11.5	16.0	12.5
7	22.5	20.0	14.5	13.0	13.0	11.5	10.5	9.0	13.5	11.0	14.0	12.0
8	22.5	19.5	13.0	11.5	13.5	11.5	10.0	9.5	11.5	8.5	18.0	12.0
9	22.0	19.5	13.0	11.5	14.0	12.5	12.0	9.0	11.5	8.5	16.0	13.0
10	21.5	19.5	13.5	12.0	14.0	13.0	11.0	9.5	10.5	9.5	13.5	9.0
11	19.5	17.5	13.5	11.0	13.5	12.0	11.0	9.5	11.0	8.5	14.0	12.0
12	18.5	16.5	11.5	9.5	13.5	12.0	10.0	9.0	12.0	10.0	17.5	12.0
13	20.0	16.0	11.5	9.0	12.0	10.5	11.0	8.5	11.5	8.0	18.0	12.0
14	20.0	16.5	11.0	9.0	11.0	10.0	11.0	8.0	11.0	7.0	18.0	12.5
15	20.0	16.5	11.0	9.0	11.0	10.0	10.5	9.0	13.0	7.0	20.0	14.5
16	20.0	16.5	11.0	9.0	11.0	9.5	11.0	8.0	14.5	8.5	19.0	15.0
17	19.5	16.5	11.5	9.5	10.5	9.0	10.0	7.0	12.5	9.5	20.5	14.5
18	19.0	17.5	10.0	8.0	10.0	9.0	10.0	7.0	13.0	10.5	21.5	15.0
19	19.5	17.5	10.0	8.0	10.0	8.5	9.5	6.5	14.5	11.5	22.5	15.5
20	20.5	17.5	10.0	8.0	9.5	8.0	11.5	7.5	15.5	12.0	23.0	16.5
21	20.0	18.5	12.0	9.5	9.0	7.5	10.5	8.0	16.0	11.0	21.5	16.0
22	19.5	17.5	12.5	11.0	8.5	7.5	12.5	9.5	15.5	12.5	17.5	16.0
23	19.5	17.0	12.0	10.5	8.5	7.0	12.0	10.0	14.0	10.5	20.5	15.0
24	20.0	18.0	12.0	10.0	9.0	7.5	11.0	9.5	10.5	9.0	20.5	16.0
25	19.5	17.0	11.5	9.5	9.0	7.5	11.0	8.0	12.5	9.5	21.0	17.0
26	18.5	17.0	12.0	10.0	8.0	6.5	10.5	8.0	13.5	10.0	21.0	17.0
27	18.5	17.0	14.0	10.0	8.0	6.5	9.0	7.5	13.0	10.5	21.5	15.5
28	18.5	17.0	13.0	11.5	7.5	6.0	11.0	8.0	11.5	10.0	20.5	17.0
29	18.5	17.0	12.0	10.0	8.0	6.5	10.5	8.5	---	---	20.5	16.5
30	17.5	14.0	11.5	10.5	8.5	6.5	11.0	8.5	---	---	23.0	17.5
31	16.0	13.5	---	---	8.5	7.0	11.0	9.0	---	---	23.5	18.0
MONTH	24.0	13.5	15.5	8.0	14.0	6.0	12.5	6.5	16.0	7.0	23.5	9.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.0	17.0	23.5	18.0	24.5	20.0	26.0	20.5	24.5	20.0	24.0	19.5
2	20.0	16.5	20.0	18.0	21.0	19.5	24.5	21.0	24.5	20.0	24.5	20.5
3	17.0	15.5	22.5	16.5	23.5	18.5	24.5	21.0	24.5	20.0	24.5	21.0
4	16.0	14.0	23.0	16.5	23.5	18.5	25.5	22.0	24.0	20.0	24.5	20.5
5	17.0	14.0	22.0	16.5	23.5	18.5	24.5	21.5	23.5	19.5	23.5	20.0
6	17.0	13.5	23.0	16.5	24.5	19.0	24.5	22.0	24.5	20.0	23.5	20.0
7	15.5	13.0	24.0	17.5	24.0	19.0	25.0	21.0	25.5	21.0	23.0	20.0
8	17.0	11.5	24.5	18.5	25.0	19.5	25.0	21.0	25.0	21.0	22.5	19.5
9	15.0	12.0	25.0	19.0	25.5	20.0	24.5	20.5	25.0	20.5	22.5	19.5
10	17.0	11.5	25.0	18.0	24.5	20.0	24.5	20.5	24.5	21.0	22.5	20.0
11	16.0	13.0	24.5	18.5	24.5	19.5	25.0	20.0	24.5	20.5	23.0	19.5
12	18.5	13.0	20.5	19.0	23.5	19.5	24.0	19.5	24.5	20.5	22.5	19.0
13	20.0	13.0	23.0	18.0	23.5	19.5	24.5	20.0	25.5	20.5	22.0	18.0
14	20.0	13.5	23.5	18.5	24.0	18.5	24.5	20.5	26.5	21.0	22.0	18.0
15	20.5	14.0	23.5	19.0	24.5	19.0	24.5	20.5	25.5	21.0	22.0	18.5
16	20.5	15.0	24.0	18.5	24.5	18.5	24.0	20.0	25.0	20.5	21.5	18.0
17	22.0	15.5	23.5	18.5	24.5	19.0	23.5	19.0	25.5	20.5	21.0	18.0
18	19.0	16.0	24.0	19.0	24.5	19.0	23.5	19.0	25.0	21.0	21.5	18.0
19	21.0	15.5	23.5	19.0	24.5	19.0	24.0	19.5	25.0	21.0	22.0	18.5
20	19.5	15.5	24.0	19.0	24.0	19.0	23.5	19.0	25.0	20.5	21.5	18.5
21	17.0	11.5	24.0	19.5	23.0	19.5	24.0	19.5	23.5	20.0	21.5	17.5
22	18.5	12.0	25.5	20.0	24.0	19.5	23.5	19.0	24.0	20.0	21.5	18.0
23	20.5	14.0	25.5	20.0	24.5	20.0	24.0	19.5	24.0	19.0	21.5	17.5
24	22.5	16.0	24.5	20.5	24.5	19.0	24.0	19.5	24.0	19.5	22.0	18.0
25	23.0	17.5	25.5	20.0	23.5	19.0	24.0	20.0	24.5	20.0	22.5	19.0
26	23.5	17.5	23.0	20.0	23.5	19.5	24.0	19.5	25.5	20.0	22.5	19.0
27	24.0	18.0	20.5	19.5	23.5	18.5	25.0	20.5	24.0	19.5	22.5	19.0
28	22.5	18.0	21.5	18.5	24.0	19.0	24.5	20.0	23.5	19.5	21.5	18.0
29	23.0	17.5	23.5	18.5	24.5	19.5	25.0	20.5	23.0	19.0	20.5	17.0
30	22.5	17.0	25.0	19.0	25.0	20.0	24.0	20.5	23.0	20.0	21.5	18.0
31	---	---	25.0	19.5	---	---	24.0	20.0	23.5	19.0	---	---
MONTH	24.0	11.5	25.5	16.5	25.5	18.5	26.0	19.0	26.5	19.0	24.5	17.0

11044250 RAINBOW CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°24'27", long 117°12'00", in NW 1/4 SE 1/4 sec.9, T.9 S., R.3 W., San Diego County, Hydrologic Unit 18070302, on left bank, 1.0 mi upstream from the confluence with Santa Margarita River, and 3.4 mi northeast of Fallbrook.

DRAINAGE AREA.—10.3 mi².

PERIOD OF RECORD.—November 1989 to current year.

REVISED RECORDS.—WDR CA-91-1: 1990(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 540 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation upstream from station. Undetermined amount of water upstream from station used for irrigation by a local nursery. Natural flow affected by return flow from irrigated areas. Water is imported for domestic use and irrigation. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,000 ft³/s (estimated), Jan. 16, 1993, gage height, unknown, on basis of slope-area measurement of peak flow; maximum recorded gage height, 8.35 ft, Feb. 23, 1998; minimum daily, 0.02 ft³/s, many days in 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 712 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0615	214	5.09

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	.30	.31	.18	.34	8.3	.68	.30	.20	.19	.03	.02
2	.07	.23	.28	.17	.31	4.5	1.1	.33	.24	.22	.08	.02
3	.07	.20	.69	.17	.30	3.3	.85	.30	.24	.15	.05	.02
4	.07	.19	.40	.17	.29	2.7	.61	.28	.20	.10	.04	.02
5	.07	.20	.36	.18	.29	2.0	.97	.30	.18	.08	.04	.02
6	.07	.21	.29	.18	.29	8.2	.91	.29	.16	.08	.04	.02
7	.07	.19	.26	.19	.30	9.3	10	.26	.16	.08	.04	.02
8	.07	.19	.26	.49	.31	3.4	2.8	.27	.16	.08	.04	.02
9	.07	.20	.26	.59	.35	3.0	2.0	.29	.15	.07	.04	.02
10	.07	.68	.32	.38	.37	16	2.3	.28	.15	.07	.04	.02
11	.07	.49	.33	39	.41	4.9	1.5	.29	.15	.07	.05	.02
12	.07	.30	.34	2.4	4.4	3.6	1.2	.32	.14	.18	.04	.02
13	.07	.30	.36	.63	14	2.7	.68	.37	.14	.08	.04	.02
14	.07	.25	.35	.61	7.0	1.9	.71	.37	.13	.07	.03	.02
15	.07	.22	.32	.49	1.0	1.6	.68	.31	.13	.06	.03	.02
16	.07	.21	.29	.35	.54	2.0	.74	.34	.12	.05	.03	.03
17	.07	.24	.26	.28	.47	1.7	.58	.29	.12	.06	.02	.03
18	.08	.21	.25	.29	.44	1.5	.58	.26	.11	.05	.02	.03
19	.09	.19	.23	.27	.50	1.3	.66	.26	.11	.05	.02	.03
20	.07	.19	.23	.25	2.6	1.0	.71	.26	.14	.05	.02	.03
21	.07	.19	.23	.24	.67	1.2	4.3	.25	.13	.04	.02	.04
22	.07	.20	.23	.24	.65	1.0	1.0	.22	.13	.05	.02	.03
23	.07	.20	.22	.24	4.3	1.0	.57	.20	.13	.05	.02	.03
24	.07	.20	.22	.28	1.4	1.1	.34	.20	.13	.04	.02	.03
25	.07	.29	.24	.36	23	1.1	.31	.20	.13	.04	.02	.03
26	.07	.22	.22	3.4	12	1.0	.31	.22	.12	.04	.02	.03
27	.07	.20	.21	1.2	30	1.1	.30	.24	.13	.03	.02	.03
28	.08	.19	.20	.70	17	.92	.31	.27	.10	.04	.02	.04
29	.09	.55	.19	.50	---	1.3	.30	.28	.11	.04	.02	.04
30	5.6	1.4	.18	.45	---	1.0	.31	.23	.11	.03	.02	.04
31	.40	---	.18	.38	---	.68	---	.20	---	.03	.02	---
TOTAL	8.09	8.83	8.71	55.26	123.53	94.30	38.31	8.48	4.35	2.27	0.96	0.79
MEAN	.26	.29	.28	1.78	4.41	3.04	1.28	.27	.14	.073	.031	.026
MAX	5.6	1.4	.69	39	30	16	10	.37	.24	.22	.08	.04
MIN	.07	.19	.18	.17	.29	.68	.30	.20	.10	.03	.02	.02
AC-FT	16	18	17	110	245	187	76	17	8.6	4.5	1.9	1.6

11044250 RAINBOW CREEK NEAR FALLBROOK, 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	.48	.84	1.07	13.1	13.6	10.0	2.96	1.29	.69	.36	.31	.42
MAX	.95	3.40	2.72	97.3	58.9	55.4	9.20	5.73	2.07	.90	.75	1.25
(WY)	1998	1997	1997	1993	1998	1995	1998	1998	1998	1990	1995	1995
MIN	.13	.15	.20	.40	1.32	.71	.63	.24	.14	.066	.031	.026
(WY)	2000	2000	2000	2000	1999	1999	1997	1996	2001	1996	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1990 - 2001

ANNUAL TOTAL	253.05	353.88	
ANNUAL MEAN	.69	.97	3.94
HIGHEST ANNUAL MEAN			14.4 1993
LOWEST ANNUAL MEAN			.66 2000
HIGHEST DAILY MEAN	49 Feb 21	39 Jan 11	800 Jan 16 1993
LOWEST DAILY MEAN	.05 Sep 6	.02 Aug 17	.02 Aug 17 2001
ANNUAL SEVEN-DAY MINIMUM	.05 Sep 6	.02 Aug 17	.02 Aug 17 2001
MAXIMUM PEAK FLOW		214 Jan 11	e8000 Jan 16 1993
MAXIMUM PEAK STAGE		5.09 Jan 11	8.35 Feb 23 1998
ANNUAL RUNOFF (AC-FT)	502	702	2850
10 PERCENT EXCEEDS	.91	1.5	4.9
50 PERCENT EXCEEDS	.26	.22	.56
90 PERCENT EXCEEDS	.06	.03	.12

e Estimated.

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA

LOCATION.—Lat 33°24'49", long 117°14'25", in NW 1/4 NW 1/4 sec.7, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 0.3 mi upstream from confluence with Sandia Creek, and 2.9 mi north of Fallbrook.

DRAINAGE AREA.—620 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1989 to current year.

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

REMARKS.—Records fair. Flow partly regulated since November 1948 by Vail Lake (station 11042510) and since 1974 by Skinner Reservoir. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 34,000 ft³/s, estimated, based on regression equation and flood routing of upstream flows, Jan. 16, 1993, gage height, 15.89 ft; no flow several days in 1990.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	9.1	5.5	9.9	8.4	168	10	7.3	4.0	3.8	3.2	4.4
2	4.7	5.5	3.5	9.1	9.2	53	10	8.0	5.6	3.6	3.2	3.6
3	4.2	4.3	5.1	6.2	8.2	28	9.1	7.2	6.2	3.3	3.1	3.7
4	5.9	4.2	4.2	5.5	7.4	19	14	7.8	6.8	3.2	3.0	3.9
5	5.4	4.2	3.8	5.6	6.1	15	13	7.3	6.1	3.4	2.9	3.6
6	6.6	5.1	3.5	6.3	4.9	29	13	8.2	5.7	3.5	3.3	3.6
7	8.3	4.6	3.0	6.9	4.4	42	46	8.3	5.6	3.8	2.5	4.2
8	12	3.9	3.1	7.2	6.8	22	59	8.2	5.7	3.1	1.8	4.2
9	6.7	3.2	3.1	16	5.2	16	20	9.5	5.9	3.7	2.5	4.7
10	3.9	4.8	3.5	12	5.4	132	24	8.9	6.7	2.5	2.5	4.9
11	4.9	8.5	3.6	371	8.7	41	21	8.7	6.2	3.0	1.9	4.4
12	4.4	15	3.8	110	18	24	14	9.9	5.3	3.0	1.7	4.7
13	3.9	7.3	4.3	37	253	17	10	12	5.1	2.8	2.6	2.8
14	4.7	5.9	5.3	19	285	13	8.4	12	6.0	3.0	2.1	2.6
15	4.6	5.0	6.0	12	41	11	7.5	11	5.6	3.7	3.1	1.6
16	4.5	5.1	6.2	9.4	17	13	8.0	10	4.7	3.2	4.0	1.8
17	5.0	5.2	5.7	8.6	9.4	10	7.9	9.2	4.3	3.0	4.3	1.4
18	4.9	5.7	4.6	8.1	6.8	9.7	8.2	8.8	3.8	3.0	4.0	1.9
19	2.7	5.0	4.9	8.3	6.0	9.4	9.1	8.0	3.5	2.9	4.2	2.6
20	2.4	3.4	5.5	9.5	27	8.8	8.4	6.1	3.7	3.0	3.7	2.9
21	4.7	3.0	7.4	9.5	17	8.2	23	7.0	3.2	2.9	3.9	2.5
22	5.3	3.9	9.3	12	8.2	8.4	28	5.9	4.3	2.8	4.2	3.0
23	5.3	6.0	11	12	14	10	15	5.1	4.2	3.3	4.8	2.5
24	4.9	6.2	10	13	35	11	9.9	4.6	4.3	3.0	4.8	3.0
25	4.7	6.1	11	18	185	10	7.8	5.5	3.8	2.8	3.9	1.7
26	5.3	5.7	9.8	22	434	9.4	7.1	4.5	3.5	3.1	5.3	2.2
27	7.2	5.8	7.8	46	352	12	7.6	5.1	3.1	2.9	5.2	1.7
28	11	9.2	8.5	20	368	13	7.8	5.6	3.0	3.2	4.9	2.5
29	8.3	8.8	10	16	---	13	8.4	6.1	3.2	2.6	5.6	2.2
30	29	7.9	9.2	11	---	12	8.3	5.3	3.6	3.2	5.6	3.3
31	24	---	9.2	9.2	---	10	---	4.8	---	2.5	5.3	---
TOTAL	214.2	177.6	191.4	866.3	2151.1	797.9	443.5	235.9	142.7	96.8	113.1	92.1
MEAN	6.91	5.92	6.17	27.9	76.8	25.7	14.8	7.61	4.76	3.12	3.65	3.07
MAX	29	15	11	371	434	168	59	12	6.8	3.8	5.6	4.9
MIN	2.4	3.0	3.0	5.5	4.4	8.2	7.1	4.5	3.0	2.5	1.7	1.4
AC-FT	425	352	380	1720	4270	1580	880	468	283	192	224	183

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

MEAN	6.55	7.09	12.2	170	190	106	24.9	17.0	8.32	5.20	4.69	4.90
MAX	15.7	24.4	37.1	1462	860	490	70.4	58.3	25.1	11.4	10.1	9.03
(WY)	1994	1997	1998	1993	1993	1991	1993	1998	1993	1993	1993	1993
MIN	3.88	1.48	1.66	3.19	10.8	2.50	4.51	6.12	2.43	2.11	1.00	1.22
(WY)	2000	1992	1990	2000	1999	1990	1990	1997	1997	1990	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	4100.3		5522.6			
ANNUAL MEAN	11.2		15.1		45.8	
HIGHEST ANNUAL MEAN					220	
LOWEST ANNUAL MEAN					5.99	
HIGHEST DAILY MEAN	643	Feb 21	434	Feb 26	14300	Jan 16 1993
LOWEST DAILY MEAN	1.5	Jul 23	1.4	Sep 17	.00	Aug 1 1990
ANNUAL SEVEN-DAY MINIMUM	1.8	Jul 20	2.1	Sep 13	.05	Jul 31 1990
MAXIMUM PEAK FLOW			1560		e34000	
MAXIMUM PEAK STAGE			3.97		15.89	
ANNUAL RUNOFF (AC-FT)	8130		10950		33150	
10 PERCENT EXCEEDS	11		18		40	
50 PERCENT EXCEEDS	4.5		5.7		6.2	
90 PERCENT EXCEEDS	2.6		3.0		2.5	

e Estimated.

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1999 to current year.

DISSOLVED OXYGEN: December 1999 to current year.

pH: December 1999 to current year.

SPECIFIC CONDUCTANCE: December 1999 to current year.

WATER TEMPERATURE: December 1999 to current year.

PERIOD OF DAILY RECORD.—December 1999 to current year.

DISSOLVED OXYGEN: December 1999 to current year.

pH: December 1999 to current year.

SPECIFIC CONDUCTANCE: December 1999 to current year.

WATER TEMPERATURE: December 1999 to current year.

INSTRUMENTATION.—Water-quality monitor since December 1999.

REMARKS.—Dissolved oxygen records rated poor through July 3 and fair thereafter. pH records rated good except for Apr. 10 to May 3, which are poor. Specific conductance records rated fair. Temperature records rated good. Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 17.9 mg/L, Mar. 23, 2000; minimum recorded, 4.5 mg/L, May 12, 2000.

pH: Maximum recorded, 9.2 standard units, Mar. 22, 2000; minimum recorded, 6.8 standard units, several days in March and April 2001.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,690 microsiemens, Apr. 11–12, 14, 2000; minimum recorded, 474 microsiemens, Feb. 21, 2000.

WATER TEMPERATURE: Maximum recorded, 27.5°C, June 27, 29, Aug. 5, 2000; minimum recorded, 4.5°C, Jan. 8, 2000.

EXTREMES FOR CURRENT YEAR.—

DISSOLVED OXYGEN: Maximum recorded, 13.4 mg/L, Feb. 9, 11; minimum recorded, 4.6 mg/L, Sept. 20, 21.

pH: Maximum recorded, 8.4 standard units, Feb. 27, Mar. 2; minimum recorded, 6.8 standard units, several days in March and April.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,630 microsiemens, June 7; minimum recorded, 519 microsiemens, Jan. 11.

WATER TEMPERATURE: Maximum recorded, 26.5°C, several days May–August; minimum recorded, 6.0°C, Dec. 23, 24, 27–29.

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, PH 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)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAY								
03...*	1108	735	7.3	79.9	8.0	1550	18.0	5.0
03...*	1109	735	7.3	79.9	8.0	1550	17.5	13.5
03...*	1110	735	7.2	78.7	8.0	1550	17.5	23.0
03...*	1111	735	7.2	78.6	8.0	1550	17.5	31.0
03...*	1112	735	7.1	77.6	8.0	1550	17.5	39.5
03...*	1113	735	7.1	77.6	8.0	1550	17.5	48.0
03...*	1114	735	7.2	78.7	8.0	1550	17.5	57.0
03...*	1115	735	7.2	78.7	8.0	1550	17.5	65.5
03...*	1116	735	7.2	78.5	8.0	1550	17.5	74.0
03...*	1117	735	7.2	79.1	8.0	1550	17.5	82.5
03...*	1118	735	7.2	78.7	8.0	1550	17.5	92.0
03...*	1119	735	7.2	78.6	8.0	1550	17.5	100

* Instantaneous discharge at the time of cross-sectional measurements: 6.7 ft³/s.

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

OXYGEN DISSOLVED (MG/L), 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	8.3	6.7	8.4	7.8	9.6	8.5	11.0	9.9	9.0	8.5	11.3	9.9
2	7.9	6.5	8.7	7.7	9.2	8.2	11.1	9.9	9.4	8.6	10.8	9.7
3	7.5	6.0	8.8	8.0	9.7	8.4	10.5	9.1	9.3	8.6	10.0	9.1
4	7.1	5.9	8.5	7.7	9.8	8.6	10.5	9.0	9.1	8.3	9.7	9.2
5	7.8	6.2	8.5	7.8	9.1	8.0	10.3	9.2	9.2	8.0	9.6	8.5
6	7.0	5.9	8.4	7.5	8.9	7.8	10.6	9.1	9.1	8.1	9.1	8.5
7	7.8	6.5	8.7	7.6	8.4	7.0	10.8	9.3	12.1	7.5	9.4	9.0
8	8.1	6.6	9.3	8.2	7.6	6.5	10.4	9.1	13.2	10.4	9.2	7.9
9	8.0	6.9	8.9	8.1	7.7	6.2	10.4	9.2	13.4	10.9	7.9	7.7
10	7.8	6.5	8.8	7.9	7.6	6.2	10.9	9.6	13.1	10.6	10.1	7.9
11	8.4	6.7	9.4	8.3	8.2	6.6	11.1	8.2	13.4	10.8	10.0	8.9
12	8.9	7.4	10.0	9.1	7.9	6.8	---	---	11.7	10.5	9.1	8.0
13	9.0	7.9	10.1	9.3	8.8	7.4	---	---	11.6	10.6	8.7	7.8
14	8.9	7.9	10.2	9.3	9.3	8.0	---	---	12.6	11.5	9.0	7.9
15	9.0	7.8	10.2	9.2	9.6	8.4	---	---	12.2	10.7	8.8	8.2
16	8.8	7.8	10.3	9.4	9.6	8.5	---	---	11.3	10.2	8.9	8.2
17	8.7	7.3	10.4	9.5	9.5	8.4	---	---	10.7	10.2	9.1	8.2
18	8.3	7.2	10.4	9.5	9.4	8.4	---	---	10.3	9.8	9.2	8.0
19	7.9	6.9	10.0	9.3	9.5	8.2	---	---	10.0	8.9	9.5	7.9
20	7.6	6.2	9.9	9.1	9.9	8.6	---	---	10.0	8.7	9.7	7.6
21	7.6	6.2	9.2	8.4	10.2	9.0	6.0	5.0	10.7	9.5	11.0	7.4
22	8.2	6.8	9.0	8.1	10.5	9.3	6.3	5.8	9.9	9.3	10.8	7.3
23	8.7	7.4	9.6	8.6	10.8	9.7	6.5	6.2	10.8	9.4	11.4	7.8
24	8.4	7.3	9.7	8.8	10.7	9.7	6.6	6.0	11.5	10.5	11.0	7.4
25	8.7	7.5	9.6	8.8	10.5	9.4	7.4	6.4	11.1	10.5	9.8	7.0
26	8.8	7.7	9.4	8.6	10.7	9.6	8.5	7.4	11.2	10.4	9.7	6.7
27	8.6	7.7	9.6	8.6	11.2	10.0	9.3	8.3	11.1	10.3	9.9	7.2
28	8.8	7.9	9.4	8.5	11.3	10.1	8.3	7.7	11.2	11.0	8.5	6.6
29	8.7	7.9	9.7	8.8	11.1	10.1	8.2	7.7	---	---	9.0	6.9
30	8.9	7.7	9.4	8.5	11.0	9.8	8.1	7.8	---	---	9.0	6.7
31	9.0	7.8	---	---	11.1	9.8	8.9	8.0	---	---	9.0	6.3
MONTH	9.0	5.9	10.4	7.5	11.3	6.2	---	---	13.4	7.5	11.4	6.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.6	6.2	---	---	10.6	7.7	8.0	5.6	8.8	6.0	7.9	5.3
2	9.0	6.7	---	---	10.0	8.1	8.1	5.7	9.0	6.2	---	---
3	9.4	6.7	---	---	10.5	8.1	8.3	5.7	9.0	6.1	---	---
4	9.3	7.2	---	---	10.1	7.6	7.6	5.6	8.9	6.0	---	---
5	9.1	7.5	---	---	9.6	6.8	7.5	5.5	9.0	6.0	---	---
6	9.2	7.3	---	---	9.2	6.4	7.5	5.4	9.1	6.1	---	---
7	9.2	7.4	---	---	9.6	6.2	7.5	5.5	9.1	5.8	---	---
8	9.3	7.5	---	---	9.2	6.2	7.4	5.3	9.2	5.5	7.7	5.5
9	8.4	7.8	---	---	9.3	6.2	7.2	5.5	9.1	6.0	7.5	5.4
10	8.5	7.9	---	---	9.3	6.1	7.5	5.1	9.2	5.9	7.5	5.4
11	8.7	8.0	---	---	9.3	6.5	7.6	5.5	9.4	5.8	7.2	5.4
12	8.0	7.3	---	---	8.2	6.2	8.1	5.7	9.3	5.6	7.2	5.3
13	7.7	6.9	---	---	7.9	5.8	8.2	5.5	9.1	5.9	---	---
14	7.4	6.9	---	---	7.7	5.7	8.1	5.7	---	---	---	---
15	7.3	6.7	---	---	7.4	5.5	8.1	5.8	8.8	5.8	---	---
16	7.4	6.6	---	---	7.6	5.4	8.1	5.6	8.5	6.0	---	---
17	7.4	6.6	---	---	7.6	5.4	8.5	5.7	8.5	5.9	---	---
18	7.6	6.5	---	---	7.9	5.6	8.4	5.9	8.5	5.9	6.7	4.8
19	7.4	6.7	---	---	7.9	5.5	8.5	5.9	8.4	5.8	6.5	4.8
20	7.3	6.5	---	---	8.4	5.6	8.8	5.8	8.4	5.9	6.4	4.6
21	8.1	6.5	---	---	8.4	5.7	8.6	5.9	8.7	5.9	6.4	4.6
22	8.6	6.6	---	---	8.2	5.8	8.5	5.7	8.6	6.2	6.6	4.8
23	---	---	---	---	8.0	5.6	8.6	6.0	8.7	6.4	---	---
24	---	---	---	---	8.4	5.8	---	---	8.8	6.3	---	---
25	---	---	9.9	7.7	8.4	5.8	8.8	6.2	8.7	6.2	7.9	5.8
26	---	---	10.3	7.7	8.2	5.7	8.5	6.1	8.3	6.2	7.9	5.8
27	---	---	10.4	8.6	8.4	5.9	8.3	5.8	8.3	6.2	8.0	5.0
28	---	---	10.7	9.1	8.3	5.9	8.5	6.0	7.8	5.3	8.1	5.9
29	---	---	10.5	8.3	8.2	5.8	8.9	5.7	8.1	5.3	8.4	6.0
30	---	---	10.6	8.2	8.0	5.7	8.7	6.0	7.9	5.5	8.5	5.8
31	---	---	10.5	7.9	---	---	9.1	5.9	8.0	5.5	---	---
MONTH	---	---	---	---	10.6	5.4	---	---	---	---	---	---

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, 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	7.8	7.6	7.7	7.6	7.8	7.6	7.5	7.5	7.9	7.7	8.3	8.1
2	7.8	7.6	7.7	7.5	7.8	7.5	7.5	7.5	7.9	7.7	8.4	8.1
3	7.8	7.6	7.5	7.4	7.8	7.6	7.6	7.4	7.9	7.7	8.3	8.0
4	7.7	7.6	7.6	7.4	7.8	7.6	7.5	7.4	7.9	7.7	8.2	7.9
5	7.8	7.6	7.5	7.3	7.7	7.5	7.6	7.4	7.9	7.7	8.1	7.9
6	7.7	7.6	7.5	7.3	7.9	7.5	7.5	7.4	7.8	7.7	8.1	7.9
7	7.8	7.6	7.5	7.0	7.7	7.4	7.5	7.4	8.2	7.7	8.0	7.8
8	7.8	7.7	7.5	7.1	7.6	7.3	7.5	7.3	8.3	7.7	7.9	7.8
9	7.8	7.6	7.5	7.1	7.7	7.3	7.5	7.3	8.1	7.7	7.9	7.8
10	7.8	7.6	7.7	7.2	7.7	7.4	7.8	7.3	8.0	7.6	8.3	7.6
11	7.9	7.6	7.8	7.3	7.5	7.4	7.9	7.2	8.0	7.7	7.8	7.7
12	7.9	7.6	8.0	7.7	7.5	7.4	7.5	7.3	7.8	7.6	7.9	7.7
13	7.8	7.6	7.8	7.4	7.6	7.4	7.5	7.3	8.2	7.5	8.0	7.9
14	7.8	7.5	7.9	7.7	7.6	7.4	7.4	7.3	7.9	7.5	8.1	7.9
15	7.8	7.6	7.8	7.4	7.6	7.5	7.5	7.4	7.5	7.3	8.2	7.8
16	7.8	7.6	7.8	7.7	7.6	7.5	7.5	7.4	7.7	7.4	8.1	7.8
17	7.8	7.5	7.8	7.6	7.6	7.5	7.5	7.4	7.6	7.6	8.2	7.8
18	7.7	7.6	7.8	7.7	7.7	7.5	7.5	7.5	7.6	7.5	8.2	7.6
19	7.6	7.5	7.8	7.4	7.5	7.4	7.6	7.5	7.7	7.6	8.1	7.6
20	7.6	7.4	7.7	7.5	7.5	7.4	7.6	7.5	8.3	7.6	7.7	7.5
21	7.6	7.4	7.6	7.4	7.6	7.5	7.6	7.5	7.9	7.6	7.7	7.5
22	7.6	7.5	7.7	7.4	7.6	7.5	7.6	7.5	7.8	7.6	7.6	7.5
23	7.7	7.5	7.7	7.4	7.6	7.5	7.5	7.5	8.0	7.7	7.5	7.3
24	7.6	7.5	7.7	7.5	7.6	7.5	7.5	7.5	8.2	7.7	7.3	7.0
25	7.8	7.6	7.8	7.4	7.6	7.5	7.5	7.4	8.2	7.6	7.0	6.8
26	7.7	7.6	7.7	7.4	7.6	7.5	7.6	7.4	8.3	8.0	7.0	6.9
27	7.7	7.6	7.7	7.5	7.6	7.5	7.6	7.4	8.4	8.1	7.1	6.9
28	7.7	7.6	7.9	7.6	7.6	7.5	7.5	7.4	8.3	8.2	7.0	6.9
29	7.7	7.5	7.9	7.6	7.6	7.5	7.7	7.4	---	---	6.9	6.8
30	7.9	7.5	7.8	7.5	7.6	7.5	7.8	7.5	---	---	7.0	6.9
31	7.8	7.6	---	---	7.6	7.5	7.9	7.6	---	---	7.0	6.8
MONTH	7.9	7.4	8.0	7.0	7.9	7.3	7.9	7.2	8.4	7.3	8.4	6.8
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.9	6.8	7.8	7.2	7.9	7.2	7.9	7.4	7.8	7.3	7.9	7.6
2	7.0	6.8	8.0	7.8	7.9	7.7	7.9	7.3	7.7	7.3	---	---
3	7.0	6.8	8.1	7.6	8.2	7.8	7.8	7.3	7.9	7.3	---	---
4	7.1	7.0	8.1	7.6	8.2	7.9	8.0	7.2	7.9	7.4	---	---
5	7.1	6.9	8.1	7.5	8.2	7.8	7.8	7.2	7.9	7.3	---	---
6	7.1	7.0	8.1	7.5	8.1	7.7	7.8	7.3	8.0	7.4	---	---
7	8.2	7.0	8.1	7.5	8.3	7.8	7.8	7.5	8.0	7.4	---	---
8	8.2	7.7	8.1	7.5	8.2	7.8	7.8	7.4	8.1	7.4	7.6	7.3
9	7.8	7.6	8.1	7.5	8.2	7.8	7.7	7.3	8.1	7.5	7.6	7.3
10	8.0	7.6	8.0	7.5	8.3	7.7	7.9	7.4	8.1	7.6	7.6	7.3
11	8.0	7.6	7.7	7.3	8.0	7.7	7.9	7.4	8.1	7.5	7.7	7.3
12	7.7	7.4	7.3	7.1	8.0	7.4	8.0	7.4	8.1	7.4	7.7	7.4
13	7.6	7.4	7.4	7.1	8.0	7.4	8.0	7.3	8.0	7.5	---	---
14	7.5	7.3	7.5	7.4	7.8	7.3	8.2	7.5	---	---	---	---
15	7.6	7.4	7.7	7.3	7.5	7.1	7.9	7.5	---	---	---	---
16	8.0	7.5	7.7	7.5	7.5	7.1	7.8	7.4	---	---	---	---
17	7.9	7.8	7.6	7.4	7.3	7.1	7.9	7.4	---	---	---	---
18	7.8	7.7	7.7	7.4	7.4	7.2	7.9	7.5	---	---	7.9	7.6
19	7.8	7.7	8.2	7.5	7.4	7.2	8.0	7.5	---	---	7.9	7.7
20	7.8	7.6	8.3	7.8	7.5	7.2	8.0	7.5	---	---	8.0	7.7
21	8.1	7.6	8.1	7.7	7.4	7.3	7.9	7.4	---	---	8.0	7.7
22	8.1	7.7	8.1	7.7	7.8	7.3	7.9	7.5	---	---	8.0	7.7
23	7.8	7.5	8.1	7.7	7.9	7.5	8.0	7.5	---	---	---	---
24	7.8	7.5	8.0	7.6	8.1	7.5	---	---	---	---	---	---
25	7.8	7.5	8.0	7.6	7.9	7.4	7.8	7.2	---	---	8.0	7.4
26	7.7	7.4	7.7	7.6	7.8	7.3	7.7	7.2	---	---	8.1	7.8
27	7.8	7.3	7.7	7.5	7.8	7.3	7.8	7.1	---	---	8.1	7.8
28	7.9	7.6	7.6	7.4	7.8	7.3	7.4	7.0	---	---	8.2	7.9
29	7.8	7.4	7.6	7.3	7.8	7.3	7.6	7.0	7.9	7.6	8.1	7.9
30	7.6	7.2	7.5	7.2	7.8	7.3	7.7	7.3	7.9	7.6	8.1	7.9
31	---	---	7.5	7.2	---	---	7.9	7.3	8.0	7.6	---	---
MONTH	8.2	6.8	8.3	7.1	8.3	7.1	---	---	---	---	---	---

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1320	1300	1240	1210	1410	1390	1560	1530	1280	1270	---	---
2	1340	1310	1210	1180	1410	1390	1560	1530	1300	1280	---	---
3	1330	1310	1220	1180	1410	1360	1550	1520	1310	1290	---	---
4	1310	1310	1230	1220	1380	1360	1560	1530	1330	1310	---	---
5	1320	1300	1250	1230	1380	1360	1570	1550	1360	1330	---	---
6	1310	1300	1260	1240	1380	1360	1560	1540	1380	1360	---	---
7	1320	1300	1290	1250	1380	1370	1570	1540	1390	1380	---	---
8	1310	1290	1310	1290	1390	1380	1560	1550	1410	1390	---	---
9	1300	1280	1330	1310	1410	1390	1560	1540	1420	1410	---	---
10	1290	1280	1350	1300	1420	1410	1560	1540	1440	1420	---	---
11	1290	1270	1390	1350	1430	1420	1550	519	1450	1430	---	---
12	1280	1260	1390	1350	1450	1430	790	736	1450	1440	---	---
13	1280	1250	1390	1370	1460	1440	805	790	1530	623	---	---
14	1270	1250	1390	1370	1470	1450	832	805	779	549	---	---
15	1270	1250	1390	1380	1480	1460	872	832	631	580	1370	1310
16	1280	1250	1400	1380	1480	1460	918	872	709	631	1410	1360
17	1270	1250	1400	1380	1480	1460	1020	918	811	709	1410	1400
18	1270	1260	1400	1380	1480	1460	1090	1020	914	811	1420	1400
19	1270	1250	1390	1370	1500	1470	1120	1090	1000	914	1420	1390
20	1270	1250	1390	1370	1510	1480	1140	1120	1050	1000	1410	1390
21	1270	1260	1400	1380	1520	1490	1150	1140	1060	1050	1400	1390
22	1270	1250	1410	1390	1530	1490	1160	1150	1080	1060	1390	1380
23	1260	1250	1410	1370	1540	1510	1180	1160	1100	1080	1390	1380
24	1250	1230	1400	1380	1540	1510	1190	1180	1100	975	1390	1380
25	1240	1220	1400	1380	1540	1510	1210	1190	---	---	1390	1380
26	1240	1220	1420	1390	1550	1510	1220	1210	---	---	1400	1380
27	1230	1210	1430	1410	1550	1520	1230	1220	---	---	1400	1390
28	1220	1210	1440	1390	1550	1520	1240	1230	---	---	1400	1390
29	1210	1200	1400	1380	1560	1520	1250	1240	---	---	1400	1390
30	1290	1190	1410	1380	1560	1520	1260	1250	---	---	1400	1380
31	1270	1240	---	---	1560	1530	1270	1260	---	---	1400	1380
MONTH	1340	1190	1440	1180	1560	1360	1570	519	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	1420	1400	1580	1540	1600	1560	---	---	1380	1370
2	---	---	1410	1410	1590	1580	1570	1530	---	---	---	---
3	---	---	1490	1400	1610	1580	1530	1510	---	---	---	---
4	---	---	1470	1460	1610	1610	1570	1520	---	---	---	---
5	---	---	1480	1470	1620	1600	1580	1560	---	---	---	---
6	---	---	1490	1480	1620	1610	1580	1570	---	---	---	---
7	---	---	1490	1480	1630	1610	1580	1550	---	---	---	---
8	---	---	1500	1480	1610	1580	1550	1530	---	---	1410	1400
9	---	---	1500	1480	1580	1550	1540	1520	---	---	1420	1410
10	---	---	1500	1480	1580	1560	1550	1520	---	---	1420	1400
11	1130	1010	1520	1470	1580	1560	1540	1490	---	---	1420	1410
12	1220	1130	1500	1450	1580	1510	1490	1470	---	---	1410	1400
13	1270	1220	1450	1350	1510	1500	1490	1470	---	---	---	---
14	1310	1270	1350	1340	1510	1500	1480	1470	---	---	---	---
15	1320	1240	1350	1340	1510	1490	1490	1470	1490	1480	---	---
16	1260	1250	1360	1340	1500	1480	1480	1470	1480	1470	---	---
17	1290	1260	1350	1340	1520	1480	1500	1470	1480	1460	---	---
18	1350	1290	1350	1330	1550	1510	1470	1460	1470	1460	1490	1470
19	1370	1330	1350	1340	1570	1540	1480	1460	1470	1450	1480	1480
20	1430	1370	1430	1340	1570	1550	1490	1470	1470	1460	1510	1480
21	1470	1430	1480	1430	1590	1570	1500	1480	1480	1460	1530	1510
22	1470	1440	1510	1480	1590	1570	1500	1460	1480	1440	1540	1530
23	1470	1440	1510	1490	1590	1560	1500	1480	1480	1410	---	---
24	1450	1420	1490	1470	1580	1510	---	---	1470	1390	---	---
25	1450	1410	1480	1460	1520	1460	---	---	1410	1370	1510	1490
26	1440	1410	1490	1480	1520	1470	---	---	1380	1360	1500	1470
27	1430	1410	1490	1470	1520	1480	---	---	1370	1350	1480	1470
28	1420	1400	1480	1470	1500	1480	---	---	1390	1350	1470	1460
29	1410	1400	1480	1470	1540	1480	---	---	1400	1390	1460	1450
30	1410	1390	1510	1470	1580	1530	---	---	1390	1370	1460	1440
31	---	---	1540	1510	---	---	---	---	1380	1370	---	---
MONTH	---	---	1540	1330	1630	1460	---	---	---	---	---	---

11044300 SANTA MARGARITA RIVER AT FALLBROOK PUBLIC UTILITY DISTRICT SUMP, NEAR FALLBROOK, 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	20.5	17.5	15.0	12.5	10.5	8.5	10.5	7.0	11.0	7.0	13.5	10.0
2	21.5	18.0	15.5	12.5	12.0	9.5	11.0	7.0	11.5	7.5	13.5	9.5
3	21.5	19.0	14.5	12.0	10.5	8.0	12.5	9.0	13.0	8.5	15.0	11.0
4	20.0	19.0	14.5	12.0	10.5	8.0	11.5	8.0	14.0	10.0	13.5	11.5
5	21.0	18.5	14.0	11.0	12.0	9.5	10.0	8.0	14.5	11.0	16.0	10.5
6	19.5	19.0	15.5	13.5	11.5	9.5	11.5	8.5	13.5	10.5	14.5	13.0
7	20.5	18.5	14.5	11.5	14.0	11.0	11.5	8.0	13.0	10.5	13.5	12.5
8	20.0	17.5	13.0	10.0	13.0	11.5	10.0	8.5	11.5	8.0	16.5	11.0
9	20.0	17.5	13.5	11.0	14.0	12.5	12.5	10.0	11.0	7.5	16.0	13.5
10	20.0	17.5	13.0	11.0	14.0	12.5	11.0	9.0	10.0	8.0	13.5	11.5
11	17.5	15.5	13.0	10.5	13.0	11.0	11.0	9.5	11.5	8.0	14.0	11.0
12	16.5	14.0	11.5	9.0	13.0	10.5	11.0	9.0	10.5	9.0	16.0	11.5
13	17.0	13.0	11.0	8.5	11.5	9.0	11.0	8.0	10.0	9.0	17.0	11.0
14	17.0	13.5	10.5	8.0	11.5	9.0	11.0	8.0	9.5	7.0	17.0	11.5
15	17.0	13.5	10.5	8.0	11.5	8.5	11.5	9.0	11.0	6.5	18.5	14.0
16	17.0	13.5	10.5	7.5	12.0	8.5	10.5	8.0	12.0	7.5	17.0	14.5
17	18.0	14.5	10.5	7.5	11.5	8.5	10.0	6.5	11.5	8.5	18.5	13.0
18	17.0	15.5	10.0	7.0	11.5	8.5	10.0	6.5	12.5	9.5	19.5	13.0
19	19.0	16.0	10.5	7.5	12.0	8.5	10.0	7.0	13.5	9.5	20.5	14.0
20	19.5	16.5	11.0	8.0	10.5	7.5	11.5	8.0	15.0	11.5	21.0	14.5
21	18.5	17.5	12.0	9.0	10.0	6.5	11.0	8.0	14.5	10.0	20.0	15.5
22	17.5	15.5	12.0	9.5	10.0	6.5	12.0	9.0	14.5	11.5	17.5	15.0
23	17.0	15.0	11.5	9.0	9.5	6.0	12.0	8.5	12.5	9.5	19.0	14.0
24	18.0	15.0	11.5	8.5	9.5	6.0	10.5	8.0	10.5	8.5	19.5	15.0
25	17.5	14.5	11.0	8.5	10.0	7.0	11.0	8.0	12.0	10.0	19.5	16.0
26	16.0	14.0	11.5	8.5	10.0	6.5	9.0	7.5	12.5	11.0	20.5	16.5
27	16.5	15.0	11.5	8.5	10.0	6.0	9.5	7.0	12.5	11.0	20.0	14.0
28	16.0	14.5	11.0	8.5	10.0	6.0	11.0	8.0	11.0	10.5	18.0	16.5
29	16.5	14.5	10.5	8.5	10.0	6.0	10.5	8.0	---	---	18.5	16.0
30	16.0	14.5	11.5	9.5	10.0	6.5	11.0	7.0	---	---	21.5	16.0
31	16.0	13.5	---	---	10.0	6.5	11.0	7.5	---	---	21.5	17.5
MONTH	21.5	13.0	15.5	7.0	14.0	6.0	12.5	6.5	15.0	6.5	21.5	9.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.0	17.0	24.0	18.5	23.5	20.0	26.5	20.5	---	---	24.5	19.5
2	19.5	16.0	20.0	18.0	21.0	19.0	25.5	20.5	---	---	---	---
3	18.0	15.0	22.5	16.5	22.5	18.5	25.5	20.5	---	---	---	---
4	17.0	14.5	22.0	15.5	23.0	18.0	26.0	21.5	---	---	---	---
5	17.5	13.5	22.0	15.5	23.5	18.0	24.5	21.0	---	---	---	---
6	17.5	13.0	22.5	15.5	24.5	19.0	25.5	21.5	---	---	---	---
7	15.0	12.5	23.5	16.0	24.5	18.5	26.5	21.0	---	---	---	---
8	16.0	11.0	24.5	17.0	25.0	19.0	26.5	20.5	---	---	23.5	20.5
9	14.0	11.0	24.5	17.5	26.0	20.5	26.0	21.0	---	---	23.5	20.5
10	15.5	11.0	25.0	19.0	26.0	20.5	26.0	20.5	---	---	23.5	20.5
11	15.5	12.0	25.0	19.5	25.5	20.0	26.0	20.5	---	---	24.0	20.5
12	18.0	13.0	21.5	19.5	24.0	20.5	26.0	20.0	---	---	23.0	19.5
13	19.0	12.5	22.5	18.5	25.0	20.0	26.0	19.0	---	---	---	---
14	19.0	13.0	23.5	18.5	25.0	18.0	26.0	21.0	---	---	---	---
15	20.0	13.5	23.0	18.5	26.0	19.5	25.5	20.5	26.5	21.5	---	---
16	20.5	13.5	24.0	19.0	25.5	18.5	25.5	20.5	26.5	21.5	---	---
17	20.5	14.0	24.0	19.0	26.0	19.5	25.0	18.5	26.5	21.0	---	---
18	18.0	15.0	24.5	19.5	26.0	18.5	25.5	20.0	26.5	21.0	22.5	18.5
19	20.0	15.5	23.5	19.5	26.5	18.5	26.0	20.5	26.5	22.0	22.5	19.0
20	19.5	15.0	24.0	19.0	26.0	18.5	25.5	20.0	26.0	21.5	22.0	19.0
21	17.5	14.5	24.0	20.0	25.0	19.0	26.5	20.5	25.5	21.5	22.0	18.0
22	18.5	12.0	26.0	20.0	26.0	19.5	26.0	20.0	25.0	21.0	21.5	17.0
23	20.5	13.5	26.5	20.0	26.0	19.5	26.0	21.0	24.5	20.0	---	---
24	22.5	15.0	23.5	20.5	25.5	18.5	---	---	24.5	19.0	---	---
25	23.5	16.5	25.5	19.5	25.5	19.0	---	---	25.0	20.0	22.5	18.0
26	23.5	18.0	21.5	19.5	25.5	20.0	---	---	25.5	20.5	22.5	18.0
27	23.5	18.5	20.0	19.0	25.5	18.5	---	---	25.5	20.5	22.5	18.0
28	21.5	18.0	20.0	18.0	26.0	18.5	---	---	24.5	20.5	21.0	17.0
29	23.0	17.5	23.5	17.5	26.0	19.0	---	---	23.5	20.0	21.0	16.0
30	23.0	17.0	24.0	18.0	26.5	20.5	---	---	24.0	20.5	21.0	17.0
31	---	---	25.0	18.5	---	---	---	---	24.5	19.5	---	---
MONTH	23.5	11.0	26.5	15.5	26.5	18.0	---	---	---	---	---	---

11044350 SANDIA CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°25'28", long 117°14'54", in SW 1/4 NE 1/4 sec.1, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 1.05 mi north of intersection of Sandia and Rock Mountain Roads, 0.8 mi upstream from mouth, and 3.8 mi north of Fallbrook.

DRAINAGE AREA.—21.1 mi².

PERIOD OF RECORD.—October 1989 to current year.

REVISED RECORDS.—WDR CA-91-1: 1990(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 380 ft above sea level, from topographic map. Prior to Sept. 30, 1993, at site 0.65 mi downstream at different datum.

REMARKS.—Records fair. No regulation or diversion upstream from station. Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of [Santa Margarita River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,100 ft³/s, Jan. 16, 1993, gage height, 17.60 ft, site and datum then in use, from floodmarks (may have been affected by backwater from the Santa Margarita River); no flow for many days in summer of 1996.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft³/s, or maximum, from rating curve extended above 536 ft³/s, on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0815	129	2.88	Feb. 25	2115	120	2.87
Feb. 14	0045	88	2.74				

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	1.7	5.1	4.2	3.9	5.4	29	7.3	6.9	5.8	1.5	3.5	1.1
2	4.8	4.9	2.5	3.8	5.3	21	8.4	7.2	4.3	2.3	3.6	1.0
3	3.8	4.4	2.5	3.6	4.9	18	8.4	7.0	4.5	2.6	3.4	1.3
4	2.5	2.3	3.2	3.4	4.8	17	8.5	6.1	5.6	3.4	1.6	2.2
5	4.0	2.6	3.8	3.0	4.0	16	8.8	4.2	5.8	3.3	1.7	2.2
6	3.7	3.7	3.7	2.1	4.7	19	8.4	4.3	5.6	3.1	2.8	2.7
7	2.6	4.1	3.8	2.5	5.0	16	15	5.3	5.3	1.2	3.0	2.4
8	1.5	3.8	4.0	4.4	4.8	15	12	5.8	4.9	1.1	3.1	1.2
9	2.9	4.0	4.2	5.0	4.8	14	11	5.7	3.1	2.5	3.4	1.4
10	3.7	4.8	4.3	4.8	5.1	28	10	5.9	2.9	2.6	3.2	2.4
11	4.0	6.1	4.8	48	5.3	15	9.3	6.0	3.9	3.2	1.8	2.4
12	3.8	5.7	4.7	18	12	14	9.0	4.9	5.1	3.2	1.8	2.8
13	3.7	5.5	4.9	11	29	13	8.5	4.9	5.1	2.9	2.2	3.1
14	2.5	5.1	5.7	8.8	32	13	8.0	6.5	4.9	1.7	2.2	2.6
15	1.7	5.3	6.1	7.7	13	12	7.9	5.4	4.1	1.6	2.0	1.8
16	2.5	5.5	4.9	7.1	11	12	7.9	5.9	2.4	2.3	2.5	.82
17	3.3	5.0	3.5	6.7	9.6	11	8.2	5.7	2.4	2.3	2.2	1.7
18	3.5	4.7	4.1	6.5	8.8	11	7.5	5.4	3.3	3.0	.86	2.0
19	3.7	4.3	4.2	6.2	8.5	11	7.5	3.9	3.7	3.1	.53	2.9
20	3.7	4.2	4.9	5.9	12	9.6	7.5	4.0	3.4	3.0	1.3	3.3
21	3.2	4.1	5.0	6.0	9.0	9.9	11	5.4	3.5	1.5	1.7	2.9
22	3.9	4.4	5.2	5.9	8.2	10	8.3	5.8	3.3	1.4	2.2	1.4
23	3.6	4.3	5.2	5.8	13	9.8	7.5	5.4	1.8	2.3	2.7	1.2
24	3.6	4.5	4.9	6.1	12	9.3	6.9	5.7	1.5	2.5	2.4	1.9
25	3.5	3.2	4.7	6.1	37	9.5	6.6	5.6	2.3	2.9	.82	1.8
26	4.5	2.7	5.7	7.8	36	9.3	6.8	5.0	2.3	3.0	.80	2.3
27	4.3	3.3	7.5	8.2	53	9.2	6.7	5.4	2.7	2.9	1.5	2.5
28	3.1	3.6	6.3	6.6	42	9.3	5.4	6.6	3.4	1.3	1.9	2.4
29	3.0	3.6	3.6	6.2	---	9.4	5.1	6.7	3.3	1.1	2.7	1.2
30	8.6	3.2	2.1	5.9	---	9.0	6.2	5.9	1.9	2.2	2.9	1.0
31	5.7	---	2.9	5.6	---	7.9	---	5.9	---	2.4	2.6	---
TOTAL	110.6	128.0	137.1	232.6	400.2	417.2	249.6	174.4	112.1	73.4	68.91	59.92
MEAN	3.57	4.27	4.42	7.50	14.3	13.5	8.32	5.63	3.74	2.37	2.22	2.00
MAX	8.6	6.1	7.5	48	53	29	15	7.2	5.8	3.4	3.6	3.3
MIN	1.5	2.3	2.1	2.1	4.0	7.9	5.1	3.9	1.5	1.1	.53	.82
AC-FT	219	254	272	461	794	828	495	346	222	146	137	119

11044350 SANDIA CREEK NEAR FALLBROOK, 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	1.59	2.46	3.59	32.1	31.0	24.0	10.8	6.45	4.09	2.11	1.27	1.20
MAX	3.57	4.27	8.12	237	128	79.8	28.0	18.3	9.49	5.40	2.73	3.21
(WY)	2001	2001	1997	1993	1993	1995	1995	1998	1998	1998	1998	1998
MIN	.53	1.34	1.88	2.56	3.85	3.62	3.73	2.14	1.02	.31	.030	.062
(WY)	1997	1992	1990	2000	1999	1999	1996	1999	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	1637.43		2164.03			
ANNUAL MEAN	4.47		5.93		9.96	
HIGHEST ANNUAL MEAN					36.8	
LOWEST ANNUAL MEAN					2.62	
HIGHEST DAILY MEAN	85	Feb 21	53	Feb 27	2000	Jan 16 1993
LOWEST DAILY MEAN	.21	Aug 20	.53	Aug 19	.00	Jul 26 1996
ANNUAL SEVEN-DAY MINIMUM	.68	Aug 11	1.6	Aug 15	.00	Aug 14 1996
MAXIMUM PEAK FLOW			129	Jan 11	5100	Jan 16 1993
MAXIMUM PEAK STAGE			2.88	Jan 11	17.60	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	3250		4290		7220	
10 PERCENT EXCEEDS	7.9		11		16	
50 PERCENT EXCEEDS	3.3		4.3		2.9	
90 PERCENT EXCEEDS	1.4		1.8		.65	

11044800 DE LUZ CREEK NEAR DE LUZ, CA

LOCATION.—Lat 33°25'11", long 117°19'15", in SW 1/4 SE 1/4 sec.5, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on left bank, 4.85 mi upstream from mouth, and 1.2 mi south of De Luz.

DRAINAGE AREA.—33.0 mi².

PERIOD OF RECORD.—October 1992 to current year.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 270 ft above sea level, from topographic map.

February 1951 to September 1965 and October 1989 to September 1991, at site 4.2 mi downstream (published as 11044900, De Luz Creek near Fallbrook).

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of [Santa Margarita River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,700 ft³/s, Jan. 16, 1993, gage height, 15.13 ft, on basis of flow-over-road computation; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 385 ft³/s, on basis of flow-over-road computation:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 25	2100	300	6.07

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	.56	.09	.23	e.84	50	3.4	4.4	2.7	.00	.00	.00
2	.00	.51	.08	.13	e.80	24	3.6	4.0	2.9	.00	.00	.00
3	.00	.43	.07	.05	e.78	18	3.7	4.0	2.8	.00	.00	.00
4	.00	.22	.14	.04	e.76	17	3.9	3.8	2.5	.00	.00	.00
5	.00	.18	.15	.15	e.70	15	3.8	3.8	1.9	.00	.00	.00
6	.00	.30	.58	.28	e.64	19	4.0	3.7	2.0	.00	.00	.00
7	.00	.29	1.3	.53	e.70	15	11	3.5	2.1	.00	.00	.00
8	.00	.16	.26	.71	e.72	12	8.3	2.9	2.0	.00	.00	.00
9	.00	.09	.14	1.3	.67	13	6.8	2.2	1.9	.00	.00	.00
10	.00	.65	.10	1.3	.74	35	6.5	2.4	1.8	.00	.00	.00
11	.00	1.2	.21	23	.84	17	5.3	3.0	1.7	.00	.00	.00
12	.00	1.1	.27	14	5.3	11	4.7	3.6	1.8	.00	.00	.00
13	.01	.75	.33	4.1	38	14	4.8	3.9	1.6	.00	.00	.00
14	.07	.81	.35	e1.8	28	18	4.7	3.2	1.2	.00	.00	.00
15	.00	.95	.46	e1.4	e5.1	17	4.7	3.0	1.0	.00	.00	.00
16	.00	.99	.28	e1.1	e4.9	15	4.0	3.0	.80	.00	.00	.00
17	.01	.82	.12	e1.0	e4.7	13	3.6	2.9	.90	.00	.00	.00
18	.00	.50	.11	e.99	e4.5	11	3.6	2.8	.73	.00	.00	.00
19	.05	.36	.07	e.92	e4.4	3.6	3.9	3.1	.47	.00	.00	.00
20	.13	.17	.11	e.89	e6.0	2.9	4.3	3.0	.40	.00	.00	.00
21	.15	.11	.13	e.88	e4.2	3.3	6.6	3.4	.27	.00	.00	.00
22	.23	.21	.17	e.88	e4.1	3.4	5.6	3.1	.26	.00	.00	.00
23	.07	.24	.24	e.86	4.8	3.8	5.1	2.5	.19	.00	.00	.00
24	.02	.15	.34	e.87	7.7	3.3	4.6	2.6	.04	.00	.00	.00
25	.04	.22	.30	e.92	74	2.9	4.1	2.8	.01	.00	.00	.00
26	.27	.20	.12	e1.5	111	3.5	4.4	3.0	.03	.00	.00	.00
27	.94	.16	.23	e2.0	95	3.6	4.7	4.0	.00	.00	.00	.00
28	.89	.15	.28	e1.4	93	3.8	5.1	4.6	.00	.00	.00	.00
29	.68	.15	.31	e.94	---	3.8	4.8	4.4	.00	.00	.00	.00
30	2.8	.13	.32	e.88	---	3.0	4.8	2.8	.00	.00	.00	.00
31	1.4	---	.27	e.86	---	3.0	---	2.4	---	.00	.00	---
TOTAL	7.76	12.76	7.93	65.91	502.89	377.9	148.4	101.8	34.00	0.00	0.00	0.00
MEAN	.25	.43	.26	2.13	18.0	12.2	4.95	3.28	1.13	.000	.000	.000
MAX	2.8	1.2	1.3	23	111	50	11	4.6	2.9	.00	.00	.00
MIN	.00	.09	.07	.04	.64	2.9	3.4	2.2	.00	.00	.00	.00
AC-FT	15	25	16	131	997	750	294	202	67	.00	.00	.00

e Estimated.

11044800 DE LUZ CREEK NEAR DE LUZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.36	.94	2.58	61.8	67.8	37.8	12.1	7.45	2.94	1.04	.42	.17
MAX	1.07	3.42	10.1	365	252	189	37.2	37.0	10.2	5.01	2.38	.84
(WY)	1993	1999	1997	1993	1998	1995	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.045	.33	3.30	2.71	2.31	.71	.027	.000	.000	.000
(WY)	1995	1995	2000	2000	1999	1999	1997	1997	2000	1996	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1993 - 2001
ANNUAL TOTAL	968.32	1259.35	
ANNUAL MEAN	2.65	3.45	16.0
HIGHEST ANNUAL MEAN			53.9
LOWEST ANNUAL MEAN			1.93
HIGHEST DAILY MEAN	88 Mar 8	111 Feb 26	3220 Jan 16 1993
LOWEST DAILY MEAN	.00 Jun 14	.00 Oct 1	.00 Aug 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 16	.00 Oct 1	.00 Aug 1 1994
MAXIMUM PEAK FLOW		300 Feb 25	9700 Jan 16 1993
MAXIMUM PEAK STAGE		6.07 Feb 25	15.13 Jan 16 1993
ANNUAL RUNOFF (AC-FT)	1920	2500	11610
10 PERCENT EXCEEDS	3.8	5.2	25
50 PERCENT EXCEEDS	.22	.46	1.2
90 PERCENT EXCEEDS	.00	.00	.00

11045050 SANTA MARGARITA RIVER AT UNITED STATES MARINE CORPS DIVERSION DAM, NEAR YSIDORA, CA

LOCATION.—Lat 33°20'17", long 117°19'49", in SW 1/4 NW 1/4 sec.5, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank, at U.S. Marine Corps Diversion Dam, 2.3 mi upstream from Basilone Road Bridge, 10.2 mi upstream from mouth, and 7.5 mi upstream from Ysidora.

DRAINAGE AREA.—710 mi².

PERIOD OF RECORD.—February 1999 to September 2001 (discontinued).

GAGE.—Water-stage recorder, crest-stage gage, and steel drop structure (diversion dam). Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records poor. Flow partly regulated by Vail Lake (station 11042510) since November 1948 and by Skinner Reservoir since 1974. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Diversions to O'Neill Lake and to ground-water recharge basins are made immediately upstream by Camp Pendleton personnel. These diversions take a varying portion of the base flow. This station, normally an auxiliary (partial-record) gage for station 11046000 (Santa Margarita River at Ysidora), was temporarily installed as a continuous-record station on Feb. 26, 1999, due to removal of Basilone Road Bridge and construction of new bridge. New station name and number established, due to nonequivalence of low- and medium-flow records with station 11046000. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,520 ft³/s, based on critical depth computations, Feb. 21, 2000, gage height, 42.44 ft; no flow for many days during 2000 and 2001 water 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	e5.0	e11	e9.3	e8.2	e11	197	.00	.00	.00	.00	e5.1	e4.2
2	e5.4	e6.3	e9.3	e8.1	e9.0	75	.00	.00	.00	.00	e5.3	e4.4
3	e5.8	e6.4	e9.3	e8.1	e7.0	52	.00	.00	.00	.00	e5.1	e4.6
4	e5.9	e6.5	e9.3	e8.1	e6.0	41	.00	.00	.00	.00	e4.9	e4.8
5	e6.1	e6.6	e9.3	e8.0	e5.0	31	.00	.00	.00	.00	e4.7	e5.0
6	e6.1	e6.7	e9.2	e8.0	e4.0	37	.00	.00	.00	.00	e4.5	e4.9
7	e5.9	e7.0	e9.2	e8.0	e3.6	49	.98	.00	.00	.00	e4.4	e4.8
8	e5.8	e7.3	e9.1	e7.9	e5.8	35	6.4	.00	.00	.00	e4.2	e4.8
9	e5.7	e7.6	e9.1	e7.9	e7.6	23	5.0	.00	.00	.00	e4.0	e4.7
10	e5.6	e7.9	e9.0	e7.9	e8.7	100	1.9	.00	.00	.00	e3.8	e4.6
11	e5.6	e8.2	e9.0	e400	e10	50	1.7	.00	.00	.00	e3.6	e4.5
12	e5.5	e16	e9.0	e130	e23	31	.22	.00	.00	.00	e3.4	e4.4
13	e5.4	e11	e8.9	e45	139	20	.00	.00	.00	.00	e3.2	e4.4
14	e5.4	e10	e8.9	e30	362	9.4	.00	.00	.00	.00	e3.0	e4.3
15	e5.3	e9.9	e8.9	e25	89	4.8	.00	.00	.00	.00	e2.7	e4.2
16	e5.2	e9.9	e8.8	e21	29	3.2	.00	.00	.00	.00	e2.4	e4.1
17	e5.2	e9.9	e8.8	e20	6.1	1.8	.00	.00	.00	.00	e2.1	e4.0
18	e5.3	e9.9	e8.7	e20	1.9	.81	.00	.00	.00	.00	e1.9	e4.0
19	e5.3	e9.8	e8.7	e20	.11	.09	.00	.00	.00	.00	e1.8	e3.9
20	e5.4	e9.8	e8.6	e20	4.6	.00	.00	.00	.00	.00	e1.6	e3.8
21	e5.5	e9.7	e8.6	e19	12	.00	.08	.00	.00	.00	e1.8	e3.7
22	e5.5	e9.7	e8.5	e19	1.3	.00	.39	.00	.00	.00	e2.0	e3.6
23	e5.6	e9.6	e10	e19	.27	.00	.17	.00	.00	.00	e2.2	e3.5
24	e5.7	e9.6	e9.0	e19	21	.00	.00	.00	.00	.00	e2.4	e3.5
25	e5.7	e9.5	e8.4	e20	46	.00	.00	.00	.00	.00	e2.6	e3.4
26	e5.8	e9.5	e8.3	e25	654	.00	.00	.00	.00	.00	e2.8	e3.3
27	e5.9	e9.5	e8.3	e50	375	.00	.00	.00	.00	e2.6	e3.0	e3.2
28	e10	e9.4	e8.3	e22	528	.00	.00	.00	.00	e4.8	e3.2	e3.2
29	e6.0	e9.4	e8.3	e17	---	.00	.00	.00	.00	e4.9	e3.4	e3.1
30	e32	e9.4	e8.2	e15	---	.00	.00	.00	.00	e5.0	e3.6	e3.0
31	e26	---	e8.2	e13	---	.00	---	.00	---	e4.9	e3.8	---
TOTAL	224.6	273.0	274.5	1049.2	2369.98	761.10	16.84	0.00	0.00	22.20	102.5	121.9
MEAN	7.25	9.10	8.85	33.8	84.6	24.6	.56	.000	.000	.72	3.31	4.06
MAX	32	16	10	400	654	197	6.4	.00	.00	5.0	5.3	5.0
MIN	5.0	6.3	8.2	7.9	.11	.00	.00	.00	.00	.00	1.6	3.0
AC-FT	445	541	544	2080	4700	1510	33	.00	.00	44	203	242

e Estimated.

11045050 SANTA MARGARITA RIVER AT UNITED STATES MARINE CORPS DIVERSION DAM, NEAR YSIDORA, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.39	6.81	5.57	17.4	62.4	15.1	2.71	1.15	1.58	2.43	2.76	2.70
MAX	7.25	9.10	8.85	33.8	84.6	24.6	5.96	3.45	3.25	3.75	3.31	4.06
(WY)	2001	2001	2001	2001	2001	2001	1999	1999	1999	1999	2001	2001
MIN	3.53	4.52	2.29	.86	40.9	2.66	.56	.000	.000	.72	2.08	1.17
(WY)	2000	2000	2000	2000	2000	1999	2001	2000	2001	2001	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	2823.66	5215.82	
ANNUAL MEAN	7.71	14.3	10.4
HIGHEST ANNUAL MEAN			14.3 2001
LOWEST ANNUAL MEAN			6.47 2000
HIGHEST DAILY MEAN	432 Feb 21	654 Feb 26	654 Feb 26 2001
LOWEST DAILY MEAN	.00 Mar 1	.00 Mar 20	.00 Mar 1 2000
ANNUAL SEVEN-DAY MINIMUM	.00 Mar 17	.00 Mar 20	.00 Mar 17 2000
MAXIMUM PEAK FLOW		a Jan 11	3520 Feb 21 2000
MAXIMUM PEAK STAGE		a Jan 11	42.44 Feb 21 2000
ANNUAL RUNOFF (AC-FT)	5600	10350	7520
10 PERCENT EXCEEDS	9.4	20	9.3
50 PERCENT EXCEEDS	1.5	4.4	2.7
90 PERCENT EXCEEDS	.00	.00	.00

a Instantaneous peak discharge and stage for water year 2001 are unknown, but are known to have occurred on Jan. 11.

11045300 FALLBROOK CREEK NEAR FALLBROOK, CA

LOCATION.—Lat 33°20'49", long 117°19'01", in SE 1/4 SE 1/4 sec.32, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, at culvert on DeLuz Road, 0.75 mi upstream from O'Neill Lake, and 4.5 mi southwest of Fallbrook.

DRAINAGE AREA.—6.97 mi².

PERIOD OF RECORD.—October 1993 to current year. Discharge records for October 1964 to September 1977 and October 1989 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control with low-water Parshall flume. Elevation of gage is 190 ft above sea level, from topographic map.

REMARKS.—Records good. Slight regulation by two small storage reservoirs upstream from station. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 895 ft³/s, Feb. 23, 1998, gage height, 9.73 ft, from rating curve extended above 140 ft³/s on basis of culvert computation; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0800	213	3.85

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	.43	.23	.13	.49	3.3	.65	.58	.38	.01	.01	.00
2	.00	.43	.23	.12	.49	1.6	.64	.53	.39	.01	.00	.00
3	.00	.43	.22	.11	.49	1.3	.61	.48	.36	.01	.00	.00
4	.00	.43	.20	.11	.49	1.2	.59	.48	.32	.01	.00	.00
5	.00	.43	.15	.12	.49	1.0	.58	.49	.31	.01	.00	.00
6	.00	.42	.16	.12	.48	5.6	.59	.48	.30	.01	.00	.00
7	.00	.39	.18	.11	.48	4.1	6.3	.48	.28	.01	.00	.00
8	.00	.37	.18	.15	.48	1.5	3.6	.47	.27	.01	.00	.00
9	.00	.36	.17	.15	.48	1.1	.93	.47	.26	.01	.00	.00
10	.00	.37	.17	.32	.50	8.7	2.2	.47	.23	.01	.00	.00
11	.00	.29	.18	48	.49	2.1	1.0	.47	.21	.01	.00	.00
12	.00	.31	.19	7.1	3.1	1.2	.74	.48	.21	.01	.00	.00
13	.00	.31	.19	1.6	17	.97	.65	.47	.21	.01	.00	.00
14	.00	.31	.20	.85	22	.88	.62	.48	.19	.01	.00	.00
15	.00	.31	.20	.71	1.6	.82	.59	.49	.18	.01	.00	.00
16	.00	.31	.20	.88	.90	.84	.58	.49	.16	.01	.00	.00
17	.00	.31	.20	.70	.77	.72	.58	.48	.15	.01	.00	.00
18	.00	.31	.20	.58	.71	.71	.58	.46	.14	.01	.00	.00
19	.00	.30	.19	.58	.70	.67	.58	.46	.12	.01	.00	.00
20	.00	.29	.19	.58	4.7	.65	.58	.44	.11	.01	.00	.00
21	.00	.29	.19	.58	1.0	.75	1.8	.45	.10	.01	.00	.00
22	.00	.28	.19	.58	.74	.70	1.3	.44	.08	.01	.01	.00
23	.00	.28	.19	.58	3.8	.65	.67	.44	.06	.01	.00	.00
24	.00	.28	.18	.58	3.0	.65	.59	.47	.06	.01	.00	.00
25	.00	.28	.17	.48	20	.65	.58	.45	.03	.01	.00	.00
26	.04	.26	.16	1.0	24	.65	.58	.46	.02	.01	.00	.00
27	.04	.25	.16	3.4	13	.65	.58	.45	.01	.01	.00	.00
28	.01	.24	.15	.78	8.1	.65	.58	.44	.01	.00	.00	.00
29	.09	.23	.16	.56	---	.65	.58	.41	.01	.01	.00	.00
30	.02	.23	.17	.52	---	.65	.58	.39	.01	.01	.00	.00
31	.33	---	.16	.51	---	.65	---	.39	---	.00	.00	---
TOTAL	0.53	9.73	5.71	72.59	130.48	46.26	31.03	14.44	5.17	0.29	0.02	0.00
MEAN	.017	.32	.18	2.34	4.66	1.49	1.03	.47	.17	.009	.001	.000
MAX	.33	.43	.23	48	24	8.7	6.3	.58	.39	.01	.01	.00
MIN	.00	.23	.15	.11	.48	.65	.58	.39	.01	.00	.00	.00
AC-FT	1.1	19	11	144	259	92	62	29	10	.6	.04	.00

11045300 FALLBROOK CREEK NEAR FALLBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.14	.86	1.06	4.72	7.41	5.12	2.01	1.09	.53	.24	.12	.091
MAX	.40	3.35	3.20	18.5	35.9	23.8	5.63	3.28	1.50	.82	.41	.41
(WY)	1999	1997	1997	1995	1998	1995	1998	1998	1995	1998	1995	1998
MIN	.013	.031	.17	.37	1.09	.71	.81	.39	.039	.000	.000	.000
(WY)	2000	2000	2000	2000	1999	1999	1997	1997	2000	2000	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	213.98		316.25			
ANNUAL MEAN	.58		.87		1.92	
HIGHEST ANNUAL MEAN					4.77	
LOWEST ANNUAL MEAN					.56	
HIGHEST DAILY MEAN	23	Mar 5	48	Jan 11	256	Mar 5 1995
LOWEST DAILY MEAN	.00	Jul 2	.00	Oct 1	.00	Sep 5 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 2	.00	Oct 1	.00	Sep 5 1994
MAXIMUM PEAK FLOW			213		895	
MAXIMUM PEAK STAGE			3.85		9.73	
ANNUAL RUNOFF (AC-FT)	424		627		1390	
10 PERCENT EXCEEDS	.65		.95		2.6	
50 PERCENT EXCEEDS	.23		.23		.48	
90 PERCENT EXCEEDS	.00		.00		.01	

11045600 O'NEILL LAKE OUTLET CHANNEL NEAR FALLBROOK, CA

LOCATION.—Lat 33°19'30", long 117°19'29", in SE 1/4 NW 1/4 sec. 8, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 300 ft downstream from O'Neill Lake, and 5.5 mi southwest of Fallbrook.

DRAINAGE AREA.—9.77 mi².

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and concrete control with low-water V-notch weir. Elevation of gage is 100 ft above sea level, from topographic map.

REMARKS.—Records excellent. Records for this station represent regulated releases from O'Neill Lake. Water is sometimes diverted into O'Neill Lake from the Santa Margarita River via a diversion dam 0.9 mi above gage. Slight regulation by two small storage reservoirs upstream from gaging station on Fallbrook Creek near Fallbrook (station 11045300). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 14 ft³/s, Nov. 20, 2000, gage height, 2.20 ft; 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	.00	.00	6.7	.13	.02	.01	.07	.03	.01	.01	.02	.01
2	.00	.00	5.3	.13	.02	.01	.07	.05	.01	.01	.01	.01
3	.00	.00	3.9	.04	.01	.01	.07	.05	.01	.01	.01	.01
4	.00	.00	4.6	.02	.01	.03	.06	.04	.01	.01	.01	.01
5	.00	.00	5.6	.02	.01	.11	.03	.02	.01	.01	.00	.01
6	.00	.00	3.9	.01	.01	.13	.02	.01	.01	.01	.01	.01
7	.00	.00	2.6	.04	.01	.09	.03	.02	.01	.01	.01	.01
8	.00	.00	2.1	.05	.01	.08	.02	.01	.01	.01	.01	.01
9	.00	.00	1.6	.01	.01	.08	.01	.03	.01	.01	.01	.01
10	.00	.00	1.3	.01	.01	.08	.01	.04	.01	.01	.01	.00
11	.00	.00	1.1	.16	.01	.05	.01	.05	.01	.01	.01	.00
12	.00	.00	.88	.16	.00	.04	.01	.03	.01	.01	.01	.00
13	.00	.00	.74	.07	.03	.02	.01	.02	.01	.01	.01	.00
14	.00	.00	.61	.06	.01	.04	.02	.02	.01	.01	.01	.00
15	.00	.00	.53	.03	.01	.05	.01	.02	.01	.01	.01	.00
16	.00	.00	.48	.01	.01	.05	.01	.02	.01	.01	.00	.00
17	.00	.00	.42	.01	.01	.05	.01	.01	.01	.01	.00	.00
18	.00	.00	.28	.02	.01	.05	.01	.02	.01	.01	.01	.00
19	.00	.00	.20	.02	.01	.06	.01	.03	.01	.01	.01	.00
20	.00	8.1	.23	.01	.01	.06	.01	.03	.01	.01	.01	.00
21	.00	13	.29	.02	.01	.07	.01	.03	.01	.01	.01	.00
22	.00	13	.28	.03	.01	.05	.01	.03	.01	.01	.00	.00
23	.00	12	.26	.05	.02	.05	.01	.02	.01	.01	.00	.00
24	.00	12	.25	.04	.01	.06	.01	.02	.01	.01	.00	.00
25	.00	11	.15	.03	.05	.07	.03	.02	.01	.01	.00	.00
26	.00	11	.10	.03	.01	.07	.05	.02	.01	.00	.00	.00
27	.00	10	.14	.02	.02	.08	.03	.02	.01	.01	.00	.00
28	.00	9.5	.16	.02	.02	.10	.05	.02	.01	.01	.01	.00
29	.00	8.8	.15	.01	---	.07	.06	.01	.01	.01	.00	.00
30	.00	7.9	.14	.01	---	.04	.03	.01	.01	.01	.01	.01
31	.00	---	.14	.01	---	.04	---	.01	---	.01	.00	---
TOTAL	0.00	116.30	45.13	1.28	0.38	1.80	0.79	0.76	0.30	0.30	0.21	0.10
MEAN	.000	3.88	1.46	.041	.014	.058	.026	.025	.010	.010	.007	.003
MAX	.00	13	6.7	.16	.05	.13	.07	.05	.01	.01	.02	.01
MIN	.00	.00	.10	.01	.00	.01	.01	.01	.01	.00	.00	.00
AC-FT	.00	231	90	2.5	.8	3.6	1.6	1.5	.6	.6	.4	.2

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

MEAN	.12	1.44	.64	.18	.17	.18	.17	.14	.11	.092	.055	.027
MAX	.35	3.88	1.46	.48	.48	.48	.50	.39	.33	.27	.16	.076
(WY)	1999	2001	2001	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	.000	.017	.004	.016	.004	.001	.000	.003	.000	.000	.000	.003
(WY)	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL TOTAL	162.27		167.35			
ANNUAL MEAN	.44		.46		.28	
HIGHEST ANNUAL MEAN					.46	
LOWEST ANNUAL MEAN					.004	
HIGHEST DAILY MEAN	13	Nov 21	13	Nov 21	13	Nov 21 2000
LOWEST DAILY MEAN	.00	Jan 7	.00	Oct 1	.00	Sep 26 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 10	.00	Oct 1	.00	Oct 9 1999
MAXIMUM PEAK FLOW			14		14	
MAXIMUM PEAK STAGE			2.20		2.20	
ANNUAL RUNOFF (AC-FT)	322		332		201	
10 PERCENT EXCEEDS	.15		.16		.44	
50 PERCENT EXCEEDS	.00		.01		.01	
90 PERCENT EXCEEDS	.00		.00		.00	

11045700 O'NEILL LAKE SPILL CHANNEL NEAR FALLBROOK, CA

LOCATION.—Lat 33°19'44", long 117°19'35", in NW 1/4 NW 1/4 sec.8, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 100 ft upstream from spillway on O'Neill Lake, 1.3 mi upstream from confluence with Santa Margarita River, and 5.5 mi southwest of Fallbrook.

DRAINAGE AREA.—9.77 mi².

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and sharp-crested weir (wooden flashboards in four weir boxes). Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records fair. Records for this station represent spill from O'Neill Lake. Minor seepage through weir flashboards may occur at times and is not indicated in records for this station. Water is sometimes diverted into O'Neill Lake from the Santa Margarita River via a diversion dam 0.55 mi above gage. Slight regulation by two small storage reservoirs upstream from gaging station on Fallbrook Creek near Fallbrook (station 11045300). See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3.5 ft³/s, Apr. 8, 2001, gage height, 6.65 ft, from rating curve developed on basis of sharp-crested weir computations; no flow for all or most of 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	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.80	2.7	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	2.8	2.7	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	2.4	2.3	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	2.0	1.7	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	1.5	1.3	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	1.1	1.0	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.89	.79	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.67	.46	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.49	.26	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.09	.26	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.68	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.81	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.44	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	12.74	24.15	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.41	.81	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	2.8	2.8	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	25	48	.00	.00	.00	.00	.00

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

	1999	1999	1999	1999	1999	2001	1999	1999	1999	1999	1999	1999
MEAN	.000	.000	.000	.000	.000	.14	.27	.000	.000	.000	.000	.000
MAX	.000	.000	.000	.000	.000	.41	.81	.000	.000	.000	.000	.000
(WY)	1999	1999	1999	1999	1999	2001	2001	1999	1999	1999	1999	1999
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1999 - 2001

ANNUAL TOTAL		36.89			
ANNUAL MEAN		.10	.034		
HIGHEST ANNUAL MEAN		.10	2001		
LOWEST ANNUAL MEAN		.000	1999		
HIGHEST DAILY MEAN		2.8	Mar 11 2001		
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1 1998	
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1 1998	
MAXIMUM PEAK FLOW		3.5	Apr 8	3.5	Apr 8 2001
MAXIMUM PEAK STAGE		6.65	Apr 8	6.65	Apr 8 2001
ANNUAL RUNOFF (AC-FT)		73		24	
10 PERCENT EXCEEDS	.00		.00	.00	
50 PERCENT EXCEEDS	.00		.00	.00	
90 PERCENT EXCEEDS	.00		.00	.00	

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA

LOCATION.—Lat 33°18'40", long 117°20'47", in NW 1/4 NW 1/4 sec.18, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, at Basilone Road Bridge, 7.9 mi upstream from mouth, and 5.2 mi upstream from Ysidora.

DRAINAGE AREA.—723 mi².

PERIOD OF RECORD.—February 1923 to February 1999 (see GAGE paragraph). Low-flow records not equivalent prior to Dec. 10, 1980, due to installation of conservation ponds above downstream site.

CHEMICAL DATA: Water years 1980–81.

WATER TEMPERATURE: Water years 1969–81.

SEDIMENT DATA: Water years 1969–78, 1982–83.

REVISED RECORDS.—WDR CA-87-1: Drainage area.

GAGE.—Water-stage recorder. Auxiliary gage 2.3 mi upstream with crest-stage gage and steel drop structure (diversion dam). Primary gage temporarily out of operation since Feb. 26, 1999, due to channel work and replacement of Basilone Road Bridge. During this period, the auxiliary gage is operated as a temporary replacement (see station 11045050; new station name and number established, due to nonequivalence of low- and medium-flow records). Elevation of gage is 75 ft above sea level, from topographic map. February 1923 to Feb. 16, 1927, at site 4.4 mi downstream at different datum (destroyed by flood). Feb. 17, 1927, to Feb. 1, 1931, no gage in operation; records based on discharge measurements. Feb. 2, 1931, to Feb. 24, 1970, at site 5.4 mi downstream at different datum; Feb. 25, 1970, to Dec. 10, 1980, at site 6.2 mi downstream at different datum.

REMARKS.—Flow partly regulated by Vail Lake (station 11042510) since November 1948 and by Skinner Reservoir since 1974. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Diversions to O'Neill Lake and to ground-water recharge basins are made at point 2.3 mi upstream by Camp Pendleton personnel. Regulated return flows from O'Neill Lake can occur at times, as can unregulated spills. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 44,000 ft³/s, estimated, based on regression equation and flood routing of upstream flows, Jan. 16, 1993, gage height, 20.47 ft; no flow for all or part of most years.

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA

LOCATION.—Lat 33°14'08", long 117°24'27", in SW 1/4 NE 1/4 sec.9, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 300 ft downstream from bridge on Interstate Highway 5, 0.5 mi upstream from mouth, and 3.5 mi northwest of Oceanside.

DRAINAGE AREA.—744 mi².

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.—October 1989 to current year. Unpublished records for water year 1989 available in files of the U.S. Geological Survey.

GAGE.—Water-stage recorder. Datum of gage is 2.78 ft below sea level.

REMARKS.—Gage height generally affected by tide. Interruptions in record at times due to malfunction of recording equipment. See schematic diagram of Santa Margarita River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 15.10 ft, from floodmarks and hydrographers' notes, Jan. 16, 1993; minimum recorded gage height, 2.02 ft, Feb. 3, 1999.

EXTREMES FOR CURRENT YEAR.—Maximum recorded gage height, 10.16 ft, Jan. 12; minimum recorded gage height, 2.64 ft, Jan. 18.

GAGE HEIGHT, FEET, 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	7.37	7.36	7.92	7.85	8.09	8.07	8.27	8.26	4.20	3.02	5.40	3.88
2	7.40	7.37	7.91	7.85	8.09	8.08	8.29	8.25	4.47	3.02	5.33	3.60
3	7.41	7.38	7.91	7.86	8.10	8.08	8.28	8.25	5.22	3.10	5.41	3.35
4	7.41	7.40	7.92	7.87	8.11	8.09	8.29	8.25	6.04	3.56	5.59	3.24
5	7.42	7.41	7.92	7.87	8.12	8.10	8.27	8.25	6.59	3.71	6.43	3.24
6	7.43	7.41	7.92	7.85	8.12	8.10	8.29	8.27	7.08	3.68	6.72	3.20
7	7.44	7.43	7.94	7.88	8.12	8.11	8.30	8.27	8.14	3.06	7.10	3.19
8	7.46	7.44	7.94	7.89	8.12	8.12	8.29	8.27	7.34	2.80	6.97	3.07
9	7.47	7.45	7.93	7.89	8.12	8.12	8.35	8.29	6.78	2.83	6.95	3.04
10	7.48	7.46	7.95	7.90	8.14	8.12	8.36	8.33	6.42	2.88	7.11	3.07
11	7.50	7.46	7.97	7.91	8.17	8.14	9.00	8.36	5.71	2.88	5.94	3.28
12	7.52	7.47	7.99	7.92	8.17	8.14	10.16	3.93	5.40	2.97	5.62	3.12
13	7.50	7.46	7.99	7.93	8.18	8.14	6.42	3.53	6.01	3.27	5.49	3.03
14	7.50	7.46	8.00	7.92	8.19	8.15	5.42	3.19	5.43	3.90	5.41	3.01
15	7.51	7.47	8.00	7.94	8.19	8.16	5.45	2.98	4.97	3.33	5.03	2.97
16	7.51	7.47	8.01	7.95	8.17	8.16	5.59	2.85	4.90	3.04	4.84	2.96
17	7.53	7.48	8.01	7.95	8.20	8.17	5.21	2.72	5.08	2.90	4.74	2.89
18	7.52	7.51	8.01	7.96	8.20	8.18	5.30	2.64	5.30	2.77	4.69	2.89
19	7.54	7.49	8.02	7.96	8.20	8.18	5.72	2.65	5.67	2.72	4.79	2.88
20	7.55	7.50	8.02	7.97	8.21	8.18	6.06	2.80	6.13	2.99	5.22	2.86
21	7.57	7.53	8.02	7.98	8.22	8.19	5.95	3.11	6.05	3.44	5.32	2.86
22	7.58	7.53	8.03	7.99	8.22	8.20	6.22	3.07	6.06	3.07	5.37	2.85
23	7.58	7.55	8.04	8.00	8.24	8.20	6.23	3.06	6.38	2.97	5.37	2.85
24	7.60	7.55	8.04	8.00	8.24	8.22	6.00	2.89	5.89	3.06	5.31	2.87
25	7.61	7.56	8.05	8.01	8.25	8.23	6.03	2.99	5.62	3.23	5.24	2.84
26	7.61	7.57	8.06	8.02	8.28	8.23	5.71	3.12	5.64	3.62	5.78	2.91
27	7.69	7.60	8.07	8.03	8.29	8.22	5.57	3.11	5.35	3.75	5.63	2.92
28	7.70	7.68	8.08	8.04	8.29	8.22	4.79	3.11	5.30	4.09	5.94	2.97
29	7.77	7.69	8.08	8.05	8.29	8.24	3.91	3.05	---	---	5.93	3.19
30	7.83	7.77	8.08	8.06	8.30	8.25	3.72	3.03	---	---	5.94	3.67
31	7.88	7.83	---	---	8.27	8.25	4.06	2.97	---	---	5.60	3.87
MONTH	7.88	7.36	8.08	7.85	8.30	8.07	10.16	2.64	8.14	2.72	7.11	2.84

SANTA MARGARITA RIVER BASIN

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

GAGE HEIGHT, FEET, 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	5.47	4.04	4.89	3.36	5.93	3.56	6.32	4.01	6.43	4.28	6.30	4.36
2	5.49	4.15	5.33	3.45	6.41	3.65	6.58	4.05	6.59	4.29	6.19	4.36
3	5.69	4.06	5.53	3.53	6.76	3.70	6.89	4.13	6.60	4.32	5.94	4.39
4	5.80	3.90	6.02	3.62	6.80	3.71	6.71	4.17	6.54	4.34	5.61	4.39
5	6.13	3.72	6.49	3.64	6.59	3.70	6.67	4.17	6.21	4.37	5.44	4.42
6	6.22	3.64	6.49	3.56	6.37	3.64	6.38	4.17	5.92	4.35	5.30	4.39
7	6.28	3.61	6.50	3.54	6.26	3.62	5.97	4.12	5.80	4.37	5.17	4.34
8	6.29	3.48	6.56	3.52	5.96	3.62	5.82	4.10	5.38	4.38	5.46	4.28
9	6.28	3.49	6.44	3.51	5.83	3.61	5.67	4.11	4.95	4.43	5.26	4.29
10	6.00	3.43	6.16	3.52	5.41	3.59	5.01	4.08	4.79	4.46	5.19	4.48
11	5.95	3.42	6.10	3.53	5.13	3.63	4.57	4.08	4.87	4.44	5.34	4.71
12	5.60	3.31	5.78	3.57	4.70	3.62	4.28	4.06	5.00	4.43	5.61	4.57
13	4.89	3.30	5.20	3.62	4.43	3.62	4.83	4.13	5.33	4.41	6.09	4.35
14	4.60	3.29	4.82	3.72	4.35	3.61	5.02	4.46	5.93	4.28	6.66	4.33
15	4.09	3.26	4.37	3.84	4.59	3.69	5.48	4.44	6.44	4.29	7.08	4.37
16	4.03	3.27	4.93	4.34	5.00	3.79	5.93	4.18	6.94	4.31	7.13	4.41
17	4.16	3.28	5.16	4.57	5.40	3.89	6.48	4.15	7.35	4.34	7.01	4.46
18	4.48	3.34	5.47	4.68	6.02	3.89	---	---	7.48	4.37	6.57	4.48
19	4.83	3.36	5.82	4.67	6.68	3.87	---	---	7.37	4.43	6.77	4.49
20	5.04	3.43	6.28	4.26	6.98	3.91	---	---	6.86	4.46	6.33	4.45
21	5.73	3.55	6.63	3.79	7.17	3.94	---	---	6.61	4.48	6.11	4.42
22	5.60	3.56	6.85	3.80	7.22	3.98	---	---	5.96	4.45	5.69	4.38
23	5.88	3.55	7.00	3.76	6.98	4.03	---	---	5.54	4.41	5.27	4.37
24	6.09	3.48	6.94	3.67	6.91	4.07	---	---	5.69	4.33	5.03	4.35
25	6.15	3.52	6.73	3.62	6.50	4.11	5.57	4.42	5.61	4.29	5.28	4.39
26	5.95	3.46	6.67	3.63	5.81	4.11	5.31	4.30	5.47	4.29	5.59	4.44
27	5.95	3.35	6.41	3.60	4.77	4.03	5.33	4.22	5.77	4.29	5.69	4.45
28	5.69	3.39	5.96	3.57	5.07	3.88	5.59	4.21	6.04	4.35	5.90	4.45
29	5.48	3.35	5.40	3.53	5.51	3.91	5.84	4.22	6.22	4.39	6.08	4.47
30	5.18	3.34	4.99	3.45	5.94	3.92	6.18	4.25	6.22	4.35	6.00	4.48
31	---	---	5.44	3.47	---	---	6.44	4.29	6.37	4.34	---	---
MONTH	6.29	3.26	7.00	3.36	7.22	3.56	---	---	7.48	4.28	7.13	4.28

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1993 to current year.

DISSOLVED OXYGEN: October 1993 to current year.

pH: October 1993 to current year.

SPECIFIC CONDUCTANCE: October 1993 to current year.

WATER TEMPERATURE: October 1993 to current year.

PERIOD OF DAILY RECORD.—October 1993 to current year.

DISSOLVED OXYGEN: October 1993 to current year.

pH: October 1993 to current year.

SPECIFIC CONDUCTANCE: October 1993 to current year.

WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1993.

REMARKS.—Dissolved oxygen records rated poor. pH records rated fair through Dec. 27 and good thereafter. Specific conductance records rated good. Temperature records rated excellent through Aug. 23 and fair thereafter. Interruptions in record at times due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 20.9 mg/L, May 1, 1996; minimum recorded, 0.0 mg/L, May 19, Aug. 29, 1994.

pH: Maximum recorded, 9.6 standard units, Dec. 21, 22, 1996, Dec. 30, 31, 1999; minimum recorded, 6.2 standard units, Nov. 26, 1993.

SPECIFIC CONDUCTANCE: Maximum recorded, 53,700 microsiemens, Oct. 5, 1995; minimum recorded, 119 microsiemens, Feb. 24, 1998.

WATER TEMPERATURE: Maximum recorded, 32.0°C, July 29, 1995, June 9, and Aug. 14, 16, 1996; minimum recorded, 5.0°C, Nov. 21, 1994.

EXTREMES FOR CURRENT YEAR.—

DISSOLVED OXYGEN: Maximum recorded, 19.3 mg/L, Aug. 14; minimum recorded, 0.2 mg/L, Aug. 3, 8, 9.

pH: Maximum recorded, 9.3 standard units, Mar. 14; minimum recorded, 7.4 standard units, May 27, 28.

SPECIFIC CONDUCTANCE: Maximum recorded, 52,500 microsiemens, May 6, 8; minimum recorded, 280 microsiemens, Feb. 14.

WATER TEMPERATURE: Maximum recorded, 29.0°C, July 29, Aug. 14; minimum recorded, 5.5°C, Jan. 18.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.2	3.2	10.7	4.4	6.6	.8	8.1	1.7	5.8	2.3	---	---
2	7.9	2.3	10.5	5.3	5.8	1.7	7.8	1.9	6.2	2.5	---	---
3	7.8	3.5	10.8	6.5	5.6	2.0	7.8	2.3	6.8	2.9	---	---
4	7.1	2.5	11.0	4.6	5.4	1.3	8.0	2.1	7.5	3.7	---	---
5	6.9	2.5	10.3	7.5	5.4	1.9	6.7	2.6	7.7	4.5	---	---
6	5.7	2.7	10.2	4.6	5.3	1.9	6.6	1.0	7.8	4.8	---	---
7	---	---	10.4	7.3	5.6	1.3	6.7	1.4	9.4	5.6	---	---
8	---	---	10.8	7.7	4.8	1.6	7.2	1.8	9.7	4.9	---	---
9	---	---	10.8	7.6	4.1	1.2	7.5	2.9	10.7	5.1	11.0	6.1
10	---	---	9.8	6.2	4.3	1.5	7.2	.8	11.1	4.6	13.3	6.8
11	---	---	9.8	4.1	4.2	1.5	8.9	1.6	10.2	4.6	9.8	6.6
12	---	---	10.4	7.4	5.5	2.1	7.0	1.4	7.5	4.9	12.3	5.4
13	---	---	10.9	6.7	4.7	1.4	8.6	5.9	7.4	4.3	13.3	5.6
14	---	---	11.3	4.3	5.1	2.3	7.8	3.9	9.4	5.8	14.9	4.4
15	11.6	6.6	11.2	7.8	5.6	2.8	6.7	3.2	10.1	8.0	13.6	4.4
16	11.4	5.9	11.9	5.2	5.6	2.7	6.8	3.1	10.0	5.5	12.2	3.6
17	11.0	2.8	11.6	8.4	6.1	2.1	6.8	4.1	7.8	3.8	12.6	4.6
18	10.3	3.1	11.2	7.6	6.1	2.8	6.9	2.0	7.9	3.2	12.3	4.6
19	10.2	3.8	11.3	3.8	6.3	2.0	6.4	1.8	7.9	5.2	11.8	4.3
20	9.5	5.3	11.5	7.0	6.0	1.3	6.5	2.8	7.8	5.3	11.0	4.9
21	8.5	2.3	11.5	5.2	6.7	1.1	6.0	2.7	7.9	5.9	10.4	5.4
22	8.6	3.2	10.7	6.8	6.7	1.7	6.5	2.5	8.0	5.4	10.1	5.5
23	8.6	2.2	10.1	1.7	6.3	2.7	6.5	2.7	8.3	5.4	9.9	4.9
24	9.9	3.7	9.6	2.0	6.6	1.8	7.0	2.7	8.6	5.9	9.9	5.0
25	10.2	6.5	9.6	2.8	7.2	1.7	7.2	3.6	8.6	5.8	9.5	5.7
26	9.4	5.6	9.0	4.4	6.9	1.1	7.2	3.4	---	---	8.3	5.2
27	8.8	3.2	8.2	1.3	7.8	2.3	7.1	3.2	---	---	8.8	5.4
28	9.3	5.3	8.1	2.3	7.8	1.7	5.7	3.3	---	---	7.1	5.2
29	9.5	6.2	7.8	2.2	7.5	1.9	5.3	1.8	---	---	7.1	5.9
30	9.2	5.2	7.1	2.7	7.2	1.3	5.8	2.1	---	---	7.9	5.4
31	10.1	6.9	---	---	8.8	2.5	6.1	2.2	---	---	7.6	5.4
MONTH	---	---	11.9	1.3	8.8	.8	8.9	.8	---	---	---	---

SANTA MARGARITA RIVER BASIN

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

OXYGEN DISSOLVED (MG/L), 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	---	---	5.8	3.8	5.8	2.4	10.1	2.4	9.0	.9	12.6	1.9
2	---	---	5.8	3.4	6.1	3.1	6.8	1.9	8.7	1.0	11.7	2.1
3	---	---	6.4	4.2	6.1	3.4	7.5	2.4	4.5	.2	7.7	1.6
4	---	---	6.3	4.4	7.7	3.1	7.6	2.0	5.5	.7	9.8	1.0
5	---	---	6.3	4.0	7.4	3.5	7.5	2.1	5.0	.7	9.0	3.1
6	---	---	5.9	3.7	7.7	3.6	7.8	2.0	6.1	.8	8.0	3.5
7	8.4	4.5	6.1	3.7	5.9	3.4	7.3	2.1	4.5	.5	11.2	3.2
8	6.7	4.5	7.4	3.5	5.9	3.7	7.6	2.1	3.6	.2	15.7	1.7
9	5.7	4.0	7.2	4.5	6.8	3.7	6.6	1.4	9.4	.2	7.7	2.8
10	6.3	4.7	7.1	4.4	7.6	3.3	7.7	1.9	12.2	.7	8.2	1.9
11	7.2	4.8	6.5	4.5	7.9	3.6	9.5	2.7	18.0	1.0	9.0	1.7
12	8.1	4.7	6.0	3.8	7.8	3.6	8.2	2.5	14.8	1.5	11.1	3.3
13	8.9	4.5	8.0	4.2	8.2	2.8	6.8	2.4	17.7	1.5	12.9	2.8
14	9.4	4.5	8.3	4.3	9.4	3.6	4.7	1.8	19.3	.9	10.6	1.5
15	---	---	6.8	2.8	9.5	2.6	5.8	1.5	14.5	1.4	9.2	2.3
16	---	---	5.4	3.1	10.0	2.7	9.1	1.7	14.3	1.3	8.7	3.2
17	---	---	5.4	3.1	9.0	2.8	9.2	1.3	13.2	2.2	8.4	3.3
18	---	---	6.4	3.5	9.7	3.1	7.7	1.7	12.8	2.1	---	---
19	---	---	6.8	4.1	7.3	3.8	6.3	.7	12.0	1.7	---	---
20	---	---	---	---	10.4	3.7	6.9	1.0	13.2	1.3	---	---
21	---	---	---	---	7.1	3.8	6.6	.7	13.2	1.4	---	---
22	---	---	---	---	8.0	3.8	5.8	.8	14.8	1.3	---	---
23	---	---	6.8	3.5	7.6	3.7	4.7	.9	12.6	1.1	---	---
24	---	---	6.9	2.0	6.4	3.9	5.7	.7	10.8	1.1	---	---
25	---	---	8.4	2.1	7.3	4.2	6.1	.8	12.7	1.3	---	---
26	---	---	7.0	1.9	7.2	4.3	8.0	.7	13.2	1.0	---	---
27	9.0	4.5	6.1	1.4	---	---	8.6	.8	13.9	1.4	---	---
28	7.7	4.0	8.2	1.6	---	---	10.7	.8	14.4	1.3	---	---
29	8.2	4.1	8.8	2.2	---	---	13.2	.9	15.7	1.4	---	---
30	8.2	4.2	7.0	1.5	6.9	1.8	11.4	1.0	17.1	2.1	---	---
31	---	---	7.7	1.9	---	---	10.6	.9	17.0	1.9	---	---
MONTH	---	---	---	---	---	---	13.2	.7	19.3	.2	---	---

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, 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	8.7	8.5	8.9	8.7	8.2	8.0	8.4	8.1	8.1	7.7	8.0	7.9
2	8.7	8.5	8.9	8.8	8.1	8.0	8.5	8.2	8.2	7.8	8.0	7.9
3	8.7	8.6	9.0	8.9	8.1	8.0	8.5	8.2	8.2	7.8	8.1	7.8
4	8.7	8.5	9.0	8.9	8.1	8.0	8.4	8.1	8.2	7.9	8.1	7.7
5	8.7	8.5	9.0	8.9	8.1	7.9	8.4	8.2	8.2	7.9	8.2	7.8
6	8.6	8.5	9.0	8.9	8.1	7.9	8.4	8.1	8.2	8.0	8.1	8.0
7	8.6	8.4	9.0	8.9	8.1	7.9	8.4	8.2	8.2	7.9	8.2	7.9
8	8.6	8.5	9.0	8.9	8.0	8.0	8.5	8.2	8.2	7.9	8.7	7.9
9	8.6	8.5	8.9	8.8	8.1	7.9	8.5	8.3	8.3	7.9	8.8	8.0
10	8.7	8.5	8.8	8.8	8.1	7.9	8.4	8.0	8.2	7.9	8.9	8.1
11	8.7	8.5	8.9	8.7	8.0	7.8	8.3	8.0	8.2	7.9	8.4	7.9
12	8.7	8.5	8.9	8.8	8.1	7.9	8.3	7.8	8.2	7.9	9.0	7.9
13	8.7	8.5	8.8	8.6	8.0	7.8	8.1	7.8	8.1	7.8	9.2	8.0
14	8.8	8.6	8.8	8.7	8.0	7.8	8.4	7.7	8.1	7.9	9.3	8.0
15	8.8	8.7	8.9	8.7	8.0	7.8	8.3	7.5	8.0	7.8	9.2	8.1
16	8.8	8.7	8.9	8.7	8.0	7.9	8.4	7.5	8.2	7.8	9.2	7.9
17	8.8	8.6	8.8	8.7	8.0	7.8	8.4	7.7	8.1	7.7	9.2	8.0
18	8.8	8.6	8.8	8.6	8.0	7.8	8.4	7.6	8.1	7.7	9.1	8.0
19	8.8	8.6	8.8	8.6	8.0	7.8	8.1	7.7	8.1	7.8	9.0	8.0
20	8.8	8.7	8.8	8.7	8.0	7.7	8.1	7.6	8.1	7.7	9.0	8.1
21	8.7	8.6	8.8	8.3	7.9	7.7	8.1	7.7	8.0	7.8	8.8	8.1
22	8.7	8.5	8.4	8.2	8.1	7.7	8.1	7.6	8.0	7.8	8.8	8.1
23	8.8	8.5	8.3	8.1	8.1	7.9	8.1	7.6	8.2	7.8	8.9	8.1
24	8.8	8.6	8.3	8.1	8.1	7.9	8.1	7.7	8.1	7.8	8.7	8.0
25	8.9	8.8	8.3	8.2	8.2	7.9	8.1	7.7	8.1	7.8	8.8	8.0
26	8.9	8.8	8.4	8.2	8.2	8.0	8.1	7.8	8.0	7.8	8.6	7.9
27	8.8	8.7	8.3	8.1	8.4	8.0	8.1	7.8	8.0	7.9	8.7	8.0
28	8.8	8.7	8.3	8.1	8.3	8.0	8.0	7.7	8.0	7.9	8.2	7.9
29	8.8	8.8	8.3	8.1	8.3	8.0	7.9	7.7	---	---	8.2	8.1
30	8.9	8.8	8.2	8.1	8.3	8.0	7.9	7.7	---	---	8.2	8.0
31	8.9	8.8	---	---	8.4	8.1	8.0	7.7	---	---	8.2	8.0
MONTH	8.9	8.4	9.0	8.1	8.4	7.7	8.5	7.5	8.3	7.7	9.3	7.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	8.0	8.1	7.8	8.1	7.6	8.5	7.9	8.2	7.8	8.3	7.6
2	8.2	8.0	8.1	7.8	8.1	7.9	8.2	7.8	8.2	7.8	8.3	7.6
3	8.1	7.9	8.1	7.9	8.1	7.9	8.3	7.9	7.9	7.7	8.1	7.7
4	8.2	7.9	8.1	8.0	8.1	7.9	8.3	7.9	7.9	7.7	8.2	7.6
5	8.2	7.9	8.1	7.9	8.1	7.8	8.3	8.0	7.9	7.6	8.1	7.7
6	8.3	8.1	8.1	7.9	8.1	7.8	8.4	7.9	8.0	7.7	8.0	7.8
7	8.4	8.1	8.1	7.9	8.1	7.8	8.4	8.0	7.9	7.6	8.2	7.7
8	8.2	8.1	8.1	7.9	8.1	7.8	8.4	8.0	7.8	7.6	8.2	7.8
9	8.2	8.0	8.0	7.8	8.1	7.8	8.3	7.8	8.2	7.6	8.2	7.9
10	8.2	8.0	8.0	7.8	8.1	7.8	8.4	7.9	8.4	7.8	8.3	7.9
11	8.4	8.0	8.0	7.8	8.2	7.8	8.5	8.1	8.7	7.9	8.3	7.9
12	8.4	7.9	7.9	7.6	8.2	7.9	8.5	8.2	8.6	8.1	8.4	7.9
13	8.6	7.8	7.9	7.7	8.2	7.8	8.6	8.2	8.7	7.9	8.5	7.9
14	8.6	7.8	8.0	7.7	8.4	8.0	8.4	8.2	8.7	7.8	8.4	7.7
15	8.7	7.7	7.8	7.5	8.4	7.9	8.4	8.1	8.5	7.8	8.1	7.5
16	8.7	7.7	7.8	7.6	8.4	8.0	8.7	8.1	8.5	7.7	8.0	7.5
17	8.8	7.8	7.7	7.6	8.4	7.9	8.7	8.1	8.3	7.8	8.0	7.5
18	8.1	7.8	7.8	7.6	8.4	7.9	8.7	8.1	8.2	7.7	---	---
19	8.6	7.9	7.9	7.7	8.3	8.0	8.6	8.0	8.2	7.7	---	---
20	8.4	7.9	8.1	7.8	8.5	8.0	8.6	8.2	8.2	7.7	---	---
21	8.4	7.8	7.9	7.8	8.2	7.9	8.6	8.2	8.3	7.7	---	---
22	8.2	8.0	8.1	7.7	8.3	7.9	8.5	8.1	8.3	7.7	---	---
23	8.5	8.0	8.0	7.7	8.3	7.9	8.3	8.0	8.2	7.7	---	---
24	8.2	8.0	8.1	7.5	8.3	7.9	8.3	7.9	8.1	7.8	---	---
25	8.2	8.0	8.0	7.5	8.3	7.9	8.2	7.7	8.2	7.6	---	---
26	8.2	7.8	8.0	7.5	8.4	8.0	8.3	7.8	8.2	7.6	---	---
27	8.4	7.8	8.0	7.4	8.6	8.2	8.3	7.6	8.3	7.6	---	---
28	8.3	7.8	7.9	7.4	8.7	8.2	8.4	7.7	8.4	7.6	---	---
29	8.3	7.8	7.9	7.5	8.5	8.0	8.6	7.7	8.4	7.6	---	---
30	8.2	7.9	8.0	7.5	8.3	7.9	8.4	7.8	8.3	7.7	---	---
31	---	---	8.0	7.6	---	---	8.4	7.7	8.4	7.6	---	---
MONTH	8.8	7.7	8.1	7.4	8.7	7.6	8.7	7.6	8.7	7.6	---	---

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, 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	24300	23600	19800	19200	18100	17700	16100	15600	47200	26600	799	643
2	24700	23800	19800	19000	18100	17600	16100	15600	48700	26000	1090	799
3	24600	23500	19600	18900	18000	17300	16100	15600	49400	40200	37000	1060
4	24600	23400	19600	18900	17900	17200	15900	15400	49300	29700	45100	2910
5	24600	23500	19300	18700	17900	17400	16000	15700	49100	30900	48700	4060
6	24500	23200	19600	18800	17900	17500	16100	15700	49400	31500	49200	13700
7	24800	23300	19500	18800	17700	17200	16000	15300	49500	21700	49900	4100
8	25000	23700	18900	18500	17800	17500	16000	15500	49500	40400	49900	2610
9	24400	23400	19000	18500	17600	17200	16400	15300	50000	27900	49100	2110
10	24000	23300	19000	18200	17800	17200	16400	15800	50400	41200	49200	1710
11	24100	23100	19100	18200	17600	16900	15900	7640	50300	41400	48400	1050
12	23500	22800	18900	18100	17500	17000	15900	1250	50300	44900	48500	1400
13	23700	22900	18800	17900	17300	16900	45400	1950	50300	36600	48500	2030
14	23700	22300	18800	18100	17100	16600	44300	4590	48900	280	48300	1520
15	23000	22300	18400	17600	17200	16600	47900	12800	938	290	47700	1660
16	23000	22200	18400	17800	17300	16600	49600	20300	44400	938	45500	1750
17	22800	22200	18400	17900	17100	16600	49600	24500	48400	9910	41300	1670
18	22500	21900	18400	17600	17100	16600	50400	19200	49600	25800	42900	1750
19	22600	21900	18500	17700	16900	16400	50200	26800	50100	31500	45300	1740
20	22500	21800	18400	17800	16900	16300	49800	29000	50100	18800	48300	1860
21	22000	21300	18500	18100	17000	16300	50000	29200	49900	22900	49000	2220
22	22100	21200	18500	17900	17100	16400	49800	24700	50000	20900	49000	2110
23	21800	21300	18400	17700	17000	16100	49900	23800	49900	7240	49000	2100
24	21600	21000	18400	17700	16800	16100	50000	24800	50300	44800	48900	2140
25	21500	20900	18300	17700	16800	16100	50000	25200	50000	40000	49400	2100
26	21400	20700	18500	17900	16500	16100	49800	34000	48600	387	49700	7550
27	21300	20500	18400	17600	16500	15600	49600	32700	759	475	49800	3250
28	21000	20200	18300	17500	16300	15700	48300	29500	1430	485	49700	19100
29	20800	20100	18200	17600	16300	15600	46100	24500	---	---	49500	38500
30	20500	19600	18200	17600	16300	15500	44500	24800	---	---	49700	43300
31	20600	19400	---	---	16300	15700	45400	23700	---	---	49400	40500
MONTH	25000	19400	19800	17500	18100	15500	50400	1250	50400	280	49900	643
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	48800	41900	50900	39400	50200	42500	51100	45500	50200	41900	50300	45600
2	49100	40100	51500	46700	50200	45500	51100	45300	---	---	50200	45800
3	48900	36100	51900	45700	50400	41300	51100	47000	---	---	49800	43700
4	49300	38000	52200	43800	50400	42800	51000	48000	---	---	49700	45200
5	49500	28100	52400	42400	50400	36700	51000	44600	---	---	48200	44800
6	49900	8680	52500	35300	50400	35400	50900	45900	---	---	46700	42000
7	49900	1690	52400	38500	50400	40700	50800	43000	---	---	44200	41000
8	49800	40300	52500	40100	50400	42200	50300	42500	---	---	46000	39400
9	49900	42400	49900	45300	50300	41300	50000	44300	---	---	44900	39300
10	49900	39600	49700	41300	50300	31800	48800	41500	---	---	44800	40000
11	50000	3920	49800	40200	50300	36900	45300	38400	---	---	44400	41600
12	49500	4460	49700	45300	49800	35100	42900	36400	---	---	44200	39400
13	49200	2450	49300	22300	47800	36300	41900	39200	---	---	47700	41100
14	47800	2360	48600	23500	47500	36500	43100	41400	---	---	49800	43200
15	34900	2380	46100	23500	48800	35900	44900	36900	---	---	49900	43700
16	29300	2240	44600	40300	49700	39400	48200	38200	---	---	49900	44600
17	41800	3400	45800	42100	50100	39000	49500	39400	---	---	49900	44700
18	47100	27300	47900	36000	50400	41100	50000	21800	---	---	---	---
19	47900	9720	48700	45600	50700	41200	50100	42500	---	---	---	---
20	49100	8170	48800	32200	50700	41600	50200	42900	---	---	---	---
21	50100	3100	48900	42500	50800	42900	50200	43400	---	---	---	---
22	50200	46200	50300	14800	50900	41500	50100	43900	---	---	---	---
23	50300	6020	50300	27700	50800	41200	50100	30200	---	---	---	---
24	50400	43700	50400	18500	50800	42400	50100	44800	---	---	---	---
25	50500	41800	50200	13100	50900	43300	49900	20700	47600	43500	---	---
26	50800	30100	50200	13500	50600	43900	45700	35100	48200	43600	---	---
27	50800	8550	50000	15600	47700	39600	46800	37500	49100	22300	---	---
28	50600	10600	49700	9280	47200	38000	48300	39100	50100	18400	---	---
29	50900	14400	49700	13800	50200	37400	49800	40300	50300	46500	---	---
30	50800	12700	49700	19100	50800	38600	50200	39800	50300	44200	---	---
31	---	---	50000	18100	---	---	50300	40500	50300	45900	---	---
MONTH	50900	1690	52500	9280	50900	31800	51100	20700	---	---	---	---

11046050 SANTA MARGARITA RIVER AT MOUTH, NEAR OCEANSIDE, 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	22.5	18.5	17.5	15.0	14.5	12.5	11.5	15.0	12.5	15.0	10.5
2	24.0	22.5	18.5	17.0	15.0	14.5	12.0	11.5	15.0	12.5	14.0	10.5
3	24.5	23.5	18.0	17.0	14.5	14.5	12.5	11.0	15.5	12.5	17.0	11.0
4	24.0	23.5	18.0	17.0	14.5	14.0	12.5	11.5	16.5	13.0	16.0	13.5
5	24.0	22.5	17.5	16.0	15.0	14.0	12.0	11.5	16.0	13.5	17.5	13.5
6	23.0	22.5	18.0	16.5	14.5	14.5	12.0	11.5	16.0	13.5	16.5	14.5
7	22.5	22.0	17.5	17.0	15.5	14.0	13.0	11.5	14.5	12.5	15.5	14.0
8	22.5	21.5	17.0	15.5	15.5	15.0	12.5	12.0	14.5	10.0	17.5	13.5
9	22.5	21.5	16.0	15.5	16.0	15.5	13.0	12.0	15.0	10.0	16.5	14.0
10	22.0	21.0	16.0	15.0	16.5	15.5	13.0	12.5	13.5	10.5	17.0	12.0
11	21.0	20.0	16.0	14.5	16.0	15.5	13.0	12.0	15.5	11.0	16.0	12.0
12	20.5	19.5	15.0	14.0	15.5	15.0	12.5	10.5	13.5	12.5	18.5	12.5
13	20.5	19.0	14.5	13.0	15.0	14.0	13.0	8.0	13.5	11.5	18.5	13.0
14	20.5	18.5	14.0	13.0	14.5	13.5	13.0	8.0	12.5	9.0	18.0	14.5
15	20.5	19.0	14.0	12.5	14.5	13.5	15.0	9.0	13.0	7.5	18.0	15.0
16	21.0	19.5	13.5	12.5	14.5	13.5	14.5	6.5	14.5	12.0	20.0	15.5
17	21.5	20.0	13.5	12.5	14.0	13.0	15.0	6.5	14.0	12.5	19.5	15.0
18	21.0	20.0	13.5	12.0	13.5	12.5	14.5	5.5	16.0	13.0	20.5	15.5
19	21.5	20.0	13.5	12.5	13.5	12.5	15.5	12.0	16.0	13.0	21.5	15.5
20	21.5	21.0	13.5	12.5	13.0	12.0	15.5	13.0	17.5	13.5	21.0	15.5
21	21.5	20.0	13.5	13.0	12.5	12.0	15.0	12.5	17.0	13.5	19.5	15.5
22	20.5	19.5	14.0	13.0	13.0	12.0	16.0	13.5	15.5	13.5	21.0	15.5
23	20.5	19.5	14.0	13.0	13.0	12.5	15.0	12.5	14.5	11.5	20.0	14.5
24	21.0	19.5	14.5	13.0	12.5	12.0	14.0	11.5	13.5	12.0	17.0	14.0
25	20.5	19.5	14.0	13.5	13.0	12.0	14.5	11.0	13.0	12.5	22.0	14.5
26	20.0	19.0	15.0	14.0	13.0	12.0	13.5	11.5	14.0	11.5	21.0	15.5
27	19.5	18.5	15.0	14.0	12.5	11.5	14.0	10.0	14.0	12.0	21.0	15.5
28	19.0	18.5	15.0	14.0	12.0	11.5	15.0	12.5	13.5	11.0	17.5	15.5
29	19.5	18.0	15.0	14.0	12.0	11.0	14.0	13.0	---	---	18.0	15.5
30	19.0	18.0	15.0	14.5	12.0	11.0	15.0	12.0	---	---	20.5	15.5
31	19.0	18.0	---	---	12.0	11.5	15.5	12.5	---	---	20.5	16.5
MONTH	24.5	18.0	18.5	12.0	16.5	11.0	16.0	5.5	17.5	7.5	22.0	10.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.0	16.0	18.5	16.0	21.5	19.0	27.0	20.5	26.5	23.0	26.5	22.5
2	19.5	16.0	18.0	15.5	20.0	19.0	24.5	20.5	26.5	22.5	27.0	23.0
3	19.5	16.0	21.5	16.0	20.5	19.0	24.0	20.5	26.5	22.5	25.0	23.0
4	19.0	16.0	22.5	17.0	24.0	19.5	25.5	20.5	27.5	22.5	25.5	22.5
5	18.5	15.5	20.5	17.0	23.5	20.0	25.0	21.0	25.5	22.0	24.5	23.0
6	20.0	15.5	23.0	18.0	24.5	20.0	25.0	21.0	27.0	22.0	23.5	22.0
7	16.5	14.0	21.5	18.0	23.0	20.0	26.0	21.5	26.0	23.5	25.0	23.0
8	17.5	14.5	21.5	17.5	22.5	20.0	26.0	22.0	25.5	23.5	24.5	23.0
9	16.5	15.0	21.0	18.0	24.0	20.5	24.5	21.5	27.0	23.0	24.0	23.0
10	17.5	15.0	21.5	18.0	25.5	20.5	25.0	21.0	27.5	24.5	24.0	23.0
11	20.0	15.0	21.0	18.5	25.5	20.5	25.5	23.0	28.5	25.5	24.0	23.0
12	21.5	15.5	19.5	18.5	25.0	21.0	26.5	24.0	28.5	26.0	25.0	23.0
13	21.5	16.0	22.5	18.0	25.5	22.0	28.0	25.0	28.5	26.0	25.5	23.0
14	22.0	15.5	24.0	18.5	27.5	23.5	27.0	25.5	29.0	24.5	24.5	21.0
15	23.0	18.0	23.5	20.5	28.0	23.5	26.0	24.5	28.0	22.5	23.5	20.5
16	23.5	18.0	21.5	20.5	27.5	23.0	27.5	22.5	27.0	21.5	24.5	20.5
17	24.0	17.5	22.0	20.0	27.0	22.5	26.5	21.5	26.5	21.5	24.5	20.0
18	19.0	16.0	22.5	20.5	27.0	22.0	26.5	21.5	26.5	22.0	---	---
19	22.5	16.0	22.0	19.5	26.5	21.5	26.5	20.5	28.0	23.0	---	---
20	22.0	15.5	23.5	19.5	26.5	21.0	26.0	21.0	27.5	23.5	---	---
21	20.5	14.0	21.5	18.5	24.5	21.0	27.0	20.5	26.0	23.5	---	---
22	18.0	15.0	25.0	18.5	26.0	21.0	26.5	20.0	26.0	23.0	---	---
23	22.5	15.0	23.0	18.5	26.5	20.0	25.0	20.0	26.0	22.5	---	---
24	20.5	14.5	21.5	18.0	25.5	20.0	25.5	20.0	26.0	24.0	---	---
25	20.0	15.5	22.5	18.5	25.5	19.5	26.5	21.0	27.0	25.0	---	---
26	21.0	15.5	21.0	18.5	25.5	20.5	27.0	24.0	26.0	24.5	---	---
27	23.5	15.5	22.0	18.5	27.0	23.0	28.5	25.0	25.5	23.5	---	---
28	21.5	15.5	21.5	18.5	28.5	24.0	28.5	25.5	25.0	23.0	---	---
29	24.0	15.5	25.5	18.5	26.0	22.0	29.0	24.0	25.0	22.5	---	---
30	22.0	16.0	24.0	19.5	25.5	21.0	28.0	23.5	25.5	23.0	---	---
31	---	---	22.5	19.0	---	---	26.5	23.0	26.0	23.0	---	---
MONTH	24.0	14.0	25.5	15.5	28.5	19.0	29.0	20.0	29.0	21.5	---	---

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA

LOCATION.—Lat 33°13'46", long 117°24'34", in SE 1/4 SW 1/4 sec.9, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on tidal flat of the Santa Margarita River, on Camp Joseph H. Pendleton Naval Reservation, 0.6 mi west of Interstate Highway 5, and 3.0 mi northwest of Oceanside.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—November 1993 to current year.

DISSOLVED OXYGEN: November 1993 to current year.

pH: November 1993 to current year.

SPECIFIC CONDUCTANCE: November 1993 to current year.

WATER TEMPERATURE: November 1993 to current year.

PERIOD OF DAILY RECORD.—November 1993 to current year.

DISSOLVED OXYGEN: November 1993 to current year.

pH: November 1993 to current year.

SPECIFIC CONDUCTANCE: November 1993 to current year.

WATER TEMPERATURE: November 1993 to current year.

INSTRUMENTATION.—Water-quality monitor since November 1993.

REMARKS.—Dissolved oxygen records rated poor. pH records rated fair except for Dec. 28 to Sept. 30, which are good. Specific conductance records rated good through June 29 and fair thereafter. Temperature records rated excellent. Interruptions in record at times in some years due to malfunction of recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—

DISSOLVED OXYGEN: Maximum recorded, 21.1 mg/L, Apr. 18, 1997; minimum recorded, 0.0 mg/L, many days during period of record.

pH: Maximum recorded, 9.9 standard units, Jan. 17, 2000; minimum recorded, 6.0 standard units, Nov. 23, 1994, Apr. 24, 1995.

SPECIFIC CONDUCTANCE: Maximum recorded, 58,700 microsiemens, July 2, 1998; minimum recorded, 236 microsiemens, Feb. 25, 1998.

WATER TEMPERATURE: Maximum recorded, 35.0°C, Aug. 14, 1996; minimum recorded, 2.0°C, Nov. 19, 21, 1994.

EXTREMES FOR CURRENT YEAR.—

DISSOLVED OXYGEN: Maximum recorded, 19.3 mg/L, June 30; minimum recorded, 0.2 mg/L, Aug. 3.

pH: Maximum recorded, 9.2 standard units, June 15–17; minimum recorded, 6.9 standard units, July 28.

SPECIFIC CONDUCTANCE: Maximum recorded, 58,000 microsiemens, June 22, 27; minimum recorded, 6,430 microsiemens, Jan. 12.

WATER TEMPERATURE: Maximum recorded, 31.5°C, Aug. 19; minimum recorded, 8.5°C, Dec. 29, Jan. 13, 19.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.8	1.8	13.1	4.9	10.2	5.9	13.4	7.4	6.8	4.8	5.1	2.8
2	8.4	3.3	13.0	6.9	10.1	5.4	14.7	8.1	6.6	5.0	6.4	4.0
3	8.5	2.3	12.6	5.5	11.0	4.8	14.4	7.8	6.0	3.1	6.8	3.3
4	6.7	3.1	12.1	7.3	10.9	5.9	14.9	6.7	5.3	2.7	7.1	3.3
5	7.6	2.6	12.2	7.0	10.7	5.4	12.2	6.8	5.0	1.2	7.1	4.0
6	6.4	3.6	12.7	7.0	8.9	6.1	14.4	5.5	5.8	1.3	7.3	3.7
7	7.6	2.3	12.7	7.7	11.9	4.8	14.0	6.8	8.0	2.6	7.2	4.2
8	8.5	3.9	13.2	6.6	7.6	4.5	9.5	6.2	7.5	1.9	7.7	5.0
9	8.6	3.6	12.0	6.7	8.4	3.7	11.5	4.8	9.3	3.7	7.8	4.8
10	8.5	3.2	12.9	7.7	8.3	4.2	11.6	4.8	9.3	6.2	8.3	5.2
11	8.1	3.2	13.1	7.6	9.3	3.7	8.1	6.3	10.1	6.3	7.4	5.3
12	8.4	3.3	14.1	9.0	7.7	4.0	8.5	.8	8.5	4.1	7.1	2.8
13	8.9	2.8	13.4	9.4	8.5	3.8	7.3	.7	7.5	2.2	7.1	2.5
14	12.6	3.5	12.9	10.0	10.8	4.6	6.5	2.4	7.1	3.6	7.2	3.5
15	13.7	5.3	13.4	9.7	11.2	5.4	6.3	2.7	5.4	1.0	6.8	2.1
16	13.1	5.8	12.2	9.9	10.6	5.6	6.2	3.9	7.2	1.0	5.6	3.0
17	10.9	5.7	12.0	9.2	10.5	5.6	6.5	4.3	7.0	4.9	5.0	2.8
18	9.3	5.0	12.5	8.9	12.5	5.9	6.8	5.0	7.5	5.1	5.4	1.1
19	10.3	5.6	12.3	9.2	11.0	6.2	6.8	5.3	6.7	2.3	5.8	1.5
20	7.7	5.4	11.7	8.3	12.4	5.8	6.7	3.4	7.9	2.3	6.6	1.2
21	8.8	3.9	12.8	8.5	12.7	6.8	6.4	3.1	7.7	4.9	6.0	3.5
22	9.9	3.4	12.8	8.0	11.3	6.7	6.6	2.9	7.5	4.9	6.2	2.2
23	9.9	5.0	12.1	7.8	11.4	5.8	6.8	3.1	8.0	5.8	6.5	3.4
24	11.9	5.2	12.5	7.5	12.6	6.4	6.8	3.2	8.3	5.5	7.2	2.3
25	12.5	5.8	12.6	7.0	10.8	6.5	7.6	5.5	7.3	4.3	7.6	2.6
26	9.8	5.1	12.3	7.2	11.3	5.9	6.9	5.1	6.1	3.0	8.8	1.7
27	10.6	5.6	11.9	6.6	14.4	6.5	6.9	4.1	4.7	.6	6.6	3.3
28	11.9	5.0	11.8	6.9	14.2	7.2	6.8	3.9	4.2	1.8	5.1	.7
29	11.5	5.9	12.2	7.5	13.5	6.8	5.2	3.9	---	---	4.9	.5
30	10.8	5.8	11.7	7.1	13.4	7.5	6.6	3.9	---	---	4.8	2.8
31	12.3	6.1	---	---	11.7	7.4	6.3	4.6	---	---	3.5	1.9
MONTH	13.7	1.8	14.1	4.9	14.4	3.7	14.9	.7	10.1	.6	8.8	.5

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

OXYGEN DISSOLVED (MG/L), 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	2.8	1.5	4.6	2.3	12.5	2.4	15.6	.4	4.5	1.1	12.2	1.8
2	3.4	1.0	6.1	2.2	8.7	1.1	14.3	.9	6.0	1.2	12.3	1.8
3	5.2	1.6	7.2	3.7	16.6	1.6	13.3	1.0	5.8	.2	10.7	2.2
4	4.9	2.4	6.4	3.0	13.4	1.0	15.6	1.3	5.7	1.1	12.0	1.2
5	5.5	2.0	6.9	3.6	13.2	1.0	12.4	1.1	5.6	.4	10.8	1.4
6	10.8	2.8	6.0	2.9	15.4	1.0	13.6	.9	5.6	.4	12.3	2.3
7	7.9	4.5	6.7	2.2	13.4	1.0	11.8	1.8	4.3	.4	12.7	2.6
8	7.7	5.3	6.1	2.8	11.7	1.0	9.8	1.9	2.1	.4	10.6	2.6
9	7.7	4.8	5.9	3.2	12.9	.9	10.2	1.5	1.7	.3	9.1	2.1
10	7.7	5.1	5.7	2.3	11.9	.9	10.6	1.9	6.0	.4	8.9	2.2
11	7.2	5.4	5.7	2.2	12.3	2.8	8.7	2.4	8.6	.7	10.2	2.5
12	6.6	4.1	5.4	1.7	14.9	3.0	8.3	2.5	6.4	1.5	10.8	3.7
13	6.0	4.2	4.5	2.5	14.3	2.3	8.7	4.9	7.1	1.2	9.8	3.4
14	5.4	3.5	5.3	2.4	15.7	1.4	7.5	4.8	5.6	1.3	9.6	3.2
15	5.5	2.6	4.5	2.0	14.9	1.5	8.5	4.3	7.5	1.3	10.1	2.3
16	5.4	2.7	7.1	2.4	14.9	7.8	7.4	3.5	6.4	.9	9.3	2.5
17	4.9	2.5	6.3	4.4	13.6	4.8	7.9	2.1	7.1	1.2	8.6	2.4
18	5.4	1.9	9.0	4.4	14.9	3.2	8.9	1.5	6.9	1.3	10.0	2.7
19	7.0	2.5	7.3	3.1	15.7	2.8	8.1	.7	7.6	1.0	7.2	2.4
20	6.3	2.9	8.1	2.7	14.2	1.0	7.1	.3	8.4	1.1	7.1	2.6
21	8.6	2.8	6.4	2.8	16.0	1.2	5.9	.3	8.5	1.2	7.0	3.5
22	7.7	5.4	7.6	3.3	12.3	1.0	5.4	.5	8.4	1.1	7.0	3.9
23	7.7	5.2	8.8	2.2	14.2	1.1	4.8	.4	8.8	2.0	7.2	4.4
24	7.9	5.5	8.7	2.3	15.3	2.0	4.3	.5	11.5	2.3	8.1	4.2
25	6.9	5.5	7.8	2.3	13.9	3.2	3.1	.6	8.9	3.2	7.5	4.3
26	6.7	4.9	8.2	.5	12.6	4.5	2.8	.7	9.8	3.1	7.7	3.9
27	6.3	4.0	12.2	4.3	12.4	4.7	1.5	.7	9.2	3.1	6.6	3.5
28	6.0	3.4	12.3	2.8	14.3	3.4	2.1	.8	9.8	2.9	7.3	3.4
29	5.9	3.6	14.1	1.8	18.5	1.3	2.1	.9	9.8	2.5	7.6	3.6
30	5.0	2.6	14.7	.8	19.3	.6	2.6	.9	12.1	3.2	7.8	3.4
31	---	---	10.6	3.4	---	---	3.6	1.0	11.3	2.2	---	---
MONTH	10.8	1.0	14.7	.5	19.3	.6	15.6	.3	12.1	.2	12.7	1.2

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, 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	8.5	8.3	8.8	8.6	8.7	8.6	8.9	8.6	8.2	8.1	7.9	7.7
2	8.6	8.4	8.9	8.6	8.7	8.6	9.0	8.7	8.2	8.1	7.9	7.7
3	8.6	8.3	8.9	8.6	8.6	8.4	9.0	8.6	8.2	8.1	8.1	7.7
4	8.5	8.4	8.9	8.8	8.6	8.5	9.0	8.6	8.1	8.0	8.2	7.8
5	8.6	8.3	8.9	8.7	8.6	8.4	9.0	8.7	8.1	7.6	8.2	7.8
6	8.5	8.4	8.9	8.7	8.5	8.4	9.0	8.5	8.2	7.8	8.2	7.9
7	8.6	8.3	8.9	8.7	8.5	8.4	9.1	8.6	8.3	7.3	8.2	7.9
8	8.6	8.4	8.9	8.8	8.5	8.4	8.8	8.6	8.2	7.4	8.2	8.0
9	8.6	8.3	8.9	8.7	8.5	8.4	8.8	8.7	8.4	7.9	8.2	7.9
10	8.6	8.4	9.0	8.8	8.5	8.3	8.9	8.6	8.4	8.2	8.2	8.0
11	8.7	8.4	9.0	8.8	8.4	8.2	8.9	8.5	8.5	8.2	8.2	8.0
12	8.7	8.4	9.0	8.9	8.4	8.1	8.8	7.6	8.4	8.1	8.2	7.7
13	8.8	8.4	9.0	8.5	8.4	8.3	8.2	7.6	8.4	8.1	8.2	7.8
14	8.8	8.5	8.7	8.6	8.4	8.1	8.1	7.9	8.4	8.1	8.2	7.8
15	8.7	8.5	8.8	8.7	8.4	8.2	8.2	7.9	8.1	7.8	8.2	7.8
16	8.7	8.5	8.8	8.7	8.3	8.1	8.2	7.9	8.2	7.8	8.1	7.9
17	8.7	8.5	8.8	8.7	8.3	8.0	8.2	8.0	8.3	8.0	8.1	7.9
18	8.6	8.5	8.8	8.7	8.4	8.1	8.2	8.0	8.3	8.1	8.1	7.9
19	8.6	8.5	8.8	8.7	8.3	8.1	8.2	8.0	8.3	7.7	8.1	7.8
20	8.6	8.5	8.8	8.7	8.3	8.0	8.2	7.9	8.3	7.7	8.2	7.8
21	8.6	8.4	8.9	8.6	8.4	8.2	8.2	7.9	8.4	8.1	8.2	8.0
22	8.6	8.3	8.9	8.8	8.4	8.2	8.2	7.8	8.3	8.2	8.3	7.8
23	8.6	8.4	8.9	8.8	8.4	8.1	8.2	7.9	8.4	8.2	8.3	8.0
24	8.6	8.4	8.9	8.8	8.5	8.2	8.2	7.8	8.3	8.2	8.3	8.1
25	8.7	8.5	8.9	8.7	8.4	8.2	8.2	8.0	8.3	8.0	8.3	7.9
26	8.7	8.5	8.8	8.7	8.4	8.2	8.2	8.0	8.2	7.9	8.5	7.8
27	8.7	8.5	8.8	8.7	8.9	8.2	8.2	7.9	7.9	7.5	8.3	8.0
28	8.7	8.5	8.8	8.7	8.9	8.5	8.2	8.0	7.9	7.7	8.2	7.7
29	8.7	8.5	8.8	8.7	8.9	8.6	8.1	7.9	---	---	8.1	7.7
30	8.8	8.6	8.8	8.7	8.9	8.6	8.1	7.8	---	---	8.2	8.0
31	8.8	8.6	---	---	8.8	8.6	8.1	7.8	---	---	8.1	7.9
MONTH	8.8	8.3	9.0	8.5	8.9	8.0	9.1	7.6	8.5	7.3	8.5	7.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.9	7.9	7.6	8.6	8.1	8.4	7.9	7.9	7.3	8.4	7.6
2	8.1	7.8	8.2	7.6	8.4	7.9	8.3	7.8	7.9	7.4	8.4	7.6
3	8.2	8.0	8.2	8.0	8.7	7.7	8.2	7.7	7.8	7.3	8.3	7.7
4	8.3	8.1	8.2	7.9	8.5	7.4	8.3	7.6	7.7	7.3	8.3	7.4
5	8.3	8.0	8.2	8.0	8.4	7.4	8.2	7.6	7.6	7.2	8.1	7.6
6	8.5	8.1	8.2	7.8	8.6	7.5	8.2	7.6	7.6	7.1	8.3	7.7
7	8.3	8.2	8.2	7.6	8.5	7.7	8.4	7.7	7.6	7.2	8.4	7.8
8	8.3	8.1	8.2	7.6	8.4	7.5	8.4	7.9	7.6	7.1	8.2	7.9
9	8.3	8.0	8.1	7.8	8.5	7.5	8.2	7.8	7.7	7.0	8.2	7.8
10	8.2	8.0	8.1	7.7	8.7	7.5	8.4	7.9	7.8	7.2	8.2	7.9
11	8.2	8.0	8.0	7.6	8.7	8.1	8.4	8.0	8.1	7.4	8.4	8.0
12	8.2	7.9	8.0	7.6	8.8	8.4	8.3	8.1	8.1	7.7	8.5	8.0
13	8.1	7.9	7.9	7.7	8.7	8.3	8.2	8.1	8.2	7.7	8.6	8.2
14	8.0	7.8	7.9	7.6	8.9	8.3	8.1	8.0	8.0	7.7	8.6	8.1
15	8.0	7.5	7.9	7.7	9.2	8.4	8.1	7.9	8.0	7.6	8.5	8.0
16	7.9	7.6	8.1	7.7	9.2	8.8	8.1	7.7	7.9	7.4	8.5	7.9
17	7.7	7.5	8.1	7.9	9.2	8.6	8.3	7.8	7.9	7.3	8.3	7.8
18	8.0	7.6	8.3	8.0	9.0	8.4	8.4	7.7	7.8	7.3	8.3	7.8
19	8.1	7.6	8.2	7.9	8.9	8.1	8.4	7.7	7.7	7.2	8.3	7.9
20	8.1	7.8	8.3	7.8	8.7	8.1	8.4	7.6	7.7	7.2	8.2	7.8
21	8.1	7.7	8.1	7.8	8.7	8.0	8.3	7.6	7.6	7.1	8.3	7.9
22	8.0	7.8	8.1	7.8	8.5	7.9	8.1	7.5	7.6	7.0	8.3	8.0
23	8.0	7.9	8.3	7.7	8.7	7.8	7.9	7.4	7.8	7.1	8.3	8.0
24	8.1	7.9	8.3	7.8	8.7	7.9	7.8	7.2	8.0	7.2	8.4	8.1
25	8.1	7.9	8.3	7.9	8.6	8.1	7.5	7.1	7.9	7.5	8.5	8.1
26	8.1	7.8	8.3	7.6	8.7	8.2	7.5	7.2	8.0	7.5	8.5	8.2
27	8.1	7.8	8.5	8.0	8.7	8.4	7.5	7.2	8.0	7.5	8.4	8.2
28	8.1	7.8	8.5	7.9	9.0	8.4	7.6	6.9	8.1	7.6	8.5	8.0
29	8.0	7.7	8.5	7.9	8.9	8.3	7.7	7.1	8.1	7.6	8.5	8.0
30	8.0	7.7	8.5	7.9	8.7	8.1	7.8	7.2	8.3	7.7	8.4	8.0
31	---	---	8.5	8.1	---	---	7.9	7.2	8.3	7.7	---	---
MONTH	8.5	7.5	8.5	7.6	9.2	7.4	8.4	6.9	8.3	7.0	8.6	7.4

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, 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	28000	27400	23000	22000	20300	19500	18000	16600	46000	43900	22100	16400
2	28000	26800	22800	21800	20300	19200	18400	16800	47800	43900	21800	15500
3	27300	26300	23000	21800	20700	19100	18300	16600	50100	46200	36300	15400
4	27200	26800	23000	21700	20200	19000	18100	16600	50300	48400	44900	30800
5	27000	26100	23800	21800	19800	18700	17600	16600	51000	48700	46900	39300
6	26600	26100	23300	21700	19900	18800	17300	16100	52500	49200	47800	41300
7	26600	25800	22000	21200	20000	18000	17600	15900	52700	48900	48600	43200
8	26200	25800	23000	21400	20000	18500	16600	15800	53000	48700	48500	43400
9	26100	25700	22900	21700	19500	18200	16500	15500	51900	49300	49100	42600
10	26000	25000	22400	20600	18600	18000	16800	15500	51300	48800	50300	41900
11	26300	25300	21700	20800	19700	18100	17000	13100	51300	49100	49500	39400
12	26200	25600	21700	20900	18900	18100	18100	6430	51200	47600	49900	43000
13	26000	24800	22300	20800	19400	18100	43900	13700	50400	38000	49800	43600
14	25900	25400	22000	20700	19200	18200	42600	37400	48100	38000	49200	40700
15	26300	25400	22100	21000	19200	18200	43200	39700	42300	30100	47400	40700
16	26000	25400	21700	20800	19400	18100	48600	39800	45100	32600	45900	40600
17	25600	25200	21800	20800	19200	17900	45900	42800	48500	41400	42100	37100
18	25700	25300	22000	20500	20000	18100	45900	42900	50300	44700	40800	38200
19	25500	25200	21700	20500	20500	18200	48100	45100	49400	46800	44200	38800
20	25400	24200	21700	20400	20200	18100	48800	46600	50300	46500	47900	40100
21	26200	24200	21000	19800	19800	18200	49000	46600	50800	47600	49000	44800
22	26400	25700	21200	20300	19300	17900	51600	46600	49900	47200	49300	44800
23	26700	25000	21500	20300	19800	17900	50200	46600	50600	44600	48700	45800
24	26600	25000	21800	20300	19600	17800	49100	46700	50100	47500	49700	45000
25	25800	23900	22100	20400	18800	17600	50100	47300	49400	39000	48400	45500
26	25500	24500	20900	20200	18500	17500	49900	47200	47600	25800	47800	44100
27	26000	23700	21300	20000	19200	17500	50000	47100	42400	23700	49200	44800
28	26100	24100	21300	19600	19100	17300	48400	45900	31000	19900	49000	44800
29	25400	23000	20500	19800	18900	17200	47500	45300	---	---	46700	42300
30	23700	22300	20400	19500	18400	17200	45600	44100	---	---	48900	40900
31	23300	22400	---	---	18100	16800	45300	43000	---	---	47700	38800
MONTH	28000	22300	23800	19500	20700	16800	51600	6430	53000	19900	50300	15400
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	45700	35000	51800	44200	51300	48200	51400	47700	47900	45900	51700	50400
2	45600	33000	50000	44000	51400	50600	50300	48200	48300	46800	53200	48800
3	40600	31100	50700	47500	51600	50100	50200	47800	48300	46300	52300	47900
4	46500	38100	51500	47500	51500	49800	50500	48300	48500	46800	51200	49500
5	47800	41100	51800	50000	51700	50300	51800	49300	48100	47100	50400	48300
6	48100	43600	52100	49500	51800	50800	51900	49400	48500	47200	50300	49000
7	49700	45200	52100	49800	51600	49300	51800	49900	48300	47200	50400	48900
8	49800	44800	52300	48500	51500	50300	51700	48500	48500	47400	49800	48800
9	50300	41700	51400	48300	50900	50100	51800	49100	48300	45800	49700	48500
10	51700	42200	51300	48600	50700	48600	52000	49100	47600	46900	49300	48000
11	50200	42600	51400	49200	50200	48300	51500	49100	48000	46400	48400	43600
12	49300	41800	50800	48300	49800	48300	50600	46600	47400	45700	46700	42300
13	47400	43800	50100	48500	49400	47600	49300	46000	47200	44000	48000	42100
14	45100	41900	49400	48200	49100	47300	47800	46600	46800	44900	47700	42700
15	41900	39300	48200	45400	54300	47400	48100	46600	47500	45700	48000	42300
16	39300	35100	47700	43500	54200	52800	48000	44600	47900	46600	48700	45400
17	35500	32200	50200	45100	55100	53200	48800	46000	48100	46400	48300	43300
18	40000	31900	51700	46100	56400	53900	50600	48000	47700	46600	52700	42200
19	43900	38400	52000	46500	57200	55400	52500	50400	48400	47100	52100	50400
20	45300	39100	52500	48900	57900	54900	53600	51400	49300	47000	51300	49700
21	49700	36700	52600	50200	57900	55100	54000	51900	49600	47900	50800	49000
22	49700	42900	52700	51000	58000	54600	54000	51900	51900	45400	49900	48400
23	50100	46900	52600	49800	56900	55100	53500	50700	50200	46500	50100	46900
24	50200	44300	52200	50500	57300	54300	52400	49600	52100	49800	50100	47400
25	51200	45400	51900	49700	57600	54300	51600	48800	52400	50000	49800	45600
26	50600	46600	51500	49100	56800	54300	51700	48600	52800	48500	49100	45200
27	51300	46000	51000	48700	58000	52900	50300	48200	51700	50000	47300	45200
28	51300	46400	50400	48700	57500	52500	50700	47600	51400	50100	47200	44900
29	49700	44600	49100	48100	57900	49300	48900	47400	51700	50400	47100	44500
30	49700	43300	49000	47500	53000	48400	48400	46700	51900	50900	46600	41800
31	---	---	48900	48300	---	---	48100	46400	52300	50500	---	---
MONTH	51700	31100	52700	43500	58000	47300	54000	44600	52800	44000	53200	41800

SANTA MARGARITA RIVER BASIN

331346117243401 SANTA MARGARITA RIVER ESTUARY NEAR OCEANSIDE, 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	18.5	15.5	15.0	14.0	13.0	10.0	16.0	10.0	16.5	11.5
2	24.5	22.5	18.5	15.5	15.5	14.0	13.0	10.0	14.5	9.5	17.5	10.5
3	25.0	23.5	17.5	14.5	15.0	13.0	14.0	11.0	14.0	11.5	18.5	14.0
4	24.5	23.5	17.5	14.0	14.5	12.0	13.5	9.5	15.0	12.5	18.0	14.5
5	24.5	22.5	17.0	15.0	16.0	13.5	12.0	10.0	15.5	13.0	18.5	13.5
6	23.5	22.0	18.5	16.0	15.0	13.0	13.5	10.5	15.0	12.5	17.5	14.5
7	23.0	21.5	18.0	16.0	16.0	14.0	14.0	10.5	15.5	9.5	16.5	14.0
8	22.5	21.0	16.5	14.0	16.5	15.5	13.0	11.0	14.5	9.0	18.5	13.5
9	23.0	21.0	16.0	14.5	16.5	16.0	14.0	11.0	15.0	9.0	17.0	13.0
10	22.5	20.5	16.0	13.5	17.0	15.5	14.0	12.0	13.5	9.0	17.0	11.5
11	21.0	19.0	16.0	14.0	16.0	14.0	13.0	11.5	16.5	9.5	16.0	13.5
12	20.5	18.5	14.5	12.5	16.5	14.0	12.0	10.5	13.0	11.0	17.0	14.5
13	20.0	17.5	14.0	11.0	16.5	16.0	13.5	8.5	12.5	12.0	17.0	14.0
14	20.0	17.5	14.0	11.5	16.0	12.5	13.5	12.0	14.0	11.5	18.0	15.0
15	20.5	17.5	14.5	11.5	14.5	12.0	14.0	12.0	16.5	13.0	18.5	15.5
16	21.5	18.5	14.0	11.0	15.0	11.5	14.5	11.5	16.5	12.5	20.5	16.5
17	21.5	19.5	14.0	10.0	14.5	11.5	13.5	10.0	16.0	13.0	23.0	17.0
18	21.0	20.0	13.0	9.0	14.5	12.0	13.0	10.0	15.5	12.5	23.5	16.5
19	22.0	20.5	14.0	9.5	14.5	10.5	13.5	8.5	15.5	12.5	21.5	16.0
20	21.5	21.0	14.0	11.0	13.0	9.5	14.0	11.0	16.5	13.5	20.0	15.5
21	21.0	19.5	14.0	11.5	13.0	9.5	13.5	11.0	18.0	12.5	18.5	16.0
22	21.0	18.5	15.0	12.5	14.0	11.5	14.5	12.5	16.5	13.0	20.5	15.5
23	21.0	18.5	15.5	12.5	13.0	10.0	13.5	11.5	14.0	11.0	21.5	14.5
24	21.5	19.0	15.5	12.0	13.0	10.0	13.5	11.0	13.0	10.5	18.0	14.5
25	21.0	18.5	15.5	12.0	14.0	11.0	14.0	10.0	13.0	12.0	23.0	14.5
26	20.5	18.0	16.0	14.0	13.5	10.5	12.0	10.0	14.0	12.0	24.0	16.0
27	20.0	17.5	16.0	13.0	13.0	9.5	12.5	10.0	14.0	12.5	23.5	15.0
28	19.5	17.0	15.5	12.0	13.0	9.0	16.0	11.0	13.5	13.0	19.0	16.0
29	19.5	17.0	16.0	13.5	13.0	8.5	13.5	11.0	---	---	18.5	16.0
30	19.0	17.0	16.0	14.0	13.5	9.0	13.5	9.5	---	---	22.0	16.5
31	19.5	17.0	---	---	13.0	10.0	15.0	9.5	---	---	22.0	17.5
MONTH	25.0	17.0	18.5	9.0	17.0	8.5	16.0	8.5	18.0	9.0	24.0	10.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20.0	18.0	21.0	17.5	22.0	19.5	29.0	23.0	28.5	23.0	29.5	22.5
2	20.0	17.0	19.5	16.0	21.5	19.0	28.0	22.0	28.5	22.5	30.0	23.5
3	19.5	16.0	23.0	16.0	23.0	19.0	26.5	22.0	29.0	23.0	26.0	22.5
4	19.0	15.5	23.0	16.5	23.5	19.5	29.0	22.0	30.0	22.5	28.0	22.5
5	18.5	15.5	23.5	16.5	22.5	19.5	27.0	22.0	28.0	23.0	25.5	23.0
6	21.5	15.0	24.0	18.5	24.5	20.0	28.0	22.5	30.0	22.5	25.5	22.0
7	17.5	14.5	22.0	18.0	23.0	20.5	29.5	21.5	28.0	24.5	27.5	21.5
8	17.5	14.0	22.0	18.0	22.0	20.0	29.0	21.0	27.0	24.0	25.5	22.5
9	17.0	15.0	22.5	18.0	24.0	20.5	27.0	20.5	29.0	23.5	25.0	22.0
10	18.5	15.0	23.5	18.5	25.5	21.0	28.5	21.0	29.0	24.5	23.0	21.5
11	21.0	15.5	22.0	19.5	27.5	21.0	28.5	21.5	30.0	24.5	24.0	21.0
12	20.5	16.0	20.5	19.5	26.5	20.5	29.5	21.5	29.5	25.0	27.0	21.0
13	23.0	16.5	22.5	18.5	26.0	21.0	29.0	24.5	30.5	25.0	27.0	22.5
14	24.5	17.0	24.5	19.0	27.5	22.0	27.0	24.0	30.5	25.0	27.0	21.5
15	24.5	16.5	24.0	20.5	29.0	24.0	28.0	22.5	29.5	24.5	27.5	21.5
16	24.5	16.0	23.5	21.5	29.5	23.0	28.5	23.0	29.0	24.0	28.5	21.0
17	25.5	17.5	24.0	21.5	29.0	23.0	29.0	22.0	29.0	23.0	27.5	21.0
18	22.5	16.5	24.5	21.0	29.5	22.0	29.5	22.5	29.5	23.0	26.5	20.5
19	21.0	16.5	23.5	21.0	29.5	21.0	29.5	22.0	31.5	23.0	25.5	20.5
20	20.5	16.5	24.5	19.5	28.0	21.0	29.0	21.0	31.0	23.5	24.5	20.5
21	18.5	14.0	21.5	19.0	28.5	21.0	30.5	21.5	29.5	23.0	23.5	20.5
22	19.5	13.5	22.5	19.0	29.5	21.0	30.5	21.5	28.0	23.0	23.0	21.0
23	20.0	15.0	21.5	18.5	30.5	20.0	30.0	22.0	28.0	22.0	22.5	21.0
24	22.5	15.0	21.0	18.5	30.0	20.0	29.0	22.0	27.5	23.0	26.5	20.5
25	21.0	16.0	21.0	18.5	30.0	20.0	29.5	22.5	26.5	24.0	27.0	22.0
26	21.5	16.0	21.0	18.5	29.0	21.5	29.0	23.0	26.5	23.5	27.0	22.0
27	21.0	16.0	21.5	18.5	29.0	21.0	30.0	23.5	26.0	23.5	24.0	21.5
28	20.0	16.0	21.5	18.5	30.0	20.5	30.0	24.0	25.5	22.5	24.5	20.0
29	24.0	16.5	24.5	19.0	28.5	22.5	30.0	24.0	26.5	22.0	25.5	19.5
30	22.5	18.0	23.5	20.5	29.0	23.0	29.0	23.5	28.5	22.5	27.5	19.5
31	---	---	22.5	19.5	---	---	27.5	23.5	28.5	23.0	---	---
MONTH	25.5	13.5	24.5	16.0	30.5	19.0	30.5	20.5	31.5	22.0	30.0	19.5

11046090 LAS FLORES CREEK AT LAS PULGAS CANYON, NEAR OCEANSIDE, CA

LOCATION.—Lat 33°19'07", long 117°26'13", in NE 1/4 SE 1/4 sec.7, T.10 S., R.5 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on right bank, 2.7 mi upstream from mouth, and 9.7 mi northwest of Oceanside.

DRAINAGE AREA.—15.6 mi².

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.—Records fair. Some pumping upstream from station for irrigation. Camp Pendleton Water Treatment Plant No. 9 discharges to the channel at a point approximately 0.5 mi upstream from gage.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 29 ft³/s, Mar. 8, 2000, gage height, 8.22 ft, from rating curve extended above 6.0 ft³/s; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0815	27	7.82

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	.00	.00	.22	.24	.41	2.6	.54	.36	.23	.00	.00	.00
2	.00	.00	.20	.24	.41	2.0	.52	.37	.24	.00	.00	.00
3	.00	.00	.20	.22	.41	1.8	.47	.33	.24	.00	.00	.00
4	.00	.00	.20	.23	.39	1.6	.46	.28	.20	.00	.00	.00
5	.00	.00	.19	.24	.38	1.5	.42	.27	.19	.00	.00	.00
6	.00	.00	.19	.27	.39	2.2	.40	.26	.18	.00	.00	.00
7	.00	.00	.20	.27	.40	1.8	1.0	.25	.17	.00	.00	.00
8	.00	.00	.21	.37	.38	1.4	.69	.27	.16	.00	.00	.00
9	.00	.00	.24	.66	.38	1.3	.58	.26	.15	.00	.00	.00
10	.00	.00	.24	.45	.46	3.1	.56	.26	.12	.00	.00	.00
11	.00	.00	.24	11	.58	1.5	.49	.26	.09	.00	.00	.00
12	.00	.00	.25	3.7	1.8	1.3	.47	.27	.08	.00	.00	.00
13	.00	.00	.24	1.6	4.8	1.2	.44	.27	.10	.00	.00	.00
14	.00	.00	.24	1.1	2.7	1.2	.42	.24	.07	.00	.00	.00
15	.00	.00	.25	.85	1.3	1.1	.41	.23	.02	.00	.00	.00
16	.00	.00	.24	2.4	.99	1.0	.40	.23	.00	.00	.00	.00
17	.00	.01	.23	.87	.84	.98	.38	.22	.00	.00	.00	.00
18	.00	.00	.20	.67	.73	.92	.38	.21	.00	.00	.00	.00
19	.00	.02	.19	.60	.72	.86	.38	.22	.00	.00	.00	.00
20	.00	.04	.21	.55	2.5	.80	.38	.23	.00	.00	.00	.00
21	.00	.05	.22	.50	.94	.78	.69	.24	.00	.00	.00	.00
22	.00	.07	.24	.46	.76	.76	.48	.23	.00	.00	.00	.00
23	.00	.09	.24	.43	1.6	.71	.39	.21	.00	.00	.00	.00
24	.00	.11	.24	.54	1.0	.69	.35	.23	.00	.00	.00	.00
25	.00	.13	.24	.49	6.2	.66	.36	.24	.00	.00	.00	.00
26	.00	.14	.22	1.1	7.7	.63	.36	.25	.00	.00	.00	.00
27	.00	.14	.23	1.6	4.8	.62	.35	.28	.00	.00	.00	.00
28	.00	.15	.22	.68	3.3	.60	.37	.27	.00	.00	.00	.00
29	.00	.24	.23	.55	---	.60	.36	.23	.00	.00	.00	.00
30	.00	.22	.24	.50	---	.57	.34	.20	.00	.00	.00	.00
31	.00	---	.24	.45	---	.52	---	.21	---	.00	.00	---
TOTAL	0.00	1.41	6.94	33.83	47.27	37.30	13.84	7.88	2.24	0.00	0.00	0.00
MEAN	.000	.047	.22	1.09	1.69	1.20	.46	.25	.075	.000	.000	.000
MAX	.00	.24	.25	11	7.7	3.1	1.0	.37	.24	.00	.00	.00
MIN	.00	.00	.19	.22	.38	.52	.34	.20	.00	.00	.00	.00
AC-FT	.00	2.8	14	67	94	74	27	16	4.4	.00	.00	.00

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

MEAN	.67	.93	.91	1.23	1.75	1.45	1.04	.61	.10	.065	.079	.076
MAX (WY)	1.86	2.52	2.15	2.09	1.98	1.77	1.85	1.29	.24	.19	.24	.23
MIN (WY)	.000	.047	.22	.51	1.58	1.20	.46	.25	.002	.000	.000	.000
	2001	2001	2001	2000	2000	2001	2001	2001	2000	2000	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	146.49	150.71	
ANNUAL MEAN	.40	.41	.74
HIGHEST ANNUAL MEAN			1.36
LOWEST ANNUAL MEAN			.41
HIGHEST DAILY MEAN	6.5	11	11
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		27	29
MAXIMUM PEAK STAGE		7.82	8.22
ANNUAL RUNOFF (AC-FT)	291	299	535
10 PERCENT EXCEEDS	.88	.98	2.0
50 PERCENT EXCEEDS	.14	.20	.27
90 PERCENT EXCEEDS	.00	.00	.00

11046100 LAS FLORES CREEK NEAR OCEANSIDE, CA

LOCATION.—Lat 33°17'32", long 117°27'21", in NW 1/4 SE 1/4 sec.24, T.10 S., R.6 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on upstream side and at center of Southern Pacific Railroad bridge, 0.5 mi upstream from mouth, and 8.5 mi northwest of Oceanside.

DRAINAGE AREA.—26.6 mi².

PERIOD OF RECORD.—May 1951 to September 1967, October 1969 to September 1979, and October 1993 to current year. Discharge records for October 1967 to September 1969 and October 1979 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

REVISED RECORDS.—WDR CA-72-1: 1971(M).

GAGE.—Water-stage recorder and multiple concrete culvert control. Elevation of gage is 35 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation upstream from station. Camp Pendleton Water Treatment Plant No. 9 discharges to the channel at a point approximately 2.7 mi upstream from gage. Some pumping upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,300 ft³/s, estimated, Mar. 4, 1978, gage height, 13.67 ft, from floodmarks, based on culvert computation of peak flow; no flow for several days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Feb. 25, 1969, reached a stage of 7.25 ft, from floodmarks, discharge, 4,200 ft³/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	.23	.42	.34	.33	.33	1.1	.43	.27	.28	.20	.12	.07
2	.25	.37	.34	.30	.40	1.1	.43	.27	.20	.34	.12	.02
3	.23	.33	.30	.31	.35	.96	.40	.23	.23	.32	.12	.04
4	.23	.30	.30	.30	.37	.60	.39	.09	.23	.22	.12	.06
5	.24	.24	.13	.30	.38	.49	.38	.19	.29	.12	.12	e .05
6	.21	.28	.23	.30	.48	.61	.38	.19	.41	.19	.13	.05
7	.22	.27	.32	.12	.43	.86	.47	.20	.40	.11	.12	.04
8	.30	.22	.34	.38	.37	.55	.53	.32	.29	.12	.15	.03
9	.26	.29	.38	.42	.38	.49	.56	.14	.24	.12	.08	.02
10	.31	.27	.34	.40	.43	1.3	.51	.15	.37	.17	.14	.02
11	.19	.14	.33	6.8	.49	.43	.38	.18	.31	.20	.05	.02
12	.20	.17	.47	1.1	.56	.43	.40	.25	.30	.19	.06	.02
13	.20	.27	.39	.94	2.4	.43	.39	.23	.25	.18	.18	.02
14	.19	.27	.43	.94	1.3	.43	.34	.22	.14	.15	.11	.02
15	.20	.26	.48	.93	.92	.49	.43	.22	.19	.28	.04	.02
16	.20	.14	.41	.68	.78	.60	.42	.27	.12	.35	.02	.02
17	.21	.26	.38	.50	.63	.49	.43	.24	.15	.33	.02	.02
18	.20	.22	.36	.43	.56	.45	.43	.25	.14	.18	.03	.02
19	.33	.20	.33	.43	.53	.47	.39	.27	.19	.35	.17	.02
20	.29	.22	.26	.38	.83	.49	.34	.28	.14	.33	.19	.02
21	.24	.25	.28	.38	.62	.49	.32	.25	.13	.32	.08	.02
22	.18	.29	.28	.38	.56	.51	.28	.35	.30	.32	.10	.02
23	.17	.21	.30	.38	.62	.48	.29	.28	.22	.30	.05	.02
24	.11	.28	.21	.41	.49	.49	.32	.22	.29	.29	.02	.02
25	.14	.30	.15	.56	6.3	.48	.33	.32	.30	.28	.12	.03
26	.04	.26	.10	.50	12	.49	.27	.37	.24	.08	.05	.03
27	.13	.26	.34	.56	3.5	.44	.27	.37	.13	.26	.06	.03
28	.19	.33	.33	.44	1.6	.44	.26	.42	.13	.22	.05	.03
29	.27	.33	.24	.43	---	.49	.24	.17	.18	.15	.08	.05
30	.54	.31	.33	.48	---	.49	.24	.17	.16	.14	.08	.07
31	.47	---	.32	.43	---	.43	---	.35	---	.12	.07	---
TOTAL	7.17	7.96	9.74	21.24	38.61	18.00	11.25	7.73	6.95	6.93	2.85	0.92
MEAN	.23	.27	.31	.69	1.38	.58	.38	.25	.23	.22	.092	.031
MAX	.54	.42	.48	6.8	12	1.3	.56	.42	.41	.35	.19	.07
MIN	.04	.14	.10	.12	.33	.43	.24	.09	.12	.08	.02	.02
AC-FT	14	16	19	42	77	36	22	15	14	14	5.7	1.8

e Estimated.

11046100 LAS FLORES CREEK NEAR OCEANSIDE, 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	.082	.27	.75	3.96	6.57	8.87	2.04	.41	.16	.12	.10	.12
MAX	.94	4.81	12.9	35.6	146	143	29.3	8.95	2.32	1.27	1.17	1.15
(WY)	1999	1966	1967	1995	1998	1978	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1952	1954	1954	1963	1961	1955	1953	1953	1952	1952	1952	1952

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1952 - 2001

ANNUAL TOTAL	171.43	139.35	
ANNUAL MEAN	.47	.38	1.93
HIGHEST ANNUAL MEAN			17.9
LOWEST ANNUAL MEAN			.006
HIGHEST DAILY MEAN	8.4 Feb 22	12 Feb 26	1050 Feb 24 1998
LOWEST DAILY MEAN	.04 Sep 21	.02 Aug 16	.00 Oct 1 1951
ANNUAL SEVEN-DAY MINIMUM	.08 Sep 17	.02 Sep 9	.00 Oct 1 1951
MAXIMUM PEAK FLOW		25 Feb 26	e7300 Mar 4 1978
MAXIMUM PEAK STAGE		.79 Feb 26	13.67 Mar 4 1978
ANNUAL RUNOFF (AC-FT)	340	276	1400
10 PERCENT EXCEEDS	.61	.52	.74
50 PERCENT EXCEEDS	.35	.28	.01
90 PERCENT EXCEEDS	.19	.05	.00

e Estimated.

11046250 SAN ONOFRE CREEK AT SAN ONOFRE, CA

LOCATION.—Lat 33°23'02", long 117°34'24", in SE 1/4 SE 1/4 sec.14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 0.2 mi north of San Onofre, 0.3 mi upstream from Interstate Highway 5, and 0.5 mi upstream from mouth.

DRAINAGE AREA.—42.2 mi².

PERIOD OF RECORD.—October 1946 to September 1967, January to September 1989, and October 1998 to current year. Previous periods of gage operation were at site 250 ft upstream and at different datum.

WATER TEMPERATURE: Water years 1982–83, 1988–89.

SEDIMENT DATA: Water years 1982–83, 1988–89.

GAGE.—Water-stage recorder, crest-stage gage, and concrete road crossing. Elevation of gage is 15 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation upstream from station. Detention basins upstream from station for ground-water recharge. Pumping upstream from station for irrigation and water supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,600 ft³/s, Apr. 1, 1958, gage height, 6.90 ft, site and datum then in use; no flow for all or part of most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft³/s, or maximum, from rating curve extended above 54 ft³/s on basis of critical-depth computations:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 26	0315	151	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	.00	.00	.00	.00	4.8	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.22	.00	2.2	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.02	.20	.89	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	3.6	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	53	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	7.4	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.25	75.44	9.69	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.008	2.69	.31	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.22	53	4.8	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.5	150	19	.00	.00	.00	.00	.00	.00

11046250 SAN ONOFRE CREEK AT SAN ONOFRE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.51	3.07	3.04	2.52	3.21	2.84	.004	.000	.000	.000	.000
MAX	.000	12.3	63.6	37.1	32.2	41.9	62.6	.10	.000	.000	.000	.000
(WY)	1947	1966	1967	1952	1962	1952	1958	1958	1947	1947	1947	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001	
ANNUAL TOTAL	191.00		85.38			
ANNUAL MEAN	.52		.23		1.29	
HIGHEST ANNUAL MEAN					8.48	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	50	Mar 5	53	Feb 26	887	Dec 6 1966
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1946
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1946
MAXIMUM PEAK FLOW			151	Feb 26	2600	Apr 1 1958
MAXIMUM PEAK STAGE			3.54	Feb 26	6.90	Apr 1 1958
ANNUAL RUNOFF (AC-FT)	379		169		935	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11046300 SAN MATEO CREEK NEAR SAN CLEMENTE, CA

LOCATION.—Lat 33°28'15", long 117°28'20", in SE 1/4 NE 1/4 sec.23, T.8 S., R.6 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 0.4 mi downstream from mouth of Devil Canyon, and 8.6 miles northeast of San Clemente.

DRAINAGE AREA.—80.8 mi².

PERIOD OF RECORD.—October 1952 to September 1967, October 1993 to current year. Discharge records for October 1967 to September 1977 and October 1989 to September 1993 available in files of U.S. Marine Corps at Camp Pendleton.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 405 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,500 ft³/s, Feb. 23, 1998, gage height, 12.83 ft, on basis of slope-area measurement of peak flow; no flow for several days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 9,240 ft³/s, gage height, 11.12 ft, Jan. 25, 1969.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft³/s, or maximum, from rating curve extended above 167 ft³/s, on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 26	unknown	unknown	unknown	Mar. 10	1045	236	4.28

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	.08	.18	1.4	62	4.9	2.1	.49	.00	.00	.00
2	.00	.00	.09	.18	1.4	31	4.6	2.1	.46	.00	.00	.00
3	.00	.00	.10	.18	1.4	20	4.5	2.1	.45	.00	.00	.00
4	.00	.00	.11	.18	1.4	15	4.4	1.8	.45	.00	.00	.00
5	.00	.00	.12	.18	1.4	12	4.4	1.6	.45	.00	.00	.00
6	.00	.00	.13	.18	1.4	13	4.3	1.5	.41	.00	.00	.00
7	.00	.00	.13	.18	1.4	17	5.3	1.3	.38	.00	.00	.00
8	.00	.00	.14	.19	1.4	13	10	1.0	.35	.00	.00	.00
9	.00	.00	.15	.30	1.4	11	9.5	.90	.31	.00	.00	.00
10	.00	.00	.16	.31	1.4	115	9.2	.83	.27	.00	.00	.00
11	.00	.00	.17	2.0	2.0	61	8.0	.77	.23	.00	.00	.00
12	.00	.06	.18	5.2	3.1	36	7.1	.77	.21	.00	.00	.00
13	.00	.07	.19	3.9	85	27	6.3	.82	.19	.00	.00	.00
14	.00	.07	.20	2.1	56	22	5.5	.83	.18	.00	.00	.00
15	.00	.07	.20	1.4	20	19	4.9	.80	.17	.00	.00	.00
16	.00	.07	.20	1.2	12	17	4.6	.73	.14	.00	.00	.00
17	.00	.07	.20	1.0	7.5	16	4.1	.70	.10	.00	.00	.00
18	.00	.07	.19	.92	5.1	14	3.7	.65	.05	.00	.00	.00
19	.00	.07	.18	.91	3.9	12	3.6	.60	.00	.00	.00	.00
20	.00	.07	.18	.91	3.9	11	3.4	.63	.00	.00	.00	.00
21	.00	.07	.18	.91	3.8	9.7	4.2	.65	.00	.00	.00	.00
22	.00	.07	.18	.91	3.2	8.8	6.3	.61	.00	.00	.00	.00
23	.00	.07	.18	.91	3.3	8.2	5.6	.56	.00	.00	.00	.00
24	.00	.07	.18	.93	4.6	7.7	4.3	.51	.00	.00	.00	.00
25	.00	.07	.18	1.0	37	7.2	3.4	.45	.00	.00	.00	.00
26	.00	.07	.18	1.3	e232	6.8	2.9	.45	.00	.00	.00	.00
27	.00	.07	.18	2.6	117	6.5	2.7	.50	.00	.00	.00	.00
28	.00	.07	.18	2.6	150	6.2	2.5	.63	.00	.00	.00	.00
29	.00	.07	.18	2.2	---	5.9	2.5	.70	.00	.00	.00	.00
30	.00	.08	.18	1.8	---	5.7	2.3	.61	.00	.00	.00	.00
31	.00	---	.18	1.6	---	5.2	---	.55	---	.00	.00	---
TOTAL	0.00	1.33	5.08	38.36	763.4	621.9	149.0	28.75	5.29	0.00	0.00	0.00
MEAN	.000	.044	.16	1.24	27.3	20.1	4.97	.93	.18	.000	.000	.000
MAX	.00	.08	.20	5.2	232	115	10	2.1	.49	.00	.00	.00
MIN	.00	.00	.08	.18	1.4	5.2	2.3	.45	.00	.00	.00	.00
AC-FT	.00	2.6	10	76	1510	1230	296	57	10	.00	.00	.00

e Estimated.

11046300 SAN MATEO CREEK NEAR SAN CLEMENTE, 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	.14	3.41	10.4	17.1	38.6	34.9	24.0	5.88	2.11	.61	.15	.080
MAX	1.57	69.4	164	131	488	371	270	53.9	21.2	6.94	2.09	1.21
(WY)	1999	1966	1967	1995	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.089	.035	.007	.000	.000	.000	.000	.000
(WY)	1953	1954	1954	1963	1961	1961	1961	1961	1960	1953	1953	1953

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	1210.07		1613.11			
ANNUAL MEAN	3.31		4.42		11.3	
HIGHEST ANNUAL MEAN					65.7	
LOWEST ANNUAL MEAN					.019	
HIGHEST DAILY MEAN	110	Mar 6	232	Feb 26	3150	Feb 24 1998
LOWEST DAILY MEAN	.00	Jun 8	.00	Oct 1	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 8	.00	Oct 1	.00	Oct 1 1952
MAXIMUM PEAK FLOW			a	Feb 26	12500	Feb 23 1998
MAXIMUM PEAK STAGE			a	Feb 26	12.83	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	2400		3200		8190	
10 PERCENT EXCEEDS	4.6		7.6		14	
50 PERCENT EXCEEDS	.11		.18		.20	
90 PERCENT EXCEEDS	.00		.00		.00	

a Instantaneous peak discharge and stage for water year 2001 are unknown, but are known to have occurred on Feb. 26.

11046360 CRISTIANITOS CREEK ABOVE SAN MATEO CREEK, NEAR SAN CLEMENTE, CA

LOCATION.—Lat 33°25'35", long 117°34'10", in SW 1/4 SW 1/4 sec.36, T.8 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, on left bank, at San Mateo Creek Road crossing, 0.5 mi upstream from confluence with San Mateo Creek, and 2.3 mi east of San Clemente.

DRAINAGE AREA.—31.6 mi².

PERIOD OF RECORD.—October 1993 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and culvert control. Auxiliary gage 250 ft downstream with crest-stage gage and concrete road crossing. Elevation of gage is 90 ft above sea level, from topographic map. October 1993 to Feb. 23, 1998, two water-stage recorders (one on each of two main channels) at same site at different datums. Gage destroyed by flood of Feb. 23, 1998, and was out of operation until Sept. 30, 1999, when it was relocated at present site.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,800 ft³/s, estimated, Feb. 23, 1998, gage height, unknown, on basis of drainage area relation with the peak on San Mateo Creek near San Clemente (11046300) and slope-area measurement of peak flow; no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 16, 1952, reached a discharge of 1,800 ft³/s, gage height, 8.86 ft, datum then in use, at site 1.8 mi upstream (station 11046350), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended above 162 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0415	348	5.35	Feb. 25	1845	206	5.16

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	3.0	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.22	1.1	.00	.00	.00	.00	.00
8	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.20	.09	.00	.00	.00	.00	.00
10	.00	.00	.00	.49	.00	10	.42	.00	.00	.00	.00	.00
11	.00	.00	.00	33	.00	.96	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.77	28	.09	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	38	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	15	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.45	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	1.7	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	3.9	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	67	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	1.2	73	.00	.00	.00	.00	.00	.00	.00
27	.58	.00	.00	.80	17	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00	.00
29	1.2	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.45	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.23	0.00	0.00	36.42	258.30	17.38	1.61	0.00	0.00	0.00	0.00	0.00
MEAN	.072	.000	.000	1.17	9.22	.56	.054	.000	.000	.000	.000	.000
MAX	1.2	.00	.00	33	73	10	1.1	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	4.4	.00	.00	72	512	34	3.2	.00	.00	.00	.00	.00

11046360 CRISTIANITOS CREEK ABOVE SAN MATEO CREEK, NEAR SAN CLEMENTE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.012	.065	.37	5.54	35.8	20.1	5.32	1.37	.31	.021	.000	.000
MAX	.072	.51	1.58	24.6	249	128	31.2	7.36	1.92	.084	.000	.000
(WY)	2001	1997	1997	1995	1998	1995	1998	1998	1998	1997	1994	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1994	1994	1994	1994	1999	1999	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	74.98		315.94			
ANNUAL MEAN	.20		.87		5.56	
HIGHEST ANNUAL MEAN					25.2	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	31	Feb 21	73	Feb 26	1400	Feb 24 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1993
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1993
MAXIMUM PEAK FLOW			348	Jan 11	e5800	Feb 23 1998
MAXIMUM PEAK STAGE			5.35	Jan 11	a	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	149		627		4030	
10 PERCENT EXCEEDS	.00		.00		3.0	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

a Peak stage is unknown but is known to have occurred on Feb. 23, 1998.

11046370 SAN MATEO CREEK AT SAN ONOFRE, CA

LOCATION.—Lat 33°23'28", long 117°35'23", in SW 1/4 NW 1/4 sec.14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, at bridge on Interstate Highway 5, 0.5 mi upstream from mouth, and 2.6 mi downstream from Cristianitos Creek.

DRAINAGE AREA.—132 mi².

PERIOD OF RECORD.—October 1946 to September 1967 and October 1984 to September 1985. Discharge measurements only, October 1998 to current year.

SEDIMENT DATA: Water years 1982–85.

GAGE.—None. Elevation of station is 20 ft above sea level, from topographic map.

REMARKS.—Flow partly regulated by small detention reservoirs.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft³/s, estimated, Dec. 5, 1966, gage height, 10.42 ft, datum then in use; maximum gage height, 12.9 ft, Mar. 1, 1983 (backwater from channel vegetation), datum then in use; no flow at times in some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	Discharge (ft ³ /s)
Oct. 5.....	1400	.26
Nov. 6.....	1410	.47
Dec. 6.....	1220	.25
Jan. 10.....	1120	.04
Feb. 7.....	1130	.22
Mar. 12.....	1150	11
Apr. 3.....	1000	.42
May 3.....	1415	.46
June 5.....	1441	.34
July 6.....	0715	.39
Aug. 1.....	1140	.22
Sept. 5.....	0740	.37

11046530 SAN JUAN CREEK AT LA NOVIA STREET BRIDGE, AT SAN JUAN CAPISTRANO, CA

LOCATION.—Lat 33°30'09", long 117°38'50", in NW 1/4 SE 1/4 sec.6, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on right bank, 20 ft downstream from La Novia Street Bridge, 1.3 mi upstream from Arroyo Trabuco Creek, and 0.8 mi east of San Juan Capistrano.

DRAINAGE AREA.—109 mi².

PERIOD OF RECORD.—October 1985 to current year. October 1985 to September 1986, published as "San Juan Creek at San Juan Capistrano".

WATER TEMPERATURE: Water years 1986–88.

SEDIMENT DATA: Water years 1986–93.

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

REMARKS.—Records fair. No regulation upstream from station. Capistrano Water Co. diverts water 2.0 mi upstream. Various amounts of diverted water reach station as irrigation return flow. October 1928 to September 1969 and October 1969 to September 1985, data published as "San Juan Creek near San Juan Capistrano" (station 11046500) and "San Juan Creek at San Juan Capistrano" (station 11046550), which are located approximately 1.9 mi upstream and 1.0 mi downstream, respectively. Data for these sites are roughly equivalent.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,600 ft³/s, estimated, Mar. 5, 1995, gage height, 20.66 ft, from rating curve extended above 3,420 ft³/s; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 22,400 ft³/s, Feb. 25, 1969, gage height, 5.60 ft, from floodmark, at site and datum then in use.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, from rating curve extended above 3,510 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0230	710	12.82	Feb. 26	0745	357	12.27
Feb. 12	1715	859	12.88				

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	.24	.17	.18	2.4	45	3.3	3.2	1.8	.00	.00	.00
2	.00	.07	.17	.17	2.1	26	3.7	3.1	1.7	.00	.00	.00
3	.00	.00	.17	.17	2.0	18	3.1	3.0	1.6	.00	.00	.00
4	.00	.00	.17	.27	2.2	14	3.3	2.3	1.5	.00	.00	.00
5	.00	.00	.01	.43	2.8	11	3.6	2.2	1.2	.17	.00	.00
6	.00	.00	.00	.52	2.4	28	4.0	2.5	1.1	.31	.00	.00
7	.00	.00	.00	.52	2.1	14	35	2.2	1.1	.00	.00	.00
8	.00	.00	.00	1.8	1.9	9.8	27	1.7	.93	.00	.00	.00
9	.00	.00	.00	2.2	1.8	9.3	8.6	1.8	.50	.00	.00	.00
10	.00	.02	.00	5.1	2.1	45	20	1.9	.28	.00	.00	.00
11	.11	.15	.00	233	2.4	18	6.4	2.1	.21	.00	.00	.00
12	.00	1.1	.00	33	225	12	5.5	2.6	.06	.00	.00	.00
13	.00	1.2	.00	11	209	8.9	4.8	3.7	.38	.00	.00	.00
14	.00	.86	.03	6.6	42	7.9	4.3	3.5	.71	.00	.00	.00
15	.00	.30	.10	5.2	15	6.9	4.2	3.1	.75	.00	.00	.00
16	.00	.19	.15	4.2	9.1	6.6	4.0	3.1	.26	.00	.00	.00
17	.00	.67	.17	3.7	7.0	6.0	3.6	2.8	.15	.00	.00	.00
18	.00	.34	.17	3.7	5.8	5.6	3.2	2.0	.42	.00	.00	.00
19	.00	.62	.16	3.7	5.8	5.0	3.5	2.3	.32	.00	.00	.00
20	.00	.81	.17	3.0	9.3	4.4	4.3	2.4	.37	.00	.00	.00
21	.00	.74	.17	2.9	5.5	4.0	21	2.3	.38	.00	.00	.00
22	.00	.56	.17	2.7	4.9	3.8	16	2.0	.38	.00	.00	.00
23	.00	.27	.17	2.5	13	3.7	6.8	1.9	.08	.00	.00	.00
24	.00	.18	.17	3.4	15	3.8	5.0	1.8	.03	.00	.00	.00
25	.00	.18	.17	5.6	103	3.6	4.2	1.3	.14	.00	.00	.00
26	.02	.17	.17	8.3	224	3.4	3.3	1.4	.00	.00	.00	.00
27	1.8	.18	.28	14	104	3.3	3.3	2.4	.00	.00	.00	.00
28	.00	.18	.17	5.4	72	3.4	2.9	2.5	.00	.00	.00	.00
29	3.6	.18	.17	3.7	---	3.7	3.1	2.9	.00	.00	.00	.00
30	13	.17	.17	3.0	---	3.7	3.2	2.3	.00	.00	.00	.00
31	3.7	---	.18	2.6	---	3.4	---	2.0	---	.00	.00	---
TOTAL	22.23	9.38	3.63	372.56	1093.6	341.2	224.2	74.3	16.35	0.48	0.00	0.00
MEAN	.72	.31	.12	12.0	39.1	11.0	7.47	2.40	.55	.015	.000	.000
MAX	13	1.2	.28	233	225	45	35	3.7	1.8	.31	.00	.00
MIN	.00	.00	.00	.17	1.8	3.3	2.9	1.3	.00	.00	.00	.00
AC-FT	44	19	7.2	739	2170	677	445	147	32	1.0	.00	.00

SAN JUAN CREEK BASIN

11046530 SAN JUAN CREEK AT LA NOVIA STREET BRIDGE, AT SAN JUAN CAPISTRANO, 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	.58	2.08	4.89	61.9	105	74.6	19.7	11.0	3.68	1.25	.56	.45
MAX	3.26	9.45	16.8	590	816	663	121	94.9	25.5	8.93	3.83	3.33
(WY)	1999	1997	1997	1993	1998	1995	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.50	1.17	.55	.037	.000	.000	.000	.000	.000
(WY)	1987	1987	1990	2000	1989	1990	1989	1987	1986	1986	1986	1986

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	1594.45		2157.93			
ANNUAL MEAN	4.36		5.91		23.4	
HIGHEST ANNUAL MEAN					106	
LOWEST ANNUAL MEAN					.61	
HIGHEST DAILY MEAN	277	Feb 21	233	Jan 11	5700	Mar 5 1995
LOWEST DAILY MEAN	.00	May 22	.00	Oct 1	.00	May 20 1986
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 5	.00	Oct 1	.00	May 20 1986
MAXIMUM PEAK FLOW			859	Feb 12	e25600	Mar 5 1995
MAXIMUM PEAK STAGE			12.88	Feb 12	20.66	Mar 5 1995
ANNUAL RUNOFF (AC-FT)	3160		4280		16970	
10 PERCENT EXCEEDS	6.5		8.4		26	
50 PERCENT EXCEEDS	.05		.27		1.1	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CA

LOCATION.—Lat 33°29'54", long 117°39'54", on line between secs.1 and 12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank, 30 ft downstream from Del Obispo Street Bridge, in San Juan Capistrano.

DRAINAGE AREA.—54.1 mi².

PERIOD OF RECORD.—October 1972 to September 1977, October 1983 to September 1989, October 1995 to current year.

WATER TEMPERATURE: Water years 1971–77, 1984.

SEDIMENT DATA: Water Years 1971–77, 1984–93.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft³/s, Feb. 23, 1998, gage height, 19.81 ft, from rating curve extended above 1,600 ft³/s; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 800 ft³/s, from rating curve extended above 1,600 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 29	2330	943	12.79	Feb. 12	2015	2,370	14.38
Jan. 11	0315	2,970	14.95	Feb. 25	1800	1,220	13.13

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	1.4	8.1	4.1	3.8	6.0	70	6.7	4.2	4.1	2.0	1.6	1.5
2	1.4	6.0	4.0	3.8	5.8	46	6.6	4.3	4.1	2.1	1.6	1.6
3	1.4	5.0	4.0	3.8	5.9	37	6.2	4.6	4.3	2.3	1.6	1.5
4	1.5	4.7	4.2	4.0	5.7	30	6.1	4.0	4.1	2.5	1.6	1.5
5	1.9	4.8	4.0	4.2	5.9	23	9.5	3.9	3.8	2.7	1.5	1.5
6	1.9	4.9	4.0	4.4	5.8	154	6.5	3.9	3.2	2.4	1.6	1.5
7	2.1	4.7	4.1	4.2	5.8	45	216	4.1	3.1	2.2	1.7	1.5
8	2.1	4.6	4.5	35	5.8	34	31	4.4	3.2	2.0	1.7	1.5
9	2.0	4.7	4.3	16	7.3	33	63	4.7	3.5	2.4	1.7	1.6
10	1.9	12	4.0	66	8.4	150	39	4.2	3.0	2.2	1.7	1.6
11	2.8	14	4.0	879	8.3	30	12	4.1	3.1	2.2	1.6	1.6
12	2.2	4.6	4.3	164	998	18	7.2	4.4	3.3	2.1	1.6	1.6
13	1.8	4.3	4.0	26	494	13	5.1	4.7	3.6	2.0	1.6	1.5
14	1.8	4.1	3.8	14	57	12	e4.5	4.6	3.7	2.0	1.7	1.5
15	1.5	3.7	3.9	9.4	21	12	e4.3	4.5	3.6	2.0	1.7	1.3
16	1.4	3.7	3.8	7.4	13	11	e4.1	4.4	3.6	2.0	1.6	1.3
17	1.4	3.7	3.7	6.3	10	10	e4.0	4.3	2.9	2.0	1.6	1.4
18	1.5	3.6	3.8	6.0	9.5	10	3.9	4.1	3.3	1.9	1.6	1.6
19	1.6	3.6	3.6	6.7	25	9.7	4.1	4.3	2.6	1.9	1.6	1.7
20	1.6	3.7	3.4	7.1	61	9.7	4.0	4.3	2.5	1.9	1.6	1.7
21	1.6	3.7	3.6	6.6	19	9.5	124	4.7	2.4	1.9	1.6	1.8
22	1.7	3.8	3.6	6.5	16	7.5	13	4.9	2.3	2.2	1.6	1.6
23	1.9	3.9	3.6	6.7	67	7.1	7.1	4.3	2.3	1.8	1.5	1.6
24	2.1	3.9	3.6	55	36	7.2	5.0	4.4	2.1	1.9	1.5	1.9
25	2.0	4.0	4.0	13	498	7.4	4.3	4.6	2.2	1.8	1.4	1.6
26	46	4.0	3.8	86	393	7.5	4.2	4.7	2.3	1.8	1.4	1.7
27	161	4.2	3.6	38	157	7.5	4.4	6.6	2.2	1.8	1.5	1.7
28	17	4.0	3.8	9.1	114	7.3	4.8	11	2.1	1.7	1.6	1.6
29	111	4.1	3.7	7.2	---	7.0	4.5	6.0	2.2	1.8	1.6	1.5
30	126	4.1	3.7	6.5	---	6.9	4.2	5.0	2.2	1.8	1.6	1.4
31	13	---	3.7	6.3	---	6.6	---	4.6	---	1.6	1.5	---
TOTAL	518.5	148.2	120.2	1512.0	3059.2	838.9	619.3	146.8	90.9	62.9	49.3	46.9
MEAN	16.7	4.94	3.88	48.8	109	27.1	20.6	4.74	3.03	2.03	1.59	1.56
MAX	161	14	4.5	879	998	154	216	11	4.3	2.7	1.7	1.9
MIN	1.4	3.6	3.4	3.8	5.7	6.6	3.9	3.9	2.1	1.6	1.4	1.3
AC-FT	1030	294	238	3000	6070	1660	1230	291	180	125	98	93

e Estimated.

SAN JUAN CREEK BASIN

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, 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	4.00	11.2	20.5	21.2	76.3	24.5	12.3	6.24	2.91	1.56	1.56	2.40
MAX	16.7	37.8	91.8	120	481	129	59.8	56.9	22.1	7.99	8.90	7.81
(WY)	2001	1997	1998	1997	1998	1998	1998	1998	1998	1998	1977	1986
MIN	.052	.81	1.73	.85	2.84	3.74	.92	.71	.007	.055	.019	.000
(WY)	1974	1975	1973	1976	1977	1988	1977	1988	1973	1973	1973	1973

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1973 - 2001	
ANNUAL TOTAL	5705.33		7213.1			
ANNUAL MEAN	15.6		19.8		15.0	
HIGHEST ANNUAL MEAN					74.1	
LOWEST ANNUAL MEAN					3.17	
HIGHEST DAILY MEAN	951	Feb 21	998	Feb 12	2560	Feb 23 1998
LOWEST DAILY MEAN	.50	Sep 8	1.3	Sep 15	.00	Oct 1 1972
ANNUAL SEVEN-DAY MINIMUM	.56	Sep 8	1.5	Sep 11	.00	Oct 1 1972
MAXIMUM PEAK FLOW			2970	Jan 11	10000	Feb 23 1998
MAXIMUM PEAK STAGE			14.95	Jan 11	19.81	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	11320		14310		10880	
10 PERCENT EXCEEDS	23		28		19	
50 PERCENT EXCEEDS	3.6		4.0		2.0	
90 PERCENT EXCEEDS	1.2		1.6		.34	

11048553 SAND CANYON CREEK AT IRVINE, CA

LOCATION.—Lat 33°39'26", long 117°49'36", in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on right bank, at culvert on Culver Drive, and 0.85 mi upstream from mouth, at Irvine.

DRAINAGE AREA.—7.06 mi².

PERIOD OF RECORD.—July 2001 to September 2001.

GAGE.—Water-stage recorder, culvert control, and crest-stage gage. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.—Records fair. No diversion upstream from station. Releases of treated wastewater from Sand Canyon Reservoir may occur at times. Irrigation return flow can cause low-flow fluctuations in discharge at times.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 0.86 ft³/s, July 6, 2001, gage height, 3.56 ft, from rating curve extended above 0.58 ft³/s; minimum daily, 0.06 ft³/s, Sept. 23, 26, 27, 29, 30, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended above 0.58 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 6	0845	0.86	3.56

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	.12
2	---	---	---	---	---	---	---	---	---	.11	.18	.10
3	---	---	---	---	---	---	---	---	---	.11	.15	.13
4	---	---	---	---	---	---	---	---	---	.13	.16	.16
5	---	---	---	---	---	---	---	---	---	.14	.19	.10
6	---	---	---	---	---	---	---	---	---	.16	.18	.08
7	---	---	---	---	---	---	---	---	---	.19	.16	.09
8	---	---	---	---	---	---	---	---	---	.27	.15	.14
9	---	---	---	---	---	---	---	---	---	.19	.15	.22
10	---	---	---	---	---	---	---	---	---	.13	.15	.24
11	---	---	---	---	---	---	---	---	---	.16	.18	.19
12	---	---	---	---	---	---	---	---	---	.18	.17	.18
13	---	---	---	---	---	---	---	---	---	.16	.16	.16
14	---	---	---	---	---	---	---	---	---	.14	.15	.16
15	---	---	---	---	---	---	---	---	---	.12	.14	.18
16	---	---	---	---	---	---	---	---	---	.13	.15	.18
17	---	---	---	---	---	---	---	---	---	.10	.15	.18
18	---	---	---	---	---	---	---	---	---	.13	.14	.26
19	---	---	---	---	---	---	---	---	---	.14	.14	.29
20	---	---	---	---	---	---	---	---	---	.15	.12	.22
21	---	---	---	---	---	---	---	---	---	.14	.12	.24
22	---	---	---	---	---	---	---	---	---	.14	.13	.07
23	---	---	---	---	---	---	---	---	---	.13	.15	.06
24	---	---	---	---	---	---	---	---	---	.12	.21	.08
25	---	---	---	---	---	---	---	---	---	.13	.27	.08
26	---	---	---	---	---	---	---	---	---	.14	.12	.06
27	---	---	---	---	---	---	---	---	---	.14	.12	.06
28	---	---	---	---	---	---	---	---	---	.12	.11	.08
29	---	---	---	---	---	---	---	---	---	.12	.13	.06
30	---	---	---	---	---	---	---	---	---	.15	.15	.06
31	---	---	---	---	---	---	---	---	---	.15	.15	---
TOTAL	---	---	---	---	---	---	---	---	---	4.43	4.83	4.23
MEAN	---	---	---	---	---	---	---	---	---	.14	.16	.14
MAX	---	---	---	---	---	---	---	---	---	.27	.27	.29
MIN	---	---	---	---	---	---	---	---	---	.10	.11	.06
AC-FT	---	---	---	---	---	---	---	---	---	8.8	9.6	8.4

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

MEAN	---	---	---	---	---	---	---	---	---	.14	.16	.14
MAX	---	---	---	---	---	---	---	---	---	.14	.16	.14
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001
MIN	---	---	---	---	---	---	---	---	---	.14	.16	.14
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

HIGHEST DAILY MEAN	.29	Sep 19
LOWEST DAILY MEAN	.06	Sep 23
ANNUAL SEVEN-DAY MINIMUM	.07	Sep 23
MAXIMUM PEAK FLOW	.86	Jul 6
MAXIMUM PEAK STAGE	3.56	Jul 6
10 PERCENT EXCEEDS	.21	
50 PERCENT EXCEEDS	.14	
90 PERCENT EXCEEDS	.08	

11048600 BONITA CREEK AT IRVINE, CA

LOCATION.—Lat 33°38'42", long 117°51'37", in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on right bank, at downstream side of unnamed service road bridge, and 0.45 mi upstream from mouth, at Irvine.

DRAINAGE AREA.—5.39 mi².

PERIOD OF RECORD.—July 2001 to September 2001.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.—Records poor. No diversion upstream from station. Slight regulation from small storage reservoir upstream from station. Irrigation return flow can cause low-flow fluctuations in discharge at times.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4.2 ft³/s, Aug. 28, 2001, gage height, 10.30 ft, from rating curve extended above 2.0 ft³/s, on basis of critical-depth computations; no flow at times during water year 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended above 2.0 ft³/s as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 28	0700	4.2	10.30

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	---	---	---	---	---	---	---	---	---	.51	.24	.50
2	---	---	---	---	---	---	---	---	---	.48	.26	.44
3	---	---	---	---	---	---	---	---	---	.41	.29	.33
4	---	---	---	---	---	---	---	---	---	.36	.35	.27
5	---	---	---	---	---	---	---	---	---	.35	.35	.31
6	---	---	---	---	---	---	---	---	---	.35	.33	.29
7	---	---	---	---	---	---	---	---	---	.38	.31	.31
8	---	---	---	---	---	---	---	---	---	.33	.29	.27
9	---	---	---	---	---	---	---	---	---	.35	.33	.25
10	---	---	---	---	---	---	---	---	---	.42	.33	.36
11	---	---	---	---	---	---	---	---	---	e.40	.33	.43
12	---	---	---	---	---	---	---	---	---	e.40	.30	.53
13	---	---	---	---	---	---	---	---	---	e.40	.15	.40
14	---	---	---	---	---	---	---	---	---	e.40	.18	.39
15	---	---	---	---	---	---	---	---	---	e.40	.72	.38
16	---	---	---	---	---	---	---	---	---	e.35	.42	.32
17	---	---	---	---	---	---	---	---	---	e.35	.38	.46
18	---	---	---	---	---	---	---	---	---	e.35	.34	.35
19	---	---	---	---	---	---	---	---	---	e.35	.36	.47
20	---	---	---	---	---	---	---	---	---	e.35	.36	.44
21	---	---	---	---	---	---	---	---	---	e.35	.36	.43
22	---	---	---	---	---	---	---	---	---	e.35	.33	.46
23	---	---	---	---	---	---	---	---	---	e.30	.32	.40
24	---	---	---	---	---	---	---	---	---	e.30	.33	.43
25	---	---	---	---	---	---	---	---	---	e.30	.33	.31
26	---	---	---	---	---	---	---	---	---	e.30	.39	.36
27	---	---	---	---	---	---	---	---	---	e.30	.39	.33
28	---	---	---	---	---	---	---	---	---	.28	.84	.39
29	---	---	---	---	---	---	---	---	---	.37	.60	.40
30	---	---	---	---	---	---	---	---	---	.23	.62	.34
31	---	---	---	---	---	---	---	---	---	.20	.53	---
TOTAL	---	---	---	---	---	---	---	---	---	10.97	11.66	11.35
MEAN	---	---	---	---	---	---	---	---	---	.35	.38	.38
MAX	---	---	---	---	---	---	---	---	---	.51	.84	.53
MIN	---	---	---	---	---	---	---	---	---	.20	.15	.25
AC-FT	---	---	---	---	---	---	---	---	---	.22	.23	.23

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

MEAN	---	---	---	---	---	---	---	---	---	.35	.38	.38
MAX	---	---	---	---	---	---	---	---	---	.35	.38	.38
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001
MIN	---	---	---	---	---	---	---	---	---	.35	.38	.38
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

HIGHEST DAILY MEAN	.84	Aug 28
LOWEST DAILY MEAN	.15	Aug 13
ANNUAL SEVEN-DAY MINIMUM	.27	Jul 28
MAXIMUM PEAK FLOW	4.2	Aug 28
MAXIMUM PEAK STAGE	10.30	Aug 28
10 PERCENT EXCEEDS	.48	
50 PERCENT EXCEEDS	.35	
90 PERCENT EXCEEDS	.27	

e Estimated.

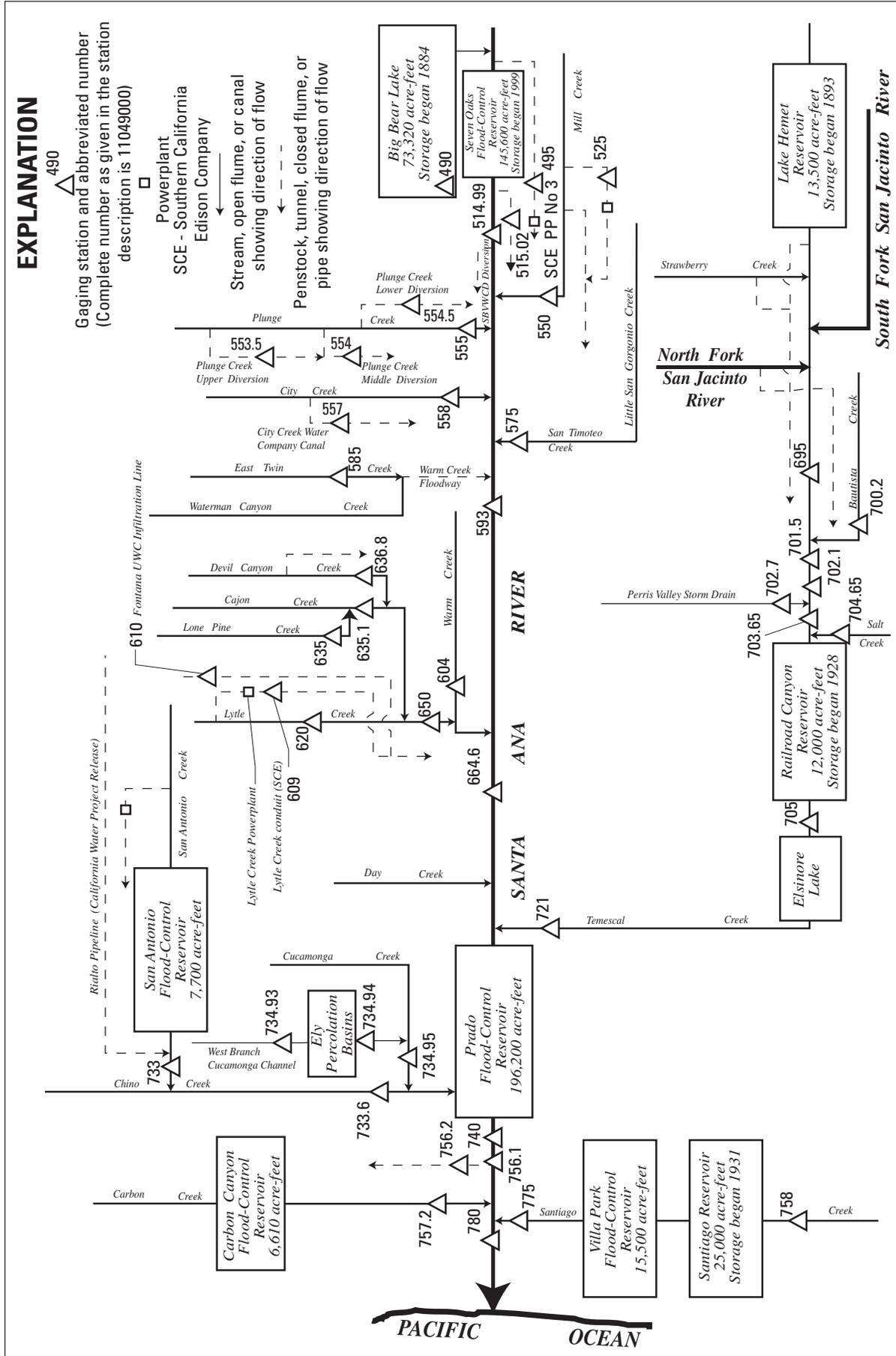


Figure 17. Diversions and storage in Santa Ana River Basin.

11049000 BIG BEAR LAKE NEAR BIG BEAR LAKE, CA

LOCATION.—Lat 34°14'33", long 116°58'33", in SW 1/4 sec.22, T.2 N., R.1 W., [San Bernardino County](#), Hydrologic Unit 18070203, at Big Bear Lake Dam on Bear Creek, 4 mi west of town of Big Bear Lake, and 7.5 mi upstream from mouth.

DRAINAGE AREA.—38.9 mi², excludes Baldwin Lake drainage included in reports prior to 1983.

PERIOD OF RECORD.—October 1950 to current year. February 1884 to September 1950 in files of Bear Valley Mutual Water Co.

REVISED RECORDS.—WDR CA-83-1: Drainage area. WDR CA-99-1: Spillway (top of dam) elevation.

GAGE.—Nonrecording gage. Datum of gage is 6,670.9 ft above sea level (levels by Bear Valley Mutual Water Co.). Prior to 1912 at old dam 200 ft upstream at same datum; spill occurs at elevation 6,743.2 ft.

REMARKS.—Lake is formed by multiple-arch concrete dam, completed in 1912, replacing existing lower dam built in 1884; storage began in spring of 1884. Capacity (based on July 1977 resurvey; present capacity table put into use August 1977), 73,320 acre-ft at elevation 6,743.2 ft, top of dam. No dead storage. During the year, 572 acre-ft was released. Between November 2000 and April 2001, 875 acre-ft was pumped from the lake for snowmaking. See schematic diagram of [Santa Ana River Basin](#).

COOPERATION.—Record of contents provided by Big Bear Municipal Water District; not reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents unknown, lake spilled in 1969, 1970, 1980, 1983; minimum contents observed, 530 acre-ft, Nov. 24, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.—Maximum contents observed, 56,140 acre-ft, Apr. 30; minimum contents observed, 48,770 acre-ft, Sept. 30.

MONTHEND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Contents (acre-ft)	Change in contents (acre-ft)
Sept. 30	54,350	—
Oct. 31	53,580	-770
Nov. 30	52,820	-760
Dec. 31	52,300	-520
CAL YR 2000	—	-6,010
Jan. 31	52,820	+520
Feb. 28	53,920	+1,100
Mar. 31	55,140	+1,220
Apr. 30	56,140	+1,000
May 31	55,070	-1,070
June 30	53,330	-1,740
July 31	51,600	-1,730
Aug. 31	50,030	-1,570
Sept. 30	48,770	-1,260
WTR YR 2001	—	-5,580

11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.—Lat 34°06'30", long 117°05'59", in SW 1/4 SW 1/4 sec.4, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, near mouth of canyon, 0.35 mi downstream from Seven Oaks Dam, 1.6 mi upstream from Mill Creek, 3.2 mi northeast of Mentone, and 16 mi downstream from Big Bear Lake.

DRAINAGE AREA.—210 mi², including area tributary to Baldwin Lake at head of Bear Valley.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1896 to current year. Prior to October 1914, records for river only not equivalent owing to Greenspot pipeline diversion between sites and exclusion of discharge from Warm Springs Canyon. Monthly discharge only for January 1910, January and February 1916 published in WSP 1315-B.

REVISED RECORDS.—WSP 931: 1940. WSP 1635: 1918, 1920(M), 1922, 1937, 1943(M). WSP 1928: Drainage area. WSP 2128: 1910.

GAGE.—Three water-stage recorders. Main gage on right bank of river (station 11051499), canal gage on powerplant diversion (station 11049500), and since 1970, supplementary gage on left bank of river (station 11051502). Elevation of the main and supplementary gages is 1,950 ft above sea level, from topographic map. Prior to Sept. 2, 1917, nonrecording gages at several sites within 1.5 mi upstream at various datums. Sept. 3, 1917, to May 27, 1969, water-stage recorder at site 0.2 mi upstream at different datum. Canal gage at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. The supplementary gage (station 11051502) measures water that is occasionally diverted out of the main channel 250 ft upstream for water distribution. Flow measured by the supplementary gage is included with the river record to maintain equivalence with records prior to 1970. For records of combined discharge of Santa Ana River and Southern California Edison Co.'s Canal above Powerplant No. 3 (station 11049500), which diverts upstream from station, see station 11051501. Prior to water year 2000, station 11049500 was named Southern California Edison Co.'s Canal below Powerplant No. 2. Prior to Oct. 1, 1952, and since Apr. 26, 1976, Bear Valley Mutual Water Co. pumps water into channel above canal gage. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records for Southern California Edison Co.'s Canal near Mentone (station 11049500) 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, 52,300 ft³/s, Mar. 2, 1938, gage height, 14.3 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow at times in some years.

Combined river and canal: Maximum discharge, 52,300 ft³/s, Mar. 2, 1938; no flow on Feb. 17, 2000.

EXTREMES OUTSIDE PERIOD OF RECORD.—Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft³/s, from notes provided by F.C. Finkle, consulting engineer, Los Angeles.

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	.00	.90	1.5	1.6	10	2.3	2.1	.80	.58	.50	.35
2	5.4	.00	.89	1.5	1.6	10	2.2	2.1	.80	.54	.49	.34
3	2.6	.00	.88	1.5	1.5	10	2.2	1.8	.80	.57	.49	.34
4	2.1	.00	.84	1.5	1.5	8.0	2.1	1.7	.79	.56	.46	.33
5	2.0	.00	.82	1.5	3.2	6.8	2.1	1.6	.78	.57	.43	.17
6	1.9	.00	.79	1.4	1.6	7.1	2.1	1.5	.78	.58	.42	.17
7	1.7	.00	.79	1.4	1.7	7.8	2.7	1.4	.76	.58	.41	.20
8	1.5	.00	.79	1.5	1.4	10	4.4	1.3	.77	.57	.27	.22
9	1.4	12	.80	1.4	1.3	9.3	4.4	1.2	.78	.56	.26	.29
10	1.4	2.2	.80	1.5	1.3	11	4.7	1.2	.79	.55	.27	.34
11	1.3	1.4	.77	1.9	1.3	11	3.8	1.2	.76	.54	.29	.39
12	1.2	1.4	.77	.01	1.5	11	3.5	1.2	.79	.49	.36	.45
13	1.1	1.4	.74	.01	8.2	11	3.3	1.1	.76	.48	.39	.45
14	1.1	1.4	.74	.01	10	10	3.1	1.1	.70	.51	.40	.44
15	1.1	1.3	.71	.02	9.8	10	2.8	1.1	.60	.49	.39	.42
16	1.1	1.3	.71	.01	9.2	10	2.8	1.1	.63	.46	.39	.41
17	.60	1.2	.71	4.9	8.8	7.3	2.3	1.1	.65	.44	.39	.39
18	.01	1.1	.69	8.6	9.6	6.1	2.3	1.1	.62	.45	.37	.39
19	.01	1.1	.69	8.8	8.4	5.6	2.2	1.1	.62	.46	.38	.37
20	.00	1.1	.70	8.6	8.1	5.4	2.3	1.0	.62	.47	.37	.32
21	.00	1.1	.71	9.3	6.6	4.1	4.2	.99	.61	.51	.35	.30
22	.00	1.1	.78	10	5.4	3.2	5.0	.95	.66	.51	.35	.27
23	.00	1.1	1.2	6.1	5.7	3.2	3.7	.92	.67	.49	.34	.26
24	.00	1.0	1.3	2.1	5.7	3.1	2.5	.94	.64	.49	.31	.24
25	.00	.99	1.2	2.0	7.2	2.9	2.2	.92	.62	.48	.27	.25
26	.00	.97	1.2	2.0	10	2.8	2.1	.94	.62	.48	.27	.24
27	.00	.94	1.3	1.9	10	2.6	2.0	.96	.59	.50	.25	.23
28	.00	.92	1.4	1.7	10	2.4	2.1	.92	.58	.50	.45	.15
29	.00	.90	1.6	1.7	---	2.4	2.1	.86	.55	.51	.37	.03
30	.00	.91	2.0	1.6	---	2.4	2.0	.83	.58	.51	.35	.04
31	.00	---	1.9	1.6	---	2.5	---	.82	---	.51	.34	---
TOTAL	28.16	36.83	30.12	87.56	152.2	209.0	85.5	37.05	20.72	15.94	11.38	8.79
MEAN	.91	1.23	.97	2.82	5.44	6.74	2.85	1.20	.69	.51	.37	.29
MAX	5.4	12	2.0	10	10	11	5.0	2.1	.80	.58	.50	.45
MIN	.00	.00	.69	.01	1.3	2.4	2.0	.82	.55	.44	.25	.03
AC-FT	56	73	60	174	302	415	170	73	41	32	23	17

11051500 SANTA ANA RIVER NEAR MENTONE, 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	4.98	9.04	25.3	41.4	81.8	94.4	63.1	48.5	21.7	11.5	6.34	6.46
MAX	77.8	206	536	646	1052	1405	413	446	278	174	124	134
(WY)	1970	1966	1967	1993	1980	1938	1969	1998	1969	1969	1969	1969
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1934	1934	1949	1936	1961	1951	1959	1959	1959	1934	1934	1933

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1915 - 2001	
ANNUAL TOTAL	3291.85		723.25			
ANNUAL MEAN	8.99		1.98		33.2	
HIGHEST ANNUAL MEAN					283	
LOWEST ANNUAL MEAN					.012	
HIGHEST DAILY MEAN	175	Feb 21	12	Nov 9	15500	Mar 2 1938
LOWEST DAILY MEAN	.00	Feb 15	.00	Oct 20	.00	Nov 21 1932
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 20	.00	Oct 20	.00	Nov 21 1932
MAXIMUM PEAK FLOW			49	Feb 5	52300	Mar 2 1938
MAXIMUM PEAK STAGE					14.30	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	6530		1430		24030	
10 PERCENT EXCEEDS	48		6.3		74	
50 PERCENT EXCEEDS	.88		.94		1.8	
90 PERCENT EXCEEDS	.01		.24		.00	

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1999 to September 2001 (discontinued).

CHEMICAL DATA: Water years 1999 to September 2001 (discontinued)

SPECIFIC CONDUCTANCE: October 1998 to September 1999.

TEMPERATURE DATA: October 1998 to September 1999.

SEDIMENT DATA: Water years 1999 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.—October 1998 to September 1999.

SPECIFIC CONDUCTANCE: October 1998 to September 1999.

WATER TEMPERATURE: October 1998 to September 1999.

REMARKS.—Water-quality data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded, 455 microsiemens, Sept. 13, 1999; minimum recorded, 151 microsiemens, July 29, 1999.

WATER TEMPERATURE: Maximum recorded, 29.5°C, July 6, 1999; minimum recorded, 3.0°C, Dec. 23, 24, 1998.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE OF HG (00025)	OXYGEN, DIS- SOLVED SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM AIR) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (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)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT										
17...	1230	.39	712	8.5	102	8.5	566	28.0	21.0	11
DEC										
14...	1000	.71	717	11.0	104	8.3	520	13.0	10.0	9
JAN										
16...	1250	.01	711	11.0	106	8.4	274	10.0	10.5	--
FEB										
20...	1530	8.9	715	10.2	102	8.5	328	13.5	12.5	--
MAR										
22...	1330	3.3	712	9.8	111	8.8	375	14.0	18.0	--
APR										
16...	1400	2.6	713	10.0	121	8.9	390	26.0	21.5	--
MAY										
17...	1300	1.1	709	8.6	117	8.9	487	29.5	27.0	15
JUN										
14...	1430	.66	710	8.5	119	8.9	499	34.0	29.0	16
JUL										
10...	1410	.57	711	8.2	119	8.9	509	30.5	31.0	7
AUG										
13...	1500	.39	710	7.6	113	8.9	550	37.0	32.5	7
SEP										
13...	1400	.43	708	8.7	120	8.9	508	33.0	28.0	6

11051500 SANTA ANA RIVER NEAR MENTONE, CA—Continued

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

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. 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- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
17...	10.0	1.2	23.0	122	.5	370	358	<.041	e.09	.14
DEC										
14...	8.3	1.2	22.7	117	.5	348	337	<.041	e.06	.14
JAN										
16...	6.4	.5	17.9	20.1	.3	185	178	e.040	.16	.38
FEB										
20...	6.5	.7	19.8	49.0	.3	225	213	<.041	.10	.17
MAR										
22...	6.8	.9	20.1	59.4	.3	249	236	<.041	.11	.19
APR										
16...	6.7	.8	20.8	68.3	.3	257	244	<.041	.12	.09
MAY										
17...	8.3	1.1	22.6	110	.5	336	305	<.041	.12	.16
JUN										
14...	8.4	1.3	25.5	120	.4	326	312	<.040	.13	.18
JUL										
10...	8.1	1.4	24.1	121	.5	337	317	<.040	.11	.13
AUG										
13...	9.2	1.3	26.4	125	.4	322	319	e.022	.14	.20
SEP										
13...	8.5	1.4	26.3	122	.5	332	319	<.040	.12	.15

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT									
17...	.108	<.006	e.003	<.018	.014	1.3	.2	<10	e2.2
DEC									
14...	.173	e.003	<.006	<.018	.011	1.2	.2	<10	<3.2
JAN									
16...	.220	<.006	.016	<.018	.026	2.4	.9	<10	<3.2
FEB									
20...	.209	e.004	e.003	<.018	.011	2.2	.4	M	e3.1
MAR									
22...	.112	e.004	<.006	<.018	.013	1.9	.4	<10	e2.7
APR									
16...	e.037	<.006	e.004	<.018	.007	1.6	.3	<10	e2.1
MAY									
17...	e.036	<.006	e.004	<.018	.009	1.5	.2	<10	e3.0
JUN									
14...	e.026	<.006	e.005	<.020	.007	1.8	.2	<10	e3.0
JUL									
10...	<.050	<.006	e.004	<.020	.005	1.7	.2	<10	e3.1
AUG									
13...	e.032	<.006	e.005	<.020	.007	1.8	.2	<10	<3.0
SEP									
13...	<.050	<.006	e.004	<.020	.007	1.3	.2	<10	e2.3

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

e Estimated.

M Presence of material verified, not quantified.

SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, 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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- SUS- PENDE (T/DAY) (80155)
OCT						
17...N	1230	.39	21.0	87	8	.01
DEC						
14...N	1000	.71	10.0	74	3	.01
JAN						
16...N	1250	.01	10.5	93	9	<.01
FEB						
20...N	1530	8.9	12.5	75	3	.07
MAR						
22...N	1330	3.3	18.0	80	7	.06
APR						
16...N	1400	2.6	21.5	59	3	.02
MAY						
17...N	1300	1.1	27.0	57	3	.01
JUN						
14...N	1430	.66	29.0	92	16	.03
JUL						
10...N	1410	.57	31.0	62	3	<.01
AUG						
13...N	1500	.39	32.5	85	6	.01
SEP						
13...N	1400	.43	28.0	57	2	<.01

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

11051501 SANTA ANA RIVER NEAR MENTONE, CA—Continued

SANTA ANA RIVER AND SOUTHERN CALIFORNIA EDISON CO.'S CANAL NEAR MENTONE, CA

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e19	e18	e21	e20	e25	e54	e37	e31	e21	e13	12	12
2	e22	e19	e21	e20	e24	e51	e35	e32	e21	e12	10	13
3	e20	e19	e21	e22	e24	e49	e33	e32	e21	e13	10	15
4	e19	e19	e21	e20	e26	e44	e33	e32	e21	e13	11	13
5	e19	e19	e21	e20	e30	e41	e33	e31	e20	e14	10	12
6	e19	e19	e21	e20	e29	e40	e36	e30	e20	e8.8	11	12
7	e19	e19	e21	e20	e29	e44	e39	e29	e19	e8.6	11	13
8	e18	e17	e21	e20	e26	e39	e39	e29	e20	e7.6	11	13
9	e18	e34	e22	e22	e23	e47	e38	e28	e19	e7.1	11	12
10	e18	e24	e22	e22	e24	e45	e39	e28	e19	e16	10	12
11	e22	e23	e23	e1.9	e24	e43	e40	e27	e19	e13	9.1	12
12	e20	e23	e21	e.01	e26	e42	e40	e26	e17	e12	9.0	13
13	e21	e23	e23	e10	e9.1	e44	e47	e25	e18	e12	9.0	13
14	e20	e23	e22	e20	e10	e49	e42	e25	e17	e13	8.9	13
15	e20	e23	e23	e25	e40	e48	e39	e24	e17	e11	8.7	13
16	e20	e23	e22	e30	e35	e47	e36	e23	e16	e11	8.5	13
17	e18	e18	e22	e27	e34	e44	e37	e25	e16	e12	7.6	13
18	e18	e17	e21	e31	e35	e44	e36	e23	e15	e11	7.0	13
19	e19	e16	e22	e31	e43	e44	e33	e24	e15	e11	7.4	13
20	e18	e15	e20	e31	e64	e45	e35	e24	e15	e11	8.0	13
21	e18	e22	e19	e32	e45	e46	e42	e25	e15	e12	9.9	13
22	e19	e21	e18	e34	e36	e41	e39	e22	e15	e13	12	12
23	e20	e21	e19	e26	e35	e40	e37	e21	e15	e12	14	12
24	e20	e21	e19	e24	e37	e40	e36	e21	e15	e12	13	12
25	e19	e21	e19	e28	e47	e39	e34	e21	e15	e12	13	12
26	e19	e21	e19	e27	e64	e39	e34	e21	e15	e9.2	13	12
27	e20	e21	e20	e27	e50	e38	e36	e23	e15	e12	13	12
28	e19	e20	e19	e26	e55	e38	e35	e24	e15	e12	12	12
29	e17	e22	e20	e26	---	e38	e34	e24	e14	e13	12	12
30	e15	e21	e20	e27	---	e38	e33	e22	e13	e13	12	e12
31	e21	---	e21	e26	---	e38	---	e22	---	e13	12	---
TOTAL	594	622	644	715.91	949.1	1339	1107	794	513	363.3	326.1	377
MEAN	19.2	20.7	20.8	23.1	33.9	43.2	36.9	25.6	17.1	11.7	10.5	12.6
MAX	22	34	23	34	64	54	47	32	21	16	14	15
MIN	15	15	18	.01	9.1	38	33	21	13	7.1	7.0	12
AC-FT	1180	1230	1280	1420	1880	2660	2200	1570	1020	721	647	748

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2001, BY WATER YEAR (WY)

MEAN	48.3	45.1	57.9	90.2	123	135	116	101	73.2	62.4	55.9	53.4
MAX	122	219	538	1439	1052	1402	413	477	277	175	124	137
(WY)	1984	1966	1967	1916	1980	1938	1969	1998	1969	1922	1969	1969
MIN	10.4	12.5	14.4	19.0	18.3	21.6	20.6	19.2	15.1	9.36	9.91	9.75
(WY)	1991	1991	1991	1991	1991	1965	1961	1961	1989	1990	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1912 - 2001	
ANNUAL TOTAL	10674.32		8344.41			
ANNUAL MEAN	29.2		22.9		79.8	
HIGHEST ANNUAL MEAN					366	
LOWEST ANNUAL MEAN					18.6	
HIGHEST DAILY MEAN	175	Feb 21	64	Feb 20	16000	Jan 27 1916
LOWEST DAILY MEAN	.00	Feb 17	.01	Jan 12	.00	Feb 17 2000
ANNUAL SEVEN-DAY MINIMUM	11	Feb 11	8.0	Aug 14	8.0	Aug 14 2001
MAXIMUM PEAK FLOW			a		52300	
ANNUAL RUNOFF (AC-FT)	21170		16550		57830	
10 PERCENT EXCEEDS	55		39		136	
50 PERCENT EXCEEDS	21		21		48	
90 PERCENT EXCEEDS	14		12		23	

e Estimated.

a Date and magnitude of peak discharge are unknown.

11052500 MILL CREEK POWER CANALS NOS. 2 AND 3 NEAR YUCAIPA, CA

LOCATION.—Lat 34°05'23", long 117°00'49", in NW 1/4 NW 1/4 sec.17, T.1 S., R.1 W., San Bernardino County, Hydrologic Unit 18070203, on penstock, 100 ft downstream from Mill Creek Nos. 2 and 3 forebay, and 4.2 mi northeast of Yucaipa.

PERIOD OF RECORD.—October 1973 to September 1986, October 1993 to current year. Records for January 1919 to September 1973 available in files of the U.S. Geological Survey.

GAGE.—Acoustic-velocity meter and water-stage recorder. Elevation of gage is 4,840 ft above sea level, from topographic map.

REMARKS.—Mill Creek Power Canals Nos. 2 and 3 divert from points 3 mi and 6 mi upstream from station, respectively. Canal No. 2, damaged during earthquake in 1992, was not used during water year 2001. Prior to October 1993, records collected at powerplant at terminus of penstock. October 1993 to September 1995, records collected at auxiliary gage at Canal No. 3 intake. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 41 ft³/s, May 6, 1995; no flow at times 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	8.0	.00	.00	.00	7.5	7.1	e.00	.00	12	7.7	7.3	6.4
2	8.0	4.2	.00	.00	7.3	7.0	e.00	.00	12	7.7	7.3	5.2
3	8.1	7.5	.00	.00	7.4	7.7	e.00	.00	12	7.6	7.1	.00
4	8.0	7.6	.00	.00	7.4	7.3	e.00	.00	12	7.4	7.1	3.6
5	8.0	4.7	.00	.00	7.3	7.1	e.00	.00	11	8.5	7.0	6.4
6	8.1	7.6	.00	.00	7.5	7.0	e6.5	.00	12	2.6	7.2	6.3
7	8.0	7.6	.00	.00	7.5	7.0	e10	.00	12	.00	7.4	6.3
8	8.0	7.6	.00	.00	7.5	7.0	e10	.00	12	.00	7.1	6.3
9	8.0	7.3	.00	.00	7.2	7.0	e12	.00	12	.00	6.9	6.3
10	8.0	7.1	.00	.00	7.2	6.9	e12	.00	12	4.4	6.9	6.1
11	8.0	7.2	.00	.00	7.4	7.2	e12	.00	12	8.0	6.9	6.2
12	8.0	7.1	.00	.00	7.2	e7.2	e12	.00	11	7.9	6.9	6.2
13	8.1	7.0	.00	.00	7.3	e7.5	e12	.00	8.6	8.2	6.8	6.2
14	8.1	7.2	.00	.00	7.3	e7.5	e12	.00	9.3	7.9	6.9	6.3
15	8.1	7.0	.00	4.5	7.5	e7.9	e12	.00	9.3	7.9	6.8	6.3
16	8.1	6.9	.00	8.2	7.4	e8.1	e11	12	9.3	7.8	6.7	6.2
17	8.1	6.8	.00	7.6	7.5	e8.1	e11	12	9.1	7.9	6.7	6.2
18	8.1	7.0	.00	7.7	7.4	e9.5	e11	12	8.7	7.9	6.6	6.2
19	8.1	6.7	.00	7.6	7.4	e11	e11	12	8.2	7.8	6.5	6.1
20	8.1	6.8	.00	7.8	7.3	e11	e11	13	8.2	7.7	6.6	6.1
21	8.2	6.8	.00	7.8	7.4	e11	e11	13	8.3	7.7	6.6	6.1
22	8.2	7.3	.00	7.3	7.2	e11	e11	13	8.3	7.6	8.5	6.1
23	7.3	6.8	.00	7.4	7.3	e11	e12	12	8.1	7.6	5.7	6.1
24	6.3	7.1	.00	7.7	7.1	e11	e13	13	8.0	7.1	6.4	6.0
25	5.8	7.2	.00	7.5	7.2	e11	e13	13	8.2	7.5	7.0	6.0
26	6.5	3.9	.00	7.6	7.1	e12	e6.5	13	8.0	7.4	6.9	6.1
27	6.3	.00	.00	7.7	7.2	e12	e.00	13	8.1	7.4	6.3	6.1
28	6.8	.00	.00	7.5	7.0	e12	.00	13	8.0	7.3	5.9	6.1
29	6.8	.00	.00	7.6	---	e12	.00	12	8.0	7.2	6.0	6.0
30	.00	.00	.00	7.5	---	e5.8	.00	12	7.9	7.3	6.4	6.0
31	.00	---	.00	7.5	---	e.00	---	12	---	7.4	6.3	---
TOTAL	223.20	170.00	0.00	126.50	205.0	264.90	232.00	200.00	293.6	206.40	210.7	175.50
MEAN	7.20	5.67	.000	4.08	7.32	8.55	7.73	6.45	9.79	6.66	6.80	5.85
MAX	8.2	7.6	.00	8.2	7.5	12	13	13	12	8.5	8.5	6.4
MIN	.00	.00	.00	.00	7.0	.00	.00	.00	7.9	.00	5.7	.00
AC-FT	443	337	.00	251	407	525	460	397	582	409	418	348

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	16.2	15.2	14.7	14.9	15.4	17.8	20.1	20.8	20.0	17.3	16.1	15.5																
MAX	26.8	23.5	23.9	26.6	27.8	30.1	33.3	31.8	28.7	29.2	30.2	27.9																
(WY)	1981	1979	1979	1979	1979	1979	1995	1995	1979	1980	1980	1978																
MIN	7.19	5.67	.000	4.08	4.55	5.33	4.50	6.45	9.79	2.74	5.92	3.01																
(WY)	2000	2001	2001	2001	2000	2000	2000	2001	2001	1999	2000	1997																

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	2529.95	2307.80	
ANNUAL MEAN	6.91	6.32	17.0
HIGHEST ANNUAL MEAN			26.2
LOWEST ANNUAL MEAN			6.32
HIGHEST DAILY MEAN	20	13	41
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	5020	4580	12320
10 PERCENT EXCEEDS	13	12	27
50 PERCENT EXCEEDS	7.5	7.2	17
90 PERCENT EXCEEDS	.00	.00	7.8

e Estimated.

11055000 MILL CREEK NEAR MENTONE, CA

LOCATION.—Lat 34°04'40", long 117°05'54", in SE 1/4 SW 1/4 sec.16, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, at Garnet Street Bridge, 1.55 mi upstream from mouth, and 1.5 mi northeast of Mentone.

DRAINAGE AREA.—49.1 mi².

PERIOD OF RECORD.—February 1939 to September 1965, October 1997 to current year. Monthly discharge only for February 1939, published in WSP 1315-B. Instantaneous values only, based on discharge measurements, since October 1997.

GAGE.—None. Elevation of station is 2,010 ft above sea level, from topographic map. February 1939 to September 1965, water-stage recorder and broad-crested weir at site 1.2 mi downstream.

REMARKS.—No regulation above station. Mill Creek power canals Nos. 1, 2, and 3 divert from points 3.8 mi, 6.8 mi, and 9.8 mi above station, respectively, and a varying portion of the remaining flow is sometimes diverted at a point 0.7 mi upstream for ground-water recharge. Canal No. 2, damaged during an earthquake in 1992, was not used during water year 2001. Pumping of wells along stream above station for irrigation. See schematic diagram of [Santa Ana River Basin](#).

COOPERATION.—Discharge measurements are provided by the San Bernardino Valley Water Conservation District during most years; no measurements were provided during water year 2001. Several observations of no flow were made during the year and provided to the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD (1939–65).—Maximum discharge, 1,500 ft³/s, Dec. 23, 1945, gage height, 6.5 ft, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow for parts of each year.

EXTREMES FOR CURRENT YEAR.—Maximum discharge observed, 0.64 ft³/s, Apr. 3; no flow observed many times during year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	.00	---	.00	---
2	---	---	---	---	.01	.11	---	---	---	.00	.00	---
3	.02	.10	---	---	---	---	.64	.00	---	.00	.00	---
4	---	---	---	.09	---	---	---	.00	.00	---	---	---
5	---	---	---	---	---	---	---	---	.00	---	---	.00
6	---	---	.28	---	---	---	---	---	.00	---	.00	.00
7	---	---	---	---	---	---	---	.00	.00	---	.00	.00
8	---	---	---	---	---	---	---	.00	.00	---	.00	---
9	---	---	---	---	---	---	---	.00	---	.00	.00	---
10	---	---	---	---	---	---	---	.00	---	.00	.00	.00
11	---	---	---	---	---	---	.00	.00	.00	.00	---	.00
12	---	---	---	---	---	---	---	.00	.00	.00	---	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.00	---	.00	.00
15	---	---	---	---	---	.21	---	.00	.00	---	.00	---
16	---	---	---	---	---	---	---	.00	---	.00	.00	---
17	---	---	---	---	---	---	---	.00	---	.00	.00	.00
18	.06	---	---	---	---	---	---	.00	.00	.00	---	.00
19	---	---	.15	---	---	---	---	---	.00	.00	---	.00
20	---	---	---	---	---	---	---	---	.00	.00	.00	.00
21	---	---	---	---	---	---	---	.00	.00	---	.00	.00
22	---	.10	---	---	---	---	---	.00	.00	---	.00	---
23	---	---	---	---	.10	---	---	.00	---	.00	.00	---
24	---	---	---	.00	---	---	.00	.00	---	.00	.00	.00
25	---	---	---	.13	---	---	---	.00	.00	.00	---	.00
26	---	---	---	---	---	---	---	---	.00	.00	---	.00
27	---	---	---	---	---	---	---	---	.00	.00	.00	.00
28	---	---	---	---	---	---	---	---	.00	---	.00	.00
29	---	---	---	---	---	---	---	.00	.00	---	.00	---
30	---	---	---	---	---	---	---	.00	---	.00	.00	---
31	---	---	---	---	---	---	---	.00	---	.00	.00	---

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.—Lat 34°07'06", long 117°08'27", in NE 1/4 NE 1/4 sec.1, T.1 S., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, at mouth of canyon, at crossing of North Fork Ditch siphon, and 1.8 mi northeast of East Highlands.

DRAINAGE AREA.—16.9 mi².

PERIOD OF RECORD.—January 1919 to current year; combined records of creek and diversions, March 1951 to current year.

REVISED RECORDS.—WSP 1635: 1924, 1926, 1935–36(M), 1943, 1944(M), 1945, 1946(M), 1947, 1950(M). WSP 1715: 1956–58(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder on creek. Since March 1951, water-stage recorder and weir on upper diversion, discontinued Sept. 30, 1991, reactivated July 27, 1993; water-stage recorder and concrete-lined canal on middle diversion; crest-stage gage and sharp-crested weir on lower diversion. Elevation of creek gage is 1,590 ft above sea level, from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft higher. Diversions all at different datums.

REMARKS.—Records good. No regulation upstream from station. Diversion from Alder Creek to Upper Plunge Creek area was active 1904–67. Diversions for irrigation are made at sites 0.5 mi (station 11055450), 1.0 mi (station 11055400), and 2.5 mi (station 11055350) upstream from streamflow station. Water has been diverted upstream from station for irrigation during entire period of record. For combined discharge of Plunge Creek and diversions, see station 11055501. No flow in lower diversion since May 29, 1966. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 5,340 ft³/s, Mar. 2, 1938, on basis of slope-area measurement of peak flow; maximum recorded gage height, 7.41 ft, Nov. 29, 1970; no flow at times in some years. Combined creek and diversions: Maximum discharge, 4,770 ft³/s, Dec. 6, 1966; no flow, Nov. 12, 1964, Sept. 29, 1965, Aug. 4, 1987, several days in November 1988, September 1991, many days in 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum, from rating curve extended above 356 ft³/s on basis of slope-conveyance measurement at gage height 7.41 ft:

Date	Time	Creek only Discharge (ft ³ /s)	Gage height (ft)	Combined creek and diversions Discharge (ft ³ /s)
Feb. 12	2115	48	3.54	48

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	.49	1.4	1.8	1.6	2.6	14	4.7	3.9	1.1	.24	.26	.21
2	.44	1.3	1.7	1.5	2.7	9.5	4.7	4.1	1.3	.21	.25	.19
3	.42	1.2	1.6	1.6	2.7	7.5	4.4	3.7	1.5	.22	.22	.21
4	.19	1.2	1.6	1.6	2.5	6.7	4.3	3.4	1.6	.24	.17	.24
5	.13	1.3	1.7	1.5	2.5	6.0	4.2	3.2	1.4	.22	.14	.23
6	.11	1.5	1.6	1.5	2.5	9.5	4.0	3.1	1.3	.49	.12	.23
7	.11	1.4	1.6	1.5	2.8	9.7	8.5	2.8	1.1	.53	.12	.29
8	.10	1.4	1.6	1.6	2.6	7.9	7.1	2.7	.90	.34	.10	.33
9	.09	1.5	1.7	1.9	2.6	7.8	6.6	2.5	.73	.31	.11	.36
10	.23	1.7	1.6	1.8	2.8	14	6.7	2.5	.61	.30	.14	.32
11	.99	1.6	1.6	12	3.2	12	6.2	2.4	.63	.31	.13	.29
12	1.0	1.5	1.7	4.9	15	9.7	7.0	2.7	.96	.28	.15	.28
13	.87	1.6	1.7	3.1	19	8.6	6.5	2.7	1.2	.22	.16	.27
14	.73	1.6	1.6	2.6	7.8	8.5	4.6	2.5	.79	.19	.13	.24
15	.67	1.6	1.6	2.5	4.9	8.4	4.1	2.3	.59	.20	.10	.23
16	.63	1.7	1.6	2.6	3.8	8.1	3.5	2.2	.50	.25	.10	.23
17	.60	1.6	1.5	2.5	3.3	7.6	3.1	2.1	.44	.30	.08	.26
18	.65	1.6	1.4	2.5	2.9	7.1	2.8	2.1	.38	.28	.07	.30
19	.72	1.6	1.4	2.6	2.9	6.8	2.9	2.3	.36	.26	.06	.31
20	.62	1.5	1.4	2.5	10	6.6	3.0	2.0	.37	.26	.09	.29
21	.69	1.5	1.4	2.4	5.6	6.5	7.6	1.7	.35	.27	.16	.28
22	.79	1.6	1.4	2.3	4.8	6.7	5.6	1.5	.36	.27	.22	.26
23	.77	1.7	1.4	2.3	4.8	6.5	6.3	1.3	.34	.26	.28	.24
24	.96	1.6	1.5	2.6	4.4	6.3	5.4	1.3	.31	.27	.25	.20
25	.96	1.6	1.4	3.1	8.5	6.1	4.7	1.3	.29	.29	.20	.17
26	1.1	1.6	1.5	3.3	13	6.0	4.6	1.4	.33	.27	.15	.20
27	1.3	1.6	1.5	3.4	11	5.6	4.8	1.7	.32	.24	.10	.21
28	1.4	1.6	1.5	2.9	17	5.3	4.7	2.0	.27	.19	.10	.19
29	1.5	1.7	1.5	2.8	---	5.4	4.4	1.8	.27	.18	.16	.21
30	3.3	1.8	1.5	2.7	---	5.1	4.3	1.4	.25	.22	.21	.17
31	1.6	---	1.6	2.6	---	4.8	---	1.2	---	.25	.22	---
TOTAL	24.16	46.1	48.2	84.3	168.2	240.3	151.3	71.8	20.85	8.36	4.75	7.44
MEAN	.78	1.54	1.55	2.72	6.01	7.75	5.04	2.32	.69	.27	.15	.25
MAX	3.3	1.8	1.8	12	19	14	8.5	4.1	1.6	.53	.28	.36
MIN	.09	1.2	1.4	1.5	2.5	4.8	2.8	1.2	.25	.18	.06	.17
AC-FT	48	91	96	167	334	477	300	142	41	17	9.4	15

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.29	1.92	6.41	12.5	21.8	22.5	12.7	4.17	1.09	.32	.16	.34
MAX	3.47	44.7	106	170	224	176	74.2	51.7	15.1	5.52	4.87	10.9
(WY)	1984	1966	1967	1993	1969	1938	1958	1998	1998	1998	1983	1978
MIN	.000	.000	.000	.003	.000	.029	.000	.000	.000	.000	.000	.000
(WY)	1920	1921	1930	1963	1961	1961	1961	1919	1919	1919	1919	1919

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1919 - 2001
ANNUAL TOTAL	1126.23	875.76	
ANNUAL MEAN	3.08	2.40	6.98
HIGHEST ANNUAL MEAN			42.5 1969
LOWEST ANNUAL MEAN			.050 1961
HIGHEST DAILY MEAN	68 Mar 8	19 Feb 13	1840 Jan 25 1969
LOWEST DAILY MEAN	.00 Jun 21	.06 Aug 19	.00 May 1 1919
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 21	.09 Aug 14	.00 May 1 1919
MAXIMUM PEAK FLOW		48 Feb 12	5340 Mar 2 1938
MAXIMUM PEAK STAGE		3.54 Feb 12	7.41 Nov 29 1970
ANNUAL RUNOFF (AC-FT)	2230	1740	5060
10 PERCENT EXCEEDS	7.6	6.5	14
50 PERCENT EXCEEDS	.79	1.5	.20
90 PERCENT EXCEEDS	.00	.20	.00

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.—Lat 34°08'38", long 117°11'16", in SW 1/4 NW 1/4 sec.27, T.1 N., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 0.6 mi upstream from Highland Avenue, and 1.5 mi northeast of Highland.

DRAINAGE AREA.—19.6 mi².

PERIOD OF RECORD.—October 1919 to current year; combined records of creek and City Creek Water Co.'s canal, June 1924 to September 1986, October 1988 to current year.

REVISED RECORDS.—WSP 1635: 1920(M), 1923(M), 1937(M), 1939(M), 1946. WSP 1928: Drainage area.

GAGE.—Water-stage recorder on creek; water-stage recorder on canal. Elevation of creek gage is 1,580 ft above sea level, from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi downstream at different datum. Canal gage at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. City Creek Water Co.'s canal (station 11055700) diverted from a site 0.5 mi upstream from station for irrigation throughout period of record until Sept. 30, 1986, and resumed diversion on Mar. 31, 1989. Diversion canal damaged by storms of January 1993, with no flow in canal from Jan. 14, 1993, to Apr. 5, 1995. For combined discharge of City Creek and canal see station 11055801. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 7,000 ft³/s, Feb. 25, 1969, gage height, 9.39 ft, from rating curve extended above 580 ft³/s, on basis of slope-area measurement at gage height 8.82 ft; no flow for many days in some years.

Combined creek and canal: Maximum discharge, 7,000 ft³/s, Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 110 ft³/s, or maximum:

Date	Time	Creek only		Combined creek and canal
		Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)
Feb. 12	1945	105	4.61	105

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	1.1	1.2	1.4	3.2	24	4.4	4.7	.37	.05	.10	.12
2	.15	1.1	1.2	1.3	3.1	17	4.8	4.9	.38	.04	.10	.12
3	.15	1.0	1.2	1.3	3.1	14	4.7	4.4	.38	.06	.10	.14
4	.17	1.0	1.2	1.4	3.2	12	4.8	4.1	.39	.05	.09	.14
5	.19	1.1	1.2	1.4	3.2	11	4.8	3.9	.38	.06	.09	.14
6	.19	1.2	1.1	1.4	3.1	15	4.6	3.7	.35	.09	.09	.15
7	.19	1.2	1.1	1.4	3.5	16	12	3.4	.33	.07	.09	.16
8	.18	1.2	1.2	1.5	3.3	14	11	3.1	.33	.06	.09	.14
9	.19	1.2	1.2	1.7	3.1	14	8.7	3.0	.31	.06	.11	.14
10	.20	1.5	1.2	1.8	3.6	21	8.8	2.9	.31	.08	.11	.13
11	.17	1.4	1.2	17	4.2	18	8.3	2.7	.28	.08	.12	.11
12	.17	1.4	1.3	6.1	33	15	9.9	3.1	.31	.07	.13	.11
13	.16	1.3	1.3	4.1	39	13	8.8	3.3	.32	.07	.13	.09
14	.15	1.3	1.3	3.6	18	12	8.3	2.9	.27	.07	.09	.08
15	.14	1.3	1.3	3.3	13	11	7.7	2.7	.26	.08	.09	.06
16	.15	1.3	1.3	3.2	10	11	7.1	2.6	.25	.09	.09	.06
17	.16	1.3	1.3	2.9	9.1	10	6.6	2.5	.24	.09	.09	.07
18	.17	1.3	1.2	2.8	8.5	9.7	6.1	2.5	.20	.08	.10	.07
19	.19	1.3	1.2	2.8	8.4	9.2	6.0	2.7	.14	.09	.10	.08
20	.18	1.2	1.2	2.8	20	8.7	6.3	2.6	.11	.09	.11	.07
21	.20	1.2	1.2	2.8	13	8.1	12	2.3	.11	.09	.12	.06
22	.19	1.3	1.2	2.8	11	7.6	8.9	2.0	.10	.09	.13	.08
23	.21	1.3	1.3	2.8	11	7.2	7.8	1.8	.09	.08	.13	.07
24	.25	1.3	1.3	3.5	10	6.7	7.0	1.8	.09	.08	.12	.05
25	.24	1.3	1.2	4.6	14	6.3	6.4	1.8	.09	.09	.12	.05
26	.27	1.2	1.3	4.4	21	6.0	6.0	1.8	.09	.08	.12	.04
27	.29	1.2	1.3	4.3	20	5.6	5.8	2.1	.08	.08	.10	.04
28	.31	1.2	1.3	4.0	27	5.2	5.6	2.6	.08	.07	.09	.03
29	.37	1.2	1.3	3.8	---	5.1	5.4	2.4	.06	.08	.12	.04
30	.83	1.2	1.3	3.6	---	4.6	5.0	1.9	.05	.10	.14	.03
31	.68	---	1.4	3.3	---	4.4	---	.83	---	.10	.13	---
TOTAL	7.26	37.1	38.5	103.1	322.6	342.4	213.6	87.03	6.75	2.37	3.34	2.67
MEAN	.23	1.24	1.24	3.33	11.5	11.0	7.12	2.81	.22	.076	.11	.089
MAX	.83	1.5	1.4	17	39	24	12	4.9	.39	.10	.14	.16
MIN	.14	1.0	1.1	1.3	3.1	4.4	4.4	.83	.05	.04	.09	.03
AC-FT	14	74	76	204	640	679	424	173	13	4.7	6.6	5.3

SANTA ANA RIVER BASIN

11055800 CITY CREEK NEAR HIGHLAND, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.09	3.37	8.50	16.6	30.7	29.2	17.9	7.51	2.88	1.10	.61	.63
MAX	8.48	43.4	89.5	199	451	219	148	52.3	26.1	11.7	9.56	5.70
(WY)	1984	1966	1967	1993	1969	1938	1926	1998	1998	1980	1983	1976
MIN	.000	.000	.000	.13	.35	.18	.033	.000	.000	.000	.000	.000
(WY)	1927	1922	1930	1936	1924	1926	1934	1934	1924	1924	1920	1920

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1920 - 2001	
ANNUAL TOTAL	1123.82		1166.72			
ANNUAL MEAN	3.07		3.20		9.89	
HIGHEST ANNUAL MEAN					75.3	
LOWEST ANNUAL MEAN					.46	
HIGHEST DAILY MEAN	53	Mar 8	39	Feb 13	3360	Feb 25 1969
LOWEST DAILY MEAN	.05	Aug 12	.03	Sep 28	.00	Jul 18 1920
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 11	.04	Sep 24	.00	Jul 18 1920
MAXIMUM PEAK FLOW			105	Feb 12	7000	Feb 25 1969
MAXIMUM PEAK STAGE			4.61	Feb 12	9.39	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	2230		2310		7160	
10 PERCENT EXCEEDS	7.5		9.8		19	
50 PERCENT EXCEEDS	1.2		1.2		1.4	
90 PERCENT EXCEEDS	.11		.08		.00	

11055801 CITY CREEK NEAR HIGHLAND, CA—Continued

CITY CREEK AND CITY CREEK WATER CO.'S CANAL NEAR HIGHLAND, CA

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	1.1	1.2	1.4	3.2	24	4.4	4.7	e1.3	e.15	e.17	e.21
2	.34	1.1	1.2	1.3	3.1	17	4.8	4.9	e1.6	e.13	e.16	e.19
3	.34	1.0	1.2	1.3	3.1	14	e4.7	4.4	e2.0	e.15	e.16	e.21
4	.45	1.0	1.2	1.4	3.2	12	e4.8	4.1	e2.2	e.15	e.14	e.22
5	.53	1.1	1.2	1.4	3.2	11	e4.8	3.9	e1.9	e.17	e.14	e.21
6	.64	1.2	1.1	1.4	3.1	15	e4.6	3.7	e1.6	e.28	e.13	e.22
7	.66	1.2	1.1	1.4	3.5	16	e12	3.4	e1.3	e.23	e.13	e.25
8	.68	1.2	1.2	1.5	3.3	14	e11	3.1	e1.1	e.17	e.12	e.25
9	.76	1.2	1.2	1.7	3.1	14	e8.7	3.0	e.96	e.16	e.14	e.25
10	.87	1.5	1.2	1.8	3.6	21	e8.8	2.9	e.89	e.17	e.13	e.28
11	.82	1.4	1.2	17	4.2	18	e8.3	2.7	e.85	e.20	e.14	e.25
12	.84	1.4	1.3	6.1	33	15	e9.9	3.1	e1.3	e.16	e.15	e.24
13	.80	1.3	1.3	4.1	39	13	e8.8	3.3	e1.8	e.17	e.14	e.21
14	.63	1.3	1.3	3.6	18	12	e8.3	2.9	e1.1	e.15	e.10	e.21
15	.55	1.3	1.3	3.3	13	11	e7.7	2.7	e.75	e.16	e.09	e.16
16	.52	1.3	1.3	3.2	10	11	e7.1	2.6	e.62	e.17	e.10	e.15
17	.49	1.3	1.3	2.9	9.1	10	e6.6	2.5	e.52	e.17	e.10	e.18
18	.53	1.3	1.2	2.8	8.5	9.7	e6.1	2.5	e.43	e.14	e.11	e.19
19	.61	1.3	1.2	2.8	8.4	9.2	e6.0	2.7	e.36	e.15	e.10	e.20
20	.58	1.2	1.2	2.8	21	8.7	e6.3	2.6	e.30	e.14	e.12	e.18
21	.61	1.2	1.2	2.8	13	8.1	e12	2.3	e.27	e.15	e.13	e.17
22	.68	1.3	1.2	2.8	11	7.6	e8.9	2.0	e.24	e.14	e.15	e.18
23	.71	1.3	1.3	2.8	11	7.2	e7.8	1.8	e.20	e.13	e.19	e.23
24	.87	1.3	1.3	3.5	10	6.7	e7.0	1.8	e.19	e.13	e.18	e.16
25	.90	1.3	1.2	4.6	14	6.3	e6.4	1.8	e.18	e.13	e.15	e.14
26	.98	1.2	1.3	4.4	22	6.0	e6.0	1.8	e.21	e.12	e.14	e.13
27	1.2	1.2	1.3	4.3	20	5.6	e5.8	2.1	e.20	e.12	e.10	e.13
28	1.3	1.2	1.3	4.0	27	5.2	5.6	2.6	e.21	e.11	e.09	e.10
29	1.6	1.2	1.3	3.8	---	5.1	5.4	2.4	e.18	e.12	e.13	e.11
30	5.1	1.2	1.3	3.6	---	4.6	5.0	1.9	e.15	e.14	e.16	e.08
31	2.0	---	1.4	3.3	---	4.4	---	e1.5	---	e.17	e.15	---
TOTAL	27.99	37.1	38.5	103.1	324.6	342.4	213.6	87.7	24.91	4.83	4.14	5.69
MEAN	.90	1.24	1.24	3.33	11.6	11.0	7.12	2.83	.83	.16	.13	.19
MAX	5.1	1.5	1.4	17	39	24	12	4.9	2.2	.28	.19	.28
MIN	.34	1.0	1.1	1.3	3.1	4.4	4.4	1.5	.15	.11	.09	.08
AC-FT	56	74	76	204	644	679	424	174	49	9.6	8.2	11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2001, BY WATER YEAR (WY)

MEAN	2.19	4.65	8.93	17.5	31.7	30.4	19.4	10.1	5.41	2.61	1.62	1.57
MAX	10.2	44.1	89.9	199	451	221	148	54.2	26.9	13.3	11.0	7.05
(WY)	1984	1966	1967	1993	1969	1938	1926	1998	1998	1998	1983	1983
MIN	.13	.36	.69	2.07	2.55	2.89	2.14	.72	.72	.11	.051	.066
(WY)	1991	1991	1991	1936	1964	1961	1961	1934	1989	1990	1989	1990

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1924 - 2001

ANNUAL TOTAL	1153.31	1214.56	
ANNUAL MEAN	3.15	3.33	11.2
HIGHEST ANNUAL MEAN			77.8
LOWEST ANNUAL MEAN			2.04
HIGHEST DAILY MEAN	53	39	3360
LOWEST DAILY MEAN	.10	.08	.00
ANNUAL SEVEN-DAY MINIMUM	.11	.10	.00
MAXIMUM PEAK FLOW		105	7000
ANNUAL RUNOFF (AC-FT)	2290	2410	8140
10 PERCENT EXCEEDS	7.5	9.8	20
50 PERCENT EXCEEDS	1.3	1.3	3.7
90 PERCENT EXCEEDS	.20	.14	.40

e Estimated.

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA

LOCATION.—Lat 34°03'41", long 117°16'00", in NW 1/4 NE 1/4 sec.26, T.1 S., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, 1,500 ft upstream from Redlands Boulevard Bridge, and 0.6 mi northwest of Loma Linda.

DRAINAGE AREA.—125 mi².

PERIOD OF RECORD.—October 1954 to September 1965, February 1968 to September 1975, April 1979 to current year. Discharge measurements only, October 1997 to September 1998.

WATER TEMPERATURE: April 1979 to December 1981.

SEDIMENT DATA: April 1979 to December 1981, December 1991 to March 1994.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 1,040 ft above sea level, from topographic map. Prior to April 1979, water-stage recorder at site 0.45 mi downstream at different datum. Prior to Dec. 7, 1997, at site 0.25 mi downstream at different datum.

REMARKS.—Records poor. Since Dec. 7, 1997, channel is a trapezoidal concrete floodway. No regulation upstream from station. Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,000 ft³/s, Feb. 25, 1969, gage height, 8.2 ft, from floodmark, from rating curve extended above 2,100 ft³/s, on basis of slope-conveyance study of peak flow, at site and datum then in use; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft³/s, or maximum, from rating curve extended above 79 ft³/s, on basis of step-backwater analysis:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0800	480	2.20	Mar. 10	0630	153	1.67
Feb. 13	0530	229	1.75				

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	.32	.62	.02	.16	.19	3.0	.24	.18	.12	.36	.18	.17
2	.22	.55	.02	.16	.16	.10	.65	.18	.16	.63	.18	.40
3	.17	.53	.02	.20	.12	.06	e.40	.24	.16	.96	.18	.68
4	.11	.48	.02	.22	.09	.00	e.38	.27	.12	.92	.18	.72
5	.07	.42	.01	.22	.06	.00	e.38	.29	.12	1.8	.17	.76
6	.05	.35	.01	.23	.43	.17	e.38	.35	.07	.72	.17	.95
7	.04	.36	.01	.23	.48	7.0	e21	.40	.03	.61	.17	1.0
8	.02	.28	.01	2.7	.02	.00	e7.0	.39	.10	.21	.16	.98
9	.01	.23	.01	.97	.00	1.1	e25	.25	.07	.01	.17	.48
10	.19	.20	.01	18	.75	33	e6.0	.00	.04	.00	.17	.38
11	.28	.17	.01	e97	.26	9.1	e3.0	.16	.03	.00	.16	.40
12	.23	.15	.74	4.6	24	4.7	e2.7	1.3	.17	.08	.15	.35
13	.21	.19	1.3	1.5	77	.34	e2.6	2.7	.49	.09	.15	.37
14	.16	.28	.47	.54	1.6	.06	e2.5	2.6	.53	.11	.14	.27
15	.11	.23	.39	2.1	.11	.21	2.4	2.4	.27	.17	.13	.11
16	.07	.21	.38	.20	.08	.11	2.4	2.3	.11	.36	.13	.02
17	.04	.19	.35	.02	.05	.08	2.4	2.2	.01	.30	.12	.08
18	.02	.16	.26	.02	.00	.09	2.4	2.2	.03	.07	.12	.43
19	.01	.13	.17	.11	.01	.08	2.4	2.1	.01	.17	.12	.30
20	.00	.11	.15	.11	.19	.09	2.4	2.0	.09	.35	.12	.45
21	.00	.10	.15	.08	.18	.05	15	2.0	1.5	.39	.15	.80
22	.00	.09	.17	.06	.14	.17	4.0	1.9	2.0	.40	.26	1.2
23	.00	.08	.18	.05	2.6	.32	2.5	1.8	1.0	.33	.16	1.2
24	.00	.07	.19	.04	1.3	.61	1.4	1.0	.50	.20	.03	.70
25	.00	.06	.19	.03	7.9	.68	.00	.06	.04	.19	.02	.19
26	.62	.05	.18	18	8.9	.78	.00	.10	e.10	.19	.07	.52
27	1.2	.04	.20	.61	20	.46	.00	.11	e.50	.18	.12	.46
28	.77	.03	.20	.26	35	.03	.00	.12	.43	.17	.04	.46
29	3.2	.03	.18	.24	---	.06	.00	.12	e.20	.18	.04	.43
30	1.4	.03	.17	.34	---	.18	.10	.20	.24	.18	.18	.40
31	.72	---	.16	.26	---	.24	---	.21	---	.18	.28	---
TOTAL	10.24	6.42	6.33	149.26	181.62	62.87	109.63	30.13	9.24	10.51	4.42	15.66
MEAN	.33	.21	.20	4.81	6.49	2.03	3.65	.97	.31	.34	.14	.52
MAX	3.2	.62	1.3	.97	.77	.33	.25	2.7	2.0	1.8	.28	1.2
MIN	.00	.03	.01	.02	.00	.00	.00	.00	.01	.00	.02	.02
AC-FT	20	13	13	296	360	125	217	60	18	21	8.8	31

e Estimated.

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, 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	.86	1.47	1.98	9.27	11.9	6.83	1.57	.85	.76	.65	.60	.75
MAX	2.27	11.6	11.6	113	186	53.7	16.8	3.65	2.20	3.65	1.76	3.03
(WY)	1988	1983	1985	1993	1969	1991	1958	1969	1989	1968	1965	1965
MIN	.000	.000	.16	.079	.17	.000	.000	.000	.000	.000	.000	.000
(WY)	1996	1996	1996	1972	1968	1997	1979	1996	1996	1995	1995	1995

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1955 - 2001
ANNUAL TOTAL	661.36	596.33	
ANNUAL MEAN	1.81	1.63	3.10
HIGHEST ANNUAL MEAN			21.7
LOWEST ANNUAL MEAN			.74
HIGHEST DAILY MEAN	100	97	3500
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		480	15000
MAXIMUM PEAK STAGE		2.20	8.20
ANNUAL RUNOFF (AC-FT)	1310	1180	2250
10 PERCENT EXCEEDS	1.4	2.4	2.0
50 PERCENT EXCEEDS	.18	.19	.60
90 PERCENT EXCEEDS	.00	.02	.00

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.—Lat 34°10'45", long 117°15'53", in NE 1/4 NE 1/4 sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 1,000 ft upstream from Del Rosa Water Co.'s Diversion, 0.5 mi south of Arrowhead Springs, and 1.0 mi downstream from Strawberry Creek.

DRAINAGE AREA.—8.80 mi².

PERIOD OF RECORD.—December 1919 to current year. Prior to October 1952, published as "Strawberry Creek near Arrowhead Springs."

REVISED RECORDS.—WSP 1635: 1924(M), 1927, 1928(M), 1929, 1932(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 1,590 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. One small diversion dam for domestic use upstream from station. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,710 ft³/s, Jan. 29, 1980, gage height, 8.35 ft, on basis of slope-area measurement of peak flow; no flow at times in 1929, 1931–35.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40 ft³/s, or maximum, from rating curve extended above 120 ft³/s, on basis of slope-area measurement at gage height 8.35 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 12	1930	57	2.90

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.58	1.2	.96	1.2	1.7	13	2.4	2.1	.95	.55	.48	.48
2	e.58	1.1	.85	1.1	1.8	8.4	3.0	2.3	1.3	.52	.48	.48
3	e.59	1.1	.90	1.0	1.7	7.0	2.7	2.1	1.5	.50	.47	.52
4	e.61	1.0	.80	1.1	1.5	5.8	2.7	1.9	1.4	.53	.47	.48
5	e.62	1.1	.83	1.1	1.5	5.0	2.7	1.8	1.2	.55	.47	.45
6	e.62	1.2	.81	1.3	1.6	7.6	2.6	1.8	1.0	.61	.48	.45
7	e.64	1.1	.83	1.2	1.7	7.2	8.1	1.5	.95	.62	.48	.45
8	e.65	1.1	.82	1.3	1.8	6.4	5.3	1.4	.71	.62	.48	.47
9	e.61	1.0	1.0	1.3	1.8	6.4	4.6	1.2	.85	.57	.48	.48
10	e.66	1.2	1.1	2.0	2.0	10	4.7	1.3	.78	.57	.48	.45
11	e.64	1.3	1.1	13	2.0	8.0	4.5	1.2	.61	.57	.48	.45
12	e.60	1.2	1.1	3.9	18	6.8	4.6	1.8	1.0	.56	.48	.45
13	e.59	1.1	1.2	2.7	18	5.7	4.1	1.9	1.0	.57	.48	.45
14	e.62	1.1	1.2	2.4	7.4	4.8	3.7	1.6	.65	.60	.48	.44
15	.58	1.1	1.2	2.3	5.1	4.4	3.4	1.6	.53	.61	.48	.44
16	.58	1.1	1.2	2.1	3.9	4.3	3.2	1.4	e.53	.57	.48	.45
17	.55	1.0	1.2	1.8	3.5	4.0	2.9	1.5	e.52	.52	.48	.45
18	.56	1.0	1.1	1.9	3.2	3.7	2.7	1.4	e.52	.52	.48	.48
19	.59	1.0	1.1	1.8	3.4	3.4	2.8	1.6	e.53	.54	.48	.48
20	.61	.93	.96	1.7	7.6	3.1	2.9	1.6	e.52	.49	.48	.48
21	.64	.86	.96	1.8	4.6	3.0	4.6	1.4	e.52	.52	.48	.48
22	.63	1.0	.88	1.7	4.0	3.1	3.5	1.4	.51	.52	.48	.48
23	.69	1.1	1.1	1.7	4.0	2.9	3.1	1.1	.52	.51	.48	.48
24	.65	1.1	1.1	2.0	4.1	2.9	2.8	1.2	.54	.52	.48	.48
25	.71	1.1	.99	2.1	7.6	2.8	2.3	1.1	.52	.51	.48	.48
26	.78	1.0	1.1	2.4	9.8	2.7	2.5	1.3	.53	.50	.48	.48
27	.95	.92	.92	2.3	9.6	2.7	2.3	1.6	.54	.48	.48	.48
28	1.2	.93	.90	2.2	15	2.4	2.4	1.8	.55	.48	.48	.48
29	1.6	.98	1.0	2.1	---	2.6	2.3	1.5	.53	.48	.48	.48
30	3.3	1.0	1.1	2.0	---	2.2	2.1	1.1	.56	.48	.48	.48
31	1.4	---	1.3	1.8	---	2.3	---	1.1	---	.49	.48	---
TOTAL	24.63	31.92	31.61	68.3	147.9	154.6	101.5	47.6	22.37	16.68	14.85	14.08
MEAN	.79	1.06	1.02	2.20	5.28	4.99	3.38	1.54	.75	.54	.48	.47
MAX	3.3	1.3	1.3	13	18	13	8.1	2.3	1.5	.62	.48	.52
MIN	.55	.86	.80	1.0	1.5	2.2	2.1	1.1	.51	.48	.47	.44
AC-FT	49	63	63	135	293	307	201	94	44	33	29	28

e Estimated.

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.51	2.51	4.79	7.81	12.3	13.5	8.14	4.95	2.91	1.68	1.26	1.16
MAX	11.4	20.3	43.6	95.7	102	101	38.3	30.6	15.9	9.40	11.9	4.94
(WY)	1984	1966	1967	1993	1993	1991	1978	1998	1998	1983	1983	1983
MIN	.20	.47	.51	.91	1.14	1.27	.56	.66	.56	.18	.20	.20
(WY)	1965	1965	1990	1963	1964	1972	1977	1934	1961	1964	1964	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1921 - 2001	
ANNUAL TOTAL	723.36		676.04			
ANNUAL MEAN	1.98		1.85		5.17	
HIGHEST ANNUAL MEAN					23.1	
LOWEST ANNUAL MEAN					.85	
HIGHEST DAILY MEAN	30	Mar 8	18	Feb 12	795	Feb 25 1969
LOWEST DAILY MEAN	.35	Aug 14	.44	Sep 14	.10	Aug 23 1929
ANNUAL SEVEN-DAY MINIMUM	.36	Aug 10	.45	Sep 10	.11	Jul 11 1964
MAXIMUM PEAK FLOW			57	Feb 12	3710	Jan 29 1980
MAXIMUM PEAK STAGE			2.90	Feb 12	8.35	Jan 29 1980
ANNUAL RUNOFF (AC-FT)	1430		1340		3750	
10 PERCENT EXCEEDS	3.2		4.0		9.3	
50 PERCENT EXCEEDS	1.1		1.1		2.0	
90 PERCENT EXCEEDS	.46		.48		.51	

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°03'54", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.4 mi downstream from E Street Bridge, 0.4 mi upstream from Warm Creek, 1.2 mi downstream from San Timoteo Creek, 26 mi downstream from Big Bear Lake, and 2.8 mi south of San Bernardino.

DRAINAGE AREA.—541 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March 1939 to September 1954, October 1966 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 940 ft above sea level, from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 0.4 mi upstream at datum 964.50 ft above sea level. Nov. 11, 1950, to September 1954, water-stage recorder on both banks 0.4 mi upstream at datum 964.50 ft above sea level. October 1966 to September 1976, water-stage recorder on right bank 0.4 mi upstream at datum 954.50 ft above sea level. October 1976 to September 1977, gage was removed for channel construction. October 1977 to Jan. 28, 1981, water-stage recorder on right bank, 0.5 mi upstream at elevation 950 ft above sea level, from topographic map.

REMARKS.—Records fair. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. Natural flow of stream affected by ground-water withdrawals and diversion for domestic use and irrigation upstream from station. Effluent from sewage reclamation plant 1.0 mi upstream caused sustained flow past gage from 1967 to Mar. 21, 1996. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,000 ft³/s, Feb. 25, 1969, gage height, 11.9 ft, site and datum then in use; no flow for many days many years prior to 1967 and since Mar. 21, 1996.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,000 ft³/s, from rating curve extended above 5,930 ft³/s, on basis of critical-depth computations, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2230	2,600	5.19	Mar. 7	0300	1,670	4.87
Feb. 13	0600	1,950	4.98	Mar. 10	0315	1,690	4.88
Feb. 27	1515	1,670	4.87				

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	4.0	3.3	.00	48	.00	.00	.00	.00	.89	.00
2	.00	.03	.35	2.4	.00	25	.00	.00	.00	.89	.00	.00
3	.00	.00	.13	2.8	.00	19	1.9	.00	1.3	.11	.00	.00
4	.00	.00	.28	2.7	.00	19	.01	.00	2.6	.00	.00	.00
5	.42	.15	.23	1.4	.00	15	.00	.00	.43	.83	.00	.20
6	1.5	.50	.26	.68	.00	29	.00	.00	.27	.02	.00	.00
7	.00	2.7	1.4	.24	.00	102	51	.00	.24	.00	.00	.00
8	.16	3.3	.74	5.7	.00	8.5	11	.00	.00	.00	.00	.00
9	.00	.00	.00	5.3	.00	5.5	82	.00	.00	.00	.00	.00
10	.99	4.0	.00	194	.00	241	17	.00	.00	.00	.06	.00
11	.92	2.8	.00	756	.00	29	3.0	.00	.00	.00	.00	.00
12	.11	.65	2.7	.01	158	19	3.5	.00	.00	.00	.00	.00
13	.00	.74	2.6	.00	472	13	4.3	.00	.00	.00	.00	.00
14	.20	1.3	2.8	.00	32	11	3.3	.00	.00	.00	.00	.00
15	.53	.88	.74	.00	33	9.9	3.1	.00	.00	.00	.47	.00
16	.00	.02	.00	.00	26	8.9	2.4	.00	.00	.00	2.6	.00
17	.00	.14	.00	.00	26	8.4	3.0	.00	.00	.00	1.9	.00
18	.00	.10	.00	.00	25	6.6	.96	.00	.00	1.9	1.5	.00
19	.00	.05	1.4	.00	20	7.0	1.9	.00	.00	1.0	.00	.00
20	.25	.24	3.5	.00	25	2.7	1.2	.00	.00	.00	.04	.18
21	.06	.57	3.3	.00	18	2.3	56	.00	.00	.11	.00	.24
22	2.4	.44	.67	.00	8.9	4.6	11	.98	.23	.99	.00	.42
23	.57	.15	.81	.00	14	1.8	6.8	.72	.00	.72	.00	.84
24	.36	.15	3.4	.00	15	2.8	.70	.00	.00	.00	.00	.85
25	.00	.18	1.0	.00	48	1.3	2.4	.00	.00	.14	.00	.57
26	2.8	.40	.39	1.8	73	.27	.00	1.9	.00	2.1	.00	.00
27	1.7	.12	.90	.25	236	.00	.00	.00	.00	.00	.00	.00
28	.00	.09	1.1	.03	208	.00	.00	.00	.00	.00	.00	1.3
29	5.4	.00	.10	.00	---	1.7	.00	.64	.00	.80	.00	.00
30	54	.39	.39	.00	---	.89	.00	.00	.00	1.2	.00	.00
31	.34	---	2.9	.00	---	.00	---	.00	---	.91	.00	---
TOTAL	72.71	20.09	36.09	976.61	1437.90	643.16	266.47	4.24	5.07	11.72	7.46	4.60
MEAN	2.35	.67	1.16	31.5	51.4	20.7	8.88	.14	.17	.38	.24	.15
MAX	54	4.0	4.0	756	472	241	82	1.9	2.6	2.1	2.6	1.3
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	144	40	72	1940	2850	1280	529	8.4	10	23	15	9.1

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.88	3.47	20.9	23.7	20.6	37.4	27.2	11.3	2.39	.93	.87	.63
MAX	3.35	21.3	117	109	72.2	183	237	145	31.2	9.87	8.37	6.32
(WY)	1942	1945	1946	1943	1945	1943	1941	1941	1941	1940	1940	1939
MIN	.000	.007	.000	1.90	2.41	1.70	1.14	.14	.000	.000	.000	.000
(WY)	1951	1952	1951	1948	1942	1951	1951	1942	1950	1950	1942	1948

SUMMARY STATISTICS

WATER YEARS 1939 - 1954

ANNUAL MEAN	12.7
HIGHEST ANNUAL MEAN	56.6 1941
LOWEST ANNUAL MEAN	.78 1951
HIGHEST DAILY MEAN	2350 Jan 23 1943
LOWEST DAILY MEAN	.00 Jun 19 1940
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 10 1940
ANNUAL RUNOFF (AC-FT)	9190
10 PERCENT EXCEEDS	16
50 PERCENT EXCEEDS	1.0
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.9	43.3	77.4	158	232	253	132	103	63.9	40.8	36.8	34.6
MAX	117	191	469	1327	2096	1279	742	707	339	162	160	75.0
(WY)	1984	1984	1967	1993	1980	1980	1980	1983	1983	1969	1983	1983
MIN	12.4	13.2	14.8	13.2	11.6	10.6	12.5	9.35	13.0	9.08	9.97	9.93
(WY)	1968	1972	1970	1972	1968	1972	1972	1967	1971	1967	1967	1967

SUMMARY STATISTICS

WATER YEARS 1967 - 1995

ANNUAL MEAN	100
HIGHEST ANNUAL MEAN	441 1980
LOWEST ANNUAL MEAN	17.2 1968
HIGHEST DAILY MEAN	14800 Feb 25 1969
LOWEST DAILY MEAN	6.4 Jul 13 1967
ANNUAL SEVEN-DAY MINIMUM	8.1 Sep 16 1967
MAXIMUM PEAK FLOW	28000 Feb 25 1969
MAXIMUM PEAK STAGE	11.90 Feb 25 1969
ANNUAL RUNOFF (AC-FT)	72490
10 PERCENT EXCEEDS	165
50 PERCENT EXCEEDS	35
90 PERCENT EXCEEDS	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.3	22.4	22.5	74.8	192	43.5	42.7	73.7	21.1	6.28	12.5	15.2
MAX	38.1	56.2	42.6	230	729	114	190	430	116	20.9	66.1	75.8
(WY)	1996	1997	1998	1997	1998	1998	1998	1998	1998	1999	1998	1998
MIN	2.35	.67	1.16	14.1	7.57	.10	.000	.000	.000	.000	.000	.000
(WY)	2001	2001	2001	2000	1997	1997	1997	1996	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1996 - 2001

ANNUAL TOTAL	5751.43	3486.12	44.2	
ANNUAL MEAN	15.7	9.55	152	1998
HIGHEST ANNUAL MEAN			9.55	2001
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	1230 Feb 21	756 Jan 11	5050	Feb 24 1998
LOWEST DAILY MEAN	.00 May 14	.00 Oct 1	.00	Mar 22 1996
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 11	.00 Jan 13	.00	Mar 22 1996
MAXIMUM PEAK FLOW		2600 Jan 10	21100	Feb 23 1998
MAXIMUM PEAK STAGE		5.19 Jan 10	7.70	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	11410	6910	31990	
10 PERCENT EXCEEDS	17	11	70	
50 PERCENT EXCEEDS	1.5	.03	3.6	
90 PERCENT EXCEEDS	.00	.00	.00	

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1983–86, 1988 to current year.

WATER TEMPERATURE: November 1982 to September 1983.

SEDIMENT DATA: Water years 1983–86, 1988 to current year.

PERIOD OF DAILY RECORD.—October 1982 to September 1983.

WATER TEMPERATURE: November 1982 to September 1983.

SUSPENDED-SEDIMENT DISCHARGE: October 1982 to September 1983.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SED.	SED.	SED.	SED.	SED.
				SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SUSP. FALL DIAM. % FINER THAN .031 MM (70341)
DEC	05...	1405	.18	28.0	--	--	--	--
JAN	03...	1245	5.2	20.0	--	--	--	--
	11...	1305	409	9.0	34	40	49	67
FEB	13...	1205	423	9.0	30	40	53	69
	26...	1055	66	14.0	--	--	--	--
	28...	1535	61	11.0	40	51	62	76
MAR	09...	0855	4.8	13.0	--	--	--	--
AUG	01...	1035	.67	24.5	--	--	--	--

DATE	SED.	SED.	SED.	SED.	SED.	SEDI-	
	SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SIEVE DIAM. MENT, SUS- PENDE (MG/L) (80154)	MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
DEC	05...	71	--	--	--	3	<.01
JAN	03...	91	--	--	--	32	.45
	11...	87	92	96	99	100	5440
FEB	13...	90	95	98	100	--	5650
	26...	46	--	--	--	--	782
	28...	87	89	94	99	100	2190
MAR	09...	92	--	--	--	--	48
AUG	01...	55	--	--	--	--	15

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

11060400 WARM CREEK NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°04'42", long 117°17'58", in San Bernardino Grant, [San Bernardino County](#), Hydrologic Unit 18070203, on left bank, 0.2 mi downstream from Interstate Highway 215 Bridge, and 2.0 mi southwest of San Bernardino.

DRAINAGE AREA.—11.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—February 1964 to September 1972, October 1974 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area. WDR CA-92-1: 1978(M), 1980–81(M), 1983–86(M).

GAGE.—Water-stage recorder. Elevation of gage is 960 ft above sea level, from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi upstream at different datum.

REMARKS.—Records fair. Natural channel prior to October 1972; concrete-lined channel since October 1974. Possible diversion during high flows into Warm Creek from Lytle Creek flood detention basin 3.4 mi upstream. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,500 ft³/s, Mar. 4, 1978, gage height, 4.88 ft, from rating curve extended above 420 ft³/s on basis of step-backwater analysis; maximum gage height, 6.33 ft, Nov. 22, 1965, site and datum then in use; no flow at times in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.77	.71	1.9	2.6	6.8	2.9	3.3	1.4	1.3	.93	.31
2	.71	.76	.82	1.9	2.6	3.2	4.8	3.2	1.4	1.2	.78	.30
3	.47	.80	.85	1.6	2.4	3.4	3.6	2.7	1.3	1.4	1.0	.31
4	.48	.84	.85	1.7	2.4	3.7	3.4	3.5	1.5	1.4	.77	.33
5	.50	.96	.75	1.8	2.6	4.3	3.3	3.3	1.9	10	.77	.34
6	.58	1.2	.84	1.8	2.5	37	2.7	3.2	2.0	5.1	.78	.30
7	.55	1.3	.93	1.6	3.6	18	53	3.2	1.9	1.9	.77	.28
8	.59	1.6	1.2	10	2.9	4.3	3.5	3.4	2.1	1.9	.77	.35
9	.64	1.3	1.3	2.4	2.8	17	21	2.6	3.1	1.8	.78	.34
10	3.3	6.0	1.0	75	14	56	3.5	2.6	1.3	1.3	.65	.40
11	.58	1.2	1.1	190	4.9	5.0	2.6	2.7	2.4	1.3	.78	.42
12	.58	1.1	2.4	2.8	188	4.2	2.1	4.6	4.4	1.3	.80	.39
13	.55	1.2	1.6	1.7	68	4.0	2.1	2.6	3.6	1.3	.85	.40
14	.57	.82	1.5	1.6	2.5	3.9	2.3	2.7	2.8	1.5	.78	.36
15	.58	.77	1.5	9.3	2.3	4.0	2.4	2.7	3.8	1.3	.78	.37
16	.58	.79	1.5	2.3	2.6	3.9	2.9	2.6	2.7	1.3	.77	.40
17	.58	.83	1.6	2.4	2.6	3.7	2.7	2.6	1.3	1.4	.59	.24
18	.61	.89	1.6	2.5	2.6	3.4	3.0	2.6	5.4	1.3	.54	.26
19	.59	1.2	1.7	2.6	18	3.6	3.1	2.6	5.9	1.2	.49	.29
20	.59	.77	1.7	2.5	27	3.9	3.2	2.5	10	1.0	.38	.20
21	1.2	.81	1.7	2.5	4.4	4.4	44	3.0	9.7	1.0	.40	.20
22	.67	1.0	1.9	2.6	3.7	3.2	4.4	2.3	5.5	1.0	.47	.23
23	.76	1.0	1.8	2.3	39	3.3	3.6	2.2	.91	1.0	.42	.19
24	.76	.84	2.1	6.4	20	2.5	3.5	2.3	.98	1.0	.43	.23
25	.84	.70	1.7	5.0	76	3.1	3.4	2.2	.99	1.0	.37	.22
26	.99	.75	2.0	46	46	3.2	3.7	2.2	1.2	1.0	.37	.25
27	1.7	.77	2.0	6.2	89	3.4	3.6	1.7	1.1	1.0	.52	.35
28	1.1	.90	1.9	2.7	48	3.1	3.7	2.2	1.2	1.1	.37	.35
29	34	.84	1.7	2.5	---	3.0	3.6	2.3	1.3	.89	.32	.20
30	4.2	.72	1.7	2.4	---	2.7	4.3	1.6	1.2	.83	.35	.23
31	.81	---	1.9	2.7	---	2.9	---	2.1	---	.90	.28	---
TOTAL	61.13	33.43	45.85	398.7	683.0	228.1	205.9	83.3	84.28	50.92	19.06	9.04
MEAN	1.97	1.11	1.48	12.9	24.4	7.36	6.86	2.69	2.81	1.64	.61	.30
MAX	34	6.0	2.4	190	188	56	53	4.6	10	10	1.0	.42
MIN	.47	.70	.71	1.6	2.3	2.5	2.1	1.6	.91	.83	.28	.19
AC-FT	121	66	91	791	1350	452	408	165	167	101	38	18

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1972, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.11	2.77	4.73	4.68	4.19	1.15	1.82	.033	.000	.000	.003	.006
MAX	.49	13.1	14.0	32.7	29.6	4.35	11.5	.24	.000	.003	.026	.050
(WY)	1970	1966	1972	1969	1969	1970	1965	1969	1965	1968	1967	1965
MIN	.000	.000	.41	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1969	1969	1972	1967	1972	1966	1965	1965	1965	1965	1966

SUMMARY STATISTICS

WATER YEARS 1965 - 1972

ANNUAL MEAN	1.61
HIGHEST ANNUAL MEAN	5.16 1969
LOWEST ANNUAL MEAN	.33 1968
HIGHEST DAILY MEAN	488 Jan 25 1969
LOWEST DAILY MEAN	.00 Oct 1 1964
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1964
MAXIMUM PEAK FLOW	2200 Jan 25 1969
MAXIMUM PEAK STAGE	6.33 Nov 22 1965
ANNUAL RUNOFF (AC-FT)	1170
10 PERCENT EXCEEDS	.00
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	7.29	9.15	11.2	17.8	37.3	33.7	14.2	12.0	8.90	7.75	7.50	6.97
MEAN	7.29	9.15	11.2	17.8	37.3	33.7	14.2	12.0	8.90	7.75	7.50	6.97
MAX	32.4	33.1	41.6	41.2	418	376	44.2	86.7	43.6	34.5	50.6	30.3
(WY)	1984	1986	1985	1993	1978	1978	1986	1980	1980	1980	1983	1983
MIN	.12	.087	.40	.11	.85	2.51	.17	.37	.067	.11	.061	.023
(WY)	1978	1996	1980	1976	1977	1977	1977	1978	1978	1979	1979	1979

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1975 - 2001

ANNUAL TOTAL	1848.33	1902.71	
ANNUAL MEAN	5.05	5.21	14.3
HIGHEST ANNUAL MEAN			70.5 1978
LOWEST ANNUAL MEAN			1.91 1977
HIGHEST DAILY MEAN	142 Feb 21	190 Jan 11	3400 Mar 1 1978
LOWEST DAILY MEAN	.36 Sep 24	.19 Sep 23	.00 Nov 29 1974
ANNUAL SEVEN-DAY MINIMUM	.38 Sep 24	.22 Sep 20	.00 Dec 7 1974
MAXIMUM PEAK FLOW		809 Jan 11	8500 Mar 4 1978
MAXIMUM PEAK STAGE		2.28 Jan 11	4.88 Mar 4 1978
ANNUAL RUNOFF (AC-FT)	3670	3770	10400
10 PERCENT EXCEEDS	4.3	5.0	27
50 PERCENT EXCEEDS	1.7	1.7	4.6
90 PERCENT EXCEEDS	.76	.40	.10

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1999 to current year.

CHEMICAL DATA: Water years 1999 to current year.

SPECIFIC CONDUCTANCE: October 1998 to September 2001 (discontinued).

WATER TEMPERATURE: October 1998 to September 2001 (discontinued).

SEDIMENT DATA: Water years 1999 to current year.

PERIOD OF DAILY RECORD.—October 1998 to September 2001 (discontinued).

SPECIFIC CONDUCTANCE: October 1998 to September 2001 (discontinued).

WATER TEMPERATURE: October 1998 to September 2001 (discontinued).

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature.

REMARKS.—Specific Conductance records rated good except for Feb. 17–21, which are rated fair, and Jan. 14–Feb. 16, Feb. 22–Mar. 22, Apr. 28–May 16, and Jun. 5–13, which are rated poor. Water Temperature records rated good except for Mar. 16–26, which are rated fair; and Mar. 27–May 16, which are rated poor. Interruptions in record July 1–10 were due to malfunction of recording equipment and Aug. 21–23 were due to poor communication between monitor and flow. Specific-conductance and water-temperature values are affected by ground-water discharge. Water-quality data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,150 microsiemens, Nov. 9, 13, 2000; minimum recorded, 48 microsiemens, Feb. 21, 2000.

WATER TEMPERATURE: Maximum recorded, 36.5°C, July 12, 1999; minimum recorded, 8.5°C, Mar. 6, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,150 microsiemens, Nov. 9, 13; minimum recorded, 67 microsiemens, Jan. 11.

WATER TEMPERATURE: Maximum recorded, 34.5°C, Aug. 7, 18; minimum recorded, 9.0°C, Jan. 11.

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 SATUR- ATION) (00301)	PH WATER 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 NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT										
16...	1640	.58	735	11.7	142	7.7	1020	27.5	23.0	183
DEC										
12...	1530	4.8	734	7.7	82.0	7.5	604	14.5	16.5	66
JAN										
16...	1450	1.6	735	11.9	123	7.8	839	11.5	15.0	130
FEB										
22...	1030	3.9	736	10.4	120	8.5	671	17.5	20.5	39
MAR										
22...	0930	3.2	738	9.0	103	8.0	745	14.0	20.0	37
APR										
17...	1140	3.2	739	10.4	135	8.6	665	26.5	27.0	22
MAY										
17...	0900	2.6	735	10.3	127	8.1	800	19.0	24.0	87
JUN										
14...	0910	2.1	735	9.8	125	8.0	743	25.5	25.5	68
JUL										
10...	0900	1.3	736	8.6	107	8.1	832	21.0	24.5	120
AUG										
15...	0930	1.0	735	8.1	104	7.8	722	28.5	26.0	106
SEP										
13...	0900	.58	734	7.4	87.4	7.6	869	21.5	21.5	114

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

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

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)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT										
16...	455	139	25.9	5.98	.725	35.5	14.3	272	332	--
DEC										
12...	209	65.4	11.0	7.96	1.17	38.8	27.8	143	174	--
JAN										
16...	377	117	20.4	4.92	.994	44.4	20.1	247	302	--
FEB										
22...	209	64.9	11.4	3.00	1.67	55.4	36.2	170	199	4
MAR										
22...	226	70.7	12.0	3.56	1.75	60.5	36.3	189	231	--
APR										
17...	193	60.0	10.5	3.31	1.96	62.6	40.8	171	203	3
MAY										
17...	303	93.5	16.8	4.65	1.26	50.5	26.3	216	263	--
JUN										
14...	262	80.4	14.9	4.02	1.34	49.7	28.8	194	237	--
JUL										
10...	344	103	21.0	5.35	.900	38.3	19.2	223	273	--
AUG										
15...	307	91.1	19.3	5.64	.795	32.0	18.2	201	245	--
SEP										
13...	371	109	24.2	5.35	.760	33.7	16.2	257	313	--
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. 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)
OCT										
16...	40.7	.6	18.3	225	.9	694	655	<.041	.17	.27
DEC										
12...	28.1	1.2	15.3	88.7	.6	449	361	1.60	5.0	5.0
JAN										
16...	41.0	1.1	21.5	167	.8	603	569	.053	.52	.56
FEB										
22...	44.3	2.1	22.3	104	.6	434	410	<.041	.10	.15
MAR										
22...	54.8	2.3	21.9	101	.6	473	442	<.041	.19	.26
APR										
17...	41.5	1.9	22.2	94.6	.6	424	400	<.041	.17	.31
MAY										
17...	43.2	1.4	21.9	135	.7	540	497	e.030	.45	.68
JUN										
14...	40.3	1.4	23.9	114	.6	471	446	<.040	.19	.26
JUL										
10...	41.4	.9	22.4	147	.8	558	515	<.040	.24	.38
AUG										
15...	33.6	.8	23.6	137	.7	492	465	e.039	.40	.77
SEP										
13...	32.8	.7	26.7	145	.8	567	532	<.040	.42	.54

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

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

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

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT									
16...	.101	<.006	.006	<.018	.016	2.6	.8	<10	44.6
DEC									
12...	3.79	.401	.108	<.018	.188	53	4.0	100	40.7
JAN									
16...	.557	.013	.039	e.012	.054	1.9	.2	10	30.9
FEB									
22...	.221	.010	.016	e.010	.023	1.4	.4	<10	12.6
MAR									
22...	.352	.012	.009	<.018	.014	1.7	.4	M	8.7
APR									
17...	.163	.006	.018	e.015	.037	1.5	.8	<10	11.7
MAY									
17...	.174	.007	.018	<.018	.039	2.3	1.4	10	20.2
JUN									
14...	.289	.009	.015	e.009	.035	2.1	.8	M	17.5
JUL									
10...	.119	.006	.010	<.020	.022	3.1	.7	<50	24.9
AUG									
15...	.325	.032	.013	<.020	.040	4.0	1.9	<10	23.8
SEP									
13...	.066	<.006	.011	<.020	.025	4.7	1.2	M	42.1

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER SPECIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAY								
17...*	0911	735	9.2	114	7.9	690	24.0	.80
17...*	0912	735	9.9	122	7.9	750	24.0	2.40
17...*	0913	735	10.3	127	7.8	850	24.0	4.00
17...*	0914	735	9.8	121	7.6	920	24.0	5.60
17...*	0915	735	9.9	122	7.6	600	24.0	7.20

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

e Estimated.

M Presence of material verified, not quantified.

* Instantaneous discharge at the time of cross-sectional measurements: 2.6 ft³/s.

SANTA ANA RIVER BASIN

11060400 WARM CREEK NEAR SAN BERNARDINO, 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- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT						
16...N	1640	.58	23.0	55	6	.01
DEC						
12...N	1530	4.8	16.5	42	16	.21
JAN						
16...N	1450	1.6	15.0	60	6	.03
FEB						
22...N	1030	3.9	20.5	77	6	.06
MAR						
22...N	0930	3.2	20.0	64	5	.04
APR						
17...N	1140	3.2	27.0	79	22	.19
MAY						
17...N	0900	2.6	24.0	64	7	.05
JUN						
14...N	0910	2.1	25.5	51	6	.03
JUL						
10...N	0900	1.3	24.5	77	7	.02
AUG						
15...N	0930	1.0	26.0	82	7	.02
SEP						
13...N	0900	.58	21.5	59	5	.01

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocols.

11060400 WARM CREEK NEAR SAN BERNARDINO, 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	1010	962	998	879	1000	977	910	788	721	707	522	361
2	984	842	1020	867	1030	1000	900	799	726	718	639	522
3	976	947	1030	862	1040	1010	887	810	719	699	672	639
4	995	844	1040	902	1010	947	892	750	709	699	686	671
5	1030	788	1020	885	947	904	846	755	699	653	692	683
6	1030	869	989	893	905	886	823	745	671	649	685	528
7	1020	911	1040	979	897	885	829	761	683	520	533	516
8	1010	845	1100	1030	906	858	804	392	559	514	655	526
9	1020	844	1150	965	860	842	615	393	569	544	681	624
10	1020	534	965	477	844	835	754	88	648	550	624	499
11	992	708	839	680	841	823	275	67	627	531	571	523
12	1000	958	1040	713	824	557	501	275	656	187	657	571
13	1030	958	1150	918	916	797	578	457	281	187	690	657
14	1040	988	934	863	941	779	787	577	415	281	725	690
15	1040	938	894	840	915	773	850	630	521	415	747	725
16	1040	936	897	839	970	778	823	626	588	521	778	747
17	1030	937	900	860	962	780	720	700	610	588	787	776
18	1040	885	937	852	967	785	704	680	615	577	786	746
19	1040	828	931	792	935	788	686	662	649	505	748	712
20	1040	915	916	868	902	792	680	660	631	460	743	711
21	1040	738	919	897	870	780	679	660	619	594	730	695
22	1040	859	925	907	869	748	721	679	665	609	735	667
23	1040	817	950	925	862	763	727	656	727	665	726	545
24	1060	943	967	942	871	775	673	381	749	726	797	694
25	1050	944	946	933	903	807	629	353	742	433	777	685
26	1050	836	957	945	908	770	682	274	476	424	799	708
27	1040	419	963	950	873	774	581	314	541	407	759	663
28	1050	553	965	928	895	772	690	581	420	360	808	652
29	1040	189	953	937	921	757	739	690	---	---	719	632
30	781	190	977	952	915	786	752	736	---	---	731	648
31	953	781	---	---	912	763	736	715	---	---	724	633
MONTH	1060	189	1150	477	1040	557	910	67	749	187	808	361
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	706	646	683	610	761	645	---	---	850	706	1000	821
2	692	604	668	589	737	676	---	---	901	769	995	832
3	713	638	690	619	745	679	---	---	860	622	983	843
4	717	639	690	602	746	741	---	---	850	706	972	831
5	716	635	680	620	742	704	---	---	851	709	977	810
6	715	661	777	600	708	689	---	---	869	645	973	811
7	794	150	744	628	698	689	---	---	854	736	973	863
8	557	346	712	590	701	666	---	---	868	785	971	786
9	644	159	681	645	719	628	---	---	870	729	980	808
10	582	312	690	660	712	663	---	---	922	742	986	777
11	615	582	706	640	722	665	869	691	872	709	979	798
12	642	581	708	592	723	578	860	724	856	649	990	820
13	664	587	715	681	665	585	850	749	861	694	991	837
14	678	618	755	676	1030	488	868	736	872	732	987	815
15	704	642	771	671	908	493	868	732	868	725	970	857
16	704	591	749	720	847	487	863	752	863	695	960	862
17	727	625	758	682	854	777	861	766	974	838	986	899
18	740	638	779	682	849	483	861	774	998	826	989	873
19	739	657	748	673	855	507	860	767	951	795	981	806
20	730	661	733	633	511	478	888	772	960	816	986	898
21	688	181	740	522	515	468	871	760	---	859	1000	912
22	587	337	736	596	835	460	884	789	---	---	1000	888
23	598	532	761	655	858	796	881	753	---	807	997	952
24	612	547	744	640	856	766	869	770	947	784	1010	961
25	676	588	745	670	855	780	868	731	952	822	975	932
26	749	613	731	608	856	774	872	748	963	776	986	936
27	689	608	707	672	856	786	857	742	963	644	951	786
28	675	613	705	468	841	768	847	717	958	791	867	760
29	694	604	744	513	835	755	844	700	969	890	944	867
30	671	523	747	673	834	781	851	700	982	859	1010	944
31	---	---	737	537	---	---	845	708	1000	857	---	---
MONTH	794	150	779	468	1030	460	---	---	---	---	1010	760

11060400 WARM CREEK NEAR SAN BERNARDINO, CA—Continued

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

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	31.0	20.0	23.0	14.5	19.0	14.0	20.5	14.0	21.5	12.0	23.5	11.0
2	30.0	20.5	22.5	15.0	21.5	14.0	17.5	13.0	22.5	13.5	22.0	15.5
3	29.5	21.0	20.5	14.5	21.5	13.5	20.0	13.0	24.0	15.0	24.0	16.5
4	24.0	21.0	22.0	15.0	19.5	13.5	20.0	12.5	25.5	17.0	21.5	17.5
5	29.0	21.0	21.0	14.5	22.5	15.5	18.5	13.5	25.0	17.5	24.5	17.5
6	23.5	21.0	23.0	16.5	18.0	15.0	20.5	15.5	23.5	17.5	19.5	14.5
7	27.0	20.5	19.0	12.5	21.5	16.0	20.5	14.5	19.5	14.0	19.5	15.5
8	28.5	20.5	22.0	13.0	19.0	16.0	17.0	14.5	19.0	12.5	25.5	18.0
9	28.0	19.5	20.0	15.0	21.0	17.0	20.5	15.0	20.5	14.0	22.0	14.0
10	24.0	17.0	20.0	12.0	20.5	16.5	19.0	11.5	19.5	12.0	18.0	10.5
11	25.0	18.0	21.0	13.5	18.5	14.5	14.0	9.0	20.5	13.0	20.0	15.0
12	26.5	18.0	20.5	12.0	18.0	14.5	17.0	12.5	17.0	10.0	26.0	16.5
13	27.0	16.5	21.0	10.5	19.5	13.5	18.0	12.5	14.5	9.5	25.0	16.0
14	26.5	16.5	20.0	11.0	19.0	15.5	17.5	12.5	22.0	12.5	26.0	16.5
15	25.5	17.0	20.0	11.0	20.0	15.0	16.0	11.0	22.0	14.0	26.0	18.5
16	28.0	17.0	20.5	11.0	21.0	14.5	15.5	11.5	23.5	15.0	25.0	18.5
17	28.0	17.5	18.5	10.5	19.5	13.5	16.0	11.0	21.5	15.5	27.0	17.0
18	24.5	19.0	20.5	10.5	18.5	13.0	19.0	11.5	21.5	16.5	29.5	18.0
19	27.0	19.5	22.0	11.5	19.5	12.5	19.5	13.0	20.5	13.5	30.0	18.5
20	27.0	19.0	19.5	12.5	19.5	13.0	20.5	14.0	23.5	13.0	29.0	19.5
21	23.0	19.5	21.5	14.0	19.5	13.5	20.5	14.0	25.0	15.5	27.5	19.0
22	21.5	17.5	18.5	13.5	19.5	13.5	21.0	15.5	23.0	16.5	22.5	18.5
23	23.5	17.5	21.5	12.5	19.0	13.5	20.5	14.5	17.5	12.0	26.5	18.5
24	25.5	18.5	21.0	12.5	19.0	13.5	17.0	12.0	19.0	13.0	26.5	18.5
25	25.5	18.0	22.5	13.0	15.0	12.5	20.0	11.5	17.0	12.0	27.0	19.5
26	21.5	18.0	22.5	13.5	18.0	12.0	15.5	9.5	22.0	11.5	27.0	19.5
27	22.0	18.0	21.5	13.5	19.0	12.5	18.0	10.5	19.5	12.5	28.0	18.0
28	23.0	17.5	22.5	14.5	20.0	12.5	20.5	15.0	18.0	11.5	27.0	18.5
29	21.5	15.5	21.5	14.5	20.5	13.0	19.0	16.5	---	---	27.0	19.5
30	20.5	15.5	21.5	14.0	20.0	13.5	17.5	13.5	---	---	29.0	19.5
31	23.0	15.0	---	---	20.0	13.0	18.0	13.0	---	---	28.0	19.5
MONTH	31.0	15.0	23.0	10.5	22.5	12.0	21.0	9.0	25.5	9.5	30.0	10.5
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	19.0	30.0	19.0	31.5	21.5	---	---	33.5	22.0	32.0	22.5
2	25.0	18.5	24.0	18.5	29.5	21.5	---	---	33.5	22.0	32.5	23.0
3	22.5	17.0	25.0	14.5	28.5	21.0	---	---	33.5	22.0	32.5	23.0
4	20.5	17.0	27.0	16.0	30.5	20.0	---	---	32.5	21.5	32.5	23.0
5	25.5	17.0	29.5	17.5	31.5	20.0	---	---	33.0	22.0	31.0	23.0
6	23.5	17.0	30.5	18.0	33.0	21.0	---	---	32.0	23.0	31.5	22.5
7	17.5	12.5	30.5	19.0	33.0	21.5	---	---	34.5	23.5	31.0	22.0
8	24.5	13.0	32.0	20.0	33.5	21.5	---	---	33.0	24.0	30.5	21.0
9	21.0	12.5	31.5	20.5	33.0	21.5	---	---	33.5	23.0	30.5	21.0
10	22.5	14.0	31.5	20.0	32.0	21.5	---	---	32.5	23.0	30.5	20.5
11	19.0	16.5	30.5	19.5	31.0	21.0	33.0	21.5	33.0	23.0	31.5	20.5
12	26.5	17.0	24.5	20.0	23.5	20.5	33.0	21.0	34.0	23.0	30.5	21.0
13	27.0	16.0	29.5	19.5	30.0	20.5	33.5	21.5	34.0	23.0	31.0	19.5
14	27.5	16.5	29.5	18.5	31.5	20.0	33.0	22.5	33.5	24.0	32.0	21.5
15	28.0	17.0	28.5	19.0	31.5	20.5	32.5	22.0	34.0	23.0	30.0	21.0
16	29.0	17.5	30.0	19.0	32.5	21.0	32.5	22.0	33.5	23.0	30.5	20.0
17	29.5	17.0	32.5	20.5	33.0	21.5	32.5	21.5	32.5	23.5	30.0	20.0
18	25.5	18.0	31.5	21.0	32.0	21.0	32.5	21.5	34.5	24.0	30.0	20.0
19	25.5	17.5	28.0	21.5	33.5	19.0	33.0	22.0	32.5	24.0	30.0	20.0
20	25.0	17.0	31.5	20.5	30.5	18.0	33.0	21.5	32.5	23.5	29.0	20.0
21	22.0	12.0	32.0	21.0	30.5	18.5	33.0	22.0	31.5	23.0	30.0	20.0
22	27.5	14.5	34.0	21.0	30.0	19.0	33.0	21.5	30.5	22.5	30.0	19.5
23	30.0	17.0	33.0	22.0	33.0	22.0	32.5	22.0	32.0	22.0	30.0	19.5
24	31.0	18.0	33.0	22.0	32.5	21.0	33.0	22.0	33.0	22.0	31.0	19.5
25	30.5	18.5	33.5	22.0	32.5	21.5	32.5	22.0	32.0	22.5	30.5	20.5
26	30.0	18.5	31.0	22.0	32.5	22.0	33.5	22.0	33.5	23.5	31.5	21.0
27	29.5	19.0	24.0	20.5	33.0	21.0	33.5	22.5	33.0	23.5	31.0	21.0
28	28.5	19.0	27.5	20.0	33.5	21.0	34.0	22.5	32.5	23.0	31.0	19.5
29	29.5	18.5	33.0	20.0	33.5	21.5	34.0	22.5	30.5	22.0	31.0	19.5
30	29.5	18.5	32.0	20.5	34.0	22.5	33.0	22.5	32.0	22.0	30.5	21.0
31	---	---	33.5	21.5	---	---	33.0	22.0	32.0	22.0	---	---
MONTH	31.0	12.0	34.0	14.5	34.0	18.0	---	---	34.5	21.5	32.5	19.5

11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.—Lat 34°12'44", long 117°27'26", in NW 1/4 SE 1/4 sec.36, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 25 ft upstream from highway culvert crossing, 0.7 mi upstream from right tributary, 2.3 mi downstream from Lytle Creek Conduit, and 8 mi north of Fontana.

DRAINAGE AREA.—46.6 mi².

PERIOD OF RECORD.—October 1918 to current year. Combined records of Lytle Creek and diversions, October 1898 to December 1899, October 1904 to current year (published as "at mouth of canyon near Rialto" 1898–99, as "near San Bernardino" 1904–18, and as "Lytle Creek and Fontana pipeline near Fontana" 1919–31). Monthly discharge only for some periods published in WSP 1315-B.

REVISED RECORDS.—WSP 1011: 1943. WDR CA-83-1: Drainage area. WDR CA-98-1: 1969(M).

GAGE.—Water-stage recorder and crest-stage gage on creek. Elevation of gage is 2,380 ft above sea level, from topographic map. October 1918 to Mar. 21, 1938, at site 1 mi downstream at different datum. Mar. 22, 1938, to Nov. 20, 1963, at site 75 ft downstream at datum 4.58 ft lower. Water-stage recorder and sharp-crested weir on conduit since June 3, 1949. Water-stage recorder and sharp-crested weir on infiltration line from Oct. 1, 1971, to Sept. 30, 1992; nonrecording flow meter on diversion pipe since Oct. 1, 1992.

REMARKS.—Records fair. No regulation upstream from station. Southern California Edison Co.'s Lytle Creek Conduit (station 11060900) diverts 2.3 mi upstream for power development and Fontana Water Co. collects water from an infiltration line (station 11061000) upstream for irrigation and domestic use. Spill can occur from Southern California Edison Co.'s Lytle Creek forebay during unusually high flows. Water can be pumped from channel by two pumps at Miller Narrows at a point approximately 2 mi upstream. No water has been pumped out of channel since 1971. For records of combined discharge of Lytle Creek and diversions, see station 11062001. Records pertaining to distribution of flows diverted from Lytle Creek are available in the files of the U.S. Geological Survey. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records for Lytle Creek Conduit were provided by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Records for Fontana Water Co.'s infiltration line were provided by Fontana Water Co.

EXTREMES FOR PERIOD OF RECORD.—Creek only: Maximum discharge, 25,200 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow, maximum gage height, 15.0 ft, Jan. 25, 1969; no flow at times most years.

Combined creek and diversions: Maximum discharge, 25,200 ft³/s, Mar. 2, 1938; minimum daily, 2.6 ft³/s, Nov. 28, 1989.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft³/s, or maximum:

Date	Time	Creek only		Combined creek and diversions
		Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)
Feb. 13	0530	189	3.22	196

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	2.6	19	13	1.1	.00	.00	.00	.00
2	.00	.00	.00	.00	2.1	16	13	1.3	.00	.00	.00	.00
3	.00	.00	.00	.00	1.8	12	12	1.4	.00	.00	.00	.00
4	.00	.00	.00	.00	1.3	9.6	11	.93	.00	.00	.00	.00
5	.00	.00	.00	.00	1.5	7.7	9.3	.58	.00	.00	.00	.00
6	.00	.00	.00	.00	1.8	22	8.0	.41	.00	.00	.00	.00
7	.00	.00	.00	.00	3.6	21	18	1.8	.00	.00	.00	.00
8	.00	.00	.00	.00	3.6	18	10	5.9	.00	.00	.00	.00
9	.00	.00	.00	.00	3.8	19	9.8	.79	.00	.00	.00	.00
10	.00	.00	.00	1.2	5.2	20	7.5	.46	.00	.00	.00	.00
11	.00	.00	.00	51	5.5	16	5.3	.34	.00	.00	.00	.00
12	.00	.00	.00	7.1	34	13	3.3	.30	.00	.00	.00	.00
13	.00	.00	.00	1.9	83	10	2.1	.15	.00	.00	.00	.00
14	.00	.00	.00	1.2	40	8.5	1.4	.12	.00	.00	.00	.00
15	.00	.00	.00	.89	32	7.1	.79	.08	.00	.00	.00	.00
16	.00	.00	.00	.39	25	6.8	.45	.03	.00	.00	.00	.00
17	.00	.00	.00	.27	21	6.3	.33	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	19	6.2	.21	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	23	9.1	.21	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	26	13	.42	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	11	16	16	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	5.9	18	4.7	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	2.1	17	2.5	.00	.00	.00	.00	.00
24	.00	.00	.00	.01	3.6	15	1.5	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	17	14	1.2	.00	.00	.00	.00	.00
26	.00	.00	.00	.06	28	13	1.2	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	25	12	1.4	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	26	11	1.7	.00	.00	.00	.00	.00
29	.00	.00	.00	1.6	---	12	1.4	.00	.00	.00	.00	.00
30	.00	.00	.00	3.1	---	12	1.3	.00	.00	.00	.00	.00
31	.00	---	.00	3.0	---	12	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	71.72	454.4	412.3	159.01	15.69	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	2.31	16.2	13.3	5.30	.51	.000	.000	.000	.000
MAX	.00	.00	.00	51	83	22	18	5.9	.00	.00	.00	.00
MIN	.00	.00	.00	.00	1.3	6.2	.21	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	142	901	818	315	31	.00	.00	.00	.00

SANTA ANA RIVER BASIN

11062000 LYTLE CREEK NEAR FONTANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.18	7.62	9.97	26.0	42.1	52.2	29.3	20.1	14.9	11.0	7.50	5.84
MAX	48.2	275	151	552	633	752	254	189	157	131	80.5	65.7
(WY)	1984	1966	1967	1969	1980	1938	1978	1993	1983	1983	1969	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1919 - 2001	
ANNUAL TOTAL	872.79		1113.12			
ANNUAL MEAN	2.38		3.05		19.3	
HIGHEST ANNUAL MEAN					177	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	86	Feb 21	83	Feb 13	8950	Mar 2 1938
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1918
ANNUAL SEVEN-DAY MINIMUM	.00	May 3	.00	Oct 1	.00	Oct 1 1918
MAXIMUM PEAK FLOW			189	Feb 13	25200	Mar 2 1938
MAXIMUM PEAK STAGE			3.22	Feb 13	15.00	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	1730		2210		14000	
10 PERCENT EXCEEDS	4.4		12		44	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11062001 LYTLE CREEK NEAR FONTANA, CA—Continued

LYTLE CREEK, SOUTHERN CALIFORNIA EDISON CO.'S LYTLE CREEK CONDUIT, AND
FONTANA WATER CO.'S INFILTRATION LINE DIVERSION

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	11	12	12	9.8	50	41	29	22	14	13	12
2	9.4	11	12	11	9.3	47	40	29	22	12	13	11
3	11	11	12	12	8.9	44	39	29	22	14	13	11
4	11	11	12	12	8.5	42	39	29	22	13	13	11
5	11	11	13	11	8.6	38	37	29	20	13	13	11
6	11	11	13	12	8.9	51	36	27	19	14	12	11
7	11	12	12	12	11	51	47	26	18	14	12	11
8	11	12	12	12	11	47	39	33	19	13	12	12
9	11	12	12	12	11	48	38	28	19	13	12	11
10	9.6	12	12	8.6	12	50	34	28	19	13	12	12
11	9.9	12	13	56	13	45	32	27	19	13	12	11
12	9.9	12	12	18	41	41	30	27	18	13	12	12
13	9.8	12	11	18	90	39	30	28	18	13	12	11
14	9.7	12	10	16	47	38	29	27	18	13	12	11
15	9.6	11	9.6	15	39	35	30	25	18	13	12	11
16	9.6	9.1	9.8	15	32	35	30	26	18	13	12	11
17	9.5	12	9.8	16	28	35	30	26	18	15	12	12
18	9.7	12	10	16	26	34	29	25	18	15	11	12
19	9.6	12	9.9	16	30	37	28	26	17	15	11	12
20	9.5	12	10	15	38	43	28	25	15	14	12	11
21	9.8	12	10	14	29	45	44	24	17	14	12	11
22	9.8	12	10	15	27	47	34	24	16	14	12	12
23	9.7	12	10	16	26	45	30	24	16	15	12	12
24	9.9	12	10	14	28	43	30	23	16	15	12	11
25	10	12	11	15	44	42	30	23	16	15	12	12
26	10	12	11	17	59	41	30	22	16	14	11	11
27	11	12	11	14	49	40	29	23	15	14	11	11
28	11	12	11	12	64	39	29	22	15	14	11	11
29	10	12	12	9.7	---	40	30	22	15	14	11	11
30	12	12	11	12	---	40	30	22	15	14	11	12
31	11	---	12	11	---	40	---	22	---	14	11	---
TOTAL	317.0	350.1	346.1	465.3	809.0	1312	1002	800	536	427	369	341
MEAN	10.2	11.7	11.2	15.0	28.9	42.3	33.4	25.8	17.9	13.8	11.9	11.4
MAX	12	12	13	56	90	51	47	33	22	15	13	12
MIN	9.4	9.1	9.6	8.6	8.5	34	28	22	15	12	11	11
AC-FT	629	694	686	923	1600	2600	1990	1590	1060	847	732	676

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2001, BY WATER YEAR (WY)

MEAN	26.4	28.4	30.8	55.7	68.0	78.3	56.4	46.9	39.1	33.1	30.0	27.5
MAX	71.9	285	168	650	653	785	264	225	164	131	107	81.5
(WY)	1984	1966	1967	1916	1980	1938	1978	1978	1978	1969	1969	1978
MIN	7.54	8.05	7.65	11.0	11.7	12.1	10.8	10.9	9.41	7.05	6.98	6.43
(WY)	1962	1991	1951	1951	1899	1965	1899	1961	1990	1899	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1899 - 2001
ANNUAL TOTAL	6209.7	7074.5	
ANNUAL MEAN	17.0	19.4	43.5
HIGHEST ANNUAL MEAN			194
LOWEST ANNUAL MEAN			10.7
HIGHEST DAILY MEAN	98	Feb 23	90
LOWEST DAILY MEAN	8.7	Aug 25	8.5
ANNUAL SEVEN-DAY MINIMUM	9.1	Aug 20	9.3
MAXIMUM PEAK FLOW		196	Feb 13
ANNUAL RUNOFF (AC-FT)	12320	14030	31540
10 PERCENT EXCEEDS	30	39	78
50 PERCENT EXCEEDS	12	13	26
90 PERCENT EXCEEDS	9.6	10	12

11063500 LONE PINE CREEK NEAR KEENBROOK, CA

LOCATION.—Lat 34°15'59", long 117°27'47", in SE 1/4 SW 1/4 sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 50 ft upstream from the Burlington Northern & Santa Fe Railway Co. bridge, 150 ft upstream from confluence with Cajon Creek, and 1.1 mi north of Keenbrook.

DRAINAGE AREA.—15.1 mi².

PERIOD OF RECORD.—December 1919 to September 1938, June 1949 to current year.

REVISED RECORDS.—WSP 1635: 1920–22(M), 1924–25(M), 1926–27, 1928(M), 1930, 1931(M), 1932–33, 1934–36(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 2,605.92 ft above sea level. Prior to Mar. 2, 1938, water-stage recorder (destroyed by flood), and Mar. 2 to Sept. 30, 1938, nonrecording gage at same site at datum 0.98 ft higher.

REMARKS.—Records fair. No regulation or diversion upstream from station. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,180 ft³/s, Mar. 2, 1938, gage height, unknown, on basis of slope-area measurement of peak flow, maximum recorded gage height, 10.70 ft, Jan. 25, 1969; no flow Aug. 6–8, Sept. 29, 30, 1965.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 80 ft³/s, or maximum, from rating curve extended above 322 ft³/s, on basis of slope-conveyance measurement at gage height 9.07 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0330	115	2.89	Feb. 13	0600	92	2.68

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	.43	.38	.34	.38	.47	1.0	.76	.72	.58	.60	.53	.47
2	.42	.38	.33	.38	.47	.87	.68	.68	.60	.61	.52	.50
3	.44	.38	.28	.38	.47	.86	.68	.62	.66	.60	.50	.42
4	.46	.36	.28	.38	.47	.80	.68	.58	.64	.54	.50	.38
5	.42	.38	.28	.38	.47	.65	.68	.58	.64	.54	.51	.38
6	.41	.38	.28	.38	.47	.54	.68	.57	.55	.58	.51	.38
7	.45	.37	.38	.38	.56	.48	1.2	.54	.50	.58	.53	.38
8	.43	.36	.38	.40	.58	.47	1.2	.58	.49	.53	.52	.40
9	.43	.38	.38	.42	.58	.41	1.1	.58	.45	.53	.51	.38
10	.43	.38	.38	.62	.58	.54	.91	.58	.46	.54	.48	.38
11	.44	.38	.38	15	.58	.64	.76	.58	.45	.55	.49	.38
12	.38	.36	.39	.59	12	.68	.58	.58	.47	.54	.48	.38
13	.38	.31	.38	.47	30	.69	.60	.58	.49	.54	.47	.38
14	.38	.28	.39	.47	1.2	.80	.64	.58	.53	.57	.45	.38
15	.39	.28	.40	.47	.59	.80	.68	.58	.53	.63	.44	.37
16	.41	.29	.38	.47	.58	.80	.68	.58	.53	.63	.45	.38
17	.38	.29	.38	.47	.58	.80	.68	.57	.55	.62	.47	.38
18	.38	.29	.38	.47	.58	.80	.68	.58	.55	.57	.49	.38
19	.42	.35	.38	.47	.61	.80	.69	.58	.54	.59	.48	.38
20	.39	.38	.38	.41	.62	.75	.69	.62	.54	.55	.47	.38
21	.47	.38	.38	.41	.58	.68	.98	.64	.54	.57	.49	.38
22	.44	.38	.38	.47	.60	.68	.92	.62	.54	.56	.49	.38
23	.46	.38	.40	.47	.67	.68	.82	.55	.53	.63	.55	.38
24	.47	.37	.42	.47	.68	.72	.83	.57	.53	.63	.54	.34
25	.47	.28	.46	.46	1.3	.73	.87	.55	.54	.55	.54	.35
26	.47	.28	.47	.44	2.3	.72	.88	.56	.58	.51	.49	.38
27	.47	.28	.47	.47	2.9	.80	.80	.58	.51	.52	.43	.38
28	.47	.28	.47	.44	3.4	.83	.80	.57	.49	.52	.44	.42
29	.50	.28	.42	.44	---	.91	.80	.52	.50	.53	.45	.42
30	.43	.28	.38	.39	---	.88	.80	.51	.61	.53	.47	.38
31	.38	---	.38	.45	---	.81	---	.56	---	.52	.45	---
TOTAL	13.30	10.15	11.78	28.30	64.89	22.62	23.75	18.09	16.12	17.51	15.14	11.67
MEAN	.43	.34	.38	.91	2.32	.73	.79	.58	.54	.56	.49	.39
MAX	.50	.38	.47	15	30	1.0	1.2	.72	.66	.63	.55	.50
MIN	.38	.28	.28	.38	.47	.41	.58	.51	.45	.51	.43	.34
AC-FT	26	20	23	56	129	45	47	36	32	35	30	23

11063500 LONE PINE CREEK NEAR KEENBROOK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.98	1.18	1.86	2.31	4.10	4.46	2.04	1.63	1.33	1.11	1.07	1.03
MAX	5.35	6.51	15.0	24.1	40.6	98.1	11.0	8.91	7.41	5.95	6.61	6.09
(WY)	1984	1966	1923	1969	1969	1938	1980	1980	1980	1993	1993	1993
MIN	.079	.091	.095	.094	.10	.10	.10	.10	.10	.10	.090	.093
(WY)	1991	1991	1991	1991	1964	1964	1961	1928	1928	1928	1965	1965

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1920 - 2001	
ANNUAL TOTAL	288.91		253.32			
ANNUAL MEAN	.79		.69		1.93	
HIGHEST ANNUAL MEAN					11.4	
LOWEST ANNUAL MEAN					.11	
HIGHEST DAILY MEAN	14	Feb 20	30	Feb 13	1480	Mar 2 1938
LOWEST DAILY MEAN	.28	Nov 14	.28	Nov 14	.00	Aug 6 1965
ANNUAL SEVEN-DAY MINIMUM	.29	Nov 25	.29	Nov 25	.06	Aug 2 1965
MAXIMUM PEAK FLOW			115		6180	
MAXIMUM PEAK STAGE			2.89		10.70	
ANNUAL RUNOFF (AC-FT)	573		502		1400	
10 PERCENT EXCEEDS	.93		.80		4.0	
50 PERCENT EXCEEDS	.68		.49		.60	
90 PERCENT EXCEEDS	.38		.38		.10	

11063510 CAJON CREEK BELOW LONE PINE CREEK, NEAR KEENBROOK, CA

LOCATION.—Lat 34°16'04", long 117°27'58", in NW 1/4 NW 1/4 sec.13, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank, 0.25 mi downstream from Lone Pine Creek, and 0.95 mi north of Keenbrook.

DRAINAGE AREA.—56.5 mi².

PERIOD OF RECORD.—October 1971 to September 1977, October 1983 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,600 ft above sea level, from topographic map. Oct. 1, 1971, to Sept. 30, 1977, at site 0.25 mi upstream at abandoned diversion dam at different datum.

REMARKS.—Records good. Concrete control installed Oct. 1, 1987. No regulation or diversion upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,700 ft³/s, Feb. 8, 1993, gage height, 8.48 ft, from rating curve extended above 180 ft³/s, on basis of slope-area measurement at gage height 8.48 ft; minimum daily, 1.7 ft³/s, Sept. 5, 6, 1989.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft³/s, or maximum, from rating curve extended above 373 ft³/s, on basis of slope-area measurement at gage height 8.48 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0400	446	5.80	Feb. 13	0530	948	6.32

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	3.9	4.1	4.1	4.7	46	9.9	8.6	4.9	3.5	2.9	2.7
2	3.5	3.6	4.1	4.1	4.7	35	9.9	8.5	4.9	3.5	2.9	2.7
3	3.7	3.4	4.1	4.3	4.7	31	9.7	8.2	4.8	3.6	2.8	2.7
4	4.1	3.3	4.1	4.3	4.7	30	9.6	8.0	4.7	3.5	2.8	2.7
5	3.9	3.3	4.1	4.4	4.7	28	9.4	7.9	4.7	3.8	2.8	2.7
6	4.1	3.5	4.1	4.4	4.7	31	9.3	7.6	4.3	3.9	2.8	2.7
7	4.0	3.4	4.1	4.4	5.2	25	23	7.4	4.0	3.8	2.7	2.7
8	4.0	3.4	4.1	4.4	5.0	22	15	7.0	4.0	3.7	2.7	2.7
9	4.0	3.6	4.1	4.4	5.0	21	14	6.9	4.0	3.6	2.7	2.7
10	4.1	3.6	4.1	5.8	5.4	25	13	6.8	3.9	3.6	2.8	2.6
11	4.3	3.6	4.1	75	5.0	22	12	6.6	3.9	3.6	2.7	2.6
12	4.2	3.8	4.1	11	97	22	11	6.9	4.1	3.4	2.8	2.7
13	4.1	3.8	4.1	7.5	249	20	11	6.9	4.0	3.3	2.8	2.8
14	4.0	3.8	4.1	6.6	63	19	10	6.7	3.7	3.3	2.7	2.8
15	4.0	3.8	4.1	6.0	41	18	10	6.5	3.7	3.3	2.7	2.7
16	3.9	3.8	4.1	5.5	29	17	9.8	6.2	3.5	3.4	2.7	2.8
17	3.9	3.8	4.1	5.2	27	17	9.7	6.0	3.5	3.4	2.7	2.8
18	4.0	3.8	4.1	5.0	27	16	9.2	6.0	3.5	3.4	2.7	2.9
19	3.9	3.8	4.1	4.9	36	16	9.3	6.1	3.5	3.4	2.7	2.8
20	3.9	3.8	4.1	4.7	36	15	9.5	5.9	3.8	3.4	2.7	2.8
21	4.1	3.8	4.1	4.7	25	14	16	5.7	3.8	3.3	2.8	2.8
22	4.1	3.8	4.1	4.7	22	14	10	5.6	3.8	3.2	2.8	2.8
23	4.3	3.8	4.1	4.7	24	16	9.5	5.5	3.7	3.2	2.7	2.8
24	4.1	3.7	4.1	4.7	24	16	9.3	5.4	3.6	3.3	2.7	2.7
25	3.9	3.6	4.1	4.7	34	15	8.9	5.2	3.7	3.3	2.6	2.9
26	4.3	3.7	4.1	5.3	49	14	8.7	5.3	3.8	3.2	2.6	2.9
27	4.4	3.7	4.1	5.1	58	14	8.4	5.6	3.7	3.2	2.6	2.9
28	4.4	3.8	4.1	5.0	66	13	8.8	5.6	3.7	3.1	2.6	2.9
29	4.7	4.1	4.1	5.0	---	13	8.7	5.2	3.6	2.9	2.7	2.9
30	4.6	4.1	4.2	4.8	---	13	8.7	4.9	3.6	2.9	2.7	2.9
31	4.1	---	4.1	4.7	---	12	---	4.8	---	2.9	2.8	---
TOTAL	125.9	110.9	127.2	229.4	960.8	630	321.3	199.5	118.4	104.9	84.7	83.1
MEAN	4.06	3.70	4.10	7.40	34.3	20.3	10.7	6.44	3.95	3.38	2.73	2.77
MAX	4.7	4.1	4.2	75	249	46	23	8.6	4.9	3.9	2.9	2.9
MIN	3.3	3.3	4.1	4.1	4.7	12	8.4	4.8	3.5	2.9	2.6	2.6
AC-FT	250	220	252	455	1910	1250	637	396	235	208	168	165

11063510 CAJON CREEK BELOW LONE PINE CREEK, NEAR KEENBROOK, 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	5.34	5.79	9.02	19.0	24.9	17.0	10.5	8.18	6.10	5.09	4.73	5.53
MAX	14.8	13.2	26.5	134	121	51.5	27.7	18.1	15.8	16.0	15.1	24.5
(WY)	1984	1984	1972	1993	1993	1995	1993	1998	1993	1993	1993	1976
MIN	2.00	1.97	2.05	2.33	5.06	4.31	2.93	3.39	1.98	2.05	2.12	1.99
(WY)	1991	1992	1991	1991	1977	1990	1977	1976	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1972 - 2001	
ANNUAL TOTAL	2660.7		3096.1			
ANNUAL MEAN	7.27		8.48		10.0	
HIGHEST ANNUAL MEAN					35.5	
LOWEST ANNUAL MEAN					3.80	
HIGHEST DAILY MEAN	162	Feb 21	249	Feb 13	1100	Feb 23 1998
LOWEST DAILY MEAN	2.7	Sep 9	2.6	Aug 25	1.7	Sep 5 1989
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 6	2.6	Aug 23	1.8	Sep 2 1989
MAXIMUM PEAK FLOW			948	Feb 13	6700	Feb 8 1993
MAXIMUM PEAK STAGE			6.32	Feb 13	8.48	Feb 8 1993
ANNUAL RUNOFF (AC-FT)	5280		6140		7260	
10 PERCENT EXCEEDS	11		16		15	
50 PERCENT EXCEEDS	4.2		4.1		5.8	
90 PERCENT EXCEEDS	3.2		2.8		2.9	

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°12'30", long 117°19'50", in Muscupiabe Grant, [San Bernardino County](#), Hydrologic Unit 18070203, on left bank, 0.6 mi downstream from confluence of East and West Forks, and 7.5 mi northwest of San Bernardino.

DRAINAGE AREA.—5.49 mi².

PERIOD OF RECORD.—November 1911 to September 1912, October 1913 to September 1914, December 1919 to current year. Monthly figures only for January 1914, published in WSP 1315-B.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,080 ft above sea level, from topographic map. Prior to December 1919, nonrecording gage at site 0.5 mi downstream at different datum. December 1919 to July 1969, at site 0.4 mi downstream at different datum. July 1969 to September 1972, present gage used as supplementary gage. Oct. 1, 1973, to Feb. 25, 1974, supplementary gage at site 0.5 mi downstream at different datum.

REMARKS.—Records good above 1 ft³/s and fair below. No regulation upstream from station. City of San Bernardino diverts upstream from station at times, with diverted flows routed to recharge basins downstream from station. Natural flow affected by pumping along creek. Records given below are for creek only unless otherwise indicated. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD (1913–14 and since 1919).—Maximum discharge, 3,720 ft³/s, Jan. 25, 1969, gage height, 5.40 ft, site and datum then in use, on basis of slope-area measurement of peak flow, maximum gage height, 8.40 ft, Mar. 4, 1978; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum, from rating curve extended above 158 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 12	1645	66	5.71

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	.11	.66	.87	9.3	2.3	1.4	.47	.00	.00	.00
2	.00	.26	.13	.68	.80	8.7	2.2	1.5	.54	.00	.00	.00
3	.00	.27	.20	.69	.82	7.9	2.1	1.4	.65	.00	.00	.00
4	.00	.25	.23	.70	.74	7.2	2.0	1.3	.60	.00	.00	.00
5	.00	.24	.24	.72	.74	6.8	2.0	1.2	.57	.00	.00	.00
6	.00	.43	.25	.74	.77	8.8	1.9	1.2	.55	.00	.00	.00
7	.00	.45	.23	.75	.90	8.4	7.5	1.1	.51	.00	.00	.00
8	.00	.49	.21	.84	.93	7.4	4.0	1.1	.47	.00	.00	.00
9	.00	.59	.24	.86	.86	6.8	3.1	.93	.24	.00	.00	.00
10	.00	.65	.23	1.5	2.2	7.5	2.9	.87	.21	.00	.00	.00
11	.00	.68	.19	9.8	2.7	6.5	2.7	.85	.20	.00	.00	.00
12	.00	.68	.17	4.2	16	5.9	2.8	1.1	.34	.00	.00	.00
13	.00	.70	.17	3.3	13	5.5	2.5	1.1	.33	.00	.00	.00
14	.00	.72	.17	2.8	7.7	5.4	2.3	.92	.22	.00	.00	.00
15	.07	.73	.18	2.4	6.6	5.2	2.1	.84	.18	.00	.00	.00
16	.10	.76	.21	2.3	5.0	5.1	1.9	.77	.14	.00	.00	.00
17	.12	.61	.21	2.2	3.4	5.0	1.8	.75	.11	.00	.00	.00
18	.12	.38	.31	2.1	3.8	3.7	1.7	.76	.09	.00	.00	.00
19	.13	.31	.43	2.1	7.1	2.7	1.7	.81	.07	.16	.00	.00
20	.13	.20	.45	2.0	13	2.7	1.8	.74	.05	.35	.00	.00
21	.17	.18	.48	2.0	7.3	2.7	4.1	.62	.04	.00	.00	.00
22	.21	.19	.51	2.0	6.3	2.7	2.4	.53	.03	.00	.00	.00
23	.25	.20	.53	2.0	6.2	2.7	2.0	.44	.02	.00	.00	.00
24	.26	.19	.52	2.1	6.6	2.6	1.9	.42	.02	.00	.00	.00
25	.27	.16	.63	2.0	12	2.6	1.8	.45	.01	.00	.00	.00
26	.29	.16	.68	2.6	12	2.6	1.7	.48	.01	.00	.00	.00
27	.29	.14	.69	2.8	11	2.5	1.7	.62	.00	.00	.00	.00
28	.29	.12	.71	2.3	11	2.5	1.7	.75	.00	.00	.00	.00
29	.90	.12	.71	1.5	---	2.5	1.6	.60	.00	.00	.00	.00
30	.97	.12	.73	1.2	---	2.5	1.5	.47	.00	.00	.00	.00
31	.36	---	.71	.98	---	2.4	---	.48	---	.00	.00	---
TOTAL	4.93	11.31	11.46	62.82	160.33	154.8	71.7	26.50	6.67	0.51	0.00	0.00
MEAN	.16	.38	.37	2.03	5.73	4.99	2.39	.85	.22	.016	.000	.000
MAX	.97	.76	.73	9.8	16	9.3	7.5	1.5	.65	.35	.00	.00
MIN	.00	.12	.11	.66	.74	2.4	1.5	.42	.00	.00	.00	.00
AC-FT	9.8	22	23	125	318	307	142	53	13	1.0	.00	.00

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.37	.97	1.76	3.69	6.90	7.46	4.42	2.24	1.02	.54	.35	.33
MAX	3.36	12.9	14.0	44.4	108	72.9	28.3	15.2	9.49	5.09	3.83	3.33
(WY)	1984	1966	1967	1993	1980	1938	1978	1983	1998	1998	1993	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1926	1926	1926	1926	1948	1951	1951	1951	1947	1926	1925	1924

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1920 - 2001	
ANNUAL TOTAL	489.93		511.03			
ANNUAL MEAN	1.34		1.40		2.46	
HIGHEST ANNUAL MEAN					16.1	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	19	Feb 21	16	Feb 12	556	Jan 25 1969
LOWEST DAILY MEAN	.00	Aug 9	.00	Oct 1	.00	Sep 23 1921
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 9	.00	Oct 1	.00	Sep 23 1921
MAXIMUM PEAK FLOW			66	Feb 12	3720	Jan 25 1969
MAXIMUM PEAK STAGE			5.71	Feb 12	8.40	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	972		1010		1780	
10 PERCENT EXCEEDS	4.0		4.0		5.5	
50 PERCENT EXCEEDS	.39		.44		.20	
90 PERCENT EXCEEDS	.00		.00		.00	

11063682 EAST BRANCH CALIFORNIA AQUEDUCT AT DEVIL CANYON POWERPLANT, NEAR SAN BERNARDINO, CA

LOCATION.—Lat 34°12'20", long 117°20'01", in San Bernardino Corporate Grant, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, in powerplant 5 mi northwest of San Bernardino.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995, in files of California Department of Water Resources. Published as "Devil Canyon Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meters on 5 pipes. Elevation of gage is 1,939 ft above sea level (levels by California Department of Water Resources).

REMARKS.—This record is the total flow of the East Branch California Aqueduct, including flow through the powerplant and bypass flow, if any. See schematic diagram of the [Mojave River Basin](#).

COOPERATION.—Records were computed by the California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,510 ft³/s, Dec. 14, 2000; no flow at times 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	1060	1260	1350	1300	736	608	958	833	1010	1130	1160	963
2	958	1160	1410	1240	796	816	1120	899	863	1070	1060	940
3	1100	1280	1410	1180	770	736	953	774	973	1060	933	1040
4	1190	1310	1490	1170	663	744	1100	993	942	1160	868	1050
5	1020	1330	1280	1410	358	572	1110	945	939	1120	1030	936
6	1090	1370	1460	1130	347	574	1220	758	944	1010	1040	1110
7	1040	1260	1380	1380	363	631	929	987	898	1120	990	927
8	1080	1370	1480	1240	282	565	868	1000	953	1100	1100	1030
9	1080	1450	1300	1130	562	558	913	959	793	1040	1130	882
10	1030	1360	1500	1030	865	852	1120	961	939	1230	915	994
11	1020	1350	1490	581	689	679	1160	1020	1150	1260	1120	967
12	1070	1330	1360	498	665	688	1010	939	1050	1060	905	946
13	1110	1450	1370	785	587	799	916	983	1130	1040	1210	863
14	1170	1180	1510	844	704	819	936	1170	1160	917	926	978
15	1180	1490	1210	916	505	770	807	1000	1100	1010	1060	803
16	1250	1310	1430	670	814	1200	1090	981	1080	1020	1140	829
17	1160	1300	1400	820	736	893	842	915	897	980	1110	974
18	1220	1300	1380	650	730	1100	969	929	965	961	1060	934
19	1110	1380	1310	586	579	1120	844	949	1070	959	879	1000
20	1220	1250	1230	606	617	883	679	1070	973	967	948	889
21	1230	1450	1240	306	520	898	663	924	920	905	927	894
22	1310	1450	1220	406	475	797	757	1020	1200	966	967	975
23	1340	1260	1340	492	554	891	690	1070	1090	921	1010	839
24	1250	1450	1150	359	847	715	735	1010	1210	975	1080	857
25	1280	1290	1030	405	547	943	689	1030	1200	1100	995	1020
26	1210	1370	1210	266	604	938	815	940	1180	1010	986	886
27	1370	1360	1260	237	577	857	762	993	1170	1010	938	973
28	1040	1300	1170	303	611	911	983	962	1200	995	1080	1040
29	864	1300	1080	546	---	928	872	999	1190	1050	1190	1030
30	1100	1380	1030	791	---	956	1070	1060	974	1100	1080	956
31	978	---	1210	791	---	920	---	951	---	1080	1020	---
TOTAL	35130	40100	40690	24068	17103	25361	27580	30024	31163	32326	31857	28525
MEAN	1133	1337	1313	776	611	818	919	969	1039	1043	1028	951
MAX	1370	1490	1510	1410	865	1200	1220	1170	1210	1260	1210	1110
MIN	864	1160	1030	237	282	558	663	758	793	905	868	803
AC-FT	69680	79540	80710	47740	33920	50300	54700	59550	61810	64120	63190	56580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	612	452	495	423	372	516	899	911	931	1023	1032	944
MAX	1135	1337	1313	1096	1069	1208	1163	1138	1160	1147	1234	1140
(WY)	2000	2001	2001	2000	2000	2000	2000	1997	2000	2000	2000	2000
MIN	189	145	119	82.6	3.23	102	577	585	712	749	825	631
(WY)	1996	1996	1999	1997	1997	1997	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	431271		363927			
ANNUAL MEAN	1178		997		719	
HIGHEST ANNUAL MEAN					1079	
LOWEST ANNUAL MEAN					515	
HIGHEST DAILY MEAN	1510	Dec 14	1510	Dec 14	1510	Dec 14 2000
LOWEST DAILY MEAN	798	Jan 4	237	Jan 27	.00	Dec 12 1996
ANNUAL SEVEN-DAY MINIMUM	936	Jan 1	353	Jan 22	.00	Jan 21 1997
ANNUAL RUNOFF (AC-FT)	855400		721800		520900	
10 PERCENT EXCEEDS	1360		1320		1220	
50 PERCENT EXCEEDS	1170		1000		815	
90 PERCENT EXCEEDS	1000		658		117	

11065000 LYTLE CREEK AT COLTON, CA

LOCATION.—Lat 34°04'44", long 117°18'17", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank, 400 ft downstream from Colton Avenue, 1,930 ft upstream from outlet end of channel, and 1.3 mi northeast of Colton.

DRAINAGE AREA.—186 mi².

PERIOD OF RECORD.—October 1957 to September 1983, October 1984 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 974.67 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.—Records fair except for discharges below 10 ft³/s, which are poor. Flow partly regulated by Lytle Creek spreading grounds 3.2 mi upstream. Diversions upstream from station for irrigation, power development, domestic use, and ground-water replenishment. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,500 ft³/s, Mar. 4, 1978, gage height, 14.8 ft, from rating curve extended above 4,200 ft³/s on basis of discharge for design flood at gage height 21.4 ft; no flow for many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.00	.00
6	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.11	5.7	.00	.00	.00	.00	.00
8	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.2	1.5	.00	.00	.00	.00	.00
10	.00	.00	.00	25	.07	11	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	128	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	149	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	86	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.65	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.57	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	5.9	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.04	.90	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	5.3	3.6	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	43	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	2.9	.00	.00	.00	.00	.00	.00	.00
29	13	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.14	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	13.14	0.00	0.00	160.09	298.64	14.71	13.10	0.01	0.00	2.60	0.00	0.00
MEAN	.42	.000	.000	5.16	10.7	.47	.44	.000	.000	.084	.000	.000
MAX	13	.00	.00	128	149	11	5.9	.01	.00	2.6	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	26	.00	.00	318	592	29	26	.02	.00	5.2	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

MEAN	.75	4.44	7.46	19.4	30.3	19.3	4.17	4.07	2.28	1.28	.82	.75
MAX	15.8	79.1	104	318	363	326	57.3	87.6	61.3	35.4	17.1	9.58
(WY)	1981	1966	1966	1969	1980	1978	1969	1969	1978	1978	1969	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1958	1958	1959	1963	1961	1959	1961	1959	1958	1958	1958	1958

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1958 - 2001

ANNUAL TOTAL	385.66	502.29		
ANNUAL MEAN	1.05	1.38	7.82	
HIGHEST ANNUAL MEAN			65.4	1969
LOWEST ANNUAL MEAN			.008	1977
HIGHEST DAILY MEAN	134	Feb 21	5040	Jan 25 1969
LOWEST DAILY MEAN	.00	Jan 2	.00	Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 2	.00	Oct 1 1957
MAXIMUM PEAK FLOW			726	Feb 12 17500
MAXIMUM PEAK STAGE			2.67	Feb 12 14.80
ANNUAL RUNOFF (AC-FT)	765	996	5660	Mar 4 1978
10 PERCENT EXCEEDS	.00	.00	3.6	
50 PERCENT EXCEEDS	.00	.00	.00	
90 PERCENT EXCEEDS	.00	.00	.00	

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION.—Lat 33°58'07", long 117°26'51", in NE 1/4 SW 1/4 sec.30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on left bank, at MWD pipeline crossing, 0.8 mi downstream from Union Pacific Railroad Bridge, 1.1 mi upstream from bridge on Van Buren Boulevard, and 3.3 mi north of Arlington.

DRAINAGE AREA.—852 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—March 1970 to current year.

REVISED RECORDS.—WDR CA-83-1: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 685 ft above sea level, from topographic map. Prior to Apr. 15, 1985, water-stage recorder at site 300 ft upstream on left bank at different datum. From Apr. 15 to Sept. 30, 1985, water-stage recorder near right bank (atop pier 9 of MWD pipeline crossing), at same site and datum. From Oct. 1, 1985, to June 16, 1993, water-stage recorder and crest-stage gage on right bank at same site and datum.

REMARKS.—Records fair below 250 ft³/s and poor above. Flow partly regulated by Big Bear Lake (station 11049000) and, since November 1999, by Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft. Natural streamflow affected by ground-water withdrawals, diversions for irrigation, return flows from irrigated areas, and discharges of treated effluent. The records at this station are equivalent to those collected at Santa Ana River at Riverside Narrows, near Arlington minus the flow at Riverside Water-Quality Control Plant at Riverside Narrows, near Arlington. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 31,300 ft³/s, Feb. 24, 1998, gage height, 14.69 ft, on basis of area-velocity study, maximum gage height, 20.23 ft, site and datum then in use, Mar. 4, 1978; minimum daily, 15 ft³/s, Sept. 7, 8, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge since at least 1927, 100,000 ft³/s, Mar. 2, 1938, on basis of slope-area measurement at site 1.1 mi downstream. Flood of Jan. 22, 1862, 320,000 ft³/s, on basis of slope-conveyance study at site 8.2 mi upstream. Stage at that site was 5 ft higher than that of Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0930	5,370	10.17	Feb. 27	1730	2,490	8.95
Feb. 12	2215	3,830	9.46	Mar. 10	0445	2,030	8.49

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	80	98	103	95	105	210	94	79	85	74	84	73
2	80	84	100	88	92	117	93	79	91	71	87	74
3	81	102	98	91	82	109	90	75	101	72	83	75
4	81	99	97	92	95	103	95	75	90	71	87	69
5	97	97	92	93	88	111	97	77	88	75	83	70
6	110	94	95	88	93	163	92	76	88	83	75	62
7	100	85	101	89	98	233	303	76	90	77	76	74
8	99	97	100	98	102	111	127	77	84	69	75	74
9	99	100	94	111	101	93	216	79	86	69	76	75
10	100	97	100	145	104	549	189	75	77	69	73	74
11	104	104	102	1960	104	125	105	75	76	63	78	75
12	77	101	102	244	1070	105	97	80	77	69	72	80
13	101	101	101	127	981	121	93	83	77	65	80	73
14	98	98	98	110	199	92	101	75	74	78	77	75
15	98	97	98	110	120	90	88	87	74	74	88	72
16	79	99	101	110	95	97	99	80	71	81	76	69
17	94	100	105	108	100	89	95	78	74	88	74	68
18	94	101	109	96	95	87	101	64	61	73	67	78
19	95	106	107	92	93	93	109	60	64	76	72	71
20	92	101	107	90	125	84	105	59	65	70	65	79
21	97	106	107	88	114	100	256	57	68	68	69	75
22	96	99	106	e91	105	106	96	70	73	58	60	86
23	95	102	103	e93	164	116	93	69	72	71	56	80
24	92	107	105	112	162	97	90	70	72	73	64	80
25	84	98	102	114	315	107	92	82	70	58	64	80
26	94	101	99	271	340	101	86	89	67	64	63	79
27	100	98	97	157	467	93	92	92	68	73	66	71
28	94	105	99	129	493	98	84	86	63	76	64	80
29	95	114	94	125	---	102	88	81	70	76	67	78
30	142	101	96	109	---	101	81	80	74	85	68	82
31	101	---	102	107	---	98	---	85	---	86	72	---
TOTAL	2949	2992	3120	5433	6102	3901	3447	2370	2290	2255	2261	2251
MEAN	95.1	99.7	101	175	218	126	115	76.5	76.3	72.7	72.9	75.0
MAX	142	114	109	1960	1070	549	303	92	101	88	88	86
MIN	77	84	92	88	82	84	81	57	61	58	56	62
AC-FT	5850	5930	6190	10780	12100	7740	6840	4700	4540	4470	4480	4460

e Estimated.

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

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	61.4	79.1	103	232	288	314	146	118	79.2	54.2	53.7	55.2
MAX	194	259	292	1839	1411	1806	604	666	351	145	233	129
(WY)	1988	1984	1984	1993	1980	1995	1983	1983	1983	1983	1983	1976
MIN	20.5	21.2	23.3	24.7	23.1	23.7	23.1	22.3	20.2	16.8	17.9	18.0
(WY)	1974	1975	1974	1972	1972	1972	1971	1972	1981	1981	1981	1974

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	39512		39371			
ANNUAL MEAN	108		108		132	
HIGHEST ANNUAL MEAN					416	
LOWEST ANNUAL MEAN					29.0	
HIGHEST DAILY MEAN	1920	Feb 21	1960	Jan 11	11500	Mar 2 1983
LOWEST DAILY MEAN	56	Aug 22	56	Aug 23	15	Sep 7 1980
ANNUAL SEVEN-DAY MINIMUM	62	Aug 17	62	Aug 22	16	Jul 1 1981
MAXIMUM PEAK FLOW			5370	Jan 11	31300	Feb 24 1998
MAXIMUM PEAK STAGE			10.17	Jan 11	20.23	Mar 4 1978
ANNUAL RUNOFF (AC-FT)	78370		78090		95830	
10 PERCENT EXCEEDS	117		113		191	
50 PERCENT EXCEEDS	92		92		66	
90 PERCENT EXCEEDS	70		69		23	

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1970 to current year.

CHEMICAL DATA: Water years 1970 to current year.

SPECIFIC CONDUCTANCE: Water years 1970–78, 1999–2000.

WATER TEMPERATURE: Water years 1999–2000.

SEDIMENT DATA: Water years 1999–2000.

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 WATER (DEG C) (00010)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT					
02...	1025	80	930	21.5	561
18...	1400	99	872	23.0	545
NOV					
01...	0930	104	870	18.0	534
22...	0805	91	902	13.5	559
DEC					
07...	0855	101	904	17.0	561
20...	0805	107	877	13.0	548
JAN					
03...	0720	88	870	12.5	571
23...	0950	94	877	14.5	557
FEB					
02...	0950	93	858	14.5	574
14...	1015	209	721	13.5	421
MAR					
01...	0835	217	606	13.5	388
15...	0835	90	947	16.5	598
APR					
02...	0850	99	884	16.5	552
24...	0910	93	930	18.0	596
MAY					
01...	0840	82	900	17.0	564
17...	0750	82	886	19.0	574
JUN					
04...	0810	88	902	18.5	562
12...	0835	80	895	19.5	552
JUL					
02...	0810	76	905	21.0	572
10...	1215	72	922	27.5	574
AUG					
06...	1110	77	909	25.0	588
21...	1115	77	915	24.0	586
SEP					
05...	1420	72	893	24.0	568
17...	1430	65	926	24.0	550

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.—Lat 33°44'17", long 116°49'59", in SE 1/4 NE 1/4 sec.13, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on left bank, 0.6 mi downstream from bridge on State Highway 74, 1.5 mi downstream from North Fork San Jacinto River, 7.8 mi southeast of San Jacinto, and 9.5 mi downstream from Lake Hemet.

DRAINAGE AREA.—142 mi².

PERIOD OF RECORD.—October 1920 to February 1927, March 1927 to September 1991, October 1996 to current year. River only records for October 1969 to September 1980 and October 1981 to September 1991 are at site upstream of Lake Hemet Municipal Water District's lower canal and are equivalent to other records if lower canal diversion is deducted from flow past station. Records of lower canal diversion are available at Lake Hemet Municipal Water District. Combined records of river and diversions are equivalent for October 1948 to September 1981. Combined records of river and diversion for October 1981 to September 1990, published in WDR CA-82-1 to WDR CA-90-1, are not equivalent due to diversion for municipal supply upstream of gages beginning in 1982. Monthly discharge only for October 1920 and July to September 1926 are published in WSP 1315-B.

REVISED RECORDS.—WSP 881: 1938. WSP 1635: 1950. WSP 1928: Drainage area. WDR CA-97-1: Date of peak discharge for Water Year 1991.

GAGE.—Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 1,910 ft above sea level, from topographic map. From 1927 to 1991 gage operated at various locations and datums approximately 0.6 mi upstream. See WDR CA-91-1 for further description.

REMARKS.—Records fair. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts 4.5 mi upstream from station. Several other small diversions in the basin. Diversions upstream from station began prior to 1920. See schematic of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—(River only) Maximum discharge, 45,000 ft³/s, Feb. 16, 1927, gage height unknown, on basis of slope-area measurement of peak flow; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft³/s, or maximum, from rating curve extended above 275 ft³/s on basis of critical depth computations:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 28	2315	52	3.20

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	.20	35	1.3	.64	.00	.00	.00	.00
2	.00	.00	.00	.00	.19	24	1.2	.65	.00	.00	.00	.00
3	.00	.00	.00	.00	.18	16	1.2	.59	.00	.00	.00	.00
4	.00	.00	.00	.00	.16	12	1.2	.48	.00	.00	.00	.00
5	.00	.00	.00	.00	.13	9.4	1.2	.41	.00	.00	.00	.00
6	.00	.00	.00	.00	.13	12	1.1	.35	.00	.00	.00	.00
7	.00	.00	.00	.00	.13	29	1.3	.30	.00	.00	.00	.00
8	.00	.00	.00	.00	.13	22	4.9	.25	.00	.00	.00	.00
9	.00	.00	.00	.00	.13	17	6.6	.22	.00	.00	.00	.00
10	.00	.00	.00	.00	.13	20	6.7	.21	.00	.00	.00	.00
11	.00	.00	.00	.07	.13	21	3.5	.18	.00	.00	.00	.00
12	.00	.00	.00	.02	.16	17	2.1	.22	.00	.00	.00	.00
13	.00	.00	.00	.02	.29	13	1.7	.19	.00	.00	.00	.00
14	.00	.00	.00	.03	.22	5.8	1.3	.16	.00	.00	.00	.00
15	.00	.00	.00	.08	.20	6.6	1.3	.15	.00	.00	.00	.00
16	.00	.00	.00	.06	.20	7.6	1.4	.12	.00	.00	.00	.00
17	.00	.00	.00	.04	.20	5.0	1.3	.12	.00	.00	.00	.00
18	.00	.00	.00	.06	.20	4.6	1.1	.10	.00	.00	.00	.00
19	.00	.00	.00	.06	.20	5.8	.95	.09	.00	.00	.00	.00
20	.00	.00	.00	.07	.21	11	.93	.09	.00	.00	.00	.00
21	.00	.00	.00	.08	.20	14	2.4	.07	.00	.00	.00	.00
22	.00	.00	.00	.08	.20	14	2.3	.06	.00	.00	.00	.00
23	.00	.00	.00	.09	.23	11	1.9	.03	.00	.00	.00	.00
24	.00	.00	.00	.13	.25	10	1.1	.03	.00	.00	.00	.00
25	.00	.00	.00	.13	2.2	7.9	1.8	.02	.00	.00	.00	.00
26	.00	.00	.00	.17	22	3.8	.97	.03	.00	.00	.00	.00
27	.00	.00	.00	.15	27	1.5	.86	.06	.00	.00	.00	.00
28	.00	.00	.00	.13	35	1.5	.82	.11	.00	.00	.00	.00
29	.00	.00	.00	.13	---	1.5	.82	.07	.00	.00	.00	.00
30	.00	.00	.00	.13	---	1.3	.93	.03	.00	.00	.00	.00
31	.00	---	.00	.15	---	1.3	---	.01	---	.00	.00	---
TOTAL	0.00	0.00	0.00	1.88	90.60	361.6	56.18	6.04	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.061	3.24	11.7	1.87	.19	.000	.000	.000	.000
MAX	.00	.00	.00	.17	35	35	6.7	.65	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.13	1.3	.82	.01	.00	.00	.00	.00
AC-FT	.00	.00	.00	3.7	180	717	111	12	.00	.00	.00	.00

SANTA ANA RIVER BASIN

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.70	4.07	14.9	19.1	54.8	66.3	48.2	22.4	6.34	1.25	1.10	1.18
MAX	14.2	164	283	230	1039	743	312	224	81.8	13.0	13.6	23.1
(WY)	1980	1966	1967	1969	1980	1938	1941	1983	1998	1979	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1923	1924	1930	1936	1951	1947	1934	1934	1931	1924	1923	1922

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1921 - 2001	
ANNUAL TOTAL	637.37		516.30			
ANNUAL MEAN	1.74		1.41		19.6	
HIGHEST ANNUAL MEAN					156	
LOWEST ANNUAL MEAN					.075	
HIGHEST DAILY MEAN	33	Feb 21	35	Feb 28	7590	Feb 21 1980
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1920
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1920
MAXIMUM PEAK FLOW			52	Feb 28	45000	Feb 16 1927
MAXIMUM PEAK STAGE			3.20	Feb 28	a	Feb 16 1927
ANNUAL RUNOFF (AC-FT)	1260		1020		14210	
10 PERCENT EXCEEDS	7.5		2.1		40	
50 PERCENT EXCEEDS	.00		.00		.13	
90 PERCENT EXCEEDS	.00		.00		.00	

a Maximum peak stage for period of record is unknown, but probably occurred on Feb. 16, 1927.

11070020 BAUTISTA CREEK AT HEAD OF FLOOD CONTROL CHANNEL, NEAR HEMET, CA

LOCATION.—Lat 33°42'42", long 116°52'04", in NW 1/4 NE 1/4 sec.27, T.5 S., R.1 E., [Riverside County](#), Hydrologic Unit 18070202, on right bank, at head of concrete-lined flood channel, 3.7 mi upstream from mouth, and 3.0 mi southeast of Valle Vista.

DRAINAGE AREA.—47.6 mi².

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 2,080 ft above sea level, from topographic map. Prior to October 1988 at datum 10.00 ft lower.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Minor diversion upstream from station for irrigation. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,310 ft³/s, Jan. 16, 1993, gage height, 3.53 ft, from rating curve developed on basis of critical-depth computations at concrete control; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve developed on basis of critical-depth computations at concrete control:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0700	3.7	1.05

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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	e.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	e.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.01	.00	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.02	.00	.00	.1	.00	.00	.00	.00	.00	.00	.00	.00

e Estimated.

11070020 BAUTISTA CREEK AT HEAD OF FLOOD CONTROL CHANNEL, NEAR HEMET, 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	.005	.015	.015	2.96	3.06	3.38	.41	.058	.001	.080	.052	.036
MAX	.061	.21	.12	31.1	22.3	26.4	3.39	.58	.011	1.11	.55	.50
(WY)	1997	1997	1988	1993	1993	1995	1998	1998	1995	1999	1994	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1988	1989	1989	1989	1989	1989	1988	1988	1988	1989	1988

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	3.63		0.08			
ANNUAL MEAN	.010		.000		.83	
HIGHEST ANNUAL MEAN					4.35	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	2.1	Feb 21	.07	Jan 11	298	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
MAXIMUM PEAK FLOW			3.7	Jan 11	1310	Jan 16 1993
MAXIMUM PEAK STAGE			1.05	Jan 11	3.53	Jan 16 1993
ANNUAL RUNOFF (AC-FT)	7.2		.2		602	
10 PERCENT EXCEEDS	.00		.00		.00	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11070150 SAN JACINTO RIVER ABOVE STATE STREET, NEAR SAN JACINTO, CA

LOCATION.—Lat 33°49'17", long 116°58'21", in NE 1/4 SW 1/4 sec.15, T.4 S., R.1 W., [Riverside County](#), Hydrologic Unit 18070202, on left bank, 400 ft upstream from State Street Bridge, 5.5 mi downstream from confluence with Bautista Creek, and 2.5 mi northwest of San Jacinto.

DRAINAGE AREA.—252 mi².

PERIOD OF RECORD.—October 1996 to current year.

REVISED RECORDS.—WDR CA-00-1: 1998.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,500 ft above sea level, from topographic map.

REMARKS.—Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts 4.0 mi upstream from station on San Jacinto River near San Jacinto (station 11069500). See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,570 ft³/s, Feb. 23, 1998, gage height, 4.53 ft, from rating curve extended above 880 ft³/s; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.—No flow for entire water year.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.000	.000	.016	19.8	7.78	27.0	16.0	.000	.000	.000	.000
MAX	.000	.000	.000	.081	99.9	38.9	135	79.9	.000	.000	.000	.000
(WY)	1997	1997	1997	1997	1998	1998	1998	1998	1997	1997	1997	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1997	1997	1997	1998	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001
ANNUAL MEAN			5.77
HIGHEST ANNUAL MEAN			28.9
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN			600
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00
MAXIMUM PEAK FLOW			1570
MAXIMUM PEAK STAGE			4.53
ANNUAL RUNOFF (AC-FT)			4180
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11070210 SAN JACINTO RIVER AT RAMONA EXPRESSWAY, NEAR LAKEVIEW, CA

LOCATION.—Lat 33°50'23", long 117°08'06", in SW 1/4 NW 1/4 sec.7, T.4 S., R.2 W., Riverside County, Hydrologic Unit 18070202, on right bank, at downstream end of Ramona Expressway Bridge, and 1.0 mi northwest of Lakeview.

DRAINAGE AREA.—365 mi².

PERIOD OF RECORD.—October 2000 to September 2001.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,420 ft above sea level, from topographic map.

REMARKS.—Records fair. Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Natural storage of floodwaters in the Mystic Lake area, approximately 3 mi upstream, also reduces peak flows at times in some years. Low flows sustained, at times, by releases of reclaimed water upstream from station. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts water at a point 4.0 mi upstream from station on San Jacinto River near San Jacinto (station 11069500). See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2.7 ft³/s, Jan. 26, 2001, gage height, 7.88 ft, from rating curve extended above 2.6 ft³/s; maximum gage height, 8.03 ft, July 9, 2001; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 26	1545	2.7	7.88

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	.91	.89	1.5	.58	1.8	1.5	.89	1.0	.59	.96	.96	.00
2	.84	.87	1.4	.63	1.8	1.4	.98	.96	.63	.99	.93	.00
3	.81	.71	1.4	.54	1.9	1.4	.98	1.0	.63	.97	.83	.00
4	.71	.71	1.3	.62	1.8	1.4	1.0	1.1	.63	.90	.82	.00
5	.68	.75	1.2	.68	1.9	1.3	1.0	1.0	.60	.93	.83	.00
6	.69	.77	1.1	.74	2.0	1.3	1.1	.99	.60	.96	.84	.00
7	.68	.75	1.0	.78	2.0	1.4	1.1	.96	.59	.91	.81	.00
8	.70	.76	.97	.82	2.0	1.3	1.1	.98	.60	.96	.80	.00
9	.74	.78	.92	.86	2.1	1.2	1.2	.89	.59	1.1	.80	.00
10	.77	.79	.89	.93	2.1	1.2	1.2	.81	.62	1.0	.70	.00
11	.74	.80	.85	1.3	2.1	1.2	1.2	.82	.66	.98	.64	.00
12	.75	.79	.81	1.0	2.1	1.1	1.1	.84	.69	.95	.68	.00
13	.38	.80	.77	1.1	2.1	.98	1.2	.84	.73	1.0	.62	.00
14	.08	.78	.78	1.2	1.8	.96	1.1	.79	.72	.95	.59	.00
15	.02	.77	.75	1.3	1.7	.95	1.2	.76	.73	.95	.53	.00
16	.00	.77	.75	1.5	1.7	.96	1.1	.78	.74	.99	.52	.00
17	.00	.75	.77	1.5	1.6	.89	1.1	.77	.77	.97	.49	.00
18	.00	.75	.70	1.5	1.6	.87	1.0	.73	.80	.96	.37	.00
19	.32	.75	.76	1.5	1.7	.88	1.1	.69	.81	.90	.29	.00
20	.60	.77	.63	1.5	1.6	.89	1.1	.71	.81	.94	.20	.00
21	.62	.81	.59	1.5	1.7	.88	1.2	.70	.82	.95	.08	.00
22	.63	.82	.59	1.5	1.7	.82	1.1	.68	.87	1.0	.00	.00
23	.64	.79	.59	1.5	1.8	.83	1.0	.68	.98	.98	.00	.00
24	.67	.80	.60	1.6	1.8	.85	1.1	.67	.94	.96	.00	.00
25	.73	.80	.56	1.7	1.8	.84	.84	.71	1.0	.98	.00	.00
26	.76	.81	.54	2.5	1.7	.89	.78	.71	1.0	.96	.00	.00
27	.78	1.0	.55	2.5	1.6	.54	1.0	.73	1.0	.88	.00	.00
28	.80	1.4	.54	2.6	1.7	.28	1.1	.75	1.0	.83	.00	.00
29	.81	1.4	.61	2.4	---	.29	1.1	.71	.98	.83	.00	.00
30	.83	1.5	.58	2.3	---	.66	1.1	.66	.96	.95	.00	.00
31	.84	---	.57	1.9	---	.81	---	.62	---	.97	.00	---
TOTAL	18.53	25.64	25.57	42.58	51.2	30.77	32.07	25.04	23.09	29.56	13.33	0.00
MEAN	.60	.85	.82	1.37	1.83	.99	1.07	.81	.77	.95	.43	.000
MAX	.91	1.5	1.5	2.6	2.1	1.5	1.2	1.1	1.0	1.1	.96	.00
MIN	.00	.71	.54	.54	1.6	.28	.78	.62	.59	.83	.00	.00
AC-FT	37	51	51	84	102	61	64	50	46	59	26	.00

11070210 SAN JACINTO RIVER AT RAMONA EXPRESSWAY, NEAR LAKEVIEW, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.60	.85	.82	1.37	1.83	.99	1.07	.81	.77	.95	.43	3.48
MAX	.60	.85	.82	1.37	1.83	.99	1.07	.81	.77	.95	.43	6.96
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000
MIN	.60	.85	.82	1.37	1.83	.99	1.07	.81	.77	.95	.43	.000
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	317.38	
ANNUAL MEAN	.87	
HIGHEST DAILY MEAN	2.6	Jan 28
LOWEST DAILY MEAN	.00	Oct 16
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 22
MAXIMUM PEAK FLOW	2.7	Jan 26
MAXIMUM PEAK STAGE	8.03	Jul 9
ANNUAL RUNOFF (AC-FT)	630	
10 PERCENT EXCEEDS	1.5	
50 PERCENT EXCEEDS	.82	
90 PERCENT EXCEEDS	.00	

11070270 PERRIS VALLEY STORM DRAIN AT NUEVO ROAD, NEAR PERRIS, CA

LOCATION.—Lat 33°48'04", long 117°12'19", in SW 1/4 SW 1/4 sec.21, T.4 S., R.3 W., Riverside County, Hydrologic Unit 18070202, on right bank, 1.9 mi northeast of Perris, and 2.0 mi upstream from San Jacinto River.

DRAINAGE AREA.—93.3 mi².

PERIOD OF RECORD.—October 1969 to September 1975, October 1989 to September 1997, and October 1998 to current year.

PRECIPITATION DATA: October 1989 to September 1997.

REVISED RECORDS.—WDR CA-92-1: 1991(M).

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1,410 ft above sea level, from topographic map. October 1969 to September 1975, at same site at different datum.

REMARKS.—Records fair. Some regulation by percolation basins upstream from station. Some pumping for irrigation upstream from station. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,400 ft³/s, Feb. 12, 1992, gage height, 7.81 ft, from rating curve extended above 2,120 ft³/s, on basis of slope area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,100 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0800	961	4.24

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	.04	.09	.00	.00	28	.00	.00	.06	.04	.04	.03
2	.00	.00	.30	.00	.03	.37	.00	.01	.08	.00	.07	.03
3	.00	.00	.10	.00	.09	.00	.00	.01	.09	.01	.07	.03
4	.00	.30	.00	.00	.04	.00	.00	.00	.02	.10	.07	.03
5	.00	.22	.00	e.00	.02	.00	.00	.00	.04	.06	.11	e.02
6	.00	.12	.02	e.00	.12	9.8	.00	.00	.11	.09	.01	.01
7	.04	.03	.10	e.00	.13	38	5.4	.13	.11	.05	.03	.01
8	.21	.00	.21	e.40	.11	3.7	7.4	.00	.13	.03	.01	.01
9	.00	.00	.25	e.05	.50	.03	4.2	.01	.10	.00	.05	.03
10	.00	.00	.15	e2.0	.38	21	50	.00	.06	.03	.08	.01
11	.00	1.1	.01	410	.38	2.3	.66	.01	.01	.04	.05	.00
12	.00	1.6	.05	24	14	.53	.00	.42	.12	.03	.02	.01
13	.00	.01	.14	1.7	209	.18	.00	.03	.10	.03	.00	.00
14	.00	.00	.09	.22	27	.01	.00	.00	.06	.01	.01	.00
15	.00	.00	.00	.88	.71	.01	.00	.00	.02	.06	.01	.00
16	.00	.00	.00	19	.01	.02	.00	.01	.07	.00	.03	.00
17	.02	.00	.00	1.2	.00	.00	.00	.08	.15	.01	.01	.00
18	.00	.00	.00	.11	.00	.00	.00	.08	.00	.01	.02	.00
19	.00	.09	.00	.00	.24	.00	.00	.07	.04	.03	.13	.00
20	.00	.43	.00	.70	2.0	.00	.00	.09	.01	.03	.00	.00
21	.00	.15	.00	.01	.51	.01	9.7	.22	.05	.01	.00	.01
22	.00	.16	.00	.00	.02	.03	1.7	.05	.07	.04	.05	.00
23	.00	.13	.00	.02	.42	.04	.00	.08	.03	.00	.05	.00
24	.00	.04	.00	.29	6.9	.04	.00	.05	.07	.03	.04	.00
25	.00	.13	.00	.08	e92	.00	.00	.08	.00	.04	.03	.00
26	.13	.05	.00	18	113	.00	.00	.21	.04	.02	.03	.00
27	5.6	.00	.00	19	52	.00	.01	.15	.06	.02	.00	.00
28	.70	.05	.00	8.3	74	.00	.02	.10	.06	.05	.00	.00
29	.45	.11	.00	.38	---	.00	.00	.14	.04	.04	.04	.00
30	43	.11	.00	.01	---	.00	.00	.03	.06	.00	.07	.00
31	1.8	---	.00	.00	---	.00	---	.03	---	.03	.04	---
TOTAL	51.95	4.87	1.51	506.35	593.61	104.07	79.09	2.09	1.86	0.94	1.17	0.23
MEAN	1.68	.16	.049	16.3	21.2	3.36	2.64	.067	.062	.030	.038	.008
MAX	43	1.6	.30	410	209	38	50	.42	.15	.10	.13	.03
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	103	9.7	3.0	1000	1180	206	157	4.1	3.7	1.9	2.3	.5

e Estimated.

11070270 PERRIS VALLEY STORM DRAIN AT NUEVO ROAD, NEAR PERRIS, CA—Continued

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	.28	1.13	3.38	21.1	19.5	12.0	1.04	.15	.17	.12	.019	.25
MAX	1.68	9.87	35.1	167	87.5	70.7	4.87	1.06	1.73	1.85	.18	4.21
(WY)	1997	1997	1993	1993	1993	1991	1994	1990	1995	1999	2000	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1970	1972	1970	1975	1971	1972	1970	1970	1970	1970	1970	1970

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	1075.77		1347.74			
ANNUAL MEAN	2.94		3.69		4.86	
HIGHEST ANNUAL MEAN					24.4	
LOWEST ANNUAL MEAN					.30	
HIGHEST DAILY MEAN	383	Feb 21	410	Jan 11	1270	Jan 16 1993
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1969
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 9	.00	Oct 1 1969
MAXIMUM PEAK FLOW			961	Jan 11	4400	Feb 12 1992
MAXIMUM PEAK STAGE			4.24	Jan 11	7.81	Feb 12 1992
ANNUAL RUNOFF (AC-FT)	2130		2670		3520	
10 PERCENT EXCEEDS	.50		.78		.23	
50 PERCENT EXCEEDS	.00		.02		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11070365 SAN JACINTO RIVER NEAR SUN CITY, CA

LOCATION.—Lat 33°44'46", long 117°13'51", in SW 1/4 SE 1/4 sec.7, T.5 S., R.3 W., Riverside County, Hydrologic Unit 18070202, on left bank, 0.6 mi downstream from Goetz Road Bridge, 6.0 mi northeast of Railroad Canyon Dam, and 3.2 mi northwest of Sun City.

DRAINAGE AREA.—560 mi².

PERIOD OF RECORD.—October 2000 to September 2001.

GAGE.—Water-stage recorder, crest-stage gage, and culvert/concrete road crossing control. Elevation of gage is 1,400 ft above sea level, from topographic map.

REMARKS.—Records fair. Sand and gravel operations upstream from station may reduce runoff and cause peak attenuation. Natural storage of floodwaters in the Mystic Lake area also reduces peak flows at times in some years. Flow partly regulated by Lake Hemet. Lake Hemet Municipal Water District's upper canal diverts at a point 4.0 mi upstream from station on San Jacinto River near San Jacinto (station 11069500). See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,020 ft³/s, Jan. 11, 2001, gage height, 11.04 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 400 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	1330	1,020	11.04	Feb. 26	0345	476	9.22
Feb. 13	1430	623	9.22				

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	.00	.10	.00	.00	.44	54	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.10	2.9	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.01	.75	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.24	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	e.00
6	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00	e.00
7	.00	.00	.00	.00	.00	28	.00	.00	.00	.00	.00	e.00
8	.00	.00	.00	.00	.00	19	3.3	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.83	1.3	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	14	38	.00	.00	.00	.00	.00
11	.00	e.00	.00	436	.00	5.1	9.0	.00	.00	.00	.00	e.00
12	.00	e.00	.00	91	.00	1.4	.49	.00	.00	.00	.00	e.00
13	.00	e.00	.00	4.1	300	.24	.06	.00	.00	.00	.00	.00
14	.00	e.00	.00	.64	100	.09	.00	.00	.00	.00	.00	e.00
15	.00	e.00	.00	.10	2.6	.02	.00	.00	.00	.00	.00	e.00
16	.00	e.00	.00	20	.56	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	2.7	.14	.00	28	.00	.00	.00	.00	e.00
18	.00	.00	.00	.31	.03	.00	8.9	.00	.00	.00	.00	.00
19	.00	.00	.00	.03	.00	.00	1.5	.00	.00	.00	e.00	.00
20	.00	.00	.00	.00	.00	.00	.60	.00	.00	.00	e.00	.00
21	.00	.00	.00	.00	.00	22	.36	.00	.00	.00	e.00	.00
22	.00	.00	.00	.00	.00	3.9	7.6	.00	.00	.00	e.00	e.00
23	.00	.00	.00	.00	.00	.85	.85	.00	.00	.00	.00	e.00
24	.00	.00	.00	.00	.00	.21	.13	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	39	.04	.01	.00	.00	.00	.00	.00
26	.00	.00	.00	.34	248	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	35	45	.00	.00	.00	.00	.00	.00	e.00
28	.00	.00	.00	11	66	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	1.8	---	.00	.00	.00	.00	.00	.00	.00
30	10	.00	.00	.79	---	.00	.00	.00	.00	.00	.00	.00
31	8.0	---	.00	.67	---	.00	---	.00	---	.00	.00	---
TOTAL	18.00	0.10	0.00	604.48	801.88	154.83	100.10	0.00	0.00	0.00	0.00	0.00
MEAN	.58	.003	.000	19.5	28.6	4.99	3.34	.000	.000	.000	.000	.000
MAX	10	.10	.00	436	300	54	38	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	36	.2	.00	1200	1590	307	199	.00	.00	.00	.00	.00

e Estimated.

11070365 SAN JACINTO RIVER NEAR SUN CITY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.58	.003	.000	19.5	28.6	4.99	3.34	.000	.000	.000	.000	.000
MAX	.58	.003	.000	19.5	28.6	4.99	3.34	.000	.000	.000	.000	.000
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	.58	.003	.000	19.5	28.6	4.99	3.34	.000	.000	.000	.000	.000
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	1679.39	
ANNUAL MEAN	4.60	
HIGHEST DAILY MEAN	436	Jan 11
LOWEST DAILY MEAN	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1
MAXIMUM PEAK FLOW	1020	Jan 11
MAXIMUM PEAK STAGE	11.04	Jan 11
ANNUAL RUNOFF (AC-FT)	3330	
10 PERCENT EXCEEDS	.85	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

11070465 SALT CREEK AT MURRIETA ROAD, NEAR SUN CITY, CA

LOCATION (REVISED).—Lat 33°41'39", long 117°12'17", in SW 1/4 NW 1/4 sec.33, T.5 S., R.3 W., Riverside County, Hydrologic Unit 18070202, on right bank, 20 ft upstream from Murrieta Road crossing, 2.2 mi upstream from Railroad Canyon Reservoir, and 1.1 mi southwest of Sun City.

DRAINAGE AREA.—116 mi².

PERIOD OF RECORD.—October 1983 to September 1985, October 2000 to September 2001.

GAGE.—Water-stage recorder and crest-stage gage. October 1983 to September 1985, at same site at different datum. Elevation of gage is 1,405 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Paloma Valley Reservoir. Diversions for irrigation and domestic use occur at times upstream from station. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 224 ft³/s, Aug. 17, 1984, gage height, 3.02 ft, datum then in use; maximum gage height, 7.83 ft, Jan. 11, 2001; no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 4,120 ft³/s, Mar. 2, 1983, gage height, 6.88 ft, datum then in use, provided by Riverside County Flood Control and Water Conservation District.

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	.25	21	.00	.00	.00	e.00	e.00	.00
2	.00	.41	.00	.00	.13	4.7	.00	.00	.00	e.00	.00	.00
3	.00	.00	.00	.00	.06	2.2	.00	.00	.00	e.00	.00	.00
4	.00	.00	.00	.00	.00	1.4	.00	.00	.00	e.00	.00	.00
5	.00	.00	.00	.00	.00	.61	.00	.00	.00	e.00	.00	.00
6	.00	.00	.00	.00	.00	3.5	.00	.00	.00	e.00	.00	.00
7	.00	.00	.00	.00	.00	3.8	2.1	.00	.00	e.00	.00	.00
8	.00	.00	.00	.00	.00	5.3	.16	.00	.00	e.00	.00	.00
9	.00	.00	.00	.01	.00	2.3	.42	.00	.00	e.00	.00	.00
10	.00	.00	.00	e.50	.26	3.3	.25	.00	.00	e.00	.00	.00
11	.00	.00	.00	e70	.07	1.1	.00	.00	.00	e.00	.00	.00
12	.00	.00	.00	e32	7.0	.30	.00	.00	.00	e.00	.00	.00
13	.00	.00	.00	e5.0	41	.00	.00	.00	.00	e.00	.00	.00
14	.00	.00	.00	e.20	40	.00	.00	.43	.00	e.00	.00	.00
15	.00	.00	.00	e.03	9.1	.00	.00	.21	.00	e.00	.00	.00
16	.00	.00	.00	e.00	2.9	.00	.00	.00	.00	e.00	.00	.00
17	.00	.00	.00	e.00	1.3	.00	.00	.90	.00	e.00	.00	.00
18	.00	.00	.00	.00	.75	.00	.00	1.5	.00	e.00	.00	.00
19	.00	.00	.00	.00	.72	.00	.00	.03	.00	e.00	.00	.00
20	.00	.00	.00	.00	1.8	.00	.00	.00	.00	e.00	.00	.00
21	.00	.00	.00	.00	.24	.00	4.7	.00	.00	e.00	.00	.00
22	.00	.00	.00	.07	.01	.00	.22	.00	.00	e.00	.00	.00
23	.00	.00	.00	1.1	.05	.00	.00	.00	.00	e.00	.00	.00
24	.00	.00	.00	1.7	.68	.00	.00	.00	.00	e.00	.00	.00
25	.00	.00	.00	.47	31	.00	.00	.00	.00	e.00	.00	.00
26	.00	.00	.00	13	63	.00	.00	.00	.00	e.00	.00	.00
27	.00	.00	.00	3.0	54	.00	.00	.00	e.00	e.00	.00	.00
28	.00	.00	.00	1.2	55	.00	.00	.00	e.00	e.00	.00	.00
29	.44	.00	.00	.65	---	.00	.00	.00	e.00	e.00	.00	.00
30	2.7	.00	.00	.64	---	.00	.00	.00	e.00	e.00	.00	.00
31	.00	---	.00	.25	---	.00	---	.00	---	e.00	.00	---
TOTAL	3.14	0.41	0.00	129.82	309.32	49.51	7.85	3.07	0.00	0.00	0.00	0.00
MEAN	.10	.014	.000	4.19	11.0	1.60	.26	.099	.000	.000	.000	.000
MAX	2.7	.41	.00	70	63	21	4.7	1.5	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	6.2	.8	.00	257	614	98	16	6.1	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

MEAN	.69	.24	3.73	1.49	3.95	.53	.18	.033	.000	.083	.42	.038
MAX	1.98	.61	10.0	4.19	11.0	1.60	.27	.099	.000	.25	1.26	.11
(WY)	1984	1985	1985	2001	2001	2001	1984	2001	1984	1984	1984	1984
MIN	.000	.014	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1985	2001	2001	1984	1984	1984	1985	1984	1984	1985	1985	1985

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 1984 - 2001

ANNUAL TOTAL	503.12		
ANNUAL MEAN	1.38	.94	
HIGHEST ANNUAL MEAN		1.38	2001
LOWEST ANNUAL MEAN		.43	1984
HIGHEST DAILY MEAN	70	Jan 11	74
LOWEST DAILY MEAN	.00	Oct 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	.00
MAXIMUM PEAK FLOW	106	Jan 11	224
MAXIMUM PEAK STAGE	7.83	Jan 11	7.83
ANNUAL RUNOFF (AC-FT)	998		678
10 PERCENT EXCEEDS	.70		.06
50 PERCENT EXCEEDS	.00		.00
90 PERCENT EXCEEDS	.00		.00

e Estimated.

11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.—Lat 33°39'51", long 117°17'35", in SE 1/4 NE 1/4 sec.9, T.6 S., R.4 W., [Riverside County](#), Hydrologic Unit 18070203, on right bank, 2.0 mi east of Elsinore, 2.1 mi downstream from Railroad Canyon Dam, and 36 mi downstream from Lake Hemet.

DRAINAGE AREA.—723 mi².

PERIOD OF RECORD.—January 1916 to current year. Monthly figures 1927–50, adjusted for diversion, published in WSP 1315-B.

REVISED RECORDS.—WDR CA-72-1: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,270 ft above sea level, from topographic map. Prior to Feb. 13, 1916, nonrecording gage at site 0.7 mi downstream at different datum. Feb. 13, 1916, to Oct. 27, 1921, nonrecording gage at present site, at different datum.

REMARKS.—Records fair. Flow partly regulated by Lake Hemet, capacity, 13,500 acre-ft, and since 1928 by Railroad Canyon Reservoir, capacity, 12,000 acre-ft, 2.1 mi upstream from station. Diversions for irrigation and domestic use upstream from Railroad Canyon Reservoir took place in some years prior to water year 1994. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,000 ft³/s, Feb. 17, 1927, gage height, 11.8 ft, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.81	.67	.67	1.1	82	1.5	.60	.16	.00	.00	.00
2	.29	.77	.69	.66	1.1	57	1.4	.59	.17	.00	.00	.00
3	.27	.68	.70	.67	1.1	24	1.3	.57	.18	.00	.00	.00
4	.30	.67	.69	.70	1.0	12	1.2	.54	.19	.00	.00	.00
5	.31	.62	.70	.69	1.0	7.7	1.2	.52	.20	.00	.00	.00
6	.29	.69	.72	.73	1.0	7.5	1.1	.50	.20	.00	.00	.00
7	.29	.62	.76	.71	1.0	8.7	1.6	.47	.17	.00	.00	.00
8	.27	.59	.74	.89	1.0	23	1.5	.44	.14	.00	.00	.00
9	.26	.65	.77	1.0	.97	19	1.5	.42	.11	.00	.00	.00
10	.31	.66	.77	.95	.94	14	1.5	.39	.08	.00	.00	.00
11	.30	.74	.81	14	.97	14	6.7	.38	.07	.00	.02	.00
12	.31	.67	.81	3.2	2.8	11	7.4	.41	.07	.00	.02	.00
13	.49	.71	.74	1.5	9.7	6.8	4.6	.42	.07	.00	.00	.00
14	.94	.77	.82	1.2	5.8	4.4	2.9	.40	.04	.00	.04	.00
15	.49	.76	.88	1.1	1.7	3.7	1.8	.38	.02	.00	.01	.00
16	.46	.78	.80	1.1	1.5	3.0	1.3	.36	.01	.00	.00	.00
17	.39	.78	.81	1.1	1.4	2.8	1.1	.34	.00	.00	.00	.00
18	.39	.76	.79	1.1	1.3	2.7	.93	.31	.00	.00	.00	.00
19	.41	.75	.77	1.0	1.3	2.1	.94	.33	.00	.00	.00	.00
20	.38	.71	.79	1.0	1.3	1.9	.91	.33	.00	.00	.00	.00
21	.40	.68	.81	.94	1.3	1.7	.97	.31	.00	.00	.00	.00
22	.42	.72	.73	.93	1.2	3.5	.89	.30	.00	.00	.00	.00
23	.40	.65	.67	.96	1.3	4.9	.83	.25	.00	.00	.00	.00
24	.48	.70	.63	.97	1.3	4.3	.81	.23	.00	.00	.00	.00
25	.52	.69	.62	1.0	9.9	3.5	.74	.24	.00	.00	.00	.00
26	.58	.68	.73	1.5	11	2.8	.71	.23	.00	.00	.00	.00
27	.67	.65	.76	1.9	8.6	2.1	.70	.28	.00	.00	.00	.00
28	.72	.65	.75	1.2	10	1.9	.68	.29	.00	.00	.00	.00
29	.75	.69	.76	1.2	---	1.7	.64	.26	.00	.00	.00	.00
30	1.4	.69	.73	1.1	---	1.7	.61	.21	.00	.00	.00	.00
31	.84	---	.70	1.1	---	1.5	---	.18	---	.00	.00	---
TOTAL	14.65	20.99	23.12	46.77	82.58	336.9	49.96	11.48	1.88	0.00	0.09	0.00
MEAN	.47	.70	.75	1.51	2.95	10.9	1.67	.37	.063	.000	.003	.000
MAX	1.4	.81	.88	14	11	82	7.4	.60	.20	.00	.04	.00
MIN	.26	.59	.62	.66	.94	1.5	.61	.18	.00	.00	.00	.00
AC-FT	29	42	46	93	164	668	99	23	3.7	.00	.2	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2001, BY WATER YEAR (WY)

MEAN	.58	.76	4.95	34.9	87.3	70.9	22.9	5.46	.77	.58	.38	.49
MAX	22.0	28.1	268	1303	2116	802	333	132	13.8	19.7	14.6	15.4
(WY)	1938	1938	1922	1916	1980	1983	1941	1983	1937	1938	1937	1938
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1917	1917	1917	1921	1921	1921	1921	1921	1919	1918	1918	1917

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1916 - 2001	
ANNUAL TOTAL	204.16		588.42			
ANNUAL MEAN	.56		1.61		16.9	
HIGHEST ANNUAL MEAN					232	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	6.7	Feb 21	82	Mar 1	14000	Jan 28 1916
LOWEST DAILY MEAN	.00	Jun 27	.00	Jun 17	.00	Jul 28 1916
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 27	.00	Jun 17	.00	Jul 28 1916
MAXIMUM PEAK FLOW			102	Mar 1	16000	Feb 17 1927
MAXIMUM PEAK STAGE			5.69	Mar 1	11.80	Feb 17 1927
ANNUAL RUNOFF (AC-FT)	405		1170		12240	
10 PERCENT EXCEEDS	.93		2.3		3.7	
50 PERCENT EXCEEDS	.52		.62		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA

LOCATION.—Lat 33°53'21", long 117°33'43", in La Sierra Grant, [Riverside County](#), Hydrologic Unit 18070203, on right bank, 500 ft upstream from Main Street Bridge in Corona, and 1.5 mi upstream from topographic boundary of Prado Flood-Control Basin.

DRAINAGE AREA.—224 mi², excludes 768 mi² above Lake Elsinore.

PERIOD OF RECORD.—October 1980 to July 1983, February 1984 to current year. December 1967 to September 1974, water-stage recorder at site 1.2 mi downstream at different datum (published as station 11072200, "Temescal Creek at Corona").

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 600 ft above sea level, from topographic map. October 1980 to July 1983 at site 500 ft downstream at different datum.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated by several small storage reservoirs. Many diversions upstream from station for irrigation. Water discharged to channel from Arlington Desalter at times since September 1990; records for water years 1981 to 1990 and 1991 to current year are not equivalent. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,720 ft³/s, Mar. 1, 1983, gage height, 11.67 ft, site and datum then in use, on basis of slope-conveyance study; minimum daily, 0.27 ft³/s, Sept. 25, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 8,850 ft³/s, Feb. 25, 1969, gage height, 8.17 ft, from floodmark, at old site (station 11072200) 1.2 mi downstream on basis of slope-area measurement of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	10	12	12	1.9	10	9.6	10	11	12	2.6	9.1
2	12	5.8	11	13	2.0	4.5	11	11	11	13	3.7	9.4
3	12	11	11	12	1.9	2.8	13	10	11	13	6.6	9.2
4	12	11	12	12	1.7	2.4	14	10	12	11	13	9.7
5	12	7.6	13	13	4.1	2.2	14	11	12	38	13	11
6	13	14	13	13	8.5	26	13	10	13	15	16	11
7	13	12	13	12	9.9	5.0	76	10	12	14	17	11
8	13	14	14	21	12	1.7	10	9.5	16	10	18	11
9	13	14	14	11	13	11	18	9.7	18	7.9	21	9.9
10	18	18	14	90	27	10	10	10	19	9.2	25	12
11	9.8	19	15	238	17	1.4	10	11	19	11	27	9.8
12	7.7	12	15	9.7	287	1.3	10	10	22	11	28	10
13	8.2	12	15	3.4	113	1.4	10	12	26	11	28	11
14	7.4	12	13	2.6	5.2	1.7	11	13	25	11	19	11
15	7.9	12	15	14	3.5	1.5	11	16	18	10	11	14
16	10	13	16	4.4	2.7	1.4	11	17	12	11	7.9	12
17	11	13	16	2.5	2.5	1.6	11	18	12	11	7.2	14
18	11	13	15	2.8	2.8	1.7	12	19	11	11	6.9	13
19	13	11	16	2.5	31	1.8	12	20	11	7.7	6.1	11
20	14	14	17	2.3	9.5	1.9	12	24	12	8.3	4.1	13
21	14	15	13	2.3	2.1	2.2	39	15	13	8.2	2.1	15
22	12	14	16	2.5	1.9	2.7	18	13	12	7.4	4.4	15
23	10	14	14	2.7	23	2.1	18	11	12	6.0	7.3	14
24	13	13	15	12	18	2.1	18	10	12	6.6	8.1	15
25	14	14	14	2.6	142	2.1	15	11	11	8.2	7.8	15
26	15	15	14	76	63	2.7	9.5	10	13	9.8	7.9	15
27	38	15	12	3.3	95	7.8	13	9.5	12	9.0	8.4	14
28	6.6	13	15	2.1	58	12	11	9.1	12	7.7	7.6	e13
29	30	12	15	2.0	---	12	9.8	9.3	12	7.9	8.0	e13
30	16	12	14	1.8	---	12	9.7	9.9	13	8.9	8.4	e13
31	10	---	14	1.9	---	12	---	11	---	5.8	8.6	---
TOTAL	408.6	385.4	436	600.4	959.2	161.0	459.6	380.0	425	331.6	359.7	364.1
MEAN	13.2	12.8	14.1	19.4	34.3	5.19	15.3	12.3	14.2	10.7	11.6	12.1
MAX	38	19	17	238	287	26	76	24	26	38	28	15
MIN	6.6	5.8	11	1.8	1.7	1.3	9.5	9.1	11	5.8	2.1	9.1
AC-FT	810	764	865	1190	1900	319	912	754	843	658	713	722

e Estimated.

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1990, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.62	15.1	23.8	23.0	14.5	40.9	13.1	12.0	9.35	7.15	6.45	6.99
MAX	16.1	55.9	126	116	25.5	237	39.3	43.7	30.0	10.9	13.4	11.3
(WY)	1986	1981	1981	1981	1981	1983	1983	1983	1983	1985	1990	1985
MIN	2.36	4.67	2.53	7.01	7.42	6.26	4.02	3.77	1.12	1.20	1.79	1.09
(WY)	1985	1987	1982	1989	1982	1990	1989	1982	1982	1982	1982	1981

SUMMARY STATISTICS

WATER YEARS 1981 - 1990

ANNUAL MEAN	12.4
HIGHEST ANNUAL MEAN	33.7 1981
LOWEST ANNUAL MEAN	6.10 1987
HIGHEST DAILY MEAN	1720 Mar 1 1983
LOWEST DAILY MEAN	.27 Sep 25 1981
ANNUAL SEVEN-DAY MINIMUM	.56 Sep 23 1981
MAXIMUM PEAK FLOW	4720 Mar 1 1983
MAXIMUM PEAK STAGE	11.67 Mar 1 1983
ANNUAL RUNOFF (AC-FT)	8990
10 PERCENT EXCEEDS	27
50 PERCENT EXCEEDS	6.1
90 PERCENT EXCEEDS	2.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

MEAN	12.1	14.0	16.5	44.9	93.5	67.9	38.0	23.4	15.5	13.3	12.2	12.4
MAX	16.3	24.3	26.4	161	351	349	190	100	34.3	24.9	20.1	15.1
(WY)	1997	1994	1993	1995	1993	1995	1995	1995	1995	1993	1993	1994
MIN	6.22	5.55	9.35	12.4	15.4	5.19	2.89	3.24	7.33	3.56	6.98	7.08
(WY)	1996	1996	1999	1998	1997	2001	1991	1992	1992	1994	1994	1995

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1991 - 2001

ANNUAL TOTAL	5811.5	5270.6	
ANNUAL MEAN	15.9	14.4	29.9
HIGHEST ANNUAL MEAN			81.8 1995
LOWEST ANNUAL MEAN			12.8 1999
HIGHEST DAILY MEAN	222 Feb 21	287 Feb 12	2090 Feb 24 1998
LOWEST DAILY MEAN	2.2 Mar 19	1.3 Mar 12	.34 Jul 3 1992
ANNUAL SEVEN-DAY MINIMUM	2.8 Mar 13	1.5 Mar 11	.89 Jan 13 1992
MAXIMUM PEAK FLOW		1130 Jan 11	3660 Feb 24 1998
MAXIMUM PEAK STAGE		4.81 Jan 11	6.54 Feb 24 1998
ANNUAL RUNOFF (AC-FT)	11530	10450	21700
10 PERCENT EXCEEDS	17	18	44
50 PERCENT EXCEEDS	13	12	13
90 PERCENT EXCEEDS	8.5	2.6	4.3

11073300 SAN ANTONIO CREEK AT RIVERSIDE DRIVE, NEAR CHINO, CA

LOCATION.—Lat 34°01'07", long 117°43'47", in Santa Ana del Chino Grant, [San Bernardino County](#), Hydrologic Unit 18070203, on right bank, at south end of Riverside Drive Bridge, 0.4 mi upstream from confluence with Chino Creek, 10.2 mi downstream from San Antonio Dam, and 2.4 mi northwest of Chino.

DRAINAGE AREA.—36.6 mi².

PERIOD OF RECORD.—December 1998 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 735 ft above sea level, from topographic map.

REMARKS.—Records poor. Flow mostly regulated by San Antonio Flood-Control Reservoir, capacity, 7,700 acre-ft. Natural streamflow affected by ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. Flow at gage is primarily urban runoff, except when releases are made from San Antonio Dam. Releases of imported water are made to San Antonio Creek by the California Water Project at times in some years, from Rialto Pipeline below San Antonio Dam, at a site 10 mi upstream. During the current year, the California Water Project reported releases of 6,520 acre-ft. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,260 ft³/s, Jan. 11, 2001, gage height, 3.31 ft, from rating curve extended above 576 ft³/s on basis of step-backwater analysis; 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	.22	.22	.00	.26	.18	.39	.23	.00	.05	.00	.08	.18
2	.14	34	.00	.15	.05	.30	.43	.05	.00	.04	.09	.36
3	.12	104	.44	.15	.30	.23	.27	.00	.00	.09	.19	.35
4	.13	103	.14	.45	.00	.03	.30	.09	.00	.02	.10	.23
5	.13	105	.09	.34	.05	.09	.32	.01	.00	21	.00	.29
6	.06	103	.13	.29	.05	30	.17	.02	.00	.44	.01	.33
7	.04	97	.24	.09	.13	1.6	51	.00	.00	.54	.20	.18
8	.06	96	.31	3.5	.49	.15	1.8	.02	.01	.13	.31	.19
9	.05	94	.27	.27	.13	4.5	1.6	.10	.04	.30	.17	.17
10	.10	96	.22	93	14	7.2	.11	.11	.00	.73	.23	.26
11	.10	90	.29	166	.32	.00	.08	.15	.04	.25	.23	.31
12	.03	91	.17	.86	243	.05	.77	.14	.09	.08	.14	.17
13	.07	92	.21	.03	65	.15	2.2	.07	.11	.05	.17	.25
14	.26	89	.17	.00	3.1	.00	.43	.05	.18	.06	.19	.24
15	.32	93	.24	1.9	.34	.04	.00	.06	.10	.03	.34	.15
16	31	97	.08	.57	.06	.03	2.0	.02	.04	.05	.22	.16
17	102	99	.20	.46	.00	.01	.32	.02	.01	.17	.15	.27
18	99	94	.11	.42	.04	.01	.91	.03	.01	.47	.17	.18
19	97	87	.11	.19	7.3	.04	1.7	.01	.14	.27	.21	.11
20	97	98	.07	.00	.76	.09	3.8	.01	.08	.27	.34	.26
21	98	92	.16	.00	.06	.05	25	.00	.15	.16	.19	.24
22	102	40	.23	.10	.04	.04	.08	.04	.10	.11	.33	.16
23	101	.17	.18	.05	13	.04	.00	.02	.08	.09	.37	.28
24	101	.15	.18	22	20	.01	.01	.00	.18	.19	.26	.34
25	103	.27	.14	.33	72	.00	.04	.16	.28	.22	.23	.31
26	101	.28	.29	21	23	.07	.07	1.2	.23	.00	.23	.28
27	76	.19	.38	1.9	44	.06	.15	2.4	.59	.05	.28	.26
28	.44	.01	.27	.33	14	.15	.00	.12	.43	.02	.19	.23
29	34	.02	.23	.30	---	.08	.00	.00	.25	.04	.23	.12
30	1.5	.02	.20	.51	---	.11	.00	.00	.05	.02	.28	.14
31	.20	---	.08	.02	---	.19	---	.02	---	.04	.26	---
TOTAL	1145.97	1895.33	5.83	315.47	521.40	45.71	93.79	4.92	3.24	25.93	6.39	7.00
MEAN	37.0	63.2	.19	10.2	18.6	1.47	3.13	.16	.11	.84	.21	.23
MAX	103	105	.44	166	243	30	51	2.4	.59	21	.37	.36
MIN	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11
AC-FT	2270	3760	12	626	1030	91	186	9.8	6.4	51	13	14

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

MEAN	67.6	31.9	23.6	23.1	25.8	3.85	5.08	.12	.41	.91	.37	.22
MAX	98.1	63.2	46.9	53.9	55.3	6.71	7.15	.19	.81	1.47	.70	.38
(WY)	2000	2001	2000	2000	2000	2000	2000	2000	1999	1999	1999	2000
MIN	37.0	.59	.19	5.07	2.42	1.47	3.13	.006	.11	.43	.20	.040
(WY)	2001	2000	2001	1999	1999	2001	2001	1999	2001	2000	2000	1999

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1999 - 2001

ANNUAL TOTAL	6791.30	4070.98	
ANNUAL MEAN	18.6	11.2	16.9
HIGHEST ANNUAL MEAN			22.6
LOWEST ANNUAL MEAN			11.2
HIGHEST DAILY MEAN	210	Feb 21	243
LOWEST DAILY MEAN	.00	Mar 2	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 15	.00
MAXIMUM PEAK FLOW			1260
MAXIMUM PEAK STAGE		3.31	Jan 11
ANNUAL RUNOFF (AC-FT)	13470	8070	12220
10 PERCENT EXCEEDS	90	47	50
50 PERCENT EXCEEDS	.23	.18	.18
90 PERCENT EXCEEDS	.00	.01	.00

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA

LOCATION.—Lat 34°00'14", long 117°43'34", in Santa Ana del Chino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank, 300 ft downstream from Schaefer Avenue, 0.8 mi downstream from San Antonio Creek, and 1.5 mi southwest of Chino.

DRAINAGE AREA.—48.9 mi².

PERIOD OF RECORD.—October 1969 to current year.

CHEMICAL DATA: Water year 1998.

SEDIMENT DATA: Water year 1998.

REVISED RECORDS.—WDR CA-84-1: 1983(M). WDR CA-95-1: 1992, 1993.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Concrete dikes formed low-water control from October 1975 to Apr. 16, 1991. Elevation of gage is 685 ft above sea level, from topographic map.

REMARKS.—Records fair above 10 ft³/s and poor below. Since 1997, due to construction in area of gage, Schaefer Avenue no longer extends to the Chino Creek crossing. The Schaefer Avenue Bridge, however, remains. Flow mostly regulated by San Antonio Flood-Control Reservoir, capacity, 7,700 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. Releases of imported water are made to the basin by the California Water Project at times in some years, via San Antonio Creek from Rialto Pipeline below San Antonio Dam, at a site approximately 11 mi upstream. During the current year, 6,520 acre-ft was released. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,700 ft³/s, Feb. 27, 1983, gage height, 10.32 ft, from rating curve extended above 560 ft³/s on basis of slope-conveyance study; no flow May 21, June 30, July 1, Oct. 30, Nov. 3, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 9.23 ft, present datum, discharge, 9,200 ft³/s, on basis of contracted-opening measurement at site 6.1 mi downstream.

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	2.3	2.2	2.2	2.2	1.7	4.3	3.3	3.0	2.7	2.4	1.8	1.9
2	2.0	33	2.3	2.4	1.6	3.2	3.5	2.7	2.9	2.4	1.8	1.8
3	2.0	106	3.2	2.6	2.0	2.8	2.9	2.8	3.6	2.7	2.0	2.0
4	2.2	105	2.3	2.4	1.5	2.8	3.0	2.8	3.3	2.5	2.0	1.6
5	2.1	107	2.1	3.3	1.7	2.9	2.9	2.8	2.7	41	1.9	1.4
6	2.2	107	2.1	3.6	1.7	48	2.8	2.7	2.6	3.2	2.1	1.5
7	2.3	101	2.4	2.4	1.8	5.6	106	2.6	2.5	3.3	2.1	1.6
8	2.2	93	2.4	11	2.5	3.1	5.1	2.3	2.6	2.7	2.1	1.4
9	2.2	93	2.3	3.1	1.7	14	5.9	2.4	2.5	2.6	2.0	1.7
10	2.1	93	2.4	210	27	19	2.9	2.4	2.4	3.8	2.0	1.7
11	2.6	94	2.3	495	2.1	2.8	2.7	2.4	2.4	2.8	2.0	1.5
12	1.9	92	2.2	6.8	624	2.8	3.6	2.7	2.5	2.7	2.0	1.4
13	1.7	94	2.1	3.5	196	3.0	5.1	2.7	2.8	2.6	2.1	1.4
14	1.5	94	2.5	2.9	14	2.4	3.0	2.5	2.6	2.6	2.1	1.3
15	1.7	100	2.4	10	3.2	2.7	2.4	2.6	2.4	2.5	2.1	1.4
16	32	99	2.5	6.4	2.4	2.8	5.2	2.6	2.4	2.7	1.7	1.8
17	104	99	2.4	3.9	2.1	2.5	2.8	2.5	2.3	2.8	1.4	2.0
18	93	99	2.7	2.6	2.1	2.9	4.1	2.4	2.4	3.1	1.5	1.4
19	101	98	2.4	1.8	17	2.7	5.5	3.0	2.6	2.6	1.6	1.5
20	100	98	2.6	1.8	4.6	2.7	8.9	3.3	2.3	2.4	1.6	1.4
21	101	100	2.6	1.9	2.1	3.1	62	3.1	2.7	2.3	1.6	1.6
22	103	45	3.2	1.7	2.1	3.4	2.9	2.7	2.7	2.1	1.8	1.1
23	102	2.5	2.5	1.8	27	2.8	2.7	2.6	2.4	2.3	2.0	1.1
24	105	2.3	2.4	45	41	2.8	2.5	2.5	2.3	2.2	1.8	1.2
25	109	2.2	2.4	2.0	181	2.8	2.7	2.8	2.5	2.5	1.8	1.1
26	101	2.2	2.3	40	56	2.9	2.9	5.6	2.4	2.2	1.7	.96
27	95	2.4	2.4	4.8	94	2.8	3.0	9.7	2.9	2.0	1.9	1.1
28	3.0	2.3	2.3	2.0	28	2.8	2.8	3.7	3.2	1.9	1.7	1.2
29	48	2.1	2.3	2.1	---	3.2	2.8	2.6	2.8	1.5	1.7	1.2
30	6.0	2.3	2.4	1.8	---	3.1	2.9	2.5	2.7	1.8	1.8	1.2
31	2.2	---	2.1	1.6	---	3.1	---	2.4	---	1.8	2.0	---
TOTAL	1236.2	1970.5	74.7	882.4	1341.9	165.8	268.8	93.4	79.1	116.0	57.7	43.46
MEAN	39.9	65.7	2.41	28.5	47.9	5.35	8.96	3.01	2.64	3.74	1.86	1.45
MAX	109	107	3.2	495	624	48	106	9.7	3.6	41	2.1	2.0
MIN	1.5	2.1	2.1	1.6	1.5	2.4	2.4	2.3	2.3	1.5	1.4	.96
AC-FT	2450	3910	148	1750	2660	329	533	185	157	230	114	86

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA—Continued

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	16.9	17.1	27.1	34.8	39.2	29.2	10.2	13.4	19.4	19.7	16.1	14.3
MAX	126	113	189	186	193	257	68.6	104	184	176	191	198
(WY)	1979	1976	1976	1976	1980	1978	1974	1997	1976	1974	1974	1997
MIN	.061	.23	.53	.55	.33	.30	.14	.22	.062	.069	.14	.13
(WY)	1978	1978	1970	1972	1972	1972	1977	1973	1977	1977	1976	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	8204.1		6329.96			
ANNUAL MEAN	22.4		17.3		21.4	
HIGHEST ANNUAL MEAN					92.4	
LOWEST ANNUAL MEAN					3.24	
HIGHEST DAILY MEAN	300	Feb 21	624	Feb 12	2060	Mar 1 1978
LOWEST DAILY MEAN	1.1	Aug 18	.96	Sep 26	.00	May 21 1977
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 17	1.1	Sep 22	.02	Oct 28 1977
MAXIMUM PEAK FLOW			2890	Jan 11	12700	Feb 27 1983
MAXIMUM PEAK STAGE			6.78	Jan 11	10.32	Feb 27 1983
ANNUAL RUNOFF (AC-FT)	16270		12560		15490	
10 PERCENT EXCEEDS	94		92		80	
50 PERCENT EXCEEDS	2.5		2.5		1.2	
90 PERCENT EXCEEDS	1.4		1.7		.33	

11073493 WEST BRANCH CUCAMONGA CHANNEL ABOVE ELY PERCOLATION BASINS, AT ONTARIO, CA

LOCATION.—Lat 34°02'15", long 117°37'09", in SE 1/4 SW 1/4 sec.33, T.1 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 700 ft upstream from northwest corner of westernmost of Ely Percolation Basins, in Ontario.

DRAINAGE AREA.—6.01 mi².

PERIOD OF RECORD.—October 1996 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 850 ft above sea level, from topographic map.

REMARKS.—Records poor. No regulation or diversion upstream from station. Flow at gage is primarily urban runoff. Irrigation return flow and various industrial releases represent most of the base flow at this site. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,660 ft³/s, Jan. 11, 2001, gage height, 4.50 ft, from floodmarks, from rating curve extended above 415 ft³/s, on basis of step-backwater computations; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft³/s, or maximum, from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	unknown	1,660	4.50	Feb. 12	1545	456	2.68

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	2.1	1.8	1.7	1.8	.13	2.3	2.0	.30	.29	.08	.24
2	.54	1.5	1.9	1.8	2.0	.01	2.2	1.7	.31	.31	.10	.18
3	1.2	2.3	1.9	2.0	2.2	.00	2.0	1.5	.33	.29	.11	.19
4	1.2	2.0	1.9	2.2	2.0	.00	2.4	1.7	.42	.35	.13	.17
5	1.2	1.6	2.1	2.5	1.4	.66	2.3	1.6	.37	1.1	.13	.20
6	1.3	1.9	2.1	2.7	.76	17	2.0	1.8	.33	.09	.13	.22
7	1.2	1.8	1.9	2.8	.88	1.7	57	1.7	.41	.14	.18	.21
8	1.2	1.9	2.2	4.7	.73	1.0	1.9	1.7	.32	.15	.34	.20
9	1.3	1.9	1.9	3.6	.75	2.9	3.9	1.9	.25	.35	.19	.18
10	1.9	1.4	2.0	e37	8.9	11	1.5	2.1	.23	.44	.14	.15
11	2.3	1.5	2.0	e150	1.0	.92	1.4	2.2	.24	.24	.15	.13
12	2.0	1.7	2.0	e1.0	190	.42	1.4	2.2	.31	.10	.15	.17
13	1.8	1.6	1.5	.06	49	.34	1.4	1.7	.12	.12	.12	.16
14	1.6	1.7	1.5	.07	.95	.57	1.6	2.1	.06	.16	.23	.14
15	1.8	1.7	1.6	.44	.00	.03	1.5	2.3	.08	.18	.17	.12
16	1.9	1.7	1.5	1.6	.00	.04	1.6	2.3	.05	.19	.17	.13
17	1.8	1.7	1.5	1.8	.00	.04	1.4	2.4	.02	.17	.17	.12
18	2.0	1.6	1.9	1.8	.00	.07	1.4	1.9	.04	.18	.14	.14
19	1.9	1.6	1.9	2.0	3.5	.08	1.5	1.8	.04	.18	.15	.14
20	2.1	1.9	2.2	1.9	.86	.09	2.9	1.7	.17	.18	.14	.11
21	2.2	1.7	2.2	2.1	.41	.09	30	2.0	.19	.19	.19	.48
22	1.8	.94	2.0	1.5	1.4	.93	1.4	3.1	.21	.19	.14	1.5
23	.99	.00	2.0	2.3	11	1.7	1.5	3.3	.25	.18	.18	1.7
24	1.0	.00	2.1	15	13	1.8	1.7	3.3	.21	.20	.16	1.4
25	1.3	.00	2.0	1.5	52	1.9	1.8	1.1	.24	.20	.20	1.1
26	1.8	.00	1.8	16	32	2.0	1.8	.21	.19	.20	.19	.85
27	7.9	.00	1.8	.38	36	1.9	1.6	.20	.26	.17	.18	1.8
28	2.4	1.5	1.6	.12	12	2.0	1.6	.13	.19	.12	.20	.79
29	14	2.2	1.6	.57	---	1.9	1.5	.13	.23	.12	.34	.09
30	9.6	1.8	2.0	1.7	---	2.0	1.9	.18	.26	.14	.23	.13
31	2.1	---	1.9	1.5	---	2.2	---	.23	---	.09	.25	---
TOTAL	75.45	43.24	58.3	264.34	424.54	55.42	138.4	52.18	6.63	7.01	5.38	13.14
MEAN	2.43	1.44	1.88	8.53	15.2	1.79	4.61	1.68	.22	.23	.17	.44
MAX	14	2.3	2.2	150	190	17	57	3.3	.42	1.1	.34	1.8
MIN	.12	.00	1.5	.06	.00	.00	1.4	.13	.02	.09	.08	.09
AC-FT	150	86	116	524	842	110	275	103	13	14	11	26

e Estimated.

11073493 WEST BRANCH CUCAMONGA CHANNEL ABOVE ELY PERCOLATION BASINS, AT ONTARIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.85	3.33	4.01	8.85	15.3	3.95	4.32	2.99	1.17	.80	.69	1.24
MAX	3.02	8.22	10.0	20.3	38.6	8.82	5.29	8.92	2.71	2.45	1.77	2.19
(WY)	1997	1997	1997	1997	1998	1998	1999	1998	1998	1998	1998	1997
MIN	1.00	.093	.61	1.94	1.59	1.33	1.56	.62	.22	.16	.11	.16
(WY)	1999	2000	2000	2000	1997	1997	1997	1997	2001	1997	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1997 - 2001	
ANNUAL TOTAL	1241.55		1144.03			
ANNUAL MEAN	3.39		3.13		3.97	
HIGHEST ANNUAL MEAN					7.57	
LOWEST ANNUAL MEAN					1.94	
HIGHEST DAILY MEAN	135	Feb 21	190	Feb 12	234	Feb 23 1998
LOWEST DAILY MEAN	.00	Aug 30	.00	Nov 23	.00	Jun 11 1997
ANNUAL SEVEN-DAY MINIMUM	.01	Aug 30	.06	Jun 13	.01	Jul 15 1997
MAXIMUM PEAK FLOW			1660	Jan 11	1660	Jan 11 2001
MAXIMUM PEAK STAGE			4.50	Jan 11	4.50	Jan 11 2001
ANNUAL RUNOFF (AC-FT)	2460		2270		2880	
10 PERCENT EXCEEDS	2.5		2.3		4.1	
50 PERCENT EXCEEDS	1.7		1.4		1.6	
90 PERCENT EXCEEDS	.05		.12		.08	

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.—Lat 33°58'58", long 117°35'55", in SW 1/4 NE 1/4 sec.22, T.2 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank, 300 ft upstream from Merrill Avenue Bridge, and 4.6 mi west of Mira Loma.

DRAINAGE AREA.—75.8 mi².

PERIOD OF RECORD.—January 1968 to July 1977, January 1979 to current year.

CHEMICAL DATA: Water years 1999–2000.

SPECIFIC CONDUCTANCE: Water years 1999–2000.

WATER TEMPERATURE: Water years 1999–2000.

SEDIMENT DATA: Water years 1999–2000.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 660 ft above sea level, from topographic map. Prior to July 1977 at site 100 ft downstream at different datum.

REMARKS.—Records poor. Channel is a trapezoidal concrete floodway; records for low and medium flows prior to July 31, 1977, are not equivalent (channel concrete lined since July 31, 1977). Inland Empire Utilities Agency Tertiary Plant No. 1 began discharging effluent 3.3 mi upstream from station on May 8, 1985. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,100 ft³/s, Feb. 27, 1983, gage height, 7.85 ft, from floodmark, on basis of slope-conveyance study of peak flow; prior to operation of Plant No. 1, no flow for most of some years; minimum daily, since 1985, 2.5 ft³/s, June 6, 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	35	32	40	49	42	94	47	49	45	e44	45	41
2	33	34	41	43	45	80	51	47	44	e45	48	39
3	30	36	42	26	52	60	53	60	50	e46	39	41
4	30	36	46	44	43	56	44	59	49	e42	47	48
5	30	36	42	41	48	57	38	59	41	e45	40	42
6	28	40	39	45	49	216	38	52	42	e44	41	40
7	33	39	37	46	49	65	280	53	e44	44	44	35
8	34	37	37	49	49	53	50	47	e40	45	47	40
9	33	41	34	47	52	111	78	53	e48	42	44	40
10	39	45	41	358	82	124	48	49	e45	45	42	43
11	40	42	40	1090	45	35	42	45	e44	42	49	37
12	35	36	37	51	1180	37	46	45	e42	37	47	39
13	33	38	30	39	391	36	45	46	46	41	46	40
14	36	39	36	38	51	39	54	44	45	43	51	39
15	38	40	36	64	43	46	60	41	39	52	44	43
16	37	45	41	42	43	47	56	37	44	48	46	48
17	36	46	40	35	42	48	58	43	44	58	46	44
18	35	47	47	34	44	50	58	40	41	47	48	40
19	34	49	39	34	67	51	64	45	45	58	48	41
20	37	48	44	39	57	49	70	44	46	50	36	39
21	36	45	44	40	43	49	253	46	42	52	26	37
22	38	43	47	43	50	46	56	41	42	50	36	41
23	37	43	48	41	122	43	49	39	43	42	42	42
24	36	35	52	105	147	38	55	44	43	46	44	46
25	34	37	48	40	373	40	54	39	45	41	46	43
26	35	39	44	104	279	42	44	44	46	43	43	39
27	57	41	47	48	354	38	41	38	42	50	36	40
28	31	39	47	43	161	39	40	47	43	51	38	39
29	134	40	45	46	---	50	41	45	e43	52	37	43
30	51	40	42	44	---	51	53	45	e47	47	37	43
31	33	---	56	43	---	54	---	41	---	50	38	---
TOTAL	1208	1208	1309	2811	4003	1844	1966	1427	1320	1442	1321	1232
MEAN	39.0	40.3	42.2	90.7	143	59.5	65.5	46.0	44.0	46.5	42.6	41.1
MAX	134	49	56	1090	1180	216	280	60	50	58	51	48
MIN	28	32	30	26	42	35	38	37	39	37	26	35
AC-FT	2400	2400	2600	5580	7940	3660	3900	2830	2620	2860	2620	2440

e Estimated.

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1977, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.021	1.15	1.55	18.2	4.65	1.91	1.35	.065	.001	.000	.000	.11
MAX	.19	6.07	7.91	149	30.7	7.94	13.1	.54	.007	.000	.000	1.03
(WY)	1972	1971	1972	1969	1969	1969	1969	1977	1969	1968	1968	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1969	1969	1970	1975	1972	1972	1968	1968	1968	1968	1968	1968

SUMMARY STATISTICS

WATER YEARS 1968 - 1977

ANNUAL TOTAL	
ANNUAL MEAN	2.73
HIGHEST ANNUAL MEAN	16.8 1969
LOWEST ANNUAL MEAN	.16 1976
HIGHEST DAILY MEAN	2600 Jan 25 1969
LOWEST DAILY MEAN	.00 Feb 1 1968
ANNUAL SEVEN-DAY MINIMUM	.00 Feb 1 1968
MAXIMUM PEAK FLOW	9100 Jan 25 1969
MAXIMUM PEAK STAGE	7.08 Jan 25 1969
ANNUAL RUNOFF (AC-FT)	1980
10 PERCENT EXCEEDS	.10
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1984, BY WATER YEAR (WY)

MEAN	3.49	11.3	7.69	34.1	65.0	46.3	12.1	3.43	.48	.37	1.47	1.08
MAX	11.1	27.9	24.7	149	216	205	63.4	19.8	2.30	1.22	6.99	3.45
(WY)	1984	1983	1984	1983	1980	1983	1983	1983	1983	1983	1983	1983
MIN	.091	.002	.006	1.67	1.29	2.44	.056	.063	.008	.019	.009	.011
(WY)	1981	1980	1980	1984	1984	1984	1981	1979	1979	1981	1979	1979

SUMMARY STATISTICS

WATER YEARS 1979 - 1984

ANNUAL TOTAL	
ANNUAL MEAN	17.5
HIGHEST ANNUAL MEAN	53.4 1983
LOWEST ANNUAL MEAN	1.51 1981
HIGHEST DAILY MEAN	2530 Mar 1 1983
LOWEST DAILY MEAN	.00 Feb 6 1979
ANNUAL SEVEN-DAY MINIMUM	.00 Feb 6 1979
MAXIMUM PEAK FLOW	16100 Feb 27 1983
MAXIMUM PEAK STAGE	7.85 Feb 27 1983
ANNUAL RUNOFF (AC-FT)	12700
10 PERCENT EXCEEDS	10
50 PERCENT EXCEEDS	.13
90 PERCENT EXCEEDS	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	35.4	37.6	43.5	78.8	96.5	63.1	40.2	32.6	32.8	31.2	31.3	35.6
MAX	52.9	65.7	83.0	265	304	198	65.5	63.0	57.1	46.5	51.8	52.0
(WY)	1988	1997	1993	1993	1998	1995	2001	1998	1992	2001	1992	1986
MIN	20.4	23.4	21.0	26.1	34.9	25.3	20.5	18.5	18.1	19.3	18.5	16.4
(WY)	1987	1989	1987	1989	1989	1988	1987	1988	1988	1987	1987	1988

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1986 - 2001

ANNUAL TOTAL	16776	21091	
ANNUAL MEAN	45.8	57.8	46.3
HIGHEST ANNUAL MEAN			71.4 1993
LOWEST ANNUAL MEAN			26.6 1987
HIGHEST DAILY MEAN	475 Feb 21	1180 Feb 12	2490 Feb 20 1996
LOWEST DAILY MEAN	16 Mar 15	26 Jan 3	2.5 Jun 6 1987
ANNUAL SEVEN-DAY MINIMUM	31 Oct 2	31 Oct 2	12 Aug 25 1988
MAXIMUM PEAK FLOW		6200 Jan 11	10400 Jan 7 1993
MAXIMUM PEAK STAGE		4.50 Jan 11	5.40 Jan 7 1993
ANNUAL RUNOFF (AC-FT)	33280	41830	33530
10 PERCENT EXCEEDS	47	57	54
50 PERCENT EXCEEDS	38	44	33
90 PERCENT EXCEEDS	33	36	20

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA

LOCATION.—Lat 33°53'00", long 117°38'40", in La Sierra Grant, [Riverside County](#), Hydrologic Unit 18070203, on left bank of outlet channel, 2,500 ft downstream from axis of Prado Dam, and 4.5 mi west of Corona.

DRAINAGE AREA.—1,490 mi², excludes 768 mi² above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1930 to November 1939 (irrigation seasons only), March 1940 to current year. Published as "at Santa Fe Railroad Bridge, near Prado" May 1930 to November 1931, as "at Atchison, Topeka, and Santa Fe Railroad Bridge, near Prado" May 1932 to November 1939, and as "below Prado Dam, near Prado" March 1940 to September 1950.

GAGE.—Water-stage recorder and concrete control since August 1944. Datum of gage is approximately 449 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Mar. 18, 1940, at about same site at various datums.

REMARKS.—Records good. Flow regulated since 1940 by Prado Flood-Control Reservoir, capacity, 196,200 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversion for irrigation, discharges of treated effluent, and return flow from irrigated areas. Releases of imported water are made to the basin by the California Water Project at times in some years, via San Antonio Creek from Rialto Pipeline below San Antonio Dam. During the current year, the California Water Project released 6,520 acre-ft to the basin. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,440 ft³/s, Feb. 21, 1980, gage height, 6.88 ft; maximum gage height, 7.29 ft, Jan. 19, 1993; minimum daily, 2.4 ft³/s, July 29 to Aug. 3, Sept. 20, 1978 (result of gate closure).

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938, reached a discharge of 100,000 ft³/s, on basis of slope-area measurement of peak flow at site 2.5 mi downstream.

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	127	275	259	245	386	533	416	319	202	194	179	194
2	128	240	255	239	414	524	410	347	206	195	179	194
3	130	327	255	217	410	520	397	356	208	198	172	194
4	131	319	251	228	405	520	376	341	211	190	186	199
5	131	331	257	235	415	515	361	312	213	216	181	194
6	133	355	249	251	425	515	348	268	209	217	179	195
7	134	343	248	250	421	517	344	250	211	206	177	182
8	136	327	251	230	417	520	366	253	206	200	177	184
9	280	330	252	286	413	435	362	233	211	192	176	197
10	339	343	263	253	407	367	365	232	209	188	176	203
11	334	357	264	1220	404	369	362	216	205	188	179	200
12	438	365	268	1070	399	450	355	207	203	183	179	200
13	476	378	296	333	4780	325	350	213	208	184	180	202
14	344	372	260	330	1270	339	347	212	210	186	182	198
15	247	359	206	327	493	372	342	205	203	186	173	197
16	252	349	235	367	428	383	294	208	201	186	175	202
17	304	341	249	385	422	385	266	210	201	187	179	207
18	317	336	257	382	419	387	266	211	195	189	180	201
19	321	343	245	379	416	390	294	210	196	193	179	205
20	326	348	251	374	416	396	300	211	193	184	179	204
21	327	342	250	372	416	419	273	216	192	185	167	207
22	325	331	250	371	416	446	235	212	192	181	178	207
23	323	256	254	368	416	451	256	209	194	175	187	208
24	320	246	258	368	416	448	260	209	191	180	186	208
25	308	250	247	368	1060	447	257	205	195	178	186	201
26	320	250	236	368	2040	444	262	205	189	176	184	193
27	312	253	241	370	955	452	263	211	187	179	183	194
28	317	e202	240	369	1490	455	265	212	186	175	182	191
29	294	e232	240	368	---	450	264	213	187	175	186	195
30	397	294	244	362	---	443	299	209	192	182	188	200
31	443	---	249	368	---	431	---	203	---	184	188	---
TOTAL	8714	9394	7780	11653	20769	13648	9555	7318	6006	5832	5582	5956
MEAN	281	313	251	376	742	440	318	236	200	188	180	199
MAX	476	378	296	1220	4780	533	416	356	213	217	188	208
MIN	127	202	206	217	386	325	235	203	186	175	167	182
AC-FT	17280	18630	15430	23110	41200	27070	18950	14520	11910	11570	11070	11810

e Estimated.

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, 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	109	137	203	319	411	393	247	178	146	120	97.3	93.3
MAX	344	322	709	3543	2733	2556	1101	915	736	446	352	372
(WY)	1984	1997	1967	1993	1998	1980	1980	1998	1983	1998	1983	1997
MIN	22.4	33.5	39.5	49.2	49.8	54.3	43.3	35.2	29.0	17.7	14.8	16.2
(WY)	1962	1963	1963	1963	1961	1961	1961	1961	1961	1960	1960	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	107546		112207			
ANNUAL MEAN	294		307		203	
HIGHEST ANNUAL MEAN					789	
LOWEST ANNUAL MEAN					36.4	
HIGHEST DAILY MEAN	3780	Feb 22	4780	Feb 13	6440	Feb 23 1980
LOWEST DAILY MEAN	123	Sep 29	127	Oct 1	2.4	Jul 29 1978
ANNUAL SEVEN-DAY MINIMUM	128	Sep 29	131	Oct 1	3.0	Sep 24 1973
MAXIMUM PEAK FLOW			5800	Feb 13	7440	Feb 21 1980
MAXIMUM PEAK STAGE			6.67	Feb 13	7.29	Jan 19 1993
ANNUAL RUNOFF (AC-FT)	213300		222600		147400	
10 PERCENT EXCEEDS	405		420		354	
50 PERCENT EXCEEDS	250		250		122	
90 PERCENT EXCEEDS	180		182		38	

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1967 to current year.

CHEMICAL DATA: Water years 1967 to current year.

SPECIFIC CONDUCTANCE: Water years 1970 to current year.

WATER TEMPERATURE: Water years 1970 to current year.

BIOLOGICAL DATA: Water years 1975–81.

SEDIMENT DATA: Water years 1974–94, 1999 to current year.

CHLORIDE: October 1970 to September 1971.

PERIOD OF DAILY RECORD.—Water years 1970 to current year.

SPECIFIC CONDUCTANCE: October 1969 to current year.

WATER TEMPERATURE: October 1969 to current year.

CHLORIDE: October 1970 to September 1971.

SUSPENDED-SEDIMENT DISCHARGE: October 1973 to June 1982.

INSTRUMENTATION.—Water-quality monitor recording specific conductance and water temperature since October 1969.

REMARKS.—Specific conductance records rated fair except for Oct. 12 to Jan. 3, and Aug. 17 to Sept. 30, which are poor. Temperature records rated fair except for Dec. 15 to Feb. 2, which are poor, and Apr. 19 to Sept. 30, which are good. Specific conductance and water temperature values are affected by releases from Prado Dam. Interruptions in record at times due to malfunction of recording or sensing equipment.

Sediment data and a portion of chemical data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Apr. 30, 1971; minimum recorded, 220 microsiemens, Feb. 20, 1978.

WATER TEMPERATURE: Maximum recorded, 36.0°C, Sept. 4, 1972, Sept. 8, 1984; minimum recorded, 2.5°C, Dec. 30, 1969.

SEDIMENT CONCENTRATION: Maximum daily mean, 2,870 mg/L, Mar. 5, 1978; minimum daily mean, 3 mg/L, Apr. 2, 1980, and several days during 1982.

SEDIMENT LOAD: Maximum daily, 18,900 tons, Mar. 5, 1978; minimum daily, 0.58 ton, Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,090 microsiemens, Dec. 7, Apr. 6; minimum recorded, 284 microsiemens, Feb. 14.

WATER TEMPERATURE: Maximum recorded, 28.5°C, several days June–August; minimum recorded, 10.0°C, Jan. 17, 19, 20.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE OF OF (MM HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, CENT SOLVED (MG/L) (00300)	OXYGEN, PH DIS- SOLVED WHOLE WATER 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 NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	
OCT										
06...	1130	133	--	--	--	--	995	--	21.5	--
12...	1255	495	--	--	--	--	940	--	20.0	--
19...	1000	312	750	7.8	85.7	8.0	835	20.5	19.0	50
NOV										
03...	1330	336	--	--	--	--	814	--	17.0	--
20...	1215	349	--	--	--	--	841	--	13.5	--
DEC										
01...	1145	251	--	--	--	--	965	--	14.5	--
13...	0930	304	753	10.5	98.9	8.0	968	11.0	12.0	48
15...	1040	196	--	--	--	--	987	--	14.0	--
JAN										
05...	1145	228	--	--	--	--	976	--	12.0	--
18...	1050	380	758	10.8	98.6	7.7	680	11.5	11.0	42
19...	1350	378	--	--	--	--	701	--	10.5	--
FEB										
02...	1150	412	--	--	--	--	800	--	11.5	--
21...	1200	416	756	9.9	96.0	7.9	716	17.5	13.5	46
21...	1245	416	--	--	--	--	729	--	13.5	--
MAR										
02...	1245	525	--	--	--	--	467	--	12.5	--
16...	1210	380	--	--	--	--	756	--	16.0	--
21...	1630	433	749	8.2	88.4	7.9	895	20.0	18.0	46
APR										
06...	1130	349	--	--	--	--	1040	--	18.5	--
19...	0930	307	751	8.2	90.0	8.0	1040	14.0	19.0	64
19...	1215	304	--	--	--	--	1010	--	19.5	--
MAY										
04...	1200	343	--	--	--	--	1020	--	19.5	--
16...	1300	200	748	8.0	94.5	8.1	1030	25.5	22.5	75
18...	1140	207	--	--	--	--	993	--	21.5	--
JUN										
01...	1115	202	--	--	--	--	988	--	23.0	--
13...	1420	211	745	7.4	91.2	8.2	1010	26.0	24.5	62
15...	1130	204	--	--	--	--	980	--	22.5	--
JUL										
09...	1115	192	--	--	--	--	985	--	24.0	--
12...	1000	188	751	8.3	94.8	8.1	975	23.0	21.0	52
19...	1030	194	--	--	--	--	980	--	22.0	--

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

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

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. 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)
OCT										
06...	--	--	--	--	--	612	--	--	--	--
12...	--	--	--	--	--	563	--	--	--	--
19...	86.8	.4	18.1	87.6	.7	501	487	.083	.53	1.2
NOV										
03...	--	--	--	--	--	492	--	--	--	--
20...	--	--	--	--	--	494	--	--	--	--
DEC										
01...	--	--	--	--	--	606	--	--	--	--
13...	105	.5	23.5	98.6	.8	603	584	<.041	.59	.86
15...	--	--	--	--	--	616	--	--	--	--
JAN										
05...	--	--	--	--	--	602	--	--	--	--
18...	65.2	.3	14.3	69.8	.6	415	393	.162	.79	1.1
19...	--	--	--	--	--	438	--	--	--	--
FEB										
02...	--	--	--	--	--	498	--	--	--	--
21...	75.9	.4	14.3	80.6	.6	453	429	.643	1.5	1.6
21...	--	--	--	--	--	449	--	--	--	--
MAR										
02...	--	--	--	--	--	286	--	--	--	--
16...	--	--	--	--	--	468	--	--	--	--
21...	102	.5	12.5	99.3	.8	572	544	.397	1.2	1.4
APR										
06...	--	--	--	--	--	648	--	--	--	--
19...	114	.5	18.3	109	.8	620	605	.428	1.3	1.6
19...	--	--	--	--	--	682	--	--	--	--
MAY										
04...	--	--	--	--	--	656	--	--	--	--
16...	109	.5	22.9	108	.9	660	607	.082	.63	1.3
18...	--	--	--	--	--	616	--	--	--	--
JUN										
01...	--	--	--	--	--	614	--	--	--	--
13...	115	.4	24.0	107	.8	614	593	<.040	.71	.97
15...	--	--	--	--	--	628	--	--	--	--
JUL										
09...	--	--	--	--	--	614	--	--	--	--
12...	114	.5	22.2	103	.8	610	583	<.040	.63	1.3
19...	--	--	--	--	--	600	--	--	--	--
AUG										
03...	--	--	--	--	--	644	--	--	--	--
14...	111	.4	21.9	103	.8	574	567	.086	.61	1.4
17...	--	--	--	--	--	596	--	--	--	--
SEP										
07...	--	--	--	--	--	609	--	--	--	--
12...	109	.5	22.4	99.5	.8	601	567	.148	.71	1.6
18...	--	--	--	--	--	613	--	--	--	--

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

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA—Continued

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

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
19...	4.53	.052	.527	.499	.949	4.1	6.0	10	72.1	e11
NOV										
03...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
DEC										
01...	--	--	--	--	--	--	--	--	--	--
13...	6.45	.097	1.01	.781	1.07	3.8	1.6	20	67.3	e14
15...	--	--	--	--	--	--	--	--	--	--
JAN										
05...	--	--	--	--	--	--	--	--	--	--
18...	3.93	.111	.672	.666	.801	6.5	1.1	20	58.4	<20
19...	--	--	--	--	--	--	--	--	--	--
FEB										
02...	--	--	--	--	--	--	--	--	--	--
21...	4.36	.149	.759	.755	.803	6.1	.9	20	45.0	e13
21...	--	--	--	--	--	--	--	--	--	--
MAR										
02...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
21...	4.22	.147	.876	.859	.940	6.2	.4	30	119	<20
APR										
06...	--	--	--	--	--	--	--	--	--	--
19...	6.07	.179	.856	.760	.964	4.9	2.5	10	150	e13
19...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	--	--	--	--	--	--	--	--	--	--
16...	5.41	.081	.848	.853	1.18	4.4	5.0	10	113	e19
18...	--	--	--	--	--	--	--	--	--	--
JUN										
01...	--	--	--	--	--	--	--	--	--	--
13...	5.72	.113	.818	.759	1.00	4.5	3.3	M	62.3	e16
15...	--	--	--	--	--	--	--	--	--	--
JUL										
09...	--	--	--	--	--	--	--	--	--	--
12...	4.69	.074	.764	.754	1.01	4.7	3.4	10	73.4	e18
19...	--	--	--	--	--	--	--	--	--	--
AUG										
03...	--	--	--	--	--	--	--	--	--	--
14...	4.86	.093	.790	.821	1.01	3.8	3.3	<10	39.7	<20
17...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
12...	5.09	.074	.851	.790	1.08	4.1	5.9	M	38.3	<20
18...	--	--	--	--	--	--	--	--	--	--

e Estimated.

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

M Presence of material verified, not quantified.

11074000 SANTA ANA RIVER BELOW PRADO DAM, 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, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT						
19...N	1000	312	19.0	81	213	179
DEC						
13...N	0930	304	12.0	88	55	45
JAN						
18...N	1050	380	11.0	92	24	25
FEB						
21...N	1200	416	13.5	96	14	16
MAR						
21...N	1630	433	18.0	79	7	8.2
APR						
19...N	0930	307	19.0	88	36	30
MAY						
16...N	1300	200	22.5	94	128	69
JUN						
13...N	1420	211	24.5	94	79	45
JUL						
12...N	1000	188	21.0	84	79	40
AUG						
14...N	1000	183	23.0	79	86	42
SEP						
12...N	1440	202	24.0	83	109	59

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

11074000 SANTA ANA RIVER BELOW PRADO DAM, 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	1030	995	939	886	1000	963	1020	995	871	815	463	378
2	1010	980	928	872	994	975	1030	1000	854	799	486	426
3	999	956	916	753	985	964	1060	1010	881	827	515	481
4	1000	958	758	693	997	948	1030	991	943	856	571	500
5	1040	984	742	710	972	948	1020	986	884	847	650	567
6	1020	979	769	720	980	961	1000	956	912	870	709	639
7	989	962	795	727	1090	941	998	981	945	908	741	682
8	965	925	806	744	979	924	999	950	1010	937	781	738
9	952	908	839	794	996	915	967	882	1040	913	788	729
10	962	914	852	797	994	917	994	543	1010	975	837	746
11	955	914	855	824	1010	930	554	301	1000	963	836	802
12	967	933	860	816	1010	983	493	360	983	646	809	772
13	980	949	867	837	1020	986	578	479	646	286	805	775
14	1060	977	891	854	1010	984	584	513	405	284	801	773
15	1000	947	878	847	1010	987	665	545	436	355	797	771
16	971	935	868	836	993	968	735	597	473	404	802	763
17	935	808	860	846	1000	959	771	560	516	458	813	778
18	828	802	860	818	992	959	791	659	594	478	843	795
19	820	772	840	790	1000	958	736	660	628	550	874	822
20	814	739	841	786	982	949	707	649	732	628	905	858
21	795	691	854	785	983	943	702	655	775	685	959	898
22	691	656	900	756	980	933	746	648	758	677	970	929
23	660	651	942	881	979	949	739	630	781	702	1000	961
24	668	651	952	885	1030	933	820	682	871	781	1030	985
25	681	649	934	901	1020	996	866	743	855	742	1020	995
26	684	654	947	907	1030	997	832	752	753	504	1030	1010
27	740	619	1000	947	1010	982	942	815	549	469	1040	1020
28	869	740	---	---	1030	999	872	798	519	357	1050	1020
29	917	823	---	---	1030	1010	831	757	---	---	1050	1010
30	823	499	1000	970	1050	1010	896	759	---	---	1060	1030
31	900	794	---	---	1020	997	923	833	---	---	1060	1030
MONTH	1060	499	---	---	1090	915	1060	301	1040	284	1060	378
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1060	1040	995	955	1050	932	928	880	989	946	969	933
2	1080	997	989	960	950	914	932	876	986	965	990	957
3	1060	1040	1040	959	958	876	966	907	1020	962	996	964
4	1060	1040	1050	1020	945	863	984	935	974	893	993	972
5	1060	1040	1060	1020	927	899	971	720	946	892	997	985
6	1090	1040	1020	984	909	881	965	791	918	889	1020	985
7	1070	652	999	978	893	865	955	891	929	900	1000	954
8	662	566	1060	984	874	858	974	914	925	886	988	950
9	740	559	1050	1030	891	836	1000	942	913	880	1010	953
10	862	716	1070	1020	954	877	987	930	904	869	986	962
11	882	812	1040	1010	962	908	987	944	938	859	981	954
12	909	843	1040	997	987	944	1000	965	977	916	983	946
13	977	905	1030	990	993	952	992	942	957	909	973	943
14	1020	970	1030	1010	1010	935	991	930	962	921	999	950
15	1030	992	1020	1000	999	959	988	922	978	941	1040	967
16	1030	994	1010	992	985	932	975	936	1000	927	1020	973
17	1030	994	1010	991	972	892	967	931	1010	949	997	969
18	1030	992	1020	1000	969	925	984	950	991	941	998	918
19	1070	990	1030	987	1010	901	997	941	958	918	968	898
20	1060	1010	1020	986	1000	959	964	878	939	911	920	884
21	1030	673	1000	979	977	929	931	855	953	917	907	873
22	774	675	1000	971	961	934	903	850	917	884	926	868
23	859	690	1020	975	947	917	885	840	898	874	903	868
24	959	844	1030	981	950	916	886	820	886	867	900	870
25	1010	931	1010	972	946	914	890	859	886	855	931	876
26	1010	924	1010	976	948	921	879	840	889	850	941	901
27	1000	924	1010	969	936	917	880	832	937	852	940	898
28	1000	957	997	961	934	906	939	839	948	924	965	908
29	1000	962	1000	963	932	905	950	905	942	925	984	937
30	1000	955	1010	981	922	880	981	892	949	926	995	944
31	---	---	1060	993	---	---	982	942	952	933	---	---
MONTH	1090	559	1070	955	1050	836	1000	720	1020	850	1040	868

11074000 SANTA ANA RIVER BELOW PRADO DAM, 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	21.5	20.5	19.0	16.0	16.0	14.0	15.5	12.0	12.0	11.5	12.5	12.0
2	22.0	21.0	19.5	16.5	17.0	14.5	14.0	11.5	12.5	11.5	13.0	12.0
3	22.0	21.0	18.0	16.0	17.0	14.0	14.0	11.5	12.5	12.0	12.5	12.0
4	21.5	21.0	18.5	15.0	17.0	13.5	15.0	11.0	13.5	12.5	13.0	12.0
5	22.0	21.0	18.0	15.0	17.5	15.0	14.0	11.5	13.0	12.5	13.5	12.5
6	21.5	21.0	18.0	17.0	16.5	15.0	15.5	12.5	14.0	13.0	14.0	13.5
7	21.0	21.0	17.5	15.5	17.5	15.0	15.0	12.0	14.5	14.0	14.5	14.0
8	21.5	20.0	17.0	14.0	17.0	16.0	14.5	13.0	14.5	14.0	15.0	14.5
9	21.0	20.0	17.0	14.5	17.5	15.5	15.0	13.0	14.5	13.5	15.0	14.5
10	21.0	20.5	16.5	14.5	17.5	16.0	14.5	12.0	13.5	13.0	15.5	14.5
11	20.5	20.0	16.5	14.5	17.0	15.0	13.5	10.5	13.0	12.5	15.5	15.0
12	20.0	19.0	16.5	13.5	16.0	14.5	10.5	10.5	13.0	12.0	16.0	15.0
13	19.5	18.5	16.0	13.0	15.0	12.5	11.0	10.5	12.5	11.0	15.5	15.0
14	21.5	18.0	15.5	12.5	16.0	13.0	11.0	10.5	11.0	10.5	15.5	15.0
15	21.5	18.0	15.5	13.0	16.0	13.5	11.0	10.5	11.0	10.5	16.0	15.0
16	21.5	18.0	15.5	12.5	16.0	13.0	11.5	10.5	11.5	11.0	16.0	15.5
17	21.5	18.0	15.0	13.0	16.0	12.5	11.5	10.0	12.0	11.0	16.5	16.0
18	21.0	19.0	16.0	12.5	15.0	13.0	11.0	10.5	12.0	11.0	17.0	16.5
19	21.5	19.0	16.5	12.0	15.0	12.0	10.5	10.0	12.0	11.5	17.5	17.0
20	21.5	18.5	16.5	12.5	14.5	11.5	11.0	10.0	13.0	12.0	18.0	17.5
21	21.0	19.5	16.5	14.0	15.0	11.5	10.5	10.5	13.5	12.5	18.5	17.5
22	20.0	18.5	16.0	13.5	15.0	11.5	11.0	10.5	13.5	12.5	19.0	18.5
23	19.5	17.0	17.0	13.5	14.5	11.5	11.0	10.5	13.5	12.5	19.0	19.0
24	20.5	18.0	17.0	13.5	15.0	11.5	11.5	10.5	13.5	13.5	19.5	19.0
25	20.5	18.0	17.5	13.5	14.0	11.5	11.5	11.0	13.5	13.0	19.5	19.0
26	20.0	18.0	17.5	14.0	14.0	11.0	11.5	11.0	13.0	13.0	19.5	19.0
27	19.0	17.5	17.0	14.0	14.5	11.0	12.0	11.5	13.5	13.0	19.5	19.0
28	19.0	17.5	---	---	14.5	11.0	12.0	11.5	13.5	12.0	20.0	19.5
29	19.0	18.0	---	---	15.0	11.0	12.0	11.5	---	---	20.5	20.0
30	19.0	16.5	17.0	14.5	15.0	11.0	13.0	11.5	---	---	21.0	20.0
31	18.0	16.5	---	---	15.0	11.5	12.5	11.5	---	---	21.0	20.5
MONTH	22.0	16.5	---	---	17.5	11.0	15.5	10.0	14.5	10.5	21.0	12.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.0	20.5	22.0	21.5	25.5	22.0	28.5	23.5	27.0	22.0	27.0	22.0
2	20.5	20.5	22.0	21.0	24.0	21.5	28.5	23.5	27.0	22.5	27.5	23.0
3	20.5	20.0	21.0	19.5	23.5	20.5	28.5	24.0	27.0	22.0	27.0	23.5
4	20.0	18.5	21.5	19.5	25.0	20.0	28.5	24.5	27.0	22.0	27.5	23.0
5	18.5	18.0	23.5	19.5	25.0	20.0	27.5	24.0	27.5	22.0	26.5	23.0
6	18.5	18.0	25.0	19.5	26.0	21.0	27.5	24.5	27.5	22.5	25.5	23.0
7	18.5	16.0	25.5	20.0	27.0	22.0	28.5	24.0	28.5	23.5	25.5	22.5
8	16.0	15.0	26.5	21.0	27.5	22.0	28.0	23.0	28.0	23.5	25.0	22.0
9	16.0	15.5	27.0	21.5	27.5	22.5	28.0	23.0	27.5	23.0	24.5	21.5
10	15.5	15.0	26.5	21.0	27.0	22.5	27.0	22.0	27.5	22.5	24.5	21.5
11	16.0	15.5	26.0	21.5	27.0	22.0	26.5	21.5	28.0	22.5	25.0	21.5
12	16.5	15.5	24.0	21.0	25.0	22.0	26.5	21.0	27.5	23.0	25.5	21.5
13	17.5	16.5	24.0	20.5	26.0	21.0	27.5	21.5	28.0	23.0	25.0	20.5
14	18.5	17.5	24.0	19.0	27.0	21.0	27.0	22.0	28.5	23.0	25.5	21.0
15	19.5	18.5	24.0	19.5	27.5	21.5	26.5	22.5	28.0	23.0	25.5	21.5
16	20.0	19.0	25.0	20.5	27.5	22.0	26.5	22.0	28.0	23.0	25.0	21.0
17	20.0	19.5	25.5	21.0	27.5	22.0	26.5	21.0	28.0	23.0	24.5	21.0
18	20.5	19.5	25.0	21.0	27.5	22.0	26.5	21.5	28.5	23.5	24.5	21.0
19	20.0	19.0	24.0	21.0	28.5	22.5	27.0	21.5	28.0	23.5	24.5	21.0
20	19.5	18.5	25.0	20.5	28.0	22.0	26.5	21.5	27.5	23.5	24.5	20.5
21	19.0	16.0	25.0	21.5	27.5	22.5	27.0	21.5	26.5	22.5	25.0	20.5
22	16.5	15.5	27.0	21.5	27.5	22.5	27.0	21.5	26.0	22.5	25.0	21.0
23	18.0	16.5	28.0	22.0	27.5	22.5	26.5	21.5	26.0	21.5	25.0	21.0
24	20.0	18.0	26.5	22.5	27.0	21.5	26.0	21.5	27.0	22.0	26.0	21.0
25	20.5	19.5	27.0	22.5	27.0	22.0	26.5	22.0	27.5	22.5	25.5	21.5
26	21.5	20.5	24.5	22.0	27.0	21.5	27.0	21.5	27.5	23.0	25.5	21.0
27	22.0	21.0	23.0	21.0	27.0	21.5	27.5	22.5	27.0	22.5	25.0	21.5
28	21.5	20.5	22.5	20.5	27.5	21.0	28.0	22.5	26.5	22.5	24.5	21.0
29	21.0	20.5	25.5	20.0	28.0	22.0	27.5	22.5	25.5	22.0	25.5	20.5
30	21.5	20.5	26.5	21.0	28.0	23.0	26.5	22.5	26.0	22.0	26.0	21.5
31	---	---	27.0	21.5	---	---	27.0	22.0	26.0	21.5	---	---
MONTH	22.0	15.0	28.0	19.0	28.5	20.0	28.5	21.0	28.5	21.5	27.5	20.5

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION, BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.—Lat 33°51'23", long 117°47'48", in NW 1/4 NE 1/4 sec.2, T.4 S., R.9 W., in Canon de Santa Ana, Orange County, Hydrologic Unit 18070203, 1,000 ft upstream from diversion point, 0.1 mi south of La Palma Avenue, 0.3 mi west of Imperial Highway, and 7.9 mi east of Anaheim.

DRAINAGE AREA.—1,545 mi², excludes 768 mi² above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1998 to September 2001 (discontinued).

GAGE.—Water-stage recorder and collapsible rubber dam control on main channel of river; water-stage recorder and acoustic-velocity meter on each of two box culverts; water-stage recorder and Parshall flume control on diversion (see station 11075620). Elevation of gage is 280 ft above sea level, from topographic map. River and diversion gages at different datums.

REMARKS.—Daily values for this station represent total flow in river immediately below Imperial Highway and are derived by combining flows in river at rubber dam, 40 ft downstream from diversion point, with flows in diversion and gaged culverts. Culverts reroute a portion of the total flow around rubber dam and back into the channel for downstream recharge. Diversion flows (see station 11075620) are routed to various off-river recharge basins. See schematic diagram of Santa Ana River Basin.

COOPERATION.—Records were provided by Orange County Water District, in connection with the National Water-Quality Assessment (NAWQA) Program. Data not reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 4,300 ft³/s, Feb. 13, 2001; minimum daily discharge, 106 ft³/s, Oct. 08, 2000.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 4,300 ft³/s, Feb. 13; minimum daily discharge, 106 ft³/s, Oct. 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	127	319	253	243	385	602	388	303	208	175	188	176
2	128	228	246	241	414	564	388	313	210	184	188	180
3	130	277	246	230	409	549	392	327	216	197	181	178
4	131	300	243	223	405	544	379	323	219	190	194	187
5	131	296	246	239	408	529	370	308	219	219	190	183
6	133	318	241	247	422	558	361	276	220	227	187	181
7	116	330	241	253	417	543	401	252	217	214	185	176
8	106	298	243	259	415	517	375	254	212	209	186	166
9	206	302	245	258	407	482	402	249	210	201	170	172
10	296	314	250	326	439	407	382	245	213	197	167	188
11	302	335	255	1030	404	388	375	194	207	197	168	191
12	359	339	251	1730	1160	470	369	185	206	193	173	191
13	449	354	283	392	4300	343	365	183	206	192	177	192
14	365	350	270	368	1710	341	360	190	212	194	174	189
15	233	351	209	358	584	374	353	234	208	194	170	184
16	231	337	226	372	454	387	319	232	198	195	166	187
17	260	325	245	391	439	386	282	232	195	195	168	191
18	288	322	251	388	428	384	279	233	194	197	172	191
19	293	325	245	388	426	382	291	229	189	201	172	188
20	296	333	248	384	423	380	306	232	188	193	174	188
21	301	329	249	381	414	389	328	234	183	193	163	191
22	302	325	244	380	409	410	250	233	184	190	162	193
23	300	257	249	378	450	416	258	228	182	184	176	194
24	296	244	253	430	438	409	277	223	182	189	177	194
25	293	241	248	381	968	404	267	220	185	187	175	194
26	284	239	236	460	2270	400	266	215	181	184	175	187
27	351	242	238	382	828	401	264	226	176	188	177	181
28	294	182	241	380	1780	405	265	233	168	184	171	177
29	278	228	237	379	---	398	262	237	170	184	172	178
30	346	292	242	376	---	392	276	231	170	190	173	182
31	405	---	247	373	---	391	---	227	---	193	174	---
TOTAL	8030	8932	7621	12620	22006	13545	9850	7501	5928	6030	5445	5550
MEAN	259	298	246	407	786	437	328	242	198	195	176	185
MAX	449	354	283	1730	4300	602	402	327	220	227	194	194
MIN	106	182	209	223	385	341	250	183	168	175	162	166
AC-FT	15930	17720	15120	25030	43650	26870	19540	14880	11760	11960	10800	11010

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1999 to April 2001 (discontinued).
 CHEMICAL DATA: Water years 1999 to April 2001 (discontinued).
 SPECIFIC CONDUCTANCE: July 1999 to September 1999.
 WATER TEMPERATURE: July 1999 to September 1999.
 SEDIMENT DATA: Water years 1999 to April 2001 (discontinued).

PERIOD OF DAILY RECORD.—July 1999 to September 1999.
 SPECIFIC CONDUCTANCE: July 1999 to September 1999.
 WATER TEMPERATURE: July 1999 to September 1999.

REMARKS.—Water-quality data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD DAILY OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,070 microsiemens, Sept. 8, 1999; minimum recorded, 746 microsiemens, Sept. 2, 1999.
 WATER TEMPERATURE: Maximum recorded, 26.5°C, several days in August 1999; minimum recorded, 20.0°C, Sept. 20, 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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, (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 NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)
OCT										
19...	1430	296	751	9.0	105	8.3	853	27.0	22.0	55
DEC										
13...	1330	290	759	11.5	114	8.4	998	17.0	14.5	76
JAN										
18...	1610	385	761	11.3	106	8.1	726	17.0	12.5	53
FEB										
21...	1700	412	757	10.0	100	8.2	753	18.5	15.0	58
APR										
19...	1430	285	756	12.7	147	8.8	1070	21.5	22.0	87

DATE	HARD-NESS TOTAL (MG/L AS CAC03) (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 (MG/L AS CAC03 HCO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT (MG/L AS CO3) (00452)
OCT										
19...	230	64.2	16.9	8.59	2.31	80.4	42.1	174	207	3
DEC										
13...	283	80.1	20.2	10.5	2.31	89.5	39.6	208	243	5
JAN										
18...	205	58.7	14.2	9.47	1.79	58.9	37.1	152	185	--
FEB										
21...	217	61.5	15.3	11.1	1.87	63.2	37.3	159	194	--
APR										
19...	299	84.2	21.5	11.2	2.54	101	41.2	211	224	17

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. 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)
OCT										
19...	87.8	.4	18.3	95.5	.7	532	499	e.037	.49	.92
DEC										
13...	105	.5	21.6	112	.8	616	596	<.041	.59	.87
JAN										
18...	68.5	.4	14.4	84.2	.6	444	419	.125	.69	1.0
FEB										
21...	79.3	.4	14.4	94.0	.7	482	456	.328	1.0	1.2
APR										
19...	115	.4	16.9	130	.9	680	635	<.041	.78	.94

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

11075610 SANTA ANA RIVER ABOVE SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

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

DATE	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 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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT									
19...	4.69	.046	.520	.487	.831	3.9	4.7	M	25.0
DEC									
13...	6.69	.054	.975	.924	1.06	4.1	1.7	M	35.9
JAN									
18...	3.81	.093	.622	.641	.800	6.4	1.2	20	43.8
FEB									
21...	4.33	.153	.728	.716	.763	5.8	1.3	10	29.8
APR									
19...	5.68	.180	.810	.724	.832	4.9	1.6	10	31.5

CROSS SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (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)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JAN								
18...*	1611	761	11.2	105	7.8	720	12.5	162
18...*	1612	761	11.3	106	7.8	710	12.5	126
18...*	1613	761	11.3	106	7.9	710	12.5	90.0
18...*	1614	761	11.3	106	7.9	720	12.5	54.0
18...*	1615	761	11.0	105	7.9	760	13.0	18.0

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- PENDEDED (MG/L) (80154)	SEDI- DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT						
19...N	1430	296	22.0	67	112	90
DEC						
13...N	1330	290	14.5	92	50	39
JAN						
18...N	1610	385	12.5	57	40	42
FEB						
21...N	1700	412	15.0	81	19	21
APR						
19...N	1430	285	22.0	79	12	9.2

M Presence of material verified, not quantified.

* Instantaneous discharge at the time of cross-sectional measurements: 385 ft³/s.

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.—Lat 33°51'23", long 117°48'00", in NW 1/4 NW 1/4 sec.2, T.2 S., R.9 W., in Canon De Santa Ana, Orange County, Hydrologic Unit 18070203, on diversion channel, 100 ft downstream from diversion point, 0.1 mi south of La Palma Avenue, 0.6 mi west of Imperial Highway, and 7.8 mi east of Anaheim.

DRAINAGE AREA—1,493.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1974 to December 1985, October 1998 to September 2001 (discontinued).

GAGE.—Water-stage recorder and Parshall flume control. Elevation of gage is 262 ft above sea level, from topographic map.

REMARKS.—Water is diverted from Santa Ana River, at diversion point 100 ft upstream, for recharge in off-river spreading basins.

COOPERATION.—Records were provided by Orange County Water District, in connection with National Water-Quality Assessment (NAWQA) Program. Data not reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 456 ft³/s, Feb. 25, 2000; no flow for some periods in most years.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 345 ft³/s, Mar. 08; no flow for 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	.00	204	161	177	290	268	214	200	69	149	.00	116
2	.00	132	156	175	316	296	213	208	37	65	.00	115
3	.00	177	156	164	312	307	217	217	34	.01	.00	112
4	.00	199	153	158	309	312	253	209	31	.00	.00	102
5	.03	195	155	173	312	306	281	195	29	.00	.00	92
6	.03	215	151	181	325	312	267	165	28	.00	.00	94
7	.03	226	150	186	321	332	302	145	85	.00	.00	92
8	18	197	152	192	319	345	283	145	106	.00	38	85
9	74	201	154	191	313	344	299	141	104	.00	86	88
10	152	211	159	249	331	298	263	139	106	.00	111	93
11	170	229	163	136	308	288	240	63	106	.05	99	103
12	254	233	160	202	126	310	235	38	104	.05	100	101
13	344	246	188	321	56	254	231	36	105	.08	111	102
14	271	244	176	305	84	257	227	48	106	.06	121	109
15	153	245	123	296	258	285	219	129	110	.06	122	105
16	141	231	137	288	260	296	199	126	108	.06	136	103
17	163	225	154	290	266	295	180	128	110	.08	138	106
18	189	220	160	287	258	293	177	128	114	.07	136	107
19	195	223	158	287	275	290	187	125	109	.00	132	107
20	197	236	161	284	317	289	200	126	109	.00	134	110
21	201	237	162	282	332	292	202	127	124	.00	124	111
22	203	233	157	281	326	298	149	126	155	.00	115	113
23	201	165	162	279	343	303	156	121	154	.00	117	116
24	198	152	165	308	344	296	175	116	154	.00	116	124
25	195	149	160	280	205	292	166	114	157	.00	115	129
26	187	149	150	312	60	288	166	110	153	.00	114	125
27	242	151	152	281	263	289	164	118	149	.00	116	120
28	206	116	154	283	91	294	165	127	141	.00	111	118
29	195	150	159	282	---	244	162	129	143	.00	112	118
30	242	197	176	279	---	217	176	124	143	.00	113	121
31	285	---	181	277	---	215	---	120	---	.00	114	---
TOTAL	4676.09	5988	4905	7686	7320	9005	6368	4043	3183	214.52	2731.00	3237
MEAN	151	200	158	248	261	290	212	130	106	6.92	88.1	108
MAX	344	246	188	321	344	345	302	217	157	149	138	129
MIN	.00	116	123	136	56	215	149	36	28	.00	.00	85
AC-FT	9280	11880	9730	15250	14520	17860	12630	8020	6310	426	5420	6420

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to February 2001 (discontinued).

CHEMICAL DATA: Water years 1975–79, 1981–85.

pH: November 1996 to March 1998.

SPECIFIC CONDUCTANCE: July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to February 2001 (discontinued).

WATER TEMPERATURE: November 1996 to March 1998, November 1998 to February 2001 (discontinued).

PERIOD OF DAILY RECORD.—July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to February 2001 (discontinued).

pH: November 1996 to March 1998.

SPECIFIC CONDUCTANCE: July 1974 to July 1982, December 1983 to June 1985, November 1996 to March 1998, and November 1998 to February 2001 (discontinued).

WATER TEMPERATURE: November 1996 to March 1998, November 1998 to February 2001 (discontinued).

INSTRUMENTATION.—Water-quality monitor present during water years 1974–82, 1984–85, 1997–98, and 1999–2001.

REMARKS.—Records rated good except for the periods November 14–22 which are rated fair and November 23 to December 13 which are rated poor. Interruptions in record were due to no flow to recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—

pH: Maximum recorded, 8.9 standard units, Feb. 22, 23, Mar. 26, Oct. 27–Nov. 1, 1997; minimum recorded, 6.9 standard units, Jul. 25, 26, 29, Aug. 4, 5, 1997.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 microsiemens, Sept. 21, 1978; minimum recorded, 143 microsiemens, Mar. 10, 1980.

WATER TEMPERATURE: Maximum recorded, 28.5°C, May 30, Aug. 4–6, Sept. 5, 1997; minimum recorded, 7.5°C, Feb. 14, 2001.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,070 microsiemens, Jan. 4, Feb. 10; minimum recorded, 168 microsiemens, Jan. 11.

WATER TEMPERATURE: Maximum recorded, 22.0°C, Oct. 20; minimum recorded, 7.5°C, Feb. 14.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	1040	952	914	905	1050	1010	913	880
2	---	---	954	860	916	910	1050	1020	896	860
3	---	---	860	825	937	916	1050	1020	896	868
4	---	---	849	817	956	937	1070	554	962	888
5	---	---	911	849	967	956	1040	1020	937	890
6	---	---	932	904	986	966	1040	1000	923	900
7	---	---	904	795	1000	986	1000	979	972	918
8	---	---	830	807	1010	1000	990	935	1030	970
9	---	---	830	827	1010	1000	983	910	1060	1000
10	---	---	827	786	1010	1000	968	665	1070	851
11	---	---	794	761	1010	1000	682	168	1060	981
12	---	---	795	770	1020	1000	560	195	994	228
13	---	---	787	768	1040	997	614	560	616	213
14	---	---	786	773	1040	996	638	600	551	214
15	---	---	789	778	1050	1020	651	610	558	507
16	---	---	786	774	1050	1010	721	651	599	547
17	---	---	784	775	1040	987	698	608	612	567
18	---	---	783	771	1040	993	787	693	626	592
19	---	---	788	772	1050	1000	816	720	681	626
20	857	842	792	784	1050	995	767	693	778	662
21	877	835	798	787	1020	994	730	686	---	---
22	866	840	808	796	1020	996	752	686	---	---
23	861	842	893	803	1020	992	777	672	---	---
24	873	843	903	884	1020	994	826	526	---	---
25	879	867	908	897	1020	981	851	768	---	---
26	881	837	909	898	1050	1010	890	570	---	---
27	863	548	912	904	1050	1010	958	788	---	---
28	973	708	934	910	1040	1010	942	829	---	---
29	1010	929	955	880	1060	1020	882	796	---	---
30	998	523	912	886	1060	1020	921	803	---	---
31	957	754	---	---	1060	1020	954	867	---	---
MONTH	---	---	1040	761	1060	905	1070	168	---	---

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA—Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY	
1	---	---	19.0	15.5	15.5	14.0	15.5	12.0	15.0	10.0
2	---	---	19.5	16.0	17.0	14.5	15.0	11.5	15.0	10.0
3	---	---	18.0	15.0	16.5	14.0	15.0	11.5	16.0	10.5
4	---	---	17.5	15.0	16.0	13.5	15.5	11.5	17.0	11.5
5	---	---	17.0	15.0	18.0	14.5	13.0	12.0	17.0	11.5
6	---	---	18.0	15.5	16.0	14.5	16.0	12.5	16.0	11.5
7	---	---	16.5	13.5	17.5	14.5	15.5	13.0	15.5	12.0
8	---	---	16.5	13.5	16.5	15.5	14.0	13.0	16.0	11.5
9	---	---	16.0	14.0	18.0	15.5	16.5	12.5	15.5	11.5
10	---	---	16.0	13.5	17.5	15.5	14.0	12.5	14.5	12.0
11	---	---	16.0	13.5	17.0	15.0	12.5	9.5	14.0	11.0
12	---	---	15.5	12.5	17.0	14.0	11.5	9.0	12.0	10.0
13	---	---	15.0	12.5	15.0	12.5	14.0	10.0	11.0	8.5
14	---	---	14.5	12.5	15.0	12.5	14.0	10.0	12.0	7.5
15	---	---	15.0	12.5	16.5	13.5	12.5	10.0	13.5	10.0
16	---	---	14.5	12.0	16.0	13.0	13.5	9.5	15.5	10.0
17	---	---	14.5	12.0	16.5	12.5	13.0	9.0	13.0	10.5
18	---	---	15.0	12.0	14.5	11.0	13.5	9.5	13.5	11.0
19	---	---	15.0	12.0	15.0	11.0	12.5	9.5	13.5	11.0
20	22.0	19.5	15.0	12.5	15.0	11.5	14.0	9.5	16.0	12.0
21	21.5	19.5	16.0	13.5	15.0	11.5	13.0	9.5	---	---
22	21.5	17.5	15.5	13.5	15.0	12.0	14.0	10.5	---	---
23	19.5	17.5	16.5	12.5	14.5	12.0	13.5	9.5	---	---
24	21.0	18.0	17.0	13.5	14.5	12.0	12.5	10.0	---	---
25	21.0	18.0	17.0	13.5	14.0	10.5	14.0	10.0	---	---
26	19.5	17.5	17.0	13.5	15.0	10.5	11.0	10.0	---	---
27	19.0	16.5	17.0	14.0	14.5	11.0	14.5	10.5	---	---
28	19.5	16.0	18.0	14.0	14.5	11.0	14.0	10.5	---	---
29	19.0	17.0	17.5	13.5	15.0	11.0	14.0	10.0	---	---
30	18.5	15.5	16.5	13.5	15.0	11.5	14.0	10.0	---	---
31	18.5	15.5	---	---	15.0	11.5	14.5	9.5	---	---
MONTH	---	---	19.5	12.0	18.0	10.5	16.5	9.0	---	---

11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.—Lat 33°42'46", long 117°38'39", in NE 1/4 NE 1/4 sec.30, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank, at Santiago Canyon Road Bridge, 0.9 mi northwest of Modjeska, 1.0 mi downstream from Harding Creek, and 1.5 mi downstream from Modjeska Reservoir.

DRAINAGE AREA.—13.0 mi².

PERIOD OF RECORD.—October 1961 to current year.

REVISED RECORDS.—WDR CA-73-1: 1969. WDR CA-86-1: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,210 ft above sea level, from topographic map. Prior to Sept. 10, 1969, at site 0.6 mi upstream at datum approximately 48 ft higher. Sept. 10, 1969, to Feb. 6, 1985, at site 0.6 mi upstream at datum approximately 44 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are poor. Slight regulation by Modjeska Reservoir on Harding Creek. Santiago County Water District diverts water at Modjeska Reservoir on Harding Creek. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,520 ft³/s, Feb. 25, 1969, gage height, 6.18 ft, site and datum then in use, from rating curve extended above 840 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 12.03 ft, Feb. 23, 1998; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, from rating curve extended above 444 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 25	2315	75	5.09

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	18	e.84	.26	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	13	e.81	.24	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	9.7	e.80	.20	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	7.6	e.79	.17	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	6.1	.80	.13	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	7.2	.76	.08	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	6.4	2.4	.02	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	5.7	2.4	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	5.6	2.7	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	8.7	2.1	.00	.00	.00	.00	.00
11	.00	.00	.00	1.1	.00	9.4	1.8	.00	.00	.00	.00	.00
12	.00	.00	.00	.57	7.2	8.4	1.6	.00	.00	.00	.00	.00
13	.00	.00	.00	.31	29	7.5	1.5	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	12	6.4	1.5	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	7.5	5.7	1.1	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	5.4	5.4	.98	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	3.9	4.9	.82	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	2.8	4.2	.72	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	2.5	3.6	.70	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	3.2	3.2	.66	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	3.1	2.8	1.1	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	2.9	2.5	.83	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	3.1	2.4	1.0	.00	.00	.00	.00	.00
24	.00	.00	.00	.08	3.1	2.2	.67	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	15	1.7	.55	.00	.00	.00	.00	.00
26	.00	.00	.00	.43	47	1.5	.45	.00	.00	.00	.00	.00
27	.00	.00	.00	.25	29	1.2	.39	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	26	e1.0	.37	.00	.00	.00	.00	.00
29	.04	.00	.00	.00	---	e.95	.33	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	e.90	.29	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	e.86	---	.00	---	.00	.00	---
TOTAL	0.04	0.00	0.00	2.74	202.70	164.71	31.76	1.10	0.00	0.00	0.00	0.00
MEAN	.001	.000	.000	.088	7.24	5.31	1.06	.035	.000	.000	.000	.000
MAX	.04	.00	.00	1.1	47	18	2.7	.26	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.86	.29	.00	.00	.00	.00	.00
AC-FT	.08	.00	.00	5.4	402	327	63	2.2	.00	.00	.00	.00

e Estimated.

SANTA ANA RIVER BASIN

11075800 SANTIAGO CREEK AT MODJESKA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.18	1.69	5.34	16.5	38.2	22.7	6.42	3.48	1.46	.39	.13	.068
MAX	5.00	33.5	97.4	179	404	137	33.7	27.0	8.76	2.84	1.68	1.07
(WY)	1984	1966	1967	1993	1998	1978	1983	1983	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.050	.13	.017	.000	.000	.000	.000	.000
(WY)	1962	1962	1963	1963	1965	1999	1992	1992	1987	1963	1962	1962

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	325.55		403.05			
ANNUAL MEAN	.89		1.10		7.88	
HIGHEST ANNUAL MEAN					47.2	
LOWEST ANNUAL MEAN					.21	
HIGHEST DAILY MEAN	33	Feb 21	47	Feb 26	3590	Feb 24 1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1961
MAXIMUM PEAK FLOW			75	Feb 25	6520	Feb 25 1969
MAXIMUM PEAK STAGE			5.09	Feb 25	12.03	Feb 23 1998
ANNUAL RUNOFF (AC-FT)	646		799		5710	
10 PERCENT EXCEEDS	1.5		2.8		10	
50 PERCENT EXCEEDS	.00		.00		.20	
90 PERCENT EXCEEDS	.00		.00		.00	

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.—Lat 33°46'13", long 117°53'01", in SW 1/4 NW 1/4 sec.1, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on left bank, 50 ft upstream from Bristol Street Bridge at Santa Ana, and 1,625 ft upstream from mouth at Santa Ana River.

DRAINAGE AREA.—98.6 mi².

PERIOD OF RECORD.—October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1315-B.

REVISED RECORDS.—WSP 1635: 1934, 1935(M), 1936. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 120 ft above sea level, from topographic map. Prior to Sept. 8, 1969, at site 0.1 mi upstream at different datum; from Sept. 9, 1969, to July 21, 1976, at site 50 ft downstream at different datum; from July 22, 1976, to Sept. 30, 1993, at site 77 ft upstream at datum 5.25 ft lower.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated since December 1931 by Santiago Reservoir, capacity, 25,000 acre-ft; since January 1963 by Villa Park Flood-Control Reservoir, capacity, 15,500 acre-ft, and affected by intervening gravel pits. Diversions upstream from station by Irvine Company and Serrano and Carpenter Irrigation Districts. See schematic diagram of [Santa Ana River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,600 ft³/s, Feb. 25, 1969, gage height, 9.10 ft, site and datum then in use; maximum gage height, 11.57 ft, Jan. 4, 1995; no flow for many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	8.1	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.76
9	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	1.2
10	.00	.00	.00	e45	e.15	.94	.00	.00	.00	.00	.00	2.4
11	.00	.00	.00	e157	e.00	.00	.00	.00	.00	.00	.00	.90
12	.00	.00	.00	e30	e230	.00	.00	.00	.00	.00	.00	.79
13	.00	.00	.00	e2.0	e85	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	e.00	e1.0	.00	.00	.00	.00	.00	.75	.00
15	.00	.00	.00	.00	e.02	.00	.00	.00	.00	.00	.32	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.00
23	.00	.00	.00	.00	4.3	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	e12	3.9	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	e.25	78	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	e50	34	.00	.00	.00	.00	.00	.00	.00
27	e38	.00	.00	e1.5	17	.00	.00	.00	.00	.00	.00	.00
28	e3.0	.00	.00	e.00	1.6	.00	.00	.00	.00	.00	.00	.00
29	e.50	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	e.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	41.50	0.00	0.00	297.75	454.97	9.41	11.00	0.00	0.00	0.00	3.19	6.05
MEAN	1.34	.000	.000	9.60	16.2	.30	.37	.000	.000	.000	.10	.20
MAX	38	.00	.00	157	230	8.1	11	.00	.00	.00	1.8	2.4
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	82	.00	.00	591	902	19	22	.00	.00	.00	6.3	12

e Estimated.

11077500 SANTIAGO CREEK AT SANTA ANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1963, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.079	.37	2.20	5.64	9.28	29.7	7.56	.32	.002	.000	.000	.053
MAX	2.61	3.03	9.71	62.3	94.6	329	159	3.85	.050	.000	.000	1.20
(WY)	1935	1945	1937	1952	1937	1938	1941	1941	1941	1931	1931	1939
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1931	1931	1936	1952	1931	1932	1931	1931	1931	1931	1931

SUMMARY STATISTICS

WATER YEARS 1931 - 1963

ANNUAL MEAN	4.60
HIGHEST ANNUAL MEAN	40.0 1941
LOWEST ANNUAL MEAN	.067 1961
HIGHEST DAILY MEAN	2320 Mar 3 1938
LOWEST DAILY MEAN	.00 Oct 1 1930
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1930
MAXIMUM PEAK FLOW	4400 Mar 2 1938
MAXIMUM PEAK STAGE	9.85 Jan 16 1952
ANNUAL RUNOFF (AC-FT)	3330
10 PERCENT EXCEEDS	.40
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

MEAN	.21	1.74	2.05	11.6	40.6	22.6	.65	.15	.010	.016	.056	.10
MAX	4.29	7.80	10.4	259	616	253	4.52	3.87	.24	.58	1.60	1.59
(WY)	1984	1983	1998	1993	1969	1978	1965	1998	1993	1984	1977	1976
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1969	1964	1972	1964	1966	1966	1964	1964	1964	1964	1964

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1964 - 2001

ANNUAL TOTAL	206.80	823.87	
ANNUAL MEAN	.57	2.26	6.46
HIGHEST ANNUAL MEAN			71.7 1969
LOWEST ANNUAL MEAN			.18 1987
HIGHEST DAILY MEAN	53 Feb 21	230 Feb 12	4270 Feb 25 1969
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1963
MAXIMUM PEAK FLOW		595 Feb 12	6600 Feb 25 1969
MAXIMUM PEAK STAGE		8.40 Feb 12	11.57 Jan 4 1995
ANNUAL RUNOFF (AC-FT)	410	1630	4680
10 PERCENT EXCEEDS	.00	.02	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.—Lat 33°45'04", long 117°54'27", in NW 1/4 SE 1/4 sec.10, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on right bank, 850 ft upstream from Fifth Street Bridge in Santa Ana, and 1.6 mi downstream from Santiago Creek.

DRAINAGE AREA.—1,700 mi², excludes 768 mi² above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1923 to September 1989, October 1990 to current year. Discharge measurements only, October 1989 to September 1990.

REVISED RECORDS.—WSP 1635: 1940(M), 1944. WDR CA-74-1: Drainage area. WDR CA-79-1: 1978(M).

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 70 ft above sea level, from topographic map. October 1990 to Feb. 12, 1991, at site 900 ft downstream at different datum. Feb. 13, 1991, to Apr. 4, 1994, at datum 3 ft lower. See WDR CA-90-1 for complete history of location and datum changes.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions, importation by Metropolitan Water District, municipal use, and return flow from irrigation. Since 1940, flow partially regulated by Prado Flood-Control Reservoir, capacity, 196,200 acre-ft. Natural flow affected by three small flood-control reservoirs, combined capacity, 31,900 acre-ft; Big Bear Lake (station 11049000); Seven Oaks Flood-Control Reservoir, capacity, 145,600 acre-ft; and Santiago Reservoir, capacity, 25,000 acre-ft. Discharge up to 100 ft³/s can be diverted from Carbon Creek to Coyote Creek 1.5 mi upstream from mouth of Carbon Creek. Gage out of operation from Apr. 5 through Nov. 14, 1994, due to channel work (lining). See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,300 ft³/s, Mar. 3, 1938, gage height, 10.20 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow for many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.70	.00	.00	.00	.00	571	.00	.00	.00	.00	.00	.00
2	e.45	.00	5.9	.00	.00	371	.00	.10	.00	.00	.00	.00
3	e.20	.00	9.6	.00	.00	303	.00	.00	.00	.00	.00	.00
4	e.15	.00	9.5	.00	.00	213	.00	.00	.00	.00	.00	.00
5	e.10	.00	6.4	.00	.00	176	1.7	.00	.00	.64	.00	.00
6	e.30	.00	.00	.00	.00	613	.00	.00	.00	.00	.00	.00
7	e.50	.00	2.6	.00	.00	280	58	.00	.00	.00	.00	.00
8	e.75	.00	4.4	9.0	.00	86	8.1	.00	.00	.00	.00	.00
9	e.75	.00	.07	4.7	.00	49	.65	.00	.00	.00	.00	.00
10	e2.8	.00	.00	218	18	13	e.00	.00	.00	.00	.45	.00
11	e1.5	.00	.00	3400	8.5	1.5	e.00	.00	.00	.00	.00	.00
12	.00	.00	.00	3310	4430	.00	e.00	.00	.00	.00	.00	.00
13	2.6	.00	.00	40	7740	.00	.00	.00	.00	.00	.00	.00
14	.76	.00	.00	11	3870	.00	.00	.00	.00	.00	.00	2.5
15	.33	.00	.00	3.8	753	.00	.00	.00	.00	.00	.00	.14
16	.17	.00	.00	.00	279	.00	.00	.00	.00	.00	.00	.38
17	.44	.00	.00	.00	125	.00	.00	.00	.67	.00	.05	1.1
18	.00	.00	.00	.00	102	.00	.00	.00	.00	.00	.00	.39
19	.73	.00	.58	9.5	101	.00	.00	.00	.00	.00	.00	.19
20	.00	.00	.00	1.8	76	.00	.00	.00	.00	.00	.00	.00
21	1.4	e.00	.83	.00	5.5	.00	35	.00	.00	.00	.29	.00
22	.46	e.00	.91	.00	.05	.00	12	.00	.00	.00	.00	.00
23	.10	.00	.00	.00	56	.00	2.1	.00	.00	.00	.00	.00
24	e.20	.00	e.00	95	55	.00	.00	.00	.00	.00	.00	.00
25	e.55	.00	e.00	8.5	2260	.00	.00	.00	.00	.00	.00	.00
26	8.3	.00	e.00	485	4890	.00	.00	.65	.00	.00	.00	.00
27	435	.00	e.00	73	1500	.00	.00	.05	.00	.00	.00	.00
28	14	.00	e.00	3.3	3180	.00	.00	.06	.00	.00	.00	.00
29	22	1.4	.00	.00	---	.00	.00	.31	.00	.00	.00	.00
30	20	1.5	.00	.00	---	.00	.00	.12	.00	.00	.00	.00
31	3.6	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	518.84	2.90	40.79	7672.60	29449.05	2676.50	117.55	1.29	0.67	0.64	0.79	4.70
MEAN	16.7	.097	1.32	248	1052	86.3	3.92	.042	.022	.021	.025	.16
MAX	435	1.5	9.6	3400	7740	613	58	.65	.67	.64	.45	2.5
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	1030	5.8	81	15220	58410	5310	233	2.6	1.3	1.3	1.6	9.3

e Estimated.

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1939, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.50	.46	5.97	5.50	106	137	29.0	.63	.000	.000	.000	.097
MAX	7.94	2.43	29.3	34.2	1028	2029	358	4.65	.000	.000	.000	1.65
(WY)	1935	1924	1939	1934	1927	1938	1926	1938	1923	1923	1923	1939
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1924	1925	1926	1926	1925	1929	1930	1925	1923	1923	1923	1923

SUMMARY STATISTICS

WATER YEARS 1923 - 1939

ANNUAL MEAN	23.7
HIGHEST ANNUAL MEAN	178 1938
LOWEST ANNUAL MEAN	.000 1931
HIGHEST DAILY MEAN	20300 Mar 3 1938
LOWEST DAILY MEAN	.00 Mar 16 1923
ANNUAL SEVEN-DAY MINIMUM	.00 Mar 21 1923
MAXIMUM PEAK FLOW	46300 Mar 3 1938
MAXIMUM PEAK STAGE	10.20 Mar 3 1938
ANNUAL RUNOFF (AC-FT)	17190
10 PERCENT EXCEEDS	3.6
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	1940	1940	1940	1976	1949	1949	1949	1940	1940	1940	1940	1940
MEAN	3.57	11.8	36.0	173	289	248	61.5	27.2	8.45	.91	1.88	1.41
MAX	179	154	428	3962	3014	2342	889	686	433	31.0	102	40.6
(WY)	1984	1984	1985	1993	1980	1969	1980	1998	1983	1998	1983	1986
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1940	1940	1940	1976	1949	1949	1949	1940	1940	1940	1940	1940

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1940 - 2001

ANNUAL TOTAL	11288.88	40486.32	
ANNUAL MEAN	30.8	111	70.8
HIGHEST ANNUAL MEAN			612 1993
LOWEST ANNUAL MEAN			.006 1949
HIGHEST DAILY MEAN	2660 Feb 22	7740 Feb 13	11400 Feb 25 1969
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 12	.00 Oct 1 1939
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Nov 1	.00 Oct 1 1939
MAXIMUM PEAK FLOW		12500 Jan 11	31700 Jan 4 1995
MAXIMUM PEAK STAGE		6.04 Jan 11	9.09 Jan 4 1995
ANNUAL RUNOFF (AC-FT)	22390	80300	51320
10 PERCENT EXCEEDS	6.4	19	14
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11078000 SANTA ANA RIVER AT SANTA ANA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1968–71, 1973 to current year.

CHEMICAL DATA: Water year 1998.

WATER TEMPERATURE: Water years 1968–69, 1971, 1973–80, 1982–87.

SEDIMENT DATA: Water years 1968–71, 1973 to current year.

PERIOD OF DAILY RECORD.—October 1967 to September 1971, October 1972 to September 1980, October 1981 to September 1987.

WATER TEMPERATURE: October 1967 to September 1969, October 1970 to September 1971, October 1972 to September 1980, October 1981 to September 1987.

SUSPENDED-SEDIMENT DISCHARGE: October 1967 to September 1971, October 1972 to September 1980, October 1981 to September 1987.

REMARKS.—Chemical data collected for the National Water-Quality Assessment (NAWQA) Program during water year 1998.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	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)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
OCT							
27...	1225	1190	17.0	--	--	--	--
JAN							
12...	1050	3490	11.5	41	50	62	72
FEB							
12...	1130	8080	12.0	28	36	46	58
26...	1135	5220	13.5	--	--	--	--
28...	1150	5380	12.5	--	--	--	--
MAR							
06...	1135	668	15.0	--	--	--	--

DATE	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)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, SUS- PENDEDED (T/DAY) (80155)
OCT							
27...	--	90	94	98	100	212	681
JAN							
12...	84	95	99	100	--	1280	12100
FEB							
12...	72	86	96	100	--	1420	31000
26...	--	86	94	100	--	386	5440
28...	--	55	70	92	100	654	9500
MAR							
06...	--	95	96	98	100	131	236

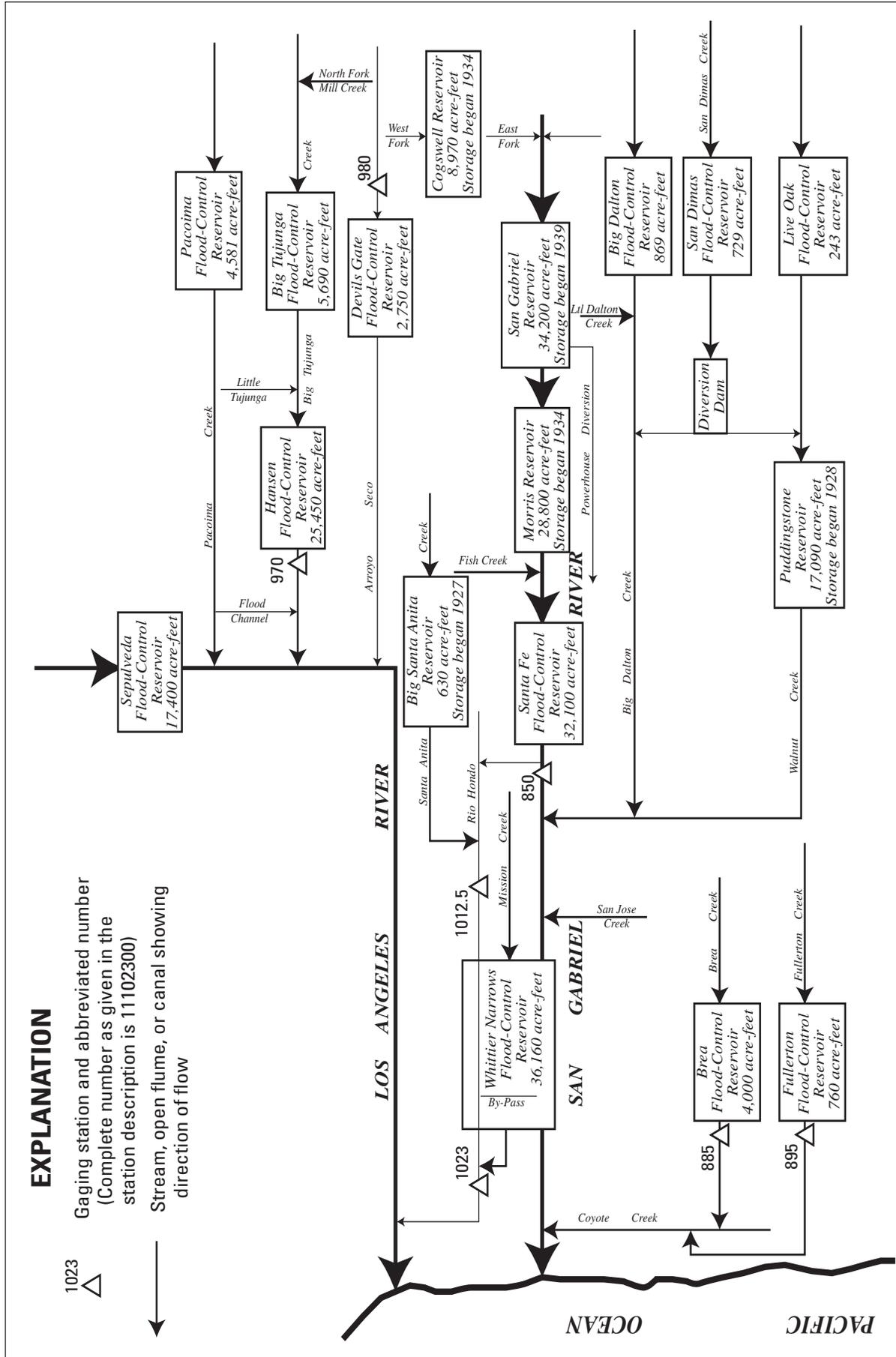


Figure 18. Diversions and storage in San Gabriel and Los Angeles River Basins.

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA

LOCATION.—Lat 34°06'44", long 117°58'07", in NE 1/4 SW 1/4 sec.6, T.1 S., R.10 W., Los Angeles County, Hydrologic Unit 18070106, on left bank, at stilling basin of outlet of Santa Fe Flood-Control Dam, 500 ft downstream from axis of dam, and 1.7 mi north of Baldwin Park.

DRAINAGE AREA.—236 mi².

PERIOD OF RECORD.—October 1942 to current year.

REVISED RECORDS.—WSP 1315-B and 1635: 1943(M). WSP 1928: Drainage area. WDR CA-99-1: 1998.

GAGE.—Water-stage recorder. Auxiliary gage 500 ft downstream with crest-stage gage and concrete control. Datum of gage is 400.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.—Records poor. Flow regulated by Cogswell and San Gabriel Flood-Control Reservoirs, combined capacity, 43,170 acre-ft; Morris Reservoir, capacity, 28,800 acre-ft; and Santa Fe Flood-Control Reservoir, capacity, 32,100 acre-ft. Diversions upstream from station for irrigation, power development, and ground-water replenishment. At times water is diverted from side of stilling basin to headwaters of Rio Hondo; 470 acre-ft were diverted during the current year. See schematic diagram of [San Gabriel and Los Angeles River Basins](#).

COOPERATION.—Records of diversion to Rio Hondo provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,900 ft³/s, Jan. 26, 1969, gage height, 22.20 ft; 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	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.18	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	8.5	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	4.6	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	1.9	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	8.73	6.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.28	.23	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	8.5	4.6	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	17	13	.00	.00	.00	.00	.00	.00	.00

SAN GABRIEL RIVER BASIN

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, 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	2.67	16.4	28.8	126	230	199	58.3	66.7	24.4	8.95	5.72	9.57
MAX	74.6	577	514	2151	3259	2465	616	768	414	170	121	206
(WY)	1993	1966	1947	1969	1969	1978	1978	1998	1958	1962	1962	1946
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1943	1943	1943	1945	1947	1947	1945	1945	1945	1943	1943	1943

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1943 - 2001
ANNUAL TOTAL	1042.35	15.24	
ANNUAL MEAN	2.85	.042	63.9
HIGHEST ANNUAL MEAN			540 1969
LOWEST ANNUAL MEAN			.000 1948
HIGHEST DAILY MEAN	77 Feb 24	8.5 Jan 11	26000 Jan 26 1969
LOWEST DAILY MEAN	.00 Mar 22	.00 Oct 1	.00 Oct 1 1942
ANNUAL SEVEN-DAY MINIMUM	.00 Mar 22	.00 Oct 1	.00 Oct 1 1942
MAXIMUM PEAK FLOW		27 Jan 10	30900 Jan 26 1969
MAXIMUM PEAK STAGE		12.01 Oct 29	22.20 Jan 26 1969
ANNUAL RUNOFF (AC-FT)	2070	30	46290
10 PERCENT EXCEEDS	9.6	.00	67
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA

LOCATION.—Lat 34°02'03", long 118°02'14", in La Puente Grant, Los Angeles County, Hydrologic Unit 18070106, at Peck Road, 0.8 mi downstream from San Jose Flood Channel, 1.2 mi upstream from axis of Whittier Narrows Dam, and 1.8 mi south of El Monte.

DRAINAGE AREA.—442 mi².

PERIOD OF RECORD.—October 1955 to September 1957, October 1963 to current year.

REVISED RECORDS.—WDR CA-86-1: Drainage area.

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

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated by several reservoirs, combined capacity, 123,000 acre-ft. Many diversions upstream from station for irrigation, power development, and ground-water replenishment. Colorado River water released to the San Gabriel River at site 14.9 mi upstream from gage, at Metropolitan Water District aqueduct crossing on San Dimas Creek for ground-water replenishment. Los Angeles County Department of Public Works diverted 470 acre-ft from San Gabriel River below Santa Fe Dam to Rio Hondo during the current year. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion to Rio Hondo provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 46,600 ft³/s, Jan. 25, 1969, gage height, 10.90 ft, from rating curve extended above 29,000 ft³/s; no flow for part of 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	37	41	37	31	34	76	45	e43	37	32	26	32
2	34	82	64	36	35	75	50	e53	35	34	28	33
3	28	149	52	33	49	104	101	e50	39	33	31	39
4	34	165	60	36	42	315	273	e38	42	44	32	33
5	35	167	204	29	37	304	314	e46	39	71	29	29
6	36	160	332	34	38	308	e398	e35	43	37	30	31
7	40	159	341	33	37	166	e849	e38	37	34	30	33
8	41	156	360	69	31	108	e70	e31	38	30	29	36
9	40	161	366	46	35	62	e157	e29	36	33	23	42
10	34	176	355	1260	154	232	e327	e35	35	31	26	31
11	38	180	349	3530	45	65	e386	39	37	27	31	27
12	37	166	335	95	3600	54	e262	40	35	27	35	38
13	33	165	353	53	2720	52	e70	42	36	33	29	32
14	39	159	364	46	122	48	e64	41	36	34	27	29
15	45	159	262	50	86	48	e60	39	35	34	29	33
16	37	160	255	51	86	50	e174	39	36	31	30	32
17	33	162	263	38	90	49	e233	41	36	26	31	33
18	34	170	257	34	87	53	e232	35	40	23	32	34
19	34	173	130	30	224	48	e109	32	37	26	33	32
20	34	169	44	38	192	43	e50	37	33	29	33	31
21	41	168	35	38	270	47	e463	42	33	32	30	31
22	48	165	38	59	90	45	e117	42	35	34	41	34
23	39	193	34	97	177	39	e55	38	32	36	28	31
24	33	163	40	281	295	47	e44	38	34	27	29	34
25	26	169	32	100	1790	46	e35	40	34	29	32	30
26	47	174	33	297	816	48	e89	33	32	32	33	36
27	970	161	37	55	446	43	e218	33	30	30	36	25
28	59	103	39	54	335	45	e221	39	32	35	28	26
29	409	68	35	95	---	42	e194	44	32	32	29	31
30	153	59	33	41	---	44	e114	40	34	33	28	29
31	46	---	34	39	---	54	---	35	---	28	28	---
TOTAL	2594	4502	5173	6728	11963	2760	5774	1207	1070	1017	936	967
MEAN	83.7	150	167	217	427	89.0	192	38.9	35.7	32.8	30.2	32.2
MAX	970	193	366	3530	3600	315	849	53	43	71	41	42
MIN	26	41	32	29	31	39	35	29	30	23	23	25
AC-FT	5150	8930	10260	13340	23730	5470	11450	2390	2120	2020	1860	1920

e Estimated.

SAN GABRIEL RIVER BASIN

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	87.6	145	157	373	580	389	121	115	70.1	56.6	54.5	73.0
MAX	208	782	426	4150	4497	3796	590	1001	254	230	208	205
(WY)	1979	1966	1993	1993	1980	1978	1978	1998	1976	1973	1973	1978
MIN	.000	.000	9.84	19.0	.000	.000	.47	.14	.000	.000	.000	.000
(WY)	1956	1978	1977	1968	1956	1956	1956	1957	1956	1956	1956	1957

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001	
ANNUAL TOTAL	57691.1		44691			
ANNUAL MEAN	158		122		183	
HIGHEST ANNUAL MEAN					810	
LOWEST ANNUAL MEAN					24.4	
HIGHEST DAILY MEAN	2160	Feb 23	3600	Feb 12	24800	Jan 26 1969
LOWEST DAILY MEAN	5.9	May 2	23	Jul 18	.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	26	Apr 28	28	Aug 5	.00	Oct 1 1955
MAXIMUM PEAK FLOW			14200	Jan 11	46600	Jan 25 1969
MAXIMUM PEAK STAGE			8.44	Jan 11	10.90	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	114400		88640		132600	
10 PERCENT EXCEEDS	295		259		214	
50 PERCENT EXCEEDS	84		39		67	
90 PERCENT EXCEEDS	35		30		1.3	

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.—Lat 33°53'16", long 117°55'32", in NE 1/4 NE 1/4 sec.28, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank, 0.2 mi downstream from Brea Dam, and 1 mi north of Fullerton.

DRAINAGE AREA.—21.6 mi².

PERIOD OF RECORD.—January 1942 to current year.

REVISED RECORDS.—WSP 1041: 1944(M). WSP 1635: 1956, 1958. WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map. Prior to Dec. 4, 1964, at datum 1.03 ft higher.

REMARKS.—Records poor below 50 ft³/s and fair above. Flow regulated by Brea Flood-Control Reservoir, capacity, 4,000 acre-ft. No diversion upstream from station. Since August 1966, low flow mostly the result of irrigation wastewater from golf course 0.8 mi upstream. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 1,700 ft³/s, Feb. 18, 1980; no flow for parts of 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	3.1	e3.4	1.9	1.6	2.0	20	1.8	2.0	1.4	.98	e.69	e1.3
2	e2.6	e3.2	2.2	1.7	2.6	10	2.3	2.2	1.7	.83	e.68	e1.3
3	e2.1	e2.8	1.8	1.8	3.1	6.9	1.4	2.0	2.2	.90	e.70	e1.2
4	e2.1	e2.6	1.9	1.8	2.9	4.7	1.4	1.9	1.7	1.3	e.73	e1.3
5	e3.2	e2.5	1.9	1.5	2.1	4.0	1.3	2.0	1.3	1.0	e.75	1.4
6	2.0	e2.5	2.4	1.6	1.8	31	1.4	1.7	1.3	1.5	e.75	1.3
7	2.2	e2.4	2.3	1.6	1.5	6.5	50	1.5	1.2	1.1	e.80	1.4
8	2.4	e2.1	1.9	8.6	1.8	2.7	6.9	1.3	1.2	.95	e.83	1.5
9	3.1	e2.1	3.0	4.6	2.0	4.3	5.2	1.4	1.2	.81	e.82	1.1
10	5.3	e2.1	2.3	59	17	7.9	3.2	1.3	1.1	.82	e.83	1.8
11	8.8	e2.6	2.4	268	3.4	3.0	3.3	1.3	1.1	.84	e.85	1.3
12	3.7	e2.4	2.2	17	278	2.4	3.3	1.5	1.2	.82	e.87	1.4
13	e3.3	e2.3	1.9	6.9	209	2.1	2.2	1.7	1.2	.76	e.88	1.5
14	e3.3	e2.2	1.5	5.4	53	2.0	2.6	1.6	.99	.74	e.90	1.7
15	e3.2	e2.1	e1.7	7.3	19	1.9	2.5	1.6	.86	.76	e.90	e1.6
16	e3.1	e2.0	e1.8	7.2	5.5	1.9	2.5	1.6	.88	e.80	e.87	e1.5
17	e3.0	e1.9	e1.9	6.0	4.7	1.8	2.0	1.5	.88	e.82	e.88	e1.5
18	e3.0	e1.8	e2.3	4.1	3.3	1.7	2.3	1.5	.94	e.85	e.90	1.6
19	e2.8	e1.9	3.1	3.6	19	1.8	2.3	1.6	.84	.89	e.92	1.4
20	e2.7	e1.8	2.4	4.0	9.3	2.1	2.1	1.9	.70	.64	e.93	1.6
21	e2.8	e1.9	3.5	1.6	3.8	2.0	23	2.1	.63	.62	e.92	e1.5
22	e2.7	1.7	2.0	1.4	3.3	2.0	4.7	2.1	.65	.73	e.92	e1.4
23	e2.6	1.8	1.7	2.1	20	2.1	3.4	1.7	.75	e.75	e.95	e1.4
24	e2.7	1.8	1.8	34	32	2.2	2.7	1.6	.76	e.73	e.97	e1.4
25	e2.7	1.9	1.7	4.3	166	2.1	2.2	1.5	.75	e.70	e.96	e1.3
26	e9.1	1.9	1.6	46	119	2.2	2.0	1.6	.79	e.74	e.98	e1.4
27	e70	1.9	1.7	6.8	80	2.3	2.0	2.1	.99	e.75	e1.0	e1.6
28	e6.5	1.8	1.5	3.8	50	2.1	2.2	2.1	.70	e.72	e1.0	e1.5
29	e15	1.8	1.5	2.7	---	2.4	2.1	1.8	.98	e.70	e1.1	1.3
30	e5.5	1.9	1.6	3.1	---	2.0	2.0	1.7	.85	e.68	e1.2	1.7
31	e4.0	---	1.6	2.6	---	1.3	---	1.5	---	e.67	e1.2	---
TOTAL	188.6	65.1	63.0	521.7	1115.1	141.4	146.3	52.9	31.74	25.90	27.68	43.2
MEAN	6.08	2.17	2.03	16.8	39.8	4.56	4.88	1.71	1.06	.84	.89	1.44
MAX	70	3.4	3.5	268	278	31	50	2.2	2.2	1.5	1.2	1.8
MIN	2.0	1.7	1.5	1.4	1.5	1.3	1.3	1.3	.63	.62	.68	1.1
AC-FT	374	129	125	1030	2210	280	290	105	63	51	55	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

MEAN	1.15	3.20	4.73	10.3	15.4	9.98	3.48	1.45	.82	.58	.66	.91
MAX	15.3	31.6	26.6	95.8	165	79.9	50.3	31.9	7.83	3.92	4.68	7.02
(WY)	1984	1984	1989	1993	1980	1978	1983	1998	1998	1998	1983	1986
MIN	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1943	1943	1951	1951	1951	1951	1950	1942	1942	1942	1942	1942

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1942 - 2001

ANNUAL TOTAL	2548.97	2422.62	
ANNUAL MEAN	6.96	6.64	4.34
HIGHEST ANNUAL MEAN			23.9
LOWEST ANNUAL MEAN			.001
HIGHEST DAILY MEAN	210	Feb 21	1700
LOWEST DAILY MEAN	.72	Jan 5	.00
ANNUAL SEVEN-DAY MINIMUM	.76	Jan 4	.00
MAXIMUM PEAK FLOW			832
MAXIMUM PEAK STAGE			4.35
ANNUAL RUNOFF (AC-FT)	5060	4810	3140
10 PERCENT EXCEEDS	9.9	6.5	3.8
50 PERCENT EXCEEDS	3.1	1.8	.24
90 PERCENT EXCEEDS	1.6	.83	.00

e Estimated.

a Instantaneous peak discharge and stage for period of record are unknown, but probably occurred on Feb. 18, 1980.

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.—Lat 33°53'45", long 117°53'07", in NW 1/4 SW 1/4 sec.24, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on left bank of outlet channel of Fullerton Dam, and 1.6 mi southeast of Brea.

DRAINAGE AREA.—4.94 mi².

PERIOD OF RECORD.—October 1941 to current year.

REVISED RECORDS.—WSP 1245: 1950(M). WSP 1928: Drainage area. WDR CA-82-1: 1981.

GAGE.—Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. V-notch sharp-crested weir used Oct. 25, 1946, to Feb. 2, 1956. Prior to Dec. 3, 1971, at datum 3.00 ft higher.

REMARKS.—Records fair. Flow regulated by Fullerton Flood-Control Reservoir, capacity, 760 acre-ft (resurvey of 1970). Small tributary formerly entering below station diverted into reservoir since December 1954. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 392 ft³/s, Mar. 1, 1983, gage height, 8.25 ft, present datum; no flow at times some years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.28	.35	.31	.30	1.7	.39	.36	.32	.31	.33	.39
2	.47	.29	.37	.30	.30	.75	.37	.35	.38	.30	.37	.36
3	.41	.28	.32	.28	.32	.47	.35	.33	.46	.31	.36	.35
4	.41	.29	.33	.34	.32	.49	.33	.32	.34	.32	.35	.34
5	.37	.30	.38	.32	.32	.40	.34	.29	.35	.39	.32	.36
6	.34	.32	.32	.34	.34	14	.52	.28	.34	.40	.33	.39
7	.43	.29	.35	.31	.31	2.8	19	.29	.34	.42	.35	.39
8	.39	.29	.42	4.9	.30	.42	.72	.30	.34	.36	.36	.39
9	.42	.30	.36	.58	.35	.31	.76	.32	.30	.34	.38	.38
10	.60	.31	.35	22	13	.48	.70	.31	.30	.33	.39	.38
11	1.1	.59	.31	147	.58	.33	.40	.30	.30	.32	.38	.42
12	.30	.29	.41	8.4	113	.30	.36	.30	.30	.34	.32	.45
13	.30	.29	.33	.64	94	.30	.35	.38	.33	.32	.32	.43
14	.39	.38	.38	.43	7.7	.30	.27	.39	.30	.33	.33	.39
15	.41	.31	.34	.41	.92	.30	.26	.37	.30	.32	.35	.35
16	.44	.31	.33	.36	.58	.30	.26	.36	.29	.32	.34	.40
17	.34	.30	.34	.31	.51	.30	.23	.33	.36	.33	.36	.44
18	.34	.31	.27	.34	.45	.30	.25	.38	.30	.33	.37	.43
19	.36	.29	.29	.40	7.1	.30	.24	.40	.32	.36	.35	.42
20	.34	.30	.31	.32	4.0	.37	.20	.37	.33	.36	.35	.47
21	.37	.32	.34	.31	.45	.32	6.1	.35	.30	.34	.39	.45
22	.32	.39	.33	.34	.43	.30	.40	.35	.40	.32	.38	.46
23	.34	.30	.32	.32	16	.33	.29	.34	.31	.34	.40	.40
24	.31	.31	.37	13	13	.35	.25	.33	.29	.35	.41	.42
25	.34	.32	.30	.52	86	.36	.26	.35	.30	.33	.39	.41
26	.51	.32	.29	22	52	.36	.25	.33	.32	.34	.36	.39
27	32	.30	.39	1.1	20	.31	.30	.43	.31	.33	.37	.39
28	.75	.32	.30	.41	27	.38	.34	.40	.30	.34	.43	.40
29	4.7	.30	.44	.34	---	.36	.34	.39	.32	.32	.39	.40
30	.90	.36	.31	.32	---	.35	.34	.34	.32	.32	.40	.37
31	.44	---	.35	.30	---	.38	---	.35	---	.33	.40	---
TOTAL	49.56	9.56	10.60	227.25	459.58	28.72	35.17	10.69	9.77	10.47	11.33	12.02
MEAN	1.60	.32	.34	7.33	16.4	.93	1.17	.34	.33	.34	.37	.40
MAX	.32	.59	.44	147	113	14	19	.43	.46	.42	.43	.47
MIN	.30	.28	.27	.28	.30	.30	.20	.28	.29	.30	.32	.34
AC-FT	.98	.19	.21	451	912	57	70	.21	.19	.21	.22	.24

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1954, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	.030	.034	.99	.41	.75	.058	.000	.002	.001	.000	.000
MAX	.000	.31	.19	6.62	3.34	4.60	.36	.003	.020	.016	.000	.000
(WY)	1942	1945	1946	1952	1944	1943	1952	1945	1942	1942	1942	1942
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1942	1942	1942	1942	1942	1942	1943	1943	1942	1942

SUMMARY STATISTICS

WATER YEARS 1942 - 1954

ANNUAL MEAN	.19
HIGHEST ANNUAL MEAN	.92 1952
LOWEST ANNUAL MEAN	.000 1948
HIGHEST DAILY MEAN	79 Jan 19 1952
LOWEST DAILY MEAN	.00 Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1941
MAXIMUM PEAK FLOW	298 Mar 16 1943
MAXIMUM PEAK STAGE	3.80 Mar 16 1943
ANNUAL RUNOFF (AC-FT)	137
10 PERCENT EXCEEDS	.00
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	1955	1955	1955	1963	1964	1966	1955	1961	1955	1955	1955	1955
MEAN	.56	1.17	1.96	4.27	5.41	3.29	1.02	.51	.35	.31	.36	.45
MAX	5.31	5.76	9.96	28.0	32.1	18.6	6.28	5.87	1.66	1.01	1.72	2.53
(WY)	1984	1986	1993	1993	1998	1983	1958	1998	1995	1991	1977	1986
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1963	1964	1966	1955	1961	1955	1955	1955	1955

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1955 - 2001

ANNUAL TOTAL	620.98	874.72	
ANNUAL MEAN	1.70	2.40	1.62
HIGHEST ANNUAL MEAN			5.16 1993
LOWEST ANNUAL MEAN			.028 1964
HIGHEST DAILY MEAN	90 Feb 21	147 Jan 11	221 Mar 1 1983
LOWEST DAILY MEAN	.10 Jun 25	.20 Apr 20	.00 Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.23 Jun 21	.24 Apr 14	.00 Oct 1 1954
MAXIMUM PEAK FLOW		364 Jan 11	392 Mar 1 1983
MAXIMUM PEAK STAGE		8.17 Jan 11	8.25 Mar 1 1983
ANNUAL RUNOFF (AC-FT)	1230	1740	1170
10 PERCENT EXCEEDS	.76	.59	1.0
50 PERCENT EXCEEDS	.34	.35	.32
90 PERCENT EXCEEDS	.29	.30	.00

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA

LOCATION.—Lat 34°15'13", long 118°23'17", in Mission San Fernando Grant, Los Angeles County, Hydrologic Unit 18070105, in city of Los Angeles, on left bank of outlet channel, 0.5 mi downstream from Hansen Dam, 0.1 mi upstream from Glen Oaks Boulevard, and 3 mi southeast of San Fernando.

DRAINAGE AREA.—153 mi².

PERIOD OF RECORD.—May 1932 to February 1938, August 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1975, published as Tujunga Creek below Hansen Dam.

REVISED RECORDS.—WDR CA-84-1: 1978(M). WDR CA-01-1: 1992.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Datum of gage is 943.32 ft above sea level (U.S. Army Corps of Engineers benchmark). See WSP 1735 for history of changes prior to Oct. 1, 1953.

REMARKS.—Records fair except for discharges below 100 ft³/s, which are poor. Flow regulated since July 1931 by Big Tujunga Flood-Control Reservoir, capacity, 5,690 acre-ft, and since September 1940 by Hansen Flood-Control Reservoir, capacity, 25,450 acre-ft. Several small diversions for domestic use and irrigation. Since about 1948, Los Angeles County Department of Public Works has diverted water 0.3 mi upstream from gage to spreading grounds, as shown in footnote below table. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Records of diversion provided by Los Angeles County Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,200 ft³/s, Feb. 10, 1978, Mar. 2, 1983, maximum gage height, 7.64 ft, Mar. 2, 1983; no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 54,000 ft³/s, estimated, Mar. 2, 1938.

REVISIONS.—The maximum discharge for calendar and water year 1992 has been revised to 4,160 ft³/s, Feb. 11, 1992, gage height, 4.14 ft; revised daily discharges, in cubic feet per second, are given below. These figures supersede those published in the report for 1992.

	Feb. 10....e431	MEAN	Feb. 11....e2610	MAX	AC-FT	AC-FT (a)
TOTAL						
February 1992	12053.00	416	2610	23910	27310	
Wtr Yr 1992	24093.14	65.8	2610	47790	-----	
Cal Yr 1992	25251.64	69.0	2610	50090	-----	

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	.31	.00	.00	.00	11	.00	.00	8.8	.50	.20	.00
2	.00	.00	.00	.00	.00	.00	.39	.00	9.7	.50	.33	.00
3	.02	.00	.00	.00	.00	.00	.00	.00	8.5	.50	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	7.7	.50	.00	.00
5	.28	.00	.00	.00	.00	14	.00	.00	6.1	.50	.00	.00
6	.31	.00	.00	.00	.00	24	.00	.00	5.4	.50	.00	.00
7	.50	.00	.00	.00	.00	32	.00	.00	4.6	.50	.00	.00
8	.50	.00	.00	.00	.00	16	.00	.00	4.6	.50	.00	.00
9	.50	.00	.00	.00	.00	.01	.00	.00	4.6	.50	.00	.00
10	.28	.00	.00	.00	.17	.00	.00	.00	4.3	.50	.00	.00
11	.00	.00	.00	1.3	.00	.05	.00	.00	3.4	.50	.00	.00
12	.00	.00	.00	.00	14	.00	.00	.00	3.4	.50	.00	.00
13	.00	.00	.00	.00	225	.00	.00	.00	3.4	.50	.00	.00
14	.00	.00	.00	.00	227	.00	.00	5.5	3.4	.50	.00	.00
15	.00	.00	.00	.00	9.7	.00	.00	6.2	3.3	.50	.00	.00
16	.01	.00	.00	.00	.00	.00	.00	6.1	2.9	.50	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	5.6	2.0	.39	.00	.00
18	.31	.00	.00	.00	.00	.00	.00	4.6	1.3	.07	.00	.00
19	1.6	.00	.00	.00	.00	.00	.00	4.6	.50	.00	.00	.00
20	2.1	.00	.00	.00	.00	.00	.14	4.6	.50	.00	.00	.00
21	2.6	.00	.00	.00	.00	.00	.00	4.6	.53	.00	.00	.00
22	.63	.00	.00	.00	.00	.00	.00	4.6	.50	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	4.6	.50	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	4.6	.50	.00	.00	.00
25	.02	.00	.00	.00	.00	.00	.00	4.6	.50	.00	.00	.00
26	.61	.00	.00	.00	15	.00	.00	4.6	.50	.00	.00	.00
27	3.5	.00	.00	.00	18	.00	.00	3.5	.50	.00	.00	.00
28	3.4	.00	.00	.00	17	.00	.00	3.4	.50	.00	.00	.00
29	1.5	.00	.00	.00	---	.00	.00	3.4	.50	.00	.00	.00
30	.50	.00	.00	.00	---	.00	.00	3.4	.50	.00	.00	.00
31	.46	---	.00	.00	---	.00	---	5.2	---	.00	.00	---
TOTAL	19.63	0.31	0.00	1.30	525.87	97.06	0.53	83.70	93.43	8.46	0.53	0.00
MEAN	.63	.010	.000	.042	18.8	3.13	.018	2.70	3.11	.27	.017	.000
MAX	3.5	.31	.00	1.3	227	32	.39	6.2	9.7	.50	.33	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.50	.00	.00	.00
AC-FT	39	.6	.00	2.6	1040	193	1.1	166	185	17	1.1	.00
a	588	173	156	969	2600	798	499	294	287	123	98	94

e Estimated.

a Combined discharge, in acre-feet, of creek and diversion.

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.45	7.55	3.78	38.9	93.6	79.7	28.0	24.2	7.14	2.60	2.08	3.09
MAX	32.2	153	65.3	742	1218	1387	252	446	81.1	52.4	33.1	41.4
(WY)	1984	1984	1984	1993	1993	1983	1983	1998	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1948	1948	1950	1949	1949	1950	1950	1949	1948	1948	1948	1948

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1948 - 2001
ANNUAL TOTAL	1349.75	830.82	
ANNUAL MEAN	3.69	2.28	24.0
HIGHEST ANNUAL MEAN			224
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	65 Feb 24	227 Feb 14	11400 Mar 2 1983
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1947
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Nov 2	.00 Oct 1 1947
MAXIMUM PEAK FLOW		689 Feb 13	15200 Feb 10 1978
MAXIMUM PEAK STAGE		2.04 Feb 13	7.64 Mar 2 1983
ANNUAL RUNOFF (AC-FT)	2680	1650	17420
10 PERCENT EXCEEDS	9.7	3.8	19
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

11098000 ARROYO SECO NEAR PASADENA, CA

LOCATION.—Lat 34°13'20", long 118°10'36", in NW 1/4 NE 1/4 sec.31, T.2 N., R.12 W., Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.7 mi east of Angeles Crest Highway, 1.5 mi upstream from Millard Canyon, and 5.5 mi northwest of Pasadena.

DRAINAGE AREA.—16.0 mi².

PERIOD OF RECORD.—December 1910 to January 1913 (fragmentary), April 1913 to November 1915, April 1916 to current year.

REVISED RECORDS.—WSP 1315-B: 1914(M), 1918(M), 1920–21(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder. Broad-crested weir since November 1938. Datum of gage is 1,397.88 ft above sea level. Prior to Oct. 1, 1916, nonrecording gage at different datum. Oct. 1, 1916, to Oct. 19, 1945, water-stage recorder at datum 4.00 ft lower.

REMARKS.—Records fair above 1 ft³/s and poor below. No regulation or diversion upstream from station. See schematic diagram of San Gabriel and Los Angeles River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,620 ft³/s, Mar. 2, 1938, gage height, 9.42 ft, present datum, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 150 ft³/s, or maximum, from rating curve extended above 1,170 ft³/s on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 13	0445	348	3.37	Mar. 6	0700	251	3.14

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	.20	.38	.69	.74	1.7	23	7.5	4.0	1.4	e.42	e.22	.15
2	.20	.36	.71	.69	1.6	19	6.7	4.0	1.6	e.37	e.23	.14
3	.24	.34	.71	.75	1.5	17	6.6	3.5	1.7	.33	e.22	.13
4	.30	.31	.77	.77	1.5	15	6.4	3.2	1.8	.41	e.23	.14
5	.28	.34	.73	.78	1.5	26	6.2	3.2	1.7	.54	e.22	.14
6	.27	.36	.69	.83	1.5	111	6.0	3.1	1.6	.72	e.22	.13
7	.29	.34	.69	.86	1.6	56	17	2.8	1.4	.60	.21	.13
8	.28	.31	.78	.89	1.5	36	11	2.6	1.3	.51	.21	.14
9	.20	.35	.78	.86	1.6	29	8.2	2.4	1.1	.33	.23	.16
10	.23	.34	.78	1.9	2.2	27	7.3	2.3	1.1	.34	.23	.15
11	.32	e.36	.82	41	2.4	22	6.9	2.2	1.0	.32	.21	.15
12	.27	e.36	.78	13	59	19	6.8	2.4	1.1	.30	.21	.14
13	.24	e.38	.76	5.4	169	17	6.5	2.6	1.0	.27	.20	.10
14	.26	e.37	.79	3.6	36	15	6.2	2.6	.92	.27	.18	.10
15	.27	e.38	.77	2.8	20	14	5.9	2.3	.85	.30	.16	.10
16	.30	e.40	.71	2.3	15	13	5.6	2.1	.78	.31	.16	.09
17	.33	e.41	.67	2.0	14	12	5.2	2.0	.70	.30	.16	.11
18	.39	e.43	.61	1.9	12	11	5.0	2.1	.66	.30	.16	.12
19	.33	e.44	.69	1.8	13	10	5.1	2.2	.62	.28	.15	.12
20	.26	.45	.77	1.7	17	9.8	5.4	2.2	.57	.27	.16	.12
21	.30	.43	.77	1.6	12	9.3	14	2.3	.53	.26	.17	.12
22	.28	.41	.77	1.6	11	9.1	7.5	2.0	.50	.24	.18	.10
23	.22	.48	.76	1.6	11	9.0	6.5	1.8	.47	.24	.18	.10
24	.31	.51	.77	2.3	12	8.6	5.8	1.6	.44	.27	.16	.09
25	.34	.50	.77	2.3	22	8.2	5.2	1.5	.45	.27	.14	.09
26	.35	.57	.77	2.5	56	8.2	5.0	1.6	.45	.26	.13	.08
27	.46	.62	.74	2.3	31	7.9	4.9	1.7	.43	.24	.12	.10
28	.36	.67	.74	2.1	28	7.7	4.9	1.8	e.42	e.23	.14	.10
29	.81	.69	.77	1.9	---	7.6	4.6	1.7	e.41	e.23	.19	.10
30	.82	.71	.86	1.8	---	7.3	4.4	1.6	e.39	e.22	.25	.08
31	.41	---	.83	1.7	---	7.4	---	1.5	---	e.22	.24	---
TOTAL	10.12	13.00	23.25	106.27	556.6	592.1	204.3	72.9	27.39	10.17	5.87	3.52
MEAN	.33	.43	.75	3.43	19.9	19.1	6.81	2.35	.91	.33	.19	.12
MAX	.82	.71	.86	41	169	111	17	4.0	1.8	.72	.25	.16
MIN	.20	.31	.61	.69	1.5	7.3	4.4	1.5	.39	.22	.12	.08
AC-FT	20	26	46	211	1100	1170	405	145	54	20	12	7.0

e Estimated.

11098000 ARROYO SECO NEAR PASADENA, 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	1.16	3.81	8.64	18.3	33.4	28.1	14.1	7.19	3.50	1.69	1.01	1.04
MAX	8.54	97.4	132	251	344	235	91.5	77.1	22.9	10.7	7.70	8.26
(WY)	1984	1966	1922	1969	1914	1938	1941	1998	1998	1969	1983	1976
MIN	.000	.060	.12	.58	.93	1.16	.69	.50	.35	.042	.000	.000
(WY)	1927	1934	1991	1991	1924	1961	1961	1961	1961	1960	1925	1925

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1911 - 2001	
ANNUAL TOTAL	1492.00		1625.49			
ANNUAL MEAN	4.08		4.45		10.1	
HIGHEST ANNUAL MEAN					57.8	
LOWEST ANNUAL MEAN					.75	
HIGHEST DAILY MEAN	144	Feb 21	169	Feb 13	3690	Feb 20 1914
LOWEST DAILY MEAN	.11	Sep 17	.08	Sep 26	.00	Aug 18 1920
ANNUAL SEVEN-DAY MINIMUM	.15	Sep 13	.09	Sep 24	.00	Aug 18 1920
MAXIMUM PEAK FLOW			348	Feb 13	8620	Mar 2 1938
MAXIMUM PEAK STAGE			3.37	Feb 13	9.42	Mar 2 1938
ANNUAL RUNOFF (AC-FT)	2960		3220		7290	
10 PERCENT EXCEEDS	8.2		11		16	
50 PERCENT EXCEEDS	.78		.77		1.9	
90 PERCENT EXCEEDS	.20		.16		.20	

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.—Lat 34°01'00", long 118°05'15", in Paso de Bartolo Grant, Los Angeles County, Hydrologic Unit 18070105, on right levee, 0.2 mi upstream from Beverly Boulevard, 0.4 mi downstream from axis of Whittier Narrows Dam, and 1.0 mi northeast of Montebello.

DRAINAGE AREA.—124 mi².

PERIOD OF RECORD.—October 1966 to current year.

GAGE.—Water-stage recorder and concrete-lined flood-control channel. Elevation of gage is 175 ft above sea level, from topographic map.

REMARKS.—Records good except for discharges below 500 ft³/s, which are poor. Flow regulated by Whittier Narrows Flood-Control Reservoir, capacity, 36,160 acre-ft. There are several small flood-control reservoirs (combined capacities, 1,700 acre-ft) and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel and Los Angeles River Basins.

COOPERATION.—Discharge records for current year provided by Los Angeles County Department of Public Works for the following dates: Oct. 1 to Jan. 9, Jan. 13–23, 25, Jan. 27 to Feb. 11, Feb. 15–23, Feb. 27 to Mar. 4, Mar. 11 to Apr. 6, Apr. 8–20, and Apr. 24 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 38,800 ft³/s, Jan. 25, 1969, gage height, 13.82 ft, from rating curve extended above 15,000 ft³/s, on basis of gate openings at dam at gage heights 12.32 and 13.82 ft; no flow at times in most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.1	138	29	40	134	20	.00	.00	.00	.00	.00
2	15	6.8	137	37	37	22	24	.00	.00	.00	.00	.00
3	15	8.4	124	33	34	65	23	.00	.00	.00	.00	.00
4	15	8.4	121	28	40	63	149	.00	.00	.00	.00	.00
5	15	8.4	129	29	42	263	154	.00	.00	.00	.00	.00
6	15	5.0	127	30	35	462	155	.00	.00	.00	.00	.00
7	15	5.0	126	30	89	178	1000	.00	.00	.00	.00	.00
8	15	.00	122	33	34	223	48	.00	.00	.00	.00	.00
9	15	1.0	117	24	14	180	45	.00	.00	.00	.00	.00
10	15	2.0	113	381	91	221	155	.00	.00	.00	.00	.00
11	15	.00	110	3210	22	39	172	.00	.00	.00	.00	.00
12	15	.00	116	92	1790	29	170	.00	.00	.00	.00	.00
13	15	.00	129	27	3040	29	141	.00	.00	.00	.00	.00
14	15	.00	163	20	231	27	102	.00	.00	.00	.00	.00
15	15	.00	123	19	34	30	8.0	.00	.00	.00	.00	.00
16	19	5.2	112	17	26	27	.00	.00	.00	.00	.00	.00
17	82	115	112	15	26	27	.00	.00	.00	.00	.00	.00
18	39	121	111	34	25	26	.00	.00	.00	.00	.00	.00
19	28	124	39	15	73	30	.00	.00	.00	.00	.00	.00
20	8.0	124	1.8	15	87	25	.00	.00	.00	.00	.00	.00
21	8.0	122	.00	15	136	24	e142	.00	.00	.00	.00	.00
22	8.0	121	.00	6.0	109	16	e109	.00	.00	.00	.00	.00
23	8.0	122	.00	43	121	13	e206	.00	.00	.00	.00	.00
24	8.0	118	.00	153	302	13	.00	.00	.00	.00	.00	.00
25	12	119	.00	27	1420	13	.00	.00	.00	.00	.00	.00
26	23	119	.00	117	620	15	.00	.00	.00	.00	.00	.00
27	470	124	2.5	32	268	12	.00	.00	.00	.00	.00	.00
28	22	118	30	34	228	15	.00	.00	.00	.00	.00	.00
29	75	125	32	37	---	18	.00	.00	.00	.00	.00	.00
30	365	139	29	48	---	16	.00	.00	.00	.00	.00	.00
31	41	---	33	43	---	19	---	.00	---	.00	.00	---
TOTAL	1441.0	1769.30	2397.30	4673.0	9014	2274	2823.00	0.00	0.00	0.00	0.00	0.00
MEAN	46.5	59.0	77.3	151	322	73.4	94.1	.000	.000	.000	.000	.000
MAX	470	139	163	3210	3040	462	1000	.00	.00	.00	.00	.00
MIN	8.0	.00	.00	6.0	14	12	.00	.00	.00	.00	.00	.00
AC-FT	2860	3510	4760	9270	17880	4510	5600	.00	.00	.00	.00	.00

e Estimated.

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, 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	99.6	134	156	340	518	335	119	110	99.4	67.8	51.4	70.0
MAX	302	362	522	2378	3459	2265	371	323	355	205	244	413
(WY)	1984	1992	1992	1993	1969	1983	1983	1998	1992	1993	1991	1991
MIN	.001	7.08	10.3	29.2	22.1	15.6	4.25	.000	.000	.000	.000	.000
(WY)	1978	1978	1977	1976	1984	1972	1977	1999	2001	2001	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001	
ANNUAL TOTAL	35651.60		24391.60			
ANNUAL MEAN	97.4		66.8		173	
HIGHEST ANNUAL MEAN					638	
LOWEST ANNUAL MEAN					40.9	
HIGHEST DAILY MEAN	2990	Feb 21	3210	Jan 11	21200	Mar 2 1983
LOWEST DAILY MEAN	.00	Apr 16	.00	Nov 8	.00	Oct 29 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 11	.00	Apr 24	.00	Sep 10 1969
MAXIMUM PEAK FLOW			13100	Feb 13	38800	Jan 25 1969
MAXIMUM PEAK STAGE			7.78	Feb 13	13.82	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	70710		48380		125500	
10 PERCENT EXCEEDS	142		129		248	
50 PERCENT EXCEEDS	30		5.0		75	
90 PERCENT EXCEEDS	.00		.00		2.1	

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA

LOCATION.—Lat 34°10'46", long 119°02'20", in Guadaluca Grant, Ventura County, Hydrologic Unit 18070103, on downstream side of county road bridge, 1.0 mi northeast of Camarillo State Hospital, and 1.4 mi downstream from Conejo Creek.

DRAINAGE AREA.—248 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—Water years 1969–83, October 1996 to current year.

GAGE.—Water-stage recorder. Datum of gage is 58.42 ft above sea level (levels by Ventura County Flood Control District).

REMARKS.—No regulation above station. Pumping for irrigation in valley 1.0 mi above station. Sustained flow from city of Thousand Oaks reclamation plant.

COOPERATION.—Records were furnished by Ventura County Flood Control District and reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,900 ft³/s, Mar. 1, 1983, gage height, 10.08 ft, maximum gage height, 10.54 ft, Feb. 16, 1980, from rating curve extended above 4,600 ft³/s, on basis of slope-conveyance study of maximum flow; no flow at times in some years.

EXTREMES FOR WATER YEAR 2000 (NOT PREVIOUSLY PUBLISHED).—Peak discharges greater than base discharge of 1,100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 21	0055	1,660	3.47	Mar. 5	1455	1,380	3.26
Feb. 23	1515	3,430	4.50	Apr. 17	1800	2,420	3.97

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0150	6,520	5.75	Feb. 26	0205	3,730	4.64
Feb. 13	0510	8,070	6.26	Mar. 6	0225	10,900	7.09

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	17	19	16	21	29	35	31	27	15	20	25	14
2	13	16	15	21	27	33	31	29	18	21	22	13
3	15	17	20	20	27	33	31	30	19	19	22	20
4	19	18	20	18	25	82	29	33	19	19	22	21
5	17	19	19	15	25	386	23	31	20	20	20	20
6	18	18	21	17	27	265	18	33	20	22	19	17
7	15	18	20	15	29	52	22	36	21	18	17	17
8	16	144	19	12	27	213	25	35	20	17	23	19
9	16	34	20	14	27	51	20	33	21	19	20	20
10	20	26	21	16	57	28	21	31	20	21	19	20
11	23	26	20	15	82	21	21	30	21	20	13	24
12	23	26	23	16	272	21	22	28	21	21	12	21
13	21	25	21	16	121	21	20	23	19	22	16	20
14	21	24	19	14	84	18	17	23	17	21	16	19
15	23	23	20	12	40	18	20	25	20	18	15	18
16	24	23	18	22	45	20	25	30	21	20	11	14
17	20	24	21	21	51	20	566	23	20	22	14	15
18	22	23	18	25	31	20	372	21	20	22	11	19
19	25	21	22	17	31	21	48	22	19	21	11	18
20	24	42	24	16	255	22	30	20	19	22	13	17
21	21	41	24	17	673	20	25	21	19	21	16	19
22	17	23	20	17	81	20	27	19	21	21	13	19
23	19	22	21	14	928	21	27	18	21	23	15	22
24	22	21	20	17	157	24	26	18	18	24	20	21
25	26	21	25	240	46	25	28	16	20	23	15	18
26	24	19	22	65	42	25	26	17	22	21	14	16
27	23	17	24	29	128	33	24	19	20	22	17	13
28	21	23	22	28	63	30	24	18	21	22	19	17
29	23	19	23	23	37	25	23	20	20	19	17	17
30	20	16	23	28	---	25	23	17	19	25	18	15
31	19	---	21	49	---	31	---	18	---	29	19	---
TOTAL	627	808	642	870	3467	1659	1645	764	591	655	524	543
MEAN	20.2	26.9	20.7	28.1	120	53.5	54.8	24.6	19.7	21.1	16.9	18.1
MAX	26	144	25	240	928	386	566	36	22	29	25	24
MIN	13	16	15	12	25	18	17	16	15	17	11	13
AC-FT	1240	1600	1270	1730	6880	3290	3260	1520	1170	1300	1040	1080

CALLEGUAS CREEK BASIN

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.8	27.4	47.3	97.2	177	108	26.5	18.4	13.3	11.4	10.9	13.4
MAX	33.5	119	227	462	1147	677	72.4	73.0	33.7	24.5	23.6	36.4
(WY)	1997	1971	1998	1969	1998	1983	1983	1998	1998	1983	1983	1983
MIN	1.83	2.61	2.84	3.94	5.61	6.17	3.45	1.83	1.20	.47	.090	1.07
(WY)	1971	1969	1969	1970	1971	1972	1970	1970	1971	1971	1970	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	10706		12795			
ANNUAL MEAN	29.3		35.0		46.2	
HIGHEST ANNUAL MEAN					149	
LOWEST ANNUAL MEAN					8.46	
HIGHEST DAILY MEAN	355	Apr 12	928	Feb 23	9690	Mar 1 1983
LOWEST DAILY MEAN	13	Jul 14	11	Aug 16	.00	Apr 24 1970
ANNUAL SEVEN-DAY MINIMUM	15	Sep 14	13	Aug 16	.00	Jul 19 1970
MAXIMUM PEAK FLOW			3430	Feb 23	25900	Mar 1 1983
MAXIMUM PEAK STAGE			4.50	Feb 23	10.54	Feb 16 1980
ANNUAL RUNOFF (AC-FT)	21240		25380		33500	
10 PERCENT EXCEEDS	37		34		42	
50 PERCENT EXCEEDS	23		21		14	
90 PERCENT EXCEEDS	16		16		2.5	

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, 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	17	20	25	28	31	65	38	31	28	24	22	22
2	19	21	24	25	29	55	38	29	29	23	22	26
3	15	25	23	26	29	51	32	32	29	23	24	24
4	12	25	23	29	29	151	29	29	33	22	19	22
5	17	24	21	27	29	1740	29	29	33	21	25	25
6	20	24	18	29	27	4020	29	32	31	21	22	22
7	21	23	19	38	27	351	242	35	28	22	21	23
8	22	23	18	42	29	145	46	35	25	24	22	23
9	21	24	22	52	29	87	37	35	28	22	22	24
10	22	23	23	216	101	70	35	35	30	21	20	22
11	24	23	23	1970	55	63	35	37	31	23	24	24
12	26	28	21	354	454	57	35	38	30	24	29	22
13	23	26	19	63	2470	52	33	38	29	25	23	22
14	20	26	18	46	213	51	31	37	25	20	23	23
15	22	23	22	42	70	51	31	35	24	25	21	21
16	21	23	21	40	55	51	34	33	23	23	22	23
17	18	25	21	36	52	48	36	29	24	21	22	24
18	18	24	21	33	51	47	35	29	26	22	21	23
19	23	25	17	33	63	46	34	29	23	20	25	21
20	21	22	18	33	57	47	33	30	19	20	21	22
21	26	21	17	33	49	45	97	31	20	17	21	21
22	27	20	18	33	47	42	41	31	21	20	21	20
23	25	24	22	33	47	42	40	28	20	17	17	23
24	27	27	23	74	97	42	38	28	25	22	25	24
25	26	24	23	48	432	42	33	29	23	23	20	22
26	43	25	21	231	1240	42	31	29	21	19	23	20
27	54	27	21	73	149	40	32	29	21	21	21	20
28	25	25	19	40	119	38	35	30	22	23	21	22
29	40	25	22	40	---	39	35	31	23	25	21	19
30	70	26	22	36	---	39	35	31	18	23	21	23
31	26	---	22	34	---	38	---	31	---	22	21	---
TOTAL	791	721	647	3837	6080	7697	1309	985	762	678	682	672
MEAN	25.5	24.0	20.9	124	217	248	43.6	31.8	25.4	21.9	22.0	22.4
MAX	70	28	25	1970	2470	4020	242	38	33	25	29	26
MIN	12	20	17	25	27	38	29	28	18	17	17	19
AC-FT	1570	1430	1280	7610	12060	15270	2600	1950	1510	1340	1350	1330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

MEAN	13.4	27.3	45.9	98.5	179	115	27.4	19.1	13.9	11.9	11.4	13.9
MAX	33.5	119	227	462	1147	677	72.4	73.0	33.7	24.5	23.6	36.4
(WY)	1997	1971	1998	1969	1998	1983	1983	1998	1998	1983	1983	1983
MIN	1.83	2.61	2.84	3.94	5.61	6.17	3.45	1.83	1.20	.47	.090	1.07
(WY)	1971	1969	1969	1970	1971	1972	1970	1970	1971	1971	1970	1970

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	12877		24861			
ANNUAL MEAN	35.2		68.1		47.3	
HIGHEST ANNUAL MEAN					149	
LOWEST ANNUAL MEAN					8.46	
HIGHEST DAILY MEAN	928	Feb 23	4020	Mar 6	9690	Mar 1 1983
LOWEST DAILY MEAN	11	Aug 16	12	Oct 4	.00	Apr 24 1970
ANNUAL SEVEN-DAY MINIMUM	13	Aug 16	17	Oct 1	.00	Jul 19 1970
MAXIMUM PEAK FLOW			10900		25900	
MAXIMUM PEAK STAGE			7.09		10.54	
ANNUAL RUNOFF (AC-FT)	25540		49310		34290	
10 PERCENT EXCEEDS	35		53		42	
50 PERCENT EXCEEDS	21		25		15	
90 PERCENT EXCEEDS	16		20		2.5	

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA—Continued

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, DIS-CHARGE, SUS-PENDE (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDE (T/DAY) (80155)
NOV					
03...	1235	25	19.0	208	14
DEC					
11...	1315	23	17.0	21	1.3
JAN					
08...	1215	40	14.0	30	3.2
12...	1200	443	11.5	2120	2540
FEB					
07...	1305	29	16.0	71	5.6
13...	1655	752	11.0	2460	4990
MAR					
06...	1130	2390	12.5	3660	23600
MAY					
18...	1500	29	22.0	7	.55
JUN					
14...	1220	27	24.5	15	1.1
JUL					
17...	1805	17	26.5	20	.92
AUG					
01...	1130	21	24.5	24	1.4
16...	1120	20	25.0	26	1.4
SEP					
11...	1415	23	25.0	56	3.5

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	15.5	---	---	---	---	---	24.5	---
2	---	---	---	15.5	---	---	---	---	---	---	---	---
3	11.5	19.0	---	---	---	---	19.5	---	---	---	---	28.0
4	---	---	---	14.0	---	---	---	26.5	25.5	---	---	---
5	24.0	---	---	---	---	11.5	21.5	---	---	---	---	---
6	---	---	---	---	---	12.5	---	---	---	---	---	---
7	---	---	---	---	16.0	---	---	---	27.5	---	---	---
8	---	---	---	14.0	---	---	---	---	---	---	---	---
9	---	---	---	---	---	16.5	---	---	---	---	---	---
10	---	---	---	14.0	---	---	---	---	---	---	---	---
11	---	---	17.0	12.0	---	---	---	---	---	---	---	25.0
12	---	---	16.5	11.5	---	---	---	---	---	---	---	---
13	---	---	---	---	11.0	---	19.0	---	---	---	21.0	---
14	---	---	15.0	---	---	18.5	---	---	24.5	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	25.0
16	---	---	---	---	---	19.5	---	---	---	---	25.0	---
17	---	---	---	14.5	17.5	---	---	26.5	---	26.5	---	---
18	---	---	---	---	---	---	---	22.0	---	---	---	---
19	---	---	19.5	15.0	---	22.5	21.5	---	---	---	---	---
20	---	---	---	---	17.5	---	---	---	---	---	25.5	---
21	---	---	---	---	---	---	19.5	23.0	28.5	---	---	---
22	---	---	---	16.0	---	21.5	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	15.5	---	---	26.5	---	---	---	---	---
26	---	---	14.5	11.5	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	14.5	---	13.5	21.5	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	14.5	---	---	24.5	---	---	---	---	---
31	---	---	---	---	---	20.5	---	---	---	---	---	---

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA—Continued

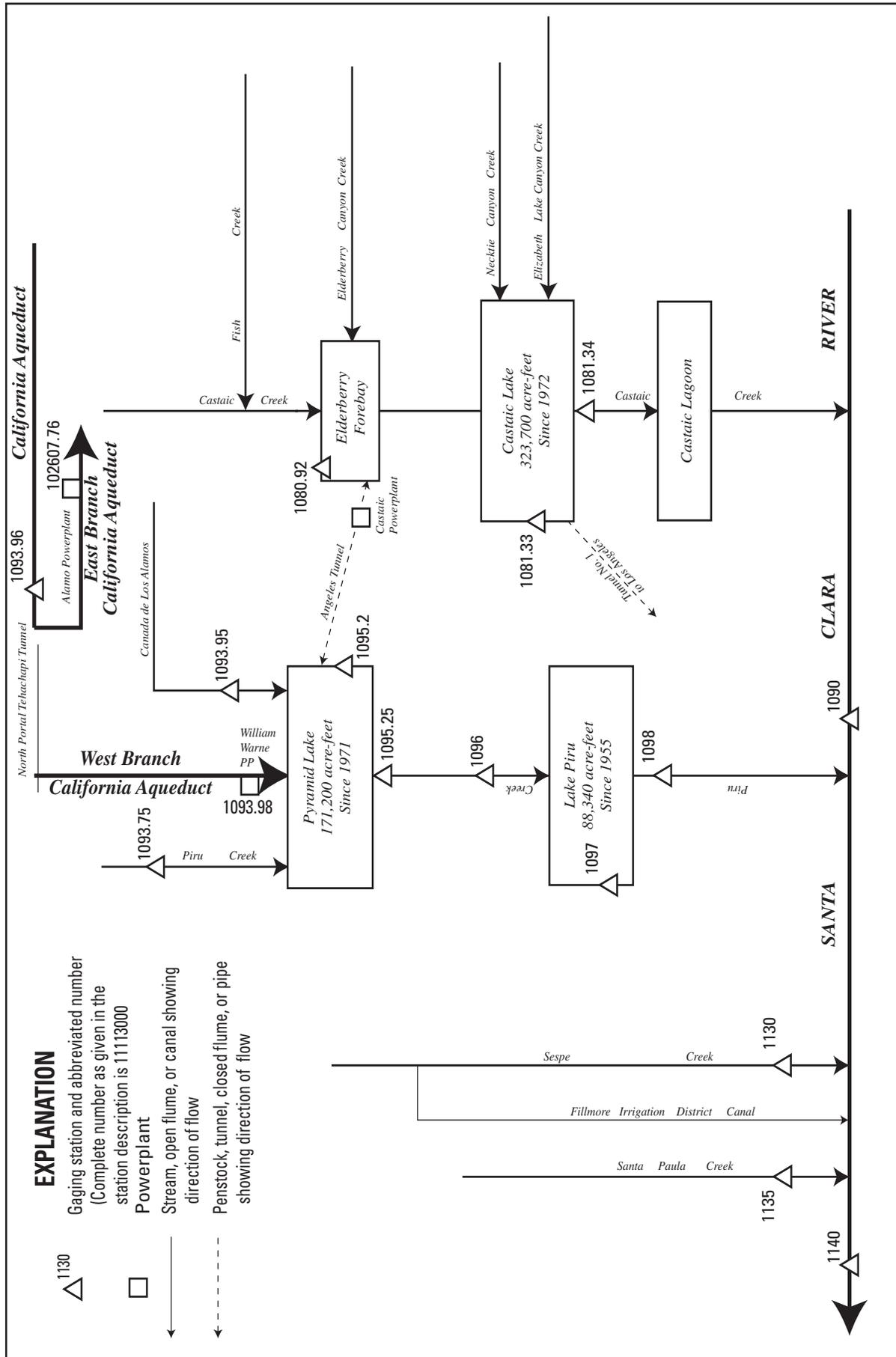
SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	17	129	6.0	20	38	2.1	25	12	.80
2	19	120	6.3	21	44	2.5	24	11	.74
3	15	111	4.4	25	177	12	23	11	.67
4	12	109	3.6	25	146	10	23	10	.63
5	17	111	5.2	24	82	5.2	21	10	.57
6	20	112	6.1	24	24	1.6	18	15	.74
7	21	113	6.5	23	19	1.2	19	16	.81
8	22	114	6.7	23	28	1.7	18	14	.67
9	21	102	5.9	24	28	1.8	22	12	.71
10	22	87	5.1	23	25	1.6	23	10	.64
11	24	72	4.7	23	22	1.4	23	14	.84
12	26	58	4.0	28	19	1.5	21	13	.72
13	23	78	4.8	26	18	1.3	19	10	.54
14	20	109	5.7	26	28	1.9	18	11	.50
15	22	83	4.7	23	41	2.5	22	12	.70
16	21	39	2.3	23	54	3.3	21	13	.74
17	18	34	1.7	25	53	3.5	21	14	.81
18	18	41	2.0	24	48	3.1	21	16	.89
19	23	48	3.0	25	43	2.9	17	17	.76
20	21	55	3.2	22	39	2.3	18	18	.86
21	26	62	4.5	21	34	2.0	17	18	.83
22	27	69	5.1	20	29	1.6	18	19	.87
23	25	75	5.0	24	24	1.6	22	19	1.1
24	27	64	4.7	27	20	1.4	23	20	1.2
25	26	45	3.2	24	17	1.1	23	20	1.3
26	43	131	16	25	14	.98	21	22	1.2
27	54	146	26	27	12	.88	21	30	1.7
28	25	62	4.3	25	12	.79	19	39	2.0
29	40	191	36	25	12	.81	22	35	2.1
30	70	482	127	26	12	.85	22	29	1.7
31	26	73	5.1	---	---	---	22	24	1.4
TOTAL	791	---	328.8	721	---	75.41	647	---	29.74
	JANUARY			FEBRUARY			MARCH		
1	28	18	1.3	31	14	1.1	65	744	129
2	25	13	.88	29	21	1.6	55	883	130
3	26	18	1.2	29	31	2.4	51	1020	141
4	29	25	1.9	29	41	3.2	151	1820	1500
5	27	24	1.7	29	51	4.0	1740	10300	58100
6	29	22	1.7	27	61	4.5	4020	18100	389000
7	38	20	2.0	27	70	5.2	351	2080	2150
8	42	22	2.5	29	71	5.5	145	807	329
9	52	21	3.0	29	70	5.5	87	222	55
10	216	1510	5160	101	800	298	70	79	15
11	1970	12300	132000	55	149	40	63	65	11
12	354	2270	2550	454	3570	6470	57	51	7.8
13	63	411	74	2470	18100	244000	52	37	5.2
14	46	199	25	213	926	622	51	24	3.3
15	42	123	14	70	412	80	51	22	3.1
16	40	81	8.9	55	211	31	51	25	3.5
17	36	41	4.1	52	49	6.9	48	23	3.0
18	33	25	2.2	51	18	2.5	47	19	2.4
19	33	17	1.5	63	18	3.2	46	16	2.0
20	33	14	1.3	57	17	2.6	47	22	2.9
21	33	13	1.1	49	12	1.6	45	32	3.9
22	33	12	1.0	47	9	1.2	42	41	4.6
23	33	11	.95	47	6	.77	42	39	4.4
24	74	211	51	97	917	409	42	33	3.7
25	48	51	7.4	432	4930	7200	42	27	3.1
26	231	1150	1060	1240	5730	21900	42	22	2.5
27	73	416	101	149	1830	793	40	16	1.8
28	40	77	8.3	119	621	199	38	12	1.2
29	40	31	3.3	---	---	---	39	16	1.7
30	36	21	2.1	---	---	---	39	23	2.5
31	34	16	1.5	---	---	---	38	29	3.0
TOTAL	3837	---	141094.83	6080	---	282093.77	7697	---	451625.6

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, 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)
1	38	22	2.2	31	8	.64	28	12	.90
2	38	12	1.2	29	7	.57	29	12	.97
3	32	9	.77	32	7	.60	29	13	1.0
4	29	9	.70	29	7	.53	33	13	1.2
5	29	9	.69	29	7	.52	33	13	1.2
6	29	19	1.6	32	6	.56	31	13	1.1
7	242	734	604	35	6	.59	28	13	1.0
8	46	190	25	35	6	.57	25	14	.93
9	37	97	9.5	35	6	.56	28	14	1.1
10	35	61	5.8	35	6	.54	30	14	1.1
11	35	52	4.9	37	6	.54	31	14	1.2
12	35	44	4.2	38	5	.55	30	15	1.2
13	33	37	3.3	38	5	.53	29	15	1.1
14	31	31	2.6	37	5	.49	25	15	1.0
15	31	25	2.1	35	5	.46	24	18	1.1
16	34	19	1.8	33	5	.41	23	21	1.3
17	36	15	1.5	29	5	.36	24	24	1.5
18	35	11	1.1	29	7	.53	26	27	1.9
19	34	8	.68	29	8	.65	23	30	1.9
20	33	8	.71	30	8	.61	19	33	1.7
21	97	242	108	31	7	.58	20	35	1.9
22	41	55	6.1	31	7	.59	21	36	2.0
23	40	31	3.4	28	8	.58	20	35	1.9
24	38	16	1.6	28	8	.61	25	34	2.3
25	33	8	.74	29	9	.67	23	34	2.1
26	31	7	.58	29	9	.71	21	33	1.9
27	32	7	.62	29	10	.74	21	33	1.8
28	35	7	.69	30	10	.81	22	32	1.9
29	35	8	.72	31	10	.88	23	31	2.0
30	35	8	.73	31	11	.93	18	31	1.5
31	---	---	---	31	11	.96	---	---	---
TOTAL	1309	---	797.53	985	---	18.87	762	---	43.70
JULY			AUGUST			SEPTEMBER			
1	24	30	1.9	22	38	2.3	22	23	1.4
2	23	29	1.9	22	119	6.9	26	23	1.6
3	23	29	1.8	24	205	13	24	22	1.5
4	22	28	1.7	19	206	10	22	25	1.5
5	21	28	1.6	25	184	12	25	28	1.9
6	21	27	1.5	22	163	9.5	22	32	1.9
7	22	26	1.6	21	141	7.9	23	35	2.2
8	24	26	1.6	22	119	7.0	23	39	2.4
9	22	25	1.5	22	97	5.7	24	42	2.8
10	21	24	1.4	20	75	4.2	22	46	2.7
11	23	24	1.5	24	54	3.4	24	47	3.1
12	24	23	1.5	29	32	2.5	22	38	2.2
13	25	23	1.5	23	16	.99	22	28	1.7
14	20	22	1.2	23	18	1.1	23	18	1.2
15	25	21	1.4	21	22	1.2	21	9	.55
16	23	21	1.3	22	25	1.5	23	8	.52
17	21	21	1.2	22	26	1.5	24	10	.63
18	22	24	1.4	21	27	1.5	23	12	.73
19	20	24	1.3	25	28	1.9	21	14	.78
20	20	24	1.3	21	29	1.7	22	16	.91
21	17	25	1.1	21	29	1.6	21	18	.99
22	20	25	1.4	21	28	1.6	20	19	1.0
23	17	25	1.2	17	28	1.3	23	21	1.3
24	22	25	1.5	25	27	1.8	24	23	1.5
25	23	26	1.6	20	27	1.5	22	25	1.5
26	19	26	1.3	23	26	1.6	20	27	1.5
27	21	26	1.5	21	26	1.4	20	29	1.6
28	23	26	1.7	21	25	1.4	22	31	1.8
29	25	26	1.8	21	25	1.4	19	32	1.6
30	23	27	1.6	21	24	1.3	23	31	1.9
31	22	27	1.6	21	24	1.3	---	---	---
TOTAL	678	---	46.4	682	---	111.99	672	---	46.91
YEAR	24861		876313.55						



EXPLANATION

- △ 1130 Gaging station and abbreviated number (Complete number as given in the station description is 11113000)
- Powerplant
- Stream, open flume, or canal showing direction of flow
- Penstock, tunnel, closed flume, or pipe showing direction of flow

Figure 19. Diversions and storage in Santa Clara River Basin.

11108092 ELDERBERRY FOREBAY NEAR CASTAIC, CA

LOCATION.—Lat 34°33'46", long 118°37'58", in SW 1/4 SE 1/4 sec.36, T.6 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, Angeles National Forest, in outlet tower in Elderberry Forebay, and 5 mi north of Castaic.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources.

GAGE.—Water-stage recorder. Elevation of gage is sea level (levels by Los Angeles Department of Water and Power).

REMARKS.—Forebay is formed by a concrete dam on Castaic Creek completed in 1974. Capacity, 32,476 acre-ft, at spillway crest on dam, at elevation 1,540 ft. Storage at normal minimum pool, 12,228 acre-ft, at elevation 1,490 ft. Forebay receives water from Pyramid Lake (station 11109520) via Castaic Powerplant. Water is pumped at times to Pyramid Lake during off-peak periods to be re-released through the powerplant. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of [Santa Clara River Basin](#).

COOPERATION.—Records were provided by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 31,537 acre-ft, Oct. 5, 2000, elevation, 1,538.09 ft; minimum, 15,716 acre-ft, Feb. 9, 1996, elevation, 1,500.54 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 30,492 acre-ft, Dec. 28, elevation, 1,535.94 ft; minimum, 16,964 acre-ft, May 5, elevation, 1,504.05 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
Based on table provided by California Department of Water Resources dated Jan. 27, 1995)

1,490	12,228	1,510	19,183	1,530	27,680	1,540	32,476
1,500	15,527	1,520	23,240				

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	19540	22138	25203	18943	24513	22446	18089	22283	23686	22901	22795	26877
2	22543	24065	22960	21331	21229	20325	17533	21388	21059	24982	21047	25411
3	23823	29843	21906	22050	18119	20441	21087	22413	17339	25771	26886	21617
4	23011	25128	23793	24868	18543	19200	20672	23767	19311	19138	21193	20441
5	24096	22263	23909	23360	19292	19622	20797	16964	18901	18048	22766	17636
6	22555	25380	27779	20813	21984	20962	24592	20325	20072	22005	22960	21992
7	21691	27741	27092	18985	21519	19622	21543	23049	26800	21498	25861	17149
8	19544	27663	24035	25660	24605	21708	20005	24531	29599	22263	24109	17821
9	20821	24750	19323	21955	25682	23595	20464	23390	25982	19057	24531	18521
10	21079	25097	17884	25053	23780	20877	19989	27413	22379	17237	24802	20752
11	21156	22648	21470	22497	19042	19080	20060	24426	19424	17747	26157	20628
12	21067	18931	22686	25495	19950	19084	22192	20520	21654	24496	21601	22956
13	22005	25247	20536	24369	26166	20060	17544	20001	19096	25606	23369	28869
14	22497	24960	22430	21918	22221	20202	18325	20660	22497	23553	19416	27538
15	23343	23591	23045	24544	25079	21051	18378	18962	24566	19291	23548	18623
16	26341	24509	23066	27074	21889	18790	26319	21687	24974	18011	26265	20298
17	26946	28356	17259	24846	21282	18775	25443	21901	22288	22067	28713	22063
18	24960	21786	22104	22994	18100	20397	25004	22196	26568	24422	28408	21303
19	27367	21376	22623	21724	20361	25478	25861	19408	24330	23975	22192	20560
20	27023	24087	20728	19031	20536	24815	26427	21376	23841	28831	21047	25696
21	24890	23815	19856	17280	22005	20889	22774	23634	27358	26477	19315	29391
22	18442	23300	23313	18160	25509	19879	20163	25013	29752	22059	18175	21169
23	19633	18419	17906	19903	24052	23664	21364	26351	25762	20720	21470	19993
24	24452	21311	18817	19872	22681	19883	25651	27152	18619	24960	23742	21716
25	23910	20468	21238	23664	19261	17992	28384	26659	20365	22711	22138	24842
26	24496	24005	22442	24908	19342	16975	28544	24261	25251	28614	18859	22333
27	25282	20636	24837	24540	24513	21059	28807	19269	25852	29048	21798	26749
28	23854	23024	30492	19104	24513	22631	23070	20266	26265	25389	22113	26586
29	20195	21360	26822	20457	---	20076	19872	21778	29394	20516	22791	20191
30	20797	24658	22417	21523	---	23326	22576	22816	29418	21823	23045	19934
31	19661	---	20962	25327	---	18445	---	25260	---	24426	28272	---
MAX	27367	29843	30492	27074	26166	25478	28807	27413	29752	29048	28713	29391
MIN	18442	18419	17259	17280	18100	16975	17533	16964	17339	17237	18175	17149
a	1511.23	1523.28	1514.51	1524.80	1522.95	1508.06	1518.43	1524.65	1533.70	1522.75	1531.27	1511.93
b	-3316	+4997	-3696	+4365	-814	-6068	+4131	+2684	+4158	-4992	+3846	-8338

CAL YR 2000 b -6358

WTR YR 2001 b -3043

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11108133 CASTAIC LAKE NEAR CASTAIC, CA

LOCATION.—Lat 34°31'22", long 118°36'43", in NW 1/4 NE 1/4 sec.13, T.5 N., R.16 W., Los Angeles County, Hydrologic Unit 18070102, in intake tower in Castaic Lake, and 2.3 mi north of Castaic.

DRAINAGE AREA.—137 mi², excludes 18.1 mi² noncontributing area in Elizabeth Canyon Creek Basin.

PERIOD OF RECORD.—October 1988 to current year. Prior to October 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder. Elevation of gage is sea level.

REMARKS.—Lake is formed by earthfill dam. Storage began April 1972. Dead storage below outlet tower to downstream distribution system, 1,799 acre-ft, elevation, 1,213 ft. Capacity below spillway level, 323,700 acre-ft, elevation, 1,515 ft. Lake receives West Branch California Aqueduct water diverted from Pyramid Lake (station 11109520) via Castaic Powerplant to Elderberry Forebay (station 11108092). Water is released downstream through Castaic Tunnel No. 1 and to Castaic Lagoon. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (AT 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 322,962 acre-ft, Mar. 25, 1998, elevation, 1,514.67 ft; minimum, 142,325 acre-ft, Jan. 7, 1995, elevation, 1,415.48 ft.

EXTREMES (AT 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 307,645 acre-ft, Jan. 25, elevation, 1,507.17 ft; minimum, 257,591 acre-ft, Apr. 30, elevation, 1,483.44 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
(Based on table provided by California Department of Water Resources in 1978)

1,450	196,414	1,470	231,964	1,490	270,629	1,510	310,451
1,460	213,807	1,480	250,894	1,500	291,186	1,520	334,985

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	282506	272120	291901	289446	302701	304078	293861	259556	287921	274724	270289	270750
2	283683	274082	293544	290557	304444	303238	294812	260207	286920	275726	271012	269243
3	284573	272241	291207	291754	303539	302464	293396	258907	285922	276459	269927	267799
4	283807	274426	292343	290074	304638	301756	295172	257670	284739	274629	271696	269364
5	283063	272423	293734	291543	303798	305005	295235	261808	285714	275116	270730	270871
6	282568	272786	294241	292680	302572	304487	293312	260562	286795	273595	269645	269304
7	279790	275584	291901	291165	303174	303776	293692	264246	286879	271878	268440	271757
8	277029	277192	292659	289718	302014	303002	291796	266219	285735	270370	267178	273090
9	278377	278971	292237	291627	303583	302228	292806	268099	284428	271394	265959	271757
10	280735	276907	289844	290452	302593	301649	291291	266419	283249	269706	267518	270491
11	283229	277989	287587	295193	301885	300878	289216	268300	281949	271737	269163	272362
12	286005	279975	288192	294178	303819	300150	287066	268111	282671	270048	268019	274244
13	287379	277887	290515	295150	305070	299253	289404	268062	283539	272201	266818	273029
14	284449	279606	288255	264072	306626	298230	286962	270229	283477	270690	268320	275889
15	281784	281270	290284	295616	305588	297336	284532	271737	285278	269243	269907	278357
16	279155	283766	288942	297017	306172	296295	282052	273434	283601	267679	271233	277070
17	279647	281578	289049	300129	305199	295193	281558	275197	282238	269987	273494	275767
18	281764	283497	286504	301713	304423	293987	276642	276907	280756	268480	272160	277417
19	279032	281393	287942	300578	303712	296146	276336	275624	281064	270931	270891	279134
20	276275	283084	289970	302873	304293	296911	273899	274467	281558	269364	269625	277846
21	273757	284884	291354	301713	306323	297825	271475	273130	282382	267859	271495	279688
22	271193	286691	288965	300578	305351	296231	269324	275279	282836	266359	270790	281846
23	268460	288025	291039	303152	305502	294706	269806	278545	280982	268039	271636	282712
24	265700	285714	288902	306020	304854	293122	267518	277274	279134	266419	272786	284946
25	267078	288338	286629	307645	304207	294051	265082	282197	277417	268942	271213	283642
26	268701	286067	288443	306843	306085	294875	262698	280961	277927	267619	269826	286587
27	270591	288422	290326	305891	305394	293354	264047	279914	278111	270991	268260	285216
28	268541	290515	287754	304660	304811	293586	261846	278930	278173	269726	269283	286650
29	266558	293164	289697	303281	---	294473	259773	281002	278254	268641	270269	288401
30	268420	290829	290829	302121	---	292574	257591	283229	276377	267498	271414	287024
31	270309	---	288568	303539	---	293164	---	286151	---	269404	270027	---
MAX	287379	293164	294241	307645	306626	305005	295235	286151	287921	276459	273494	288401
MIN	265700	272120	286504	264072	301885	292574	257591	257670	276377	266359	265959	267799
a	1489.84	1499.83	1498.75	1505.81	1506.40	1500.94	1483.44	1497.59	1492.84	1489.39	1489.70	1498.01
b	-14617	+20520	-2261	+14971	+1272	-11647	-35573	+28560	-9774	-6973	+623	+16997

CAL YR 2000 b +12333
WTR YR 2001 b +2098

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

11108134 CASTAIC CREEK BELOW METROPOLITAN WATER DISTRICT DIVERSION, BELOW CASTAIC LAKE, NEAR CASTAIC, CA

LOCATION.—Lat 34°31'10", long 118°36'34", in NE 1/4 SE 1/4 sec.13, T.5 N., R.17 W., Los Angeles County, Hydrologic Unit 18070102, in outlet structure below Castaic Dam, and 1.9 mi north of Castaic.

DRAINAGE AREA.—138 mi², excludes 18.1 mi² noncontributing area in Elizabeth Canyon Creek Basin.

PERIOD OF RECORD.—October 1994 to current year. Records for 1995 water year published as station 11108135. Records for station 11108135 for October 1976 to September 1978 and October 1988 to September 1994 are not equivalent at low flows due to evaporation and seepage. Published as "Castaic Creek Release Flow below Castaic Lake, near Castaic" prior to October 2000.

GAGE.—Flow meters on outlet pipes. Elevation of gage is 1,200 ft above sea level, from topographic map.

REMARKS.—Flow regulated by Castaic Lake (station 11108133). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3,080 ft³/s, Feb. 23, 1998; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 7,670 ft³/s, Mar. 2, 1983, at station 11108135; 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	.00	.00	.00	.00	.00	.00	10	10	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	10	10	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	10	8	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	12	8	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	12	8	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	12	6	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	49	3	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	49	3	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	40	3	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	25	3	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	20	3	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	17	3	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	12	16	3	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	76	13	3	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	50	13	3	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	51	13	3	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	40	13	3	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	40	13	3	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	40	13	2	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	40	13	2	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	40	13	2	.00	.00	.00	.00
22	.00	.00	.00	.00	71	40	13	2	.00	.00	.00	.00
23	.00	.00	.00	.00	71	25	13	2	.00	.00	.00	.00
24	.00	.00	.00	.00	39	25	13	2	.00	.00	.00	.00
25	.00	.00	.00	.00	15	25	12	2	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	25	.00	2	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	25	.00	2	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	20	.00	2	.00	.00	.00	.00
29	.00	.00	.00	.00	---	20	.00	2	.00	.00	.00	.00
30	.00	.00	.00	.00	---	15	.00	2	.00	.00	.00	.00
31	.00	---	.00	.00	---	5	---	2	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	196.00	614.00	437.00	112	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	7.00	19.8	14.6	3.61	.000	.000	.000	.000
MAX	.00	.00	.00	.00	71	76	49	10	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	389	1220	867	222	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001
MEAN	.71	1.57	2.88	4.18	54.2	50.1	34.4
MAX	4.94	11.0	15.1	19.3	352	175	81.4
(WY)	1999	1999	1999	1998	1998	1998	1996
MIN	.000	.000	.000	.000	.000	.000	.000
(WY)	1995	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	3534.00		1359.00			
ANNUAL MEAN	9.66		3.72		16.6	
HIGHEST ANNUAL MEAN					63.9	
LOWEST ANNUAL MEAN					3.72	
HIGHEST DAILY MEAN	200	May 23	76	Mar 14	3080	Feb 23 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1994
ANNUAL RUNOFF (AC-FT)	7010		2700		12060	
10 PERCENT EXCEEDS	14		13		34	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11109000 SANTA CLARA RIVER NEAR PIRU, CA

LOCATION.—Lat 34°24'13", long 118°44'18", in San Francisco Grant, [Ventura County](#), Hydrologic Unit 18070102, on right downstream bank, on private property owned by Newhall Farms, 0.1 mi south of Highway 126, 3 mi east of Piru, and 8 mi west of intersection of Highway 126 and Interstate Highway 5.

DRAINAGE AREA.—645 mi².

PERIOD OF RECORD.—October 1927 to September 1932, October 1996 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 750 ft above sea level, from topographic map.

REMARKS.—Records poor. Base flow affected by pumping from wells along stream for irrigation. Flow partly regulated since January 1972 by Castaic Lake (station 11108133), capacity, 323,700 acre-ft. Imported water from California Water Project stored and released at Castaic Dam. See schematic diagram of [Santa Clara River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,000 ft³/s, Feb. 23, 1998, from rating curve extended above 3,100 ft³/s, gage height, 10.85 ft, from floodmark; no flow for many days during the summers of 1929–32.

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	32	33	37	42	65	52	37	35	29	25	24
2	29	37	35	32	36	63	48	38	33	24	25	26
3	28	29	37	31	38	58	45	37	34	20	25	25
4	31	30	36	32	40	64	49	37	33	25	25	21
5	32	30	33	34	40	287	51	39	31	25	25	19
6	34	32	33	38	42	495	50	41	32	23	22	19
7	33	32	33	44	39	305	108	41	35	28	17	20
8	35	33	34	47	39	250	56	39	37	33	16	20
9	36	34	37	49	40	209	52	37	38	26	16	23
10	37	36	42	80	51	175	49	40	41	28	17	23
11	39	40	39	389	60	139	48	37	38	28	17	20
12	39	30	37	128	293	128	49	38	30	25	18	20
13	38	35	38	65	514	103	48	40	25	22	17	19
14	32	36	39	58	113	96	46	39	23	22	17	19
15	33	29	39	55	78	85	47	37	24	25	20	19
16	28	26	39	50	70	84	46	36	30	28	20	24
17	25	27	41	48	64	92	45	34	30	28	20	22
18	26	27	41	50	62	88	46	35	29	27	20	19
19	27	29	40	47	64	88	45	37	28	24	22	20
20	27	31	40	46	61	88	45	39	27	23	22	19
21	31	27	37	47	61	85	53	40	28	23	22	18
22	30	25	38	48	75	82	40	40	25	24	23	19
23	29	31	43	46	75	74	38	39	27	23	23	21
24	27	33	45	65	88	74	37	40	29	23	24	19
25	26	33	44	44	179	74	35	41	27	23	24	18
26	30	36	37	97	303	74	35	43	26	24	25	19
27	35	33	37	41	92	65	35	43	29	24	24	19
28	32	32	31	34	80	61	37	45	30	24	22	18
29	31	33	29	34	---	58	38	42	33	24	22	17
30	38	33	33	34	---	55	37	37	35	24	21	22
31	33	---	36	35	---	53	---	37	---	24	22	---
TOTAL	984	951	1156	1885	2739	3717	1410	1205	922	773	658	611
MEAN	31.7	31.7	37.3	60.8	97.8	120	47.0	38.9	30.7	24.9	21.2	20.4
MAX	39	40	45	389	514	495	108	45	41	33	25	26
MIN	25	25	29	31	36	53	35	34	23	20	16	17
AC-FT	1950	1890	2290	3740	5430	7370	2800	2390	1830	1530	1310	1210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

MEAN	20.8	28.9	45.0	46.8	262	99.6	49.0	80.3	30.4	17.2	15.5	15.4
MAX	61.0	62.2	92.7	95.5	1880	413	158	569	89.3	64.0	57.5	43.3
(WY)	1997	1928	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.000	4.03	7.32	20.4	16.6	15.5	2.93	3.00	.000	.000	.000	.000
(WY)	1931	1931	1930	1929	1930	1931	1931	1930	1930	1930	1929	1930

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1928 - 2001

ANNUAL TOTAL	22138	17011		
ANNUAL MEAN	60.5	46.6	58.0	
HIGHEST ANNUAL MEAN			282	1998
LOWEST ANNUAL MEAN			8.04	1930
HIGHEST DAILY MEAN	1390	Feb 21	514	Feb 13
LOWEST DAILY MEAN	19	Aug 4	16	Aug 8
ANNUAL SEVEN-DAY MINIMUM	21	Jul 29	17	Aug 7
MAXIMUM PEAK FLOW			1230	Mar 6
MAXIMUM PEAK STAGE			8.79	Jan 11
ANNUAL RUNOFF (AC-FT)	43910	33740	42040	
10 PERCENT EXCEEDS	113	74	84	
50 PERCENT EXCEEDS	37	35	24	
90 PERCENT EXCEEDS	25	22	.24	

11109375 PIRU CREEK BELOW BUCK CREEK, NEAR PYRAMID LAKE, CA

LOCATION.—Lat 34°39'58", long 118°49'24", in SE 1/4 SE 1/4 sec.30, T.7 N., R.18 W., [Ventura County](#), Hydrologic Unit 18070102, Los Padres National Forest, on left bank, 300 ft downstream from the confluence of Piru Creek and Buck Creek, 2.3 mi southeast of U.S. Forest Service Hardluck Campground, and 3.7 mi northwest of Pyramid Dam.

DRAINAGE AREA.—198 mi².

PERIOD OF RECORD.—October 1976 to September 1978, October 1988 to current year. February 1975 to September 1976, October 1978 to September 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,700 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of [Santa Clara River Basin](#).

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,700 ft³/s, Feb. 23, 1998, gage height, 16.45 ft; 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	3.9	4.8	5.9	6.5	9.7	87	170	78	16	7.2	5.5	4.6
2	4.2	4.9	5.9	6.3	9.7	88	126	75	16	7	5.4	4.8
3	3.5	4.9	5.9	6.3	10	92	110	65	16	7.1	5.1	5
4	3	5	5.9	6.2	10	147	97	57	15	7.7	5.1	13
5	3.1	5	5.9	6.2	13	1810	115	52	15	7.6	5	6.8
6	3.1	5.1	5.9	6.3	16	2490	104	50	14	9.9	4.7	5.8
7	3.1	5.2	6.2	6.3	17	733	95	48	13	17	4.3	5.5
8	3.4	5.3	6.1	6.9	15	553	86	47	13	14	4.1	5.3
9	3.8	5.4	6.1	6.8	14	454	83	45	12	10	3.9	5.1
10	3.9	5.5	6.1	54	15	352	76	43	12	9.5	3.8	5
11	3.9	5.6	6.1	39	16	289	70	40	11	8.8	3.6	5
12	3.8	5.7	6.1	21	20	262	71	38	11	8.2	3.6	4.8
13	3.8	5.7	6.1	17	26	247	75	36	10	7.7	3.4	4.9
14	3.7	5.9	6.1	15	23	263	81	34	10	7.5	3.3	4.7
15	3.5	6	6.1	14	24	270	87	33	9.7	7.7	3.3	4.6
16	3.7	6.1	6	12	25	263	95	31	9.4	7.8	3.3	4.5
17	3.6	6.1	6	11	26	270	96	30	9.1	7.4	3.2	4.6
18	3.4	5.9	6	11	33	303	91	29	8.7	7.2	3.2	4.5
19	3.6	6	6	11	61	357	93	28	8.4	7	3.3	4.3
20	3.7	6	6	10	106	377	76	26	8.3	6.9	3.4	4.4
21	3.8	6	6.1	10	71	373	69	24	8	6.7	3.7	4.4
22	4	6	6.2	10	78	330	73	23	7.7	6.6	4	4.3
23	4	6	6.3	11	67	299	87	22	7.5	6.5	3.9	4.2
24	4.7	6	6.2	13	56	294	97	21	7.4	6.4	4	4.1
25	5.1	6	6.2	13	66	288	100	20	7.4	6	4	4.1
26	4.7	6	6.3	14	111	270	100	19	7.3	5.6	3.8	4
27	5.2	6	6.2	13	101	242	90	19	7.4	5.4	3.6	4.1
28	5.2	6	6.3	11	91	231	79	19	7.5	5.3	3.5	4.1
29	5	6	6.2	11	---	265	79	18	7.5	5.4	3.7	4.3
30	5.2	5.9	6.3	11	---	228	79	17	7.5	5.5	4.1	4.1
31	5.1	---	6.3	10	---	203	---	17	---	5.6	4.5	---
TOTAL	123.7	170.0	189.0	399.8	1130.4	12730	2750	1104	312.8	238.2	123.3	148.9
MEAN	3.99	5.67	6.10	12.9	40.4	411	91.7	35.6	10.4	7.68	3.98	4.96
MAX	5.2	6.1	6.3	54	111	2490	170	78	16	17	5.5	13
MIN	3.0	4.8	5.9	6.2	9.7	87	69	17	7.3	5.3	3.2	4.0
AC-FT	245	337	375	793	2240	25250	5450	2190	620	472	245	295

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

MEAN	6.01	7.55	19.0	78.3	227	186	93.5	49.1	20.5	9.84	5.76	5.89
MAX	18.2	21.3	63.3	501	1062	674	235	237	93.7	37.3	19.1	19.7
(WY)	1999	1999	1998	1995	1998	1978	1978	1998	1998	1998	1998	1998
MIN	.099	1.16	1.62	2.28	5.36	5.31	2.67	1.21	.46	.001	.000	.000
(WY)	1978	1978	1991	1991	1990	1990	1990	1990	1990	1990	1989	1990

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1977 - 2001

ANNUAL TOTAL	6405.1	19420.1		
ANNUAL MEAN	17.5	53.2	58.0	
HIGHEST ANNUAL MEAN			163	1998
LOWEST ANNUAL MEAN			2.45	1990
HIGHEST DAILY MEAN	222	Feb 21	2490	Mar 6
LOWEST DAILY MEAN	2.0	Aug 9	3.0	Oct 4
ANNUAL SEVEN-DAY MINIMUM	2.0	Aug 9	3.3	Oct 3
MAXIMUM PEAK FLOW			4300	Mar 6
MAXIMUM PEAK STAGE			7.90	Mar 6
ANNUAL RUNOFF (AC-FT)	12700	38520	42050	
10 PERCENT EXCEEDS	58	100	138	
50 PERCENT EXCEEDS	6.1	7.4	10	
90 PERCENT EXCEEDS	2.8	3.9	1.3	

11109395 CANADA DE LOS ALAMOS ABOVE PYRAMID LAKE, CA

LOCATION.—Lat 34°41'31", long 118°47'25", in SW 1/4 SE 1/4 sec.16, T.7 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, on right bank, 1.1 mi south of Hungry Valley Road off-ramp from Interstate Highway 5, and 0.4 mi upstream of Pyramid Lake.

DRAINAGE AREA.—61.9 mi².

PERIOD OF RECORD.—October 1976 to September 1978, October 1988 to current year. March 1965 to September 1976 and October 1978 to September 1988 in files of California Department of Water Resources.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,800 ft above sea level, from topographic map.

REMARKS.—No regulation or diversion upstream from station. See schematic diagram of [Santa Clara River Basin](#).

COOPERATION.—Records were collected by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,640 ft³/s, Dec. 6, 1997, gage height, 5.73 ft; minimum daily, 0.30 ft³/s, May 10, 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	2.3	3.1	3.4	3.5	3.6	4.2	3.9	3.7	2.9	2.5	2.3	2.7
2	2.4	3.1	3.4	3.4	3.6	3.9	3.8	3.4	3.4	2.4	2.5	2.9
3	2.7	3.1	3.5	3.6	3.6	4.3	4.0	3.6	3.3	2.7	2.6	3.5
4	2.6	3.1	3.4	3.6	3.7	35	4.0	3.3	3.2	2.7	2.7	3.0
5	2.7	3.2	3.4	3.6	3.6	125	3.8	3.3	3.0	3.1	2.7	3.1
6	2.8	3.2	3.5	3.6	3.6	69	4.0	3.3	2.8	3.0	2.8	2.9
7	2.7	3.2	3.4	3.7	3.6	11	4.9	3.3	2.8	2.6	2.8	3.0
8	2.8	3.4	3.5	3.6	5.1	5.4	4.3	3.2	2.7	2.5	2.6	3.1
9	3.3	3.4	3.6	16	4.0	5.3	4.4	3.3	2.6	2.5	2.9	2.9
10	3.5	3.4	3.6	25	6.1	5.4	4.5	3.0	2.8	2.5	2.8	2.9
11	3.3	3.4	3.6	5.8	5.5	4.9	4.3	3.0	2.8	2.4	2.7	3.0
12	3.1	3.4	3.6	3.9	13	4.6	4.1	3.2	2.8	2.2	2.6	2.8
13	3.1	3.4	3.6	3.7	5.7	4.5	4.2	3.3	2.8	2.0	2.6	2.7
14	3.1	3.4	3.6	3.6	4.6	4.4	4.2	3.2	2.8	2.2	2.5	2.7
15	3.0	3.4	3.6	3.6	4.3	4.3	4.2	3.0	2.8	2.3	2.5	2.7
16	3.0	3.4	3.6	3.6	4.3	4.4	4.2	3.1	2.8	2.3	2.5	2.8
17	3.2	3.4	3.5	3.6	4.2	4.2	4.1	3.1	2.7	2.2	2.5	2.9
18	3.0	3.4	3.6	3.6	4.5	4.1	4.0	3.2	2.7	2.2	2.5	2.9
19	2.8	3.4	3.6	3.6	4.2	4.3	4.0	3.1	2.7	2.4	2.4	2.9
20	3.0	3.4	3.6	3.6	4.2	4.3	4.0	3.1	2.8	2.3	2.6	2.8
21	3.0	3.4	3.6	3.6	4.4	4.3	4.0	3.2	2.7	2.3	2.7	2.8
22	3.0	3.4	3.6	3.6	4.3	4.3	4.0	3.3	2.7	2.3	2.7	2.8
23	3.0	3.4	3.4	4.0	4.3	4.3	3.8	3.2	2.8	2.2	2.7	2.8
24	3.1	3.5	3.4	3.6	12	4.3	3.7	3.1	2.8	2.3	2.7	2.6
25	3.4	3.6	3.4	4.5	24	4.3	3.9	2.8	3.0	2.2	2.6	2.7
26	3.9	3.6	3.4	3.9	4.3	4.2	3.8	2.8	3.0	2.1	2.5	2.7
27	3.3	3.6	3.4	3.6	4.2	4.3	3.6	3.2	3.0	2.0	2.7	2.7
28	3.5	3.4	3.5	3.6	4.1	4.0	3.6	3.3	3.0	2.2	2.5	2.7
29	3.2	3.4	3.6	3.4	---	4.0	3.5	3.3	3.0	2.5	2.6	2.6
30	3.1	3.4	3.6	3.4	---	4.2	4.1	3.2	2.7	2.5	2.7	2.6
31	3.1	---	3.6	3.4	---	4.1	---	3.0	---	2.7	2.6	---
TOTAL	94.0	100.9	109.1	148.8	156.6	358.8	120.9	99.1	85.9	74.3	81.1	85.2
MEAN	3.03	3.36	3.52	4.80	5.59	11.6	4.03	3.20	2.86	2.40	2.62	2.84
MAX	3.9	3.6	3.6	25	24	125	4.9	3.7	3.4	3.1	2.9	3.5
MIN	2.3	3.1	3.4	3.4	3.6	3.9	3.5	2.8	2.6	2.0	2.3	2.6
AC-FT	186	200	216	295	311	712	240	197	170	147	161	169

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	2.31	2.73	5.70	5.04	13.0	7.71	3.30	2.67	2.20	1.94	1.85	2.02													
MAX	3.34	3.53	42.0	22.0	64.3	40.5	6.28	5.15	3.15	3.80	2.97	2.95													
(WY)	1997	1998	1998	1995	1978	1978	1998	1998	1998	1999	1999	1999													
MIN	1.40	1.56	1.93	2.38	1.80	1.80	1.50	.83	1.18	.97	1.32	1.27													
(WY)	1977	1978	1977	1978	1977	1977	1977	1977	1978	1977	1977	1977													

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1977 - 2001
ANNUAL TOTAL	1227.2	1514.7	
ANNUAL MEAN	3.35	4.15	4.16
HIGHEST ANNUAL MEAN			10.1 1998
LOWEST ANNUAL MEAN			1.54 1977
HIGHEST DAILY MEAN	16 Apr 17	125 Mar 5	1220 Feb 10 1978
LOWEST DAILY MEAN	1.6 Aug 6	2.0 Jul 13	.30 May 10 1977
ANNUAL SEVEN-DAY MINIMUM	1.6 Aug 11	2.2 Jul 22	.36 May 10 1977
MAXIMUM PEAK FLOW		216 Mar 5	3640 Dec 6 1997
MAXIMUM PEAK STAGE		3.76 Mar 5	5.73 Dec 6 1997
ANNUAL RUNOFF (AC-FT)	2430	3000	3010
10 PERCENT EXCEEDS	4.3	4.3	4.1
50 PERCENT EXCEEDS	3.4	3.4	2.6
90 PERCENT EXCEEDS	2.0	2.5	1.5

11109396 CALIFORNIA AQUEDUCT AT NORTH PORTAL TEHACHAPI TUNNEL, NEAR GORMAN, CA

LOCATION.—Lat 34°55'46", long 118°48'17", unsurveyed, in Los Alamos Y Caliente Grant, T.10 N., R.18 E., Kern County, Hydrologic Unit 18030003, at entrance to Tehachapi Tunnel, 1.5 mi southeast of A.D. Edmonston Pumping Plant, and 10 mi north of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources. Published as "North Portal Tehachapi Tunnel near Gorman" prior to October 2000.

GAGE.—Acoustic-velocity meter. Elevation of gage is 3,220 ft above sea level, from topographic map.

REMARKS.—Records represent flow pumped from the California Aqueduct through the A.D. Edmonston Pumping Plant to southern California. Downstream, the flow splits as it leaves Tehachapi Afterbay. The East Branch California Aqueduct flows through Alamo Powerplant (station 10260776), and the West Branch California Aqueduct flows through William Warne Powerplant (station 11109398). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were computed by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 3,810 ft³/s, May 13, 2001; no flow at times 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	3000	2370	2840	2840	1340	739	2560	1260	1720	2600	2170	2550
2	2400	2860	3130	2200	1340	802	1650	1620	1760	1970	1720	2550
3	2340	2650	3260	1950	1340	686	1800	1680	1960	1980	2050	3070
4	2240	2990	3140	1950	1950	1320	1420	1960	1900	2190	2060	1790
5	1880	3220	1090	1950	895	732	1570	2040	2000	2100	3250	1820
6	2120	2800	3270	1950	813	730	1870	3750	1720	2000	1250	2370
7	2150	2730	2850	1950	747	1230	2090	1900	1530	1560	1130	2260
8	2560	3040	3260	1950	709	1080	3520	2150	1510	2600	1230	2110
9	1900	3290	3410	1950	743	839	957	2100	1380	1810	1230	2270
10	1960	3170	3250	1910	743	734	1030	2060	1340	1670	1950	2190
11	2360	3210	2190	1690	1950	866	1110	2380	1840	1940	1930	2210
12	2270	3550	2400	1950	743	970	1510	2390	1720	1940	3250	2130
13	2180	2860	2740	1950	814	663	1330	3810	1810	2080	1680	2130
14	2170	2360	2440	1950	923	777	1090	2360	2010	1710	2000	2130
15	1820	2780	3160	1710	694	737	2600	2450	1900	2740	2000	2370
16	2250	2660	3440	1710	631	906	990	2250	1760	1620	1900	2600
17	2480	2710	3610	1930	743	949	907	2370	1950	1840	2110	2190
18	2510	3180	3090	1750	1470	2180	898	2350	1660	1860	1950	2110
19	2290	3780	3130	1750	719	1250	935	2010	1710	1870	2750	2090
20	2530	2570	2100	1640	834	1040	743	2920	2000	1790	1610	2250
21	2480	2780	2690	1310	997	1210	1040	2250	1870	1710	1950	1790
22	3030	2960	2470	1320	932	1590	2270	2130	2000	2760	2000	2290
23	2830	3750	2390	1450	751	1650	1010	2270	1750	1680	1860	3100
24	2670	2940	2970	1730	374	1870	1060	2410	2920	1890	1720	1470
25	2610	3000	3090	991	990	3050	1060	2390	1490	2140	1900	2030
26	2460	3680	2260	591	440	1650	913	2180	2010	2050	2680	2450
27	2510	2850	2220	439	483	2000	718	2920	2200	2040	1480	1550
28	2790	2510	2450	261	630	2060	633	2920	2040	1960	2130	1810
29	3750	2390	2460	206	---	2060	1840	2300	2080	2020	2030	1240
30	2410	2670	2460	1060	---	2160	1130	1960	1940	1750	2110	1620
31	2350	---	2920	1750	---	1580	---	1830	---	2120	1990	---
TOTAL	75300	88310	86180	49738	25738	40110	42254	71370	55480	61990	61070	64540
MEAN	2429	2944	2780	1604	919	1294	1408	2302	1849	2000	1970	2151
MAX	3750	3780	3610	2840	1950	3050	3520	3810	2920	2760	3250	3100
MIN	1820	2360	1090	206	374	663	633	1260	1340	1560	1130	1240
AC-FT	149400	175200	170900	98660	51050	79560	83810	141600	110000	123000	121100	128000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	1284	1138	1159	865	645	1219
MAX	2429	2944	2780	1930	1585	1955
(WY)	2001	2001	2001	2000	2000	2000
MIN	104	349	213	62.5	48.1	219
(WY)	1996	1996	1999	1999	1999	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	851664	722080	
ANNUAL MEAN	2327	1978	1389
HIGHEST ANNUAL MEAN			2107
LOWEST ANNUAL MEAN			941
HIGHEST DAILY MEAN	3780	Nov 19	3810
LOWEST DAILY MEAN	728	Feb 24	206
ANNUAL SEVEN-DAY MINIMUM	1290	Feb 22	630
ANNUAL RUNOFF (AC-FT)	1689000	1432000	1007000
10 PERCENT EXCEEDS	3040	2980	2480
50 PERCENT EXCEEDS	2360	1990	1350
90 PERCENT EXCEEDS	1580	897	289

11109398 WEST BRANCH CALIFORNIA AQUEDUCT AT WILLIAM WARNE POWERPLANT, NEAR GORMAN, CA

LOCATION.—Lat 34°41'07", long 118°47'16", SW 1/4 NE 1/4 sec.21, T.7 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, in powerplant at upper end of Pyramid Lake, on Canado de Los Alamos arm, and 8.5 mi southeast of Gorman.

PERIOD OF RECORD.—October 1995 to current year. Prior to October 1995 in files of California Department of Water Resources. Published as "William Warne Powerplant" prior to October 1999.

GAGE.—Acoustic-velocity meters in both penstocks.

REMARKS.—Upstream the flow splits as it leaves the Tehachapi Tunnel. Flow at this site represents West Branch California Aqueduct water flowing southwest to Pyramid Lake (station 11109520). The East Branch California Aqueduct flows through Alamo Powerplant (station 10260776). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were computed by California Department of Water Resources, under the general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 2,830 ft³/s, Sept. 6, 2000; no flow at times 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	7.6	931	1050	1620	787	97	994	813	831	3.5	902	1360
2	1350	1600	1150	1330	730	96	1180	763	677	810	962	17
3	1420	1550	1100	1160	701	93	927	1000	974	824	984	1010
4	701	1640	1420	910	1160	127	842	1340	671	686	1180	951
5	1370	1640	742	737	195	93	859	1340	693	724	.00	954
6	1020	1650	1050	733	189	97	823	1350	415	683	36	1020
7	906	1610	1190	787	322	97	632	1370	481	705	.00	1170
8	101	1640	1230	720	252	104	802	1360	718	99	.00	1270
9	970	1600	1100	759	258	101	.00	1190	727	781	259	32
10	892	1590	1030	868	329	97	.00	1410	.00	585	1150	1140
11	978	1530	1260	910	1200	98	657	1500	731	778	1210	1200
12	1020	1400	943	802	293	112	634	972	765	826	.00	1150
13	1030	1430	333	901	293	105	564	1370	724	894	792	1160
14	872	1650	672	741	285	100	326	1190	813	786	1000	1130
15	123	1650	1540	876	284	99	471	907	708	542	974	1270
16	1400	1630	1580	880	310	100	418	961	895	714	936	567
17	1220	1630	1650	871	305	96	.00	1050	66	924	778	1360
18	512	1620	1630	1100	624	260	.00	1040	689	836	1040	1200
19	1060	1640	1620	1640	314	603	.00	919	782	892	294	898
20	1530	1640	1220	920	276	1220	155	896	742	847	935	1190
21	1340	1640	1260	833	271	622	160	1140	744	587	945	1120
22	1460	1640	1090	1150	228	326	726	992	899	202	932	1290
23	1520	1580	1070	1010	236	414	347	1120	526	915	897	1590
24	1490	1600	1630	912	.00	580	497	1250	286	910	907	1380
25	1520	1600	1050	1070	39	103	430	1330	687	938	936	1250
26	1530	1390	1140	.00	98	577	303	1030	695	965	.00	1120
27	1160	1600	1190	.00	98	529	66	1260	694	965	909	1180
28	1530	1530	1250	.00	98	887	.00	1170	583	950	976	519
29	1640	1470	1230	.00	---	866	171	1180	838	62	831	.00
30	1690	1550	1240	403	---	941	352	812	678	838	1000	97
31	1150	---	1420	796	---	827	---	846	---	893	994	---
TOTAL	34512.6	46871	37080	25439.00	10175.00	10467	13336.00	34871	19732.00	22164.5	22759.00	29595.00
MEAN	1113	1562	1196	821	363	338	445	1125	658	715	734	986
MAX	1690	1650	1650	1640	1200	1220	1180	1500	974	965	1210	1590
MIN	7.6	931	333	.00	.00	93	.00	763	.00	3.5	.00	.00
AC-FT	68460	92970	73550	50460	20180	20760	26450	69170	39140	43960	45140	58700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	593	723	511	431	308	528
MAX	1113	1562	1196	821	530	1061
(WY)	2001	2001	2001	2001	1996	1999
MIN	71.4	131	.000	.000	.000	.000
(WY)	1996	1999	1999	1999	1999	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	363398.10		307002.10			
ANNUAL MEAN	993		841		533	
HIGHEST ANNUAL MEAN					885	
LOWEST ANNUAL MEAN					318	
HIGHEST DAILY MEAN	2830		1690		2830	
LOWEST DAILY MEAN	.00		.00		.00	
ANNUAL SEVEN-DAY MINIMUM	368		75		.00	
ANNUAL RUNOFF (AC-FT)	720800		608900		386200	
10 PERCENT EXCEEDS	1530		1530		1210	
50 PERCENT EXCEEDS	1020		895		485	
90 PERCENT EXCEEDS	453		98		.00	

11109525 PIRU CREEK BELOW PYRAMID LAKE, NEAR GORMAN, CA

LOCATION.—Lat 34°38'30", long 118°45'49", in SW 1/4 NW 1/4 sec.2, T.6 N., R.18 W., Los Angeles County, Hydrologic Unit 18070102, Los Padres National Forest, at downstream base of dam, and 11.7 mi southeast of Gorman.

DRAINAGE AREA.—295 mi².

PERIOD OF RECORD.—October 1988 to current year. Prior to October 1988 in files of California Department of Water Resources.

GAGE.—Flow meters with totalizer and rated radial gate on top of dam. Elevation of gage is 2,200 ft above sea level, from topographic map.

REMARKS.—Flow regulated beginning 1971 by Pyramid Lake (station 11109520). See schematic diagram of Santa Clara River Basin.

COOPERATION.—Records were collected by California Department of Water Resources, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project 2426.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 6,000 ft³/s, Feb. 23 1998; minimum daily, 4.0 ft³/s, Nov. 1–5, 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	63	5	5	5	5	5	149	25	26	26	26	27
2	63	5	5	5	5	5	149	25	26	26	26	24
3	63	5	5	5	5	100	148	25	26	26	26	23
4	63	5	5	5	5	100	125	25	26	26	26	23
5	40	5	5	5	5	1770	100	25	26	26	26	22
6	27	5	5	5	5	2610	75	25	26	26	26	22
7	26	5	5	5	5	1430	50	25	26	26	26	21
8	26	5	5	5	5	2490	50	25	26	26	26	21
9	26	5	5	5	5	1420	50	25	26	26	26	20
10	26	5	5	5	5	645	50	25	26	26	26	20
11	26	5	5	5	5	500	50	25	26	26	26	19
12	26	5	5	5	5	400	50	25	26	26	26	19
13	26	5	5	5	5	300	50	25	26	26	26	18
14	26	5	5	5	5	200	50	25	26	26	26	18
15	26	5	5	5	5	200	50	25	26	26	26	17
16	26	5	5	5	5	200	41	25	26	26	26	17
17	26	5	5	5	5	200	41	25	26	26	26	16
18	23	5	5	5	5	150	41	25	26	26	26	16
19	18	5	5	5	5	250	41	25	26	26	26	15
20	11	6	5	6	6	250	41	25	26	26	26	15
21	11	6	5	6	6	250	41	25	26	27	26	14
22	11	6	5	6	6	250	41	25	26	27	26	14
23	11	6	5	6	6	250	41	25	26	27	26	13
24	11	6	5	6	6	200	41	25	26	27	26	13
25	11	6	5	6	6	200	36	25	26	27	27	12
26	11	6	5	6	6	150	36	25	26	27	27	12
27	11	6	5	6	6	150	31	25	26	27	27	11
28	11	6	5	6	6	132	31	25	26	27	27	11
29	11	6	5	6	---	148	31	25	26	27	27	10
30	11	6	5	6	---	148	30	25	26	27	27	10
31	11	---	5	6	---	150	---	25	---	27	27	---
TOTAL	778	161	155	167	149	15253	1760	775	780	817	813	513
MEAN	25.1	5.37	5.00	5.39	5.32	492	58.7	25.0	26.0	26.4	26.2	17.1
MAX	63	6.0	5.0	6.0	6.0	2610	149	25	26	27	27	27
MIN	11	5.0	5.0	5.0	5.0	5.0	30	25	26	26	26	10
AC-FT	1540	319	307	331	296	30250	3490	1540	1550	1620	1610	1020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	22.9	26.3	26.4	80.7	155	112	42.2	29.6	24.6	24.1	22.7	23.7
MAX	75.6	90.2	64.0	422	780	492	132	97.3	41.0	32.9	26.4	54.7
(WY)	1999	1999	1996	1995	1998	2001	1993	1991	1993	1993	2000	2000
MIN	5.00	4.80	5.00	5.00	5.00	5.10	5.57	10.6	12.5	13.6	12.9	13.0
(WY)	1997	1998	2001	1991	1991	1995	1992	1990	1990	1989	1989	1990

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1989 - 2001

ANNUAL TOTAL	10601			22121			48.6			
ANNUAL MEAN	29.0			60.6			119			
HIGHEST ANNUAL MEAN							1993			
LOWEST ANNUAL MEAN							10.8			
HIGHEST DAILY MEAN	200	Mar	5	2610	Mar	6	6000	Feb	23	1998
LOWEST DAILY MEAN	5.0	Nov	1	5.0	Nov	1	4.0	Nov	1	1996
ANNUAL SEVEN-DAY MINIMUM	5.0	Nov	1	5.0	Nov	1	4.1	Nov	24	1997
ANNUAL RUNOFF (AC-FT)	21030			43880			35210			
10 PERCENT EXCEEDS	63			63			74			
50 PERCENT EXCEEDS	25			25			25			
90 PERCENT EXCEEDS	5.0			5.0			5.0			

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.—Lat 34°31'23", long 118°45'22", in NE 1/4 NW 1/4 sec.15, T.5 N., R.18 W., Ventura County, Hydrologic Unit 18070102, on left bank near Blue Point, 1.3 mi downstream from Agua Blanca Creek, 4.3 mi upstream from Santa Felicia Dam, 8.0 mi northeast of Piru, and 15 mi downstream from Pyramid Dam.

DRAINAGE AREA.—372 mi².

PERIOD OF RECORD.—October 1955 to current year.

CHEMICAL DATA: Water years 1972–80.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,058.55 ft above sea level (levels by U.S. Forest Service). Prior to Dec. 15, 1972, at site 0.3 mi upstream at different datum.

REMARKS.—Records fair. Flow regulated beginning December 1971 by Pyramid Lake (station 11109520). Imported water from the California Water Project stored and released at Pyramid Dam. See schematic diagram of Santa Clara River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 38,000 ft³/s, Feb. 23, 1998, gage height, 13.38 ft, from floodmark, from rating curve extended above 20,000 ft³/s, on basis of slope-area measurement at gage height 11.36 ft, maximum gage height, 18.6 ft, Feb. 25, 1969, site and datum then in use; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938, reached a discharge of 35,000 ft³/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	63	9.1	7.6	8.1	9.9	126	208	e60	26	27	25	24
2	63	5.9	7.5	7.4	9.6	108	206	e58	27	27	25	24
3	63	5.6	7.5	7.1	9.4	133	196	e55	28	26	25	22
4	63	5.1	7.6	7.2	9.2	357	166	e54	28	26	24	21
5	56	4.4	7.7	7.3	9.0	4280	135	e53	28	26	24	20
6	17	4.9	7.4	7.5	9.1	5030	111	e51	26	26	24	20
7	15	5.9	8.3	7.4	9.3	2480	154	e48	26	26	24	20
8	15	5.6	10	7.5	9.3	1720	106	e46	26	26	24	20
9	14	6.3	10	7.6	9.1	1320	103	e44	26	25	24	20
10	15	7.3	10	108	22	905	101	e42	27	26	25	20
11	15	6.6	10	381	56	756	97	e41	27	26	24	21
12	15	5.8	10	102	329	621	e90	e40	27	25	25	19
13	15	5.9	11	50	565	515	e88	e39	28	25	25	19
14	15	6.6	11	29	189	414	e85	e36	29	24	25	18
15	15	7.2	11	21	110	338	e82	e34	29	24	24	17
16	15	7.5	11	17	89	328	e79	e32	28	25	24	17
17	15	5.9	10	15	80	318	e78	e31	28	25	24	16
18	13	4.9	10	13	80	298	e77	e31	28	25	24	16
19	11	4.7	10	12	150	281	e76	e30	28	25	24	16
20	7.2	4.8	10	11	140	356	e76	e29	28	24	24	15
21	6.2	5.1	10	10	93	352	e85	e28	28	24	25	15
22	9.4	6.2	10	10	86	350	e80	e27	28	24	25	14
23	9.1	7.6	9.8	9.8	78	331	e74	e26	28	24	25	13
24	9.6	7.9	9.7	18	81	286	e72	26	28	25	24	13
25	9.7	7.4	9.6	15	169	282	e70	26	28	25	24	13
26	9.7	7.6	9.3	20	441	262	e68	26	28	25	24	12
27	11	7.8	9.3	19	188	207	e67	28	28	25	24	12
28	10	8.1	9.0	12	151	208	e66	29	28	24	24	11
29	12	7.3	8.7	11	---	213	e65	28	28	24	24	10
30	13	7.6	8.6	10	---	210	e64	27	27	25	24	9.9
31	11	---	8.4	10	---	208	---	26	---	25	24	---
TOTAL	630.9	192.6	290.0	970.9	3180.9	23593	3025	1151	827	779	754	507.9
MEAN	20.4	6.42	9.35	31.3	114	761	101	37.1	27.6	25.1	24.3	16.9
MAX	63	9.1	11	381	565	5030	208	60	29	27	25	24
MIN	6.2	4.4	7.4	7.1	9.0	108	64	26	26	24	24	9.9
AC-FT	1250	382	575	1930	6310	46800	6000	2280	1640	1550	1500	1010

e Estimated.

SANTA CLARA RIVER BASIN

11109600 PIRU CREEK ABOVE LAKE PIRU, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1971, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.14	54.7	52.8	106	229	100	102	33.7	12.6	4.22	2.00	1.86
MAX	11.9	503	291	992	1657	569	741	165	53.4	22.4	11.3	9.63
(WY)	1970	1966	1966	1969	1969	1969	1958	1967	1969	1969	1969	1969
MIN	.000	.34	2.91	9.24	7.50	7.26	3.96	1.34	.12	.000	.000	.000
(WY)	1956	1965	1957	1965	1965	1961	1961	1961	1961	1960	1957	1956

SUMMARY STATISTICS

WATER YEARS 1956 - 1971

ANNUAL MEAN	57.2
HIGHEST ANNUAL MEAN	294 1969
LOWEST ANNUAL MEAN	5.66 1961
HIGHEST DAILY MEAN	15600 Feb 25 1969
LOWEST DAILY MEAN	.00 Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1955
MAXIMUM PEAK FLOW	31200 Feb 25 1969
MAXIMUM PEAK STAGE	18.6 Feb 25 1969
ANNUAL RUNOFF (AC-FT)	41470
10 PERCENT EXCEEDS	84
50 PERCENT EXCEEDS	8.2
90 PERCENT EXCEEDS	.00

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

	1972	1973	1978	1990	1991	1998	1983	1983	1983	1978	1998	1998	1998
MEAN	16.3	20.1	37.9	111	261	208	84.7	50.4	30.5	21.4	17.9	17.2	
MAX	85.0	97.3	180	1154	2110	1126	289	204	93.7	47.3	40.0	56.4	
(WY)	1999	1999	1984	1995	1998	1983	1983	1983	1978	1998	1998	1998	
MIN	2.17	4.09	4.05	5.64	13.9	11.2	6.11	5.46	3.84	6.32	.80	.16	
(WY)	1973	1978	1990	1991	1987	1977	1977	1972	1976	1972	1972	1972	

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1972 - 2001

ANNUAL TOTAL	14333.9	35902.2	
ANNUAL MEAN	39.2	98.4	71.9
HIGHEST ANNUAL MEAN			240 1998
LOWEST ANNUAL MEAN			9.52 1990
HIGHEST DAILY MEAN	456 Feb 23	5030 Mar 6	15000 Feb 23 1998
LOWEST DAILY MEAN	4.4 Nov 5	4.4 Nov 5	.07 Jun 9 1972
ANNUAL SEVEN-DAY MINIMUM	5.3 Nov 2	5.3 Nov 2	.09 Sep 3 1972
MAXIMUM PEAK FLOW		10100 Mar 5	38000 Feb 23 1998
MAXIMUM PEAK STAGE		8.88 Mar 5	18.60 Feb 25 1969
ANNUAL RUNOFF (AC-FT)	28430	71210	52100
10 PERCENT EXCEEDS	85	188	118
50 PERCENT EXCEEDS	25	25	22
90 PERCENT EXCEEDS	7.9	7.6	6.2

11109700 LAKE PIRU NEAR PIRU, CA

LOCATION.—Lat 34°27'41", long 118°45'02", in Temescal Grant, [Ventura County](#), Hydrologic Unit 18070102, near center of Santa Felicia Dam on Piru Creek, 0.5 mi downstream from Santa Felicia Canyon, 4.2 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.—425 mi².

PERIOD OF RECORD.—May 1955 to current year. Prior to October 1985, monthend elevation and contents only.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by United Water Conservation District). Prior to Jan. 27, 1956, reference point at intake tower at same datum. Jan. 27, 1956, to Dec. 1, 1980, nonrecording gage at same site and datum.

REMARKS.—Lake is formed by earthfill dam. Storage began May 20, 1955. Capacity below spillway level at elevation 1,055.0 ft, 88,340 acre-ft. Water is released from outlet to Piru Creek for ground-water recharge, domestic use, and irrigation on the Oxnard Plain. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of [Santa Clara River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum contents observed, 109,400 acre-ft, Feb. 25, 1969, elevation, 1,061.45 ft; lake dry, Oct. 25 to Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 88,500 acre-ft, May 22, 24, 25, maximum elevation, 1,055.10 ft, May 25; minimum contents, 31,000 acre-ft, Nov. 14, 15; minimum elevation, 966.12 ft, Nov. 14.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by United Water Conservation District in October 1985)

970	14,800	1,000	33,900	1,030	60,500	1,050	82,300
980	20,300	1,010	42,000	1,040	70,900	1,060	94,600
990	26,700	1,020	50,800				

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	56300	38300	31200	31300	33500	41700	86100	87400	88100	86400	85800	85900
2	55600	37800	31200	31300	33500	41900	86300	87500	88000	86400	85800	85900
3	55000	37600	31200	31300	33500	42300	86500	87500	88000	86300	85800	85900
4	54400	36900	31200	31300	33500	43000	86600	87600	88000	86300	85800	85600
5	53800	36200	31200	31300	33500	50000	86600	87600	87900	86200	85800	85000
6	53200	35700	31200	31300	33500	60200	86600	87700	87900	86200	85800	84300
7	52500	35000	31200	31300	33600	65200	87000	87700	87800	86100	85800	83600
8	51900	34300	31200	31300	33600	68900	87000	87800	87800	86100	85700	83000
9	51200	33500	31200	31300	33600	71800	87000	87800	87700	86000	85700	82300
10	50500	32700	31200	31600	33700	73600	87000	87900	87700	86000	85700	81700
11	49800	32000	31300	32500	33900	75300	86900	87900	87600	86000	85700	80900
12	49200	31500	31300	32800	34800	76600	86900	88000	87600	85900	85700	80100
13	48200	31100	31300	32900	36300	77600	87000	88100	87500	85800	85700	79400
14	47300	31000	31300	33000	36800	78400	87000	88100	87500	85800	85700	78600
15	46800	31000	31300	33000	37000	79000	87000	88100	87400	85700	85700	77800
16	46100	31100	31300	33000	37200	79600	87000	88200	87300	85700	85700	77000
17	45500	31100	31300	33000	37300	80200	87000	88300	87300	85700	85700	76200
18	44800	31100	31300	33100	37500	80800	87000	88300	87200	85700	85700	75400
19	44100	31100	31300	33100	37900	81300	86900	88300	87200	85700	85700	74700
20	43300	31100	31300	33100	38200	81900	87000	88400	87100	85800	85800	73900
21	42700	31100	31300	33100	38400	82600	87000	88400	87000	85700	85700	73200
22	41900	31100	31300	33100	38600	83300	87000	88400	87000	85700	85800	72500
23	41500	31100	31300	33200	38700	83900	87000	88400	86900	85700	85800	71800
24	40600	31100	31300	33200	38900	84300	87100	88400	86800	85700	85800	71000
25	39900	31100	31300	33200	39400	84600	87100	88400	86800	85700	85800	70300
26	39600	31100	31300	33300	40500	84900	87200	88400	86700	85700	85800	69500
27	39500	31100	31300	33400	41000	85100	87200	88300	86600	85700	85800	68800
28	39500	31200	31300	33400	41400	85300	87200	88300	86600	85800	85800	68000
29	39600	31200	31300	33400	---	85500	87300	88200	86500	85700	85800	67300
30	39300	31200	31300	33400	---	85700	87300	88200	86500	85700	85800	66500
31	38800	---	31300	33400	---	85900	---	88100	---	85800	85800	---
MAX	56300	38300	31300	33400	41400	85900	87300	88400	88100	86400	85800	85900
MIN	38800	31000	31200	31300	33500	41700	86100	87400	86500	85700	85700	66500
a	1006.16	996.34	996.50	999.37	1009.28	1053.01	1054.17	1054.83	1053.46	1052.89	1052.97	1035.90
b	-18100	-7600	+100	+2100	+8000	+44500	+1400	+800	-1600	-700	0	-19300

CAL YR 2000 b -23300

WTR YR 2001 b 9600

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA

LOCATION.—Lat 34°27'37", long 118°45'04", in Temescal Grant, [Ventura County](#), Hydrologic Unit 18070102, on right bank, 750 ft downstream from Santa Felicia Dam, 1 mi upstream from Lime Canyon, 4 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.—425 mi².

PERIOD OF RECORD.—October 1955 to September 1968, October 1973 to current year.

CHEMICAL DATA: Water years 1969, 1974–80.

WATER TEMPERATURE: Water year 1969.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 858.8 ft above sea level (levels by United Water Conservation District).

REMARKS.—Records good. Since May 1955, flow regulated by Lake Piru (station 11109700), and since 1971, by Pyramid Lake (station 11109520). Imported water from the California Water Project stored by Pyramid Lake. Spill from Lake Piru bypasses gage. See schematic diagram of [Santa Clara River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 920 ft³/s, Sept. 6, 2000, gage height, 4.47 ft; no flow at times 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	413	258	6.6	8.1	7.2	7.5	105	6.3	44	48	5.0	5.0
2	411	272	6.6	8.1	7.2	7.5	104	9.1	45	24	5.0	5.0
3	383	276	6.6	8.1	7.3	7.5	104	5.7	45	31	5.1	5.0
4	381	274	6.6	8.1	7.4	7.6	104	5.2	45	46	5.0	94
5	381	272	6.5	8.1	7.4	7.9	104	5.3	46	35	4.8	323
6	380	304	6.3	8.1	7.4	8.1	104	5.0	46	43	4.8	381
7	377	344	4.8	8.1	7.5	8.1	105	5.0	46	44	4.8	383
8	374	334	6.0	8.1	7.5	8.1	105	5.0	47	44	4.8	383
9	409	346	6.0	8.1	7.5	8.1	105	5.0	47	43	5.0	381
10	413	346	6.0	8.2	7.5	8.2	105	5.0	47	25	5.0	381
11	393	346	5.8	8.2	7.5	8.4	106	5.0	48	29	5.0	433
12	397	345	5.2	8.1	7.5	12	85	5.1	31	43	4.8	457
13	403	255	8.1	8.1	7.8	8.8	76	5.3	48	43	4.8	454
14	400	5.8	8.1	8.1	7.5	7.9	76	5.1	49	43	4.8	458
15	399	7.2	8.1	8.1	7.5	7.2	74	5.0	49	43	4.8	456
16	410	7.4	8.1	8.1	7.5	6.6	74	5.2	49	18	4.8	462
17	413	7.5	8.1	8.1	7.5	6.6	74	5.2	49	5.7	4.8	463
18	406	7.5	8.1	8.1	7.5	6.6	74	5.2	49	5.7	4.8	459
19	400	7.5	8.1	8.1	7.5	6.6	75	5.2	48	5.7	4.8	459
20	399	7.5	8.1	8.1	7.5	6.6	75	2.0	48	5.7	4.8	456
21	399	4.6	8.1	8.1	7.5	6.7	75	.00	48	5.7	4.8	410
22	382	6.0	8.1	8.1	7.5	6.6	75	.00	48	5.7	4.8	418
23	397	6.6	8.1	8.1	7.5	6.5	50	.00	48	5.5	4.8	444
24	393	6.6	8.1	8.1	7.5	6.3	38	.00	48	5.5	4.8	442
25	391	6.6	8.1	8.1	7.6	107	38	13	48	5.3	4.8	446
26	306	6.6	8.1	8.1	7.5	108	38	42	47	5.3	4.8	453
27	36	6.6	8.1	8.1	7.5	106	38	43	48	5.2	5.0	448
28	4.3	6.6	8.1	8.1	7.5	106	38	43	48	5.2	5.0	456
29	4.3	6.6	8.1	8.1	---	106	38	43	48	5.1	5.0	457
30	151	6.6	8.1	8.1	---	106	17	44	48	5.0	5.0	456
31	248	---	8.1	4.8	---	106	---	44	---	5.0	5.0	---
TOTAL	10653.6	4085.8	226.9	248.0	209.3	983.7	2279	376.90	1405	683.3	151.3	11328.0
MEAN	344	136	7.32	8.00	7.47	31.7	76.0	12.2	46.8	22.0	4.88	378
MAX	413	346	8.1	8.2	7.8	108	106	44	49	48	5.1	463
MIN	4.3	4.6	4.8	4.8	7.2	6.5	17	.00	31	5.0	4.8	5.0
AC-FT	21130	8100	450	492	415	1950	4520	748	2790	1360	300	22470

11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION (REVISED).—Lat 34°26'30", long 118°55'35", in SE 1/4 NW 1/4 SE 1/4 sec.12, T.4 N., R.20 W., *Ventura County*, Hydrologic Unit 18070102, on right bank, 0.7 mi downstream from Little Sespe Creek, and 2.4 mi north on Grand Avenue, from Telegraph Road, and 2.7 mi north of Fillmore.

DRAINAGE AREA.—252 mi² (revised).

PERIOD OF RECORD.—September 1911 to September 1913, October 1927 to September 1985, October 1990 to January 1993, October 1993 to current year; combined records of creek and canal, October 1927 to September 1939 monthly only, October 1939 to September 1985, October 1990 to January 1993. Prior to 1935, published as "at Sespe."

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 565 ft above sea level, from topographic map (revised). See WSP 1315-B for history of changes prior to Jan. 17, 1946. Oct. 1, 1990, to Jan. 15, 1993, at site 0.5 mi upstream at same elevation. Gage on diversion canal discontinued Jan. 15, 1993.

REMARKS.—Records fair. No regulation upstream from station. Fillmore Irrigation Co. has diverted water 1 mi upstream since September 1911. See schematic diagram of *Santa Clara River Basin*.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 73,000 ft³/s, Feb. 10, 1978, gage height, 22.40 ft, from rating curve extended above 17,000 ft³/s, on basis of slope-area measurement at gage height 22.40 ft, maximum gage height, 24.95 ft, Feb. 25, 1969, from debris wave; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2345	6,610	10.41	Feb. 26	0445	2,740	8.71
Feb. 13	1045	2,380	8.45	Mar. 6	0545	25,900	13.91

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	.45	2.9	3.1	7.0	35	866	186	81	37	19	15	4.3
2	.42	2.6	3.0	6.7	34	745	178	78	35	17	14	5.1
3	.43	2.2	4.4	6.4	33	676	160	75	35	17	13	4.5
4	.44	2.9	3.8	6.1	33	1610	145	71	35	16	13	4.5
5	.44	2.8	3.9	5.8	37	15700	141	70	34	17	13	5.2
6	.46	1.5	3.7	6.8	43	13900	132	68	32	16	13	5.1
7	.51	1.7	4.5	7.2	39	2810	226	66	31	17	12	4.8
8	.51	1.2	3.4	7.9	34	1440	180	65	29	18	12	4.7
9	.62	1.3	4.1	8.8	31	1000	140	64	28	18	11	5.0
10	1.5	1.3	5.0	398	50	757	135	62	27	18	11	5.6
11	1.5	1.4	4.9	1240	382	603	125	60	26	17	11	5.2
12	1.1	1.2	4.9	333	1090	510	119	59	26	18	11	5.2
13	1.3	1.1	5.7	125	1720	462	115	58	26	18	10	5.1
14	.65	1.1	6.6	63	802	436	114	56	24	17	9.8	4.4
15	.73	1.1	5.3	61	566	407	113	54	23	17	9.1	4.5
16	.48	1.0	5.0	51	522	373	110	53	21	17	9.3	4.5
17	.47	.94	5.0	43	509	352	107	51	21	17	9.5	4.4
18	.46	.90	5.0	38	553	346	106	50	22	17	9.5	4.8
19	.46	1.4	4.5	35	808	359	105	49	21	17	9.3	4.5
20	.53	1.8	4.8	32	1010	367	105	49	23	17	9.4	4.9
21	.54	1.9	4.8	31	739	364	126	49	23	17	9.8	5.0
22	.53	2.1	4.8	30	703	323	109	48	22	16	9.3	4.5
23	.51	2.6	4.7	30	639	290	99	45	22	17	9.6	4.7
24	.50	2.8	4.8	40	653	274	95	80	21	16	9.2	5.3
25	.50	3.0	4.8	42	1140	256	95	46	22	16	4.9	6.7
26	.61	4.0	4.9	59	1990	245	96	44	21	16	4.1	3.1
27	10	3.6	4.6	69	1160	234	94	44	21	16	5.7	3.4
28	5.9	3.6	5.0	52	960	210	92	44	21	15	5.0	3.5
29	13	2.8	6.5	43	---	239	88	44	21	15	4.5	3.5
30	11	2.9	6.7	40	---	225	84	42	21	14	4.5	3.3
31	5.8	---	6.9	37	---	196	---	39	---	15	4.1	---
TOTAL	62.35	61.64	149.1	2954.7	16315	46575	3720	1764	771	518	295.6	139.3
MEAN	2.01	2.05	4.81	95.3	583	1502	124	56.9	25.7	16.7	9.54	4.64
MAX	13	4.0	6.9	1240	1990	15700	226	81	37	19	15	6.7
MIN	.42	.90	3.0	5.8	31	196	84	39	21	14	4.1	3.1
AC-FT	124	122	296	5860	32360	92380	7380	3500	1530	1030	586	276

11113000 SESPE CREEK NEAR FILLMORE, 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	5.31	39.8	97.2	240	498	376	166	55.0	20.0	8.06	4.18	3.93
MAX	55.4	1285	698	3378	4333	2301	1632	426	203	90.9	49.3	45.6
(WY)	1984	1966	1966	1969	1998	1978	1958	1998	1998	1998	1998	1939
MIN	.000	.000	.000	1.35	4.74	2.82	.67	.25	.000	.000	.000	.000
(WY)	1913	1930	1930	1948	1951	1961	1961	1961	1928	1928	1912	1912

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR			WATER YEARS 1911 - 2001	
ANNUAL TOTAL	22417.67		73325.69				
ANNUAL MEAN	61.3		201			124	
HIGHEST ANNUAL MEAN						641	
LOWEST ANNUAL MEAN						1.78	
HIGHEST DAILY MEAN	2410	Feb 21	15700	Mar 5	29100	Jan 25	1969
LOWEST DAILY MEAN	.41	Sep 18	.42	Oct 2	.00	Jul 11	1912
ANNUAL SEVEN-DAY MINIMUM	.43	Sep 13	.45	Oct 1	.00	Jul 11	1912
MAXIMUM PEAK FLOW			25900	Mar 6	73000	Feb 10	1978
MAXIMUM PEAK STAGE			13.91	Mar 6	24.95	Feb 25	1969
ANNUAL RUNOFF (AC-FT)	44470		145400			89850	
10 PERCENT EXCEEDS	133		369			180	
50 PERCENT EXCEEDS	5.9		17			10	
90 PERCENT EXCEEDS	.51		1.5			.20	

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION.—Lat 34°24'48", long 119°04'53", in NW 1/4 SE 1/4 sec.21, T.4 N., R.21 W., Mission San Buenaventura Grant, Ventura County, Hydrologic Unit 18070102, on right bank, 1.3 mi downstream from Sisar Creek, and 4.8 mi north of Santa Paula.

DRAINAGE AREA.—38.4 mi².

PERIOD OF RECORD.—October 1927 to current year. October 1995 to current year, operated by Ventura County Public Works Agency. March 1912 to September 1913, at site 1.2 mi upstream; records not equivalent.

CHEMICAL DATA: 1969–80.

WATER TEMPERATURE: 1969–71, 1974–75.

REVISED RECORDS.—WSP 1635: 1933(M), 1934, 1936(M), 1941(M). WDR CA-95-1: 1994. WSP 1715: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage, and ultrasonic sensor. Elevation of gage is 785 ft above sea level, from topographic map. Prior to Oct. 22, 1980, at various sites and datums 1.3 mi downstream. See WDR CA-79-1 for history of changes prior to Oct. 22, 1980. Prior to Feb. 12, 1992, at datum 5.0 ft higher at same site. High-flow data for 1996 recorded by sonic-sensor gage set to sea level datum.

REMARKS.—Natural flow affected by pumping and return flow from irrigated areas. See schematic diagram of [Santa Clara River Basin](#).

COOPERATION.—Records of discharge collected and provided by Ventura County Public Works Agency.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21,000 ft³/s, Feb. 25, 1969, gage height, 15.18 ft, from floodmark, site and datum then in use, from rating curve extended above 2,300 ft³/s, on basis of critical-depth measurement at gage height 12.2 ft, maximum gage height, 772.21 ft, Mar. 5, 2001, at present datum; no flow at times in 1927, 1949, 1951–52, 1965.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2330	1,340	771.64	Feb. 26	0330	459	770.52
Feb. 13	0345	470	770.57	Mar. 5	0615	3,480	772.21

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	2.1	3.4	3	2.9	9.5	93	51	28	e15	8.9	5.7	5
2	2	3.2	3.1	3.1	8.8	79	50	27	e15	8.6	7.5	4.9
3	1.7	3.1	3.1	2.5	10	73	47	44	e14	8.4	7.2	6.2
4	2	3.1	3.2	2.7	10	237	46	28	e14	8.2	7	4.4
5	2.1	3.1	3	2.5	9.3	2050	44	25	e13	8.5	6.8	4.2
6	2.1	3.3	2.8	2.6	9.1	1680	44	25	e13	11	6.3	4.3
7	2.1	3.2	3	2.9	8.5	550	64	24	e12	9.6	4.5	4.1
8	2.2	3.2	3.2	2.8	10	270	50	23	12	9.5	4.2	3.9
9	2.2	3.2	3.2	2.9	11	192	46	22	12	8.8	4	4.4
10	2.1	3.2	3.2	56	15	149	44	19	12	8.3	4.2	4.4
11	2.3	3.3	3.4	113	94	129	42	20	12	8.8	4.4	3.8
12	2.3	3.3	3.3	56	118	114	40	19	11	9.2	4.4	4.1
13	2.5	3.4	3.4	19	285	105	40	20	11	9.2	4.4	5
14	2.3	3.3	3.4	14	86	98	38	20	13	9.3	4.4	4.7
15	2.2	3.3	3.4	12	51	93	37	19	11	9.4	4	5.9
16	2.4	3.5	3.4	12	38	91	36	18	11	9.9	3.9	5.9
17	2.3	2.9	3.7	11	33	90	38	18	11	10	3.9	4.4
18	2.3	3.2	3	11	43	90	33	19	11	11	3.7	4.2
19	2.3	3.3	3.2	9.6	80	90	32	18	10	10	4.8	5
20	2.4	3.3	3.1	8.8	78	86	39	18	9.8	9.4	6.2	3.7
21	2.3	2.9	3.1	7.8	58	80	46	17	9.6	7.9	6.6	3.6
22	2.6	3	3.1	7.1	64	75	40	19	8.8	6.9	6.4	3.5
23	2.3	3.1	3.2	6.7	60	74	38	e17	8.7	6	6.9	3.7
24	2.6	3.2	3.3	7.9	61	69	38	e18	8.6	5.6	6.7	4.2
25	2.5	3.1	3.1	6.9	127	67	34	e18	9.1	6.9	6.2	4.8
26	3.2	3	3	8.1	233	66	31	e17	8.3	5.8	4.4	6.6
27	4.2	3	3	7.2	116	64	29	e17	8.2	5.6	4.2	5.7
28	3.1	2.9	3	6.6	96	61	32	e17	8.6	5.6	3.8	6.4
29	4.1	3	2.9	5.8	---	60	30	e16	8.8	5.4	4.2	5.2
30	3.7	3.1	2.8	6	---	57	32	e16	8.6	5.7	3.9	4.3
31	3.3	---	3	5.7	---	52	---	e15	---	5.4	4.2	---
TOTAL	77.8	95.1	97.6	423.1	1822.2	7084	1211	641	330.1	252.8	159.0	140.5
MEAN	2.51	3.17	3.15	13.6	65.1	229	40.4	20.7	11.0	8.15	5.13	4.68
MAX	4.2	3.5	3.7	113	285	2050	64	44	15	11	7.5	6.6
MIN	1.7	2.9	2.8	2.5	8.5	52	29	15	8.2	5.4	3.7	3.5
AC-FT	154	189	194	839	3610	14050	2400	1270	655	501	315	279

e Estimated.

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, 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	3.12	8.01	15.5	45.1	84.7	70.7	34.4	14.2	8.12	4.99	3.24	3.11
MAX	18.8	183	128	718	841	454	375	78.7	46.4	26.9	16.5	24.5
(WY)	1984	1966	1967	1969	1969	1978	1958	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.76	.97	1.69	.000	.081	.000	.000	.000	.000
(WY)	1929	1930	1930	1928	1930	1961	1928	1928	1928	1928	1928	1928

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	4367.5		12334.2			
ANNUAL MEAN	11.9		33.8		24.3	
HIGHEST ANNUAL MEAN					156	
LOWEST ANNUAL MEAN					1.37	
HIGHEST DAILY MEAN	329	Feb 21	2050	Mar 5	8900	Feb 25 1969
LOWEST DAILY MEAN	1.7	Oct 3	1.7	Oct 3	.00	Oct 1 1927
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 1	2.0	Oct 1	.00	Oct 1 1927
MAXIMUM PEAK FLOW			3480	Mar 5	21000	Feb 25 1969
MAXIMUM PEAK STAGE			772.21	Mar 5	772.21	Mar 5 2001
ANNUAL RUNOFF (AC-FT)	8660		24460		17580	
10 PERCENT EXCEEDS	25		66		36	
50 PERCENT EXCEEDS	3.6		7.9		4.9	
90 PERCENT EXCEEDS	2.4		2.9		.90	

11114000 SANTA CLARA RIVER AT MONTALVO, CA

LOCATION.—Lat 34°16'44", long 119°08'28" in Santa Clara Del Norte Grant, [Ventura County](#), Hydrologic Unit 18070102, on right bank, downstream side of State Highway 118 bridge, and 0.8 mi southeast of Saticoy.

DRAINAGE AREA.—1,577 mi².

PERIOD OF RECORD.—October 1927 to September 1932, October 1949 to September 1988, October 1989 to September 1993, October 1995 to September 1996. Discharge measurements only October 1993 to September 1994 at site 3.9 mi downstream, October 1994 to November 1998 at present site. November 1998 to June 1999 at site upstream of Freeman Diversion, June 1999 to current year at present site. Monthly discharge only for 1950–65, published in WSP 2128 (daily discharge available in the files of the U.S. Geological Survey).

WATER TEMPERATURE: Water years 1969–85, 1989–1993.

SEDIMENT DATA: Water years 1969–85, 1989–93.

REVISED RECORDS.—WSP 2128: Drainage area. WDR CA-00-1: 1999.

GAGE.—Water-stage recorder. Datum of gage is 120 ft above sea level, from topographic map. Oct. 1, 1927, to Sept. 30, 1932, Oct. 1, 1949, to Sept. 30, 1967, and Feb. 3, 1970, to Sept. 30, 1993, at site 3.9 mi downstream at different datums. Oct. 1, 1967, to Feb. 2, 1970, at present site at different datum. Feb. 9, 1984, to Jan. 27, 1993, supplementary gage 3.2 mi downstream at different datum. Oct. 1, 1995, to Nov. 23, 1998, at present site. Nov. 23, 1998, to June 25, 1999, at site 1.8 mi upstream at different datum. June 25, 1999, to current year at present site.

REMARKS.—Records fair. Flow partly regulated by Lake Piru (station 11109700), capacity, 88,340 acre-ft, 33 mi upstream since May 1955; by Pyramid Lake (station 11109520), capacity, 171,200 acre-ft, 42 mi upstream since 1971; by Castaic Lake (station 11108133), capacity, 323,700 acre-ft, 43 mi upstream since 1972. Natural flow affected by ground-water withdrawals, diversions, municipal use, and ground-water replenishment. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam. Diversion to spreading grounds and for irrigation in Pleasant Valley, at site 6.0 mi upstream. Discharge represents flow to the ocean regardless of upstream development. See schematic diagram of [Santa Clara River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 165,000 ft³/s, Jan. 25, 1969, gage height, 17.41 ft, at datum 5.0 ft higher; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 2, 1938, reached a discharge of 120,000 ft³/s, estimated by Ventura County Flood Control District.

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	4.9	7.1	4.8	.00	.85	885	164	20	8.1	1.8	.00	.00
2	7.3	7.1	3.8	.00	.00	510	144	18	7.7	1.8	.00	.00
3	.00	6.6	3.3	.00	.00	443	146	17	7.3	1.7	.00	.00
4	.00	6.5	2.7	.00	.00	1140	111	18	8.6	1.7	.00	.00
5	.00	6.9	2.3	.00	.00	21400	90	16	6.7	1.6	.00	.00
6	.00	15	2.0	.00	.00	20300	89	19	6.8	1.6	.00	.00
7	.00	5.2	1.9	.00	.00	4210	490	22	6.4	1.4	.00	.00
8	.00	5.6	2.2	.13	.00	1780	219	14	6.6	1.3	.00	.00
9	.00	6.2	.92	.79	.00	1320	193	11	6.3	1.2	.00	.00
10	.00	8.3	.00	368	.01	854	104	11	5.5	1.1	.00	.00
11	.00	7.5	.46	3210	442	680	69	12	4.8	1.0	.00	.00
12	13	8.5	.00	854	2110	567	58	10	6.5	.72	.00	.00
13	3.1	21	.50	190	5070	403	48	9.5	5.4	.40	.00	.00
14	.00	8.0	.51	18	616	334	50	11	2.1	.14	.00	.00
15	.00	8.3	.02	11	185	279	52	6.7	2.7	.06	.00	.00
16	1.1	9.1	.00	1.5	131	300	63	7.5	2.7	4.5	.00	.00
17	.00	9.4	.00	5.6	90	250	37	15	2.0	1.7	.00	2.1
18	.00	8.5	.00	.00	54	244	36	21	2.6	.12	.00	.00
19	.05	8.1	.00	.00	330	264	47	20	2.5	.00	.00	.00
20	.68	8.0	.00	.00	662	263	44	17	3.0	.00	.00	.00
21	1.5	8.2	.00	.00	230	284	173	16	3.2	.00	.00	.00
22	4.7	7.0	.00	.00	201	239	51	15	2.9	.00	.00	.00
23	41	6.5	.00	.00	143	237	53	13	2.9	.00	.00	.00
24	8.8	6.6	.00	36	202	210	41	15	2.5	.00	.00	.00
25	9.1	6.3	.00	32	1050	208	34	12	19	.00	.00	.00
26	12	6.2	.00	102	4030	208	28	11	18	.00	.00	2.2
27	69	5.7	.00	61	1430	165	25	10	2.8	.00	.00	.00
28	7.5	5.1	.00	11	1080	139	25	9.9	2.4	.00	.00	.00
29	13	4.7	.00	6.2	---	171	25	9.0	2.2	.00	.00	.00
30	41	4.7	.00	2.5	---	160	40	8.9	2.0	.00	.00	.00
31	7.4	---	.00	1.7	---	156	---	8.9	---	.00	.00	---
TOTAL	245.13	231.9	25.41	4911.42	18056.86	58603	2749	424.4	162.2	23.84	0.00	4.30
MEAN	7.91	7.73	.82	158	645	1890	91.6	13.7	5.41	.77	.000	.14
MAX	69	21	4.8	3210	5070	21400	490	22	19	4.5	.00	2.2
MIN	.00	4.7	.00	.00	.00	139	25	6.7	2.0	.00	.00	.00
AC-FT	486	460	50	9740	35820	116200	5450	842	322	47	.00	8.5

11114000 SANTA CLARA RIVER AT MONTALVO, 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	3.26	50.6	101	311	881	557	202	44.7	10.6	4.10	.64	1.40
MAX	72.0	1603	917	5477	7314	5985	2668	1102	268	97.4	23.9	31.7
(WY)	1997	1966	1966	1969	1969	1983	1958	1998	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1928	1928	1930	1951	1951	1931	1950	1932	1928	1928	1928	1928

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR			WATER YEARS 1928 - 2001	
ANNUAL TOTAL	25874.51		85437.46				
ANNUAL MEAN	70.7		234			177	
HIGHEST ANNUAL MEAN						1229	
LOWEST ANNUAL MEAN						.000	
HIGHEST DAILY MEAN	4340	Feb 21	21400	Mar 5	92300	Feb 25	1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 3	.00	Oct 1	1927
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 3	.00	Oct 1	1927
MAXIMUM PEAK FLOW			32900	Mar 6	165000	Jan 25	1969
MAXIMUM PEAK STAGE			15.34	Mar 6	17.41	Jan 25	1969
ANNUAL RUNOFF (AC-FT)	51320		169500			127900	
10 PERCENT EXCEEDS	63		238			99	
50 PERCENT EXCEEDS	2.3		4.5			.00	
90 PERCENT EXCEEDS	.00		.00			.00	

1118500 VENTURA RIVER NEAR VENTURA, CA

LOCATION.—Lat 34°21'05", long 119°18'23", in southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank, 420 ft downstream from bridge on Casitas Pass Road, at Foster Memorial Park, 0.2 mi downstream from Coyote Creek, and 5 mi north of Ventura.

DRAINAGE AREA.—188 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—September 1911 to January 1914, October 1929 to current year; combined records of river and diversion, October 1932 to current year.

REVISED RECORDS.—WSP 1565: 1957. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage on river; water-stage recorder and Parshall flume on diversion. Elevation of gage is 205.23 ft above sea level, Ventura County Flood Control datum. See WSP 1315-B for history of changes prior to Nov. 2, 1949. Nov. 2, 1949, to June 12, 1969, at site 80 ft downstream, at datum 9.00 ft lower. June 13, 1969, to Dec. 22, 1986, at site 370 ft upstream, at datum 5.00 ft lower.

REMARKS.—Records fair. Flow partly regulated since March 1948 by Matilija Reservoir (station 11115000), usable capacity, 1,480 acre-ft, and since October 1959 by Lake Casitas (station 11119700), capacity, 267,000 acre-ft. Water diverted to Lake Casitas on Coyote Creek since January 1959. Diversion by city of Ventura for municipal supply began prior to 1911. For records of combined discharge of river and Ventura City Diversion (station 11118400), see station 11118501.

EXTREMES FOR PERIOD OF RECORD.—River only: Maximum discharge, 63,600 ft³/s, Feb. 10, 1978, gage height, 24.14 ft, from rating curve extended above 34,000 ft³/s, maximum gage height, 29.3 ft, Jan. 25, 1969, present datum, from floodmarks; no flow at times in many years. Combined river and diversion: Maximum discharge, 63,600 ft³/s, Feb. 10, 1978; no flow, Nov. 28, 29, 1977, Oct. 23–26, 1989, July 9–11, 1990, and many days during 1994.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.2	1.1	.60	9.1	127	83	81	34	22	14	10
2	2.7	4.1	1.1	.59	8.7	113	82	67	34	22	14	10
3	2.8	3.5	1.1	.56	8.5	95	78	62	34	20	14	10
4	2.8	3.4	1.0	.56	8.5	549	66	58	34	20	14	9.8
5	2.7	3.3	.94	.55	8.7	12300	63	57	33	20	14	10
6	2.8	3.3	.94	.48	8.8	8940	62	58	32	20	14	9.8
7	3.0	3.2	.92	.46	8.8	1910	138	57	31	19	14	10
8	2.9	3.3	.87	.54	8.8	814	78	44	32	18	14	10
9	2.8	2.7	.87	.53	9.0	362	66	45	30	18	14	9.6
10	2.8	2.6	.86	128	17	219	62	51	29	18	15	9.2
11	2.8	2.1	.92	395	80	179	58	46	30	17	15	8.9
12	2.8	2.0	.94	174	172	143	55	42	29	16	15	8.8
13	2.8	1.8	.99	69	729	131	53	46	28	16	15	8.7
14	2.8	1.8	1.0	32	205	145	53	49	27	16	14	8.5
15	2.9	1.8	.97	18	113	147	65	50	20	15	14	8.5
16	2.9	1.7	.91	14	89	138	56	44	26	16	14	8.3
17	2.8	1.6	.90	12	67	126	59	41	26	15	14	8.2
18	2.8	1.4	.87	10	54	116	e62	40	25	16	13	8.2
19	2.7	1.2	.90	9.3	108	108	59	40	25	15	13	8.1
20	2.5	1.4	.89	7.9	99	104	46	39	25	14	13	7.9
21	2.8	1.7	.85	7.7	76	102	59	39	25	14	13	7.7
22	2.8	1.7	.81	8.1	72	91	43	40	25	14	13	7.4
23	2.9	1.7	.80	6.9	73	86	45	38	25	14	12	7.6
24	2.6	1.5	.78	14	172	82	43	37	24	14	11	7.7
25	2.8	2.0	.80	10	218	81	42	38	24	14	11	7.1
26	3.4	1.7	.76	20	397	93	43	37	24	14	12	7.1
27	7.9	1.5	.74	13	169	74	46	37	24	13	11	7.0
28	5.0	1.3	.71	9.6	142	77	47	37	24	14	11	6.6
29	10	1.3	.67	8.8	---	78	59	37	25	14	10	6.5
30	9.3	1.2	.65	8.9	---	80	54	35	24	14	10	6.3
31	5.5	---	.63	9.2	---	79	---	33	---	14	10	---
TOTAL	110.7	66.0	27.19	990.27	3130.9	27689	1825	1425	828	506	405	253.5
MEAN	3.57	2.20	.88	31.9	112	893	60.8	46.0	27.6	16.3	13.1	8.45
MAX	10	4.2	1.1	395	729	12300	138	81	34	22	15	10
MIN	2.5	1.2	.63	.46	8.5	74	42	33	20	13	10	6.3
AC-FT	220	131	54	1960	6210	54920	3620	2830	1640	1000	803	503

e Estimated.

11118500 VENTURA RIVER NEAR VENTURA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1957, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.29	5.15	36.5	121	192	237	78.0	26.1	12.1	6.15	3.59	2.51
MAX	21.4	38.8	174	1103	1058	1951	874	226	103	56.1	35.8	21.2
(WY)	1942	1947	1932	1952	1941	1938	1941	1941	1941	1941	1941	1941
MIN	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1931	1930	1951	1949	1934	1934	1931	1930	1930

SUMMARY STATISTICS WATER YEARS 1930 - 1957

ANNUAL MEAN	59.7
HIGHEST ANNUAL MEAN	354 1941
LOWEST ANNUAL MEAN	.000 1951
HIGHEST DAILY MEAN	17900 Mar 2 1938
LOWEST DAILY MEAN	.00 Oct 1 1929
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1929
MAXIMUM PEAK FLOW	39200 Mar 2 1938
MAXIMUM PEAK STAGE	19.20 Mar 2 1938
ANNUAL RUNOFF (AC-FT)	43230
10 PERCENT EXCEEDS	71
50 PERCENT EXCEEDS	1.9
90 PERCENT EXCEEDS	.00

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

MEAN	2.91	13.9	24.5	139	320	221	74.8	36.3	16.3	8.39	4.42	3.56
MAX	40.9	278	234	1880	2919	1797	758	408	158	63.7	32.2	29.0
(WY)	1984	1966	1966	1969	1998	1983	1983	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1962	1965	1969	1976	1961	1990	1961	1961	1961	1961	1961	1961

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1960 - 2001

ANNUAL TOTAL	9242.34	37256.56	
ANNUAL MEAN	25.3	102	70.7
HIGHEST ANNUAL MEAN			383 1995
LOWEST ANNUAL MEAN			.29 1961
HIGHEST DAILY MEAN	1020 Feb 21	12300 Mar 5	22000 Feb 9 1978
LOWEST DAILY MEAN	.09 Jan 23	.46 Jan 7	.00 Sep 12 1960
ANNUAL SEVEN-DAY MINIMUM	.24 Jan 18	.53 Jan 3	.00 Dec 15 1960
MAXIMUM PEAK FLOW		19100 Mar 6	63600 Feb 10 1978
MAXIMUM PEAK STAGE		11.30 Mar 6	29.30 Jan 25 1969
ANNUAL RUNOFF (AC-FT)	18330	73900	51220
10 PERCENT EXCEEDS	48	94	56
50 PERCENT EXCEEDS	5.9	14	3.6
90 PERCENT EXCEEDS	.71	1.0	.00

11118500 VENTURA RIVER NEAR VENTURA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1907 to December 1908, water years 1967 to current year.

CHEMICAL DATA: December 1907 to December 1908, water years 1967–79.

WATER TEMPERATURE: Water years 1969, 1971–73, 1975–81, 1986.

SEDIMENT DATA: Water years 1969–73, 1975 to current year.

PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: October 1968 to September 1969, October 1970 to September 1973, October 1974 to September 1981, and October 1985 to September 1986.

SUSPENDED-SEDIMENT DISCHARGE: October 1968 to September 1973, October 1974 to September 1981, and October 1985 to September 1986.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV						
01...	1340	3.9	17.5	3	.03	--
JAN						
11...	1455	109	12.0	394	116	99
FEB						
13...	1215	1050	9.0	1260	3570	95
13...	1445	826	9.0	1270	2830	95
MAR						
05...	1335	12400	--	4040	135000	73
05...	1550	12600	--	4190	143000	72
07...	1305	1670	15.0	433	1960	61
07...	1400	1670	15.0	408	1840	61

11118501 VENTURA RIVER NEAR VENTURA, CA—Continued

VENTURA RIVER AND VENTURA CITY DIVERSION NEAR VENTURA, 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	2.6	4.2	1.1	.60	9.1	127	83	81	34	22	14	10
2	2.7	4.1	1.1	.59	8.7	113	82	67	34	22	14	10
3	2.8	3.5	1.1	.56	8.5	95	78	62	34	20	14	10
4	2.8	3.4	1.0	.56	8.5	549	66	58	34	20	14	9.8
5	2.7	3.3	.94	.55	8.7	12300	63	57	33	20	14	10
6	2.8	3.3	.94	.48	8.8	8940	62	58	32	20	14	9.8
7	3.0	3.2	.92	.46	8.8	1910	138	57	31	19	14	10
8	2.9	3.3	.87	.54	8.8	814	78	44	32	18	14	10
9	2.8	2.7	.87	.53	9.0	362	66	45	30	18	14	9.6
10	2.8	2.6	.86	128	17	219	62	51	29	18	15	9.2
11	2.8	2.1	.92	395	80	179	58	46	30	17	15	8.9
12	2.8	2.0	.94	174	172	143	55	42	29	16	15	8.8
13	2.8	1.8	.99	69	729	131	53	46	28	16	15	8.7
14	2.8	1.8	1.0	32	205	145	53	49	27	16	14	8.5
15	2.9	1.8	.97	18	113	147	65	50	20	15	14	8.5
16	2.9	1.7	.91	14	89	138	56	44	26	16	14	8.3
17	2.8	1.6	.90	12	67	126	59	41	26	15	14	8.2
18	2.8	1.4	.87	10	54	116	62	40	25	16	13	8.2
19	2.7	1.2	.90	9.3	108	108	59	40	25	15	13	8.1
20	2.5	1.4	.89	7.9	99	104	46	39	25	14	13	7.9
21	2.8	1.7	.85	7.7	76	102	59	39	25	14	13	7.7
22	2.8	1.7	.81	8.1	72	91	43	40	25	14	13	7.4
23	2.9	1.7	.80	6.9	73	86	45	38	25	14	12	7.6
24	2.6	1.5	.78	14	172	82	43	37	24	14	11	7.7
25	2.8	2.0	.80	10	218	81	42	38	24	14	11	7.1
26	3.4	1.7	.76	20	397	93	43	37	24	14	12	7.1
27	8.0	1.5	.74	13	169	74	46	37	24	13	11	7.0
28	5.0	1.3	.71	9.6	142	77	47	37	24	14	11	6.6
29	10	1.3	.67	8.8	---	78	59	37	25	14	10	6.5
30	9.3	1.2	.65	8.9	---	80	54	35	24	14	10	6.3
31	5.5	---	.63	9.2	---	79	---	33	---	14	10	---
TOTAL	110.8	66.0	27.19	990.27	3130.9	27689	1825	1425	828	506	405	253.5
MEAN	3.57	2.20	.88	31.9	112	893	60.8	46.0	27.6	16.3	13.1	8.45
MAX	10	4.2	1.1	395	729	12300	138	81	34	22	15	10
MIN	2.5	1.2	.63	.46	8.5	74	42	33	20	13	10	6.3
AC-FT	220	131	54	1960	6210	54920	3620	2830	1640	1000	803	503

SUMMARY STATISTICS

WATER YEARS 1933 - 1957

ANNUAL MEAN	72.9
HIGHEST ANNUAL MEAN	359
LOWEST ANNUAL MEAN	2.31
HIGHEST DAILY MEAN	18000
LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	.00
MAXIMUM PEAK FLOW	39200
MAXIMUM PEAK STAGE	19.20
ANNUAL RUNOFF (AC-FT)	52810
10 PERCENT EXCEEDS	84
50 PERCENT EXCEEDS	11
90 PERCENT EXCEEDS	2.2

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

MEAN	8.45	19.0	29.3	144	326	227	82.4	44.5	24.5	16.3	11.6	9.92
MAX	50.3	282	240	1883	2919	1804	766	409	160	65.8	33.0	29.0
(WY)	1984	1966	1966	1969	1998	1983	1983	1998	1998	1998	1998	1998
MIN	.000	.000	.11	.51	2.04	3.17	3.19	2.89	2.07	1.48	.63	.005
(WY)	1995	1995	1995	2000	1961	1961	1961	1961	1961	1961	1994	1994

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1960 - 2001

ANNUAL TOTAL	9256.04	37256.66	
ANNUAL MEAN	25.3	102	77.2
HIGHEST ANNUAL MEAN			384
LOWEST ANNUAL MEAN			2.22
HIGHEST DAILY MEAN	1020	Feb 21	12300
LOWEST DAILY MEAN	.09	Jan 23	.46
ANNUAL SEVEN-DAY MINIMUM	.24	Jan 18	.53
MAXIMUM PEAK FLOW			63600
MAXIMUM PEAK STAGE			29.30
ANNUAL RUNOFF (AC-FT)	18360	73900	55920
10 PERCENT EXCEEDS	48	94	62
50 PERCENT EXCEEDS	5.9	14	12
90 PERCENT EXCEEDS	.71	1.0	2.9

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA

LOCATION.—Lat 34°24'05", long 119°29'08", in El Rincon Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 100 ft upstream from bridge on State Highway 192, 165 ft downstream from Gobernador Creek, and 1.8 mi northeast of Carpinteria.

DRAINAGE AREA.—13.1 mi².

PERIOD OF RECORD.—January 1941 to September 1977, October 1978 to current year.

REVISED RECORDS.—WSP 1061: 1943. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 130 ft above sea level, from topographic map. Prior to July 1, 1958, at site 100 ft downstream, at datum 6.00 ft higher. July 2, 1958, to Aug. 27, 1970, at site 65 ft downstream at datum 4.00 ft higher. Aug. 28, 1970, to Sept. 30, 1977, at site 100 ft downstream at same datum.

REMARKS.—Records fair. No regulation upstream from station. Gobernador Land and Water Co. diverts from Gobernador Creek 1.8 mi upstream from station. Small lake 0.8 mi southeast of station and outside the drainage area stores storm runoff and surplus water diverted from Gobernador Creek by Gobernador Land and Water Co. At times this lake is drained by pumping water back into Gobernador Creek 1,000 ft upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,880 ft³/s, Dec. 27, 1971, gage height, 14.10 ft, from floodmark, from rating curve extended above 130 ft³/s, on basis of slope-area measurement of peak flow; no flow at times each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 125 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2400	144	4.48	Mar. 5	2330	1,160	6.47
Feb. 13	0500	139	4.54				

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	.00	.00	.00	.34	6.6	3.7	1.3	.34	.00	.00	.00
2	.00	.00	.00	.00	.17	5.7	3.4	1.2	.60	.00	.00	.00
3	.00	.00	.00	.00	.16	5.0	3.3	.98	.77	.00	.00	.00
4	.00	.00	.00	.00	.11	56	3.3	.71	.59	.00	.00	.00
5	.00	.00	.00	.00	.07	651	3.4	.66	.32	.00	.00	.00
6	.00	.00	.00	.00	.04	465	3.2	.68	.27	.00	.00	.00
7	.00	.00	.00	.00	.06	88	11	.65	.17	.08	.00	.00
8	.00	.00	.00	.00	.08	51	5.0	.54	.13	.04	.00	.00
9	.00	.00	.00	.00	.04	36	4.1	.47	.15	.02	.00	.00
10	.00	.07	.00	14	2.9	32	4.9	.58	.26	.00	.00	.00
11	e.00	.10	.00	32	22	26	3.6	.61	.16	.00	.00	.00
12	e.00	.10	.00	17	22	e23	3.2	.74	.04	.00	.00	.00
13	e.00	.09	.00	3.3	76	e19	3.0	.91	.04	.00	.00	.00
14	.00	.12	.00	1.3	24	e16	2.8	.87	.00	.00	.00	.00
15	.00	.12	.00	.55	11	e13	2.7	.70	.00	.00	.00	.00
16	.00	.12	.00	.36	7.5	e12	2.6	.88	.00	.01	.00	.00
17	.00	.11	.00	.29	5.6	11	2.4	.89	.00	.04	.00	.00
18	.00	.08	.00	.23	4.9	9.3	2.1	.79	.00	.00	.00	.00
19	.00	.07	.00	.17	7.0	8.4	2.1	.80	.00	.00	.00	.00
20	.00	.06	.00	.13	8.1	7.4	2.4	.85	.00	.00	.00	.00
21	.00	.01	.00	.10	4.8	6.7	3.6	1.0	.00	.00	.00	.00
22	.00	.00	.00	.05	3.8	6.5	2.2	.76	.00	.00	.00	.00
23	.00	.00	.00	.02	3.5	6.2	2.0	.35	.00	.00	.00	.00
24	.00	.06	.00	4.2	5.8	5.9	1.7	.34	.00	.02	.00	.00
25	.00	.07	.00	2.9	9.7	5.5	1.5	.42	.00	.00	.00	.00
26	4.9	.00	.00	6.8	17	5.0	1.5	.53	.00	.00	.00	.00
27	9.4	.00	.00	2.4	10	4.4	1.6	.97	.00	.00	.00	.00
28	.46	.00	.00	1.1	8.0	4.1	1.7	.85	.00	.00	.00	.00
29	3.8	.00	.00	.52	---	3.9	1.5	.81	.00	.00	.00	.00
30	2.2	.00	.00	.34	---	3.8	1.3	.45	.00	.00	.00	.00
31	.22	---	.00	.43	---	3.7	---	.30	---	.00	.00	---
TOTAL	20.98	1.18	0.00	88.19	254.67	1597.1	90.8	22.59	3.84	0.21	0.00	0.00
MEAN	.68	.039	.000	2.84	9.10	51.5	3.03	.73	.13	.007	.000	.000
MAX	9.4	.12	.00	32	76	651	11	1.3	.77	.08	.00	.00
MIN	.00	.00	.00	.00	.04	3.7	1.3	.30	.00	.00	.00	.00
AC-FT	42	2.3	.00	175	505	3170	180	45	7.6	.4	.00	.00

e Estimated.

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, 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	.13	.78	2.48	12.9	17.9	10.6	4.27	1.10	.45	.23	.12	.12
MAX	3.59	16.7	38.9	242	274	83.8	67.8	13.7	6.24	4.35	3.07	3.32
(WY)	1984	1966	1967	1995	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1946	1944	1948	1945	1948	1947	1947	1945	1942	1942	1942	1942

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	956.76		2079.56			
ANNUAL MEAN	2.61		5.70		4.02	
HIGHEST ANNUAL MEAN					33.5	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	126	Feb 23	651	Mar 5	4000	Jan 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Jan 4 1941
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Nov 18 1941
MAXIMUM PEAK FLOW			1160	Mar 5	8880	Dec 27 1971
MAXIMUM PEAK STAGE			6.47	Mar 5	14.10	Dec 27 1971
INSTANTANEOUS LOW FLOW			.00	Oct 1		
ANNUAL RUNOFF (AC-FT)	1900		4120		2910	
10 PERCENT EXCEEDS	6.1		6.6		3.6	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11119745 MISSION CREEK AT ROCKY NOOK PARK, AT SANTA BARBARA, CA

LOCATION.—Lat 34°26'26", long 119°42'39", in Santa Barbara County, Hydrologic Unit 18060013, on right bank, 50 ft southeast of entrance to Rocky Nook Park, 75 ft upstream from bridge on Los Olivos Street, in Santa Barbara.

DRAINAGE AREA.—6.60 mi².

PERIOD OF RECORD.—Water years 1984–86. October 1997 to current year.

WATER TEMPERATURE: Water years 1984–86.

SEDIMENT DATA: Water years 1984–86.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 335 ft above sea level, from topographic map.

REMARKS.—Records fair. At times water is released to creek for ground-water recharge from Gibraltar Reservoir through Mission Tunnel several miles upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,010 ft³/s, Feb. 3, 1998, gage height, 9.52 ft, from rating curve extended above 838 ft³/s; 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	.21	.55	.32	.14	.86	6.3	2.5	1.3	.79	.33	.21	.22
2	.21	.53	.32	.13	.80	5.0	2.4	1.2	.82	.31	.19	.20
3	.23	.48	.30	.12	.74	4.3	2.3	1.2	.81	.29	.17	.21
4	.25	.44	.29	.12	.68	120	2.4	1.1	.76	.38	.16	.21
5	.26	.45	.28	.13	.64	437	2.4	1.0	.74	.34	.15	.21
6	.26	.44	.29	.14	.61	231	2.2	.98	.72	.34	.13	.21
7	.28	.46	.37	.14	.59	58	16	.95	.70	.37	.13	.27
8	.30	.73	.36	.43	.56	31	4.5	.92	.69	.34	.13	.32
9	.31	1.3	.36	.40	.65	20	3.6	.90	.68	.32	.13	.31
10	.47	.53	.35	56	2.6	15	3.1	.91	.64	.32	.13	.27
11	.58	.57	.34	32	21	11	2.7	.95	.61	.33	.12	.26
12	.43	.55	.32	38	21	9.4	2.5	.98	.58	.33	.11	.24
13	.32	.53	.29	5.6	64	8.8	2.3	1.0	.57	.31	.10	.24
14	.26	.51	.29	2.4	15	8.0	2.3	1.0	.54	.30	.09	.26
15	.25	.44	.30	1.7	8.8	7.1	2.3	1.0	.49	.32	.07	.25
16	.31	.42	.26	1.4	5.8	6.8	1.9	1.0	.49	.33	.08	.26
17	.28	.40	.25	1.1	4.7	6.1	1.8	1.0	.48	.30	.09	.27
18	.26	.37	.24	.90	3.8	5.7	1.6	1.0	.47	e.27	.09	.29
19	.27	.38	.23	.79	8.7	5.3	1.5	.98	.47	e.25	.10	.30
20	.30	.36	.22	.66	6.5	4.9	1.9	.97	.45	e.25	.11	.30
21	.34	.35	.23	.63	4.4	4.6	3.1	.99	.41	e.27	.12	.28
22	.44	.33	.23	.59	3.4	4.2	1.9	.97	.80	e.24	.13	.25
23	.30	.31	.24	.56	3.1	3.9	1.6	.89	.46	e.26	.18	.25
24	.27	.34	.24	5.1	6.3	3.7	1.5	1.6	.38	e.26	.19	.23
25	.39	.35	.23	1.3	12	3.5	1.4	4.2	.33	e.28	.20	.20
26	9.2	.33	.29	5.0	35	3.4	1.4	1.0	.34	e.26	.19	.17
27	14	.33	.15	2.6	14	3.2	1.5	.94	.33	e.24	.20	.15
28	1.0	.32	.15	1.7	8.8	3.0	1.5	.91	.32	e.22	.19	.16
29	5.1	.32	.15	1.3	---	2.9	1.4	.85	.33	e.21	.22	.20
30	1.3	.33	.15	1.1	---	2.7	1.3	.83	.34	.21	.26	.18
31	.71	---	.15	.95	---	2.6	---	.77	---	.22	.25	---
TOTAL	39.09	13.75	8.19	163.13	255.03	1038.4	78.8	34.29	16.54	9.00	4.62	7.17
MEAN	1.26	.46	.26	5.26	9.11	33.5	2.63	1.11	.55	.29	.15	.24
MAX	14	1.3	.37	56	64	437	16	4.2	.82	.38	.26	.32
MIN	.21	.31	.15	.12	.56	2.6	1.3	.77	.32	.21	.07	.15
AC-FT	78	27	16	324	506	2060	156	68	33	18	9.2	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	2001	1984	1998	1998	1998	2001	1998	1998	1998	1998	1998	1998
MEAN	.30	.48	2.69	1.99	25.4	8.72	2.38	1.62	.73	.42	.29	.20
MAX	1.26	1.52	9.47	5.79	138	33.5	6.20	8.39	3.18	2.27	1.60	.79
(WY)	2001	1984	1998	1998	1998	2001	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.10	.20	.67	.29	.28	.039	.029	.010	.007	.008
(WY)	1998	1998	2000	1986	1984	1985	1984	1985	1984	1984	1984	1984

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	962.39		1668.01			
ANNUAL MEAN	2.63		4.57		4.08	
HIGHEST ANNUAL MEAN					14.4	
LOWEST ANNUAL MEAN					.46	
HIGHEST DAILY MEAN	142	Feb 23	437	Mar 5	524	Feb 3 1998
LOWEST DAILY MEAN	.06	Jan 7	.07	Aug 15	.00	Aug 15 1984
ANNUAL SEVEN-DAY MINIMUM	.06	Jan 4	.09	Aug 13	.00	Aug 15 1984
MAXIMUM PEAK FLOW			840		1010	
MAXIMUM PEAK STAGE			8.84		9.52	
INSTANTANEOUS LOW FLOW			.06			
ANNUAL RUNOFF (AC-FT)	1910		3310		2960	
10 PERCENT EXCEEDS	4.3		5.4		3.8	
50 PERCENT EXCEEDS	.32		.45		.32	
90 PERCENT EXCEEDS	.12		.18		.01	

e Estimated.

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA

LOCATION.—Lat 34°25'35", long 119°43'20", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank, 200 ft downstream from Los Olivos Street, in Santa Barbara.

DRAINAGE AREA.—8.38 mi².

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder, low-flow concrete control and crest-stage gage. Concrete-lined channel. Elevation of gage is 105 ft above sea level, from topographic map.

REMARKS.—Records good for low- and medium-flow, and poor for high-flow. At times water is released to creek for ground-water recharge from Gibraltar Reservoir through Mission Tunnel several miles upstream. Control installed Dec. 9, 1999.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,090 ft³/s, Feb. 23, 1998, gage height, 5.67 ft, from rating curve extended above 41 ft³/s, on basis of computation of flow in concrete-lined channel, maximum gage height, 6.60 ft, Jan. 10, 1995; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 26	1930	266	2.56	Feb. 13	0330	206	2.41
Jan. 10	2115	297	2.63	Mar. 4	2400	1,400	4.28

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	.03	.00	.00	.00	5.5	e1.9	.25	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	4.5	e1.7	.19	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	3.3	e1.7	.31	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	171	e1.8	.12	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	484	e1.9	.12	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	230	3.0	.13	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	56	22	.09	.00	.00	.00	.00
8	.00	.00	.00	.79	.00	29	5.1	.02	.00	.00	.00	.00
9	.00	.00	.00	.00	2.1	20	3.0	.00	.00	.00	.00	.00
10	.00	.00	.00	79	5.5	16	2.4	.00	.00	.00	.00	.00
11	.00	.00	.00	41	27	13	1.9	.03	.00	.00	.00	.00
12	.00	.00	.00	43	20	12	1.7	.04	.00	.00	.00	.00
13	.00	.00	.00	5.8	66	10	1.5	.11	.00	.00	.00	.00
14	.00	.00	.00	1.3	15	9.0	1.3	.10	.00	.00	.00	.00
15	.00	.00	.00	.00	9.4	7.9	1.1	.09	.00	.00	.00	.00
16	.00	.00	.00	.00	6.1	7.3	1.0	.12	.00	.00	.00	.00
17	.00	.00	.00	.00	5.0	6.8	.94	.01	.00	.00	.00	.00
18	.00	.00	.00	.00	3.7	6.4	.90	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	12	5.9	.90	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	7.0	5.5	3.5	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	4.4	5.3	3.6	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	2.6	4.6	.94	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	2.8	4.2	.66	.00	.00	.00	.00	.00
24	.00	.00	.00	11	11	3.7	.52	.21	.00	.00	.00	.00
25	.00	.00	.00	.04	12	3.4	.40	3.8	.00	.00	.00	.00
26	25	.00	.00	11	32	e3.1	.37	.07	.00	.00	.00	.00
27	29	.00	.00	1.8	12	e2.8	.36	.00	.00	.00	.00	.00
28	.36	.00	.00	.02	8.9	e2.5	.38	.00	.00	.00	.00	.00
29	10	.00	.00	.00	---	e2.3	.35	.00	.00	.00	.00	.00
30	.54	.00	.00	.00	---	e2.3	.29	.00	.00	.00	.00	.00
31	.18	---	.00	.00	---	e2.1	---	.00	---	.00	.00	---
TOTAL	65.08	0.03	0.00	194.75	264.50	1139.4	67.11	5.81	0.00	0.00	0.00	0.00
MEAN	2.10	.001	.000	6.28	9.45	36.8	2.24	.19	.000	.000	.000	.000
MAX	29	.03	.00	79	66	484	22	3.8	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	2.1	.29	.00	.00	.00	.00	.00
AC-FT	129	.06	.00	386	525	2260	133	12	.00	.00	.00	.00

e Estimated.

MISSION CREEK BASIN

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, 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	.21	1.01	2.44	8.56	15.6	9.99	2.26	1.03	.17	.020	.035	.13
MAX	2.10	14.0	13.9	79.9	176	62.3	17.2	11.3	1.97	.49	1.08	1.37
(WY)	2001	1973	1972	1995	1998	1978	1983	1998	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1975	1973	1976	1972	1972	1972	1972	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	972.16		1736.68			
ANNUAL MEAN	2.66		4.76		3.39	
HIGHEST ANNUAL MEAN					18.4	
LOWEST ANNUAL MEAN					.12	
HIGHEST DAILY MEAN	157	Feb 23	484	Mar 5	1390	Jan 10 1995
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
MAXIMUM PEAK FLOW			1400	Mar 4	3090	Feb 23 1998
MAXIMUM PEAK STAGE			4.28	Mar 4	6.60	Jan 10 1995
INSTANTANEOUS LOW FLOW			.00	Oct 1		
ANNUAL RUNOFF (AC-FT)	1930		3440		2460	
10 PERCENT EXCEEDS	5.5		6.2		3.8	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, CA

LOCATION.—Lat 34°26'42", long 119°48'10", in Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, at University Drive, 0.2 mi east of Patterson Avenue, and 1.5 mi northeast of Goleta.

DRAINAGE AREA.—6.35 mi².

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation upstream from station. Some pumping for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,600 ft³/s, Mar. 10, 1995, gage height, 10.16 ft, from rating curve extended above 3,000 ft³/s, on basis of slope-area measurement of peak flow, maximum gage height, 11.16 ft, Mar. 5, 2001, at site and datum then in use; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 12	0115	631	7.28	Feb. 28	2230	88	5.58
Feb. 13	0415	222	6.23	Mar. 5	0015	2,060	11.16

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	.03	.00	.00	.12	12	1.7	.50	.32	.00	.00	.00
2	.00	.04	.00	.00	.61	7.6	1.5	.46	.41	.00	e.00	.00
3	.00	.02	.00	.00	.16	6.6	1.5	.56	.35	.00	e.00	.00
4	.00	.00	.00	.00	.26	287	1.9	.33	.25	.00	e.00	.00
5	.00	.00	.00	.00	.51	571	1.5	.35	.19	.00	e.00	.00
6	.00	.00	.00	.00	.81	174	1.8	.34	.19	.00	e.00	.00
7	.00	.00	.00	.00	.23	35	12	.33	.15	.02	e.00	.00
8	.00	.00	.00	1.2	.28	20	2.8	.29	.17	.00	e.00	.00
9	.00	.00	.00	.05	3.0	15	2.8	.27	.13	.00	e.00	.00
10	.00	.00	.00	85	8.6	12	2.0	.30	.12	.00	e.00	.00
11	.00	.00	.00	26	30	9.2	1.5	.32	.08	.00	.00	.00
12	.00	.00	.00	96	41	7.8	1.2	.41	e.01	.00	.00	.00
13	.00	.00	.00	5.6	79	6.8	1.2	.42	.01	.00	.00	.00
14	.00	.00	.00	1.2	24	5.7	1.2	.44	.03	.00	.00	.00
15	.00	.00	.00	.56	20	5.3	1.1	.40	.13	.00	.00	.00
16	.00	.00	.00	.46	14	4.9	.97	.42	.05	.00	.00	.00
17	.00	.00	.00	.42	10	4.6	.70	.46	.05	.00	.00	.00
18	.00	.00	.00	.45	7.3	4.3	.60	.51	.06	.00	.00	.00
19	.00	.00	.00	.48	22	3.9	.73	.53	.05	.00	.00	.00
20	.00	.00	.00	.26	17	3.7	1.1	.53	.00	.00	.00	.00
21	.00	.00	.00	.13	11	3.3	3.4	.62	.00	.00	.00	.00
22	.00	.00	.00	.14	7.9	3.1	1.4	.56	.00	.00	.00	.00
23	.00	.00	.00	.06	7.8	3.1	.86	.46	.00	.00	.00	.00
24	.00	.00	.00	5.7	17	2.9	.66	.45	.00	.00	.00	.00
25	.00	.00	.00	.11	17	2.7	.50	.54	.00	.00	.00	.00
26	11	.00	.00	9.6	17	2.4	.55	.66	.00	.00	.00	.00
27	2.6	.00	.00	.63	11	2.2	.49	.71	.00	.00	.00	.00
28	.05	.00	.00	.11	15	1.9	.64	.58	.00	.00	.00	.00
29	2.9	.00	.00	.10	---	1.9	.61	.42	.00	.00	.00	.00
30	.07	.00	.00	.10	---	1.9	.51	.37	.00	.00	.00	.00
31	.04	---	.00	.12	---	1.9	---	.26	---	.00	.00	---
TOTAL	16.66	0.09	0.00	234.48	382.58	1223.7	49.42	13.80	2.75	0.02	0.00	0.00
MEAN	.54	.003	.000	7.56	13.7	39.5	1.65	.45	.092	.001	.000	.000
MAX	11	.04	.00	96	79	571	12	.71	.41	.02	.00	.00
MIN	.00	.00	.00	.00	.12	1.9	.49	.26	.00	.00	.00	.00
AC-FT	33	.2	.00	465	759	2430	98	27	5.5	.04	.00	.00

e Estimated.

ATASCADERO CREEK BASIN

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, 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	.13	.25	1.28	5.65	9.37	8.38	1.54	.74	.35	.28	.11	.078
MAX	2.05	2.35	8.18	61.2	70.4	39.5	15.9	14.4	8.10	7.47	2.66	1.36
(WY)	1984	1983	1984	1995	1998	2001	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.002	.001	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1975	1990	1989	1977	1972	1972	1972	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	694.46		1923.50			
ANNUAL MEAN	1.90		5.27		2.31	
HIGHEST ANNUAL MEAN					11.4	
LOWEST ANNUAL MEAN					.039	
HIGHEST DAILY MEAN	112	Feb 23	571	Mar 5	629	Jan 10 1995
LOWEST DAILY MEAN	.00	Jan 2	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 2	.00	Oct 1	.00	Oct 1 1970
MAXIMUM PEAK FLOW			2060	Mar 5	4600	Mar 10 1995
MAXIMUM PEAK STAGE			11.16	Mar 5	11.16	Mar 5 2001
INSTANTANEOUS LOW FLOW			.00	Oct 1		
ANNUAL RUNOFF (AC-FT)	1380		3820		1680	
10 PERCENT EXCEEDS	3.3		7.0		2.0	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11120000 ATASCADERO CREEK NEAR GOLETA, CA

LOCATION.—Lat 34°25'29", long 119°48'39", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of center pier of county road bridge, 100 ft downstream from Maria Ygnacio Creek, 1.3 mi upstream from mouth, and 1.3 mi southeast of Goleta.

DRAINAGE AREA.—18.9 mi².

PERIOD OF RECORD.—October 1941 to current year. Prior to October 1947, published as "Alascadero Creek near Goleta."

SEDIMENT CONCENTRATION: Water year 1982.

SUSPENDED-SEDIMENT DISCHARGE: Water year 1982.

WATER TEMPERATURE: Water year 1982.

REVISED RECORDS.—WSP 1635: 1943–45(M), 1947(M). WSP 1928: Drainage area.

GAGE.—Water-stage recorder and broad-crested weir. Datum of gage is 8.59 ft above sea level, Santa Barbara County benchmark. Prior to Dec. 14, 1967, at site 275 ft downstream, datum 4.00 ft higher. Dec. 14, 1967, to Sept. 30, 1976, at datum 4.00 ft higher; Oct. 1, 1976, to Sept. 30, 1978, at datum 2.00 ft higher, both at present site.

REMARKS.—Records fair. No regulation upstream from station. Small diversions for irrigation upstream from station. Some low-flow results from return irrigation wastewater.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,200 ft³/s, Mar. 10, 1995, gage height, 12.45 ft, present datum, from rating curve extended above 6,900 ft³/s, maximum gage height, 17.3 ft, from floodmark, Dec. 3, 1974, present datum; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 260 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2045	1,510	4.14	Feb. 28	2115	342	3.06
Jan. 12	0615	715	3.52	Mar. 4	2330	9,820	9.38
Feb. 13	0400	968	3.75	Mar. 6	0230	2,340	4.67
Feb. 19	1230	273	2.96				

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	.05	.43	.20	.19	.95	29	4.9	3.3	.50	.16	.35	.19
2	.05	.15	.17	.17	1.1	9.8	4.7	3.6	.56	.15	.20	.15
3	.06	.11	.18	.17	.82	7.9	4.4	2.8	.57	.13	.17	.14
4	.09	.10	.19	.16	.81	1200	4.9	2.2	.43	.13	.14	.14
5	.11	.08	.19	.17	.94	1940	4.8	2.2	.33	.12	.14	.14
6	.09	.10	.38	.18	.94	598	6.9	2.3	.27	.33	.15	.14
7	.06	.08	.36	.16	.64	87	48	2.4	.26	.25	.14	.13
8	.06	.10	.21	9.6	.51	55	7.2	2.3	.25	.15	.15	.11
9	.09	.10	.20	.84	10	40	5.9	2.5	.25	.14	.16	.11
10	.08	.10	.20	367	27	33	5.1	2.7	.21	.13	.13	.12
11	.09	.10	.20	141	79	27	4.5	2.9	.19	.14	.11	.14
12	.41	.10	.20	197	90	23	3.9	2.9	.18	.12	.11	.12
13	.10	.11	.18	7.1	256	20	3.8	2.9	.19	.09	.10	.14
14	.14	.12	.17	2.5	22	18	3.7	2.8	.19	.09	.09	.14
15	.10	.12	.16	1.6	13	17	3.6	2.3	.17	.09	.14	.15
16	.11	.11	.16	1.3	9.2	13	3.4	2.2	.17	.14	.32	.19
17	.14	.11	.16	.83	6.6	14	3.2	2.3	.18	.28	.18	.18
18	.11	.16	.16	.70	5.2	9.3	3.1	2.8	.18	.13	.13	.19
19	.10	e.32	.17	.54	55	8.5	3.2	1.9	.20	.12	.12	.16
20	.08	e.18	.13	.43	20	7.8	6.5	1.8	.19	.12	.13	.17
21	.11	.28	.12	.34	8.0	7.6	9.6	1.8	.24	.15	.15	.16
22	.09	.19	.16	.38	5.8	7.4	3.9	1.4	.37	.15	.13	.16
23	.07	.14	.18	.65	7.4	7.2	3.3	1.0	.22	.13	.12	.17
24	.08	.14	.19	3.9	45	6.8	3.1	.79	.20	.14	e.29	.17
25	.09	.14	.18	2.7	24	6.4	3.0	.93	.13	.18	e.15	.17
26	16	.16	.16	4.4	39	6.2	3.2	1.0	.11	.19	.31	.17
27	28	.23	.16	4.4	16	6.3	3.2	1.1	.12	.79	.17	.15
28	2.1	.25	.16	2.2	46	6.1	3.4	1.1	.11	.44	.16	e.27
29	22	e.37	.16	1.7	---	5.1	3.3	.66	e.33	.29	.16	e.12
30	1.7	.27	.18	1.6	---	5.0	3.1	.63	.31	.44	.16	e.09
31	.48	---	.19	1.3	---	5.0	---	.52	---	.44	.15	---
TOTAL	72.84	4.95	5.81	755.21	790.91	4226.4	174.8	62.03	7.61	6.35	5.11	4.58
MEAN	2.35	.16	.19	24.4	28.2	136	5.83	2.00	.25	.20	.16	.15
MAX	28	.43	.38	367	256	1940	48	3.6	.57	.79	.35	.27
MIN	.05	.08	.12	.16	.51	5.0	3.0	.52	.11	.09	.09	.09
AC-FT	144	9.8	12	1500	1570	8380	347	123	15	13	10	9.1

e Estimated.

ATASCADERO CREEK BASIN

11120000 ATASCADERO CREEK NEAR GOLETA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.38	3.19	5.27	17.6	23.5	18.9	4.32	1.00	.24	.11	.091	.25
MAX	8.08	49.8	41.5	230	266	158	63.5	24.5	4.50	3.42	1.84	4.68
(WY)	1984	1966	1967	1969	1998	1998	1958	1998	1998	1998	1998	1976
MIN	.000	.000	.000	.000	.000	.010	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1943	1951	1948	1990	1950	1942	1942	1942	1942	1942

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	2766.94		6116.60			
ANNUAL MEAN	7.56		16.8		6.15	
HIGHEST ANNUAL MEAN					40.7	
LOWEST ANNUAL MEAN					.018	
HIGHEST DAILY MEAN	434	Feb 23	1940	Mar 5	2410	Jan 25 1969
LOWEST DAILY MEAN	.02	Jul 25	.05	Oct 1	.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.03	Jul 25	.07	Oct 1	.00	Oct 1 1941
MAXIMUM PEAK FLOW			9820	Mar 4	10200	Mar 10 1995
MAXIMUM PEAK STAGE			9.38	Mar 4	17.30	Dec 3 1974
INSTANTANEOUS LOW FLOW			.04	Oct 1		
ANNUAL RUNOFF (AC-FT)	5490		12130		4460	
10 PERCENT EXCEEDS	8.6		9.9		3.5	
50 PERCENT EXCEEDS	.17		.25		.04	
90 PERCENT EXCEEDS	.04		.11		.00	

11120500 SAN JOSE CREEK NEAR GOLETA, CA

LOCATION.—Lat 34°27'33", long 119°48'29", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 1.1 mi downstream from unnamed tributary, and 1.7 mi northeast of Goleta.

DRAINAGE AREA.—5.51 mi².

PERIOD OF RECORD.—January 1941 to January 1995, October 1995 to current year.

CHEMICAL DATA: Water years 1978–91.

REVISED RECORDS.—WSP 1928: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage, and concrete low-water control. Elevation of gage is 95.61 ft above sea level, Santa Barbara County Road Department datum. Prior to Dec. 24, 1955, at datum 5.50 ft higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft higher. Prior to Oct. 1, 1971, at site 75 ft downstream.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation upstream from station. Many small diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,520 ft³/s, Mar. 4, 2001, gage height, 9.04 ft, from rating curve extended above 400 ft³/s, on basis of slope-area measurement at gage height 9.32 ft, maximum gage height, 12.74 ft, present datum, Jan. 21, 1943; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2045	517	5.32	Mar. 4	2330	2,520	9.04
Feb. 13	0415	151	4.03				

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	.53	.37	.31	.85	8.9	2.4	1.5	.93	.61	.39	.28
2	.22	.50	.47	.36	.80	5.8	2.3	1.5	1.0	.65	.31	.31
3	.17	.40	.49	.32	.74	4.8	2.1	1.4	1.0	.68	.30	.40
4	.20	.39	.54	.29	.73	e256	2.2	1.3	.96	.54	.32	.38
5	.25	.47	.46	.25	.69	e501	2.2	1.3	.82	.61	.31	.36
6	.22	.49	.41	.30	.65	e197	2.1	1.1	.81	.63	.35	.31
7	.24	.40	.56	.34	.62	61	15	1.1	.85	.80	.27	.22
8	.35	.31	.56	.65	.58	32	4.6	.99	.87	.81	.24	.24
9	.39	.30	.56	.64	.85	21	5.0	1.1	.93	.65	.31	.31
10	.39	.43	.56	54	3.5	16	5.5	1.1	.97	.48	.25	.38
11	.50	.41	.53	29	28	13	3.7	1.2	.90	.56	.22	.26
12	.44	.34	.44	84	30	11	3.0	1.2	.69	.41	.24	.33
13	.40	.47	.44	7.8	60	8.9	2.7	1.3	.66	.36	.25	.26
14	.39	.32	.30	3.5	17	7.9	2.3	1.2	.76	.32	.27	.31
15	.38	.40	.40	2.3	7.4	7.1	2.2	1.1	.62	.36	.22	.22
16	.39	.32	.34	1.8	3.8	6.3	2.1	1.1	.57	.46	.25	.23
17	.27	.31	.48	1.5	2.4	5.8	2.0	1.1	.71	.37	.26	.27
18	.23	.28	.46	1.2	1.7	5.2	1.9	1.3	.78	.45	.29	.35
19	.32	.43	.41	1.0	18	4.8	1.8	1.2	.63	.49	.38	.24
20	.32	.45	.34	.94	13	4.5	1.9	1.2	.62	.37	.44	.32
21	.25	.32	.26	.85	8.3	4.3	7.9	1.2	.56	.36	.36	.26
22	.33	.31	.37	.85	5.9	4.0	3.2	1.1	.52	.33	.28	.24
23	.32	.37	.42	.73	5.3	3.6	2.5	.96	.53	.46	.27	.29
24	.22	.37	.47	3.6	8.4	3.3	2.2	.83	.71	.36	.24	.30
25	.20	.32	.46	1.7	10	3.0	2.1	.84	.69	.32	.24	.18
26	4.1	.46	.40	6.8	8.9	2.8	2.0	1.0	.56	.39	.36	.22
27	1.9	.48	.31	2.8	6.8	2.6	2.0	1.1	.57	.34	.42	.19
28	.64	.35	.26	1.7	7.1	2.5	1.8	1.1	.60	.33	.35	.16
29	1.3	.47	.27	1.3	---	2.4	1.6	1.0	.63	.35	.30	.15
30	.91	.43	.33	1.1	---	2.4	1.5	1.0	.56	.34	.41	.20
31	.61	---	.36	.96	---	2.4	---	.98	---	.38	.37	---
TOTAL	16.99	11.83	13.03	212.89	252.01	1211.3	93.8	35.40	22.01	14.57	9.47	8.17
MEAN	.55	.39	.42	6.87	9.00	39.1	3.13	1.14	.73	.47	.31	.27
MAX	4.1	.53	.56	84	60	501	15	1.5	1.0	.81	.44	.40
MIN	.14	.28	.26	.25	.58	2.4	1.5	.83	.52	.32	.22	.15
AC-FT	34	23	26	422	500	2400	186	70	44	29	19	16

e Estimated.

SAN JOSE CREEK BASIN

11120500 SAN JOSE CREEK NEAR GOLETA, 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	.26	1.08	2.35	5.64	12.5	7.74	2.91	.95	.37	.22	.15	.15
MAX	6.40	21.2	23.5	35.6	308	98.8	29.0	13.9	4.26	3.58	1.45	1.40
(WY)	1984	1966	1967	1952	1998	1998	1958	1998	1998	1998	1998	1954
MIN	.000	.000	.000	.000	.021	.10	.021	.000	.000	.000	.000	.000
(WY)	1947	1948	1948	1948	1948	1990	1990	1948	1946	1946	1946	1946

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1941 - 2001
ANNUAL TOTAL	905.05	1901.47	
ANNUAL MEAN	2.47	5.21	2.68
HIGHEST ANNUAL MEAN			37.4
LOWEST ANNUAL MEAN			.042
HIGHEST DAILY MEAN	81 Feb 23	501 Mar 5	1000 Feb 3 1998
LOWEST DAILY MEAN	.07 Sep 15	.14 Oct 1	.00 Jan 2 1941
ANNUAL SEVEN-DAY MINIMUM	.07 Sep 14	.20 Sep 24	.00 Aug 18 1942
MAXIMUM PEAK FLOW		2520 Mar 4	2520 Mar 4 2001
MAXIMUM PEAK STAGE		9.04 Mar 4	12.74 Jan 21 1943
INSTANTANEOUS LOW FLOW		.11 Sep 28	
ANNUAL RUNOFF (AC-FT)	1800	3770	1940
10 PERCENT EXCEEDS	4.9	5.8	2.4
50 PERCENT EXCEEDS	.45	.57	.27
90 PERCENT EXCEEDS	.13	.26	.00

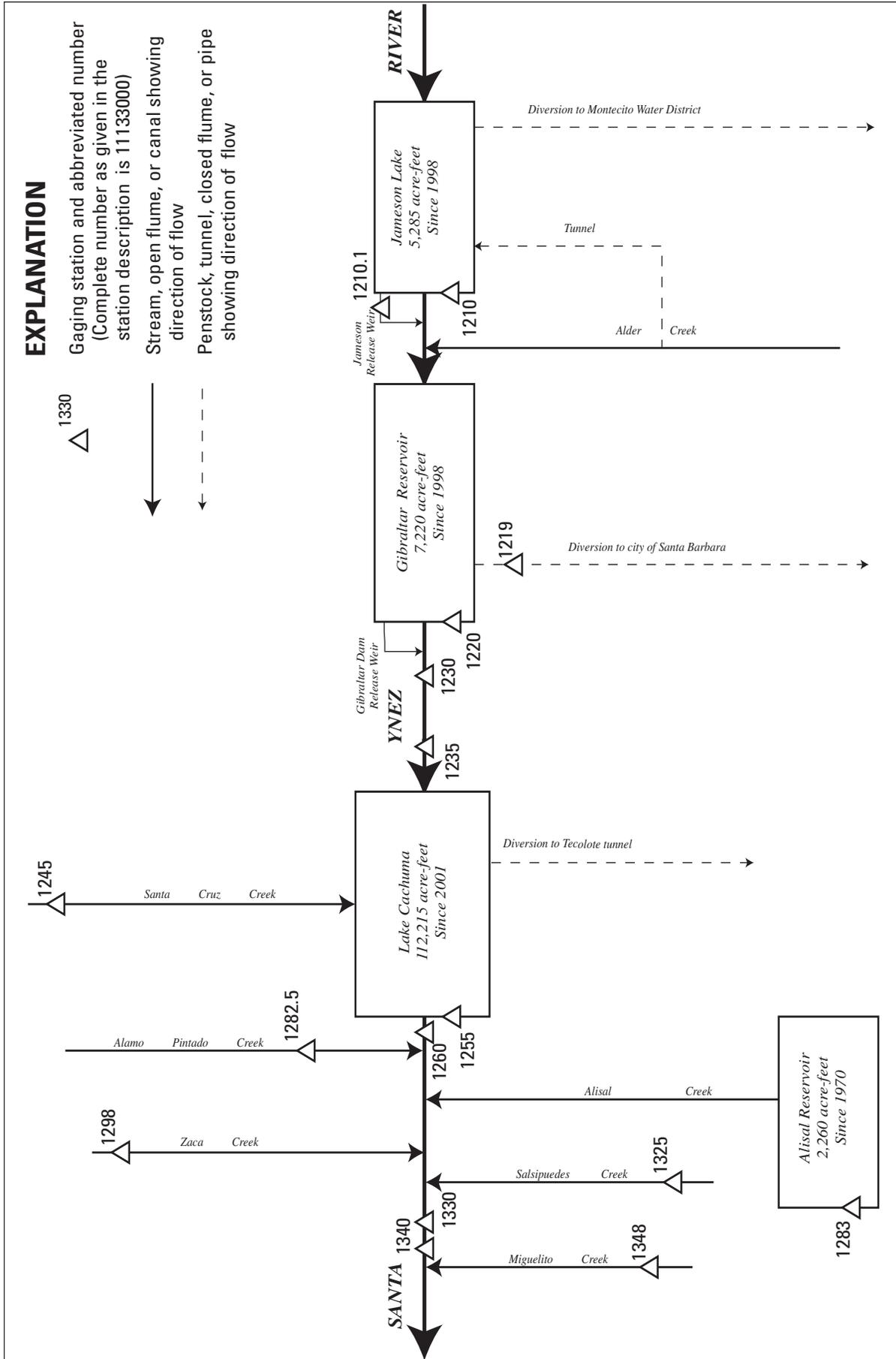


Figure 20. Diversions and storage in Santa Ynez River Basin.

11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.—Lat 34°29'32", long 119°30'25", in NE 1/4 NW 1/4 sec.28, T.5 N., R.25 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Juncal Dam, 6.5 mi north of Carpinteria, and 8 mi northeast of Montecito.

DRAINAGE AREA.—13.9 mi², excludes area of Alder Creek.

PERIOD OF RECORD.—December 1930 to current year. Prior to October 1938, published as "at Juncal Reservoir, near Montecito."

GAGE.—Two water-stage recorders. Elevation of lake gage is 2,021.6 ft, U.S. Bureau of Reclamation Datum, or 2,000 ft above sea level.

Supplementary gage and sharp-crested weir on outlet conduit of lake release, at different datum.

REMARKS.—Records of total inflow represent all water reaching Jameson Lake, including precipitation on the lake. Total inflow computed on basis of records of storage, diversion (draft) to city of Montecito, spill and release (station 11121010) to river, evaporation, and seepage.

Records of net inflow exclude precipitation on lake surface. Monthly evaporation from lake surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on bathymetric survey made in 1998. Lake capacity at spillway level, elevation 2,223.82 ft, 5,285 acre-ft. There is no regulation or diversion upstream from station. At times flow of Alder Creek, which enters Santa Ynez River 2 mi downstream from Juncal Dam, is diverted at elevation 2,250 ft through a tunnel to Jameson Lake and is included in these records. See schematic diagram of [Santa Ynez River Basin](#).

COOPERATION.—Precipitation records provided by Santa Barbara County Flood Control District.

AVERAGE DISCHARGE.—70 years (water years 1932–01), spill and release, 9.95 ft³/s, 7,210 acre-ft/yr.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (ft) ^a	Contents (acre-ft)	Change in contents (acre-ft)	Draft (acre-ft)	Spill and release (acre-ft)	Evaporation and seepage (acre-ft)	Total inflow (acre-ft)	Rain on reservoir (acre-ft)	Net inflow (acre-ft)
Sept. 30	2,216.34	4,350	—	—	—	—	—	—	—
Oct. 31	2,214.94	4,240	-110	161	0	10	61	31	30
Nov. 30	2,213.89	4,130	-110	104	0	6	0	0	0
Dec. 31	2,212.81	4,010	-120	127	0	5	12	1	11
CAL YR 2000	—	—	270	1,160	1,374	467	3,721	278	3,443
Jan. 31	2,214.75	4,220	210	100	0	3	313	75	238
Feb. 28	2,222.02	5,070	850	68	0	0	918	88	830
Mar. 31	2,224.00	5,310	240	74	7,180	30	7,524	106	7,418
Apr. 30	2,223.97	5,300	-10	70	934	23	1,017	20	997
May 31	2,223.88	5,290	-10	92	325	66	473	0	473
June 30	2,223.08	5,200	-90	114	8	72	104	0	104
July 31	2,221.66	5,020	-180	161	0	62	43	0	43
Aug. 31	2,219.77	4,800	-220	176	0	78	34	0	34
Sept. 30	2,218.00	4,590	-210	171	0	50	11	0	11
WTR YR 2001	—	—	240	1,418	8,447	405	10,510	321	13,632

^a Elevation at 0800.

11122000 SANTA YNEZ RIVER ABOVE GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.—Lat 34°31'34", long 119°41'08", in NW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Gibraltar Dam, and 7 mi north of Santa Barbara.

DRAINAGE AREA.—216 mi².

PERIOD OF RECORD.—April 1920 to current year. November 1903 to November 1918 (fragmentary) at river station at damsite; records not equivalent because records since April 1920 are based on operation of Gibraltar Reservoir, and since December 1930, Jameson Lake. Prior to October 1945, published as "Santa Ynez River near Santa Barbara."

REVISED RECORDS.—WSP 706: 1921–22. WSP 1041: 1944. WSP 1395: DA. WSP 1635: 1914, 15 (M). WDR CA-86-1: 1934–43.

GAGE.—Water-stage recorder. Elevation of gage is sea level. Supplementary gage and sharp-crested weir on diversion from reservoir at different datum. See WSP 1735 for history of changes on both gages prior to Oct. 1, 1955. Spill and release measured by station 11123000 downstream from dam.

REMARKS.—Records of total inflow represent all water reaching Gibraltar Reservoir, including precipitation on reservoir. Total inflow computed on basis of records of storage, diversion (draft—station 11121900) to city of Santa Barbara, spill and release (station 11123000) to river, evaporation, and seepage. Records of net inflow exclude precipitation on reservoir surface. Monthly evaporation from reservoir surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on bathymetric survey made in September 1998. Reservoir capacity at spillway level, elevation 1,399.82 ft, 7,220 acre-ft. Lowest outlet at elevation 1,333.86 ft. Flow regulated by Jameson Lake (station 11121000) since December 1930. See schematic diagram of [Santa Ynez River Basin](#).

COOPERATION.—Precipitation and evaporation data provided by the City of Santa Barbara.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (ft) ^a	Contents (acre-ft)	Change in contents (acre-ft)	Draft (acre-ft)	Spill and release (acre-ft)	Evaporation and seepage (acre-ft)	Total inflow (acre-ft)	Rain on reservoir (acre-ft)	Net inflow (acre-ft)
Sept. 30	1,385.63	4,190	—	—	—	—	—	—	—
Oct. 31	1,380.92	3,360	-830	861	0	54	85	58	27
Nov. 30	1,378.01	2,870	-490	455	0	36	1	0	1
Dec. 31	1,374.90	2,390	-480	493	0	32	45	2	43
CAL YR 2000	—	—	-550	3,788	25,870	1,172	30,280	547	29,733
Jan. 31	1,386.32	4,320	1,930	168	31	32	2,161	153	2,008
Feb. 28	1,398.97	7,020	2,700	302	4,010	32	7,044	159	6,885
Mar. 31	1,399.58	7,160	140	407	55,780	78	56,405	284	56,121
Apr. 30	1,399.54	7,150	-10	507	3,650	90	4,237	60	4,177
May 31	1,399.74	7,200	50	211	1,350	153	1,764	0	1,764
June 30	1,399.09	7,040	-160	163	160	191	354	0	354
July 31	1,396.53	6,450	-590	478	39	169	96	0	96
Aug. 31	1,391.04	5,240	-1,210	643	469	168	70	0	70
Sept. 30	1,385.75	4,210	-1,030	720	189	121	0	0	0
WTR YR 2001	—	—	20	5,408	65,678	1,156	72,262	716	71,546

^a Elevation at 0800.

NOTE.—For months when inflow to the lake was small and other quantities were large, preliminary computations may indicate negative net inflow. This arises primarily from the difficulty of computing net inflow as the residual of several large quantities, which are not conducive to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.—Lat 34°31'28", long 119°41'11", in SW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on left bank, 700 ft downstream from Gibraltar Dam, and 7 mi north of Santa Barbara.

DRAINAGE AREA.—216 mi².

PERIOD OF RECORD.—April 1920 to current year. Monthly discharge only prior to October 1933. Daily records for water years 1934–43 in files of U.S. Geological Survey.

REVISED RECORDS.—WDR CA-86-1: 1934–43.

GAGE.—Two water-stage recorders. Datum of gage on main channel is 1,227 ft above sea level. Supplementary gage and sharp-crested weir on the release channel from Gibraltar Dam to river at different datum (station 11122010). See WSP 1735 for history of changes on both gages prior to May 20, 1958.

REMARKS.—Records good. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 5,410 acre-ft during current year from Gibraltar Reservoir; Montecito Water District diverted 1,420 acre-ft during current year from Jameson Lake. See schematic diagram of [Santa Ynez River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 54,200 ft³/s, Jan. 25, 1969, gage height, 25.8 ft, from rating curve extended above 2,100 ft³/s, on basis of computations of flow from gate openings and flow over dam at gage heights 17.5 and 25.8 ft; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 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	.20	148	71	30	8.7	.72	.63	12
2	.00	.00	.00	.00	.20	130	65	32	8.7	.72	.60	13
3	.00	.00	.00	.00	.17	122	69	31	8.4	.69	.59	13
4	.00	.00	.00	.00	.14	548	74	31	7.8	.63	.60	13
5	.00	.00	.00	.00	.12	10300	73	33	7.6	.66	.58	13
6	.00	.00	.00	.00	.11	8730	66	33	6.8	.64	.59	13
7	.00	.00	.00	.00	.15	2140	127	33	5.2	.65	.59	13
8	.00	.00	.00	.00	.17	1070	113	32	4.0	.67	.57	3.9
9	.00	.00	.00	.00	.19	717	63	30	3.0	.69	.59	.26
10	.00	.00	.00	.01	.35	567	66	29	2.6	.71	.64	.13
11	.00	.00	.00	1.6	1.4	449	66	28	2.0	.68	.58	.07
12	.00	.00	.00	7.9	1.8	357	65	26	1.7	.62	.52	.04
13	.00	.00	.00	1.0	9.3	288	59	26	1.6	.63	.49	.01
14	.00	.00	.00	.67	3.5	244	54	19	1.2	.66	7.5	.00
15	.00	.00	.00	.51	58	239	56	19	.78	.65	12	.00
16	.00	.00	.00	.37	50	190	55	20	.68	.63	12	.00
17	.00	.00	.00	.31	75	189	54	21	.64	.64	12	.00
18	.00	.00	.00	.26	95	186	50	21	.64	.66	12	.00
19	.00	.00	.00	.22	148	167	46	20	.64	.63	12	.00
20	.00	.00	.00	.17	215	164	55	20	.65	.58	12	.00
21	.00	.00	.00	.14	165	158	81	20	.68	.58	12	.00
22	.00	.00	.00	.09	106	147	65	19	.71	.59	12	.00
23	.00	.00	.00	.08	96	120	54	18	.74	.62	12	.00
24	.00	.00	.00	.31	99	118	51	18	.70	.64	12	.00
25	.00	.00	.00	.31	137	115	48	16	.67	.64	12	.00
26	.00	.00	.00	.49	263	84	44	15	.71	.61	12	.00
27	.00	.00	.00	.43	293	87	42	15	.74	.61	12	.00
28	.00	.00	.00	.34	205	90	41	8.0	.78	.61	12	.00
29	.00	.00	.00	.25	---	89	39	3.5	.77	.58	12	.00
30	.00	.00	.00	.20	---	87	30	6.3	.72	.56	12	.00
31	.00	---	.00	.20	---	82	---	8.3	---	.57	12	---
TOTAL	0.00	0.00	0.00	15.86	2022.80	28122	1842	681.1	80.55	19.77	219.07	94.41
MEAN	.000	.000	.000	.51	72.2	907	61.4	22.0	2.69	.64	7.07	3.15
MAX	.00	.00	.00	7.9	293	10300	127	33	8.7	.72	12	13
MIN	.00	.00	.00	.00	.11	82	30	3.5	.64	.56	.49	.00
AC-FT	.00	.00	.00	31	4010	55780	3650	1350	160	39	435	187

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, 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	.70	6.11	25.7	125	255	252	104	30.9	8.30	3.58	1.73	.63
MAX	32.6	336	607	2077	3090	1712	1168	441	126	43.6	24.1	13.5
(WY)	1984	1966	1967	1969	1998	1983	1958	1998	1998	1983	1995	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1960	1959	1944	1938	1949	1948	1948	1940	1960	1960	1960	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001	
ANNUAL TOTAL	12739.96		33097.56			
ANNUAL MEAN	34.8		90.7		66.9	
HIGHEST ANNUAL MEAN					437	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	985	Feb 23	10300	Mar 5	26600	Jan 25 1969
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Dec 16 1933
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Dec 16 1933
MAXIMUM PEAK FLOW			14100	Mar 6	54200	Jan 25 1969
MAXIMUM PEAK STAGE			17.15	Mar 6	25.80	Jan 25 1969
INSTANTANEOUS LOW FLOW			.00	Oct 1		
ANNUAL RUNOFF (AC-FT)	25270		65650		48440	
10 PERCENT EXCEEDS	68		97		81	
50 PERCENT EXCEEDS	.11		.64		.10	
90 PERCENT EXCEEDS	.00		.00		.00	

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°32'37", long 119°51'50", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.3 mi downstream from Los Laureles Canyon Creek, 10 mi downstream from Gibraltar Reservoir, and 13.3 mi east of Santa Ynez.

DRAINAGE AREA.—277 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—April 1947 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder. Datum of gage is 787.8 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow regulated by Jameson Lake and Gibraltar Reservoir (stations 11121000 and 11122000). Water diverted out of basin from these reservoirs to cities of Montecito and Santa Barbara for municipal supply. Low flow affected by intermittent pumping for irrigation from infiltration gallery in riverbed at station. Satellite telemeter at station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 67,500 ft³/s, Jan. 25, 1969, gage height, 18.88 ft, from rating curve extended above 11,600 ft³/s on basis of peak flow for station below Gibraltar Dam plus tributary inflow; 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	.38	.75	.62	.43	11	237	169	57	14	4.3	1.1	10
2	.26	.74	.95	.61	10	186	142	61	14	3.7	1.0	10
3	.16	.73	.88	.52	9.7	175	143	61	14	3.3	.93	9.8
4	.38	.53	.51	.63	9.1	956	146	59	14	2.9	.97	9.7
5	.22	.78	.61	.76	8.5	9010	157	60	13	2.8	1.3	9.2
6	.17	.81	.67	.74	8.2	7770	134	64	13	2.9	1.3	9.8
7	.23	.71	.79	.70	8.0	3130	225	63	11	3.4	.90	9.9
8	.29	.72	.81	.88	7.9	2020	244	61	10	3.8	1.1	10
9	.27	.71	.82	.88	8.2	1500	157	57	9.1	2.6	.70	9.5
10	.56	.84	.77	e10	12	1150	134	55	8.8	2.7	.58	5.8
11	.60	.80	.68	e128	82	895	136	53	9.1	2.5	.51	4.1
12	.59	.85	.88	508	157	720	131	48	8.4	2.4	.48	3.3
13	.61	.73	.93	80	471	594	127	48	8.1	2.4	.70	2.7
14	.53	.62	.83	38	198	506	112	47	7.9	2.3	.70	2.7
15	.33	.90	.59	25	128	479	110	34	7.3	3.3	.88	1.9
16	.03	.84	.83	19	143	424	109	33	6.4	3.0	.40	1.9
17	.06	.92	.73	15	106	389	105	35	6.0	2.6	.32	1.7
18	.06	.82	.67	13	130	379	102	35	5.4	3.2	.29	2.3
19	.27	.69	.64	12	205	355	93	34	5.1	2.3	.49	1.4
20	.22	.87	.75	10	284	336	97	35	5.0	2.2	.23	1.5
21	.05	.29	.68	9.3	245	326	150	34	5.2	2.3	e.09	2.3
22	.11	.83	.81	8.7	179	312	142	31	4.9	3.0	4.1	1.5
23	.18	.74	.70	8.8	146	283	106	29	4.7	2.6	6.1	1.8
24	.10	.91	.75	15	165	259	101	27	4.5	1.9	6.5	1.8
25	.11	.70	.82	14	194	251	94	27	4.9	2.2	7.4	2.0
26	.35	.60	.76	23	326	224	89	25	4.5	1.7	7.5	1.8
27	.65	.89	.57	20	423	196	84	25	4.7	1.6	8.5	1.9
28	.65	.61	.74	16	325	200	84	26	4.6	1.5	8.1	1.5
29	.76	.61	.51	14	---	196	81	23	4.9	2.1	9.0	1.6
30	.76	.73	.60	12	---	188	75	16	4.3	1.9	9.7	1.8
31	.73	---	.72	12	---	179	---	14	---	1.3	10	---
TOTAL	10.67	22.27	22.62	1016.95	3999.6	33825	3779	1277	236.8	80.7	91.87	135.2
MEAN	.34	.74	.73	32.8	143	1091	126	41.2	7.89	2.60	2.96	4.51
MAX	.76	.92	.95	508	471	9010	244	64	14	4.3	10	10
MIN	.03	.29	.51	.43	7.9	175	75	14	4.3	1.3	.09	1.4
AC-FT	21	44	45	2020	7930	67090	7500	2530	470	160	182	268

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

MEAN	.57	7.74	36.7	185	364	322	130	42.8	12.2	3.96	1.19	.53
MAX	18.8	315	608	2755	4250	2525	1480	542	201	79.3	15.8	7.57
(WY)	1984	1966	1967	1969	1998	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
(WY)	1948	1948	1948	1948	1948	1990	1951	1951	1948	1948	1947	1947

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001	
ANNUAL TOTAL	18645.02		44497.68			
ANNUAL MEAN	50.9		122		90.7	
HIGHEST ANNUAL MEAN					595	
LOWEST ANNUAL MEAN					.013	
HIGHEST DAILY MEAN	1170	Feb 23	9010	Mar 5	33700	Jan 25 1969
LOWEST DAILY MEAN	.00	Aug 2	.03	Oct 16	.00	Jun 24 1947
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 9	.11	Oct 16	.00	Jul 5 1947
MAXIMUM PEAK FLOW			12600	Mar 6	67500	Jan 25 1969
MAXIMUM PEAK STAGE			10.56	Mar 6	18.88	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	36980		88260		65680	
10 PERCENT EXCEEDS	104		197		99	
50 PERCENT EXCEEDS	.93		4.9		.18	
90 PERCENT EXCEEDS	.10		.55		.00	

e Estimated.

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1973–89, 1991 to current year.
 CHEMICAL DATA: Water years 1973–89, 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT							
03...	1300	.00	--	--	--	7.6	1140
NOV							
06...	1150	.82	--	--	--	7.4	1240
DEC							
14...	1100	.88	--	--	--	7.4	1190
JAN							
04...	1300	.74	--	--	--	7.5	1160
FEB							
05...	1505	8.6	--	--	--	7.9	1160
MAR							
21...	1125	321	--	--	--	8.3	975
APR							
03...	1650	142	745	10.3	107	8.4	1020
MAY							
17...	1705	34	--	--	--	8.1	1060
JUN							
13...	1650	7.6	--	--	--	8.1	1250
JUL							
11...	1500	2.7	--	--	--	7.8 ¹	1070 ¹
AUG							
23...	1620	7.1	--	--	--	8.0	1200
SEP							
20...	1405	1.3	--	--	--	7.6	1160

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)
OCT						
03...	20.5	--	--	--	--	--
NOV						
06...	16.5	--	--	--	--	--
DEC						
14...	14.0	--	--	--	--	--
JAN						
04...	12.5	--	--	--	--	--
FEB						
05...	15.5	--	--	--	--	--
MAR						
21...	16.5	--	--	--	--	--
APR						
03...	15.8	240	466	108	47.8	2.01
MAY						
17...	24.5	--	--	--	--	--
JUN						
13...	21.0	--	--	--	--	--
JUL						
11...	26.3	--	--	--	--	--
AUG						
23...	27.0	--	--	--	--	--
SEP						
20...	24.5	--	--	--	--	--

¹ Laboratory value.

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA—Continued

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

DATE	SODIUM AD- SORP- TION RATIO		SODIUM DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
	(00931)	(00930)			(00932)	(39086)	(00453)	(00452)
OCT								
03...	--	--	--	--	--	--	--	--
NOV								
06...	--	--	--	--	--	--	--	--
DEC								
14...	--	--	--	--	--	--	--	--
JAN								
04...	--	--	--	--	--	--	--	--
FEB								
05...	--	--	--	--	--	--	--	--
MAR								
21...	--	--	--	--	--	--	--	--
APR								
03...	.900	44.6	17.2	226	265	5	11.5	
MAY								
17...	--	--	--	--	--	--	--	--
JUN								
13...	--	--	--	--	--	--	--	--
JUL								
11...	--	--	--	--	--	--	--	--
AUG								
23...	--	--	--	--	--	--	--	--
SEP								
20...	--	--	--	--	--	--	--	--

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
	(00950)	(00955)	(00945)	(70303)	(70300)	(70301)
OCT						
03...	--	--	--	--	888	--
NOV						
06...	--	--	--	--	922	--
DEC						
14...	--	--	--	--	892	--
JAN						
04...	--	--	--	--	862	--
FEB						
05...	--	--	--	--	852	--
MAR						
21...	--	--	--	--	696	--
APR						
03...	.4	15.2	322	1.0	750	687
MAY						
17...	--	--	--	--	790	--
JUN						
13...	--	--	--	--	786	--
JUL						
11...	--	--	--	--	802	--
AUG						
23...	--	--	--	--	872	--
SEP						
20...	--	--	--	--	860	--

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA—Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
03...	--	--	--	--	--	--	--
NOV							
06...	--	--	--	--	--	--	--
DEC							
14...	--	--	--	--	--	--	--
JAN							
04...	--	--	--	--	--	--	--
FEB							
05...	--	--	--	--	--	--	--
MAR							
21...	--	--	--	--	--	--	--
APR							
03...	<.041	<.047	<.006	<.018	416	<10	e3.1
MAY							
17...	--	--	--	--	--	--	--
JUN							
13...	--	--	--	--	--	--	--
JUL							
11...	--	--	--	--	--	--	--
AUG							
23...	--	--	--	--	--	--	--
SEP							
20...	--	--	--	--	--	--	--

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

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°35'48", long 119°54'28", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 0.6 mi downstream from Pine Canyon, and 9.9 mi east of Santa Ynez.

DRAINAGE AREA.—74.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder. Datum of gage is 783.38 ft above sea level. See WSP 1735 for history of changes prior to Sept. 27, 1952. Sept. 27, 1952, to June 24, 1969, at datum 3.25 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,050 ft³/s, Feb. 24, 1969, gage height, 14.45 ft, from floodmark, present datum, from rating curve extended above 2,500 ft³/s, on basis of slope-area measurement at gage height 14.16 ft; no flow at times since 1953.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, from rating curve extended above 5,000 ft³/s, on basis of slope-area measurement at gage height 12.10 ft, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 12	0745	104	7.68	Mar. 5	0044	3,980	12.79
Feb. 13	0415	383	8.77				

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	.00	.00	2.7	1.5	6.3	29	46	23	9.4	e3.0	.49	.00
2	.00	.00	2.8	1.5	6.0	24	44	21	9.6	e2.8	.44	.00
3	.00	.00	2.6	1.5	6.0	22	43	20	10	e2.8	.41	.00
4	.00	.00	2.3	1.5	6.0	221	42	20	10	e2.7	.36	.00
5	.00	.00	2.2	1.5	6.3	2080	41	20	8.9	e2.6	.28	.00
6	.00	e.04	2.2	1.5	6.3	1230	40	19	7.7	e2.5	.20	.00
7	.00	e.06	2.2	1.5	6.0	677	68	18	6.3	e2.4	.18	.00
8	.00	e.09	2.2	2.0	6.0	e450	51	18	6.0	e2.3	.16	.00
9	.00	e.12	2.2	2.2	6.0	e320	45	17	5.6	e2.1	.13	.00
10	.00	e.18	2.1	6.0	7.5	e245	e43	16	5.7	1.7	.13	.00
11	.00	e.28	2.1	44	44	e190	e40	16	6.1	1.6	.12	.00
12	.00	e.40	2.1	64	83	e155	38	16	6.3	1.7	.12	.00
13	.00	e1.1	2.0	23	141	131	36	16	6.1	1.6	.11	.00
14	.00	1.1	2.0	13	56	120	35	16	5.0	1.4	.07	.00
15	.00	1.1	2.0	11	33	113	35	16	4.6	1.4	.07	.00
16	.00	1.2	1.9	8.9	25	104	33	15	e4.5	1.4	.07	.00
17	.00	1.2	1.7	7.8	20	97	32	15	e4.4	1.4	.07	.00
18	.00	1.2	1.7	7.0	18	94	29	15	e4.4	1.4	.06	.00
19	.00	1.2	1.6	6.8	42	90	29	15	e4.3	1.3	.03	.00
20	.00	1.2	1.6	6.3	62	85	30	14	e4.3	1.1	.04	.00
21	.00	1.2	1.6	6.0	34	82	45	14	e4.2	1.0	.03	.00
22	.00	1.2	1.6	6.1	28	76	36	13	e4.1	.97	.03	.00
23	.00	1.3	1.6	6.0	25	72	33	13	e4.1	.88	.00	.00
24	.00	1.5	1.6	10	24	68	30	12	e4.0	.83	.00	.00
25	.00	1.6	1.6	13	30	64	28	12	e3.9	.80	.00	.00
26	.00	1.8	1.6	16	45	61	27	12	e3.7	.74	.00	.00
27	.00	2.0	1.6	12	49	58	26	13	e3.6	.61	.00	.00
28	.00	2.1	1.6	9.2	37	54	25	14	e3.4	.51	.00	.00
29	.00	2.2	1.6	7.9	---	54	24	13	e3.2	.47	.00	.00
30	.00	2.4	1.6	7.4	---	51	24	12	e3.1	.44	.00	.00
31	.00	---	1.6	6.7	---	47	---	10	---	.48	.00	---
TOTAL	0.00	27.77	59.8	312.8	858.4	7164	1098	484	166.5	46.93	3.60	0.00
MEAN	.000	.93	1.93	10.1	30.7	231	36.6	15.6	5.55	1.51	.12	.000
MAX	.00	2.4	2.8	64	141	2080	68	23	10	3.0	.49	.00
MIN	.00	.00	1.6	1.5	6.0	22	24	10	3.1	.44	.00	.00
AC-FT	.00	55	119	620	1700	14210	2180	960	330	93	7.1	.00

e Estimated.

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.64	3.04	11.7	36.9	72.5	64.0	36.9	15.2	6.27	2.28	.94	.54
MAX	12.4	50.4	205	510	743	355	378	141	63.0	27.9	13.7	8.68
(WY)	1984	1966	1967	1969	1969	1995	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.10	.23	.11	.000	.000	.000	.000	.000
(WY)	1954	1954	1954	1963	1951	1948	1961	1961	1961	1959	1953	1953

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	4340.92		10221.80			
ANNUAL MEAN	11.9		28.0		20.6	
HIGHEST ANNUAL MEAN					134	
LOWEST ANNUAL MEAN					.066	
HIGHEST DAILY MEAN	313	Feb 21	2080	Mar 5	5000	Feb 24 1969
LOWEST DAILY MEAN	.00	Jul 25	.00	Oct 1	.00	Jul 6 1953
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 25	.00	Oct 1	.00	Jul 6 1953
MAXIMUM PEAK FLOW			3980	Mar 5	7050	Feb 24 1969
MAXIMUM PEAK STAGE			12.79	Mar 5	14.45	Feb 24 1969
ANNUAL RUNOFF (AC-FT)	8610		20270		14950	
10 PERCENT EXCEEDS	31		46		35	
50 PERCENT EXCEEDS	2.0		2.4		1.3	
90 PERCENT EXCEEDS	.00		.00		.00	

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1991 to current year.

CHEMICAL DATA: October 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
NOV							
13...	1525	1.1	--	--	--	7.7	1160
DEC							
13...	1230	2.1	--	--	--	8.0	1130
JAN							
16...	1300	9.0	--	--	--	8.5	1100
FEB							
08...	1320	6.0	--	--	--	8.1	1080
MAR							
12...	1345	144	--	--	--	8.1	737
APR							
06...	1900	40	744	10.0	103	8.3	874
MAY							
21...	1445	13	--	--	--	8.2	898
JUN							
13...	1415	6.6	--	--	--	8.2	1100
JUL							
09...	1615	2.1	--	--	--	8.3 ¹	929 ¹

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)
NOV						
13...	17.0	--	--	--	--	--
DEC						
13...	13.5	--	--	--	--	--
JAN						
16...	9.5	--	--	--	--	--
FEB						
08...	12.0	--	--	--	--	--
MAR						
12...	--	--	--	--	--	--
APR						
06...	15.4	179	402	85.1	46.0	1.79
MAY						
21...	27.5	--	--	--	--	--
JUN						
13...	27.5	--	--	--	--	--
JUL						
09...	29.5	--	--	--	--	--

¹ Laboratory value.

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, 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 TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV							
13...	--	--	--	--	--	--	--
DEC							
13...	--	--	--	--	--	--	--
JAN							
16...	--	--	--	--	--	--	--
FEB							
08...	--	--	--	--	--	--	--
MAR							
12...	--	--	--	--	--	--	--
APR							
06...	.758	34.9	15.8	223	272	9.4	.4
MAY							
21...	--	--	--	--	--	--	--
JUN							
13...	--	--	--	--	--	--	--
JUL							
09...	--	--	--	--	--	--	--

DATE	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)
NOV						
13...	--	--	--	866	--	--
DEC						
13...	--	--	--	854	--	--
JAN						
16...	--	--	--	792	--	--
FEB						
08...	--	--	--	788	--	--
MAR						
12...	--	--	--	--	--	--
APR						
06...	17.1	243	.8	622	572	<.041
MAY						
21...	--	--	--	634	--	--
JUN						
13...	--	--	--	672	--	--
JUL						
09...	--	--	--	674	--	--

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

SANTA YNEZ RIVER BASIN

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA—Continued

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

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)
NOV						
13...	--	--	--	--	--	--
DEC						
13...	--	--	--	--	--	--
JAN						
16...	--	--	--	--	--	--
FEB						
08...	--	--	--	--	--	--
MAR						
12...	--	--	--	--	--	--
APR						
06...	<.047	<.006	<.018	166	<10	5.5
MAY						
21...	--	--	--	--	--	--
JUN						
13...	--	--	--	--	--	--
JUL						
09...	--	--	--	--	--	--

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

11125500 LAKE CACHUMA NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°34'57", long 119°58'47", in Lomas de la Purification Grant, Santa Barbara County, Hydrologic Unit 18060010, at Bradbury Dam on Santa Ynez River, on upstream face near left end of dam, and 6.1 mi east of Santa Ynez.

DRAINAGE AREA.—417 mi².

PERIOD OF RECORD.—November 1952 to current year. Prior to October 1985, only monthend elevations and contents and total diversions published. November 1952 to October 1960, published as "Cachuma Reservoir near Santa Ynez."

CHEMICAL DATA: Water Year 1998.

GAGE.—Water-stage recorder. Elevation of gage is sea level (U.S. Bureau of Reclamation benchmark). Prior to Oct. 1, 1965, nonrecording gage.

REMARKS.—Reservoir is formed by earthfill dam. Storage began November 1952. Dead storage below outlet gage to river, elevation, 600 ft, 97 acre-ft, included in contents. Capacity below sill of inlet to Tecolote Tunnel, elevation, 660 ft, 26,109 acre-ft; below spillway level, elevation, 720 ft, 112,215 acre-ft; and below top of four radial gates, elevation, 750 ft, 188,030 acre-ft. Water is released from outlet to Santa Ynez River to satisfy downstream water rights. Water diverted to Tecolote Tunnel for use by City of Santa Barbara, Goleta Water District, Carpinteria Valley Water District, and Montecito Water District. Records, including extremes, represent total contents at 0800 hours. See schematic diagram of Santa Ynez River Basin.

COOPERATION.—Reservoir elevation, contents, and diversion figures provided by U.S. Bureau of Reclamation. Contents not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 221,100 acre-ft, Feb. 24, 1969, elevation, 755.11 ft; minimum since initial filling in April 1958, 27,681 acre-ft, Feb. 27, 1991, elevation, 661.06 ft.

EXTREMES (AT 0800) FOR CURRENT YEAR.—Maximum contents, 197,089 acre-ft, Mar. 5, elevation, 752.17 ft; minimum, 161,650 acre-ft, Jan. 10, elevation, 739.97 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on surveys by U.S. Bureau of Reclamation)

680	46,647	710	92,452	730	134,559	750	188,030
690	59,806	720	112,215	740	159,637	760	220,052
700	75,020						

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	170671	167493	164771	162272	165539	178230	193009	194364	193009	186730	181937	177233
2	170502	167437	164688	162191	165512	178722	193070	194302	192917	186549	181760	177117
3	170333	167409	164606	162082	165539	179190	193009	194271	192826	186398	181584	177001
4	170192	167326	164551	162001	165539	179745	192979	194241	192734	186216	181408	176885
5	170023	167243	164496	161893	165512	197089	193040	194148	192581	186095	181290	176769
6	169856	167187	164441	161811	165484	195415	193040	194086	192489	185914	181143	176624
7	169717	167132	164414	161730	165430	190623	193132	194055	192397	185763	181026	176480
8	169550	167022	164360	161757	165430	190654	193101	194024	192275	185642	180849	176364
9	169355	166857	164305	161676	165430	190929	192948	193993	192122	185491	180673	176248
10	169216	166775	164251	161650	165430	190684	192887	193962	192000	185340	180526	176161
11	169161	166665	164224	162896	165512	190776	193040	193901	191877	185219	180350	176076
12	169050	166583	163980	164333	166418	190715	193132	193839	191755	185067	180203	175905
13	168966	166473	163790	165292	167604	191082	193284	193808	191602	184888	180056	175762
14	168855	166391	163709	165457	169189	191571	193315	193808	191449	184709	179909	175591
15	168744	166253	163628	165539	169745	191969	193346	193777	191327	184560	179762	175448
16	168660	166116	163492	165567	170136	192275	193376	193746	191174	184381	179615	175305
17	168494	166006	163384	165594	170446	192581	193437	193684	191051	184262	179468	175163
18	168355	165924	163329	165567	170727	192673	193499	193653	190929	184083	179321	174991
19	168216	165841	163248	165539	171178	192764	193623	193623	190776	183904	179174	174877
20	168077	165759	163140	165539	172079	192734	193746	193623	190623	183755	178999	174763
21	167965	165704	163031	165484	172812	192703	194055	193623	190501	183605	178796	174620
22	167826	165567	162923	165457	173353	192703	194302	193561	190379	183456	178652	174506
23	167743	165457	162869	165375	173809	192734	194395	193530	190228	183277	178478	174392
24	167604	165347	162733	165430	174265	192734	194457	193499	190107	183128	178362	174306
25	167465	165265	162679	165484	174921	192734	194519	193437	189955	182979	178217	174164
26	167326	165182	162598	165622	175576	192673	194426	193376	189804	182800	178072	174021
27	167521	165128	162543	165649	176499	192611	194395	193315	189653	182681	177928	173935
28	167493	165045	162489	165677	177451	192673	194395	193284	189532	182532	177763	173793
29	167521	164990	162462	165677	---	192764	194364	193254	189411	182383	177638	173650
30	167576	164880	162408	165622	---	192887	194364	193223	189260	182234	177493	173479
31	167548	---	162354	165594	---	192948	---	193101	---	182055	177377	---
MAX	170671	167493	164771	165677	177451	197089	194519	194364	193009	186730	181937	177233
MIN	167326	164880	162354	161650	165430	178230	192887	193101	189260	182055	177377	173479
a	742.13	741.16	740.23	741.42	745.63	750.83	751.29	750.88	749.62	748.01	746.41	745.05
b	-3,292	-2,668	-2,526	-3,240	-11,857	15,497	1,416	-1,263	-3,841	-7,205	-4,678	-3,898
c	1,782	1,801	1,774	1,872	1,132	1,544	2,095	2,737	2,984	3,053	2,927	2,388

CAL YR 2000 b 4,255

WTR YR 2001 b 2,639

- a Elevation, in feet, at end of month.
- b Change in contents, in acre-feet.
- c Diversion, in acre-feet, to Tecolote Tunnel.

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA

LOCATION.—Lat 34°35'21", long 119°59'16", in Canada de los Pinos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 0.7 mi downstream from Bradbury Dam, and 5.5 mi southeast of Santa Ynez.

DRAINAGE AREA.—422 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—December 1928 to September 1931, October 1932 to September 1976, May 1994 to current year (seasonal records only).

GAGE.—Water-stage recorder. Elevation of gage is 545.66 ft above sea level (Bureau of Reclamation benchmark). Prior to Oct. 1, 1955, at site 2.5 mi downstream at different datum. Oct. 1, 1955, to Sept. 16, 1969, at site 0.4 mi downstream at datum 7.2 ft higher.

REMARKS.—Records poor. No records computed above 250 ft³/s. Flow regulated by Jameson Lake since December 1930, Gibraltar Reservoir, and Lake Cachuma since November 1952 (stations 11121000, 11122000, and 11125500, respectively). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito and Santa Barbara, and to the Santa Ynez Valley for municipal supply. Some water pumped from wells along river banks for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 79,000 ft³/s, Jan. 25, 1969, gage height, 22.00 ft, from floodmark, present datum, on basis of computation of maximum flow over dam; no flow at times in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e19	2.1	---	---	---	---	224	e18	e3.2	4.3	e3.3	6.2
2	e24	1.8	---	---	---	---	224	e16	e3.2	4.6	e3.3	6.5
3	e19	1.5	---	---	---	---	216	e15	e4.8	4.2	e3.3	7.8
4	e21	e1.4	---	---	---	---	209	e14	4.8	4.0	e3.3	7.7
5	e27	e1.2	---	---	---	---	200	e13	4.9	3.9	e3.3	6.3
6	e28	e1.2	---	---	---	---	193	e12	4.6	3.9	e3.3	6.4
7	e36	e.77	---	---	---	---	---	e11	3.8	3.8	e3.3	7.0
8	e42	.58	---	---	---	---	---	e10	2.2	3.5	e3.3	6.8
9	e42	.47	---	---	---	---	---	e8.5	2.6	3.7	e3.3	6.3
10	e34	.44	---	---	---	---	65	e7.5	3.4	3.2	e3.3	6.4
11	e28	.37	---	---	---	---	39	e6.6	4.2	2.5	e3.4	6.3
12	e20	.39	---	---	---	---	35	e5.8	4.5	2.8	e3.4	6.4
13	e17	.50	---	---	---	---	32	e5.0	3.6	2.8	e3.5	7.6
14	e18	.52	---	---	---	---	51	e4.3	3.2	2.9	e3.5	7.2
15	e16	.49	---	---	---	---	38	e3.8	2.9	2.9	e3.6	5.5
16	e18	.53	---	---	---	---	24	e3.5	2.7	3.0	e3.7	7.3
17	e18	.50	---	---	---	---	17	e3.3	2.9	3.0	e3.7	7.0
18	e18	.49	---	---	---	---	7.2	e3.2	3.8	3.4	e3.8	6.1
19	e17	.53	---	---	---	---	1.2	e3.2	3.1	3.2	e3.9	5.9
20	e17	.55	---	---	---	---	1.0	e3.2	3.4	e3.2	e4.0	6.1
21	e18	.67	---	---	---	---	4.1	e3.2	4.3	e3.3	e4.2	6.6
22	e18	.78	---	---	---	---	19	e3.2	4.4	e3.3	e4.7	7.8
23	e17	.88	---	---	---	---	29	e3.2	5.1	e3.3	e5.2	7.9
24	e18	.87	---	---	---	---	38	e3.1	4.2	e3.3	e5.5	8.3
25	e18	1.0	---	---	---	---	39	e3.1	3.8	e3.3	e5.7	8.1
26	11	1.3	---	---	---	---	27	e3.1	4.1	e3.3	e5.9	7.1
27	5.5	1.4	---	---	---	---	24	e3.2	4.0	e3.3	e6.0	5.8
28	3.1	1.4	---	---	---	---	e22	e3.2	3.9	e3.3	e6.1	6.0
29	2.8	1.4	---	---	---	---	e21	e3.2	4.3	e3.3	6.2	6.3
30	2.7	1.6	---	---	---	---	e19	e3.2	4.5	e3.3	6.5	6.3
31	2.5	---	---	---	---	---	---	e3.2	---	e3.3	6.3	---
TOTAL	595.6	27.63	---	---	---	---	---	201.8	114.4	105.1	131.8	203.0
MEAN	19.2	.92	---	---	---	---	---	6.51	3.81	3.39	4.25	6.77
MAX	42	2.1	---	---	---	---	---	18	5.1	4.6	6.5	8.3
MIN	2.5	.37	---	---	---	---	---	3.1	2.2	2.5	3.3	5.5
AC-FT	1180	55	---	---	---	---	---	400	227	208	261	403

e Estimated.

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. October 1991 to current year.

CHEMICAL DATA: October 1991 to current year.

SPECIFIC CONDUCTANCE: July 1994 to November 1994, October 1995 to current year.

WATER TEMPERATURE: July 1994 to current year.

PERIOD OF DAILY RECORD. July 1994 to current year.

SPECIFIC CONDUCTANCE: July 1994 to November 1994, October 1995 to current year.

WATER TEMPERATURE: July 1994 to current year.

INSTRUMENTATION. Water-quality monitor since July 1994.

REMARKS. Specific conductance records are rated excellent and water temperature records are rated good. Water-quality samples collected below spillway. Interruption in record was due to the malfunction of the recording instrument. Continuous water quality is not collected Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,020 microsiemens, Aug. 31, 1999, several days in September 1999, June 8, 9, 2000; minimum recorded, 194 microsiemens, Dec. 6, 1997.

WATER TEMPERATURE: Maximum recorded, 29.5°C, Aug. 3, 1999; minimum recorded, 9.0°C, Nov. 15, 1994, Jan. 6, 1998.

EXTREMES FOR CURRENT YEAR.

SPECIFIC CONDUCTANCE: Maximum recorded, 991 microsiemens, Nov. 8; minimum recorded, 790 microsiemens, July 6.

WATER TEMPERATURE: Maximum recorded, 24.0°C, July 5; minimum recorded, 11.0°C, Nov. 18, 19.

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 (PER- CENT SATUR- ATION) (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...	1310	22	--	--	--	8.2	925
NOV							
08...	1230	.56	--	--	--	7.8	942
DEC							
11...	1415	72	--	--	--	7.6	881
JAN							
10...	1245	1.4	--	--	--	7.8	918
FEB							
16...	1400	5.0	--	--	--	7.8	749
APR							
03...	1130	218	750	12.9	122	8.2	810
MAY							
30...	1810	3.3	--	--	--	7.8 ¹	797 ¹
JUN							
12...	1405	4.3	--	--	--	7.8	852
JUL							
10...	1630	2.8	--	--	--	7.9 ¹	800 ¹
AUG							
29...	1555	6.4	--	--	--	7.8	810
SEP							
17...	1600	6.0	--	--	--	7.5	808

¹ Laboratory Value.

SANTA YNEZ RIVER BASIN

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

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

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 CACO3 (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT						
04...	16.0	--	--	--	--	--
NOV						
08...	15.5	--	--	--	--	--
DEC						
11...	13.0	--	--	--	--	--
JAN						
10...	11.0	--	--	--	--	--
FEB						
16...	11.5	--	--	--	--	--
APR						
03...	12.1	216	370	78.0	42.5	2.33
MAY						
30...	21.5	--	--	--	--	--
JUN						
12...	20.5	--	--	--	--	--
JUL						
10...	20.5	--	--	--	--	--
AUG						
29...	20.5	--	--	--	--	--
SEP						
17...	20.5	--	--	--	--	--

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, CA—Continued

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

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)
OCT						
04...	--	--	--	--	653	--
NOV						
08...	--	--	--	--	688	--
DEC						
11...	--	--	--	--	665	--
JAN						
10...	--	--	--	--	671	--
FEB						
16...	--	--	--	--	524	--
APR						
03...	.4	12.0	265	.8	583	541
MAY						
30...	--	--	--	--	576	--
JUN						
12...	--	--	--	--	570	--
JUL						
10...	--	--	--	--	570	--
AUG						
29...	--	--	--	--	559	--
SEP						
17...	--	--	--	--	570	--

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
04...	--	--	--	--	--	--	--
NOV							
08...	--	--	--	--	--	--	--
DEC							
11...	--	--	--	--	--	--	--
JAN							
10...	--	--	--	--	--	--	--
FEB							
16...	--	--	--	--	--	--	--
APR							
03...	<.041	e.044	e.004	.018	286	<10	4.9
MAY							
30...	--	--	--	--	--	--	--
JUN							
12...	--	--	--	--	--	--	--
JUL							
10...	--	--	--	--	--	--	--
AUG							
29...	--	--	--	--	--	--	--
SEP							
17...	--	--	--	--	--	--	--

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

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, 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	930	901	967	946	---	---	---	---	---	---	---	---
2	923	899	959	945	---	---	---	---	---	---	---	---
3	918	900	955	949	---	---	---	---	---	---	---	---
4	921	900	952	944	---	---	---	---	---	---	---	---
5	917	892	956	943	---	---	---	---	---	---	---	---
6	917	877	966	953	---	---	---	---	---	---	---	---
7	---	877	984	948	---	---	---	---	---	---	---	---
8	913	889	991	975	---	---	---	---	---	---	---	---
9	940	894	975	969	---	---	---	---	---	---	---	---
10	---	886	972	966	---	---	---	---	---	---	---	---
11	---	891	970	962	---	---	---	---	---	---	---	---
12	---	893	970	958	---	---	---	---	---	---	---	---
13	921	899	970	957	---	---	---	---	---	---	---	---
14	923	903	968	957	---	---	---	---	---	---	---	---
15	922	904	971	962	---	---	---	---	---	---	---	---
16	927	904	971	950	---	---	---	---	---	---	---	---
17	938	914	960	952	---	---	---	---	---	---	---	---
18	927	874	962	949	---	---	---	---	---	---	---	---
19	946	922	971	959	---	---	---	---	---	---	---	---
20	961	938	969	961	---	---	---	---	---	---	---	---
21	939	914	971	961	---	---	---	---	---	---	---	---
22	928	916	969	963	---	---	---	---	---	---	---	---
23	922	895	973	963	---	---	---	---	---	---	---	---
24	926	890	974	963	---	---	---	---	---	---	---	---
25	971	926	972	962	---	---	---	---	---	---	---	---
26	---	947	975	965	---	---	---	---	---	---	---	---
27	---	946	974	964	---	---	---	---	---	---	---	---
28	---	951	974	948	---	---	---	---	---	---	---	---
29	---	964	968	928	---	---	---	---	---	---	---	---
30	---	965	966	929	---	---	---	---	---	---	---	---
31	978	963	---	---	---	---	---	---	---	---	---	---
MONTH	---	874	991	928	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	867	820	---	---	837	811	825	814	---	---	825	814
2	839	823	---	---	835	812	825	815	---	---	826	814
3	---	---	---	---	823	808	828	816	---	---	827	818
4	---	---	---	---	819	803	836	821	---	---	829	820
5	---	---	---	---	818	807	834	816	---	---	829	821
6	---	---	---	---	818	806	839	790	---	---	831	822
7	---	---	---	---	823	804	833	813	---	---	829	820
8	---	---	---	---	828	815	833	819	---	---	832	823
9	---	---	---	---	829	819	835	820	---	---	833	825
10	---	---	---	---	827	816	838	821	---	---	834	826
11	---	---	---	---	826	814	836	828	---	---	835	812
12	---	---	---	---	828	808	835	827	---	---	832	817
13	---	---	---	---	824	819	834	824	---	---	839	815
14	---	---	---	---	827	814	836	826	---	---	838	818
15	---	---	---	---	830	822	830	824	---	---	841	805
16	---	---	---	---	835	827	832	821	---	---	824	806
17	---	---	---	---	834	827	831	824	---	---	826	805
18	---	---	---	---	835	828	835	819	---	---	818	811
19	---	---	---	---	832	824	835	816	---	---	819	812
20	---	---	---	---	832	813	828	820	---	---	818	811
21	---	---	---	---	832	817	827	817	---	---	819	810
22	---	---	---	---	832	806	826	815	---	---	820	810
23	---	---	---	---	831	824	829	815	---	---	816	809
24	---	---	---	---	832	819	829	815	---	---	817	807
25	---	---	---	---	827	814	828	815	---	---	817	810
26	---	---	---	---	827	816	833	810	---	---	817	806
27	---	---	---	---	826	819	830	800	---	---	818	810
28	---	---	---	---	832	819	---	---	---	---	821	811
29	---	---	---	---	824	815	---	---	---	---	819	813
30	---	---	---	---	825	815	---	---	819	804	822	804
31	---	---	833	814	---	---	---	---	821	813	---	---
MONTH	---	---	---	---	837	803	---	---	---	---	841	804

11126000 SANTA YNEZ RIVER NEAR SANTA YNEZ, 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	17.5	15.5	17.0	14.0	---	---	---	---	---	---	---	---
2	17.0	15.5	17.0	14.5	---	---	---	---	---	---	---	---
3	17.0	15.5	17.0	14.5	---	---	---	---	---	---	---	---
4	17.0	15.5	16.5	14.0	---	---	---	---	---	---	---	---
5	17.0	15.5	16.5	15.0	---	---	---	---	---	---	---	---
6	17.0	15.5	17.0	15.5	---	---	---	---	---	---	---	---
7	16.0	15.5	16.5	14.5	---	---	---	---	---	---	---	---
8	16.5	15.5	16.0	14.0	---	---	---	---	---	---	---	---
9	16.5	15.0	16.5	14.5	---	---	---	---	---	---	---	---
10	16.0	15.0	15.5	13.5	---	---	---	---	---	---	---	---
11	16.0	15.0	15.0	12.5	---	---	---	---	---	---	---	---
12	17.0	15.0	14.5	12.0	---	---	---	---	---	---	---	---
13	16.5	15.0	14.0	11.5	---	---	---	---	---	---	---	---
14	16.5	14.5	14.0	11.5	---	---	---	---	---	---	---	---
15	17.0	15.0	13.5	11.5	---	---	---	---	---	---	---	---
16	17.0	15.0	14.0	11.5	---	---	---	---	---	---	---	---
17	17.0	15.0	13.5	11.5	---	---	---	---	---	---	---	---
18	17.0	15.5	13.5	11.0	---	---	---	---	---	---	---	---
19	17.0	16.0	13.5	11.0	---	---	---	---	---	---	---	---
20	17.0	15.5	13.0	11.5	---	---	---	---	---	---	---	---
21	17.0	16.0	13.5	12.0	---	---	---	---	---	---	---	---
22	16.5	14.5	14.5	12.5	---	---	---	---	---	---	---	---
23	16.0	14.5	14.0	12.0	---	---	---	---	---	---	---	---
24	16.5	14.5	14.0	12.0	---	---	---	---	---	---	---	---
25	16.0	14.0	14.5	12.5	---	---	---	---	---	---	---	---
26	15.5	15.0	14.5	12.5	---	---	---	---	---	---	---	---
27	16.5	15.0	14.5	12.5	---	---	---	---	---	---	---	---
28	17.5	16.0	14.5	12.5	---	---	---	---	---	---	---	---
29	17.0	15.5	14.5	13.0	---	---	---	---	---	---	---	---
30	17.0	15.0	15.0	13.5	---	---	---	---	---	---	---	---
31	17.0	15.0	---	---	---	---	---	---	---	---	---	---
MONTH	17.5	14.0	17.0	11.0	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	12.0	---	---	22.5	20.0	22.5	20.0	---	---	21.5	18.0
2	13.0	---	---	---	22.0	20.0	23.5	20.0	---	---	22.5	18.5
3	---	---	---	---	21.0	19.0	23.5	20.5	---	---	22.0	18.5
4	---	---	---	---	21.0	19.0	23.0	21.0	---	---	21.5	18.5
5	---	---	---	---	21.0	19.0	24.0	20.5	---	---	21.0	18.5
6	---	---	---	---	21.5	19.0	22.5	20.0	---	---	20.5	18.0
7	---	---	---	---	22.0	19.0	22.0	19.0	---	---	20.5	17.5
8	---	---	---	---	22.0	19.5	22.0	19.5	---	---	20.5	18.0
9	---	---	---	---	21.5	19.5	21.5	20.0	---	---	20.5	18.0
10	---	---	---	---	21.0	19.0	22.0	19.5	---	---	20.0	17.5
11	---	---	---	---	20.5	19.0	22.0	20.0	---	---	20.0	17.5
12	---	---	---	---	20.5	18.5	22.0	19.5	---	---	20.0	17.0
13	---	---	---	---	21.5	18.5	22.0	19.5	---	---	21.0	17.5
14	---	---	---	---	22.5	18.5	21.5	20.0	---	---	21.0	17.5
15	---	---	---	---	21.5	18.5	21.0	19.5	---	---	20.5	17.5
16	---	---	---	---	21.5	19.0	20.5	19.0	---	---	20.0	17.5
17	---	---	---	---	22.0	19.5	21.0	19.0	---	---	21.0	18.0
18	---	---	---	---	22.0	19.5	21.5	19.0	---	---	20.5	18.0
19	---	---	---	---	22.0	19.5	21.0	19.0	---	---	20.5	18.0
20	---	---	---	---	23.5	19.5	21.0	19.5	---	---	20.5	18.0
21	---	---	---	---	22.5	19.5	21.0	19.0	---	---	20.5	18.0
22	---	---	---	---	22.5	20.0	21.5	19.0	---	---	21.0	17.5
23	---	---	---	---	22.5	20.0	21.5	19.0	---	---	20.5	17.5
24	---	---	---	---	22.0	20.0	21.5	19.0	---	---	20.0	17.5
25	---	---	---	---	21.0	19.0	21.5	19.5	---	---	20.0	17.5
26	---	---	---	---	21.5	19.5	22.0	19.5	---	---	20.5	17.5
27	---	---	---	---	21.5	19.0	21.5	19.5	---	---	20.0	17.5
28	---	---	---	---	21.5	19.0	---	---	---	---	19.5	17.0
29	---	---	---	---	22.0	19.5	---	---	---	---	19.5	17.0
30	---	---	---	---	22.5	19.5	---	---	21.0	18.0	21.0	17.5
31	---	---	22.5	20.0	---	---	---	---	21.0	18.0	---	---
MONTH	---	---	---	---	23.5	18.5	---	---	---	---	22.5	17.0

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.—Lat 34°37'06", long 120°07'11", in NW 1/4 NW 1/4 sec.11, T.6 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank, at downstream side of bridge on Alamo Pintado Road, and 1.7 mi northeast of Solvang.

DRAINAGE AREA.—29.4 mi².

PERIOD OF RECORD.—October 1970 to September 1985, October 1989 to September 1992, October 1994 to current year. Records prior to October 1970 in files of Santa Barbara County Flood Control District.

CHEMICAL DATA: Water year 1997.

REVISED RECORDS.—WDR CA-98-1: 1997.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 540.49 ft above sea level, Santa Barbara County datum.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,680 ft³/s, Feb. 3, 1998, gage height, 11.69 ft, from rating curve extended above 1,050 ft³/s; no flow part of most years.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 10.32 ft, from information provided by Santa Barbara County Flood Control District.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 13	0715	101	3.22	Mar. 5	0415	462	5.15

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	1.6	1.7	1.4	2.0	1.6	3.3	5.8	5.4	3.3	.71	1.5	.75
2	1.6	1.6	1.4	1.4	1.8	3.2	5.6	4.2	3.2	.68	1.4	.73
3	1.5	1.5	1.3	1.4	2.7	3.0	6.0	4.0	3.1	.63	1.4	.70
4	1.6	1.6	1.3	1.4	2.3	27	6.6	3.2	2.9	.56	1.6	.74
5	1.4	1.6	1.2	2.5	2.1	277	6.1	3.8	2.8	.60	.94	.82
6	1.9	1.6	1.4	2.7	1.8	151	5.5	3.4	2.5	.90	.83	.82
7	1.4	1.7	1.3	2.6	1.8	59	9.1	3.0	2.4	.86	.71	.94
8	1.4	1.9	1.7	3.4	1.8	21	5.8	2.9	2.2	.89	.97	1.0
9	1.5	1.9	1.5	1.6	2.1	12	6.1	2.4	2.1	.98	1.5	1.0
10	2.3	1.9	1.2	15	3.2	15	5.7	2.3	1.9	1.1	1.8	.98
11	2.1	2.1	1.9	9.6	11	15	5.5	3.4	2.1	.91	1.8	.99
12	1.7	2.0	2.6	9.2	11	13	5.5	4.2	2.4	1.2	1.3	.95
13	1.6	1.8	3.6	1.2	34	9.4	5.6	5.1	1.8	1.0	1.3	.90
14	1.6	2.0	3.0	.93	9.5	7.9	5.3	4.5	1.6	.98	1.3	.90
15	1.7	2.1	2.2	.79	6.2	7.9	5.3	4.9	1.2	1.0	1.1	.89
16	1.6	2.3	4.3	1.8	5.3	7.1	5.4	4.4	1.3	1.1	1.3	.66
17	1.5	2.3	3.8	1.4	4.5	6.3	5.2	2.4	1.1	1.1	1.1	.87
18	1.5	2.2	3.6	1.3	4.2	5.7	5.7	2.5	1.1	1.1	1.2	1.3
19	1.5	1.6	2.6	1.7	4.1	5.1	6.3	3.1	1.1	1.1	1.2	1.5
20	1.6	1.6	3.9	1.6	3.7	4.7	6.8	4.3	1.0	1.1	1.3	1.5
21	1.4	1.4	2.2	1.4	3.8	5.0	7.2	4.3	.91	1.1	1.2	1.4
22	1.5	1.4	2.3	1.2	3.9	4.9	5.7	4.3	.78	1.0	1.1	1.1
23	1.6	1.6	3.1	1.3	3.8	6.0	5.5	4.2	.76	1.0	.87	1.1
24	1.6	1.7	3.2	1.1	4.2	5.7	5.4	3.7	.86	.99	.98	1.1
25	1.9	1.7	4.0	.98	3.7	5.2	4.9	3.6	.74	1.0	.97	.89
26	7.2	1.9	3.6	1.2	3.9	4.9	4.6	3.3	.82	.92	.69	.84
27	2.4	1.8	2.7	1.1	3.4	4.5	5.5	4.4	.77	.99	.70	.85
28	1.5	1.9	2.6	1.3	3.4	4.8	6.2	4.3	.93	.73	.61	.77
29	4.8	1.9	1.8	1.9	---	5.4	5.6	4.0	.82	.86	.82	.81
30	1.8	1.3	2.3	2.5	---	5.9	4.8	3.4	.78	1.1	.72	.66
31	1.7	---	2.5	1.8	---	5.8	---	3.2	---	1.7	.76	---
TOTAL	60.0	53.6	75.5	79.30	144.8	711.7	174.3	116.1	49.27	29.89	34.97	28.46
MEAN	1.94	1.79	2.44	2.56	5.17	23.0	5.81	3.75	1.64	.96	1.13	.95
MAX	7.2	2.3	4.3	15	34	277	9.1	5.4	3.3	1.7	1.8	1.5
MIN	1.4	1.3	1.2	.79	1.6	3.0	4.6	2.3	.74	.56	.61	.66
AC-FT	119	106	150	157	287	1410	346	230	98	59	69	56

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, 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	.47	.65	.75	4.02	13.2	8.61	2.35	1.08	.80	.49	.56	.43
MAX	3.06	5.73	3.31	56.8	219	44.8	22.9	7.62	4.83	3.29	3.38	3.53
(WY)	1999	1996	1999	1995	1998	1995	1998	1998	1995	1999	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1971	1973	1971	1971	1971	1971	1971	1971	1971	1971	1971

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1971 - 2001

ANNUAL TOTAL	1006.61	1557.89	
ANNUAL MEAN	2.75	4.27	2.73
HIGHEST ANNUAL MEAN			25.3
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	26	Feb 23	277
LOWEST DAILY MEAN	.80	Jun 12	.56
ANNUAL SEVEN-DAY MINIMUM	.99	Jul 12	.68
MAXIMUM PEAK FLOW			462
MAXIMUM PEAK STAGE			5.15
ANNUAL RUNOFF (AC-FT)	2000	3090	1980
10 PERCENT EXCEEDS	5.8	5.8	3.3
50 PERCENT EXCEEDS	2.0	1.8	.00
90 PERCENT EXCEEDS	1.3	.86	.00

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.—Lat 34°32'56", long 120°07'45", in NE 1/4 NW 1/4 sec.4, T.5 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, in cove on right bank, 0.4 mi upstream from reservoir spillway, and 3 mi south of Solvang.

DRAINAGE AREA.—7.83 mi².

PERIOD OF RECORD.—December 1971 to current year. Prior to October 1985, only monthend elevations and contents published.

GAGE.—Water-stage recorder. Datum of gage is sea level.

REMARKS.—Lake is formed by earthfill dam. Storage began Dec. 19, 1970. Usable capacity, 2,260 acre-ft, between bottom of outlet gate at elevation 555.70 ft, and crest of spillway at elevation 599.88 ft. Dead storage, 110 acre-ft. Inflow must total 150 acre-ft during any one month between November and June in order to store flows for that water year. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of [Santa Ynez River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 2,800 acre-ft, Mar. 5, 2001, elevation, 604.57 ft; minimum, 748 acre-ft, Nov. 8–10, 1972, elevation, 577.15 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 2,800 acre-ft, Mar. 5, maximum elevation, 604.57 ft; minimum contents, 1,980 acre-ft, Jan. 8, minimum elevation, 595.44 ft.

Capacity table (elevation in feet, and contents, in acre-feet)
(Based on data provided by Santa Barbara County Flood Control District in 1971)

590 1,540 600 2,380 595 1,940 605 2,840

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2050	2030	2000	1980	2380	2400	2380	2370	2360	2300	e2220	2120
2	2050	2030	2000	1980	2380	2390	2380	2370	2360	2300	e2210	2120
3	2050	2030	2000	1980	2380	2390	2380	2370	2360	2300	e2210	2120
4	2040	2030	2000	1980	2380	2780	2380	2370	2360	2290	e2210	2120
5	2040	2030	2000	1980	2380	2550	2380	2370	2360	2290	e2200	2110
6	2040	2030	2000	1980	2380	2490	2380	2370	2360	2290	e2200	2110
7	2040	2030	2000	1980	2380	2440	2380	2370	2360	2290	e2200	2110
8	2030	2020	2000	1980	2380	2420	2380	2370	2350	2290	e2200	2110
9	2030	2020	2000	1980	2390	2410	2380	2370	2350	2280	e2190	2110
10	2030	2020	2000	2110	2390	2400	2380	2370	2350	2280	e2190	2110
11	2030	2020	2000	2200	2430	2400	2380	2370	2350	e2280	e2190	2100
12	2030	2020	2000	2360	2410	2400	2380	2370	2350	e2270	e2180	2100
13	2030	2020	2000	2380	2460	2390	2380	2370	2340	e2270	e2180	2100
14	2030	2010	2000	2380	2420	2390	2380	2370	2340	e2270	e2170	2100
15	2030	2010	1990	2380	2400	2390	2380	2370	2340	e2270	e2170	2100
16	2030	2010	1990	2380	2380	2390	2380	2370	2340	e2260	e2170	2100
17	2020	2010	1990	2380	2340	2390	2380	2370	2340	e2260	e2170	2100
18	2020	2010	1990	2380	2320	2390	2380	2370	2330	e2260	e2160	2090
19	2020	2010	1990	2380	2410	2390	2380	2370	2330	e2250	e2160	2090
20	2020	2010	1990	2380	2410	2390	2380	2370	2330	e2250	e2160	2090
21	2010	2010	1990	2380	2400	2390	2380	2370	2320	e2250	e2160	2080
22	2010	2010	1990	2380	2400	2390	2380	2370	2320	e2240	e2150	2080
23	2010	2010	1990	2380	2400	2390	2380	2370	2320	e2240	e2150	2080
24	2010	2010	1990	2380	2410	2380	2380	2370	2320	e2240	e2150	2080
25	2010	2010	1990	2380	2400	2380	2380	2370	2320	e2240	e2150	2070
26	2020	2010	1990	2390	2400	2380	2370	2370	2310	e2230	e2140	2070
27	2020	2010	1990	2390	2400	2380	2370	2370	2310	e2230	e2140	2060
28	2020	2000	1980	2380	2400	2380	2370	2370	2310	e2230	2140	2060
29	2030	2000	1980	2380	---	2380	2370	2370	2310	e2230	2130	2060
30	2030	2000	1980	2380	---	2380	2370	2370	2300	e2220	2130	2060
31	2030	---	1980	2380	---	2380	---	2360	---	e2220	2130	---
MAX	2050	2030	2000	2390	2460	2780	2380	2370	2360	2300	2220	2120
MIN	2010	2000	1980	1980	2320	2380	2370	2360	2300	2220	2130	2060
a	596.12	595.75	595.54	600.01	600.19	600.01	599.94	599.83	599.16	e598.20	597.20	596.40
b	-20	-30	-20	+400	+20	-20	-10	-10	-60	-80	-90	-70

CAL YR 2000 b 0
WTR YR 2001 b 10

e Estimated.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11128500 SANTA YNEZ RIVER AT SOLVANG, CA

LOCATION. Lat 34 °35 06", long 120°08 37", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, near left bank, on downstream end of pier of Alisal Road Bridge, 25 ft downstream from Alisal Creek, 0.8 mi southwest of Solvang, and 10 mi downstream from Lake Cachuma.

DRAINAGE AREA. 579 mi².

PERIOD OF RECORD. October 1996 to current year.

CHEMICAL DATA: October 1996 to current year.

PERIOD OF DAILY RECORD. August 1997 to current year.

SPECIFIC CONDUCTANCE: August 1997 to September 1997, April 1999 to current year.

WATER TEMPERATURE: August 1997 to current year.

INSTRUMENTATION. Water-quality monitor since August 1997.

REMARKS. Specific conductance and water temperature records rated good. Continuous water quality is not published Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.

SPECIFIC CONDUCTANCE: Maximum recorded, 2,060 microsiemens, Sept. 23, 1997; minimum recorded, 527 microsiemens, Sept. 4, 1997.

WATER TEMPERATURE: Maximum recorded, 31.5°C, Aug. 2, 2000; minimum recorded, 11.0°C, June 12, 17, 18, 1998, Nov. 18—20, 2000.

EXTREMES FOR CURRENT YEAR.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,130 microsiemens, Aug. 23; minimum recorded, 837 microsiemens, Aug. 17.

WATER TEMPERATURE: Maximum recorded, 29.5°C, several days in August; minimum recorded, 11.0°C, Nov. 18—20.

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 OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT							
04...	1655	18	--	--	--	8.2	974
NOV							
14...	1430	7.1	--	--	--	7.8	1060
DEC							
12...	1305	5.8	--	--	--	8.1	1060
JAN							
11...	1700	60	--	--	--	8.0	924
FEB							
12...	1630	140	--	--	--	8.0	772
MAR							
21...	1450	446	--	--	--	8.4	733
APR							
04...	1545	196	755	12.1	119	8.7	843
MAY							
22...	1400	8.1	--	--	--	8.4	1010
JUN							
14...	1700	7.2	--	--	--	7.6	915
JUL							
12...	1615	2.3	--	--	--	8.2 ¹	1080 ¹
AUG							
27...	1715	.56	--	--	--	8.6	992

¹ Laboratory value.

SANTA YNEZ RIVER BASIN

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

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

DATE	TEMPER- ATURE (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL AS CACO3 (MG/L) (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						
04...	21.5	--	--	--	--	--
NOV						
14...	15.5	--	--	--	--	--
DEC						
12...	14.5	--	--	--	--	--
JAN						
11...	12.0	--	--	--	--	--
FEB						
12...	12.0	--	--	--	--	--
MAR						
21...	16.5	--	--	--	--	--
APR						
04...	14.0	190	379	79.7	43.6	2.14
MAY						
22...	24.5	--	--	--	--	--
JUN						
14...	24.5	--	--	--	--	--
JUL						
12...	24.0	--	--	--	--	--
AUG						
27...	29.0	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)
OCT							
04...	--	--	--	--	--	--	--
NOV							
14...	--	--	--	--	--	--	--
DEC							
12...	--	--	--	--	--	--	--
JAN							
11...	--	--	--	--	--	--	--
FEB							
12...	--	--	--	--	--	--	--
MAR							
21...	--	--	--	--	--	--	--
APR							
04...	.837	37.4	17.6	188	201	14	15.8
MAY							
22...	--	--	--	--	--	--	--
JUN							
14...	--	--	--	--	--	--	--
JUL							
12...	--	--	--	--	--	--	--
AUG							
27...	--	--	--	--	--	--	--

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

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

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT						
04...	--	--	--	--	695	--
NOV						
14...	--	--	--	--	748	--
DEC						
12...	--	--	--	--	772	--
JAN						
11...	--	--	--	--	642	--
FEB						
12...	--	--	--	--	527	--
MAR						
21...	--	--	--	--	504	--
APR						
04...	.4	16.2	246	.8	591	555
MAY						
22...	--	--	--	--	664	--
JUN						
14...	--	--	--	--	720	--
JUL						
12...	--	--	--	--	756	--
AUG						
27...	--	--	--	--	678	--

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
04...	--	--	--	--	--	--	--
NOV							
14...	--	--	--	--	--	--	--
DEC							
12...	--	--	--	--	--	--	--
JAN							
11...	--	--	--	--	--	--	--
FEB							
12...	--	--	--	--	--	--	--
MAR							
21...	--	--	--	--	--	--	--
APR							
04...	<.041	.078	<.006	<.018	240	<10	e1.8
MAY							
22...	--	--	--	--	--	--	--
JUN							
14...	--	--	--	--	--	--	--
JUL							
12...	--	--	--	--	--	--	--
AUG							
27...	--	--	--	--	--	--	--

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

11128500 SANTA YNEZ RIVER AT SOLVANG, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1010	947	987	970	---	---	---	---	---	---	---	---
2	951	936	982	967	---	---	---	---	---	---	---	---
3	941	933	974	963	---	---	---	---	---	---	---	---
4	940	918	972	962	---	---	---	---	---	---	---	---
5	943	915	976	955	---	---	---	---	---	---	---	---
6	939	932	962	953	---	---	---	---	---	---	---	---
7	942	931	995	962	---	---	---	---	---	---	---	---
8	940	927	1040	995	---	---	---	---	---	---	---	---
9	938	909	1040	1040	---	---	---	---	---	---	---	---
10	930	911	1060	1030	---	---	---	---	---	---	---	---
11	926	917	1060	1050	---	---	---	---	---	---	---	---
12	930	922	1080	1060	---	---	---	---	---	---	---	---
13	935	925	1080	1070	---	---	---	---	---	---	---	---
14	939	931	1070	984	---	---	---	---	---	---	---	---
15	944	936	993	973	---	---	---	---	---	---	---	---
16	952	938	992	972	---	---	---	---	---	---	---	---
17	948	934	994	975	---	---	---	---	---	---	---	---
18	948	938	994	974	---	---	---	---	---	---	---	---
19	952	944	995	976	---	---	---	---	---	---	---	---
20	967	948	996	971	---	---	---	---	---	---	---	---
21	979	964	997	973	---	---	---	---	---	---	---	---
22	985	973	993	973	---	---	---	---	---	---	---	---
23	982	974	997	975	---	---	---	---	---	---	---	---
24	980	972	997	974	---	---	---	---	---	---	---	---
25	980	969	1000	976	---	---	---	---	---	---	---	---
26	988	914	998	979	---	---	---	---	---	---	---	---
27	961	904	1000	981	---	---	---	---	---	---	---	---
28	963	944	1000	979	---	---	---	---	---	---	---	---
29	968	881	1000	974	---	---	---	---	---	---	---	---
30	976	961	1000	979	---	---	---	---	---	---	---	---
31	976	959	---	---	---	---	---	---	---	---	---	---
MONTH	1010	881	1080	953	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	1000	956	1080	1030	1110	971	---	---
2	---	---	---	---	1000	962	1100	1030	1110	1010	---	---
3	---	---	---	---	1010	937	1100	1010	1120	1010	---	---
4	---	---	---	---	999	954	1100	998	1110	944	---	---
5	---	---	---	---	994	943	1120	1060	1120	999	---	---
6	---	---	---	---	1020	894	1110	942	1110	1020	---	---
7	---	---	---	---	1060	955	1100	1070	1110	967	---	---
8	---	---	---	---	1060	890	1090	1040	1110	915	---	---
9	---	---	---	---	1050	942	1090	1060	1120	961	---	---
10	---	---	---	---	1040	994	1090	1050	1120	957	---	---
11	---	---	---	---	1020	922	1100	1060	1110	982	---	---
12	---	---	---	---	1020	974	1100	1020	1110	1000	---	---
13	---	---	---	---	1030	909	1120	968	1120	997	---	---
14	---	---	---	---	1050	958	1090	937	1120	969	---	---
15	---	---	---	---	1070	1020	1120	850	1110	995	---	---
16	---	---	---	---	1070	1040	1120	944	1110	966	---	---
17	---	---	---	---	1080	1050	1120	1030	1110	837	---	---
18	---	---	---	---	1070	992	1120	925	1120	958	---	---
19	---	---	---	---	1070	992	1100	1010	1120	995	---	---
20	---	---	---	---	1070	1040	1100	1020	1120	989	---	---
21	---	---	---	---	1080	1050	1080	1010	1120	989	---	---
22	---	---	---	---	1080	1060	1080	996	1120	976	---	---
23	---	---	991	958	1090	1060	1090	916	1130	988	---	---
24	---	---	986	936	1090	1060	1100	977	1110	879	---	---
25	---	---	982	920	1100	1060	1100	955	1060	915	---	---
26	---	---	982	939	1090	1040	1100	1020	1040	928	---	---
27	---	---	982	961	1080	1050	1120	1020	---	---	---	---
28	---	---	995	924	1090	1050	1120	939	---	---	---	---
29	---	---	1010	929	1090	1040	1120	1020	---	---	---	---
30	---	---	1000	964	1080	1040	1120	1030	---	---	---	---
31	---	---	1000	961	---	---	1110	967	---	---	---	---
MONTH	---	---	---	---	1100	890	1120	850	---	---	---	---

11128500 SANTA YNEZ RIVER AT SOLVANG, 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	19.0	19.0	14.5	---	---	---	---	---	---	---	---
2	23.0	18.5	19.5	15.5	---	---	---	---	---	---	---	---
3	23.0	18.5	19.0	14.5	---	---	---	---	---	---	---	---
4	22.5	18.0	18.5	14.0	---	---	---	---	---	---	---	---
5	23.0	18.5	18.0	15.5	---	---	---	---	---	---	---	---
6	19.5	18.5	18.5	15.0	---	---	---	---	---	---	---	---
7	19.5	18.5	18.5	14.0	---	---	---	---	---	---	---	---
8	22.0	18.0	18.0	13.5	---	---	---	---	---	---	---	---
9	21.0	18.0	17.0	14.5	---	---	---	---	---	---	---	---
10	20.0	17.5	17.0	13.0	---	---	---	---	---	---	---	---
11	19.5	17.0	16.5	12.5	---	---	---	---	---	---	---	---
12	20.5	16.5	16.5	12.5	---	---	---	---	---	---	---	---
13	21.5	17.0	16.0	12.0	---	---	---	---	---	---	---	---
14	21.5	15.5	15.5	11.5	---	---	---	---	---	---	---	---
15	21.0	17.5	15.5	11.5	---	---	---	---	---	---	---	---
16	22.0	17.0	16.0	12.0	---	---	---	---	---	---	---	---
17	21.5	16.0	16.0	11.5	---	---	---	---	---	---	---	---
18	21.0	17.5	15.5	11.0	---	---	---	---	---	---	---	---
19	21.5	17.5	15.5	11.0	---	---	---	---	---	---	---	---
20	21.0	17.5	16.0	11.0	---	---	---	---	---	---	---	---
21	21.0	17.0	16.0	13.0	---	---	---	---	---	---	---	---
22	20.5	16.0	15.5	12.5	---	---	---	---	---	---	---	---
23	20.5	15.5	15.5	11.5	---	---	---	---	---	---	---	---
24	20.0	15.5	16.0	12.0	---	---	---	---	---	---	---	---
25	19.5	15.5	16.0	12.0	---	---	---	---	---	---	---	---
26	17.5	16.5	16.0	12.0	---	---	---	---	---	---	---	---
27	19.5	16.5	16.0	12.0	---	---	---	---	---	---	---	---
28	19.5	17.0	16.0	12.0	---	---	---	---	---	---	---	---
29	19.0	16.0	16.0	13.5	---	---	---	---	---	---	---	---
30	19.0	15.5	16.5	13.0	---	---	---	---	---	---	---	---
31	19.0	15.0	---	---	---	---	---	---	---	---	---	---
MONTH	24.0	15.0	19.5	11.0	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	25.0	19.0	25.5	19.0	27.5	18.5	---	---
2	---	---	---	---	24.0	19.0	26.5	19.0	28.0	18.5	---	---
3	---	---	---	---	23.5	18.5	26.5	19.5	28.5	18.5	---	---
4	---	---	---	---	24.0	18.5	25.0	20.0	27.5	18.5	---	---
5	---	---	---	---	24.5	18.5	26.5	19.5	28.0	18.5	---	---
6	---	---	---	---	24.5	18.5	23.0	19.5	29.0	18.5	---	---
7	---	---	---	---	25.5	18.5	25.5	19.5	29.5	18.5	---	---
8	---	---	---	---	25.0	18.5	26.0	19.5	28.5	18.5	---	---
9	---	---	25.5	19.0	24.5	18.5	25.0	19.5	29.5	18.5	---	---
10	---	---	25.0	17.5	24.0	18.5	25.5	19.5	28.5	18.5	---	---
11	---	---	24.0	17.5	24.0	18.5	25.0	19.5	28.0	18.0	---	---
12	---	---	23.0	18.0	23.5	18.5	25.5	18.5	27.5	18.0	---	---
13	---	---	21.5	17.5	24.0	18.5	25.5	19.0	28.0	17.5	---	---
14	---	---	23.5	17.0	25.5	18.0	25.0	19.0	29.0	17.5	---	---
15	---	---	24.0	17.5	24.5	18.5	24.5	19.0	29.0	17.5	---	---
16	---	---	24.0	18.0	25.0	18.5	25.0	18.5	29.5	17.5	---	---
17	---	---	23.5	17.5	25.0	18.5	25.0	18.5	29.5	17.5	---	---
18	---	---	24.0	18.0	25.0	18.5	26.0	18.5	29.5	17.5	---	---
19	---	---	23.5	18.0	25.5	18.5	26.0	19.0	29.0	17.5	---	---
20	---	---	24.0	18.5	25.0	19.0	26.0	19.0	27.5	17.5	---	---
21	---	---	24.5	18.5	25.5	19.0	26.0	19.0	27.5	17.5	---	---
22	---	---	24.5	19.0	25.5	19.0	26.5	18.5	28.0	17.5	---	---
23	---	---	24.5	18.5	25.0	19.0	26.5	19.0	28.5	17.5	---	---
24	---	---	25.0	18.5	25.0	19.0	27.0	19.0	28.0	17.5	---	---
25	---	---	25.0	19.5	24.5	18.5	27.5	19.0	29.0	17.0	---	---
26	---	---	23.5	19.5	25.0	19.0	27.5	19.0	29.5	16.0	---	---
27	---	---	20.5	19.0	24.5	18.5	28.0	19.0	---	---	---	---
28	---	---	23.5	18.5	24.5	18.5	28.0	18.5	---	---	---	---
29	---	---	24.0	18.0	25.0	19.0	28.0	18.5	---	---	---	---
30	---	---	25.0	18.0	25.5	19.0	26.5	19.0	---	---	---	---
31	---	---	25.5	19.0	---	---	27.5	18.5	---	---	---	---
MONTH	---	---	---	---	25.5	18.0	28.0	18.5	---	---	---	---

11129800 ZACA CREEK NEAR BUELLTON, CA

LOCATION.—Lat 34°38'55", long 120°11'00", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 2 ft upstream from bridge on Frontage Road, 0.9 mi upstream from Dry Creek, 2.4 mi north of Buellton, and 4.0 mi upstream from mouth.

DRAINAGE AREA.—32.8 mi².

PERIOD OF RECORD.—September 1963 to September 1981, October 1989 to September 1992, October 1994 to current year.

CHEMICAL DATA: April 1997 to September 1997.

Gage.—Water-stage recorder. Elevation of gage is 471.54 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Some pumping from wells along stream for irrigation upstream from station. Small regulation by Zaca Lake, about 15 mi upstream. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,390 ft³/s, Feb. 24, 1969, gage height, 9.20 ft, maximum gage height, 12.59 ft, Feb. 3, 1998; no flow most of each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 50 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0939	484	7.19

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	.01	.09	.07	.26	1.8	2.6	.55	e.11	e.00	.00	.00
2	.00	.02	.09	.06	.26	1.0	2.5	.39	e.09	e.00	.00	.00
3	.00	.01	.08	.07	.26	.85	2.8	.35	e.08	e.00	.00	.00
4	.00	.01	.09	.08	.25	22	3.0	.33	e.07	e.00	.00	.00
5	.00	.03	.09	.09	.26	317	3.1	.24	e.06	e.00	.00	.00
6	.00	.04	.10	.09	.25	173	2.9	.20	e.05	e.00	.00	.00
7	.00	.01	.11	.10	.21	41	7.2	.16	e.04	e.00	.00	.00
8	.00	.01	.08	.76	.21	21	5.6	.13	e.03	e.00	.00	.00
9	.00	.03	.08	.19	.33	15	5.5	.13	e.02	e.00	.00	.00
10	.00	.02	.07	3.6	.68	12	4.9	.14	e.01	e.00	.00	.00
11	.00	.01	.07	3.3	1.2	10	3.7	.14	e.00	e.00	.00	.00
12	.00	.01	.08	6.4	4.8	8.0	2.9	.17	e.00	e.00	.00	.00
13	.00	.05	.07	.69	16	6.7	2.5	.20	e.00	e.00	.00	.00
14	.00	.06	.07	.31	9.5	6.1	2.5	.19	e.00	.00	.00	.00
15	.00	.06	.07	.23	4.8	5.7	2.5	.17	e.00	.00	.00	.00
16	.00	.06	.06	.20	2.6	5.1	2.1	.17	e.00	.00	.00	.00
17	.00	.06	.07	.21	1.1	4.8	2.0	.19	e.00	.00	.00	.00
18	.00	.06	.04	.20	.44	4.5	1.9	.23	e.00	.00	.00	.00
19	.00	.06	.04	.20	1.8	4.2	1.9	.27	e.00	.00	.00	.00
20	.00	.07	.04	.18	.71	3.7	1.7	.33	e.00	.00	.00	.00
21	.00	.07	.05	.17	.45	3.6	2.1	.35	e.00	.00	.00	.00
22	.00	.06	.07	.16	.39	3.4	1.4	.33	e.00	.00	.00	e.00
23	.00	.06	.06	.17	.70	3.2	1.2	.30	e.00	.00	.00	e.00
24	.00	.08	.07	.75	5.2	3.1	1.1	.26	e.00	.00	.00	e.00
25	.00	.08	.06	.28	3.1	2.6	.96	.29	e.00	.00	.00	e.00
26	1.9	.09	.05	1.4	2.7	2.7	.87	.35	e.00	.00	.00	e.00
27	.20	.09	.06	.42	1.6	2.5	.70	.51	e.00	.00	.00	e.00
28	.00	.08	.06	.31	1.3	2.4	.66	.33	e.00	.00	.00	e.00
29	1.2	.08	.06	.27	---	2.8	.57	.21	e.00	.00	.00	e.00
30	.05	.08	.07	.25	---	2.9	.54	.15	e.00	.00	.00	e.00
31	.00	---	.07	.27	---	2.5	---	.11	---	.00	.00	---
TOTAL	3.35	1.46	2.17	21.48	61.36	695.15	73.90	7.87	0.56	0.00	0.00	0.00
MEAN	.11	.049	.070	.69	2.19	22.4	2.46	.25	.019	.000	.000	.000
MAX	1.9	.09	.11	6.4	16	317	7.2	.55	.11	.00	.00	.00
MIN	.00	.01	.04	.06	.21	.85	.54	.11	.00	.00	.00	.00
AC-FT	6.6	2.9	4.3	43	122	1380	147	16	1.1	.00	.00	.00

e Estimated.

11129800 ZACA CREEK NEAR BUELLTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.010	.062	.47	3.08	9.85	5.30	1.41	.52	.18	.029	.007	.005
MAX	.13	1.22	7.64	32.1	120	40.1	9.75	5.69	2.52	.42	.13	.090
(WY)	1999	1997	1997	1969	1998	1995	1995	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1964	1967	1964	1968	1964	1964	1964	1964	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL TOTAL	257.17		867.30			
ANNUAL MEAN	.70		2.38		1.70	
HIGHEST ANNUAL MEAN					11.6	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	63	Feb 23	317	Mar 5	598	Feb 3 1998
LOWEST DAILY MEAN	.00	Jun 13	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 13	.00	Oct 1	.00	Oct 1 1963
MAXIMUM PEAK FLOW			484	Mar 5	1390	Feb 24 1969
MAXIMUM PEAK STAGE			7.19	Mar 5	12.59	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	510		1720		1230	
10 PERCENT EXCEEDS	.45		3.0		1.1	
50 PERCENT EXCEEDS	.07		.07		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA

LOCATION.—Lat 34°35'19", long 120°24'27", in W 1/2 sec.24, T.6 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank, at bridge on Jalama Road, 0.4 mi downstream from El Jaro Creek, and 4.4 mi southeast of Lompoc.

DRAINAGE AREA.—47.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1941 to current year.

REVISED RECORDS.—WSP 2128: Drainage area.

GAGE.—Water-stage recorder and concrete low-water control. Elevation of gage is 220 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation upstream from station. Small diversions for irrigation upstream from station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,400 ft³/s, Mar. 15, 1952, gage height, 20.80 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 300 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2015	625	3.41	Feb. 24	1415	755	3.72
Feb. 13	0700	947	4.16	Mar. 5	0630	5,810	12.78
Feb. 19	1130	1,320	4.96				

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	2.4	2.4	2.2	4.4	14	19	e8.6	5.3	3.3	2.8	2.3
2	1.9	2.4	2.4	2.2	4.4	13	19	e8.5	5.3	3.1	2.8	2.1
3	2.0	2.3	2.4	2.1	4.4	13	18	e8.5	5.2	3.0	2.8	2.0
4	2.3	2.2	2.4	2.0	4.4	1490	18	8.5	5.1	2.8	2.8	2.0
5	2.4	2.3	2.4	2.0	4.4	1990	18	8.6	4.9	2.7	2.8	2.0
6	2.5	2.4	2.3	2.0	4.4	1340	18	8.7	4.6	2.5	2.8	2.0
7	2.9	2.4	2.4	2.0	4.4	438	56	8.7	4.4	2.6	2.9	2.1
8	2.8	2.3	2.4	3.2	4.4	279	14	8.5	4.4	2.3	2.7	2.3
9	2.5	2.3	2.4	2.9	4.6	219	13	8.3	4.5	2.3	2.8	2.5
10	3.0	2.3	2.3	111	6.6	181	13	8.0	4.6	2.3	2.9	2.3
11	3.6	2.3	2.3	34	69	161	13	8.1	4.6	2.2	2.9	2.1
12	3.2	2.3	2.4	94	13	145	13	8.0	4.6	2.3	2.9	2.0
13	2.7	2.3	2.4	7.4	404	e130	12	8.1	4.6	2.4	2.9	2.0
14	2.4	2.4	2.4	e5.3	60	e120	12	7.9	4.5	2.6	3.0	2.0
15	2.4	2.4	2.4	e4.8	12	e112	12	7.4	4.5	2.5	2.9	2.0
16	2.4	2.4	2.4	e4.6	9.7	107	12	7.2	4.3	2.2	2.9	2.1
17	2.3	2.4	2.3	4.4	8.7	68	11	7.2	4.3	2.1	2.6	2.1
18	2.3	2.3	2.2	4.4	9.6	40	11	7.3	4.2	2.0	2.4	2.2
19	2.3	2.4	2.2	4.4	215	34	11	7.2	4.2	2.0	2.3	2.2
20	2.4	2.4	2.2	4.4	93	33	11	7.3	4.2	2.0	2.3	2.2
21	2.3	2.4	e2.2	4.4	17	31	14	7.3	4.3	2.1	2.3	2.2
22	2.1	2.4	2.2	4.4	13	29	11	7.0	3.9	2.1	2.5	2.1
23	1.9	2.4	2.3	4.4	20	28	e10	6.4	3.9	2.2	2.4	2.0
24	1.8	2.4	2.2	8.6	188	27	e9.6	6.1	4.0	2.3	2.4	2.0
25	2.0	2.4	2.2	5.3	48	25	e9.3	6.1	3.7	2.3	2.2	2.0
26	4.2	2.4	2.2	9.5	35	24	e9.0	6.0	3.6	2.4	2.1	2.0
27	6.6	2.4	2.1	5.7	18	23	e8.8	6.4	3.6	2.3	2.1	e2.0
28	3.4	2.4	2.2	5.0	17	21	e8.7	6.3	3.7	e2.6	2.2	e2.0
29	7.6	2.4	2.2	4.7	---	21	e8.6	5.8	3.6	e2.6	2.2	e2.0
30	3.4	2.4	2.3	4.6	---	21	e8.6	5.6	3.4	2.6	2.5	e2.0
31	2.6	---	2.2	4.5	---	20	---	5.4	---	2.6	2.4	---
TOTAL	88.1	70.9	71.3	360.4	1296.4	7197	421.6	229.0	130.0	75.3	80.5	62.8
MEAN	2.84	2.36	2.30	11.6	46.3	232	14.1	7.39	4.33	2.43	2.60	2.09
MAX	7.6	2.4	2.4	111	404	1990	56	8.7	5.3	3.3	3.0	2.5
MIN	1.8	2.2	2.1	2.0	4.4	13	8.6	5.4	3.4	2.0	2.1	2.0
AC-FT	175	141	141	715	2570	14280	836	454	258	149	160	125

e Estimated.

11132500 SALSIPUEDES CREEK NEAR LOMPOC, 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	.85	2.23	7.40	24.0	44.8	41.6	16.0	4.86	2.49	1.45	1.01	.84
MAX	4.26	48.6	102	281	474	545	158	33.1	12.7	8.69	5.77	4.51
(WY)	1942	1966	1956	1995	1998	1995	1941	1998	1998	1998	1941	1941
MIN	.000	.041	.050	.081	.33	.36	.21	.000	.000	.000	.015	.010
(WY)	1962	1991	1990	1991	1991	1990	1989	1961	1961	1961	1972	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	5443.2		10083.3			
ANNUAL MEAN	14.9		27.6		11.9	
HIGHEST ANNUAL MEAN					80.6	
LOWEST ANNUAL MEAN					.17	
HIGHEST DAILY MEAN	869	Apr 17	1990	Mar 5	5390	Mar 11 1995
LOWEST DAILY MEAN	1.1	Jan 12	1.8	Oct 24	.00	Jul 23 1948
ANNUAL SEVEN-DAY MINIMUM	1.1	Jan 9	2.0	Sep 23	.00	Jul 23 1948
MAXIMUM PEAK FLOW			5810	Mar 5	11400	Mar 15 1952
MAXIMUM PEAK STAGE			12.78	Mar 5	20.80	Mar 15 1952
ANNUAL RUNOFF (AC-FT)	10800		20000		8590	
10 PERCENT EXCEEDS	21		22		12	
50 PERCENT EXCEEDS	2.5		3.0		1.5	
90 PERCENT EXCEEDS	1.9		2.1		.10	

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1978 to current year.

CHEMICAL DATA: Water years 1978 to current year.

pH: Water years 1982–83.

WATER TEMPERATURE: Water years 1982–98.

PERIOD OF DAILY RECORD.—Water years 1982–98.

pH: Water years 1982–83.

WATER TEMPERATURE: Water years 1982–98.

INSTRUMENTATION.—Water-quality monitor, water years 1982–83.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 (PER- CENT SATUR- ATION) (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
NOV						
07...	1435	2.3	--	--	--	8.1 1470
DEC						
04...	1125	2.4	--	--	--	8.2 1410
JAN						
05...	1235	2.0	--	--	--	8.3 1330
FEB						
05...	1435	4.4	--	--	--	8.4 1270
MAR						
20...	1255	34	--	--	--	8.3 1230
APR						
06...	1305	20	762	11.9	118	8.4 1280
MAY						
07...	1400	8.9	--	--	--	8.3 1190
JUN						
06...	1435	4.8	--	--	--	8.3 1210
JUL						
05...	1440	2.9	--	--	--	8.2 1140
AUG						
02...	1135	2.9	--	--	--	8.3 1230
SEP						
10...	1150	2.5	--	--	--	8.2 1270

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)
NOV						
07...	13.5	--	--	--	--	--
DEC						
04...	8.5	--	--	--	--	--
JAN						
05...	6.0	--	--	--	--	--
FEB						
05...	14.5	--	--	--	--	--
MAR						
20...	18.5	--	--	--	--	--
APR						
06...	15.0	218	540	142	45.0	2.15
MAY						
07...	23.5	--	--	--	--	--
JUN						
06...	25.5	--	--	--	--	--
JUL						
05...	24.5	--	--	--	--	--
AUG						
02...	19.0	--	--	--	--	--
SEP						
10...	17.0	--	--	--	--	--

11132500 SALSIPUEDES CREEK NEAR LOMPOC, 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 TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV							
07...	--	--	--	--	--	--	--
DEC							
04...	--	--	--	--	--	--	--
JAN							
05...	--	--	--	--	--	--	--
FEB							
05...	--	--	--	--	--	--	--
MAR							
20...	--	--	--	--	--	--	--
APR							
06...	1.52	81.1	24.6	322	372	10	77.7
MAY							
07...	--	--	--	--	--	--	--
JUN							
06...	--	--	--	--	--	--	--
JUL							
05...	--	--	--	--	--	--	--
AUG							
02...	--	--	--	--	--	--	--
SEP							
10...	--	--	--	--	--	--	--

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)
NOV						
07...	--	--	--	--	888	--
DEC						
04...	--	--	--	--	900	--
JAN						
05...	--	--	--	--	892	--
FEB						
05...	--	--	--	--	928	--
MAR						
20...	--	--	--	--	920	--
APR						
06...	.6	22.7	278	1.2	906	846
MAY						
07...	--	--	--	--	838	--
JUN						
06...	--	--	--	--	796	--
JUL						
05...	--	--	--	--	750	--
AUG						
02...	--	--	--	--	824	--
SEP						
10...	--	--	--	--	824	--

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA—Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	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)
NOV							
07...	--	--	--	--	--	--	--
DEC							
04...	--	--	--	--	--	--	--
JAN							
05...	--	--	--	--	--	--	--
FEB							
05...	--	--	--	--	--	--	--
MAR							
20...	--	--	--	--	--	--	--
APR							
06...	<.041	.672	e.006	.096	456	<10	55.7
MAY							
07...	--	--	--	--	--	--	--
JUN							
06...	--	--	--	--	--	--	--
JUL							
05...	--	--	--	--	--	--	--
AUG							
02...	--	--	--	--	--	--	--
SEP							
10...	--	--	--	--	--	--	--

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

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA

LOCATION.—Lat 34°38'14", long 120°25'28", in Canada de Salsipuedes Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.6 mi upstream from State Highway 246, 1.9 mi east of Lompoc, 1.8 mi downstream from Salsipuedes Creek, and 12.4 mi downstream from Lake Cachuma.

DRAINAGE AREA.—789 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—May 1947 to November 1951 (irrigation seasons only), May 1952 to September 1963, October 1964 to September 1979, October 1980 to current year. Records equivalent, except for low-flow periods, to those published as "near Lompoc" (station 11133500), November to December 1906, October 1907 to September 1918, May 1925 to September 1960, and October 1978 to September 1980.

REVISIONS.—WSP 1928: Drainage area.

GAGE.—Two water-stage recorders. Elevation of main gage is 85 ft (prior to Apr. 10, 1991, at datum 5 ft higher) above sea level, from topographic map. See WSP 1715 for history of changes prior to Oct. 1, 1961. Since Oct. 1, 1961, at various sites and datums within 0.1 mi of present site. Supplementary gage, used for high-water periods, at site 0.6 mi downstream at datum 79.25 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952, by Lake Cachuma (stations 11121000, 11122000, and 11125500, respectively). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream. Satellite telemeter at station. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 80,000 ft³/s, Jan. 25, 1969, gage height, 24.20 ft, from supplementary gage; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 9, 1907, reached a stage of 22.0 ft, site and datum then in use, discharge, 120,000 ft³/s, from mean-depth study.

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	28	23	13	16	39	159	211	154	23	6.6	4.0	2.5
2	24	21	13	16	38	134	214	133	22	6.7	4.1	2.0
3	23	19	13	16	37	116	226	103	21	6.9	3.8	2.1
4	23	17	14	16	35	4780	e230	108	e20	6.6	3.3	1.9
5	20	17	14	15	34	33200	e250	103	e19	6.7	3.2	1.9
6	19	17	14	15	32	35400	265	92	e17	6.7	3.2	1.9
7	18	14	14	15	31	7500	346	82	e16	6.7	2.8	2.3
8	19	14	12	18	30	3820	468	76	e15	6.5	2.7	3.1
9	24	15	14	20	31	2560	411	69	15	6.4	2.5	3.8
10	31	15	15	161	47	2270	323	64	15	6.4	2.4	3.6
11	35	14	15	658	153	1820	e290	59	16	6.2	2.2	2.0
12	31	14	16	383	405	1450	e250	56	17	6.1	2.4	2.1
13	26	14	15	153	2140	1120	e220	54	17	5.4	2.4	2.0
14	21	14	14	65	1550	833	e200	51	16	4.8	2.6	1.9
15	18	14	14	52	442	750	e180	49	14	4.6	2.5	1.6
16	16	14	15	47	204	771	e170	46	13	4.6	2.6	1.8
17	14	14	16	44	149	723	e160	43	13	4.3	2.7	2.5
18	13	13	16	44	129	731	e150	40	13	4.3	2.9	2.6
19	12	14	15	46	620	694	e150	37	12	4.3	2.9	2.3
20	12	15	15	41	518	693	e140	35	11	4.2	2.7	2.1
21	12	14	15	37	264	665	e130	35	9.8	3.8	2.9	2.1
22	11	13	15	34	171	608	e130	33	9.3	3.9	2.6	1.9
23	9.8	13	15	30	171	558	e130	31	8.5	4.1	2.1	1.7
24	8.9	13	16	49	524	523	125	30	8.3	4.0	1.8	2.1
25	8.5	13	16	39	396	514	125	28	9.0	4.1	1.6	2.5
26	11	13	17	60	344	541	125	27	8.3	4.3	1.4	2.6
27	24	14	16	65	253	517	137	30	7.5	4.0	1.3	1.8
28	27	13	16	55	202	429	154	31	7.1	3.5	1.3	1.4
29	35	13	16	48	---	335	154	28	7.1	3.4	1.6	1.3
30	37	13	16	38	---	297	154	28	7.1	3.6	1.8	1.1
31	27	---	16	37	---	217	---	26	---	3.8	2.1	---
TOTAL	638.2	444	461	2333	8989	104728	6218	1781	407.0	157.5	78.4	64.5
MEAN	20.6	14.8	14.9	75.3	321	3378	207	57.5	13.6	5.08	2.53	2.15
MAX	37	23	17	658	2140	35400	468	154	23	6.9	4.1	3.8
MIN	8.5	13	12	15	30	116	125	26	7.1	3.4	1.3	1.1
AC-FT	1270	881	914	4630	17830	207700	12330	3530	807	312	156	128

e Estimated.

SANTA YNEZ RIVER BASIN

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, 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	4.31	6.98	30.8	236	520	496	192	71.3	19.0	5.28	3.20	3.50
MAX	29.9	112	291	3303	7452	3590	1253	993	310	78.3	26.8	29.4
(WY)	1992	1966	1984	1969	1998	1983	1998	1998	1998	1998	1997	1992
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1955	1955	1989	1961	1990	1961	1961	1961	1960	1954	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	26005.59		126299.6			
ANNUAL MEAN	71.1		346		130	
HIGHEST ANNUAL MEAN					941	
LOWEST ANNUAL MEAN					.000	
HIGHEST DAILY MEAN	4360	Feb 23	35400	Mar 6	38000	Jan 25 1969
LOWEST DAILY MEAN	.76	Sep 7	1.1	Sep 30	.00	Sep 18 1953
ANNUAL SEVEN-DAY MINIMUM	.85	Sep 7	1.5	Aug 24	.00	Oct 23 1953
MAXIMUM PEAK FLOW			42300	Mar 6	80000	Jan 25 1969
MAXIMUM PEAK STAGE			20.56	Mar 6	24.20	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	51580		250500		94320	
10 PERCENT EXCEEDS	111		388		122	
50 PERCENT EXCEEDS	15		16		2.1	
90 PERCENT EXCEEDS	1.8		2.5		.00	

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. Water years 1978—88, October 1996 to current year.

CHEMICAL DATA: Water years 1978—88, October 1996 to current year.

PERIOD OF DAILY RECORD. October 1998 to current year.

SPECIFIC CONDUCTANCE: October 1998 to current year.

WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION. Water-quality monitor since October 1998.

REMARKS. Specific conductance records good except for June 8—15, which are fair and June 16 to July 13, which are rated fair to poor.

Continuous water quality is not published Dec. 1 to Mar. 31.

EXTREMES FOR PERIOD OF DAILY RECORD.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,890 microsiemens, July 16, 1999; minimum recorded, 922 microsiemens, Apr. 8, 2001.

WATER TEMPERATURE: Maximum recorded, 32.0°C, July 12, 13, 1999; minimum recorded, 7.0°C, Nov. 19, 2000.

EXTREMES FOR CURRENT YEAR.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,820 microsiemens, June 29; minimum recorded, 922 microsiemens, Apr. 8.

WATER TEMPERATURE: Maximum recorded, 29.0°C, May 24, 30; minimum recorded, 7.0°C, Nov. 19.

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)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT						
06...	1350	19	--	--	8.0	1360
NOV						
09...	1300	15	--	--	8.1	1500
DEC						
15...	1310	15	--	--	8.1	1560
JAN						
05...	1245	16	--	--	8.0	1560
FEB						
16...	1045	199	--	--	7.9	1000
MAR						
23...	1140	545	--	--	8.2	901
APR						
04...	1100	278	765	9.9	95.2	1070
JUN						
15...	1730	11	--	--	8.0	1620
JUL						
13...	1635	4.7	--	--	8.1 ¹	1430 ¹
AUG						
17...	1510	2.7	--	--	7.9	1410
SEP						
21...	1535	2.2	--	--	8.2	1500

DATE	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL AS CACO3 (MG/L) (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						
06...	19.0	--	--	--	--	--
NOV						
09...	16.0	--	--	--	--	--
DEC						
15...	15.0	--	--	--	--	--
JAN						
05...	10.5	--	--	--	--	--
FEB						
16...	11.0	--	--	--	--	--
MAR						
23...	--	--	--	--	--	--
APR						
04...	13.5	236	469	99.9	53.2	2.56
JUN						
15...	23.5	--	--	--	--	--
JUL						
13...	26.5	--	--	--	--	--
AUG						
17...	27.5	--	--	--	--	--
SEP						
21...	24.5	--	--	--	--	--

¹ Laboratory value.

SANTA YNEZ RIVER BASIN

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, 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 TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 06...	--	--	--	--	--	--	--
NOV 09...	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--
JAN 05...	--	--	--	--	--	--	--
FEB 16...	--	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--	--
APR 04...	1.10	54.6	20.1	233	284	38.6	.4
JUN 15...	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--
AUG 17...	--	--	--	--	--	--	--
SEP 21...	--	--	--	--	--	--	--

DATE	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 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)
OCT 06...	--	--	--	1040	--	--
NOV 09...	--	--	--	1090	--	--
DEC 15...	--	--	--	1120	--	--
JAN 05...	--	--	--	1140	--	--
FEB 16...	--	--	--	698	--	--
MAR 23...	--	--	--	656	--	--
APR 04...	18.2	294	1.0	760	702	<.041
JUN 15...	--	--	--	1070	--	--
JUL 13...	--	--	--	1020	--	--
AUG 17...	--	--	--	984	--	--
SEP 21...	--	--	--	1040	--	--

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

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA—Continued

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

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 06...	--	--	--	--	--	--
NOV 09...	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--
JAN 05...	--	--	--	--	--	--
FEB 16...	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--
APR 04...	.234	e.004	.025	313	<10	5.5
JUN 15...	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--
AUG 17...	--	--	--	--	--	--
SEP 21...	--	--	--	--	--	--

e Estimated.

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

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, 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	1330	1130	1490	1440	---	---	---	---	---	---	---	---
2	1390	1310	1510	1460	---	---	---	---	---	---	---	---
3	1560	1370	1610	1500	---	---	---	---	---	---	---	---
4	1530	1490	1610	1580	---	---	---	---	---	---	---	---
5	1490	1440	1620	1570	---	---	---	---	---	---	---	---
6	1510	1420	1660	1580	---	---	---	---	---	---	---	---
7	1480	1380	1630	1580	---	---	---	---	---	---	---	---
8	1560	1400	1600	1520	---	---	---	---	---	---	---	---
9	1460	1300	1630	1480	---	---	---	---	---	---	---	---
10	1610	1340	1520	1480	---	---	---	---	---	---	---	---
11	1370	1340	1520	1490	---	---	---	---	---	---	---	---
12	1380	1360	1540	1480	---	---	---	---	---	---	---	---
13	1600	1380	1560	1490	---	---	---	---	---	---	---	---
14	1580	1540	1540	1490	---	---	---	---	---	---	---	---
15	1600	1540	1550	1520	---	---	---	---	---	---	---	---
16	1560	1520	1550	1520	---	---	---	---	---	---	---	---
17	1580	1500	1580	1520	---	---	---	---	---	---	---	---
18	1590	1510	1560	1540	---	---	---	---	---	---	---	---
19	1670	1490	1560	1530	---	---	---	---	---	---	---	---
20	1540	1470	1570	1520	---	---	---	---	---	---	---	---
21	1490	1470	1550	1530	---	---	---	---	---	---	---	---
22	1500	1460	1610	1540	---	---	---	---	---	---	---	---
23	1500	1490	1580	1540	---	---	---	---	---	---	---	---
24	1500	1490	1600	1540	---	---	---	---	---	---	---	---
25	1570	1500	1580	1540	---	---	---	---	---	---	---	---
26	1630	1550	1570	1540	---	---	---	---	---	---	---	---
27	1550	1420	1580	1540	---	---	---	---	---	---	---	---
28	1460	1420	1580	1530	---	---	---	---	---	---	---	---
29	1620	1360	1620	1540	---	---	---	---	---	---	---	---
30	1420	1360	1580	1540	---	---	---	---	---	---	---	---
31	1450	1420	---	---	---	---	---	---	---	---	---	---
MONTH	1670	1130	1660	1440	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1090	1070	1180	1140	1520	1440	1720	1690	1580	1520	1480	1430
2	1100	1070	1190	1140	1570	1470	1720	1690	1580	1520	1490	1440
3	1150	1070	1220	1160	1580	1470	1720	1700	1560	1500	1510	1440
4	1090	1070	1220	1180	1600	1470	1720	1700	1550	1340	1480	1420
5	1100	1070	1220	1190	1550	1470	1720	1700	1530	1370	1500	1430
6	1140	1060	1260	1210	1550	1430	1720	1680	1500	1440	1500	1430
7	1100	1000	1300	1250	1520	---	1720	1700	1480	1420	1480	1450
8	1000	922	1340	1280	1780	---	1720	1700	1510	1430	1500	1300
9	956	923	1370	1310	1740	1570	1720	1700	1490	1440	1520	1460
10	1040	946	1470	1330	1700	1530	1720	1700	1510	1440	1500	1450
11	1130	1040	1460	1340	1720	1550	1730	1700	1500	1450	1510	1470
12	1150	1120	1450	1340	1740	1540	1720	1680	1490	1440	1510	1470
13	1180	1140	1440	1350	1680	1580	1730	1670	1490	1440	1510	1480
14	1200	1170	1440	1340	1740	1550	1690	1620	1520	1440	1510	1480
15	1180	1150	1470	1340	1750	1580	1700	1570	1500	1420	1520	1410
16	1190	1150	1470	1320	1720	1690	1700	1510	1490	1450	1470	1300
17	1240	1170	1510	1330	1720	1690	1670	1630	1490	1440	1500	1340
18	1290	1180	1480	1330	1720	1680	1670	1620	1500	1440	1530	1280
19	1240	1190	1500	1320	1720	1690	1660	1620	1480	1390	1510	1400
20	1280	1230	1510	1330	1720	1690	1670	1400	1480	1440	1520	1480
21	1280	1220	1520	1310	1720	1700	1640	1590	1480	1440	1520	1480
22	1280	1250	1540	1310	1710	1650	1640	1590	1480	1440	1520	1460
23	1280	1200	1550	1340	1700	1680	1640	1550	1480	1430	1510	1440
24	1240	1160	1490	1370	1710	1680	1620	1580	1490	1430	1520	1480
25	1240	1140	1520	1380	1720	1690	1620	1570	1460	1410	1500	1460
26	1150	1140	1600	1410	1720	1690	1620	1570	1460	1410	1510	1480
27	1170	1140	1480	1300	1720	1690	1590	1400	1460	1430	1510	1480
28	1180	1160	1470	1410	1720	1690	1540	1400	1460	1420	1510	1490
29	1180	1150	1520	1420	1820	1680	1550	1400	1480	1430	1520	1490
30	1260	1150	1510	1430	1720	1690	1540	1410	1450	1420	1520	1500
31	---	---	1550	1450	---	---	1570	1530	1470	1420	---	---
MONTH	1290	922	1600	1140	1820	---	1730	1400	1580	1340	1530	1280

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, 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	26.0	18.5	19.0	11.5	---	---	---	---	---	---	---	---
2	25.0	18.0	20.5	13.0	---	---	---	---	---	---	---	---
3	24.5	18.5	19.5	12.5	---	---	---	---	---	---	---	---
4	22.5	17.5	19.5	11.5	---	---	---	---	---	---	---	---
5	24.0	18.0	18.0	14.5	---	---	---	---	---	---	---	---
6	19.5	18.0	19.0	14.0	---	---	---	---	---	---	---	---
7	20.5	17.5	19.0	11.5	---	---	---	---	---	---	---	---
8	23.5	17.5	18.0	11.0	---	---	---	---	---	---	---	---
9	24.0	17.5	17.0	12.0	---	---	---	---	---	---	---	---
10	21.0	17.0	16.5	10.5	---	---	---	---	---	---	---	---
11	20.0	16.0	15.5	9.0	---	---	---	---	---	---	---	---
12	23.0	15.5	15.5	8.5	---	---	---	---	---	---	---	---
13	22.5	14.5	15.0	8.0	---	---	---	---	---	---	---	---
14	22.5	14.0	15.0	9.0	---	---	---	---	---	---	---	---
15	22.0	16.5	15.0	8.5	---	---	---	---	---	---	---	---
16	23.5	16.0	15.5	9.0	---	---	---	---	---	---	---	---
17	22.5	14.5	15.0	8.0	---	---	---	---	---	---	---	---
18	22.0	16.5	14.5	7.5	---	---	---	---	---	---	---	---
19	22.5	16.5	14.5	7.0	---	---	---	---	---	---	---	---
20	22.0	16.0	14.5	7.5	---	---	---	---	---	---	---	---
21	22.0	16.0	16.0	11.0	---	---	---	---	---	---	---	---
22	22.0	13.5	15.5	10.0	---	---	---	---	---	---	---	---
23	21.5	13.0	15.0	9.0	---	---	---	---	---	---	---	---
24	21.5	13.0	15.5	9.5	---	---	---	---	---	---	---	---
25	21.0	14.0	15.5	9.5	---	---	---	---	---	---	---	---
26	18.5	14.5	15.5	9.5	---	---	---	---	---	---	---	---
27	20.0	14.5	15.0	9.5	---	---	---	---	---	---	---	---
28	20.5	15.0	15.5	9.5	---	---	---	---	---	---	---	---
29	21.0	15.0	16.5	12.0	---	---	---	---	---	---	---	---
30	19.0	12.5	16.0	11.5	---	---	---	---	---	---	---	---
31	19.5	12.5	---	---	---	---	---	---	---	---	---	---
MONTH	26.0	12.5	20.5	7.0	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.5	15.0	23.5	15.5	28.0	17.0	26.5	18.5	24.5	20.0	26.5	18.5
2	19.5	13.0	23.5	13.5	25.5	17.5	26.5	19.0	25.5	19.5	27.0	19.0
3	18.0	12.5	25.0	14.0	24.5	16.0	27.5	19.5	24.5	20.0	26.5	19.0
4	17.0	12.5	25.5	13.5	26.0	16.0	25.0	20.0	26.5	19.0	26.5	19.0
5	19.0	12.0	24.5	15.5	25.5	16.5	26.0	19.5	28.5	20.0	26.0	18.5
6	18.5	13.0	26.5	15.5	25.5	15.0	22.5	19.5	26.0	20.0	25.0	17.5
7	17.5	13.5	27.0	15.0	26.0	15.0	24.5	19.5	26.0	20.0	26.0	18.5
8	17.0	11.0	27.5	16.0	25.0	16.0	24.5	19.5	25.5	20.0	21.0	19.0
9	18.0	12.5	26.5	17.0	23.0	17.0	24.0	19.0	24.5	20.0	25.5	18.5
10	18.5	12.5	26.0	16.5	22.5	16.5	24.5	18.5	27.0	19.0	25.0	16.0
11	17.5	13.5	25.0	16.0	21.0	16.0	25.0	18.5	27.0	18.5	26.0	18.0
12	20.0	12.0	22.5	17.0	21.0	16.0	25.0	18.0	26.5	18.0	25.0	16.5
13	20.0	12.5	21.5	16.5	23.5	15.0	25.5	18.0	26.0	18.0	26.0	18.5
14	20.5	12.0	25.0	15.5	25.0	15.5	23.5	18.5	27.0	18.0	26.5	18.5
15	21.0	13.5	25.5	16.0	24.5	17.0	23.0	18.0	27.5	18.0	25.5	18.5
16	21.5	14.0	26.0	16.5	25.5	18.0	22.5	18.0	27.0	18.0	25.0	18.5
17	22.0	12.5	25.5	15.5	25.5	18.5	24.5	18.5	27.0	18.5	23.5	18.0
18	21.5	15.0	24.5	16.0	26.0	18.0	25.0	19.0	27.0	18.0	24.5	18.0
19	18.0	14.0	27.5	16.5	26.0	18.0	24.0	19.0	27.5	18.0	24.5	18.0
20	19.0	12.5	26.5	17.0	26.5	18.5	24.0	19.0	26.0	18.5	25.0	18.0
21	21.0	12.5	28.0	17.0	27.0	18.5	25.5	19.0	26.5	18.0	25.0	18.5
22	22.5	12.5	28.0	17.5	26.5	19.0	25.0	19.0	26.5	18.0	25.0	18.0
23	24.0	14.5	28.5	17.0	25.5	19.5	24.0	18.5	27.0	18.5	25.5	18.0
24	25.0	14.0	29.0	16.0	25.0	19.0	24.0	19.5	25.0	18.0	24.5	18.0
25	25.5	16.0	28.5	18.5	26.0	19.0	26.0	19.5	27.5	18.0	24.5	17.5
26	20.5	16.5	23.0	18.5	26.0	19.0	25.5	20.0	27.0	18.0	26.0	17.5
27	20.0	15.0	22.0	17.0	26.0	18.5	28.0	19.5	27.5	18.5	25.0	16.5
28	23.0	14.5	25.5	16.0	24.5	19.0	28.0	19.5	27.5	17.0	24.5	16.0
29	23.0	13.5	27.0	16.0	24.5	19.0	27.5	20.0	23.0	19.0	25.0	16.0
30	24.0	13.5	29.0	15.5	26.0	19.0	26.5	19.5	25.0	18.5	27.0	15.5
31	---	---	28.5	16.5	---	---	23.5	20.0	27.5	18.0	---	---
MONTH	25.5	11.0	29.0	13.5	28.0	15.0	28.0	18.0	28.5	17.0	27.0	15.5

11134000 SANTA YNEZ RIVER AT H STREET, NEAR LOMPOC, CA

LOCATION.—Lat 34°40'06", long 120°27'25", in Lompoc Grant, [Santa Barbara County](#), Hydrologic Unit 18060010, near left bank, 1,000 ft on downstream side of H Street Bridge, on State Highway 1, and 2 mi north of Lompoc.

DRAINAGE AREA.—816 mi².

PERIOD OF RECORD.—October 1946 to September 1962, October 1998 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 57 ft above sea level. Various datums used during period of record.

REMARKS.—Records poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952, by Lake Cachuma (stations 11121000, 11122000, and 11125500, respectively). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream. Satellite telemeter at station. See schematic diagram of [Santa Ynez River Basin](#).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge prior to regulation by Lake Cachuma, 37,900 ft³/s, Jan. 16, 1952, gage height, 17.4 ft (datum then in use), from rating curve extended above 2,900 ft³/s. Maximum discharge after regulation by Lake Cachuma, 41,600 ft³/s, Mar. 6, 2001, gage height, 14.09 ft; no flow for several months 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	9.7	12	1.6	5.4	29	149	314	e157	e15	.00	.00	.00
2	4.7	11	1.5	5.3	30	128	304	e130	e14	.00	.00	.00
3	3.7	7.1	1.3	4.4	29	121	283	e100	e13	.00	.00	.00
4	3.3	5.5	1.4	4.8	26	1760	261	e105	e11	.00	.00	.00
5	2.6	2.8	1.7	4.3	24	25300	264	e100	e10	.00	.00	.00
6	.73	5.2	2.0	3.7	24	31900	256	e70	e8.8	.00	.00	.00
7	.48	4.2	2.2	3.7	23	9350	287	e45	e7.8	.00	.00	.00
8	.71	2.8	1.7	8.3	21	e4000	377	e35	e6.7	.00	.00	.00
9	4.2	3.1	2.1	8.2	22	e2700	349	e29	e6.0	.00	.00	.00
10	14	4.6	2.5	48	30	e2400	312	e25	e5.4	.00	.00	.00
11	20	3.6	2.7	312	52	e1900	241	e24	e5.0	.00	.00	.00
12	20	3.1	3.6	303	149	e1400	206	e24	e4.5	.00	.00	.00
13	13	5.0	3.3	206	643	e1150	193	e24	e4.0	.00	.00	.00
14	7.3	5.8	2.1	107	666	e1000	184	e25	e3.7	.00	.00	.00
15	5.9	5.7	2.2	67	254	e900	189	e27	e3.4	.00	.00	.00
16	2.4	4.0	2.7	51	174	e780	185	e28	e2.7	.00	.00	.00
17	.89	3.2	3.5	49	116	e740	175	e29	e2.0	.00	.00	.00
18	.00	3.7	4.3	45	100	e710	161	e30	e1.0	.00	.00	.00
19	.00	3.5	5.2	43	267	e665	126	e31	e.00	.00	.00	.00
20	.00	5.7	6.0	41	286	e630	98	e30	.00	.00	.00	.00
21	.00	4.5	4.0	36	210	e600	98	e28	.00	.00	.00	.00
22	.00	2.5	4.3	33	153	e570	84	e25	.00	.00	.00	.00
23	.00	1.5	4.4	32	146	e540	130	e23	.00	.00	.00	.00
24	.00	1.6	4.9	46	257	e500	167	e21	.00	.00	.00	.00
25	.00	3.6	5.8	36	235	e460	154	e19	.00	.00	.00	.00
26	.00	3.4	6.8	56	206	e425	151	e18	.00	.00	.00	.00
27	.61	3.6	7.0	57	180	e390	141	e18	.00	.00	.00	.00
28	11	4.0	7.3	45	172	e360	154	e17	.00	.00	.00	.00
29	28	3.6	5.9	36	---	e330	e157	e16	.00	.00	.00	.00
30	33	2.0	5.3	35	---	310	e157	e16	.00	.00	.00	.00
31	15	---	6.2	29	---	301	---	e16	---	.00	.00	---
TOTAL	201.22	131.9	115.5	1761.1	4524	92469	6158	1285	124.00	0.00	0.00	0.00
MEAN	6.49	4.40	3.73	56.8	162	2983	205	41.5	4.13	.000	.000	.000
MAX	33	12	7.3	312	666	31900	377	157	15	.00	.00	.00
MIN	.00	1.5	1.3	3.7	21	121	84	16	.00	.00	.00	.00
AC-FT	399	262	229	3490	8970	183400	12210	2550	246	.00	.00	.00

e Estimated.

11134000 SANTA YNEZ RIVER AT H STREET, NEAR LOMPOC, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1952, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.000	2.33	9.46	301	43.9	293	69.8	15.5	2.45	.29	.000	.000
MAX	.000	14.0	54.8	1741	215	1722	416	92.9	14.7	1.73	.000	.000
(WY)	1947	1947	1947	1952	1952	1952	1952	1952	1952	1952	1947	1947
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1947	1948	1948	1948	1948	1948	1948	1948	1947	1947	1947	1947

SUMMARY STATISTICS

WATER YEARS 1947 - 1952

ANNUAL MEAN	62.1
HIGHEST ANNUAL MEAN	354 1952
LOWEST ANNUAL MEAN	.000 1948
HIGHEST DAILY MEAN	19600 Jan 16 1952
LOWEST DAILY MEAN	.00 Oct 1 1946
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 1 1946
MAXIMUM PEAK FLOW	37900 Jan 16 1952
MAXIMUM PEAK STAGE	17.40 Jan 16 1952
ANNUAL RUNOFF (AC-FT)	44980
10 PERCENT EXCEEDS	25
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	1953	1954	1955	1956	1957	1960	1958	1953	1953	1953	1953	1953
MEAN	1.37	2.51	26.1	31.0	164	327	132	30.9	4.57	.039	.000	.097
MAX	11.3	19.8	166	181	934	2983	1046	282	50.6	.51	.000	1.26
(WY)	1999	1999	1956	1956	1962	2001	1958	1958	1958	1958	1953	2000
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1953	1955	1954	1957	1955	1960	1957	1953	1953	1953	1953	1953

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1953 - 2001

ANNUAL TOTAL	24282.90	106769.72	
ANNUAL MEAN	66.3	293	59.5
HIGHEST ANNUAL MEAN			293 2001
LOWEST ANNUAL MEAN			.051 1957
HIGHEST DAILY MEAN	5000 Feb 23	31900 Mar 6	31900 Mar 6 2001
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 18	.00 Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 18	.00 Oct 1 1952
MAXIMUM PEAK FLOW		41600 Mar 6	41600 Mar 6 2001
MAXIMUM PEAK STAGE		14.09 Mar 6	14.09 Mar 6 2001
ANNUAL RUNOFF (AC-FT)	48170	211800	43130
10 PERCENT EXCEEDS	109	302	62
50 PERCENT EXCEEDS	2.5	5.2	.00
90 PERCENT EXCEEDS	.00	.00	.00

11134800 MIGUELITO CREEK AT LOMPOC, CA

LOCATION.—Lat 34°37'54", long 120°27'50", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 120 ft upstream from drop structure to debris basin, and 1,900 ft south of Lompoc Union High School.

DRAINAGE AREA.—11.6 mi².

PERIOD OF RECORD.—October 1970 to May 6, 1986, October 1987 to current year.

CHEMICAL DATA: Water years 1980–86, 1988–97.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 97.94 ft above sea level, Santa Barbara County Flood Control District datum. Prior to May 6, 1986, on right bank at site 350 ft downstream at different datum.

REMARKS.—Records poor. No regulation or diversion upstream from station; some pumping from wells along stream for irrigation. See schematic diagram of Santa Ynez River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,660 ft³/s, Feb. 3, 1998, gage height, 4.61 ft, from theoretical rating curve above 50 ft³/s; no flow for many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 5.83 ft, site in use prior to 1986, from floodmark, discharge, 680 ft³/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 140 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0545	1,230	3.00

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	1.1	.43	.70	.43	e.72	2.0	1.4	2.0	.65	.61	.45
2	.33	1.0	.43	.70	.43	.70	2.4	1.4	2.3	.68	.60	.43
3	.33	1.2	.43	.67	.43	.70	2.4	1.4	1.9	.69	.60	.46
4	.42	.70	.43	.69	.58	101	2.4	1.4	2.0	.69	.60	.51
5	.37	.60	.43	.66	.68	205	2.4	1.6	1.6	.66	.60	.45
6	.41	.41	.43	.61	.60	65	2.4	1.7	1.4	.62	.60	.44
7	.40	.43	.43	.70	.60	20	5.7	1.9	1.3	.60	.60	.44
8	.43	.43	.43	1.6	.43	11	1.6	2.1	1.3	.65	.60	.43
9	.43	.39	.43	.76	1.0	6.7	1.4	2.0	1.2	.70	.48	.43
10	.65	.33	.43	14	1.1	5.2	1.5	2.0	1.3	.65	.43	.43
11	.60	.33	.43	3.4	5.3	3.9	1.4	2.0	1.3	.62	.43	.43
12	.51	.33	.44	2.4	.77	3.5	1.2	2.1	1.3	.67	.43	.43
13	.43	.33	.43	.76	17	3.1	1.1	2.4	1.0	.71	.46	.43
14	.43	.41	.43	.66	2.2	2.9	1.1	2.8	.95	.67	.60	.43
15	.43	.41	.43	.60	.86	2.8	1.1	2.8	1.1	.70	.60	.43
16	.43	.39	.43	.54	.70	2.8	1.2	2.8	1.1	.70	.60	.43
17	.52	.37	.43	.43	.70	2.3	1.2	2.8	1.1	.71	.60	.43
18	.60	.38	.43	.43	.83	2.0	1.3	2.8	.97	.71	.57	.43
19	.60	.43	.43	.94	7.3	2.0	1.5	2.8	.87	.73	.43	.43
20	.63	.43	.43	.71	3.9	1.9	1.8	3.1	.86	.72	.43	.47
21	.70	.43	.43	.70	1.8	1.7	1.8	3.6	1.1	.63	.44	.60
22	.70	.43	.43	.65	1.7	1.7	1.4	3.9	.79	.60	.44	.60
23	.77	.43	.43	.69	2.2	1.7	1.4	4.1	.70	.61	.43	.60
24	.89	.44	.43	1.3	11	1.7	1.1	4.1	.70	.61	.43	.60
25	1.1	.46	.58	.63	e1.5	1.7	1.1	4.1	.75	.60	.43	.60
26	2.5	.43	.60	1.6	e.84	1.6	1.1	3.6	.70	.70	.43	.60
27	1.5	.43	.60	.60	e.78	1.5	.89	3.3	.70	.62	.43	.60
28	1.1	.43	.47	.52	e.75	1.4	.88	2.9	.76	.61	.44	.60
29	3.5	.43	.60	.51	---	1.6	.93	2.7	.76	.60	.45	.60
30	1.2	.43	.60	.56	---	1.7	1.4	2.0	.88	.62	.44	.60
31	1.1	---	.61	.53	---	2.0	---	2.2	---	.60	.43	---
TOTAL	24.37	14.74	14.39	40.25	66.41	461.52	49.10	79.8	34.69	20.33	15.66	14.81
MEAN	.79	.49	.46	1.30	2.37	14.9	1.64	2.57	1.16	.66	.51	.49
MAX	3.5	1.2	.61	14	17	205	5.7	4.1	2.3	.73	.61	.60
MIN	.33	.33	.43	.43	.43	.70	.88	1.4	.70	.60	.43	.43
AC-FT	48	29	29	80	132	915	97	158	69	40	31	29

e Estimated.

11134800 MIGUELITO CREEK AT LOMPOC, 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	.30	.61	1.60	3.60	7.36	8.82	2.19	1.35	.93	.63	.48	.37
MAX	1.39	2.77	8.69	37.9	75.6	106	14.2	6.04	5.60	2.64	2.55	2.05
(WY)	1984	1996	1993	1995	1998	1995	1983	1983	2000	1983	2000	1983
MIN	.001	.001	.008	.019	.047	.091	.076	.053	.008	.016	.006	.000
(WY)	1973	1978	1990	1991	1972	1972	1972	1972	1992	1992	1972	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1971 - 2001
ANNUAL TOTAL	983.40	836.07	
ANNUAL MEAN	2.69	2.29	2.34
HIGHEST ANNUAL MEAN			13.8
LOWEST ANNUAL MEAN			.15
HIGHEST DAILY MEAN	66	205	1170
LOWEST DAILY MEAN	.13	.33	.00
ANNUAL SEVEN-DAY MINIMUM	.16	.36	.00
MAXIMUM PEAK FLOW		1230	2660
MAXIMUM PEAK STAGE		3.00	4.61
ANNUAL RUNOFF (AC-FT)	1950	1660	1690
10 PERCENT EXCEEDS	6.2	2.8	2.9
50 PERCENT EXCEEDS	1.7	.69	.43
90 PERCENT EXCEEDS	.35	.43	.03

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA

LOCATION.—Lat 34°46'56", long 120°31'47", in Jesus Maria Grant, Santa Barbara County, Hydrologic Unit 18060009, on Vandenberg Military Reservation, on downstream side of San Antonio Road Bridge, 0.7 mi east of junction of San Antonio Road and Lompoc-Casmalia Road, and 3.8 mi south of Casmalia.

DRAINAGE AREA.—135 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1955 to September 1993, October 1994 to current year.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 160 ft above sea level, from topographic map. Prior to June 27, 1958, at datum 2.00 ft higher.

REMARKS.—Records fair. No regulation upstream from station. Flow affected by pumping from wells along stream for irrigation upstream from station. At times water is released to creek from Vandenberg Air Force Base Water-Treatment Plant.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,680 ft³/s, Mar. 1, 1983, gage height, 14.32 ft, from rating curve extended above 1,100 ft³/s, on basis of slope-area measurement at gage height 12.93 ft; minimum daily, 0.04 ft³/s, Jan. 22, 2001.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11	0030	155	2.71	Mar. 5	0915	2,740	10.39
Feb. 11	1630	155	2.68	Mar. 8	1300	152	2.73
Feb. 13	0830	435	3.81	Mar. 9	1315	104	2.55
Feb. 24	1615	194	2.76				

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	13	.74	1.1	1.2	14	2.8	1.7	.94	.76	.94	1.0
2	20	9.8	.75	.91	1.1	9.9	2.9	1.7	.89	.69	.92	.97
3	13	4.9	.66	.90	1.2	7.7	2.8	1.5	.83	.71	.91	1.0
4	7.7	4.8	.81	1.3	1.2	99	2.8	1.5	.83	.73	1.2	.97
5	9.3	5.6	.52	1.2	1.2	1510	2.8	1.6	.83	.84	1.0	.75
6	13	4.9	1.0	1.2	1.5	664	2.9	1.6	.73	.86	.78	.65
7	5.6	1.8	1.2	1.1	1.5	288	6.3	1.7	.68	.86	.83	.83
8	6.3	4.1	1.2	1.7	1.8	137	2.9	1.8	.69	.77	.82	.80
9	6.6	4.9	1.2	1.2	2.2	75	2.1	1.4	.85	.83	.92	.93
10	6.3	6.0	1.2	5.6	4.4	59	1.9	1.4	.75	.83	.80	.84
11	6.1	5.8	1.2	46	42	34	1.7	1.5	.60	.78	.74	.99
12	3.5	6.0	1.2	20	18	22	1.7	1.5	.49	.83	.70	.97
13	1.9	6.6	1.1	1.9	172	15	1.7	1.6	.26	.82	.74	.97
14	6.7	12	1.2	1.1	45	10	1.7	1.5	.25	.74	.76	.94
15	11	12	1.2	.63	12	8.0	1.7	1.5	.39	.88	1.0	.95
16	8.5	9.7	1.2	.49	5.5	6.1	1.7	1.4	.47	.89	1.0	.95
17	13	8.0	1.0	.35	2.4	4.9	1.6	1.3	.51	.79	.90	1.1
18	13	2.3	1.0	.22	.71	4.8	1.8	1.2	.52	.78	.80	1.1
19	16	2.3	1.0	.19	6.4	4.4	1.8	1.2	.54	.85	.81	1.2
20	13	2.5	1.0	.10	14	3.6	1.9	1.1	.47	.98	.83	1.1
21	15	2.1	1.1	.07	13	4.0	2.2	1.1	.47	.72	.80	1.2
22	19	1.7	1.2	.04	10	4.8	1.7	1.2	.46	.77	.76	1.2
23	14	1.8	1.3	.05	17	4.1	1.6	1.2	.54	.71	.72	1.2
24	13	1.7	1.1	2.9	58	3.9	1.6	1.2	.64	.80	.66	1.1
25	19	1.5	1.1	.66	39	3.6	1.6	1.1	.67	.88	.72	1.0
26	19	1.3	1.0	9.5	33	3.7	1.8	1.2	.67	.93	.70	.92
27	22	1.2	1.0	2.8	26	3.5	1.9	1.3	.66	.85	.69	.91
28	23	.93	1.1	1.2	19	3.3	1.8	1.1	.74	.85	.65	.84
29	20	.87	1.3	1.3	---	3.1	1.9	.97	.77	1.1	.79	.74
30	20	.79	1.7	1.1	---	2.8	1.9	.97	.75	1.0	1.1	.77
31	14	---	1.2	1.0	---	2.8	---	1.2	---	.85	.99	---
TOTAL	398.5	140.89	33.48	107.81	550.31	3016.0	65.5	42.24	18.89	25.68	25.98	28.89
MEAN	12.9	4.70	1.08	3.48	19.7	97.3	2.18	1.36	.63	.83	.84	.96
MAX	23	13	1.7	46	172	1510	6.3	1.8	.94	1.1	1.2	1.2
MIN	1.9	.79	.52	.04	.71	2.8	1.6	.97	.25	.69	.65	.65
AC-FT	790	279	66	214	1090	5980	130	84	37	51	52	57

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.06	1.63	2.79	11.4	29.3	22.3	7.30	1.45	.93	.69	.69	.78
MAX	12.9	6.73	10.6	104	273	234	149	3.85	2.07	1.59	1.84	3.09
(WY)	2001	1973	1956	1995	1998	1983	1958	1983	1983	1983	1981	2000
MIN	.19	.19	.29	.41	.54	.44	.30	.24	.17	.18	.21	.16
(WY)	1990	1990	1990	1991	1991	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001	
ANNUAL TOTAL	3264.39		4454.17			
ANNUAL MEAN	8.92		12.2		6.57	
HIGHEST ANNUAL MEAN					39.7	
LOWEST ANNUAL MEAN					.47	
HIGHEST DAILY MEAN	362	Feb 23	1510	Mar 5	2040	Mar 2 1983
LOWEST DAILY MEAN	.52	Dec 5	.04	Jan 22	.04	Jan 22 2001
ANNUAL SEVEN-DAY MINIMUM	.64	Aug 14	.15	Jan 17	.13	Jul 27 1990
MAXIMUM PEAK FLOW			2740	Mar 5	4680	Mar 1 1983
MAXIMUM PEAK STAGE			10.39	Mar 5	14.32	Mar 1 1983
ANNUAL RUNOFF (AC-FT)	6470		8830		4760	
10 PERCENT EXCEEDS	20		14		4.9	
50 PERCENT EXCEEDS	1.4		1.2		1.0	
90 PERCENT EXCEEDS	.68		.70		.38	

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1978 to current year.

CHEMICAL DATA: Water years 1978 to current year.

pH: December 1981 to September 1983.

WATER TEMPERATURE: December 1981 to September 1983.

PERIOD OF DAILY RECORD.—December 1981 to September 1983.

pH: December 1981 to September 1983.

WATER TEMPERATURE: December 1981 to September 1983.

INSTRUMENTATION.—Water-quality monitor from December 1981 to September 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, PH DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT							
12...	1150	4.7	--	--	--	7.9	2280
NOV							
13...	1405	7.5	--	--	--	7.7	2770
DEC							
07...	1115	1.2	--	--	--	8.0	2810
JAN							
10...	1235	1.1	--	--	--	8.0	2950
FEB							
06...	1345	1.3	--	--	--	8.2	2950
MAR							
23...	1400	3.9	--	--	--	8.2	3070
APR							
02...	1615	2.5	754	10.5	124	8.4	3080
MAY							
09...	1115	1.4	--	--	--	8.3	3180
JUN							
12...	1220	1.0	--	--	--	8.7	3010
JUL							
03...	1325	.81	--	--	--	8.4	2940
30...	1500	1.0	--	--	--	8.2	2890
SEP							
10...	1545	.79	--	--	--	8.1	2720

DATE	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL AS CACO3 (MG/L) (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						
12...	16.0	--	--	--	--	--
NOV						
13...	10.5	--	--	--	--	--
DEC						
07...	12.0	--	--	--	--	--
JAN						
10...	9.5	--	--	--	--	--
FEB						
06...	16.0	--	--	--	--	--
MAR						
23...	16.5	--	--	--	--	--
APR						
02...	22.5	120	444	118	36.1	6.44
MAY						
09...	22.0	--	--	--	--	--
JUN						
12...	22.5	--	--	--	--	--
JUL						
03...	29.0	--	--	--	--	--
30...	25.0	--	--	--	--	--
SEP						
10...	23.5	--	--	--	--	--

11136100 SAN ANTONIO CREEK NEAR CASMALIA, 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 TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
	OCT 12...	--	--	--	--	--	--	--
NOV 13...	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--
JAN 10...	--	--	--	--	--	--	--	--
FEB 06...	--	--	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--	--	--
APR 02...	2.87	139	40.1	323	368	13		
MAY 09...	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--
JUL 03...	--	--	--	--	--	--	--	--
SEP 30...	--	--	--	--	--	--	--	--
SEP 10...	--	--	--	--	--	--	--	--

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. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
	OCT 12...	--	--	--	--	--	1770
NOV 13...	--	--	--	--	--	2300	--
DEC 07...	--	--	--	--	--	2040	--
JAN 10...	--	--	--	--	--	2240	--
FEB 06...	--	--	--	--	--	2260	--
MAR 23...	--	--	--	--	--	2570	--
APR 02...	396	.7	41.3	1000	3.6	2620	1960
MAY 09...	--	--	--	--	--	2420	--
JUN 12...	--	--	--	--	--	2150	--
JUL 03...	--	--	--	--	--	2040	--
SEP 30...	--	--	--	--	--	2000	--
SEP 10...	--	--	--	--	--	1830	--

SAN ANTONIO CREEK BASIN

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA—Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
12...	--	--	--	--	--	--	--
NOV							
13...	--	--	--	--	--	--	--
DEC							
07...	--	--	--	--	--	--	--
JAN							
10...	--	--	--	--	--	--	--
FEB							
06...	--	--	--	--	--	--	--
MAR							
23...	--	--	--	--	--	--	--
APR							
02...	2.98	5.21	2.40	.377	857	<30	345
MAY							
09...	--	--	--	--	--	--	--
JUN							
12...	--	--	--	--	--	--	--
JUL							
03...	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--
SEP							
10...	--	--	--	--	--	--	--

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

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA

LOCATION.—Lat 35°01'19", long 120°13'39", SW 1/4 sec.14, T.11 N., R.32 W., San Luis Obispo–Santa Barbara County Line, Hydrologic Unit 18060007, on left bank, 270 ft downstream of bridge on State Highway 166, 1.5 mi downstream from Buckhorn Canyon, and 13 mi northeast of Santa Maria.

DRAINAGE AREA.—886 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1903 to December 1905 (published as "Santa Maria River near Santa Maria"), October 1959 to current year. Monthly discharge only for October 1903 and July 1904. Yearly estimate for water year 1941 (incomplete), published in WSP 1315-B.

REVISED RECORDS.—WDR CA-71-1: Drainage area. WDR CA-77-1: 1976.

GAGE.—Water-stage recorder. Elevation of gage is 760 ft above sea level, from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 26,200 ft³/s, Feb. 23, 1998, gage height, 14.76 ft, from rating curve extended above 4,900 ft³/s, on basis of slope-area measurement at gage height 14.76 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 6	1200	5,450	11.23

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	.15	.25	.03	.00	2.1	34	13	6.5	2.4	1.3	.52	.18
2	.15	.18	.02	.00	1.8	27	12	6.3	2.4	1.3	.50	.16
3	.16	.14	.02	.00	1.3	24	12	6.1	2.4	1.2	.49	.14
4	.16	.13	.02	.00	1.1	42	12	6.1	2.3	1.2	.48	.13
5	.09	.13	.01	.00	.89	1430	11	5.9	2.3	1.2	.44	.14
6	.10	.12	.12	.00	.84	2540	12	5.8	2.2	1.5	.41	.14
7	.13	.10	.04	.00	.91	e725	24	5.7	2.1	1.7	.39	.15
8	.08	.09	.00	.30	.97	e250	24	5.8	2.0	1.3	.37	.16
9	.05	.08	.00	.00	1.2	e110	17	6.5	2.0	1.2	.34	.16
10	.50	.22	.00	1.5	3.3	e90	15	6.5	2.0	1.2	.30	.15
11	.30	.16	.01	24	12	77	13	6.3	1.9	1.1	.30	.14
12	.19	.14	.01	36	44	64	12	6.1	2.0	1.1	.30	.13
13	.08	.20	.02	26	77	52	12	6.3	1.9	1.0	.31	.11
14	.05	.20	.00	8.2	62	46	11	5.9	1.8	.99	.30	.10
15	.01	.19	.00	5.4	37	40	10	5.8	1.8	.98	.31	.11
16	.02	.16	.00	4.2	23	36	9.6	5.3	1.7	.99	.29	.12
17	.00	.15	.00	3.3	18	33	9.0	5.3	1.8	1.0	.29	.12
18	.00	.14	.00	2.8	15	29	8.6	5.2	1.7	.96	.22	.11
19	.01	.14	.00	2.3	16	26	8.5	5.1	1.6	.93	.21	.11
20	.01	.15	.00	2.1	19	24	9.6	5.0	1.6	.89	.20	.11
21	.04	.11	.00	1.9	18	21	15	4.7	1.6	.85	.20	.11
22	.01	.16	.00	1.6	19	20	13	4.5	1.5	.81	.19	.10
23	.00	.15	.00	1.3	22	19	10	4.3	1.5	.78	.19	.10
24	.01	.11	.00	7.2	26	18	8.7	4.1	1.5	.74	.17	.09
25	.06	.01	.00	8.2	33	18	8.0	3.8	1.5	.71	.16	.09
26	.73	.00	.00	9.9	49	17	7.7	3.8	1.5	.68	.16	.08
27	.63	.00	.00	8.3	54	16	7.5	3.8	1.5	.63	.14	.08
28	.35	.00	.00	6.2	41	15	7.4	4.0	1.5	.59	.14	.09
29	.76	.01	.00	4.5	---	15	7.0	3.8	1.5	.57	.17	.07
30	.43	.01	.00	3.3	---	15	6.7	e3.3	1.4	.56	.19	.06
31	.30	---	.00	2.5	---	14	---	e2.8	---	.54	.18	---
TOTAL	5.56	3.63	0.30	171.00	599.41	5887	346.3	160.4	54.9	30.50	8.86	3.54
MEAN	.18	.12	.010	5.52	21.4	190	11.5	5.17	1.83	.98	.29	.12
MAX	.76	.25	.12	36	77	2540	24	6.5	2.4	1.7	.52	.18
MIN	.00	.00	.00	.00	.84	14	6.7	2.8	1.4	.54	.14	.06
AC-FT	11	7.2	.6	339	1190	11680	687	318	109	60	18	7.0

e Estimated.

SANTA MARIA RIVER BASIN

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, 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	.81	2.54	15.0	39.4	117	107	26.9	8.34	4.40	1.96	1.21	1.69
MAX	11.3	23.6	275	467	1210	974	243	96.9	66.0	26.2	20.8	22.7
(WY)	1999	1966	1967	1969	1998	1995	1998	1998	1998	1998	1998	1990
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1960	1960	1960	1960	1964	1961	1961	1961	1961	1960	1960	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1960 - 2001
ANNUAL TOTAL	3030.01	7271.40	
ANNUAL MEAN	8.28	19.9	26.7
HIGHEST ANNUAL MEAN			168 1998
LOWEST ANNUAL MEAN			.002 1964
HIGHEST DAILY MEAN	271 Feb 23	2540 Mar 6	10000 Feb 24 1998
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 17	.00 Oct 1 1959
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Dec 14	.00 Oct 1 1959
MAXIMUM PEAK FLOW		5450 Mar 6	26200 Feb 23 1998
MAXIMUM PEAK STAGE		11.23 Mar 6	14.76 Feb 23 1998
ANNUAL RUNOFF (AC-FT)	6010	14420	19340
10 PERCENT EXCEEDS	18	21	21
50 PERCENT EXCEEDS	.71	.99	.53
90 PERCENT EXCEEDS	.00	.01	.00

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water year 1978 to current year.

CHEMICAL DATA: Water year 1978 to current year.

SEDIMENT DATA: January 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 OXYGEN, (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT							
04...	1430	.09	--	--	--	8.3	1370
NOV							
08...	1115	.08	--	--	--	8.1	1450
DEC							
05...	1215	.06	--	--	--	8.3	1350
JAN							
08...	1305	.14	--	--	--	8.4	1480
FEB							
07...	1335	1.0	--	--	--	8.4	1890
MAR							
13...	1250	51	--	--	--	8.4	1730
APR							
05...	1245	12	746	9.2	99.5	8.3	2010
MAY							
08...	1320	5.8	--	--	--	8.2	2250
JUN							
07...	1340	2.0	--	--	--	8.2	1590
JUL							
11...	1455	.96	--	--	--	8.2	1420
31...	1445	.48	--	--	--	8.2	1430
SEP							
14...	1155	.12	--	--	--	8.2	1420

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)
OCT						
04...	24.0	--	--	--	--	--
NOV						
08...	14.0	--	--	--	--	--
DEC						
05...	12.0	--	--	--	--	--
JAN						
08...	12.0	--	--	--	--	--
FEB						
07...	12.0	--	--	--	--	--
MAR						
13...	--	--	--	--	--	--
APR						
05...	17.5	645	864	192	93.2	5.06
MAY						
08...	30.5	--	--	--	--	--
JUN						
07...	32.5	--	--	--	--	--
JUL						
11...	29.0	--	--	--	--	--
31...	30.5	--	--	--	--	--
SEP						
14...	24.5	--	--	--	--	--

SANTA MARIA RIVER BASIN

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA—Continued

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

DATE	SODIUM	SODIUM,		ALKA-	BICAR-	CHLO-
	AD- SORP- TION RATIO (00931)	DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	LINITY WAT DIS TOT IT FIELD CACO3 (39086)	BONATE WATER DIS IT FIELD HCO3 (00453)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT						
04...	--	--	--	--	--	--
NOV						
08...	--	--	--	--	--	--
DEC						
05...	--	--	--	--	--	--
JAN						
08...	--	--	--	--	--	--
FEB						
07...	--	--	--	--	--	--
MAR						
13...	--	--	--	--	--	--
APR						
05...	2.49	168	29.6	219	268	101
MAY						
08...	--	--	--	--	--	--
JUN						
07...	--	--	--	--	--	--
JUL						
11...	--	--	--	--	--	--
31...	--	--	--	--	--	--
SEP						
14...	--	--	--	--	--	--
DATE	FLUO-	SILICA,	SULFATE	SOLIDS,	SOLIDS,	SOLIDS,
	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	DIS- SOLVED (MG/L AS SO4) (00945)	DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
OCT						
04...	--	--	--	--	1010	--
NOV						
08...	--	--	--	--	1020	--
DEC						
05...	--	--	--	--	1020	--
JAN						
08...	--	--	--	--	1120	--
FEB						
07...	--	--	--	--	1490	--
MAR						
13...	--	--	--	--	1330	--
APR						
05...	.6	13.7	856	2.3	1710	1560
MAY						
08...	--	--	--	--	1550	--
JUN						
07...	--	--	--	--	1200	--
JUL						
11...	--	--	--	--	1100	--
31...	--	--	--	--	1130	--
SEP						
14...	--	--	--	--	1040	--

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA—Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
04...	--	--	--	--	--	--	--
NOV							
08...	--	--	--	--	--	--	--
DEC							
05...	--	--	--	--	--	--	--
JAN							
08...	--	--	--	--	--	--	--
FEB							
07...	--	--	--	--	--	--	--
MAR							
13...	--	--	--	--	--	--	--
APR							
05...	<.041	.053	e.004	<.018	392	<30	25.7
MAY							
08...	--	--	--	--	--	--	--
JUN							
07...	--	--	--	--	--	--	--
JUL							
11...	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--
SEP							
14...	--	--	--	--	--	--	--

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)
NOV						
08...	1115	.22	14.0	76	.05	--
JAN						
11...	1125	4.1	11.0	77	.85	--
12...	1130	12	10.5	393	13	--
17...	1325	3.4	12.5	470	4.3	--
24...	1130	8.7	10.0	1840	43	--
31...	1430	2.6	17.5	42	.29	--
FEB						
07...	1340	.81	12.0	2	<.01	--
12...	1245	44	9.5	2310	274	--
13...	1620	89	11.5	2260	543	--
22...	1305	21	16.0	46	2.6	--
28...	1305	40	15.5	146	16	--
MAR						
07...	1250	650	--	33300	58400	90
08...	1605	245	18.0	8130	5380	92
13...	1300	52	--	484	68	--
22...	1345	20	23.5	22	1.2	--
28...	1425	15	--	22	.89	--

e Estimated.

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

11138500 SISQUOC RIVER NEAR SISQUOC, CA

LOCATION.—Lat 34°50'23", long 120°10'02", in Sisquoc Grant, Santa Barbara County, Hydrologic Unit 18060008, on left bank, 2.6 mi upstream from La Brea Creek, and 7 mi east of Sisquoc.

DRAINAGE AREA.—281 mi².

PERIOD OF RECORD.—Water years 1978 to current year.

WATER-DISCHARGE: Water Years 1944–99.

CHEMICAL DATA: Water years 1978 to current year.

REMARKS.—Water-discharge records were collected during water years 1943–99.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT							
05...	1435	.76	--	--	--	8.3	1240
NOV							
09...	1040	1.3	--	--	--	8.2	1360
DEC							
07...	1355	1.4	--	--	--	8.1	1260
JAN							
10...	1040	1.3	--	--	--	8.2	1260
FEB							
08...	1535	20	--	--	--	8.5	1180
APR							
05...	1845	95	748	9.6	97.7	8.4	993
MAY							
14...	1355	37	--	--	--	8.4	1040
JUN							
11...	1415	11	--	--	--	8.6	1060
JUL							
16...	1500	3.0	--	--	--	8.4	1070
AUG							
03...	1035	2.0	--	--	--	8.2	1110
SEP							
11...	1315	1.3	--	--	--	8.2	1140

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)
OCT						
05...	21.0	--	--	--	--	--
NOV						
09...	11.5	--	--	--	--	--
DEC						
07...	16.0	--	--	--	--	--
JAN						
10...	9.5	--	--	--	--	--
FEB						
08...	13.0	--	--	--	--	--
APR						
05...	15.1	253	470	97.2	55.2	1.83
MAY						
14...	23.0	--	--	--	--	--
JUN						
11...	24.0	--	--	--	--	--
JUL						
16...	19.5	--	--	--	--	--
AUG						
03...	20.0	--	--	--	--	--
SEP						
11...	22.5	--	--	--	--	--

11138500 SISQUOC RIVER NEAR SISQUOC, 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 TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT							
05...	--	--	--	--	--	--	--
NOV							
09...	--	--	--	--	--	--	--
DEC							
07...	--	--	--	--	--	--	--
JAN							
10...	--	--	--	--	--	--	--
FEB							
08...	--	--	--	--	--	--	--
APR							
05...	.840	41.8	16.2	217	250	7	12.1
MAY							
14...	--	--	--	--	--	--	--
JUN							
11...	--	--	--	--	--	--	--
JUL							
16...	--	--	--	--	--	--	--
AUG							
03...	--	--	--	--	--	--	--
SEP							
11...	--	--	--	--	--	--	--

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)
OCT						
05...	--	--	--	--	934	--
NOV						
09...	--	--	--	--	932	--
DEC						
07...	--	--	--	--	956	--
JAN						
10...	--	--	--	--	960	--
FEB						
08...	--	--	--	--	908	--
APR						
05...	.4	15.3	319	1.0	722	673
MAY						
14...	--	--	--	--	794	--
JUN						
11...	--	--	--	--	804	--
JUL						
16...	--	--	--	--	818	--
AUG						
03...	--	--	--	--	862	--
SEP						
11...	--	--	--	--	844	--

SANTA MARIA RIVER BASIN

11138500 SISQUOC RIVER NEAR SISQUOC, CA—Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT							
05...	--	--	--	--	--	--	--
NOV							
09...	--	--	--	--	--	--	--
DEC							
07...	--	--	--	--	--	--	--
JAN							
10...	--	--	--	--	--	--	--
FEB							
08...	--	--	--	--	--	--	--
APR							
05...	<.041	.054	<.006	e.011	108	<10	8.6
MAY							
14...	--	--	--	--	--	--	--
JUN							
11...	--	--	--	--	--	--	--
JUL							
16...	--	--	--	--	--	--	--
AUG							
03...	--	--	--	--	--	--	--
SEP							
11...	--	--	--	--	--	--	--

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

11140000 SISQUOC RIVER NEAR GAREY, CA

LOCATION.—Lat 34°53'38", long 120°18'20", in SW 1/4 sec.36, T.10 N., R.33 W., Santa Barbara County, Hydrologic Unit 18060008, on downstream side of Santa Maria Mesa Road Bridge, near left bank, 0.6 mi northeast of Garey, and 3.7 mi downstream from Tepusquet Creek.

DRAINAGE AREA.—471 mi².

PERIOD OF RECORD.—October 1940 to current year. Records for water year 1941 incomplete; yearly estimate and monthly discharge only for October 1940 and January 1941, published in WSP 1315-B.

REVISED RECORDS.—WSP 1011: 1941, 1943. WSP 1928: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of main gage is 354.8 ft above sea level, Santa Barbara County datum. See WSP 1735 for history of changes of main gage prior to Oct. 1, 1959. Oct. 1, 1959, to Dec. 30, 1965, at datum 6.00 ft higher. Since Oct. 1, 1959, supplementary gage on downstream side of bridge near right bank at same datum. Supplementary gage discontinued June 8, 1992.

REMARKS.—Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation of about 7,000 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 33,600 ft³/s, Mar. 1, 1983, gage height, 11.16 ft, from rating curve extended above 22,000 ft³/s, maximum gage height, 13.50 ft, Dec. 6, 1966; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 5	0945	11,000	8.65	Apr. 7	2000	200	5.71

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	129	113	e36	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	97	97	e31	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	81	86	e17	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	279	79	e8.1	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	6680	71	e4.5	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	5990	60	e3.7	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	e3600	124	e3.3	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	e1500	157	e3.0	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	e880	87	e2.8	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	673	78	e2.6	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	515	69	2.4	.00	.00	.00	.00
12	.00	.00	.00	18	76	405	64	2.0	.00	.00	.00	.00
13	.00	.00	.00	37	166	303	59	2.2	.00	.00	.00	.00
14	.00	.00	.00	3.0	154	273	59	2.2	.00	.00	.00	.00
15	.00	.00	.00	.00	103	257	58	1.4	.00	.00	.00	.00
16	.00	.00	.00	.00	83	244	55	.09	.00	.00	.00	.00
17	.00	.00	.00	.00	69	227	53	.03	.00	.00	.00	.00
18	.00	.00	.00	.00	58	211	47	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	63	223	44	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	126	224	45	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	121	227	55	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	79	204	51	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	80	174	e48	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	90	154	e46	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	104	139	e45	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	129	131	e45	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	181	137	e44	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	165	139	e42	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	134	e41	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	136	e40	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	120	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	58.00	1847.00	24486	1962	122.32	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	1.87	66.0	790	65.4	3.95	.000	.000	.000	.000
MAX	.00	.00	.00	37	181	6680	157	36	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	81	40	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	115	3660	48570	3890	243	.00	.00	.00	.00

e Estimated.

SANTA MARIA RIVER BASIN

11140000 SISQUOC RIVER NEAR GAREY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.12	2.61	18.0	98.0	227	196	89.6	20.8	4.15	.76	.14	.16
MAX	3.88	39.0	506	1531	3310	1833	1072	407	135	35.8	5.99	4.20
(WY)	1968	1966	1967	1969	1998	1983	1958	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1942	1942	1944	1944	1947	1947	1947	1946	1945	1942	1942	1942

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	9474.53		28475.32			
ANNUAL MEAN	25.9		78.0		53.9	
HIGHEST ANNUAL MEAN					446 1998	
LOWEST ANNUAL MEAN					.000 1948	
HIGHEST DAILY MEAN	736	Apr 18	6680	Mar 5	13900	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1941
MAXIMUM PEAK FLOW			11000	Mar 5	33600	Mar 1 1983
MAXIMUM PEAK STAGE			8.65	Mar 5	13.50	Dec 6 1966
ANNUAL RUNOFF (AC-FT)	18790		56480		39030	
10 PERCENT EXCEEDS	77		122		53	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11141050 ORCUTT CREEK NEAR ORCUTT, CA

LOCATION.—Lat 34°53'01", long 120°29'38", in SW 1/4 SE 1/4 sec.6, T.9 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060008, on right bank, 10 ft upstream from Black Road Bridge, 0.2 mi northeast of State Highway 1, and 3.0 mi northwest of Orcutt.

DRAINAGE AREA.—18.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1982 to September 1992, October 1994 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 160 ft above sea level, from topographic map.

REMARKS.—Records fair. No regulation or diversion upstream from station. Natural flow affected by pumping and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,350 ft³/s, Mar. 5, 2001, gage height, 10.33 ft, from rating curve extended above 10 ft³/s, on basis of slope-area measurements at gage heights 4.83 and 7.53 ft, maximum gage height, 11.07 ft, Mar. 10, 1995; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharge greater than base discharge of 25 ft³/s, or maximum:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 10	2000	185	3.44	Feb. 19	1145	37	2.23
Jan. 11	2400	27	2.07	Feb. 24	1345	52	2.42
Jan. 26	0945	37	2.23	Mar. 5	0600	4,350	10.33
Feb. 11	1430	109	2.95	Mar. 9	1700	36	2.29
Feb. 13	0645	171	3.36	Apr. 7	0630	42	2.40

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	.05	.14	.10	.14	.95	2.4	.31	.06	.01	.05	.09
2	.00	.07	.13	.08	.12	.62	.69	.21	.12	.00	.00	.05
3	.04	.04	.10	.05	.12	.47	.31	.13	.05	.02	.13	.00
4	.00	.02	.10	.10	.11	.70	.28	.11	.09	.00	.00	.02
5	.06	.08	.13	.04	.12	679	.29	.40	.09	.02	.11	.04
6	.06	.05	.13	.06	.16	95	.40	.12	.00	.01	.25	.02
7	.07	.04	.20	.11	.11	25	14	.13	.00	.01	.04	.02
8	.13	.04	.21	2.0	.07	12	.83	.22	.04	.04	.03	.01
9	.04	.03	.17	.56	.11	11	.65	.54	.01	.02	.29	.00
10	.13	.04	.13	31	2.7	4.4	.45	.11	.00	.01	.01	.00
11	1.0	.06	.15	15	29	3.2	.35	.13	.02	.20	.11	.00
12	.55	.01	.16	11	6.8	3.7	.30	.16	.03	.03	.11	.00
13	.33	.02	.14	1.1	52	2.3	.31	.06	.02	.02	.00	.00
14	.06	.06	.15	.36	5.9	1.4	.34	.09	.02	.11	.00	.01
15	.03	.06	.11	.13	1.4	1.4	.19	.14	.00	.00	.22	.00
16	.01	.05	.09	.10	.79	1.2	.22	.06	.01	.00	.07	.00
17	.00	.11	.14	.05	.46	.98	.23	.11	.03	.11	.03	.00
18	.00	.11	.13	.05	.36	.53	.46	.14	.04	.10	.30	.00
19	.04	.06	.06	.05	9.9	.68	.56	.13	.01	.05	.00	.00
20	.02	.13	.11	.05	2.7	1.2	1.6	.15	.03	.05	.00	.08
21	.02	.09	.23	.06	.99	1.5	5.1	.14	.00	.00	.04	.04
22	.01	.11	.12	.05	.54	1.2	2.1	.04	.00	.00	.00	.02
23	.06	.17	.17	.05	3.5	.87	.41	.09	.02	.00	.00	.11
24	.00	.10	.07	6.8	17	.76	.47	.10	.00	.00	.13	.00
25	.00	.08	.05	.86	5.3	.87	.37	.10	.00	.00	.07	.00
26	.15	.18	.10	14	13	1.1	.58	.14	.03	.02	.18	.08
27	.97	.12	.10	1.3	5.9	.84	.47	.21	.06	.00	.25	.23
28	.53	.10	.03	.49	1.8	.56	.32	.07	.01	.03	.02	.00
29	1.1	.16	.06	.24	---	.56	.16	.06	.02	.00	.21	.02
30	.56	.10	.04	.19	---	.75	.28	.10	.00	.00	.30	.00
31	.12	---	.04	.16	---	1.1	---	.07	---	.22	.03	---
TOTAL	6.09	2.34	3.69	86.19	161.10	925.14	35.12	4.57	0.81	1.08	2.98	0.84
MEAN	.20	.078	.12	2.78	5.75	29.8	1.17	.15	.027	.035	.096	.028
MAX	1.1	.18	.23	31	52	679	14	.54	.12	.22	.30	.23
MIN	.00	.01	.03	.04	.07	.47	.16	.04	.00	.00	.00	.00
AC-FT	12	4.6	7.3	171	320	1840	70	9.1	1.6	2.1	5.9	1.7

SANTA MARIA RIVER BASIN

11141050 ORCUTT CREEK NEAR ORCUTT, 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	.085	.31	.72	3.33	10.1	14.4	1.53	.39	.15	.11	.086	.076
MAX	.29	1.27	2.68	27.5	76.7	120	8.88	3.04	.43	.34	.23	.26
(WY)	1984	1998	1992	1995	1998	1995	1998	1998	1998	1998	1983	1998
MIN	.000	.000	.018	.040	.070	.059	.020	.031	.009	.003	.003	.005
(WY)	1995	1995	1996	1985	1984	1989	1990	1986	1996	1996	1992	1996

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	1241.40		1229.95			
ANNUAL MEAN	3.39		3.37		2.58	
HIGHEST ANNUAL MEAN					13.8	
LOWEST ANNUAL MEAN					.090	
HIGHEST DAILY MEAN	210	Feb 23	679	Mar 5	1460	Mar 10 1995
LOWEST DAILY MEAN	.00	Jul 27	.00	Oct 1	.00	Oct 1 1982
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 14	.00	Sep 9	.00	Oct 1 1982
MAXIMUM PEAK FLOW			4350	Mar 5	4350	Mar 5 2001
MAXIMUM PEAK STAGE			10.33	Mar 5	11.07	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	2460		2440		1870	
10 PERCENT EXCEEDS	1.7		1.4		1.3	
50 PERCENT EXCEEDS	.11		.11		.08	
90 PERCENT EXCEEDS	.00		.00		.00	

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1983–92, October 1993 to current year.

CHEMICAL DATA: Water years 1983–92, October 1993 to current year.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	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							
06...	1235	.07	--	8.0	3230	16.5	--
NOV							
08...	1540	e.04	--	8.2	3280	12.0	--
DEC							
04...	1300	.09	--	8.2	3520	17.5	--
JAN							
04...	1435	.12	--	8.3	3480	8.5	--
FEB							
06...	1110	.17	--	8.2	4090	12.0	--
MAR							
20...	0910	.78	--	8.2	2180	17.0	--
APR							
02...	1115	.43	754	8.4	2440	21.3	283
MAY							
02...	1430	.35	--	9.1	2340	28.0	--
JUN							
05...	1500	.00	--	9.2	2980	--	--
SEP							
07...	1100	.08	--	7.9	1690	17.5	--

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)
OCT						
06...	--	--	--	--	--	--
NOV						
08...	--	--	--	--	--	--
DEC						
04...	--	--	--	--	--	--
JAN						
04...	--	--	--	--	--	--
FEB						
06...	--	--	--	--	--	--
MAR						
20...	--	--	--	--	--	--
APR						
02...	560	121	62.7	7.82	6.31	343
MAY						
02...	--	--	--	--	--	--
JUN						
05...	--	--	--	--	--	--
SEP						
07...	--	--	--	--	--	--

e Estimated.

SANTA MARIA RIVER BASIN

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

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

DATE	ALKA-	BICAR-	CAR-	CHLO-	FLUO-	SILICA,	
	LINITY WAT DIS TOT IT FIELD	BONATE WATER DIS IT FIELD	BONATE WATER DIS IT FIELD	RIDE, DIS- SOLVED	RIDE, DIS- SOLVED	DIS- SOLVED (MG/L AS SIO2)	
	SODIUM PERCENT (00932)	MG/L AS CACO3 (39086)	MG/L AS HCO3 (00453)	MG/L AS CO3 (00452)	(MG/L AS CL) (00940)	(MG/L AS F) (00950)	(00955)
OCT							
06...	--	--	--	--	--	--	
NOV							
08...	--	--	--	--	--	--	
DEC							
04...	--	--	--	--	--	--	
JAN							
04...	--	--	--	--	--	--	
FEB							
06...	--	--	--	--	--	--	
MAR							
20...	--	--	--	--	--	--	
APR							
02...	56.7	276	318	10	463	.5 18.9	
MAY							
02...	--	--	--	--	--	--	
JUN							
05...	--	--	--	--	--	--	
SEP							
07...	--	--	--	--	--	--	

DATE	SULFATE	SOLIDS,	SOLIDS,	SOLIDS,	NITRO-	NITRO-
	DIS- SOLVED (MG/L AS SO4) (00945)	DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT						
06...	--	--	2160	--	--	--
NOV						
08...	--	--	1960	--	--	--
DEC						
04...	--	--	2030	--	--	--
JAN						
04...	--	--	2260	--	--	--
FEB						
06...	--	--	2610	--	--	--
MAR						
20...	--	--	1450	--	--	--
APR						
02...	312	2.3	1680	1520	e.034	5.57
MAY						
02...	--	--	1650	--	--	--
JUN						
05...	--	--	1930	--	--	--
SEP						
07...	--	--	960	--	--	--

e Estimated.

11141050 ORCUTT CREEK NEAR ORCUTT, CA—Continued

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

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT					
06...	--	--	--	--	--
NOV					
08...	--	--	--	--	--
DEC					
04...	--	--	--	--	--
JAN					
04...	--	--	--	--	--
FEB					
06...	--	--	--	--	--
MAR					
20...	--	--	--	--	--
APR					
02...	.196	.333	640	<30	483
MAY					
02...	--	--	--	--	--
JUN					
05...	--	--	--	--	--
SEP					
07...	--	--	--	--	--

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

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low- or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites are given in separate tables.

Crest-Stage Partial-Record Stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage station is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current year is given. Information on some lower floods may have been obtained but is not published here. The years given in the period of record represent water years for which the annual maximum has been obtained.

Annual maximum discharge at crest-stage partial-record stations during water year 2001

s	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (ft)	Discharge (ft ³ /s)
BRISTOL LAKE BASIN							
10253000	Gourd Creek near Ludlow, CA	Lat 34°40'35", long 116°01'20", in SW 1/4 sec.23, T.7 N., R.9 E., San Bernardino County , Hydrologic Unit 18090208, at culvert on U.S. Highway 40 (formerly U.S. Highway 66), and 8.5 mi southeast of Ludlow.	0.30	1959-74, 1976-01	07-07-01	16.35	110
10262600	Boom Creek near Barstow, CA	Lat 34°54'20", long 116°56'55", NW 1/4 NE 1/4 sec.2, T.9 N., R.1 W., San Bernardino County , Hydrologic Unit 18090208, at culvert on Interstate Highway 15, and 4.3 mi east of Barstow.	.24	1956-66, 1967-73a, 1976-97, 1999b-01	03-12-01	9.44	19
ANTELOPE VALLEY							
10263900	Buckhorn Creek near Valyermo, CA	Lat 34°53'35", long 117°55'13", in SW 1/4 sec.15, T.3 N., R.10 W., Los Angeles County , Hydrologic Unit 18090206, Angeles National Forest, at culvert on State Highway 2, and 8.1 mi southwest of Valyermo.	.48	1961-66a, 1967-69, 1971-73, 1977-01	03-20-01	2.75	29
10264530	Pine Creek near Palmdale, CA	Lat 34°36'09", long 118°14'48", in SE 1/4 SW 1/4 sec.15, T.6 N., R.13 W., Los Angeles County , on left bank, at culvert on Elizabeth Lake Road, and 7.5 mi northwest of Palmdale.	1.78	1958-73, 1977-88, 1988-94a, 1997-01		—	0
10264560	Spencer Canyon Creek near Fairmont, CA	Lat 34°46'33", long 118°34'08", in SW 1/4 SW 1/4 sec.15, T.8 N., R.16 W., Los Angeles County , Hydrologic Unit 18090206, at culvert on State Highway 138, and 8.5 mi northwest of Fairmont.	3.60	1959-64, 1965-73a, 1974, 1978-01		unknown	unknown
10264605	Joshua Creek near Mojave, CA	Lat 35°00'45", long 118°20'40" in SE 1/4 SE 1/4 sec.27, T.11 N., R.14 W., Kern County, Hydrologic Unit 18090206, on right bank at culvert on Tehachapi-Willow Springs Road, and 10.0 mi southwest of Mojave.	3.83	1989-94a, 2000-01		—	0
10264646	South Drainage Bissell/Rosamond Hills near Edwards Air Force Base, CA	Lat 34°53'18", long 117°58'23" in NE 1/4 NW 1/4 sec.7, T.9 N., R.10 W., Kern County , Hydrologic Unit 18090206, 1.8 mi southwest of intersection of Forbes Avenue and Rosamond Boulevard, and 2.3 mi southwest of Edwards Air Force Base.	9.25	1996-01		—	0

a Operated as a continuous-record station.

s	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (ft)	Discharge (ft ³ /s)
ANTELOPE VALLEY—Continued							
10264656	Mojave Creek near Edwards Air Force Base, CA	Lat 34°58'07", long 117°59'38" in NW 1/4 NE 1/4 sec.13, T.10 N., R.11 W., Los Angeles County, Hydrologic Unit 18090206, 3.75 mi northwest of intersection of Forbes and Mojave Avenues, and 3.75 mi northwest of Edwards Air Force Base.	—	1996–01		—	0
10264673	North Base Tributary at railroad crossing, near Edwards Air Force Base, CA	Lat 34°59'32", long 117°53'09", in SW 1/4 NE 1/4 sec.1, T.10 N., R.10 W., Kern County, Hydrologic Unit 18090206, 0.6 mi north on Rosamond Boulevard from intersection of north Base Boulevard, 6.6 mi north of intersection of Mojave Boulevard, in Edwards Air Force Base.	—	1997–01		—	0
SANTA YNEZ RIVER BASIN							
11131700	Santa Rita Creek near Lompoc, CA	Lat 34°38'41", long 120°22'09", in Santa Rita Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 2.4 mi upstream from mouth, and 6.5 mi east of Lompoc.	14.1	1976–79 1981–01	03-05-01	6.13	62
11133700	Purisima Creek near Lompoc, CA	Lat 34°41'34", long 120°25'51", in Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank, 1.1 mi northeast of junction of Buener Road and Lompoc–Casmalia Road, and 4.0 mi northeast of Lompoc.	4.75	1972–75a 1976–01	03-05-01	2.04	57
11135200	Rodeo–San Pasqual Creek near Lompoc, CA	Lat 34°38'42", long 120°30'57", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank, 0.1 mi east of Dewolf Avenue at Highway 246, and 3.3 mi west of Lompoc.	7.80	1971–72 1973–78 1980–01	03-05-01	1.64	50
SANTA ANA RIVER BASIN							
11070185	Lamb Canyon Creek at Victory Ranch, near San Jacinto, CA	Lat 33°51'31", long 117°00'53", in NW 1/4 NW 1/4 sec.5, T.4 S., R.1 W., Riverside County, Hydrologic Unit 18070202, on left bank, at private road culvert crossing, 1.25 mi upstream of confluence with San Jacinto River, and 6.0 mi northwest of San Jacinto.	3.97	1997–01	01-11-01	2.91	1.8

a Operated as a continuous-record station.

Water-quality partial-record stations are particular sites where chemical-quality, biological, and (or) sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA

LOCATION.—Lat 34°10'14", long 116°49'48", in NW 1/4 SE 1/4 sec.13, T.1 N., R.1 E., San Bernardino County, Hydrologic Unit 18070203, approximately 0.3 mi upstream from Highway 38, and 9.0 mi northeast of Angelus Oaks.

DRAINAGE AREA.—7.31 mi².

PERIOD OF RECORD.—Water years 1999 to September 2001 (discontinued).

CHEMICAL DATA: Water years 1999 to July 2001 (discontinued).

WATER TEMPERATURE: October 1999 to September 2001 (discontinued).

SEDIMENT DATA: Water years 1999 to July 2001 (discontinued).

PERIOD OF DAILY RECORD.— October 1999 to September 2001 (discontinued).

WATER TEMPERATURE: October 1999 to September 2001 (discontinued).

INSTRUMENTATION.— Water-quality monitor recording water temperature from October 1999 to September 2001.

REMARKS.—Temperature record rated excellent. Interruptions in record from Oct. 17 to Jan. 16 were due to malfunction in downloading data; Aug. 4 and 5 were due to monitor out of communication with flow. Water-quality data collected for the National Water-Quality Assessment (NAWQA) Program.

EXTREMES FOR PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: Maximum recorded, 17.0°C, July 4, 2001; minimum recorded, 0.0°C, several days in 1999 and 2000, and many days in 2001.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum recorded, 17.0°C, July 4; minimum recorded, 0.0°C, many days January–April.

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, (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 AS CACO3 (00900)
OCT 17...	1100	4.1	--	--	--	7.8	70	12.0	3.5	26.3
JAN 16...	1630	4.2	600	11.2	98.8	7.8	65	-3.0	0.0	25.3
APR 15...	1850	5.2	605	9.1	97.0	7.7	70	10.0	8.0	25.4
JUL 09...	1440	1.2	610	8.4	106	7.6	86	25.5	15.5	30.3

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- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 17...	8.53	1.22	.85	.349	4.1	24.6	31	38	.7
JAN 16...	8.16	1.19	.90	.324	3.7	23.6	31	38	.6
APR 15...	8.20	1.19	.93	.348	4.0	24.8	30	36	.6
JUL 09...	9.57	1.55	1.07	.403	5.1	25.9	36	44	.8

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA—Continued

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

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)
OCT 17...	.2	12.0	2.1	.1	49	48.4	<.041	<.10	e.08
JAN 16...	.2	11.8	2.1	.1	49	47.4	<.041	<.10	<.08
APR 15...	.2	11.6	2.4	.1	45	46.8	<.041	e.07	.09
JUL 09...	.3	12.1	2.5	.1	64	54.8	<.040	<.10	.20

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 17...	<.047	<.006	<.006	<.018	.005	.58	.4	10	<3.2
JAN 16...	e.023	<.006	e.003	<.018	.007	.76	.6	10	<3.2
APR 15...	<.047	<.006	e.005	<.018	.013	1.4	1.0	20	<3.2
JUL 09...	e.028	<.006	.007	<.020	.018	1.4	1.3	40	<3.0

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- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 17...N	1100	4.1	3.5	70	2	.02
JAN 16...N	1630	4.2	0.0	52	3	.03
APR 15...N	1850	5.2	8.0	65	3	.04
JUL 09...N	1440	1.2	15.5	45	8	.03

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

e Estimated.

N Suspended-sediment data determined from sample collected and processed according to National Water-Quality Assessment (NAWQA) Program protocol.

SANTA ANA RIVER BASIN

341014116494801 SOUTH FORK SANTA ANA RIVER NEAR SOUTH FORK CAMPGROUND, NEAR ANGELUS OAKS, CA—Continued

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

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

SANTA MARIA RIVER BASIN

345727120375401 GREEN CANYON CREEK AT MAIN STREET, NEAR GUADALUPE, CA

LOCATION.—Lat 34°57'27", long 120°37'54", Santa Barbara County, Hydrologic Unit 18060008, at culvert, on West Main Street, and 3.6 mi southwest of Guadalupe.

DRAINAGE AREA.—Not determined.

PERIOD OF RECORD.—Water years 1986 to current year.

CHEMICAL DATA: Water years 1986 to current year.

REMARKS.—Records good.

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, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	HARDNESS NONCARB DISSOLV. AS (MG/L) (00904)	HARDNESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925)
APR 09...	1700	32	764	9.1	96	7.9	1630	18.0	480	680	162	66.3
SEP 06...	1330	15	764	10.7	117	8.1	2350	19.5	810	1100	248	116
DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORPTION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKALINITY WAT TOT FIELD (MG/L AS CACO3) (39086)	BICARBONATE DIS IT FIELD (MG/L AS HCO3) (00453)	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)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
APR 09...	8.80	2	90.6	22	198	246	106	.4	18.0	457	1.50	--
SEP 06...	6.83	2	153	23	285	348	186	.4	31.6	778	2.61	1920
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE SOLVED (MG/L AS N) (00613)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	ALACHLOR, TOTAL RECOVER (UG/L) (77825)	AMETRYNE, TOTAL (UG/L) (82184)	ATRAZINE, UNFLTRD REC (UG/L) (39630)	BROMACIL, WATER WHLREC (UG/L) (30234)
APR 09...	1100	.021	15.5	.040	.495	184	<10	103	<.1	<.1	<.1	e.2
SEP 06...	1690	e1.51	e29.0	e.173	e.275	306	<30	132	<.1	<.1	<.1	<.2
DATE	BUTACHLOR, WATER WHLREC (UG/L) (30235)	BUTYLPHENOTHION, WATER WHLREC (UG/L) (30236)	CARBOXIN, PHENOTHION, WATER UNFLTRD (UG/L) (39786)	CARBOXIN, WHOLE WATER RECOVERABLE (UG/L) (30245)	CHLORPYRIFOS, TOTAL RECOVER (UG/L) (38932)	CYANAZINE, TOTAL (UG/L) (81757)	CYCLOTRATE, WATER WHOLE RECOVERABLE (UG/L) (30254)	DEETHYL ATRAZINE, WATER, WHOLE, TOTAL (UG/L) (75981)	DE-ISO PROPYL ATRAZINE, WATER, DEF TOTAL (UG/L) (39040)	DE-ISO PROPYL ATRAZINE, WATER, WHOLE, TOTAL (UG/L) (75980)	DI-AZINON, TOTAL (UG/L) (39570)	DIPHENAMID, WATER WHOLE RECOVERABLE (UG/L) (30255)
APR 09...	<.1	<.1	<.02	e.3	.01	<.2	<.1	<.2	<.02	<.2	.03	<.1
SEP 06...	<.1	<.1	<.02	<.2	.10	<.2	<.1	<.2	<.02	<.2	<.02	<.1

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

e Estimated.

SANTA MARIA RIVER BASIN

345727120375401 GREEN CANYON CREEK AT MAIN STREET, NEAR GUADALUPE, CA—Continued

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

DATE	DISUL- FOTON UNFILT RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEXAZI- NONE WATER WHOLE RECOV- ERABLE (UG/L) (30264)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	METRI- BUZIN WATER WHOLE TOT.REC (UG/L) (82611)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)	PROME- TONE TOTAL (UG/L) (39056)	PROME- TRYNE TOTAL (UG/L) (39057)
	APR 09...	<.07	<.01	<.01	<.2	<.03	<.01	<.2	<.1	<.01	<.02	<.2
SEP 06...	<.03	<.01	<.01	<.2	e.02	<.01	.4	<.1	<.01	<.02	<.2	.3

DATE	PROPA- CHLOR WATER WHOLE RECOV. (UG/L) (30295)	PRO- PAZINE TOTAL (UG/L) (39024)	SIMA- ZINE TOTAL (UG/L) (39055)	SIME- TRYNE TOTAL (UG/L) (39054)	TER- BACIL WATER WHOLE RECOV. (UG/L) (30311)	TRI- FLURA- LIN TOTAL (UG/L) (39030)	VER- NOLATE WATER WHOLE RECOV. (UG/L) (30324)	ALDRIN, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39351)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39393)
	APR 09...	<.1	<.1	<.1	<.1	<.2	<.1	<.1	<.2	<3	<.2	<.2
SEP 06...	<.1	<.1	<.1	<.1	<.2	<.1	<.1	<.2	<3	3.6	<.2	<.2

DATE	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39758)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERRIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERRIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERRIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERRIAL (UG/KG) (39403)
	APR 09...	<.2	<.2	<.2	<2	<.2	2.2	33	15	<5
SEP 06...	<.2	<.2	<.2	<2	<.2	71	230	110	<5	<50

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

e Estimated.

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
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
<i>Area</i>		
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
<i>Volume</i>		
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
<i>Flow</i>		
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
<i>Mass</i>		
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.