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Water Resources Data California Water Year 2000

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

By M.D. Webster, S.W. Anderson, M.F. Friebel, L.A. Freeman, and J.R. Smithson

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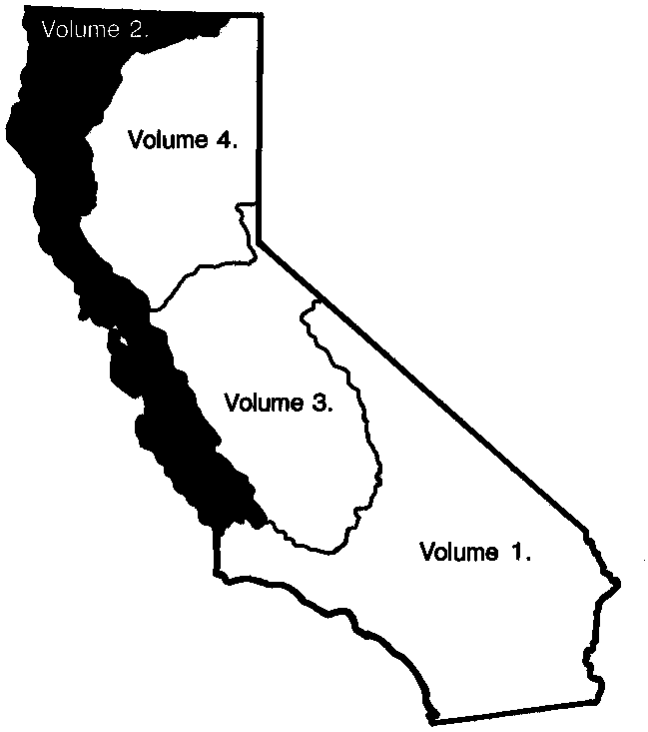

Prepared in cooperation with the
California Department of Water Resources and with other agencies

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 2012
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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M.D. Webster, S.W. Anderson, M.F. Friebel, L.A. Freeman, and J.R. Smithson

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13. ABSTRACT *(Maximum 200 words)*

Water-resources data for the 2000 water year for California consist of records of stage, discharge, and water quality of streams, stage and contents in lakes and reservoirs, and water levels and water quality in wells. Volume 2 contains discharge records for 121 gaging stations, gage-height records for 10 stations, stage and contents for 6 lakes and reservoirs, and water quality for 34 stations. Also included are data for 1 low-flow partial-record station, and 32 miscellaneous-measurement stations. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.

14. SUBJECT TERMS
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James C. Bowers, Assistant Chief, Operations

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Greg D. Brewster, Hydrologic Technician
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Richard A. Hunrichs, Surface Water Hydrologist
Robert W. Meyer, Surface Water Hydrologist

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CONTENTS

ILLUSTRATIONS

[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]

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
11141150	Arroyo Grande above Phoenix Creek, near Arroyo Grande	13.4	1967–92
11141160	Wittenberg Creek near Arroyo Grande	3.11	1967–75
11141300	Arroyo Grande near Arroyo Grande	68.3	1958–66
11141400	Tar Spring Creek near Arroyo Grande	18.2	1968–79
11141500	Arroyo Grande at Arroyo Grande	102	1940–86
11141600	Los Berros Creek near Nipomo	15	1968–78
11142080	Morro Creek at Morro Bay	24	1971–78
11142100	Toro Creek near Morro Bay	18	1971–78
11142200	Santa Rosa Creek near Cambria	12.5	1957–72
11142240	Perry Creek at Cambria	22.9	1988–89
11142300	San Simeon Creek near Cambria	26.3	1988–89
11142500	Arroyo de la Cruz near San Simeon	41.2	1951–79
11142550	San Carpoforo Creek near San Simeon	34.6	1978
11142800	Rat Creek near Lucia	.82	1961–63
11143300	Arroyo del Rey at Del Rey Oaks	13.8	1967–78
11143500	Salinas River near Pozo	70.3	1943–83
11144000	Toro Creek near Pozo	9.56	1961–69, 1972–83
11144200	Salsipuedes Creek near Pozo	5.91	1970–83
11144600	Salinas River below Salinas Dam, near Pozo	112	1974–86
11145000	Salinas River above Pilitas Creek, near Santa Margarita	114	1942–75
11145500	Salinas River near Santa Margarita	149	1922, 1932–49
11147000	Jack Creek near Templeton	25.3	1950–78
11147040	Santa Rita Creek Tributary near Templeton	2.95	1967–72
11147070	Santa Rita Creek near Templeton	18.2	1962–94
11147600	Huerhuero Creek near Creston	101	1959–72
11147700	Cholame Creek Tributary near Cholame	9.26	1959–65
11147800	Cholame Creek near Shandon	227	1959–72
11148000	Estrella Creek near Paso Robles	787	1940–41
11148500	Estrella River near Estrella	922	1955–96
11148800	Nacimiento River near Bryson	147	1958–71
11149500	Nacimiento River near San Miguel	349	1940–57
11149650	Sulphur Springs Canyon near Jolon	5.16	1968–69
11150800	Cow Creek near San Ardo	4.8	1961–64
11151000	San Lorenzo Creek near King City	210	1940–42
11151500	San Lorenzo Creek at King City	259	1943–45
11151870	Arroyo Seco near Greenfield	113	1961–86
11152570	Alisal Creek near Salinas	14.2	1971–74
11152650	Reclamation Ditch near Salinas	53.2	1971–86
11152900	Cedar Creek near Bell Station	12.8	1962–82
11153000	Pacheco Creek near Dunneville	146	1940–82
11153040	Pacheco Creek at Dunneville	154	1982–85
11153470	Llagas Creek above Chesbro Reservoir, near Morgan Hill	9.63	1972–82
11153500	Llagas Creek near Morgan Hill	19.6	1952–71
11153700	Pajaro River near Gilroy	399	1959–82
11153790	Uvas Creek at Sveadal	2.88	1973–74
11153800	Alec Canyon near Morgan Hill	.91	1970–72
11153900	Uvas Creek above Uvas Reservoir, near Morgan Hill	21	1961–82
11154000	Uvas Creek near Morgan Hill	30.4	1931–57
11154100	Bodfish Creek near Gilroy	7.40	1960–82
11154200	Uvas Creek near Gilroy	71.2	1959–92
11154500	Pajaro River at Sargent	505	1941
11156000	San Benito River below McCoy Creek, near Hernandez	108	1950–53, 1960–63
11156450	Willow Creek Tributary near San Benito	1.24	1964–69
11156700	Pescadero Creek near Paicines	38.3	1959–70
11158500	San Benito River near Hollister	586	1950–83
11158900	Pescadero Creek near Chittenden	10.2	1970–81

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11159150	Corralitos Creek near Corralitos	10.6	1958–72
11159400	Green Valley Creek near Corralitos	7.05	1964–67
11159500	Pajaro River at Watsonville	1,272	1912–13, 1972–73
11159690	Aptos Creek near Aptos	10.2	1972–85
11159700	Aptos Creek at Aptos	12.2	1959–72
11159800	West Branch Soquel Creek near Soquel	12.2	1959–72
11159940	Soquel Creek near Soquel	32.0	1969–72
11160020	San Lorenzo River near Boulder Creek	6.17	1968–93
11160060	Bear Creek at Boulder Creek	16.0	1977–93
11160070	Boulder Creek at Boulder Creek	11.3	1976–93
11160200	Newell Creek at Ben Lomond	8.98	1958–60
11160300	Zayante Creek at Zayante	11.1	1957–93
11161500	Branciforte Creek at Santa Cruz	17.3	1940–43, 1952–68
11161570	Majors Creek near Santa Cruz	3.77	1970–76
11161590	Laguna Creek near Davenport	3.07	1970–76
11161800	San Vicente Creek near Davenport	6.07	1970–85
11161900	Scott Creek above Little Creek, near Davenport	25.1	1959–73
11162000	Scott Creek near Davenport	27.3	1937, 1939–41
11162540	Butano Creek near Pescadero	18.3	1962–74
11162570	San Gregorio Creek at San Gregorio	50.9	1970–94
11162600	Purisima Creek near Half Moon Bay	4.83	1959–69
11162720	Colma Creek at South San Francisco	10.8	1964–96
11162722	Spruce Branch at South San Francisco	.70	1965–69
11162900	Sharon Creek near Menlo Park	.38	1959–69
11162800	Redwood Creek at Redwood City	1.82	1959–97
11162940	San Francisquito Creek below Ladera Dam site, near Stanford University	28.5	1962–70
11162950	San Francisquito Creek Tributary near Stanford University	.24	1959–64
11163000	Los Trancos Canal near Stanford University	—	1931–41
11163200	Los Trancos Creek Tributary near Stanford University	.42	1959–66
11163500	Los Trancos Creek at Stanford University	7.46	1931–41
11164000	Lagunita Canal at Stanford University	—	1931–41
11165500	San Francisquito Creek at Palo Alto	40.8	1931–41
11166500	Stevens Creek near Cupertino	18.1	1931–59
11166575	Permanente Creek near Monte Vista	3.86	1984–87
11166578	West Fork Permanente Creek near Monte Vista	2.98	1984–87
11167000	Alamitos Creek near Edenvale	34.5	1930–58
11167660	Ross Creek at San Jose	5.70	1962–70
11167700	Ross Creek below Jarvis Road, at San Jose	7.71	1972–74
11168500	Los Gatos Creek below Los Gatos	42.6	1945–53
11169800	Coyote Creek near Gilroy	109	1961–82
11170000	Coyote Creek near Madrone	196	1903–12, 1917–87
11170500	Coyote Creek at Coyote	204	1917–23
11171500	Coyote Creek near Edenvale	229	1917–62
11172000	Coyote Creek at San Jose	238	1917
11172100	Upper Penitencia Creek at San Jose	21.5	1962–87
11172500	Laguna Creek at Irvington	12.5	1917–19
11173000	Alameda Creek near Sunol	37.5	1912–30
11173500	Calaveras Creek near Sunol	98.7	1898–1908, 1911–30
11174500	Alamo Creek at Dublin	38.7	1915–20
11174600	Alamo Canal near Pleasanton	40.8	1978–83
11175000	Tassajero Creek near Pleasanton	26.8	1915–19, 1922–30
11176090	Arroyo Mocho at Livermore	50.8	1984–86
11176100	Arroyo Las Positas above Livermore	7.82	1972–74
11176140	Altamont Creek near Livermore	13.4	1979–80
11176145	Arroyo Las Positas at Livermore	53.3	1980–86
11176150	Arroyo Las Positas near Livermore	64.6	1912–19, 1922, 1924–30
11176180	Arroyo Las Positas at El Charro Road, near Pleasanton	75.0	1978–83
11176200	Arroyo Mocho near Pleasanton	142	1962–86

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11176300	Tassajara Creek near Pleasanton	26.8	1915–19, 1922–30, 1979–83
11176600	Arroyo Valle at Pleasanton	171	1958–86
11179500	Crandal Slough near Centerville	—	1917–18
11180000	Alameda Creek near Sunol	639	1917–19
11180750	Alameda Creek at Union City	653	1959–73
11181004	Castro Valley Creek at Castro Valley	.98	1979–80
11181006	Castro Valley Creek at Knox Street, at Castro Valley	2.20	1978–80, 1989–93
11181300	Peralta Creek at Oakland	1.67	1973
11181330	Temescal Creek above Lake Temescal, at Oakland	1.74	1979–81, 1989–93
11181335	Caldecott Creek at Lake Temescal, at Oakland	.83	1980–81
11181390	Wildcat Creek at Vale Road, at Richmond	7.79	1976–96
11181400	Wildcat Creek at Richmond	8.67	1964–75
11182030	Rheem Creek at San Pablo	1.49	1961–90
11182100	Pinole Creek at Pinole	10.0	1939–70, 1972–77
11182400	Arroyo del Hambre at Martinez	15.1	1965–82
11182800	San Ramon Creek near Walnut Creek	47.9	1973–92
11183000	San Ramon Creek at Walnut Creek	50.8	1953–73
11183500	Walnut Creek at Walnut Creek	79.2	1953–68
11183600	Walnut Creek at Concord	85.2	1968–92
11183700	Little Pine Creek near Alamo	1.22	1975–89
11184000	Galindo Creek at Concord	7.74	1955–58
11184500	Pine Creek at Concord	28.3	1953–60
11455900	Napa River at Calistoga	21.9	1976–83
11455950	Sulphur Creek near St. Helena	4.50	1966–67
11456500	Conn Creek near Oakville	55.4	1930–59, 1971–75
11457000	Dry Creek near Napa	17.4	1951–66
11457500	Dry Creek near Yountville	18.7	1941
11458100	Milliken Creek near Napa	17.3	1971–83
11458200	Redwood Creek near Napa	9.79	1958–73
11458300	Napa Creek at Napa	14.9	1971–83
11458350	Tulucay Creek at Napa	12.6	1972–83
11458500	Sonoma Creek at Agua Caliente	58.4	1955–81
11459000	Petaluma River at Petaluma	30.9	1949–63
11459300	San Antonio Creek near Petaluma	28.9	1975–81
11459800	San Rafael Creek at San Rafael (REVISED RECORDS IN WDR CA-91-2)	1.24	1972–76
11459830	Irwin Creek at San Rafael	—	1972–76
11460000	Corte Madera Creek at Ross	18.1	1951–93
11460100	Arroyo Corte Madera del Presidio at Mill Valley	4.69	1966–73, 1975–86
11460160	Morses Creek at Bolinas	.70	1967–69
11460500	Nicasio Creek at Point Reyes Station	36.6	1954–60
11460800	Walker Creek near Tomales	40.1	1959–84
11460920	Salmon Creek at Bodega	15.7	1962–75
11460940	Russian River near Redwood Valley	14.1	1963–68
11461400	East Fork Russian River Tributary near Potter Valley	.15	1959–61
11462700	Feliz Creek near Hopland	31.3	1958–66
11463160	Big Sulphur Creek near Middletown	2.89	1978–79
11463500	Russian River at Geyserville	655	1911–13
11463900	Maacama Creek near Kellogg	43.4	1961–81
11463940	Franz Creek near Kellogg	15.7	1964–68
11464050	Dry Creek Tributary near Hopland	1.19	1968–69
11464400	Dry Creek near Yorkville	56.0	1974–83
11464500	Dry Creek near Cloverdale	87.8	1941–80
11464860	Warm Springs Creek near Asti	12.2	1973–83
11465050	Dutcher Creek near Asti	2.24	1973
11465150	Pena Creek near Geyserville	22.3	1979–90
11465800	Santa Rosa Creek near Santa Rosa	12.5	1959–70
11466200	Santa Rosa Creek at Santa Rosa	56.6	1940–41
11467200	Austin Creek near Cazadero	63.1	1959–66
11467500	South Fork Gualala River near Annapolis	161	1951–71, 1991–94

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11467510	South Fork Gualala River near the Sea Ranch	161	1991–92
11467600	Garcia River near Point Arena	98.5	1962–83
11467800	Rancheria Creek near Boonville	65.6	1959–68
11467850	Soda Creek Tributary near Boonville	1.53	1965–68
11468010	Albion River near Comptche	14.4	1961–69
11468070	South Fork Big River near Comptche	36.2	1960–71
11468150	Warner Creek near Fort Bragg	.61	1969
11468540	Pudding Creek near Fort Bragg	12.5	1964–71
11468850	Dunn Creek near Rockport	1.88	1961–64
11468990	Honeydew Creek near Honeydew	14.9	1973–77
11469500	North Fork Mattole River at Petrolia	37.6	1951–57
11469800	Cold Creek Tributary near Elk Creek	.81	1970
11471800	Tomki Creek near Willits	43.4	1963–70
11472000	Eel River at Hearst	466	1911–13
11472150	Eel River near Dos Rios	528	1967–94
11472200	Outlet Creek near Longvale	161	1957–94
11472500	Eel River above Dos Rios	705	1951–65
11472800	Middle Fork Eel River above Black Butte River, near Covelo	204	1968–70
11472900	Black Butte River near Covelo	162	1959–75
11473000	Middle Fork Eel River below Black Butte River, near Covelo	367	1952–67
11473100	Williams Creek near Covelo	30.4	1962–69
11473500	Middle Fork Eel River near Covelo	406	1912–18, 1920–22
11473530	Mill Creek below Alder Creek, near Covelo	17.1	1962–65
11473600	Short Creek near Covelo	15.2	1959–69
11473700	Mill Creek near Covelo	95.6	1956–71
11473800	Elk Creek near Hearst	84.1	1964–73
11473980	Goforth Creek at Dos Rios	3.83	1966–68
11474000	Eel River below Dos Rios	1,484	1912–13, 1952–66
11474400	Hulls Creek near Covelo	25.9	1962–64
11475500	South Fork Eel River near Branscomb	43.9	1947–70
11475700	Tenmile Creek near Laytonville	50.3	1958–74
11475940	East Branch South Fork Eel River near Garberville	74.3	1966–72
11476000	South Fork Eel River at Garberville	468	1912–13, 1940
11476700	Larabee Creek near Holmes	84.1	1960–65
11477475	Mill Creek below Sulphur Creek, at Dinsmore	3.11	1990–95
11477500	Van Duzen River near Dinsmore	85.2	1954–58, 1964–74
11477700	Little Van Duzen River near Bridgeville	36.2	1958–67
11478000	Van Duzen River at Bridgeville	202	1912–13, 1940–51
11478400	Van Duzen River Tributary near Bridgeville	.71	1969
11479000	Yager Creek near Carlotta	127	1954–55, 1957–60, 1966–72
11479500	Yager Creek at Carlotta	134	1912–13
11479700	Elk River near Falk	44.2	1958–67
11480000	Jacoby Creek near Freshwater	5.80	1955–64
11480500	Mad River near Forest Glen	143	1953–94
11480750	Mad River near Kneeland	351	1966–74
11480800	North Fork Mad River near Korbel	40.4	1958–64, 1973–74
11481200	Little River near Trinidad	40.5	1956–94
11482000	Redwood Creek near Korbel	83.0	1912–13
11482110	Lacks Creek near Orick	16.9	1980–91
11482120	Redwood Creek above Panther Creek, near Orick	150	1981–89
11482125	Panther Creek near Orick	6.07	1979–91
11482130	Coyote Creek near Orick	7.78	1980–82, 1984–89
11482200	Redwood Creek at South Park Boundary, near Orick	185	1971–81
11482468	Little Lost Man Creek at Site No. 2, near Orick	3.46	1974–82, 1985–89
11488700	Dry Lake Tributary at Perez	1.74	1963–66
11489500	Antelope Creek near Tennant	18.6	1953–79
11490000	Antelope Creek near Macdoel	30	1922
11490500	Butte Creek near Macdoel	178	1922, 1952–60
11512000	Fall Creek at Copco	14.6	1933–59

DISCONTINUED GAGING STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Period of record
11512500	Klamath River below Fall Creek, near Copco	4,317	1924–61
11516600	Cottonwood Creek at Hornbrook	89.8	1965–71
11516900	Little Shasta River near Montague	48.2	1958–78
11517000	Shasta River near Montague	673	1912–13, 1917–21, 1924–33
11517800	Beaver Creek near Klamath River	106	1960–65
11517900	East Fork Scott River below Houston Creek, near Callahan	19.7	1970–73

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
11144500	Santa Margarita Lake near Pozo	112	1945–86
11166740	Calero Reservoir near New Almaden	6.93	1936–85
11461800	Lake Mendocino near Ukiah	105	1966–90
11464900	Lake Sonoma near Geyserville	130	1984–90

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
11141150	Arroyo Grande above Phoenix Creek, near Arroyo Grande	13.4	WQ,S,T	1967–73, 1977, 1990
11141280	Lopez Creek near Arroyo Grande	20.9	WQ,S,T	1968–72, 1977
11143000	Big Sur River near Big Sur	46.5	WQ,T	1966–79
11143250	Carmel River near Carmel	247.23	WQ,S	1954–66, 1990, 1991–97
11147040	Santa Rita Creek Tributary near Templeton	2.95	T	1968–72
11147070	Santa Rita Creek near Templeton	18.2	S	1968–72
11148800	Nacimiento River near Bryson	147	T,S	1959, 1961–71
11148900	Nacimiento River below Sapaque Creek, near Bryson	162	T	1972–73
11149400	Nacimiento River below Nacimento Dam, near Bradley	329	WQ	1963–66
11149700	San Antonio River at Sam Jones Bridge	204	T,S	1959, 1961–62, 1964–65
11149900	San Antonio River near Lockwood	217	T	1966–73
11150000	San Antonio River at Pleyto	277	T,S	1962, 1965
11151870	Arroyo Seco near Greenfield	113	S	1963–75, 1978–84
11152300	Salinas River near Chualar	4,042	C,T,B	1967–69, 1977–81
11152500	Salinas River near Spreckels	4,156	WQ,B,C, T,S	1950–54, 1958–79
11152540	El Toro Creek near Spreckles	31.9	S	1986, 1990
11153470	Llagas Creek above Chesbro Reservoir, near Morgan Hill	9.63	T	1972–78
11153555	Llagas Creek at San Martin	28.2	WQ,S	1980–87, 1989–91
11153900	Uvas Creek above Uvas Reservoir, near Morgan Hill	21	T,S	1966–76
11154700	Clear Creek near Idria	14.1	T	1993–96

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
11159000	Pajaro River at Chittenden	1,186	WQ,B,C, T,S	1952–92
11159200	Corralitos Creek at Freedom	27.8	S	1976–77, 1980–81
11160000	Soquel Creek at Soquel	40.2	T	1966–79
11160500	San Lorenzo River at Big Trees	106	S,T	1966–82
11162500	Pescadero Creek near Pescadero	45.9	WQ,T,S	1965–80, 1986, 1990–93
11162720	Colma Creek at South San Francisco	10.8	S	1966–76
11162722	Spruce Branch at South San Francisco	1.68	S	1965–69
11166575	Permanente Creek near Monte Vista	3.86	T,S	1984–87
11166578	West Fork Permanente Creek near Monte Vista	2.98	T,S	1985–86
11166710	Arroyo Calero above Calero Reservoir, near New Almaden	3.14	WQ	1986–90
11166900	Alamitos Creek near New Almaden	31.8	WQ,S	1985–91
11167500	Guadalupe Creek at Guadalupe	12.8	WQ,S	1980–91
11168000	Los Gatos Creek at Los Gatos	39.0	WQ	1952–66, 1980–87, 1989–91
11168800	Los Gatos Creek at Lincoln Avenue, at San Jose	48.4	WQ	1980–87, 1989–91
11169580	Calabazas Creek Tributary No. 1 at Mt. Eden Road	.37	T	1973–77
11169600	Prospect Creek above Saratoga Golf Course, near Saratoga	.27	T	1973–75
11169616	Calabazas Creek at Rainbow Drive, near Cupertino	3.98	T	1974–77
11169800	Coyote Creek near Gilroy	109	T,S	1965–76
11169970	Coyote Creek below Leroy Anderson Dam, near Madrone	195	WQ,S	1980–88, 1990–91
11171500	Coyote Creek near Edenvale	229	WQ,S	1979–88, 1990–91
11174600	Alamo Canal near Pleasanton	40.8	C	1979–83
11176000	Arroyo Mocho near Livermore	38.2	C	1979–83
11176140	Altamont Creek near Livermore	13.4	C	1979–80
11176145	Arroyo Las Positas at Livermore	53.3	C	1980–83
11176180	Arroyo Las Positas at El Charro, near Pleasanton	75.0	C	1980–83
11176200	Arroyo Mocho near Pleasanton	142	C	1980–84
11176300	Tassajara Creek near Pleasanton	26.8	C	1979–83
11176350	Arroyo de la Laguna above Arroyo Valle, near Pleasanton	224	T,S	1975–79
11176400	Arroyo Valle below Lang Canal, near Livermore	130	S	1963, 1965
11176500	Arroyo Valle near Livermore	147	S	1966–67
11176600	Arroyo Valle at Pleasanton	171	WQ,C,	1975–83
11176900	Arroyo de la Laguna above bridge, near Pleasanton	—	T	1960–63
11177000	Arroyo de la Laguna near Pleasanton	405	C	1979–83
11177200	Vallecitos Creek at Sunol	7.48	C	1975–86
11179000	Alameda Creek near Niles	633	WQ,C	1906, 1952–67, 1969 1975–93
11180825	San Lorenzo Creek above Don Castro Reservoir, near Castro Valley	18.0	T,S	1981–94
11180940	Cull Creek Tributary No. 4 above Cull Creek Reservoir, near Castro Valley	.45	S	1981, 1986, 1989, 1992
11180965	Cull Creek below Cull Creek Dam, near Castro Valley	6.37	T,S	1979
11181040	San Lorenzo Creek at San Lorenzo	44.6	T,S	1989–93
11181330	Temescal Creek above Lake Temescal, at Oakland	1.74	WQ,S	1979–81
11181390	Wildcat Creek at Vale Road, at Richmond	7.79	S	1978–80
11456000	Napa River near St. Helena	81.4	S	1961–62
11458000	Napa River near Napa	218	WQ,B,C T,S	1971, 1973–93
11460000	Corte Madera Creek at Ross	18.1	S	1978–80
11460015	Corte Madera Creek at College Avenue, at Kentfield	18.2	S	1988–89
11460110	Gerbode Valley Creek near Sausalito	3.29	WQ,S	1986–88
11460120	Rodeo Lagoon at Ft. Cronkhite, near Sausalito	4.07	WQ	1986–88
11460130	Tennessee Valley Creek near Tamalpais Valley	1.91	WQ,S	1986–88
11460140	Redwood Creek below Muir Woods, near Mill Valley	4.11	WQ,S	1986–88
11460152	Redwood Creek at Muir Beach, near Tamalpais Valley	7.29	WQ,S	1986–88
11460154	Green Gulch at Muir Beach, near Tamalpais Valley	1.51	WQ,S	1986–88
11460156	Webb Creek near Stinson Beach	1.12	WQ,S	1986–88
11460158	Table Rock Creek at Stinson Beach	1.34	WQ,S	1986–88
11460170	Pine Creek at Bolinas	7.83	T,S	1967, 1969–70

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
11460600	Lagunitas Creek near Point Reyes	81.7	T	1989–90
11460920	Salmon Creek at Bodega	15.7	T,S	1964–75
11461000	Russian River near Ukiah	100	WQ,S,B,T	1964–68, 1977–79, 1991–92, 1994–97
11461500	East Fork Russian River near Calpella	92.2	S	1965–68
11462000	East Fork Russian River near Ukiah	105	WQ,S,B,T	1953–55, 1964–68, 1973–94
11462500	Russian River near Hopland	362	WQ,T,S	1951–79, 1989–93, 1995–96
11463000	Russian River near Cloverdale	503	T,S	1964–68, 1994–96
11463160	Big Sulphur Creek near Middletown	2.89	T,S	1978–79
11463200	Big Sulphur Creek near Cloverdale	85.5	S	1967–68
11464000	Russian River near Healdsburg	793	WQ	1951–66, 1980
11464500	Dry Creek near Cloverdale	87.8	T	1965–79
11465000	Dry Creek below Warm Springs Dam, near Geyserville	131	T	1981–94
11465150	Pena Creek near Geyserville	22.3	S	1979–86
11465200	Dry Creek near Geyserville	162	WQ,S,T	1964–87
11467000	Russian River near Guerneville	1,338	WQ,B,C, T,S	1951–95
11467590	Garcia River at Eureka Hill Road, near Point Arena	83.2	S	1992–97
11467600	Garcia River near Point Arena	98.5	T	1964–78
11468000	Navarro River near Navarro	303	WQ	1959–66, 1973–79
11468600	Middle Fork Ten Mile River near Fort Bragg	32.9	T	1965–73
11471000	Potter Valley Powerhouse intake near Potter Valley	—	S	1964–68
11472150	Eel River near Dos Rios	528	S	1967–77
11472200	Outlet Creek near Longvale	161	S	1967–70
11472500	Eel River above Dos Rios	705	T,S	1959, 1962–82
11472800	Middle Fork Eel River above Black Butte River, near Covelo	204	T,S	1966, 1969–70
11472900	Black Butte River near Covelo	162	T,S	1964–66, 1968–75
11473000	Middle Fork Eel River below Black Butte River, near Covelo	367	T,S	1961–63, 1968–79
11473800	Elk Creek near Hearst	84.1	T	1965–73
11473900	Middle Fork Eel River near Dos Rios	745	C,S	1967–69
11474500	North Fork Eel River near Mina	248	T,S	1973–75
11474700	Chamise Creek near Island Mountain	22.6	T,S	1973–75
11475000	Eel River at Fort Seward	2,107	S	1966–76
11475100	Dobbyn Creek near Fort Seward	61.4	T,S	1973–76
11475500	South Fork Eel River near Branscomb	43.9	T,S	1961–70
11475560	Elder Creek near Branscomb	6.50	WQ,T,S	1968–96
11476500	South Fork Eel River near Miranda	537	T,S	1960–83
11476600	Bull Creek near Weott	28.1	S	1960–80
11477000	Eel River at Scotia	3,113	WQ,B,C T,S	1952–95, 1998
11477500	Van Duzen River near Dinsmore	85.2	T	1966–74
11477700	Little Van Duzen River near Bridgeville	36.2	T	1961–65
11478500	Van Duzen River near Bridgeville	222	T,S	1956–65, 1998
11480700	Maple Creek near Blue Lake	12.1	T	1969
11480750	Mad River near Kneeland	351	T	1966–74
11480780	Mad River near Blue Lake	393	T	1973–76
11481000	Mad River near Arcata	485	S	1960–74
11481500	Redwood Creek near Blue Lake	67.7	WQ,T	1973–92
11482110	Lacks Creek near Orick	16.9	C,S	1975–76, 1978–91
11482120	Redwood Creek above Panther Creek, near Orick	150	S	1988–89
11482125	Panther Creek near Orick	6.07	T,S	1979–91
11482130	Coyote Creek near Orick	7.78	T,S	1980
11482200	Redwood Creek at South Park Boundary, near Orick	185	T	1974–81
11482468	Little Lost Man Creek at Site No. 2, near Orick	3.46	WQ,S	1974–76, 1978–82, 1985–89
11482500	Redwood Creek at Orick	277	WQ,T	1959–92
11516600	Cottonwood Creek at Hornbrook	89.8	T	1965–71
11517500	Shasta River near Yreka	793	WQ,T,S	1955–56, 1959–79

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS—Continued

Station No.	Station name	Drainage area (mi^2)	Type of record	Period of record
11519500	Scott River near Fort Jones	653	WQ,S	1955–56, 1959–79
11523000	Klamath River at Orleans	8,475	S	1967–79
11525500	Trinity River at Lewiston	719	WQ,T,S	1951–83
11525550	Grass Valley Creek near French Gulch	7.93	S	1985–89
11525580	Little Grass Valley Creek near Lewiston	10.7	S	1985–00
11525655	Trinity River below Limekiln Gulch, near Douglas City	812	T,S	1981–91
11526500	North Fork Trinity River at Helena	151	T,S	1963
11528200	South Fork Trinity River near Hyampom	342	T	1961–65
11528500	Hayfork Creek near Hyampom	378	T	1961–74
11528700	South Fork Trinity River below Hyampom	764	S	1967–70, 1981–82
11529000	South Fork Trinity River near Salyer	898	T,S	1959–67, 1981–82
11530000	Trinity River at Hoopa	2,853	S	1960–79
11530020	Supply Creek at Hoopa	15.8	T,S	1982–85
11530300	Blue Creek near Klamath	120	T	1966–78
11530500	Klamath River near Klamath	12,100	WQ,B,C, T,S	1951–95
11532000	South Fork Smith River near Crescent City	291	T,S	1978–79
11532500	Smith River near Crescent City	614	WQ,C,B, S,T	1952–93
11532620	Mill Creek near Crescent City	28.6	T	1974–80
353339121053900	Santa Rosa Creek on Highway 1 Bridge, at Cambria	46.6	WQ	1988–89
353406121061100	Santa Rosa Creek at Windson Boulevard, near Cambria	47.1	WQ	1988–89
353635121043101	San Simeon Creek at Palmer Flats, near Cambria	23.1	WQ	1988–89
371057121472501	Calero Reservoir at dam, near New Almaden	6.93	WQ,B	1978–79, 1984–91
374906122281801	San Francisco Bay at Golden Gate Bridge	—	C,T	1997
375658122324000	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 0	—	S	1988–89
375701122324200	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 1	—	S	1988–89
375704122324200	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 2	—	S	1988–89
375710122324000	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 3	—	S	1990
375711122324600	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 4	—	S	1988–89
375712122325100	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 5	—	S	1988–89
375712122325200	Corte Madera Creek near College Avenue, at Kentfield, at Cross Section 6	—	S	1988–89

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

WATER RESOURCES DATA—CALIFORNIA, WATER YEAR 2000
VOLUME 2—PACIFIC SLOPE BASINS FROM ARROYO GRANDE TO OREGON STATE LINE EXCEPT CENTRAL VALLEY

By M.D. Webster, S.W. Anderson, M.F. Friebel, J.R. Smithson, *and* L.A. Freeman

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, 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 121 streamflow-gaging stations, 1 low-flow partial-record streamflow station, and 32 miscellaneous measurement stations; (2) gage-height records for 10 stations, (3) stage and contents records for 6 lakes and reservoirs; and (4) water-quality records for 34 streamflow-gaging stations. Records included for stream stages are only a small fraction of those obtained during the water year.

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

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

Publications similar to this report are published annually by the U.S. Geological Survey for all States. Each report has an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CA-00-2." 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:

Alameda County Flood Control and Water Conservation District, Robert Hale, Water Resources Manager.

Alameda County Flood Control and Water Conservation District, Zone 7, Dale Myers, General Manager.

Alameda County Water District, Paul Piraino, General Manager.

California Department of Parks and Recreation, Rusty Areias, Director.

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

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

Contra Costa County Flood Control and Water Conservation District, R. Mitch Avalon, Deputy Director.

Humboldt Bay Municipal Water District, Carol Rische, General Manager.

Karuk Tribe of California, Alvis Johnson, Tribal Chairman.

Marin Municipal Water District, Pamela J. Nicolai, General Manager.

Monterey County Water Resources Agency, Curtis V. Weeks, General Manager.

Monterey Peninsula Water Management District, Darby W. Fuerst, General Manager.

North Marin Water District, Chris DeGabriele, General Manager.

San Benito County Water District, John S. Gregg, District Manager.

San Francisco Water Department, Anson B. Moran, General Manager.

San Jose, city of, Carl W. Mosher, Director, Environmental Services Department.

San Luis Obispo County Engineering Department, Timothy P. Nanson, County Engineer.

San Mateo County Department of Public Works, Robert L. Frame, Senior Civil Engineer.

Santa Clara Valley Water District, Stanley M. Williams, General Manager.

Santa Cruz, city of, Water Department, Terry Tompkins, Deputy Director/Operations.

Santa Cruz County Flood Control and Water Conservation District, Planning Department, Bruce Laclergue, Water Resources Manager.

Santa Rosa, city of, Lynn M. Small, Environmental Services Superintendent.

Scotts Valley Water District, Jon P. Sansing, General Manager.

Sonoma County Permit and Resource Management Department, Sibohan McGregor, Geothermal Coordinator.

Sonoma County Water Agency, Randy O. Poole, General Manager.

Soquel Creek Water District, Laura D. Brown, General Manager.

University of California, Davis, Ahmad Hakim-Elahi, Director of Sponsored Programs.

Yurok Indian Tribe, Charles Chamberlain, Acting Senior Fishery Biologist.

Assistance in the form of funds or services was given by the Forest Service, U.S. Department of Agriculture; Corps of Engineers, U.S. Army; Bureau of Land Management, Bureau of Reclamation, and National Park Service, U.S. Department of the Interior.

The following organizations aided in collecting records: Pacific Gas and Electric Company, PacifiCorp, STS Hydropower, and North Coast Hydroelectric.

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

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

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

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

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

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

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

EXPLANATION OF THE RECORDS

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

Station-Identification Numbers

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

Downstream-Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 11465350, which appears just to the left of the station name, includes the two-digit part number "11" plus the six-digit downstream-order number "465350." 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).

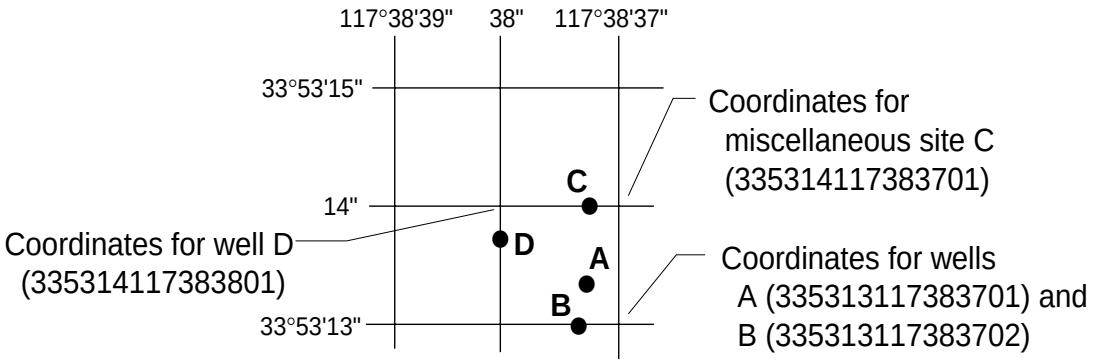

Figure 1. System for numbering miscellaneous sites (latitude and longitude).

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 19.

Data Collection and Computation

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

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

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

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes or observations, and records for other stations in the same or nearby basins for comparable periods.

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

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

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

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

Data Presentation

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

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

Station manuscript

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

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

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

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

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

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

REMARKS.—All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information

presented as the first entry. The paragraph also is used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

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

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

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

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

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

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

Data table of daily mean values

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

Statistics of monthly mean data

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

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation for tables containing complex data for the current water year. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS __–__," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

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

Other Records Available

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

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

Records of Surface-Water Quality

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

Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape or stored electronically in a data logger. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 2 through 18.

Arrangement of Records

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

Onsite Measurements and Sample Collection

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

One sample can adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and

for use in calculating load. All samples obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

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

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

Water Temperature

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

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

Sediment

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

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

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

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

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

Cross-Sectional Data

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

Laboratory Measurements

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

Water Quality-Control Data

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

Blank Samples

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

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

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

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

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

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

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

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

Reference Samples

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

Replicate Samples

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

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

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

Spike Samples

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

ACCESS TO USGS WATER DATA

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

http://water.usgs.gov.

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Multiple-plate samplers are artificial substrates of known surface area used for obtaining 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 geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place. *See NOAA web site:*

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

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

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

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

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

Organism is any living entity.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

Stage: See "Gage height."

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Ultraviolet (UV) absorption at 254 or 280 nanometers (UV absorption units per centimeter of pathlength of UV light through a sample) 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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

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

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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

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

Section E. Subsurface Geophysical Methods

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

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

Section F. Drilling and Sampling Methods

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

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Section B. Ground-Water Techniques

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

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

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

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

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

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

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

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

Section C. Sedimentation and Erosion Techniques

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

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

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

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

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

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

Section B. Surface Water

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

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

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

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis

Section A. Water Analysis

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

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

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

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

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

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

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

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

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

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

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

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

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

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

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

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

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

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

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

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

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

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

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

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

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

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

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

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

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

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

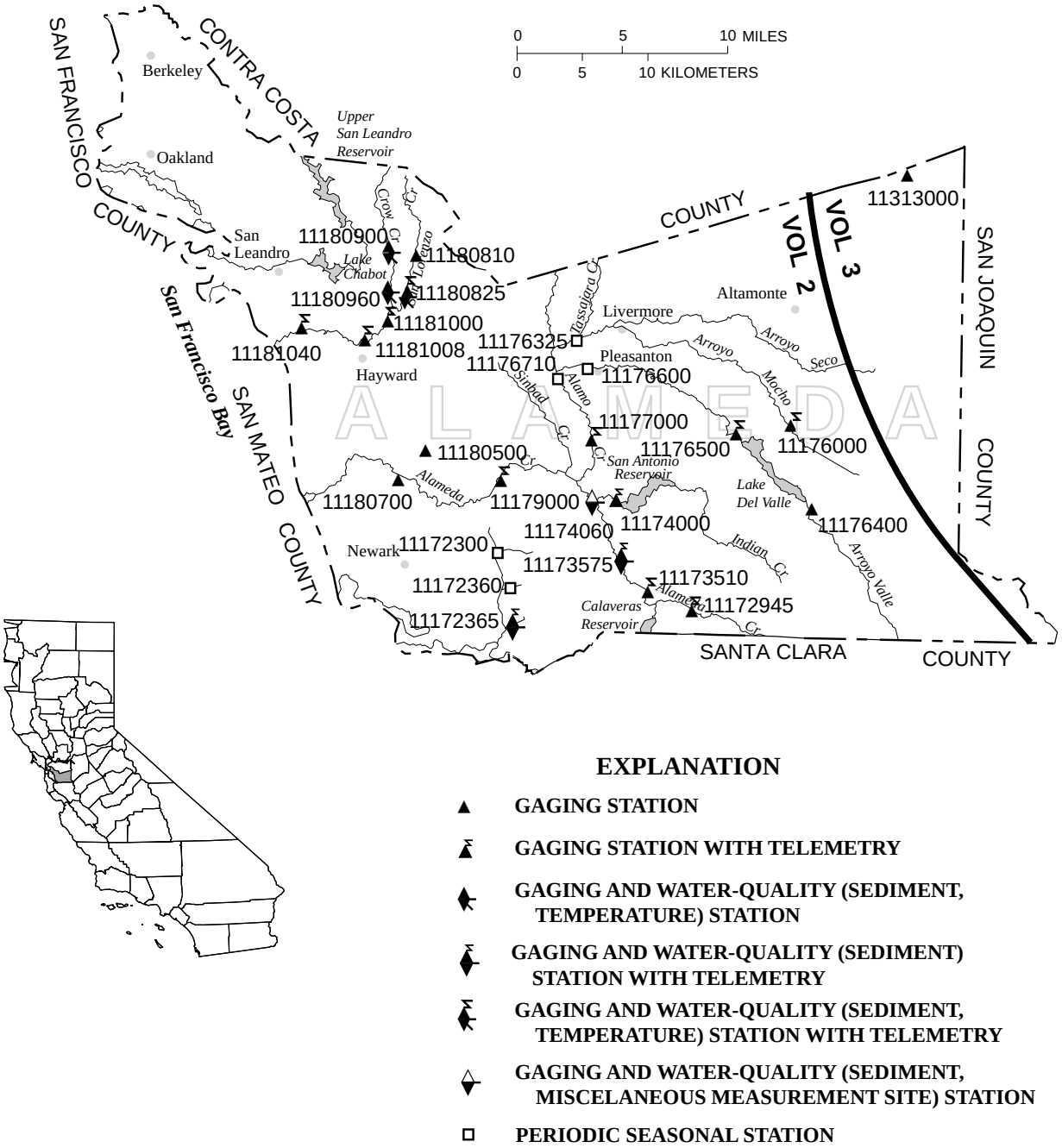

Figure 2. Location of discharge and water-quality stations in Alameda County.
(NOTE: Record for station 11313000 published in volume 3.)

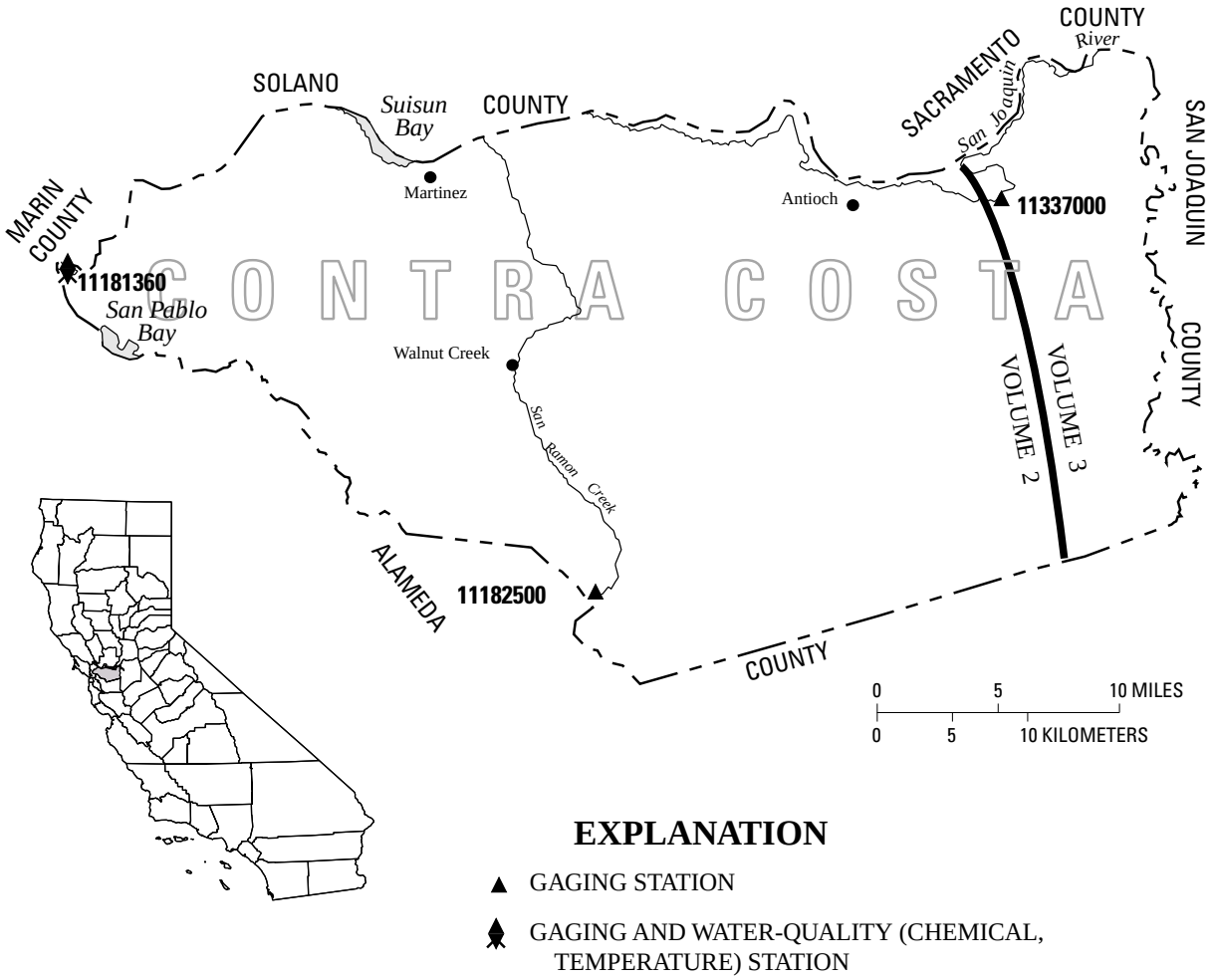

Figure 3. Location of discharge and water-quality stations in Contra Costa County.
(NOTE: Record for station 11337000 published in volume 3.)

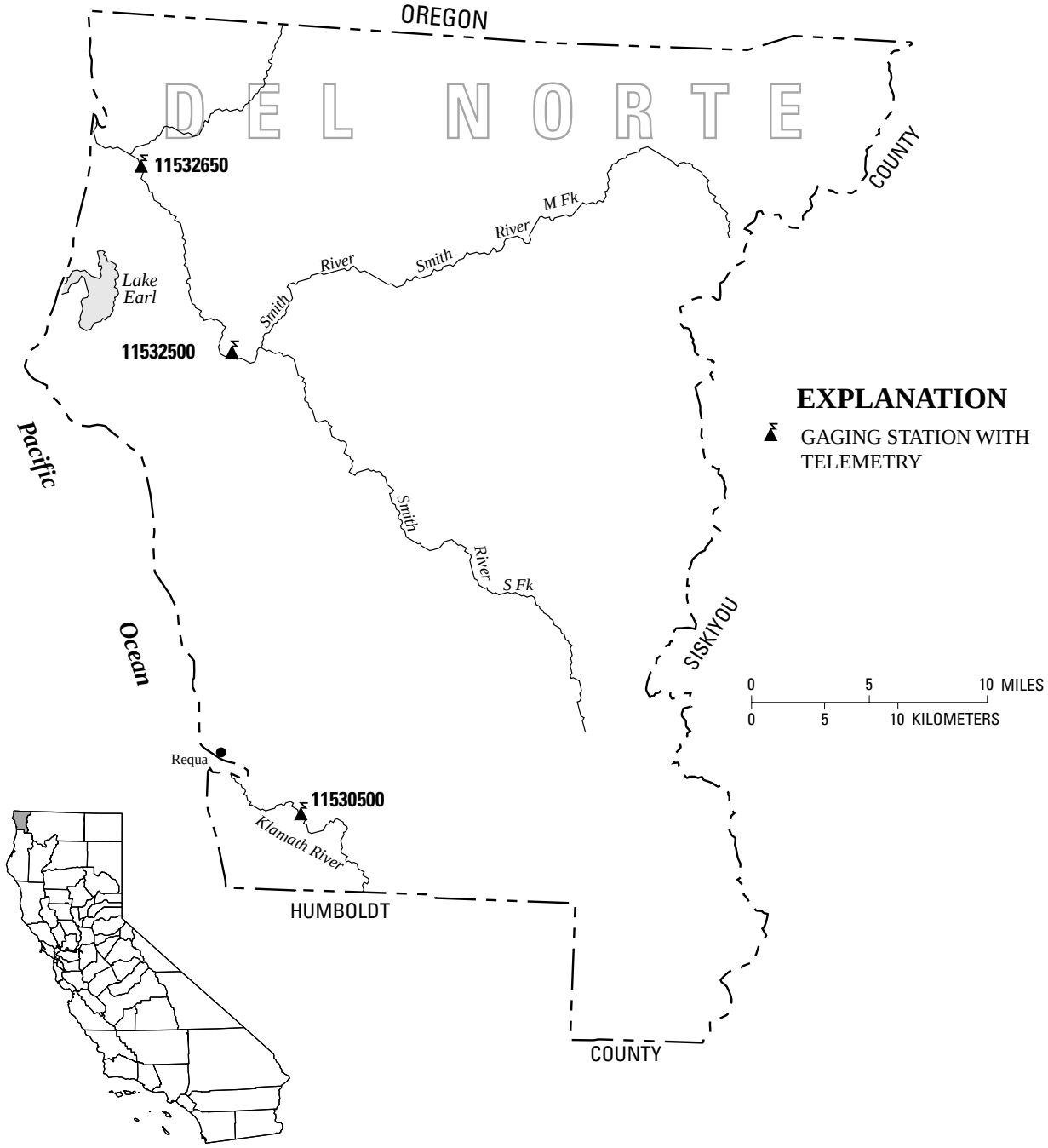

Figure 4. Location of discharge stations in Del Norte County.

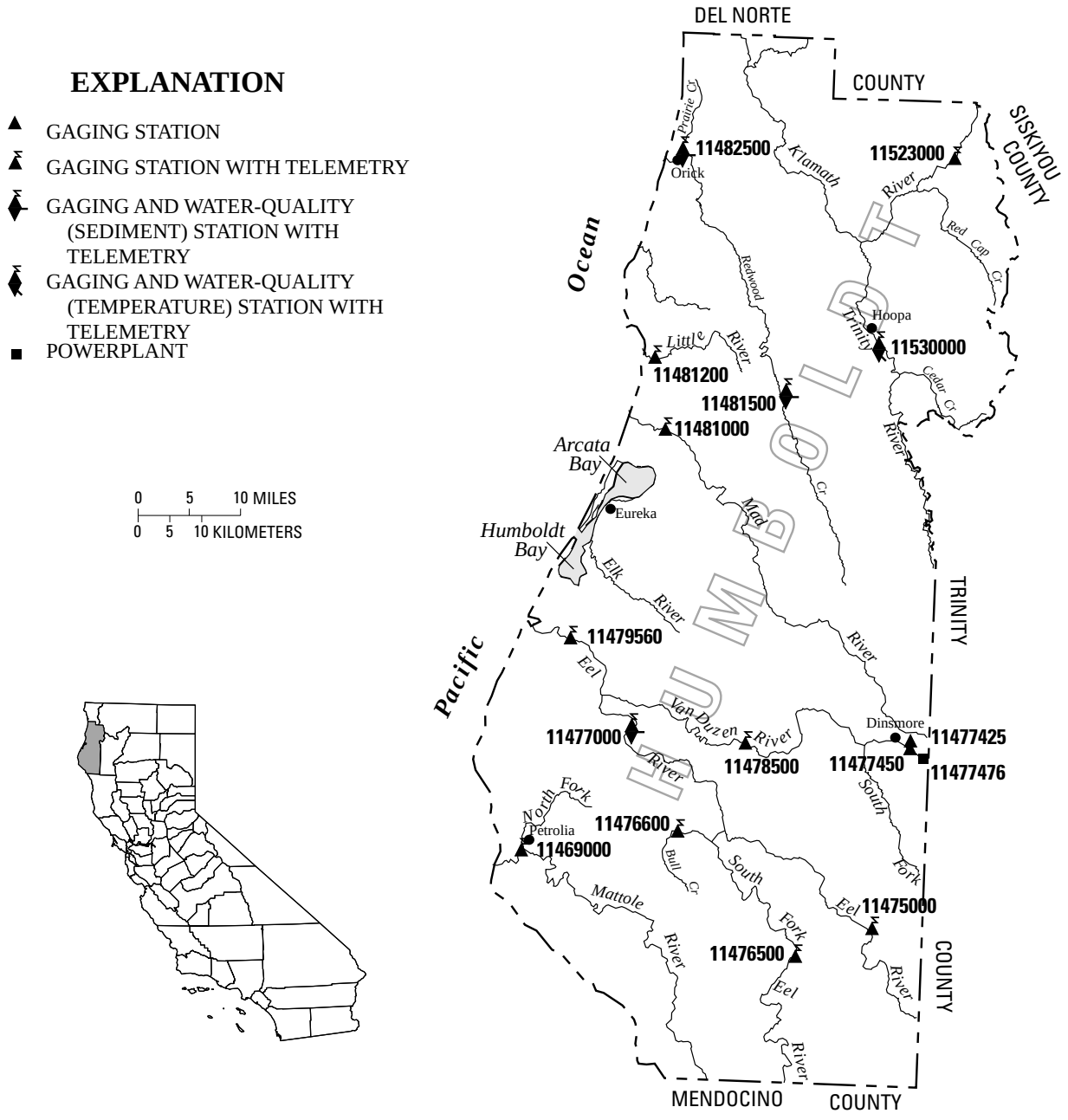

Figure 5. Location of discharge and water-quality stations in Humboldt County.

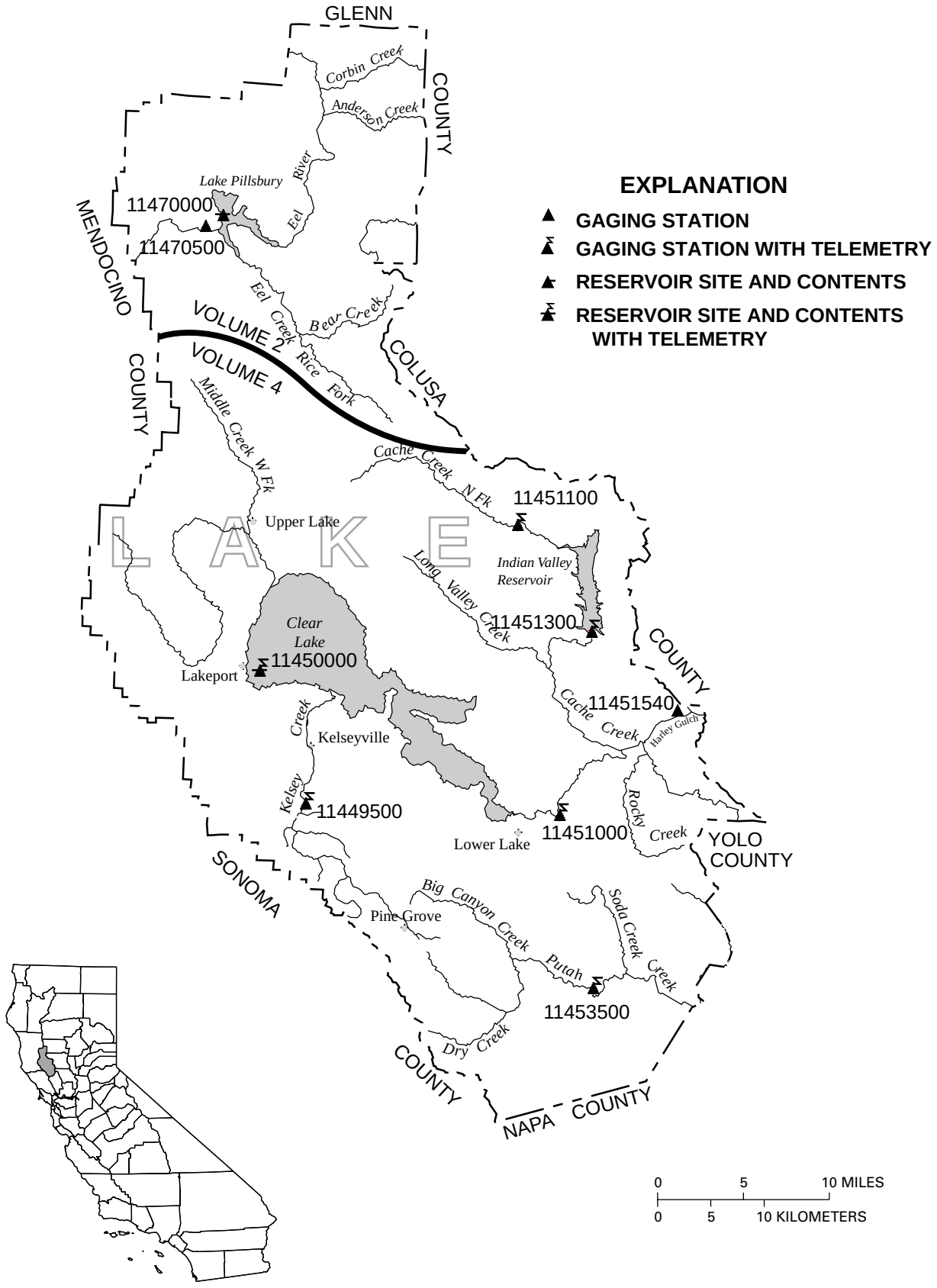

Figure 6. Location of discharge stations in Lake County.
(NOTE: Records for stations 11449500 through 11453500 published in volume 4.)

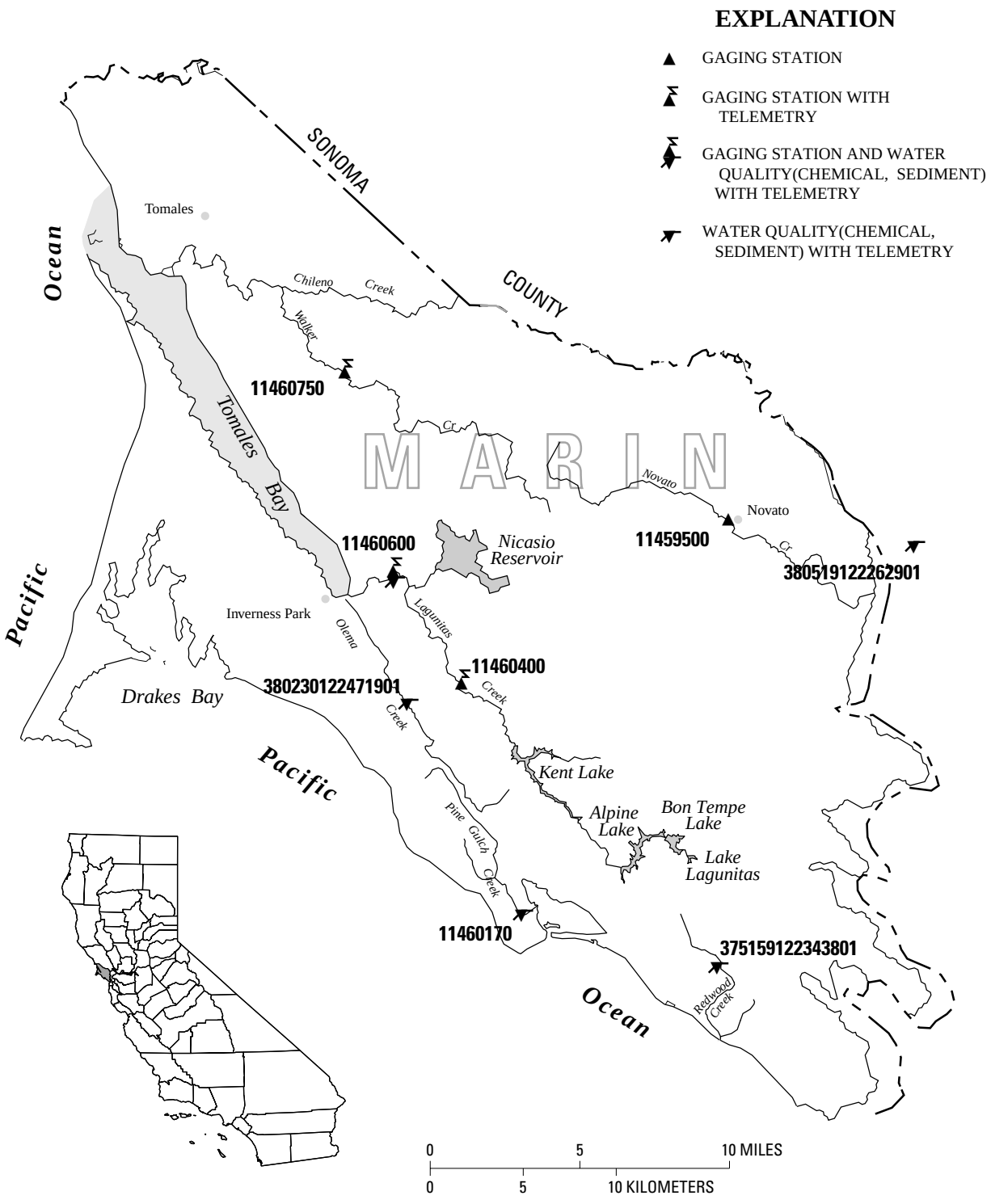

Figure 7. Location of discharge and water-quality stations in Marin County.

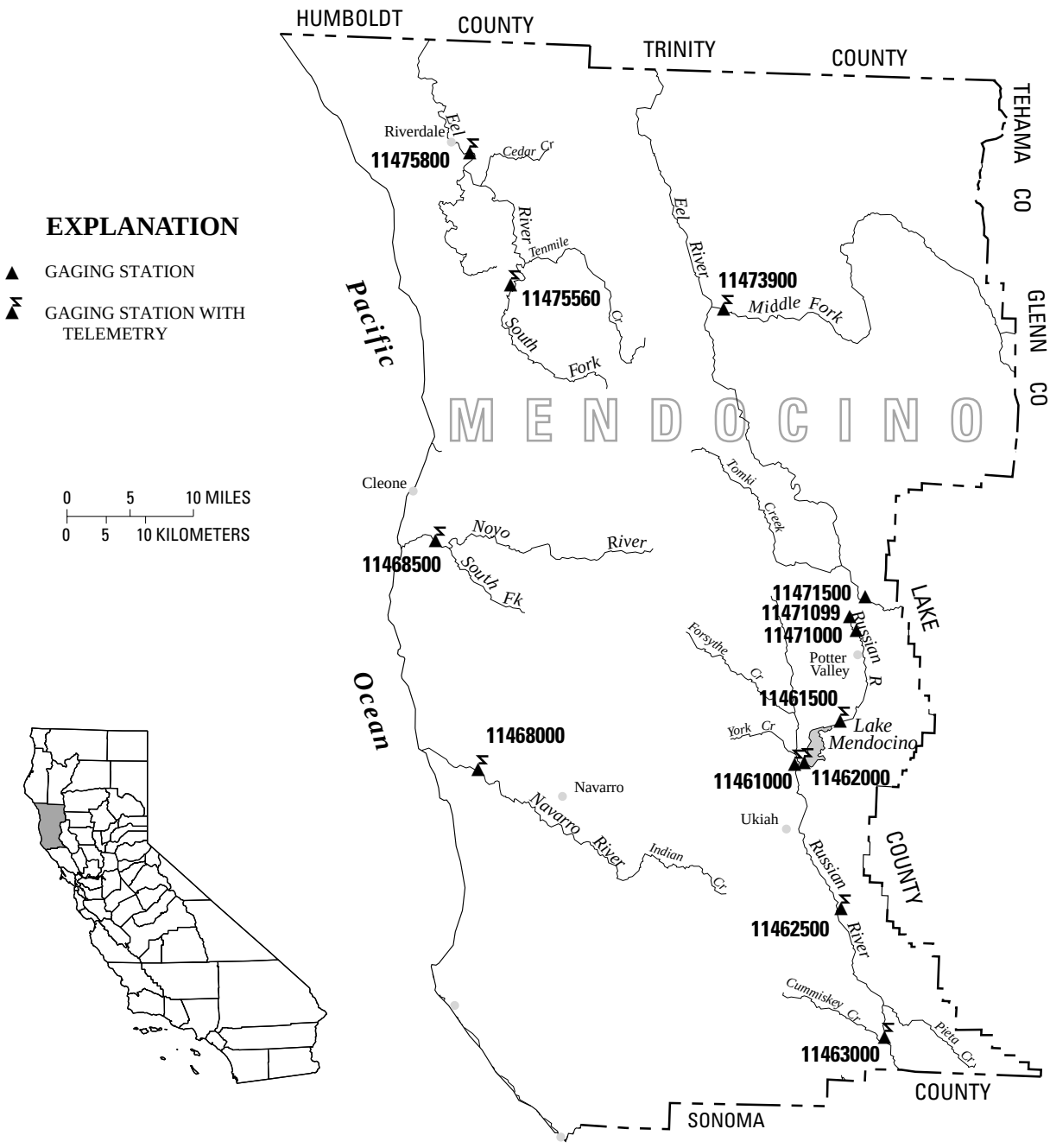

Figure 8. Location of discharge stations in Mendocino County.

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

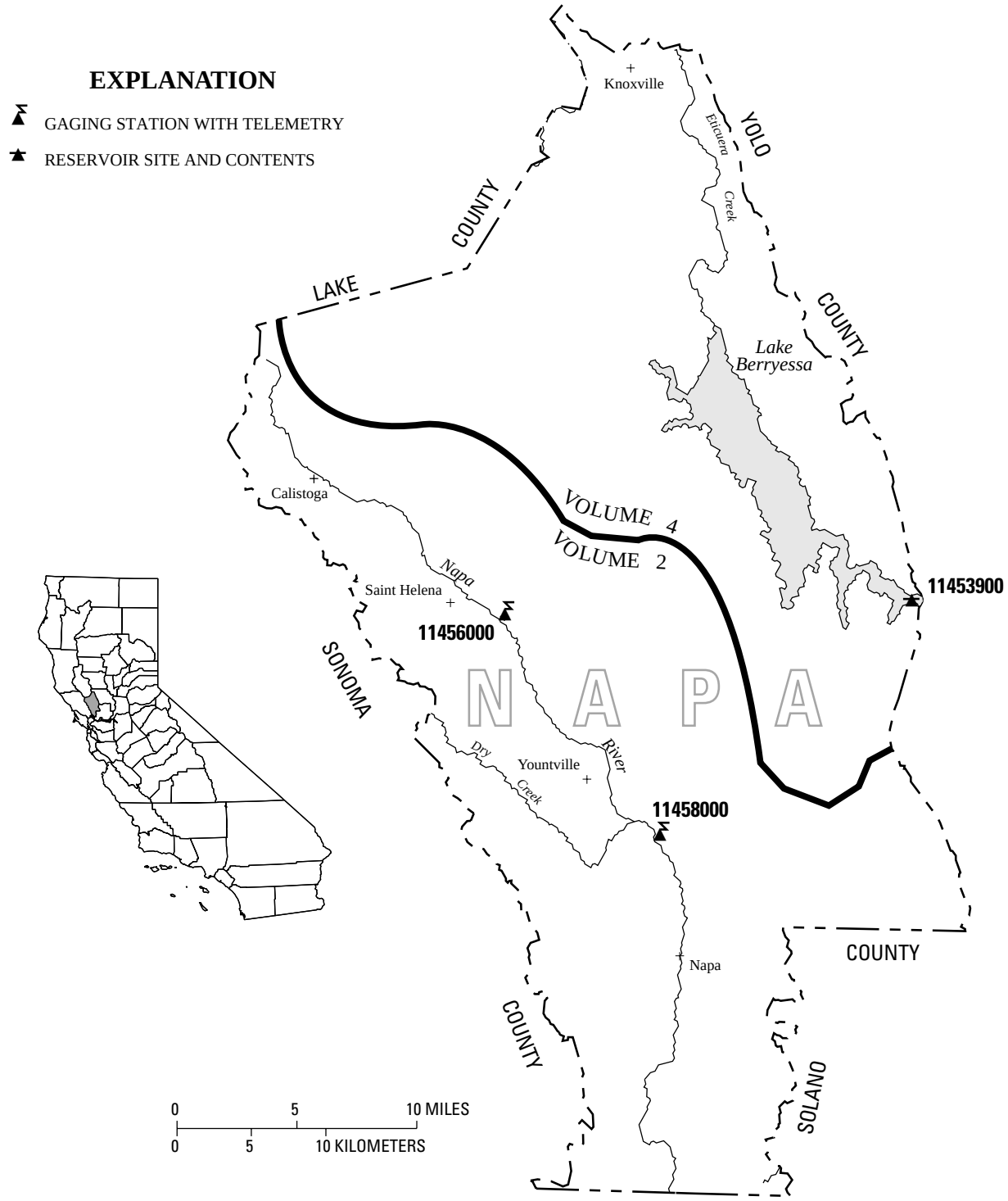

Figure 10. Location of discharge stations in Napa County.
(NOTE: Record for station 11453900 published in volume 4.)

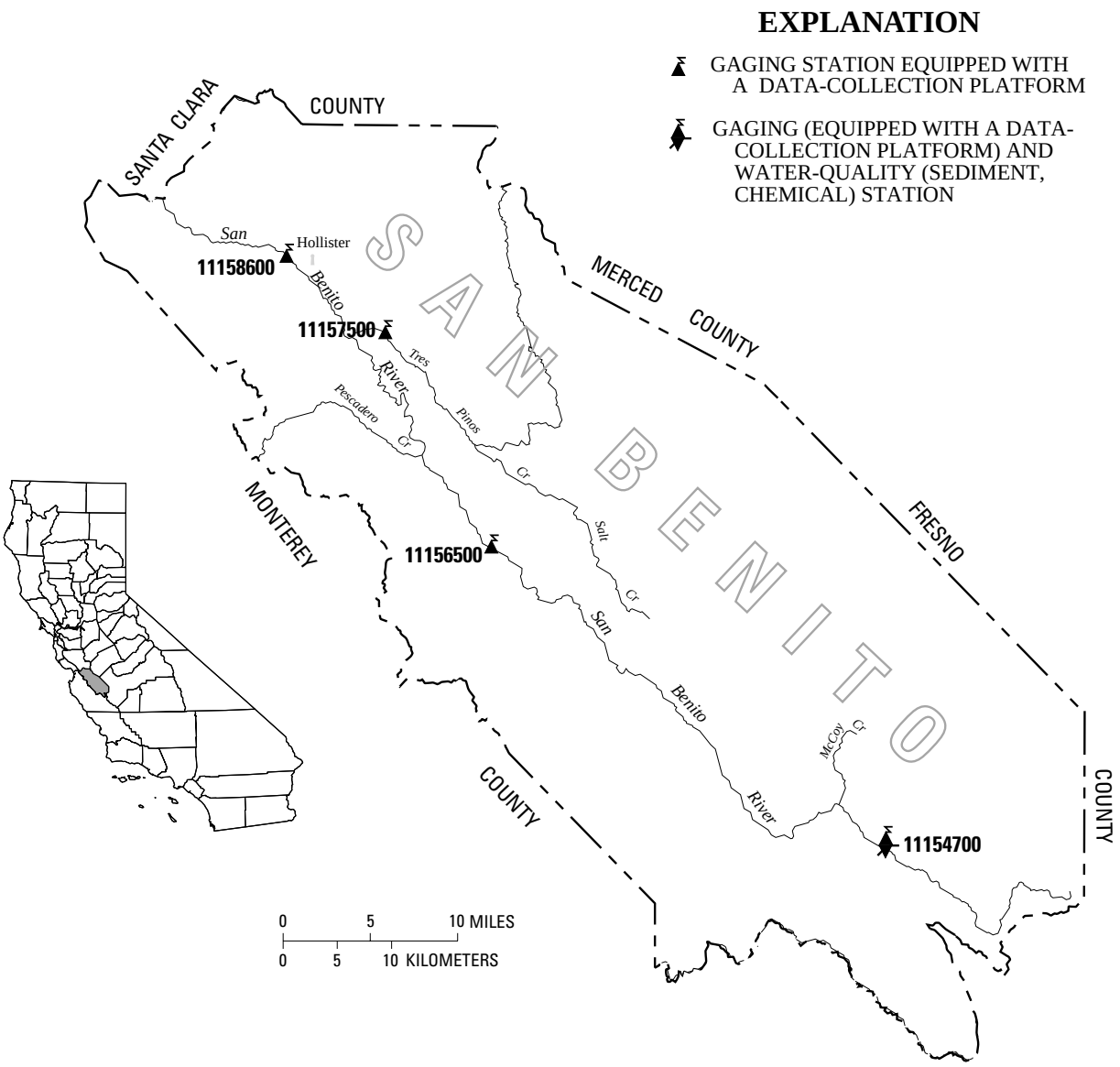

Figure 11. Location of discharge and water-quality stations in San Benito County.

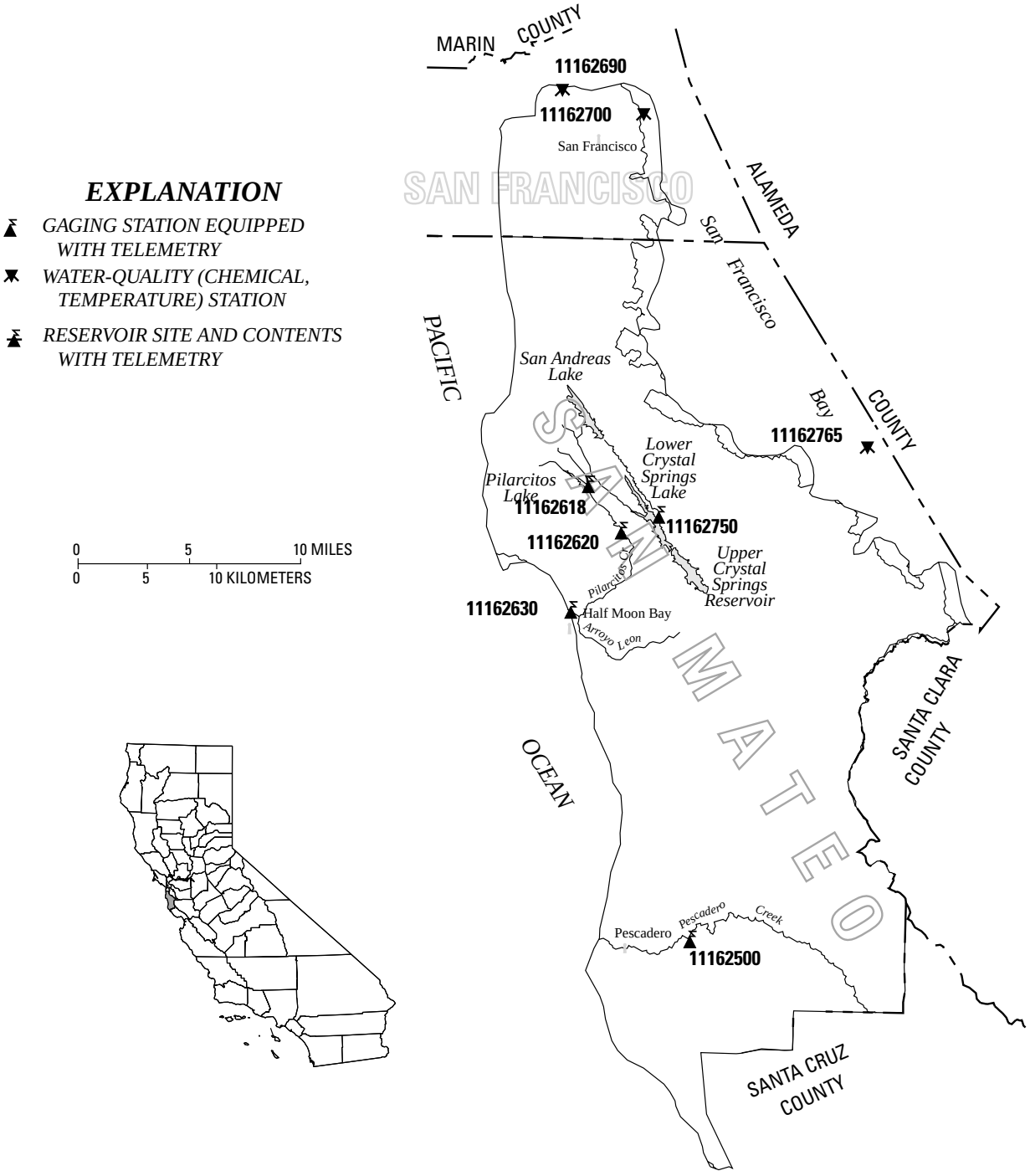

Figure 12. Location of discharge and water-quality stations in San Francisco and San Mateo Counties.

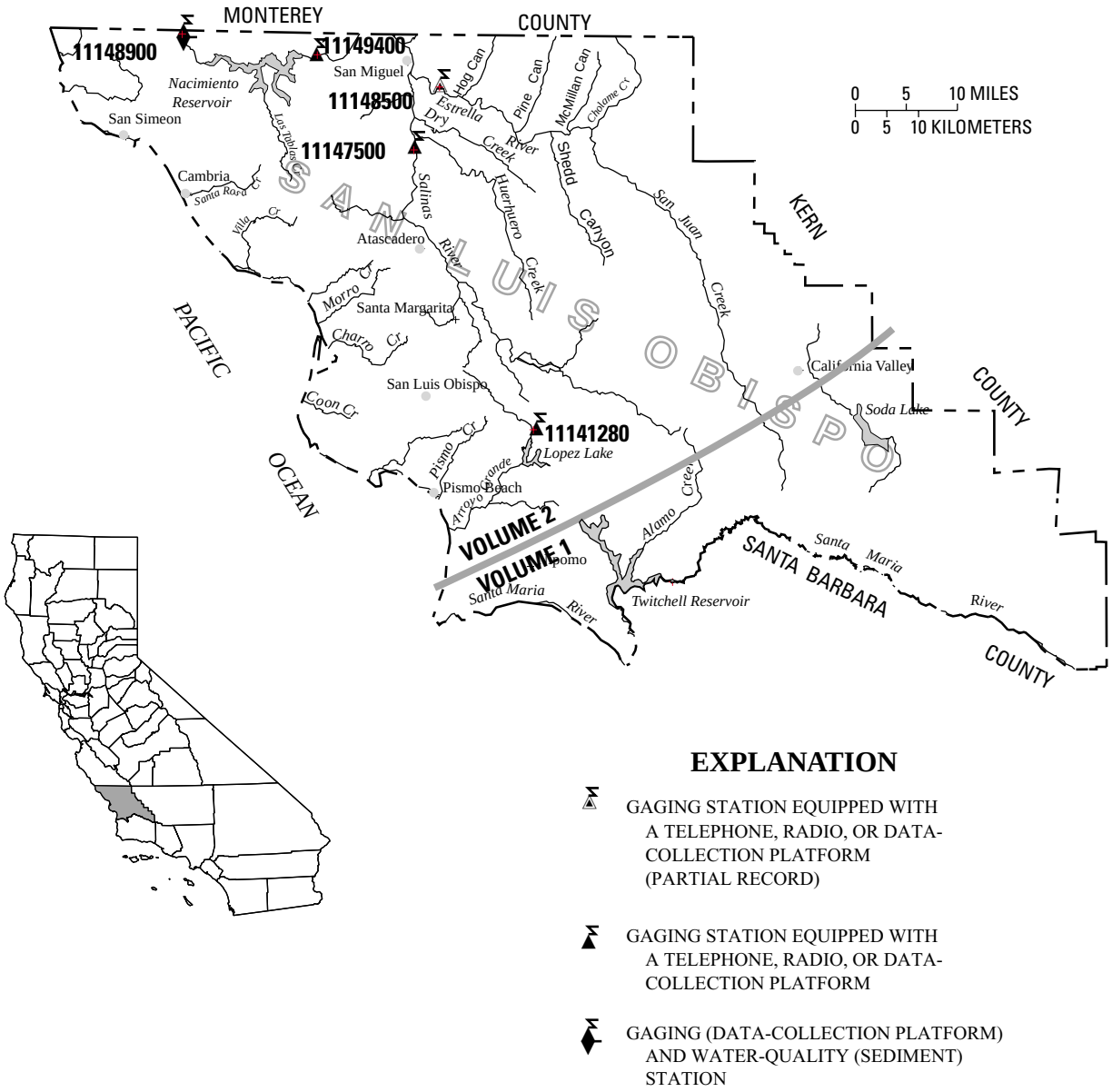

Figure 13. Location of discharge and water-quality stations in San Luis Obispo County.

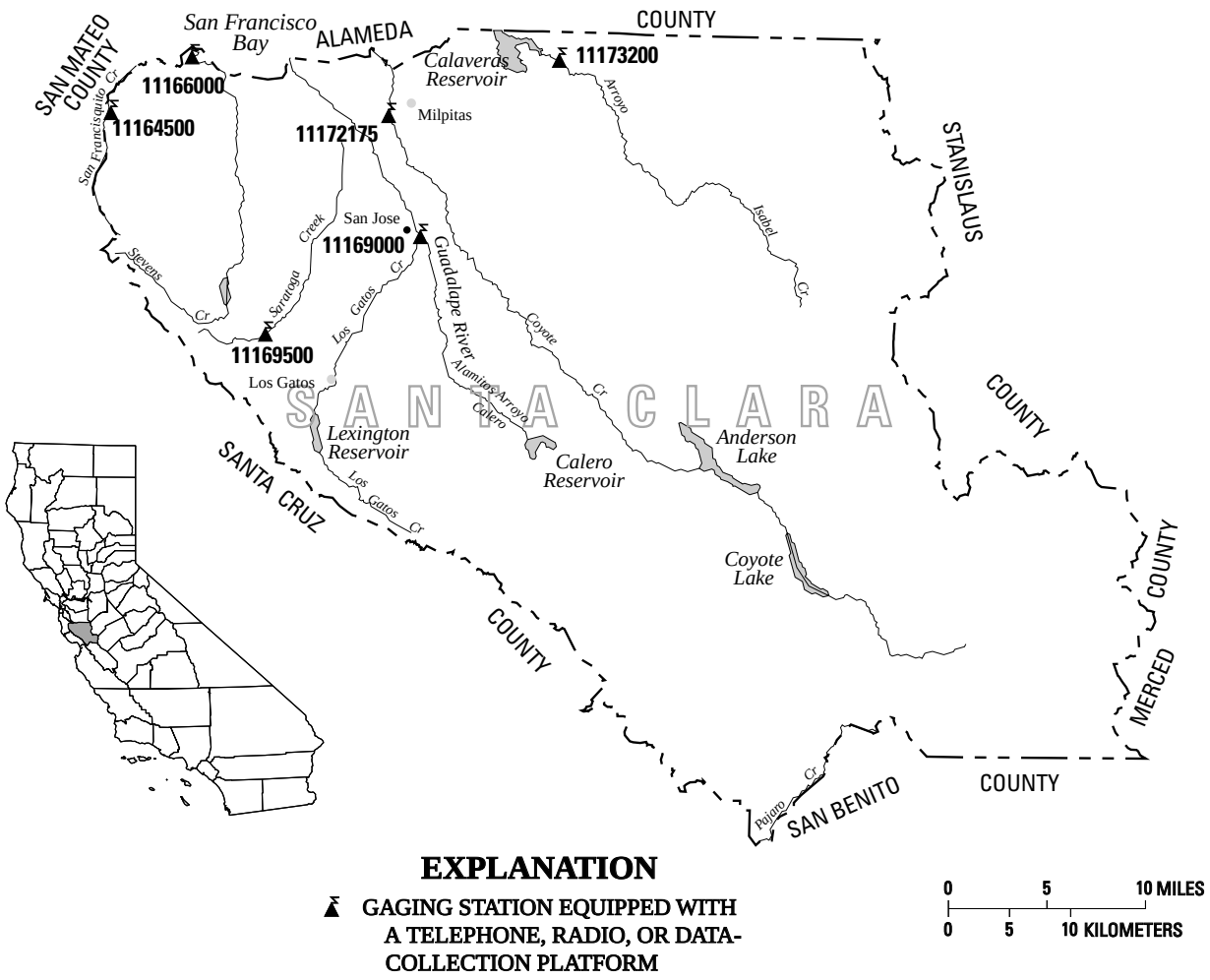

Figure 14. Location of discharge stations in Santa Clara County.

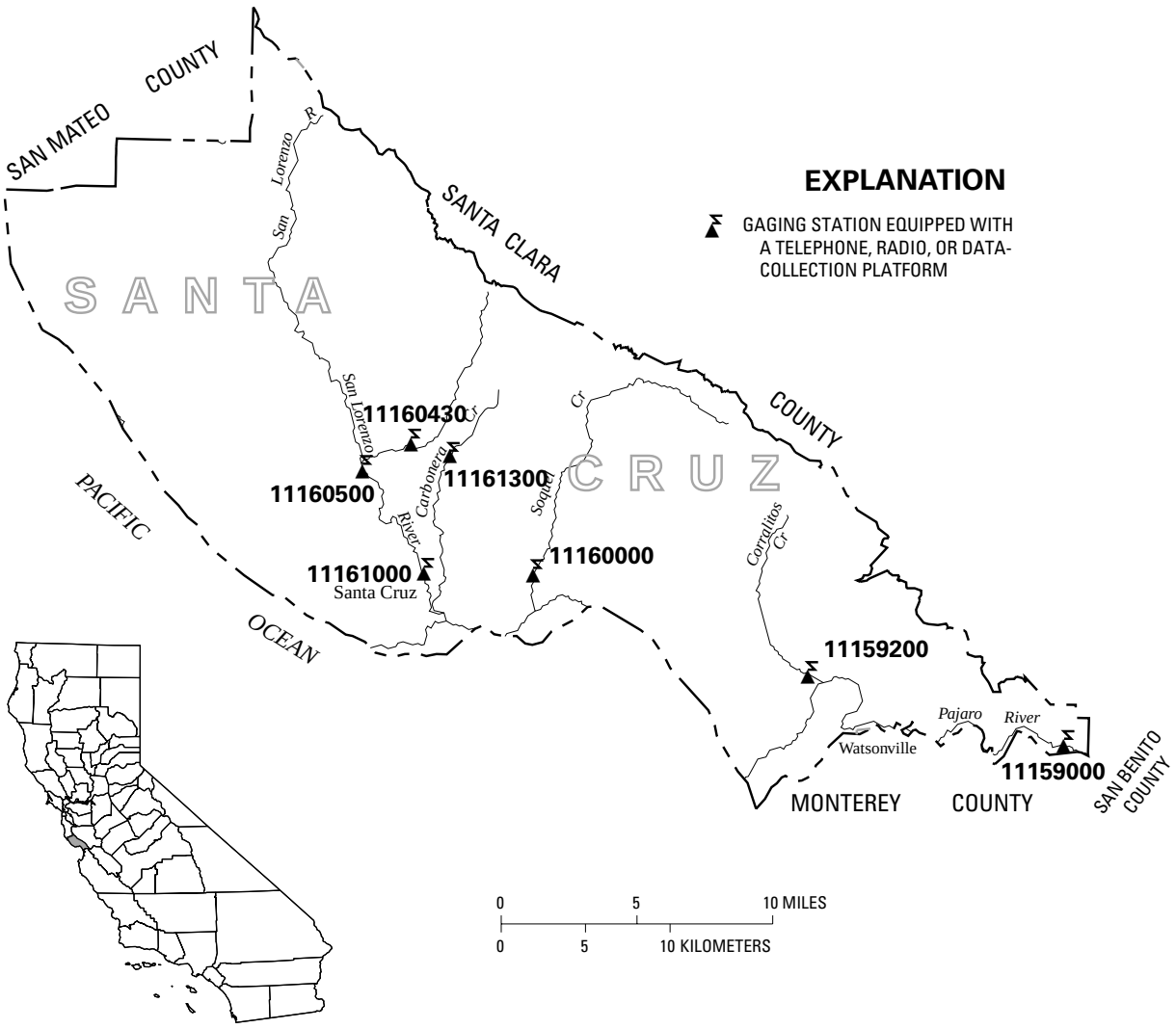

Figure 15. Location of discharge stations in Santa Cruz County.

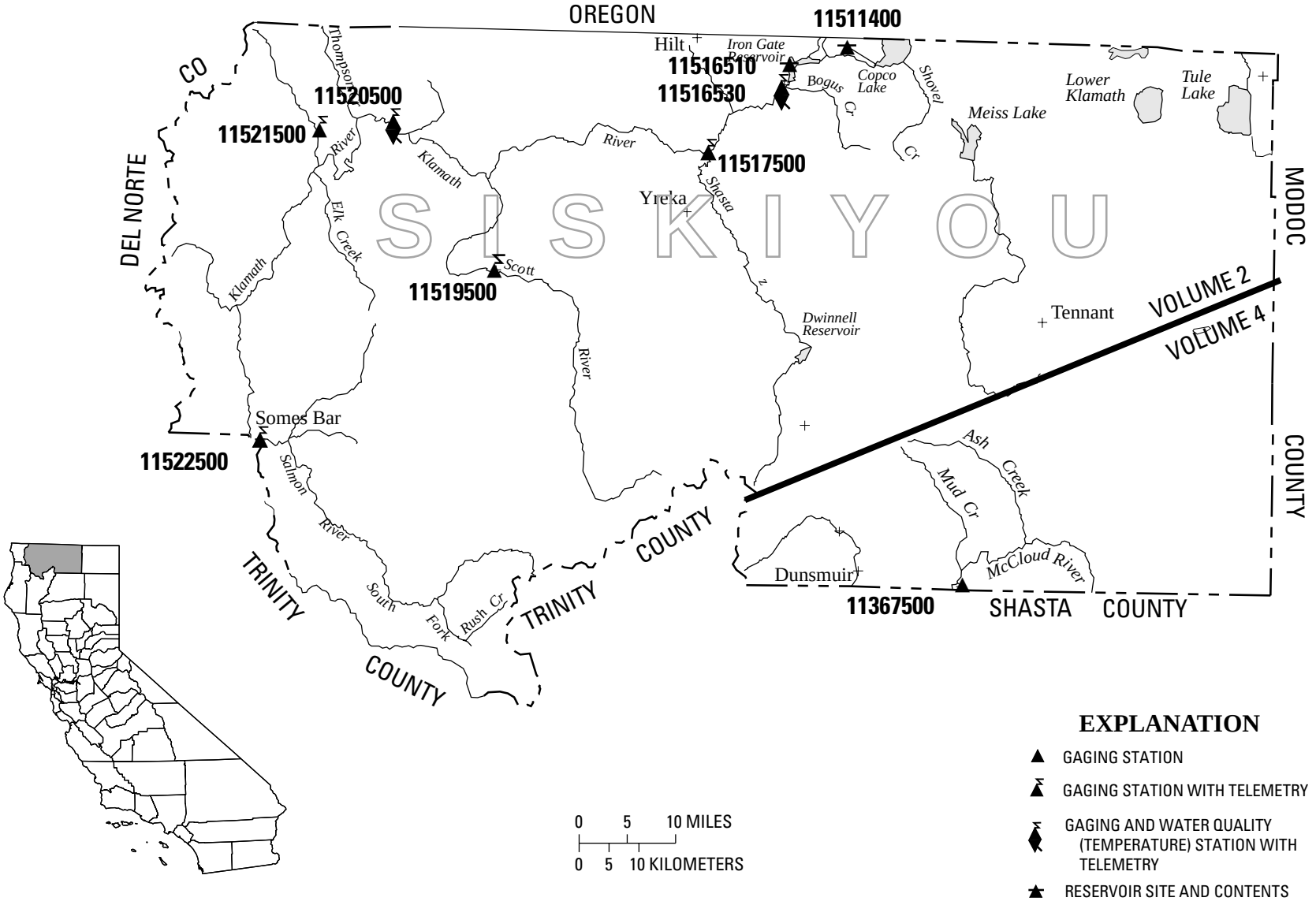

Figure 16. Location of discharge and water-quality stations in Siskiyou County.
(NOTE: Records for station 11367500 published in volume 4.)

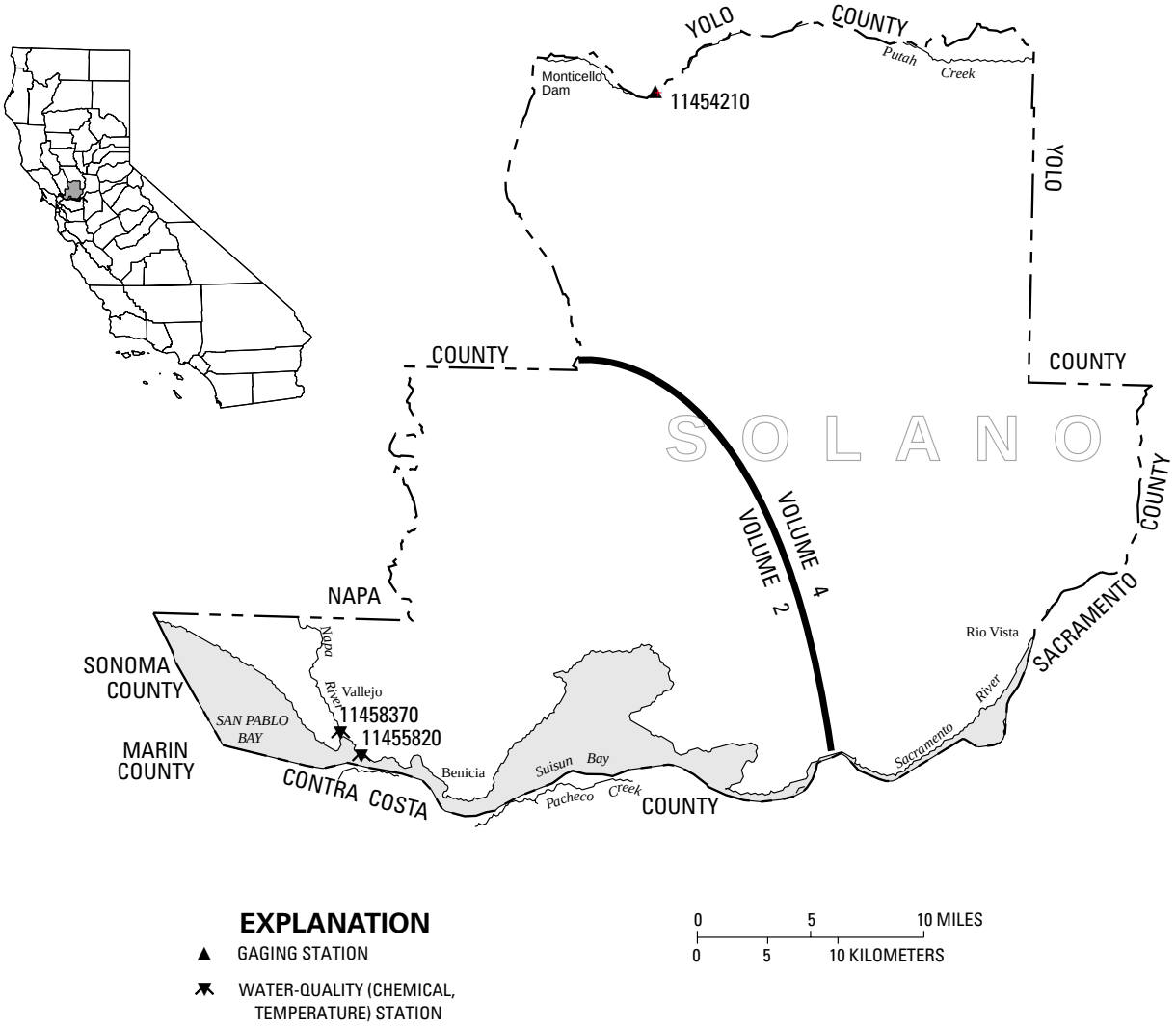

Figure 17. Location of discharge and water-quality stations in Solano County.
(NOTE: Records for station 11454210 published in volume 4.)

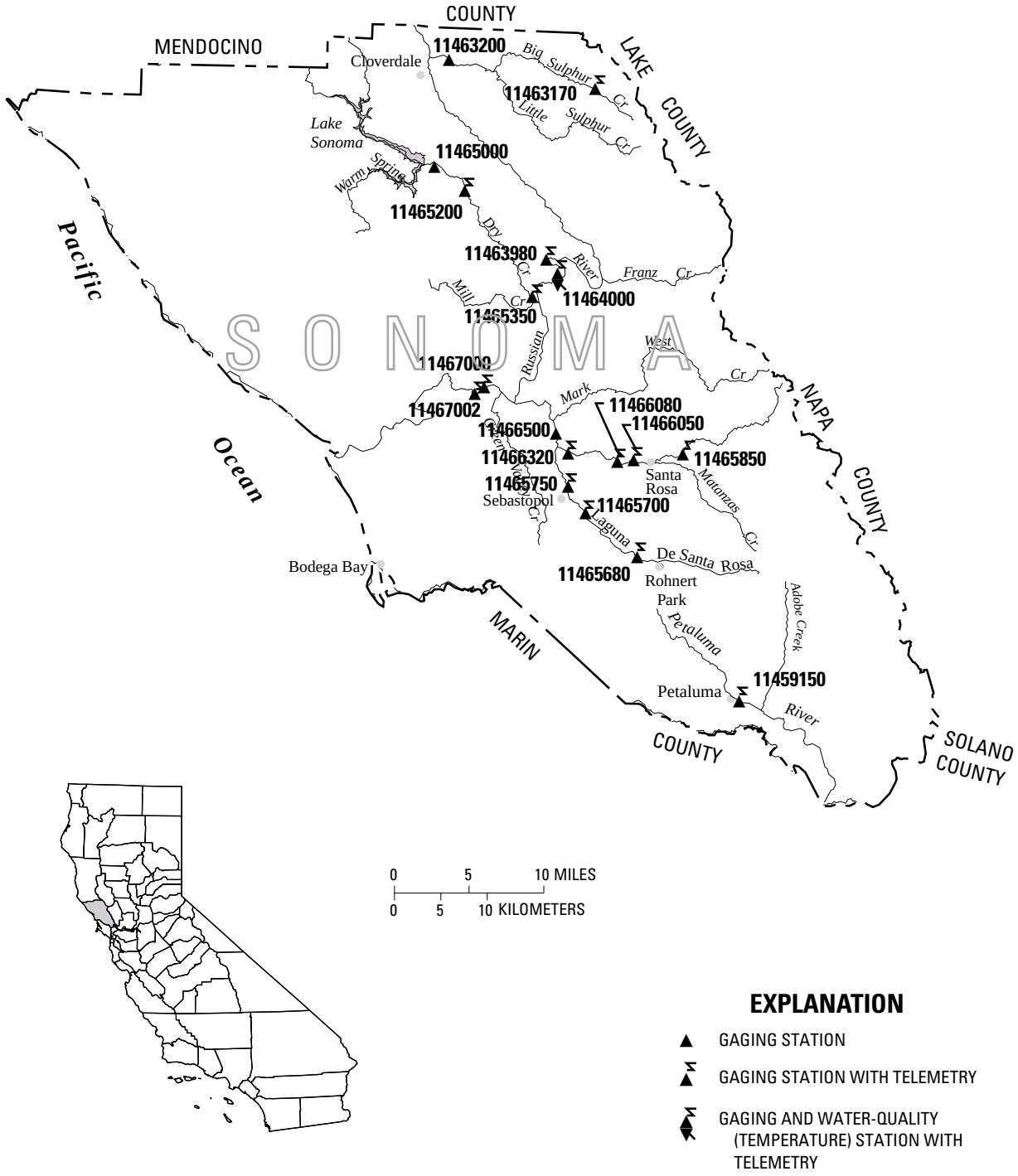

Figure 18. Location of discharge and water-quality stations in Sonoma County.

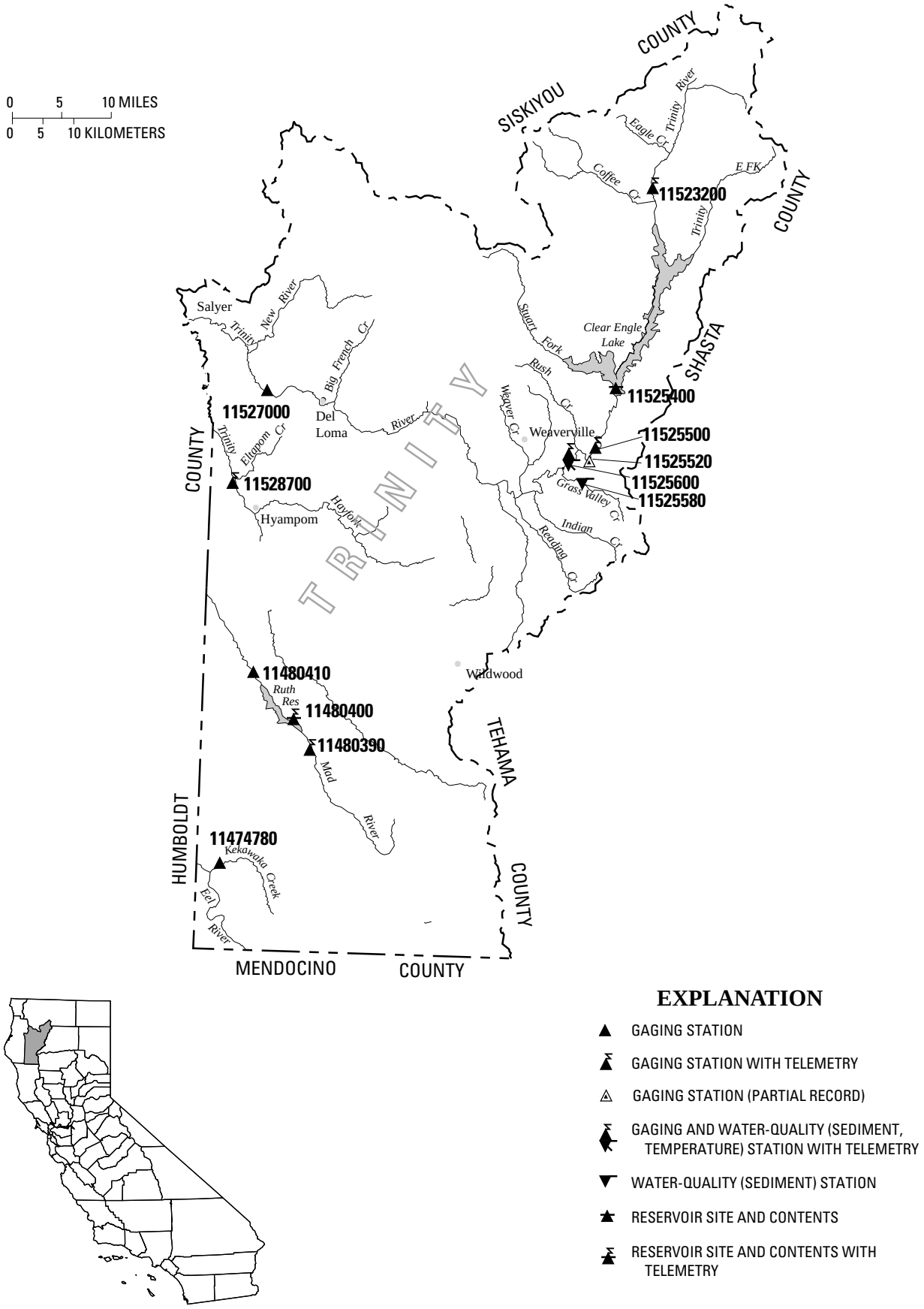

Figure 19. Location of discharge and water-quality stations in Trinity County.

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

Remark Codes

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

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

Dissolved Trace-Element Concentrations

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

Change in National Trends Network Procedures

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

Data Precision

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

ARROYO GRANDE BASIN

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CA

LOCATION.—Lat 35°14'08", long 120°28'17", in SE 1/4 sec.19, T.31 S., R.14 E., San Luis Obispo County, Hydrologic Unit 18060006, on left bank 3.4 mi north of Lopez Lake Spillway and 9.2 mi northeast of Arroyo Grande.

DRAINAGE AREA.—20.9 mi^2.

PERIOD OF RECORD.—July 1967 to current year.
CHEMICAL DATA: Water year 1977.
WATER TEMPERATURE: Water years 1968–72.
SEDIMENT DATA: Water years 1968–72.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 580 ft above sea level, from topographic map. Prior to Oct. 31, 1984, at site 0.4 mi downstream at different datum.

REMARKS.—Records fair. Small diversions upstream from station for domestic use.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,830 ft^3/s, Jan. 25, 1969, gage height, 9.26 ft in gage well, 10.8 ft from floodmarks, site and datum then in use, from rating curve extended above 300 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 10.12 ft, Feb. 3, 1998; minimum daily discharge, 0.30 ft^3/s, Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1200	378	9.13	Feb. 21	1730	284	8.76

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.9	3.6	3.4	5.4	30	12	12	4.1	3.5	3.0	3.1
2	3.1	2.9	3.5	3.4	5.0	27	12	10	4.3	3.6	3.0	2.3
3	3.3	2.9	3.6	3.4	5.2	25	11	9.5	4.4	3.7	3.0	2.3
4	3.3	2.9	3.8	3.4	7.2	23	e10	9.4	4.3	3.7	3.1	2.4
5	3.2	3.0	3.8	3.4	5.9	27	10	9.2	3.9	3.6	2.8	2.4
6	3.2	3.1	3.9	3.5	5.4	28	9.5	9.1	3.7	3.5	2.6	2.4
7	3.2	3.1	3.5	3.5	4.9	26	9.5	8.7	3.7	3.5	3.0	2.4
8	3.1	4.9	3.1	3.5	4.5	34	9.0	8.2	4.9	3.5	e3.0	2.6
9	3.0	3.8	3.3	3.5	4.3	33	8.9	7.5	4.9	4.0	3.1	2.3
10	3.1	3.6	3.3	3.4	12	29	8.4	6.9	4.8	4.2	2.9	2.6
11	3.1	3.6	3.3	3.4	20	26	8.1	6.9	4.7	4.1	2.6	2.3
12	3.0	3.4	3.3	3.4	95	24	10	6.9	4.3	3.9	2.5	2.3
13	3.0	3.4	3.3	3.4	158	23	13	6.8	3.9	3.7	2.4	2.0
14	3.1	3.3	3.2	3.4	258	21	16	6.3	3.7	3.4	2.2	1.9
15	3.3	3.3	3.2	3.3	58	20	15	6.4	3.8	3.4	1.7	2.2
16	3.3	3.4	3.2	3.8	32	19	15	7.5	3.9	3.7	1.7	2.4
17	3.3	4.0	3.3	4.1	28	18	31	6.3	4.2	3.6	1.6	3.1
18	3.2	3.6	3.2	6.4	22	17	24	5.6	4.5	3.3	1.6	2.9
19	3.1	4.0	3.1	5.2	20	17	20	5.2	5.9	3.1	1.8	2.8
20	3.1	4.5	3.3	4.6	22	16	18	4.9	5.5	3.1	2.0	3.0
21	2.9	3.7	3.4	4.4	126	16	17	4.9	5.0	3.4	2.4	3.6
22	2.9	3.4	3.3	4.3	90	15	16	4.6	4.8	3.2	2.7	4.2
23	3.0	3.4	3.3	5.5	109	15	16	4.6	4.8	3.4	3.0	4.0
24	3.0	3.6	3.3	6.5	55	15	15	5.1	4.4	3.5	3.0	3.7
25	3.1	3.4	3.3	6.8	36	14	15	5.0	4.4	3.4	2.7	3.4
26	3.1	3.4	3.4	5.7	28	14	14	4.5	3.7	3.0	2.6	3.2
27	3.1	3.5	3.4	5.2	57	14	13	4.1	3.6	3.2	2.8	3.3
28	3.1	3.6	3.4	5.1	48	13	13	4.0	3.6	3.4	3.0	3.1
29	3.0	3.6	3.4	4.9	36	13	13	4.4	3.5	3.3	2.9	3.0
30	3.0	3.6	3.4	5.8	---	12	12	4.5	3.4	3.1	2.8	2.8
31	3.0	---	3.3	6.3	---	12	---	4.3	---	3.1	3.0	---
TOTAL	96.2	104.8	104.7	135.9	1357.8	636	414.4	203.3	128.6	108.1	80.5	84.0
MEAN	3.10	3.49	3.38	4.38	46.8	20.5	13.8	6.56	4.29	3.49	2.60	2.80
MAX	3.3	4.9	3.9	6.8	258	34	31	12	5.9	4.2	3.1	4.2
MIN	2.9	2.9	3.1	3.3	4.3	12	8.1	4.0	3.4	3.0	1.6	1.9
AC-FT	191	208	208	270	2690	1260	822	403	255	214	160	167

e Estimated.

ARROYO GRANDE BASIN

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.08	4.43	7.38	22.2	32.1	28.2	14.6	7.96	5.16	3.78	3.15	2.91
MAX	9.12	13.6	34.2	145	169	133	65.2	46.1	21.3	14.7	10.2	9.40
(WY)	1984	1984	1997	1969	1998	1983	1983	1983	1998	1998	1998	1998
MIN	1.03	1.23	1.58	2.00	2.00	2.46	2.08	1.75	1.38	.72	.44	.82
(WY)	1978	1978	1991	1991	1991	1977	1977	1990	1972	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1967 - 2000	
ANNUAL TOTAL	2296.4		3454.3			
ANNUAL MEAN	6.29		9.44		11.1	
HIGHEST ANNUAL MEAN					37.3	1983
LOWEST ANNUAL MEAN					1.89	1977
HIGHEST DAILY MEAN	88	Feb 9	258	Feb 14	1360	Jan 25 1969
LOWEST DAILY MEAN	2.3	Aug 20	1.6	Aug 17	.30	Aug 1 1977
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 19	1.8	Aug 14	.34	Jul 28 1977
INSTANTANEOUS PEAK FLOW			378	Feb 14	2830	Jan 25 1969
INSTANTANEOUS PEAK STAGE			9.13	Feb 14	10.12	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	4550		6850		8070	
10 PERCENT EXCEEDS	11		20		19	
50 PERCENT EXCEEDS	4.0		3.7		4.0	
90 PERCENT EXCEEDS	3.0		2.9		1.6	

11143000 BIG SUR RIVER NEAR BIG SUR, CA

LOCATION.—Lat 36°14'45", long 121°46'20", in SW 1/4 SW 1/4 sec.29, T.19 S., R.2 E., Monterey County, Hydrologic Unit 18060006, on right bank at downstream side of bridge, 0.4 mi upstream from Post Creek, and 2.6 mi southeast of town of Big Sur.

DRAINAGE AREA.—46.5 mi^2.

PERIOD OF RECORD.—March 1950 to current year. Prior to October 1959, published as Sur River at Big Sur.
CHEMICAL DATA: Water year 1977.
WATER TEMPERATURE: Water years 1966–79.

REVISED RECORDS.—WSP 1445: 1952(P), 1953(M). WSP 1715: 1951, drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 240 ft above sea level, from topographic map. Prior to Oct. 1, 1951, nonrecording gage at site 0.9 mi downstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,700 ft^3/s, Jan. 5, 1978, gage height, 14.30 ft, from rating curve extended above 6,800 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 2.6 ft^3/s, Aug. 23, 1977, Sept. 9, Oct. 29, and Nov. 5, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 23	1830	2,780	8.88	Feb. 23	0215	1,710	7.87
Feb. 14	0915	4,440	10.18				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	e17	19	21	212	528	147	83	46	39	30	24
2	e20	e17	18	22	187	472	142	82	49	38	28	28
3	e20	e17	17	21	198	424	138	81	48	40	25	25
4	e19	e17	17	21	192	388	134	79	49	40	24	23
5	e19	e18	17	21	186	459	130	79	48	38	26	21
6	e19	e22	17	20	181	442	126	78	48	38	26	20
7	e19	24	17	20	167	421	122	82	47	36	26	20
8	e18	40	17	19	155	549	118	87	57	36	26	19
9	e18	21	18	19	149	534	115	79	50	36	27	19
10	e18	18	18	19	407	492	113	76	47	35	26	19
11	e18	17	18	21	657	452	109	71	46	34	25	18
12	e18	17	18	24	1140	416	e108	66	43	34	27	18
13	e18	16	18	22	1760	383	e107	62	40	35	27	18
14	e18	16	18	20	2990	354	e107	66	40	33	26	20
15	e18	15	19	20	1630	328	e107	71	40	32	24	22
16	e18	17	19	55	1110	306	e106	74	41	31	23	20
17	e17	20	19	35	799	286	206	64	42	31	22	18
18	e17	17	19	365	609	268	142	59	43	29	22	20
19	e17	54	18	65	496	252	122	57	44	29	20	19
20	e17	39	19	50	514	241	110	55	43	27	19	19
21	e17	21	19	30	582	228	104	53	40	25	20	20
22	e17	18	19	20	512	216	102	51	40	25	20	26
23	e17	17	19	1270	1060	206	98	50	41	28	21	26
24	e17	16	20	1610	787	197	95	51	43	25	21	23
25	e17	16	20	1380	652	189	92	50	45	24	20	21
26	e17	15	20	525	551	183	90	49	42	25	20	18
27	e17	15	20	319	738	178	88	48	41	27	20	18
28	e20	16	20	239	662	172	87	47	40	26	20	19
29	e17	16	20	194	598	167	86	46	39	27	21	19
30	e17	18	20	295	---	160	84	45	39	31	22	17
31	e17	---	21	252	---	153	---	45	---	33	23	---
TOTAL	556	607	578	7014	19881	10044	3435	1986	1321	987	727	617
MEAN	17.9	20.2	18.6	226	686	324	114	64.1	44.0	31.8	23.5	20.6
MAX	20	54	21	1610	2990	549	206	87	57	40	30	28
MIN	17	15	17	19	149	153	84	45	39	24	19	17
AC-FT	1100	1200	1150	13910	39430	19920	6810	3940	2620	1960	1440	1220

e Estimated.

11143000 BIG SUR RIVER NEAR BIG SUR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.5	44.6	103	246	292	227	145	68.0	37.4	24.1	17.7	15.5
MAX	86.8	302	449	1047	1329	964	843	333	119	71.4	43.0	39.4
(WY)	1963	1951	1956	1997	1998	1983	1958	1983	1998	1998	1998	1983
MIN	5.08	4.97	7.52	8.27	11.4	16.8	9.15	8.70	6.17	4.94	3.80	4.52
(WY)	1991	1991	1991	1991	1977	1977	1977	1977	1977	1977	1977	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	25406		47753			
ANNUAL MEAN	69.6		130		102	
HIGHEST ANNUAL MEAN					319	1983
LOWEST ANNUAL MEAN					10.0	1977
HIGHEST DAILY MEAN	1230	Feb 9	2990	Feb 14	4150	Mar 10 1995
LOWEST DAILY MEAN	15	Nov 15	15	Nov 15	2.6	Aug 23 1977
ANNUAL SEVEN-DAY MINIMUM	16	Nov 23	16	Nov 23	2.9	Nov 4 1990
INSTANTANEOUS PEAK FLOW			4440	Feb 14	10700	Jan 5 1978
INSTANTANEOUS PEAK STAGE			10.18	Feb 14	14.30	Jan 5 1978
INSTANTANEOUS LOW FLOW					2.6	Aug 23 1977
ANNUAL RUNOFF (AC-FT)	50390		94720		74200	
10 PERCENT EXCEEDS	165		384		229	
50 PERCENT EXCEEDS	26		32		29	
90 PERCENT EXCEEDS	17		17		9.6	

11143200 CARMEL RIVER AT ROBLES DEL RIO, CA

LOCATION.—Lat 36°28'28", long 121°43'40", in Los Laureles Grant, Monterey County, Hydrologic Unit 18060012, on right bank, on downstream side of Rosie's Bridge at Robles del Rio, 0.2 mi downstream from Hitchcock Canyon, and 11 mi southeast of town of Carmel.

DRAINAGE AREA.—193 mi^2.

PERIOD OF RECORD.—August 1957 to current year.

REVISED RECORDS.—WSP 1715: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 268.57 ft above sea level (based on Monterey County benchmark). Prior to June 1981, at site 150 ft upstream at same datum.

REMARKS.—Records fair. Low flow regulated by Los Padres Reservoir 11 mi upstream, usable capacity, 1,970 acre-ft, and San Clemente Reservoir 4 mi upstream, usable capacity, 76 acre-ft. There is diversion from San Clemente Reservoir for municipal supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,000 ft^3/s, Mar. 10, 1995, gage height, 12.90 ft; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, reached a stage of 11.7 ft, from floodmarks, discharge, 6,930 ft^3/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 23	2030	1,790	3.89	Feb. 23	0615	1,340	3.37
Feb. 14	1245	3,160	5.03				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	7.1	9.6	12	146	533	135	83	39	16	12	9.2
2	7.2	7.7	9.9	12	131	466	131	81	33	16	12	10
3	7.6	8.8	10	12	140	409	126	78	28	15	11	9.6
4	7.8	9.2	9.9	12	151	355	124	74	28	15	10	8.3
5	7.8	9.1	10	12	132	657	122	71	26	16	10	7.9
6	7.7	9.2	10	12	137	646	116	69	26	16	10	7.7
7	7.4	10	10	12	130	510	108	68	26	18	10	7.0
8	7.1	12	10	11	122	599	113	69	32	18	10	7.1
9	7.0	10	e10	12	125	621	111	64	34	18	10	7.2
10	6.7	8.7	e10	12	150	554	109	62	30	17	9.1	8.2
11	6.8	8.3	e10	13	277	496	107	59	28	15	8.9	8.5
12	6.9	8.2	e10	13	784	455	105	56	25	14	8.7	8.0
13	6.9	8.2	e10	13	975	407	105	54	24	13	9.0	7.8
14	7.2	8.6	e10	14	2230	376	109	51	23	13	8.3	7.4
15	7.1	8.4	10	14	1290	342	106	54	27	13	8.8	8.1
16	6.4	8.2	10	19	838	314	107	59	26	14	8.9	7.7
17	6.5	8.3	10	22	589	285	277	53	26	14	8.9	7.8
18	6.5	8.7	10	36	435	263	178	48	26	13	8.7	6.6
19	6.4	9.4	10	36	350	246	145	44	27	13	8.8	6.4
20	6.3	10	10	32	349	232	130	40	26	13	9.3	6.6
21	6.4	10	10	32	554	217	122	40	24	13	10	7.4
22	7.0	9.8	10	35	448	204	115	44	23	14	11	8.2
23	7.2	9.8	10	609	951	192	111	43	23	14	11	8.3
24	7.2	9.7	10	1440	738	184	106	42	23	14	9.3	7.8
25	6.9	9.7	11	1080	588	176	101	41	22	15	7.4	8.8
26	7.1	9.9	11	448	476	166	97	38	21	14	7.5	9.3
27	7.2	9.9	11	240	765	158	93	39	19	13	8.4	9.2
28	7.4	9.8	11	172	737	159	90	44	17	13	8.5	9.2
29	7.0	9.9	11	139	620	153	88	41	17	13	8.4	8.9
30	6.7	10	11	153	---	148	85	40	14	13	8.3	8.5
31	6.5	---	11	176	---	142	---	39	---	12	8.2	---
TOTAL	217.0	276.6	316.4	4855	15358	10665	3572	1688	763	448	290.4	242.7
MEAN	7.00	9.22	10.2	157	530	344	119	54.5	25.4	14.5	9.37	8.09
MAX	7.8	12	11	1440	2230	657	277	83	39	18	12	10
MIN	6.3	7.1	9.6	11	122	142	85	38	14	12	7.4	6.4
AC-FT	430	549	628	9630	30460	21150	7090	3350	1510	889	576	481

e Estimated.

11143200 CARMEL RIVER AT ROBLES DEL RIO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.00	14.0	58.3	208	342	278	168	58.7	20.9	7.55	2.95	2.54
MAX	23.6	135	480	899	2308	1855	1071	410	130	62.5	31.1	20.0
(WY)	1999	1984	1984	1997	1998	1983	1958	1983	1998	1998	1998	1998
MIN	.000	.000	.000	.26	.000	.011	.000	.000	.000	.000	.000	.000
(WY)	1960	1960	1960	1991	1977	1977	1977	1977	1961	1959	1957	1957

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	24814.2		38692.1			
ANNUAL MEAN	68.0		106		95.7	
HIGHEST ANNUAL MEAN					442	1983
LOWEST ANNUAL MEAN					.050	1977
HIGHEST DAILY MEAN	1080	Feb 9	2230	Feb 14	9000	Feb 3 1998
LOWEST DAILY MEAN	6.1	Aug 12	6.3	Oct 20	.00	Aug 1 1957
ANNUAL SEVEN-DAY MINIMUM	6.3	Aug 8	6.5	Oct 16	.00	Aug 1 1957
INSTANTANEOUS PEAK FLOW			3160	Feb 14	16000	Mar 10 1995
INSTANTANEOUS PEAK STAGE			5.03	Feb 14	12.90	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	49220		76750		69310	
10 PERCENT EXCEEDS	180		344		230	
50 PERCENT EXCEEDS	20		14		7.2	
90 PERCENT EXCEEDS	6.9		7.4		.00	

11143250 CARMEL RIVER NEAR CARMEL, CA

LOCATION.—Lat 36°32'21", long 121°52'46", in Canada de la Segunda Grant, Monterey County, Hydrologic Unit 18060012, on left bank, 0.6 mi downstream from Potrero Canyon, and about 3 mi east of Carmel (revised).

DRAINAGE AREA.—247.23 mi^2.

PERIOD OF RECORD.—August 1962 to current year.
CHEMICAL DATA: Water years 1954–66.
SEDIMENT DATA: Water years 1990, 1991–97.

GAGE.—Water-stage recorder. Prior to Nov. 16, 1998, at site 1,650 ft upstream at different datum. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.—Records good except Feb. 14 to May 8 and estimated periods, which are fair. Low flow regulated by Los Padres Reservoir, usable capacity, 1,970 acre-ft, and San Clemente Reservoir, usable capacity, 76 acre-ft. There are diversions from San Clemente Reservoir for municipal supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,000 ft^3/s, Mar. 10, 1995, gage height, 20.85 ft, at datum then in use; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1445	2,450	11.81	Mar. 05	2315	1,300	10.09
Feb. 23	0815	1,340	10.17				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.00	.00	163	611	140	75	32	8.9	.73	.00
2	.00	.00	e.00	.00	145	545	132	75	29	9.5	.00	.00
3	.00	.00	e.00	.00	137	497	124	73	29	9.0	.00	.00
4	.00	.00	e.00	.00	152	443	117	67	30	8.8	.00	.00
5	.00	.00	e.00	.00	130	863	114	66	29	9.5	.00	.00
6	.00	.00	e.00	.00	129	851	108	65	27	9.5	.00	.00
7	.00	.00	e.00	.00	121	654	94	61	25	8.7	.00	.00
8	.00	.00	e.00	.00	111	695	98	65	26	7.6	.00	.00
9	.00	.00	.00	.00	105	715	95	70	33	7.7	.00	.00
10	.00	.00	.00	.00	110	644	89	66	31	7.0	.00	.00
11	.00	.00	.00	.00	260	595	86	67	29	5.8	.00	.00
12	.00	e.00	.00	.00	716	551	82	61	28	5.0	.00	.00
13	.00	e.00	.00	.00	786	500	81	60	26	4.3	.00	.00
14	.00	e.00	.00	.00	1900	460	82	55	24	3.9	.00	.00
15	.00	e.00	.00	.00	1240	421	83	60	19	4.0	.00	.00
16	.00	e.00	.00	.00	925	387	78	70	18	4.3	.00	.00
17	.00	e.00	.00	.00	729	353	228	68	18	4.7	.00	.00
18	.00	e.00	.00	e5.5	594	326	180	60	19	4.7	.00	.00
19	.00	e.00	.00	e14	502	303	141	53	19	4.6	.00	.00
20	.00	e.00	.00	e14	475	285	125	48	19	4.7	.00	.00
21	.00	e.00	.00	e13	711	267	116	46	18	4.4	.00	.00
22	.00	e.00	.00	e15	604	247	109	41	16	4.0	.00	.00
23	.00	e.00	.00	312	973	230	105	38	15	4.2	.00	.00
24	.00	e.00	.00	1000	760	220	102	41	13	4.3	.00	.00
25	.00	e.00	.00	914	654	205	96	40	13	4.2	.00	.00
26	.00	e.00	.00	475	561	194	92	40	13	4.1	.00	.00
27	.00	e.00	.00	294	800	179	88	39	11	3.9	.00	.00
28	.00	e.00	.00	216	787	178	84	37	10	2.3	.00	.00
29	.00	e.00	.00	171	683	169	85	36	10	2.7	.00	.00
30	.00	e.00	.00	152	---	161	79	36	9.6	2.8	.00	.00
31	.00	---	.00	197	---	150	---	34	---	2.4	.00	---
TOTAL	0.00	0.00	0.00	3792.50	15963	12899	3233	1713	638.6	171.5	0.73	0.00
MEAN	.000	.000	.000	122	550	416	108	55.3	21.3	5.53	.024	.000
MAX	.00	.00	.00	1000	1900	863	228	75	33	9.5	.73	.00
MIN	.00	.00	.00	.00	105	150	78	34	9.6	2.3	.00	.00
AC-FT	.00	.00	.00	7520	31660	25590	6410	3400	1270	340	1.4	.00

e Estimated.

11143250 CARMEL RIVER NEAR CARMEL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.40	9.55	61.4	247	398	335	186	72.6	23.1	6.22	1.35	.71
MAX	22.3	110	479	1034	2360	2196	1006	533	161	75.2	27.3	15.9
(WY)	1984	1984	1983	1969	1998	1983	1982	1983	1998	1998	1998	1998
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1965	1965	1969	1977	1977	1977	1977	1977	1968	1966	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	24945.86		38411.33			
ANNUAL MEAN	68.3		105		110	
HIGHEST ANNUAL MEAN					508	1983
LOWEST ANNUAL MEAN					.000	1977
HIGHEST DAILY MEAN	1220	Feb 9	1900	Feb 14	9050	Feb 3 1998
LOWEST DAILY MEAN	.00	Jul 21	.00	Oct 1	.00	Oct 6 1962
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 21	.00	Oct 1	.00	Jul 9 1964
INSTANTANEOUS PEAK FLOW			2450	Feb 14	16000	Mar 10 1995
INSTANTANEOUS PEAK STAGE			11.81	Feb 14	20.85	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	49480		76190		79870	
10 PERCENT EXCEEDS	199		397		279	
50 PERCENT EXCEEDS	8.0		4.3		.90	
90 PERCENT EXCEEDS	.00		.00		.00	

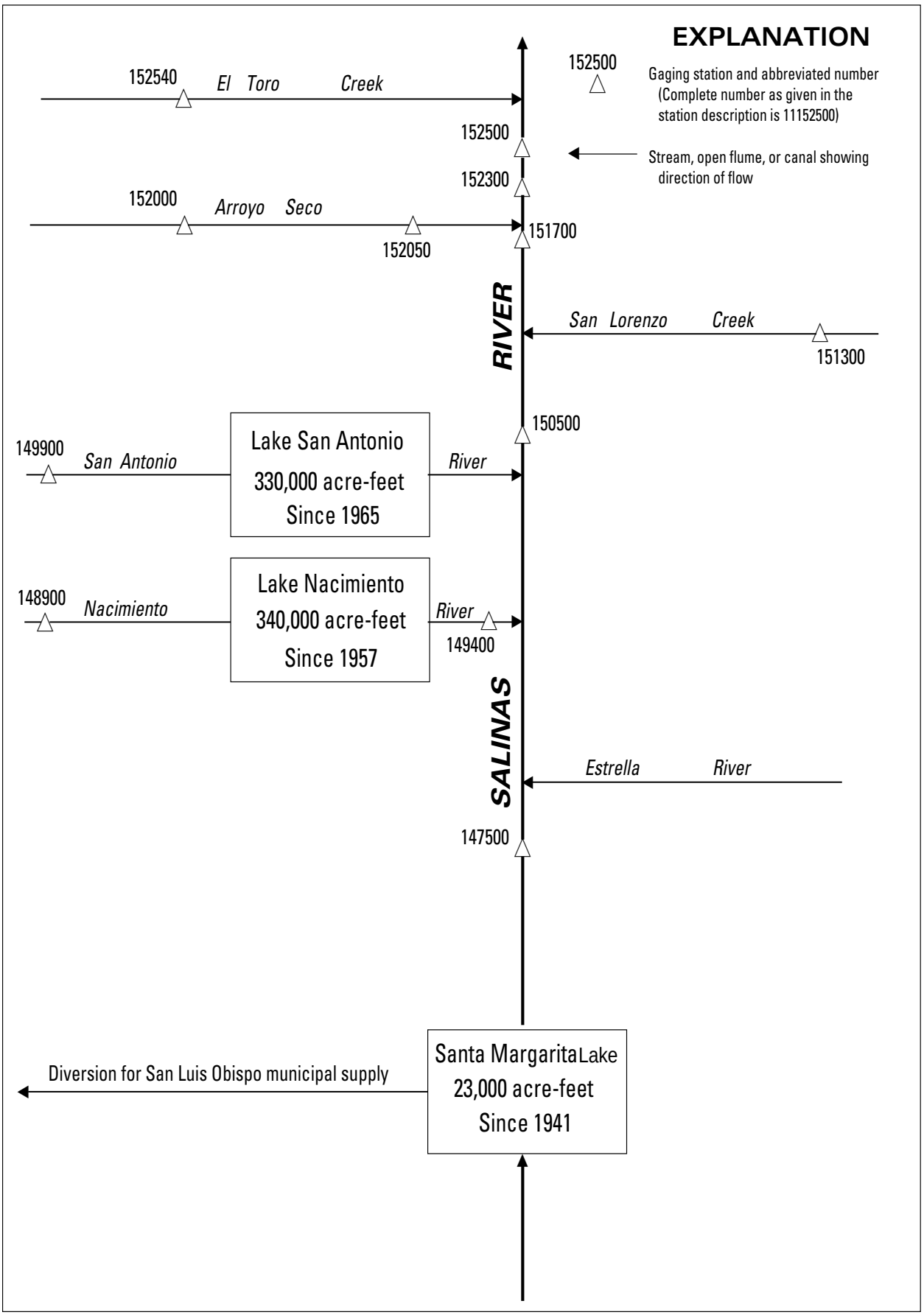

Figure 20. Diversions and storage in Salinas River Basin.

11147500 SALINAS RIVER AT PASO ROBLES, CA

LOCATION.—Lat 35°37'43", long 120°41'00", in Paso de Robles Grant, San Luis Obispo County, Hydrologic Unit 18060005, on left bank, at upstream side of 13th Street Bridge, in Paso Robles, and 3.5 mi upstream from Huerhuero Creek.

DRAINAGE AREA.—390 mi^2.

PERIOD OF RECORD.—October 1939 to September 1965, October 1969 to current year.
CHEMICAL DATA: Water years 1963–66.
SEDIMENT DATA: June 1990.

REVISED RECORDS.—WSP 981: 1942.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 670.61 ft above sea level. Prior to June 14, 1951, nonrecording gage at same site and datum.

REMARKS.—Records are poor. Low flows regulated by Santa Margarita Lake, 32 mi upstream, beginning in December 1941, usable capacity, 23,000 acre-ft. Small diversions for irrigation upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,400 ft^3/s, Mar. 10, 1995, gage height, 22.99 ft; no flow for many days in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 25, 1969, reached a stage of 23.8 ft, from floodmarks, discharge, 28,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 850 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1645	6,660	11.73	Feb. 23	1200	3,320	9.28

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	.00	503	74	24	.36	e.13	.00	.00
2	.00	.00	.00	e.00	.00	390	68	21	.33	e.12	.00	.00
3	.00	.00	.00	e.00	.00	352	63	19	.31	e.11	.00	.00
4	.00	.00	.00	e.00	.00	313	59	17	.31	e.10	.00	.00
5	.00	.00	.00	e.00	.00	323	56	15	.30	e.05	.00	.00
6	.00	.00	.00	e.00	.00	315	52	13	.30	e.00	.00	.00
7	.00	.00	.00	e.00	.00	283	e47	11	.28	e.00	.00	.00
8	.00	.00	.00	e.00	.00	563	e45	12	.28	e.00	.00	.00
9	.00	.00	.00	e.00	.27	654	e43	11	.30	e.00	.00	.00
10	.00	.00	.00	e.00	9.3	487	e40	10	.27	e.00	.00	.00
11	.00	.00	.00	e.00	220	384	e36	8.5	e.26	e.00	.00	.00
12	.00	.00	.00	e.00	882	322	e32	8.2	e.24	e.00	.00	.00
13	.00	.00	.00	e.00	1640	280	31	7.3	e.23	e.00	.00	.00
14	.00	.00	.00	e.00	4730	257	33	6.2	e.23	e.00	.00	.00
15	.00	.00	.00	.00	1490	248	35	5.3	e.22	e.00	.00	.00
16	.00	.00	.00	.13	685	226	34	6.8	e.21	e.00	.00	.00
17	.00	.00	.00	.14	592	202	146	7.7	e.20	e.00	.00	.00
18	.00	.00	.00	4.6	382	184	199	6.4	e.20	e.00	.00	.00
19	.00	.00	.00	.10	309	166	123	4.7	e.19	e.00	.00	.00
20	.00	.00	.00	.00	299	150	110	3.7	e.18	e.00	.00	.00
21	.00	.00	e.00	.00	959	134	97	3.1	e.18	e.00	.00	.00
22	.00	.00	e.00	.00	946	122	84	1.5	e.18	.00	.00	.00
23	.00	.00	e.00	.47	1790	111	74	1.2	e.17	.00	.00	.00
24	.00	.00	e.00	1.2	1020	106	65	.91	e.17	.00	.00	.00
25	.00	.00	e.00	1.2	630	95	56	.77	e.17	.00	.00	.00
26	.00	.00	e.00	.00	451	83	48	.70	e.16	.00	.00	.00
27	.00	.00	e.00	.00	1050	76	43	.69	e.16	.00	.00	.00
28	.00	.00	e.00	.00	925	83	34	.62	e.16	.00	.00	.00
29	.00	.00	e.00	.00	621	90	30	.51	e.15	.00	.00	.00
30	.00	.00	e.00	.00	---	88	27	.45	e.14	.00	.00	.00
31	.00	---	e.00	.00	---	80	---	.40	---	.00	.00	---
TOTAL	0.00	0.00	0.00	7.84	19630.57	7670	1884	228.65	6.84	0.51	0.00	0.00
MEAN	.000	.000	.000	.25	677	247	62.8	7.38	.23	.016	.000	.000
MAX	.00	.00	.00	4.6	4730	654	199	24	.36	.13	.00	.00
MIN	.00	.00	.00	.00	.00	76	27	.40	.14	.00	.00	.00
AC-FT	.00	.00	.00	16	38940	15210	3740	454	14	1.0	.00	.00

e Estimated.

11147500 SALINAS RIVER AT PASO ROBLES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.48	5.43	52.1	247	417	370	162	27.2	3.49	.28	.055	.88
MAX	117	86.0	581	2138	2884	2410	1980	338	64.2	4.84	1.91	44.0
(WY)	1943	1983	1983	1997	1998	1995	1958	1998	1998	1941	1942	1942
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1941	1940	1940	1948	1948	1961	1961	1959	1947	1940	1940	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	12414.21		29428.41			
ANNUAL MEAN	34.0		80.4		106	
HIGHEST ANNUAL MEAN					526	1983
LOWEST ANNUAL MEAN					.000	1961
HIGHEST DAILY MEAN	988	Feb 9	4730	Feb 14	19600	Mar 10 1995
LOWEST DAILY MEAN	.00	Jun 15	.00	Oct 1	.00	Nov 1 1939
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 15	.00	Oct 1	.00	Nov 1 1939
INSTANTANEOUS PEAK FLOW			6660	Feb 14	28400	Mar 10 1995
INSTANTANEOUS PEAK STAGE			11.73	Feb 14	22.99	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	24620		58370		76610	
10 PERCENT EXCEEDS	82		200		168	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA

LOCATION.—Lat 35°47'19", long 121°05'34", in SW 1/4 NE 1/4 sec.3, T.25 S., R.8 E., San Luis Obispo County, Hydrologic Unit 18060005, on left bank, just downstream from Sapaque Creek, and 1.4 mi south of Bryson.

DRAINAGE AREA.—162 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1971 to current year.

REVISED RECORDS.—WDR CA-82-2: Drainage area.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 57,600 ft^3/s, Jan. 14, 1993, gage height, 32.14 ft, from rating curve extended above 7,900 ft^3/s on basis of slope-area measurement at 32.00 ft gage height, maximum gage height, 35.15 ft, Mar. 10, 1995; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2330	10,100	18.89				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.06	4.0	297	771	97	43	12	1.4	.00	.00
2	.00	.00	.06	4.2	221	630	92	41	12	1.2	.00	.00
3	.00	.00	.05	4.2	184	549	87	39	11	1.0	.00	.00
4	.00	.00	.04	4.2	287	470	83	37	11	.85	.00	.00
5	.00	.00	.05	4.4	213	522	79	36	10	.76	.00	.00
6	.00	.00	.07	4.6	219	651	76	34	9.9	.78	.00	.00
7	.00	.00	.08	4.7	178	569	73	33	9.7	1.1	.00	.00
8	.00	.00	.09	4.7	150	1670	70	34	9.5	1.5	.00	.00
9	.00	.00	.11	4.6	130	1250	67	35	11	1.5	.00	.00
10	.00	.00	.13	4.6	990	889	65	32	12	1.5	.00	.00
11	.00	.00	.12	4.5	1740	707	63	31	11	1.4	.00	.00
12	.00	.00	.12	4.5	3300	596	60	30	9.7	1.2	.00	.00
13	.00	.00	.13	4.5	4470	510	57	29	8.8	1.0	.00	.00
14	.00	.00	.12	4.6	7150	440	59	28	7.9	.80	.00	.00
15	.00	.00	.13	4.5	2180	389	64	33	6.9	.68	.00	.00
16	.00	.00	.13	7.0	1280	339	60	38	5.8	.56	.00	.00
17	.00	.00	.14	17	966	299	363	33	5.1	.46	.00	.00
18	.00	.00	.15	764	702	266	192	30	4.9	.36	.00	.00
19	.00	.05	.15	266	563	242	113	28	5.0	.30	.00	.00
20	.00	.17	.15	111	864	221	89	26	5.0	.26	.00	.00
21	.00	.06	.15	70	3510	201	78	24	4.9	.21	.00	.00
22	.00	.01	.15	47	1720	183	70	22	4.0	.18	.00	.00
23	.00	.00	.15	1010	3190	168	65	20	3.7	.17	.00	.00
24	.00	.00	.15	1620	1420	157	61	18	3.4	.14	.00	.00
25	.00	.00	.16	2260	985	148	57	18	3.1	.11	.00	.00
26	.00	.01	.16	547	743	139	54	18	3.0	.10	.00	.00
27	.00	.03	.16	301	1810	131	51	17	2.8	.08	.00	.00
28	.00	.03	.16	209	1360	126	48	16	2.5	.07	.00	.00
29	.00	.04	.16	153	966	118	46	15	2.1	.04	.00	.00
30	.00	.07	.18	554	---	111	45	14	1.8	.01	.00	.00
31	.00	---	3.4	543	---	103	---	13	---	.00	.00	---
TOTAL	0.00	0.47	7.06	8545.8	41788	13565	2484	865	209.5	19.72	0.00	0.00
MEAN	.000	.016	.23	276	1441	438	82.8	27.9	6.98	.64	.000	.000
MAX	.00	.17	3.4	2260	7150	1670	363	43	12	1.5	.00	.00
MIN	.00	.00	.04	4.0	130	103	45	13	1.8	.00	.00	.00
AC-FT	.00	.9	14	16950	82890	26910	4930	1720	416	39	.00	.00

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.54	53.9	177	581	774	512	166	46.9	11.7	2.35	.24	.052
MAX	4.90	413	911	2440	3545	2048	1142	318	63.3	17.7	3.03	.77
(WY)	1973	1973	1983	1978	1998	1983	1982	1983	1998	1998	1998	1983
MIN	.000	.000	.000	.000	3.82	16.0	4.20	1.61	.11	.000	.000	.000
(WY)	1972	1978	1991	1991	1991	1977	1977	1990	1977	1972	1972	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	29518.07		67484.55			
ANNUAL MEAN	80.9		184		191	
HIGHEST ANNUAL MEAN					623	1983
LOWEST ANNUAL MEAN					5.74	1977
HIGHEST DAILY MEAN	2160	Feb 9	7150	Feb 14	24400	Mar 10 1995
LOWEST DAILY MEAN	.00	Jul 19	.00	Oct 1	.00	Sep 16 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 19	.00	Oct 1	.00	Sep 16 1971
INSTANTANEOUS PEAK FLOW			10100	Feb 13	57600	Jan 14 1993
INSTANTANEOUS PEAK STAGE			18.89	Feb 13	35.15	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	58550		133900		138400	
10 PERCENT EXCEEDS	241		544		339	
50 PERCENT EXCEEDS	3.8		1.6		6.6	
90 PERCENT EXCEEDS	.00		.00		.00	

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1972 to current year. Published as station 11148800 "near Bryson" in water years 1958–59, 1961–71.
WATER TEMPERATURE: Water years 1972–73.
SEDIMENT DATA: Water years 1972 to current year.

PERIOD OF DAILY RECORD.—October 1971 to September 1973.
WATER TEMPERATURE: October 1971 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to September 1973.

REMARKS.—Zero bed-load discharge observed for flows less than 150 ft^3/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB						
08...	1335	150	12.5	4	1.6	--
MAR						
30...	1025	111	13.0	1	.30	50
APR						
26...	1000	54	17.5	4	.58	--
MAY						
23...	1025	20	25.0	2	.11	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
JUL							
19...	1000	1	.32	24.0	--	4	13
19...	1002	1	.32	24.0	--	4	12
19...	1004	1	.32	24.0	--	2	7
19...	1006	1	.32	24.0	1	4	9
19...	1008	1	.31	24.0	1	5	9
19...	1010	1	.31	24.0	1	2	3

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
JUL						
19...	22	30	38	54	80	100
19...	20	26	33	48	71	100
19...	10	14	21	35	68	100
19...	12	15	21	36	54	100
19...	13	17	24	39	71	100
19...	3	4	7	15	57	100

11149400 NACIMIENTO RIVER BELOW NACIMIENTO DAM, NEAR BRADLEY, CA

LOCATION.—Lat 35°45'41", long 120°51'16", in NE 1/4 NE 1/4 sec.14, T.25 S., R.10 E., San Luis Obispo County, Hydrologic Unit 18060005, Camp Roberts Military Reservation, on left bank, 2.2 mi downstream from Nacimiento Dam, and 7.6 mi southwest of Bradley.

DRAINAGE AREA.—329 mi^2.

PERIOD OF RECORD.—October 1957 to current year.

CHEMICAL DATA: Water years 1963–66.

REVISED RECORDS.—WDR CA-84-2: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 597 ft above sea level, from topographic map.

REMARKS.—Records fair. Flow regulated by Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft. No diversion upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,340 ft^3/s, Feb. 25, 1969, gage height, 10.92 ft; no flow at times in 1958–63, 1965, 1977, 1990.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	25	341	154	23	221	36	36	316	424	416	406
2	25	25	340	154	23	136	36	36	292	422	416	406
3	25	199	298	153	23	83	37	36	276	422	416	406
4	25	541	263	152	22	73	52	36	276	422	416	407
5	23	626	263	153	22	75	43	36	301	424	413	406
6	22	625	228	152	22	74	44	36	329	421	411	406
7	30	536	155	92	22	69	43	36	319	421	409	405
8	20	396	154	24	22	51	43	36	307	421	409	405
9	24	395	154	21	22	33	43	36	306	420	409	406
10	25	394	165	20	23	33	43	36	306	420	409	406
11	25	329	218	20	22	33	43	51	309	420	409	405
12	24	317	218	21	24	34	40	214	309	419	323	405
13	25	442	200	21	24	33	36	304	320	418	409	400
14	25	432	190	21	24	33	36	329	331	418	409	385
15	25	357	190	21	208	33	37	328	333	417	409	274
16	25	418	190	22	827	33	37	328	335	417	409	83
17	25	435	180	21	1790	33	37	308	335	418	409	24
18	25	509	175	22	2460	34	36	276	334	417	409	22
19	25	595	174	21	1920	34	36	276	345	417	409	21
20	25	593	166	21	1510	34	36	276	357	417	409	21
21	25	590	166	67	2290	34	36	272	357	420	407	21
22	25	587	166	151	2640	35	37	254	375	418	408	21
23	28	583	166	152	4220	35	37	271	398	417	406	21
24	26	550	166	77	4180	35	36	273	396	417	405	21
25	25	476	166	23	3800	35	36	273	411	417	405	21
26	25	449	166	23	3200	35	36	273	382	417	405	21
27	26	348	166	23	2300	35	37	273	397	417	405	20
28	26	342	159	23	1290	35	36	273	397	417	405	20
29	26	342	154	23	248	35	36	300	396	417	407	20
30	26	341	154	23	---	35	37	316	411	417	407	20
31	26	---	154	23	---	35	---	316	---	417	407	---
TOTAL	777	12797	6045	1894	33201	1566	1158	6144	10256	12986	12595	6305
MEAN	25.1	427	195	61.1	1145	50.5	38.6	198	342	419	406	210
MAX	30	626	341	154	4220	221	52	329	411	424	416	407
MIN	20	25	154	20	22	33	36	36	276	417	323	20
AC-FT	1540	25380	11990	3760	65850	3110	2300	12190	20340	25760	24980	12510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	228	126	118	277	605	288	145	209	299	380	397	351
MAX	501	618	1629	3341	4830	3016	1501	1067	581	662	802	684
(WY)	1983	1983	1983	1997	1998	1969	1958	1983	1969	1958	1967	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	1.16	2.44	.000	.000
(WY)	1958	1958	1958	1962	1962	1961	1961	1961	1990	1990	1961	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	78588		105724			
ANNUAL MEAN	215		289		284	
HIGHEST ANNUAL MEAN					1038	1983
LOWEST ANNUAL MEAN					3.43	1990
HIGHEST DAILY MEAN	726	Feb 13	4220	Feb 23	6770	Feb 26 1969
LOWEST DAILY MEAN	20	Oct 8	20	Oct 8	.00	Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	24	Oct 8	20	Sep 24	.00	Oct 1 1957
INSTANTANEOUS PEAK FLOW			4240	Feb 22	7340	Feb 25 1969
INSTANTANEOUS PEAK STAGE			8.93	Feb 22	10.92	Feb 25 1969
ANNUAL RUNOFF (AC-FT)	155900		209700		205400	
10 PERCENT EXCEEDS	447		421		506	
50 PERCENT EXCEEDS	196		185		128	
90 PERCENT EXCEEDS	26		23		2.0	

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA

LOCATION.—Lat 35°53'48", long 121°05'14", in Los Ojitos Grant, Monterey County, Hydrologic Unit 18060005, on downstream side of highway bridge, 0.4 mi upstream from Tule Canyon, and 3.3 mi south of Lockwood.

DRAINAGE AREA.—217 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1965 to current year.

REVISED RECORDS.—WDR CA-82-2: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 795.00 ft above sea level. Prior to Aug. 28, 1975, at datum 5.00 ft higher.

REMARKS.—Records fair. No regulation; some pumping upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 23,600 ft^3/s, Mar. 10, 1995, gage height, 14.25 ft, current datum, from rating curve extended above 8,000 ft^3/s, on basis of contracted-opening measurement at gage height 12.6 ft; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 25	0845	3,110	9.14	Feb. 23	1045	1,980	8.28
Feb. 14	1700	4,830	10.11				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	243	516	92	48	13	.00	.00	.00
2	.00	.00	.00	.00	183	441	89	46	12	.00	.00	.00
3	.00	.00	.00	.00	151	391	88	44	11	.00	.00	.00
4	.00	.00	.00	.00	149	344	85	42	11	.00	.00	.00
5	.00	.00	.00	.00	126	344	82	41	9.9	.00	.00	.00
6	.00	.00	.00	.00	157	349	80	39	9.4	.00	.00	.00
7	.00	.00	.00	.00	130	309	78	38	9.2	.00	.00	.00
8	.00	.00	.00	.00	115	482	75	38	9.8	.00	.00	.00
9	.00	.00	.00	.00	103	547	72	38	9.9	.00	.00	.00
10	.00	.00	.00	.00	114	455	70	36	10	.00	.00	.00
11	.00	.00	.00	.00	406	392	68	34	9.8	.00	.00	.00
12	.00	.00	.00	.00	903	351	66	33	8.8	.00	.00	.00
13	.00	.00	.00	.00	1130	316	63	32	7.4	.00	.00	.00
14	.00	.00	.00	.00	3030	289	64	30	6.6	.00	.00	.00
15	.00	.00	.00	.00	1580	261	66	32	5.5	.00	.00	.00
16	.00	.00	.00	.00	919	241	64	35	4.7	.00	.00	.00
17	.00	.00	.00	.00	728	223	106	35	4.2	.00	.00	.00
18	.00	.00	.00	4.2	539	210	120	32	3.9	.00	.00	.00
19	.00	.00	.00	109	439	198	89	30	3.7	.00	.00	.00
20	.00	.00	.00	57	392	185	76	28	3.1	.00	.00	.00
21	.00	.00	.00	43	1130	171	69	27	2.7	.00	.00	.00
22	.00	.00	.00	29	969	158	66	25	2.2	.00	.00	.00
23	.00	.00	.00	179	1170	148	64	22	1.8	.00	.00	.00
24	.00	.00	.00	1630	830	140	61	21	1.5	.00	.00	.00
25	.00	.00	.00	1680	639	133	58	21	1.3	.00	.00	.00
26	.00	.00	.00	593	520	127	55	19	.94	.00	.00	.00
27	.00	.00	.00	338	835	120	53	18	.46	.00	.00	.00
28	.00	.00	.00	235	860	114	50	17	.05	.00	.00	.00
29	.00	.00	.00	171	611	109	49	15	.00	.00	.00	.00
30	.00	.00	.00	195	---	102	48	14	.00	.00	.00	.00
31	.00	---	.00	445	---	97	---	14	---	.00	.00	---
TOTAL	0.00	0.00	0.00	5708.20	19101	8263	2166	944	173.85	0.00	0.00	0.00
MEAN	.000	.000	.000	184	659	267	72.2	30.5	5.80	.000	.000	.000
MAX	.00	.00	.00	1680	3030	547	120	48	13	.00	.00	.00
MIN	.00	.00	.00	.00	103	97	48	14	.00	.00	.00	.00
AC-FT	.00	.00	.00	11320	37890	16390	4300	1870	345	.00	.00	.00

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.33	13.8	82.2	309	429	342	128	44.6	14.2	3.55	.40	.055
MAX	11.7	108	573	1515	2351	1856	637	167	94.0	35.7	6.90	1.91
(WY)	1984	1984	1967	1969	1998	1983	1982	1983	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.058	.005	.000	.000	.000	.000	.000
(WY)	1966	1967	1977	1977	1977	1977	1977	1977	1972	1966	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	12869.64		36356.05			
ANNUAL MEAN	35.3		99.3		112	
HIGHEST ANNUAL MEAN					455	1983
LOWEST ANNUAL MEAN					.005	1977
HIGHEST DAILY MEAN	629	Feb 10	3030	Feb 14	14000	Mar 10 1995
LOWEST DAILY MEAN	.00	Jun 29	.00	Oct 1	.00	Oct 1 1965
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 29	.00	Oct 1	.00	Oct 1 1965
INSTANTANEOUS PEAK FLOW			4830	Feb 14	23600	Mar 10 1995
INSTANTANEOUS PEAK STAGE			10.11	Feb 14	14.25	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	25530		72110		81410	
10 PERCENT EXCEEDS	106		311		228	
50 PERCENT EXCEEDS	.00		.00		4.4	
90 PERCENT EXCEEDS	.00		.00		.00	

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1966 to current year.
WATER TEMPERATURE: Water years 1966–73.
SEDIMENT DATA: Water years 1966 to current year.

PERIOD OF DAILY RECORD.—October 1965 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: October 1965 to September 1973.
WATER TEMPERATURE: November 1965 to May 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION: Maximum daily mean, 7,420 mg/L, Dec. 6, 1966; minimum daily mean, no flow on many days each year.
SEDIMENT LOAD: Maximum daily, 161,000 tons, Dec. 6, 1966; minimum daily, 0 ton, many days each year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
JAN											
20...	1320	55	16.0	7	1.0	76	--	--	--	--	--
26...	1230	551	13.0	154	229	48	--	--	--	--	--
FEB											
21...	1310	1090	12.0	874	2570	16	21	28	44	70	91
MAR											
16...	1400	240	15.5	124	80	18	--	--	--	--	--
APR											
24...	1330	61	22.0	6	.99	65	--	--	--	--	--
MAY											
16...	1345	36	20.0	8	.78	54	--	--	--	--	--
JUN											
22...	1105	2.6	25.5	2	.01	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAY							
16...	1316	1	36	20.0	1	3	15
16...	1318	1	36	20.0	--	2	12
16...	1320	1	36	20.0	--	1	10
16...	1321	1	36	20.0	--	3	16
16...	1322	1	36	20.0	--	2	13
16...	1323	1	36	20.0	--	1	5
16...	1324	1	36	20.0	--	1	8
16...	1326	1	36	20.0	--	1	7
16...	1328	1	36	20.0	--	--	6
16...	1329	1	36	20.0	--	1	5

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
MAY							
16...	38	54	67	81	90	96	100
16...	31	51	72	85	94	100	--
16...	28	47	65	79	89	98	100
16...	35	50	63	78	93	100	--
16...	31	43	55	72	88	95	100
16...	37	78	91	94	97	100	--
16...	41	76	89	94	98	100	--
16...	29	60	82	92	97	100	--
16...	21	33	42	49	60	87	100
16...	14	21	28	37	52	76	100

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	STARTING TIME (2400 HOURS) (82073)	ENDING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
20...	1350	1000	1130	.250	0	1345	1400	30	2.0
20...	1405	1000	1130	.250	0	1400	1415	30	2.0
26...	1250	1000	1130	.250	0	1245	1300	20	10.0
26...	1310	1000	1130	.250	0	1305	1320	20	10.0
FEB									
21...	1120	1000	1140	.250	0	1100	1140	30	9.0
21...	1210	1000	1140	.250	0	1154	1228	30	9.0
MAR									
16...	1305	1000	1150	.250	0	1301	1307	20	8.0
16...	1315	1000	1150	.250	0	1313	1319	20	8.0
APR									
24...	1345	1000	1150	.250	0	1339	1354	30	3.0
24...	1400	1000	1150	.250	0	1355	1408	30	3.0
MAY									
16...	1240	1000	1150	.250	0	1232	1248	20	2.0
16...	1255	1000	1150	.250	0	1251	1257	20	2.0
JUN									
22...	1045	1000	1150	.250	0	1040	1048	20	1.0
22...	1055	1000	1150	.250	0	1050	1058	20	1.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VERTICALS IN COMPOSITE SAMPLE (NUM) (04119)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COMPOSITE SAMPLE T/D/FT (04122)	SEDIMENT DISCHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
JAN									
20...	2	30	30	1.00	55	16.0	.30	22	1
20...	2	30	30	1.00	55	16.0	.42	22	1
26...	2	20	20	3.00	549	13.0	1.64	521	1
26...	2	20	20	3.00	542	13.0	3.57	521	1
FEB									
21...	2	22	22	4.50	981	12.0	7.23	1960	1
21...	2	22	22	4.50	1020	12.0	12.6	1960	1
MAR									
16...	2	11	11	4.00	242	15.5	1.73	133	1
16...	2	11	11	4.00	240	15.5	1.30	133	1
APR									
24...	2	20	20	1.50	61	22.0	1.15	57	--
24...	2	20	20	1.50	61	22.0	.74	57	--
MAY									
16...	2	23	23	1.00	36	20.0	.73	34	--
16...	2	23	23	1.00	36	20.0	.77	34	--
JUN									
22...	2	21	21	.50	2.6	25.5	<.01	.03	--
22...	2	21	21	.50	2.6	25.5	<.01	.03	--

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
20...	14	60	88	96	99	100	--	--
20...	16	56	85	96	99	100	--	--
26...	25	59	80	88	91	95	98	100
26...	17	50	75	86	92	96	98	100
FEB								
21...	12	41	67	82	89	96	99	100
21...	11	36	65	82	91	97	100	100
MAR								
16...	12	43	75	88	93	98	100	--
16...	16	49	75	88	94	99	100	--
APR								
24...	12	50	81	93	97	100	100	--
24...	12	55	86	96	98	100	--	--
MAY								
16...	9	49	83	94	98	99	100	--
16...	8	49	83	95	99	100	--	--
JUN								
a22...	--	--	--	--	--	--	--	--
a22...	--	--	--	--	--	--	--	--

a Sample size was insufficient for particle-size analysis.

11150500 SALINAS RIVER NEAR BRADLEY, CA

LOCATION.—Lat 35°55'49", long 120°52'04", in SW 1/4 NW 1/4 sec.14, T.23 S., R.10 E., Monterey County, Hydrologic Unit 18060005, on left bank, 6 mi northwest of Bradley, and 7 mi downstream from San Antonio River.

DRAINAGE AREA.—2,535 mi^2.

PERIOD OF RECORD.—October 1948 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL DATA: Water years 1958, 1962–66, 1972–75, 1977, 1980, 1981.
SEDIMENT DATA: Water years 1950, 1990.

REVISED RECORDS.—WSP 1285: 1950. WDR CA-84-2: 1978.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 442.69 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.—Records poor for estimated days and Oct. 1 to Jan. 10, otherwise fair. Flow regulated by Santa Margarita Lake beginning in December 1941, usable capacity, 23,000 acre-ft; Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft; and Lake San Antonio beginning in December 1965, usable capacity, 330,000 acre-ft. Several small diversions upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 120,000 ft^3/s, Mar. 11, 1995, gage height, 23.44 ft, from rating curve extended above 50,000 ft^3/s; no flow at times in 1951, 1954–55, 1957.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	34	410	156	46	1310	143	81	316	471	538	537
2	37	40	410	153	46	1070	135	79	326	483	548	509
3	39	40	424	158	45	907	136	86	303	512	546	506
4	41	326	304	161	45	647	132	162	313	520	542	504
5	39	787	290	157	42	515	134	194	318	517	519	468
6	36	850	256	162	42	493	133	292	365	514	519	458
7	35	845	186	181	42	445	128	536	352	497	520	481
8	36	571	149	214	41	517	118	568	334	478	549	488
9	28	494	154	199	41	805	117	424	323	488	560	475
10	30	491	166	187	41	735	115	382	308	494	581	470
11	31	472	214	184	43	576	111	378	328	481	601	475
12	33	342	220	187	147	480	103	334	333	469	561	488
13	31	547	227	182	775	408	93	346	333	473	508	494
14	30	599	207	181	e2200	358	88	375	357	474	556	449
15	32	528	211	184	e4800	327	87	379	358	468	543	407
16	31	425	215	189	e2200	314	89	374	354	487	534	206
17	32	516	209	188	e1600	301	116	366	352	496	567	87
18	38	517	200	194	e2400	286	196	292	364	500	584	51
19	35	647	202	176	e2900	256	232	268	381	481	595	36
20	36	716	201	170	e2400	236	180	273	415	497	600	28
21	34	760	202	127	e1900	227	161	275	409	505	605	28
22	31	781	210	115	e3300	222	143	259	389	529	615	28
23	33	758	216	165	e3800	216	129	257	409	574	597	25
24	37	666	209	164	e6400	204	116	283	445	587	592	24
25	39	598	179	95	e5600	200	116	280	459	578	598	22
26	40	681	191	72	4980	201	114	277	476	546	604	22
27	42	567	190	64	3310	193	110	267	441	546	576	21
28	43	494	192	59	3820	176	101	269	457	540	532	21
29	37	509	172	54	1600	156	90	284	454	552	542	20
30	39	470	165	52	---	152	85	326	435	535	552	19
31	35	---	157	49	---	150	---	323	---	515	561	---
TOTAL	1096	16071	6938	4579	54606	13083	3751	9289	11207	15807	17445	7847
MEAN	35.4	536	224	148	1883	422	125	300	374	510	563	262
MAX	43	850	424	214	6400	1310	232	568	476	587	615	537
MIN	28	34	149	49	41	150	85	79	303	468	508	19
AC-FT	2170	31880	13760	9080	108300	25950	7440	18420	22230	31350	34600	15560

e Estimated.

11150500 SALINAS RIVER NEAR BRADLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1956, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.23	100	752	1457	685	878	310	139	21.1	3.41	2.03	1.74
MAX	4.04	742	2319	5372	1449	2724	580	249	55.3	6.26	4.16	4.46
(WY)	1951	1951	1956	1952	1950	1952	1952	1955	1956	1953	1952	1952
MIN	1.64	4.40	11.0	140	238	293	87.4	40.7	7.87	1.64	.000	.000
(WY)	1955	1956	1954	1949	1953	1950	1951	1949	1950	1951	1955	1955

SUMMARY STATISTICS	WATER YEARS 1949 - 1956	
ANNUAL MEAN	363	
HIGHEST ANNUAL MEAN	945	1952
LOWEST ANNUAL MEAN	152	1955
HIGHEST DAILY MEAN	22000	Dec 24 1955
LOWEST DAILY MEAN	.00	Aug 15 1951
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 15 1951
INSTANTANEOUS PEAK FLOW	26800	Jan 15 1952
INSTANTANEOUS PEAK STAGE	12.35	Jan 15 1952
ANNUAL RUNOFF (AC-FT)	263100	
10 PERCENT EXCEEDS	745	
50 PERCENT EXCEEDS	16	
90 PERCENT EXCEEDS	1.6	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	272	173	217	738	1560	1005	469	317	393	472	505	428
MAX	632	559	2152	7066	10180	7044	5642	1792	845	683	770	743
(WY)	1970	1983	1983	1997	1998	1995	1958	1983	1994	1994	1991	1969
MIN	3.00	5.00	7.58	9.26	10.6	16.3	12.1	4.50	2.98	.84	.37	1.47
(WY)	1962	1962	1991	1991	1991	1990	1990	1961	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	119304		161719			
ANNUAL MEAN	327		442		540	
HIGHEST ANNUAL MEAN					1997	1983
LOWEST ANNUAL MEAN					9.39	1990
HIGHEST DAILY MEAN	1130	Feb 10	e6400	Feb 24	63900	Mar 11 1995
LOWEST DAILY MEAN	28	Oct 9	19	Sep 30	.07	Sep 9 1990
ANNUAL SEVEN-DAY MINIMUM	31	Oct 9	21	Sep 24	.09	Sep 4 1990
INSTANTANEOUS PEAK FLOW			e7000	Feb 24	120000	Mar 11 1995
INSTANTANEOUS PEAK STAGE			unknown	Feb 24	23.44	Mar 11 1995
ANNUAL RUNOFF (AC-FT)	236600		320800		391300	
10 PERCENT EXCEEDS	595		602		669	
50 PERCENT EXCEEDS	291		304		310	
90 PERCENT EXCEEDS	44		39		23	

e Estimated.

11151300 SAN LORENZO CREEK BELOW BITTERWATER CREEK, NEAR KING CITY, CA

LOCATION.—Lat 36°16'05", long 121°03'55", in NE 1/4 sec.23, T.19 S., R.8 E., Monterey County, Hydrologic Unit 18060005, on left bank, 1.3 mi downstream from Bitterwater Creek, 5 mi northeast of King City, and 10 mi upstream from mouth.

DRAINAGE AREA.—233 mi^2.

PERIOD OF RECORD.—October 1958 to current year.
CHEMICAL DATA: Water year 1977.

REVISED RECORDS.—WDR CA-85-2: 1969–84(M).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 431.48 ft above sea level. October 1958 to Apr. 24, 1967, at site 500 ft upstream at datum 5.00 ft higher. Apr. 25, 1967, to July 12, 1981, at site 200 ft upstream.

REMARKS.—Records poor. No regulation; small diversions upstream from station by ranchers and sand-processing plant. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,500 ft^3/s, Jan. 25, 1969, gage height, 15.33 ft, in gage well, 16.2 ft, from floodmarks, from rating curve extended above 7,100 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in 1961 and 1973.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	0415	933	5.78	Mar. 5	1830	381	4.68
Feb. 23	1330	1,160	6.16	Mar. 8	1100	813	5.56
Feb. 27	1445	808	5.55	Apr. 17	1825	253	4.36

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.6	4.7	3.7	38	113	17	e5.3	1.8	.64	.64	1.0
2	2.6	3.7	4.8	3.7	29	89	17	e5.0	2.0	.66	.62	1.0
3	2.7	3.7	4.7	3.6	23	94	23	e4.4	1.9	.82	.63	.98
4	2.8	3.7	4.8	3.6	22	93	19	e4.2	1.9	.92	.58	.84
5	2.9	3.7	4.7	3.7	21	148	19	e4.0	1.9	.93	.54	.78
6	2.9	3.8	4.8	3.7	19	127	19	e3.9	1.7	.95	.52	.83
7	2.9	4.1	4.9	3.8	17	89	22	e3.9	1.8	1.0	.60	.84
8	2.9	6.3	4.9	3.9	15	301	24	e3.8	2.9	.97	.70	.80
9	2.8	6.2	5.0	3.8	14	173	22	e3.7	2.5	1.0	.71	.83
10	2.8	4.8	4.9	3.9	13	116	18	e3.6	2.2	1.0	.73	.92
11	2.8	4.4	4.9	3.8	46	108	18	e3.6	2.2	.97	.79	.96
12	2.8	4.4	4.9	3.8	186	75	16	e3.4	1.9	.97	.68	.97
13	2.9	4.5	4.8	3.9	184	63	17	e3.3	1.8	.96	.63	1.1
14	3.1	4.4	4.9	3.8	454	49	18	e3.2	1.6	.86	.56	.96
15	3.3	4.5	4.9	4.0	102	41	21	e3.1	1.4	.73	.58	.99
16	3.3	4.6	4.9	4.3	47	42	23	6.4	1.2	.75	.59	1.0
17	3.3	5.0	4.9	4.4	109	43	97	8.2	1.1	.77	.58	1.1
18	3.4	4.7	4.9	7.7	61	39	84	6.8	1.3	.75	.55	1.0
19	3.3	4.7	4.6	18	40	34	45	4.9	1.2	.63	.63	.98
20	3.4	4.8	4.5	15	32	31	19	4.0	1.1	.68	.68	.98
21	3.4	4.6	4.4	13	324	27	13	3.1	.94	.74	.80	1.0
22	3.4	4.8	4.4	9.9	113	26	9.4	3.0	.88	.68	.82	1.4
23	3.5	4.8	4.3	9.6	413	28	e8.9	2.9	.91	.56	.78	.71
24	3.5	4.3	4.1	93	118	33	e8.3	2.6	.84	.46	.77	.67
25	3.5	4.5	4.0	118	77	31	e8.0	2.6	.80	.51	.72	.66
26	3.5	4.5	4.0	64	53	31	e7.5	2.4	.69	.67	.67	.67
27	3.5	4.7	3.8	34	263	30	e7.2	2.5	.61	.66	.65	.70
28	3.5	4.7	3.5	22	243	27	e6.5	2.2	.54	.72	.67	.74
29	3.6	4.7	3.5	16	117	26	e6.0	1.8	.59	.72	1.3	.77
30	3.6	4.7	3.5	14	---	24	e5.6	1.7	.57	.71	1.8	.76
31	3.6	---	3.6	34	---	19	---	1.7	---	.74	1.0	---
TOTAL	98.1	135.9	139.5	533.6	3193	2170	638.4	115.2	42.77	24.13	22.52	26.94
MEAN	3.16	4.53	4.50	17.2	110	70.0	21.3	3.72	1.43	.78	.73	.90
MAX	3.6	6.3	5.0	118	454	301	97	8.2	2.9	1.0	1.8	1.4
MIN	2.6	3.6	3.5	3.6	13	19	5.6	1.7	.54	.46	.52	.66
AC-FT	195	270	277	1060	6330	4300	1270	228	85	48	45	53

e Estimated.

11151300 SAN LORENZO CREEK BELOW BITTERWATER CREEK, NEAR KING CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.91	4.13	10.8	42.4	61.7	46.4	16.9	6.38	2.64	1.27	.82	1.27
MAX	20.0	34.7	62.6	401	583	422	113	90.1	33.9	15.0	7.26	17.9
(WY)	1977	1966	1967	1969	1998	1995	1983	1998	1998	1983	1983	1976
MIN	.053	.058	.073	.065	.25	.59	.19	.070	.040	.050	.000	.030
(WY)	1991	1991	1991	1991	1991	1964	1964	1992	1961	1992	1973	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1959 - 2000	
ANNUAL TOTAL	2623.4		7140.06			
ANNUAL MEAN	7.19		19.5		16.2	
HIGHEST ANNUAL MEAN					81.4	1998
LOWEST ANNUAL MEAN					.66	1968
HIGHEST DAILY MEAN	177	Apr 12	454	Feb 14	5860	Mar 10 1995
LOWEST DAILY MEAN	1.7	Jul 27	.46	Jul 24	.00	Jun 12 1961
ANNUAL SEVEN-DAY MINIMUM	1.7	Jul 26	.59	Aug 13	.00	Jun 12 1961
INSTANTANEOUS PEAK FLOW			1160	Feb 23	11500	Jan 25 1969
INSTANTANEOUS PEAK STAGE			6.16	Feb 23	15.33	Jan 25 1969
ANNUAL RUNOFF (AC-FT)	5200		14160		11700	
10 PERCENT EXCEEDS	12		45		21	
50 PERCENT EXCEEDS	4.4		3.7		1.4	
90 PERCENT EXCEEDS	2.2		.69		.10	

11151700 SALINAS RIVER AT SOLEDAD, CA

LOCATION.—Lat 36°24'40", long 121°19'06", on boundary between San Vicente and Los Coches Grants, Monterey County, Hydrologic Unit 18060005, near right bank, on upstream end of pier, on U.S. Highway 101, 0.9 mi south of Soledad, and 1 mi upstream from Arroyo Seco.

DRAINAGE AREA.—3,563 mi^2.

PERIOD OF RECORD.—October 1968 to September 1978, October 1983 to current year.
CHEMICAL DATA: Water years 1972–75, 1977.
SEDIMENT DATA: Water years 1990, 1992.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 150.61 ft above sea level.

REMARKS.—Records fair. Flow regulated by Santa Margarita Lake beginning in December 1941, usable capacity, 23,000 acre-ft; Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft; and by Lake San Antonio beginning in December 1965, usable capacity, 330,000 acre-ft. Several small diversions for irrigation upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 106,000 ft^3/s, Feb. 25, 1969, gage height, 23.31 ft; maximum gage height, 26.49 ft, Mar. 11, 1995; no flow at times in some years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.65	265	118	94	2010	167	84	135	163	204	274
2	e1.6	.91	262	118	83	1720	155	79	132	174	190	267
3	e1.5	1.2	263	116	76	1500	149	70	132	200	188	251
4	e1.4	1.7	264	114	72	1350	142	57	134	212	183	235
5	1.2	1.8	251	118	69	1170	137	44	141	220	184	225
6	1.2	2.0	226	113	67	1080	131	37	146	219	196	210
7	1.1	3.3	216	113	68	901	128	39	148	215	210	194
8	.97	8.0	204	112	66	853	123	88	166	210	209	184
9	.69	7.0	177	125	66	1120	118	143	171	211	205	176
10	.53	13	160	146	68	1010	113	172	166	222	205	179
11	.83	49	148	146	69	935	107	160	168	220	206	186
12	.78	78	142	139	96	815	102	164	174	211	208	181
13	.43	95	156	132	186	722	99	156	172	199	220	171
14	.21	93	162	132	539	651	97	148	157	185	208	167
15	.17	156	157	135	1940	588	94	157	148	176	209	160
16	.02	193	149	143	2500	521	95	161	151	184	210	146
17	.01	193	148	156	1670	459	103	162	150	198	210	135
18	.27	221	145	183	2080	410	109	163	152	194	213	106
19	.52	257	144	178	2510	362	112	156	160	189	224	81
20	.64	304	143	178	2840	327	117	141	159	192	236	55
21	.50	384	139	167	1920	321	121	136	154	196	256	35
22	.23	415	131	161	2910	307	114	135	154	199	259	22
23	.04	424	123	163	3470	283	111	130	153	207	256	15
24	.06	423	125	168	5280	268	113	128	157	219	253	10
25	.39	436	131	200	4800	257	106	129	172	222	242	7.3
26	.65	428	135	216	4150	243	101	126	180	219	235	5.2
27	.77	379	134	158	3860	230	97	124	179	206	241	3.7
28	.65	352	129	121	3380	216	92	124	170	191	261	2.7
29	.41	293	129	106	3240	205	88	125	164	187	267	2.0
30	.33	270	127	103	---	192	86	127	162	192	273	1.6
31	.29	---	123	100	---	180	---	130	---	208	275	---
TOTAL	19.89	5482.56	5208	4378	48169	21206	3427	3795	4707	6240	6936	3687.5
MEAN	.64	183	168	141	1661	684	114	122	157	201	224	123
MAX	1.6	436	265	216	5280	2010	167	172	180	222	275	274
MIN	.01	.65	123	100	66	180	86	37	132	163	183	1.6
AC-FT	39	10870	10330	8680	95540	42060	6800	7530	9340	12380	13760	7310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	162	128	155	886	1775	1172	293	136	149	162	163	186
MAX	488	336	876	6383	11170	8695	1834	661	456	412	327	478
(WY)	1970	1970	1984	1997	1998	1995	1969	1969	1969	1998	1969	1969
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	62360.95		113255.95			
ANNUAL MEAN	171		309		440	
HIGHEST ANNUAL MEAN					1981	1969
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	1100	Feb 10	5280	Feb 24	68300	Feb 25 1969
LOWEST DAILY MEAN	.01	Oct 17	.01	Oct 17	.00	Mar 9 1977
ANNUAL SEVEN-DAY MINIMUM	.23	Oct 13	.23	Oct 13	.00	Mar 9 1977
INSTANTANEOUS PEAK FLOW			6120	Feb 24	106000	Feb 25 1969
INSTANTANEOUS PEAK STAGE			14.45	Feb 24	26.49	Mar 11 1995
ANNUAL RUNOFF (AC-FT)	123700		224600		318800	
10 PERCENT EXCEEDS	270		423		513	
50 PERCENT EXCEEDS	160		157		135	
90 PERCENT EXCEEDS	1.9		1.8		.00	

e Estimated.

11152000 ARROYO SECO NEAR SOLEDAD, CA

LOCATION.—Lat 36°16'50", long 121°19'18", in SW 1/4 NE 1/4 sec.16, T.19 S., R.6 E., Monterey County, Hydrologic Unit 18060005, on right bank, under county road bridge, 1.5 mi downstream from Vaquero Creek, and 10 mi south of Soledad.

DRAINAGE AREA.—244 mi^2.

PERIOD OF RECORD.—November 1901 to current year. Records for water year 1902 incomplete; yearly estimate published in WSP 1315-B.

REVISED RECORDS.—WSP 881: 1902–9 (yearly summary only). WSP 1565: 1916–19, 1920–21(M), 1922, 1926–27, 1928–30(M), 1932, 1934, 1936(M). WSP 1715: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 339.20 ft above sea level. Prior to June 16, 1929, nonrecording gage, and June 16, 1929, to Dec. 2, 1941, water-stage recorder at site 1 mi upstream at different datum. Dec. 3, 1941, to Sept. 30, 1959, water-stage recorder at datum 2.00 ft higher. Jan. 30 to Mar. 26, 1969, nonrecording gage at bridge at same datum.

REMARKS.—Records fair. No regulation or large diversion upstream from station. Low flows affected by upstream gravel mining and irrigation during summer months. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 28,300 ft^3/s, Apr. 3, 1958, gage height, 16.40 ft, datum then in use, from rating curve extended above 12,000 ft^3/s on basis of slope-area measurement at gage height 16.30 ft, maximum gage height, 16.44 ft, Mar. 10, 1995; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 23	2030	3,420	5.64	Feb. 23	0600	3,020	5.30
Feb. 14	1215	8,390	8.83				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	8.6	13	16	264	689	168	101	44	17	8.1	7.9
2	4.0	8.8	14	16	228	591	162	97	44	17	7.5	9.0
3	4.6	9.0	14	16	206	524	155	95	43	16	7.1	9.8
4	4.4	9.2	14	16	263	469	150	91	41	17	7.0	9.8
5	4.5	9.5	14	16	210	546	145	90	39	17	7.1	8.6
6	5.4	9.8	14	17	226	562	140	88	38	18	7.2	8.4
7	5.3	10	14	17	196	495	136	86	38	17	6.7	8.2
8	5.6	16	14	17	178	846	131	91	42	17	7.0	7.7
9	6.0	22	14	17	164	782	128	86	47	16	6.6	7.8
10	5.9	15	15	16	393	674	125	80	41	16	7.3	7.6
11	5.7	13	15	16	792	593	121	79	40	16	7.0	6.7
12	5.3	12	16	16	1600	538	117	77	37	16	6.8	6.7
13	5.4	12	15	17	2010	490	112	76	35	15	6.8	7.1
14	5.1	12	16	17	4190	448	120	74	33	15	6.3	6.6
15	6.3	12	16	17	1770	414	120	84	31	14	5.8	6.7
16	5.6	12	16	27	1080	376	116	92	29	13	6.0	7.2
17	6.1	12	17	63	806	345	491	84	27	13	4.6	8.3
18	6.0	14	17	519	608	321	248	76	27	13	5.1	7.2
19	6.2	14	18	192	494	302	187	71	28	12	5.2	7.1
20	6.2	88	17	112	535	287	164	68	27	12	5.2	7.1
21	6.0	35	16	78	1280	272	151	62	26	11	5.2	7.1
22	6.0	20	15	55	929	257	142	59	24	11	4.9	7.9
23	6.3	16	16	1320	1580	244	136	57	22	11	6.0	10
24	7.0	15	16	1880	1060	233	129	58	22	9.9	6.3	13
25	6.9	15	16	1620	813	225	123	56	22	9.9	5.9	13
26	7.6	14	16	589	649	217	117	53	21	9.9	6.1	14
27	8.3	14	15	343	1120	206	113	52	20	8.6	6.0	15
28	8.7	14	15	256	986	200	108	51	19	9.4	4.9	15
29	8.7	14	16	206	812	192	109	48	18	9.5	5.6	16
30	8.9	14	16	363	---	183	105	47	17	9.1	6.9	16
31	9.1	---	16	380	---	174	---	45	---	8.7	6.8	---
TOTAL	190.1	489.9	476	8250	25442	12695	4469	2274	942	415.0	195.0	282.5
MEAN	6.13	16.3	15.4	266	877	410	149	73.4	31.4	13.4	6.29	9.42
MAX	9.1	88	18	1880	4190	846	491	101	47	18	8.1	16
MIN	3.0	8.6	13	16	164	174	105	45	17	8.6	4.6	6.6
AC-FT	377	972	944	16360	50460	25180	8860	4510	1870	823	387	560

11152000 ARROYO SECO NEAR SOLEDAD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.37	53.6	166	395	587	452	254	95.0	40.0	15.0	6.02	4.94
MAX	75.5	650	1161	2425	2697	2344	2043	644	208	97.4	54.5	38.8
(WY)	1905	1927	1956	1914	1998	1983	1958	1983	1998	1998	1983	1978
MIN	.000	.000	2.87	5.95	8.98	18.5	7.82	4.14	.66	.000	.000	.000
(WY)	1914	1991	1991	1991	1991	1977	1977	1977	1924	1924	1913	1913

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1902 - 2000	
ANNUAL TOTAL	31704.41		56120.5			
ANNUAL MEAN	86.9		153		171	
HIGHEST ANNUAL MEAN					709	1983
LOWEST ANNUAL MEAN					6.97	1977
HIGHEST DAILY MEAN	2360	Feb 9	4190	Feb 14	16500	Dec 23 1955
LOWEST DAILY MEAN	.00	Sep 3	3.0	Oct 1	.00	Aug 27 1904
ANNUAL SEVEN-DAY MINIMUM	.61	Aug 31	4.5	Oct 1	.00	Aug 27 1904
INSTANTANEOUS PEAK FLOW			8390	Feb 14	28300	Apr 3 1958
INSTANTANEOUS PEAK STAGE			8.83	Feb 14	16.44	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	62890		111300		123900	
10 PERCENT EXCEEDS	230		490		367	
50 PERCENT EXCEEDS	17		17		28	
90 PERCENT EXCEEDS	2.3		6.3		.05	

11152050 ARROYO SECO BELOW RELIZ CREEK, NEAR SOLEDAD, CA

LOCATION.—Lat 36°23'59", long 121°19'23", in Los Conches Grant, Monterey County, Hydrologic Unit 18060005, on right bank, at county road bridge, 1.7 mi south of Soledad, and 7.4 mi downstream from Reliz Creek.

DRAINAGE AREA.—304 mi^2.

PERIOD OF RECORD.—October 1994 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 167.93 ft above sea level (levels by Monterey County).

REMARKS.—Records fair. No regulation or large diversion upstream from station. Low flows affected by upstream gravel mining and irrigation during summer months. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 31,000 ft^3/s, Mar. 10, 1995, gage height, 9.62 ft, rating affected by backwater from Salinas River. Discharge estimated by routing peak. No flow for many days.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	0415	3,350	4.73	Feb. 23	0800	3,010	4.60
Feb. 14	1300	6,150	5.55				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	88	600	e23	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	45	486	e17	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	36	417	e12	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	62	360	e7.0	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	37	392	e4.0	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	39	430	e1.0	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	36	374	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	36	637	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	36	666	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	51	568	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	868	474	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	1560	426	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	1620	382	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	3970	346	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	1810	315	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	1040	284	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	731	256	233	.00	.00	.00	.00	.00
18	.00	.00	.00	101	511	226	159	.00	.00	.00	.00	.00
19	.00	.00	.00	85	411	202	77	.00	.00	.00	.00	.00
20	.00	.00	.00	21	394	181	51	.00	.00	.00	.00	.00
21	.00	.00	.00	21	1240	161	37	.00	.00	.00	.00	.00
22	.00	.00	.00	20	996	140	25	.00	.00	.00	.00	.00
23	.00	.00	.00	671	1540	120	21	.00	.00	.00	.00	.00
24	.00	.00	.00	2250	987	105	18	.00	.00	.00	.00	.00
25	.00	.00	.00	1840	710	95	e7.0	.00	.00	.00	.00	.00
26	.00	.00	.00	511	545	85	e.00	.00	.00	.00	.00	.00
27	.00	.00	.00	181	930	75	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	78	988	e67	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	39	720	e54	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	67	---	e40	.00	.00	.00	.00	.00	.00
31	.00	---	.00	276	---	e31	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	6161.00	22037	8995	692.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	199	760	290	23.1	.000	.000	.000	.000	.000
MAX	.00	.00	.00	2250	3970	666	233	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	36	31	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	12220	43710	17840	1370	.00	.00	.00	.00	.00

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

MEAN	.000	3.82	75.7	717	858	578	157	32.4	1.72	.000	.000	.003
MAX	.000	14.3	392	1975	2806	1944	448	111	8.67	.000	.000	.019
(WY)	1995	1997	1997	1997	1998	1995	1998	1995	1998	1995	1995	1999
MIN	.000	.000	.000	36.3	170	49.2	.000	.000	.000	.000	.000	.000
(WY)	1995	1995	1995	1999	1999	1997	1997	1997	1996	1995	1995	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	11157.65		37885.00			
ANNUAL MEAN	30.6		104		199	
HIGHEST ANNUAL MEAN					354	1995
LOWEST ANNUAL MEAN					30.9	1999
HIGHEST DAILY MEAN	1870	Feb 9	3970	Feb 14	17000	Mar 10 1995
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
INSTANTANEOUS PEAK FLOW			6150	Feb 14	31000	Mar 10 1995
INSTANTANEOUS PEAK STAGE			5.55	Feb 14	9.62	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	22130		75140		144200	
10 PERCENT EXCEEDS	83		350		513	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11152300 SALINAS RIVER NEAR CHUALAR, CA

LOCATION.—Lat 36°33'20", long 121°32'55", in Guadalupe y Llanitos de Los Correos Grant, Monterey County, Hydrologic Unit 18060005, near left bank, on upstream side of bridge, on Chualar-River Road, and 2 mi southwest of Chualar.

DRAINAGE AREA.—4,042 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1976 to current year.

REVISED RECORDS.—WDR CA-85-2: 1983–84(M).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 68.00 ft above sea level. Prior to January 1979, nonrecording gage at same site and datum. Prior to Aug. 19, 1991, at site 0.2 mi upstream at same datum.

REMARKS.—Records fair. Daily discharges prior to January 1979 determined by discharge measurements at this site correlated to streamflow for Salinas River at Soledad (station 11151700) and Salinas River near Spreckels (station 11152500). Flow regulated by Santa Margarita Lake beginning in December 1941, usable capacity, 23,000 acre-ft; Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft; and Lake San Antonio beginning in December 1965, usable capacity, 330,000 acre-ft. Large withdrawals from ground water and small surface-water diversions for municipal use and for irrigation upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 92,000 ft^3/s, estimated, Mar. 11, 1995, gage height, 19.70 ft, from rating curve extended above 18,000 ft^3/s; peak flow includes an estimate of 8,800 ft^3/s bypassing the gage; no flow at times during most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	194	78	193	3220	277	28	56	45	77	125
2	.00	.00	190	76	117	2430	224	24	55	44	75	125
3	.00	.00	187	74	81	1940	183	19	53	54	73	118
4	.00	.00	185	72	64	1550	165	14	52	72	70	110
5	.00	.00	181	70	75	1340	151	10	49	84	67	103
6	.00	.00	159	69	52	1280	139	6.7	48	89	64	99
7	.00	.00	150	67	49	1080	128	5.7	45	89	66	96
8	.00	.00	148	66	37	1070	120	14	48	86	71	90
9	.00	.00	145	64	31	1380	112	34	61	85	68	84
10	.00	.00	135	63	31	1220	109	81	60	88	66	81
11	.00	.00	125	61	245	1070	103	95	57	95	65	78
12	.00	.00	118	59	955	932	94	92	59	93	65	75
13	.00	.00	114	56	1150	768	85	93	60	88	68	72
14	.00	.00	115	52	4090	701	81	89	54	84	77	70
15	.00	.00	113	49	4310	674	75	90	52	81	74	68
16	.00	.00	112	46	4030	651	71	97	49	79	73	65
17	.00	.00	110	46	2640	611	84	100	45	76	71	62
18	.00	.00	108	60	2130	583	281	101	40	76	69	58
19	.00	.00	105	157	2450	560	195	101	38	75	70	40
20	.00	.00	104	104	2880	541	156	94	40	74	77	4.3
21	.00	31	102	72	2820	514	129	91	40	73	93	.00
22	.00	141	99	69	3520	494	119	89	37	72	104	.00
23	.00	171	94	70	4670	484	102	87	36	74	106	.00
24	.00	185	92	1590	6540	450	84	85	35	82	104	.00
25	.00	194	91	1750	7300	427	78	81	36	91	102	.00
26	.00	205	88	1030	6160	422	70	79	50	93	97	.00
27	.00	203	86	426	5960	419	56	76	56	89	94	.00
28	.00	200	85	212	5250	399	44	73	56	86	102	.00
29	.00	200	83	134	5120	375	39	66	49	83	112	.00
30	.00	197	81	97	---	349	33	63	47	80	123	.00
31	.00	---	80	209	---	336	---	59	---	77	122	---
TOTAL	0.00	1727.00	3779	7048	72950	28270	3587	2037.4	1463	2457	2565	1623.30
MEAN	.000	57.6	122	227	2516	912	120	65.7	48.8	79.3	82.7	54.1
MAX	.00	205	194	1750	7300	3220	281	101	61	95	123	125
MIN	.00	.00	80	46	31	336	33	5.7	35	44	64	.00
AC-FT	.00	3430	7500	13980	144700	56070	7110	4040	2900	4870	5090	3220

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.0	74.8	284	1155	2217	1694	460	189	73.4	65.1	59.0	76.1
MAX	286	474	2757	8328	14350	10690	2793	2418	767	462	381	425
(WY)	1983	1983	1983	1997	1998	1983	1982	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1981	1990	1990	1989	1977	1989	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1977 - 2000	
ANNUAL TOTAL	47589.50		127506.70			
ANNUAL MEAN	130		348		525	
HIGHEST ANNUAL MEAN					2796	1983
LOWEST ANNUAL MEAN					.000	1990
HIGHEST DAILY MEAN	1640	Feb 10	7300	Feb 25	68000	Mar 12 1995
LOWEST DAILY MEAN	.00	May 7	.00	Oct 1	.00	Jan 27 1977
ANNUAL SEVEN-DAY MINIMUM	.00	May 7	.00	Oct 1	.00	Feb 3 1977
INSTANTANEOUS PEAK FLOW			8540	Feb 25	e92000	Mar 11 1995
INSTANTANEOUS PEAK STAGE			10.19	Feb 25	19.70	Mar 11 1995
ANNUAL RUNOFF (AC-FT)	94390		252900		380200	
10 PERCENT EXCEEDS	279		658		876	
50 PERCENT EXCEEDS	88		78		47	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1977 to current year.
CHEMICAL DATA: Water years 1977 to current year.
SPECIFIC CONDUCTANCE: Water years 1977–81.
WATER TEMPERATURE: Water years 1967–69, 1977–81.
BIOLOGICAL DATA: Water years 1977–81.
SEDIMENT DATA: December 1966 to September 1969, January 1977 to May 1995, June 1997 to current year.

PERIOD OF DAILY RECORD.—January 1977 to September 1981.
SPECIFIC CONDUCTANCE: January 1977 to September 1981.
WATER TEMPERATURE: January 1977 to September 1981.
SUSPENDED-SEDIMENT DISCHARGE: December 1966 to September 1969.

INSTRUMENTATION.—Water-quality monitor from January 1977 to September 1981.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
FEB												
17...	1145	2620	766	105	11.4	8.1	303	12.0	110	27	27.3	10.7
MAY												
09...	1145	30	765	116	10.9	8.7	887	18.5	300	170	64.4	33.7
AUG												
30...	1200	127	762	108	9.9	8.6	369	19.5	140	29	33.5	14.3
SEP												
08...	0945	93	758	98	9.5	8.5	382	16.5	150	43	36.6	14.6

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
FEB											
17...	1.5	.7	17.1	25	85	104	--	10.9	.2	18.8	44.8
MAY											
09...	3.2	2	66.9	32	128	144	6	62.0	.2	20.5	209
AUG											
30...	1.4	.6	17.0	20	112	128	5	11.0	.2	13.7	50.5
SEP											
08...	1.4	.6	17.5	20	108	131	1	11.8	.2	15.6	50.2

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	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)	TUR-BID-ITY (NTU) (00076)
FEB											
17...	.91	<.020	.489	<.010	.066	.062	.642	.26	192	185	270
MAY											
09...	.59	<.020	3.64	.077	<.050	<.010	.053	.80	585	553	1.8
AUG											
30...	.42	<.020	.305	<.010	<.050	.020	.108	.31	225	211	25
SEP											
08...	.32	<.020	.359	<.010	e.032	.025	.087	.31	231	215	23

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

11152300 SALINAS RIVER NEAR CHUALAR, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
FEB										
17...	1410	2470	12.0	1250	8340	32	42	60	85	100
MAY										
09...	1320	33	18.5	30	2.7	36	--	--	--	--
AUG										
30...	1335	124	23.5	44	15	68	--	--	--	--
SEP										
08...	1130	91	16.5	26	6.4	76	--	--	--	--

11152500 SALINAS RIVER NEAR SPRECKELS, CA

LOCATION.—Lat 36°37'52", long 121°40'17", in Nacional Grant, Monterey County, Hydrologic Unit 18060005, on right bank, on downstream side of bridge on Salinas–Monterey Highway (68), 0.8 mi upstream from El Toro Creek, 1.6 mi northwest of Spreckels, and 2 mi south of Salinas.

DRAINAGE AREA.—4,156 mi^2.

PERIOD OF RECORD.—January 1900 to August 1901, October 1929 to current year. Records for water year 1930 incomplete; yearly estimate published in WSP 1315-B. Published as "near Salinas" 1900–01.
CHEMICAL DATA: Water years 1952–54, 1958–70, 1972–79. Published incorrectly as station 11152300 "near Chualar" in 1967.
BIOLOGICAL DATA: Water years 1975–77.
SPECIFIC CONDUCTANCE: Water years 1975 to January 1977, daily.
WATER TEMPERATURE: Water years 1967–79, daily. Published incorrectly as station 11152300 "near Chualar" in 1967–69.
SEDIMENT DATA: Water years 1950–51; 1967–79, daily; 1986, monthly; August 1990. Published incorrectly as station 11152300 "near Chualar" in 1967–69.
TURBIDITY: Water year 1973.

REVISED RECORDS.—WSP 1565: 1930, 1935, 1945. WSP 1715: 1959. WSP 1929: Drainage area. WDR CA-85-2: 1983.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 20.56 ft above sea level. 1900–01, May 10 to July 29, 1940, nonrecording gages at site 0.3 mi downstream at different datum. July 29, 1940, to May 22, 1969, water-stage recorder at site 0.3 mi downstream at datum 0.69 ft lower. May 23, 1969, to Jan. 13, 1970, nonrecording gage at same site and datum. Mar. 17, 1941, to June 30, 1961, supplementary nonrecording gages.

REMARKS.—Records fair. Flow regulated by Santa Margarita Lake (formerly Salinas Reservoir) beginning in 1941, usable capacity, 23,000 acre-ft; Lake Nacimiento (formerly Nacimiento Reservoir) beginning in February 1957, usable capacity, 340,000 acre-ft; and by Lake San Antonio beginning in December 1965, usable capacity, 330,000 acre-ft. Large withdrawals from ground water and small surface-water diversions for municipal use and for irrigation upstream from station. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 95,000 ft^3/s, Mar. 12, 1995, gage height, 30.29 ft, from rating extended above 30,000 ft^3/s, peak includes estimate of 9,800 ft^3/s bypassing gage; no flow at times in 1929–40, many days in 1990–2000.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	99	13	220	3300	193	10	7.9	.00	2.3	52
2	.00	.00	92	8.9	118	2820	171	7.4	7.9	.00	4.2	59
3	.00	.00	94	6.8	78	2470	149	5.7	6.2	.00	2.5	61
4	.00	.00	97	6.2	55	2060	137	5.2	3.7	.00	.00	59
5	.00	.00	101	5.3	48	2280	121	.00	.00	.00	.00	53
6	.00	.00	101	5.3	41	1910	108	.00	.00	.00	.00	47
7	.00	.00	88	3.6	28	1650	96	.00	.00	7.5	.00	38
8	.00	.00	77	2.6	24	1440	87	.00	1.7	16	.00	29
9	.00	.00	76	1.8	17	1990	77	.00	2.3	17	.00	21
10	.00	.00	63	1.7	17	1940	70	.00	8.7	19	.00	16
11	.00	.00	45	8.0	18	1720	66	18	9.2	23	.00	13
12	.00	.00	34	17	426	1530	59	41	6.9	27	.00	17
13	.00	.00	28	17	1490	1330	52	49	9.2	26	.00	22
14	.00	.00	26	14	3030	1160	49	53	10	22	.00	18
15	.00	.00	32	14	4600	993	41	52	4.1	15	.00	14
16	.00	.00	35	18	3780	856	36	65	.00	7.5	.00	12
17	.00	.00	32	23	2810	751	41	67	.00	4.0	.00	8.1
18	.00	.00	28	37	2470	667	128	67	.00	6.4	.00	4.0
19	.00	.00	26	47	2900	595	177	68	.00	7.7	.00	1.7
20	.00	.00	27	146	3370	546	119	65	.00	5.0	.00	.00
21	.00	.00	25	68	3590	499	94	50	.00	3.6	2.8	.00
22	.00	.00	22	54	4160	454	85	40	.00	4.2	8.6	.00
23	.00	.00	17	171	4740	390	69	37	.00	3.5	17	.00
24	.00	.00	12	706	5570	349	58	32	.00	5.0	23	.00
25	.00	.00	10	1580	6200	329	55	28	.00	9.0	26	.00
26	.00	4.9	12	1570	5100	321	46	22	.00	15	27	.00
27	.00	96	16	531	4810	306	36	17	.00	17	25	.00
28	.00	127	18	285	4440	267	26	12	.00	14	23	.00
29	.00	137	17	171	4170	252	19	8.2	.00	6.9	29	.00
30	.00	120	16	119	---	235	14	8.9	.00	3.2	38	.00
31	.00	---	15	85	---	218	---	10	---	e.90	45	---
TOTAL	0.00	484.90	1381	5736.2	68320	35628	2479	838.40	77.80	285.40	273.40	544.80
MEAN	.000	16.2	44.5	185	2356	1149	82.6	27.0	2.59	9.21	8.82	18.2
MAX	.00	137	101	1580	6200	3300	193	68	10	27	45	61
MIN	.00	.00	10	1.7	17	218	14	.00	.00	.00	.00	.00
AC-FT	.00	962	2740	11380	135500	70670	4920	1660	154	566	542	1080

e Estimated.

11152500 SALINAS RIVER NEAR SPRECKELS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1940, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.24	5.04	378	491	3003	1656	520	75.7	7.80	1.53	.81	1.82
MAX	12.0	12.0	3215	1742	11940	9543	2019	340	49.3	9.00	5.00	6.10
(WY)	1939	1939	1932	1940	1938	1938	1935	1938	1938	1938	1938	1932
MIN	.000	.000	.000	6.33	9.23	3.86	.70	.10	.10	.000	.000	.000
(WY)	1940	1940	1940	1931	1931	1931	1931	1931	1931	1931	1931	1931

SUMMARY STATISTICS	WATER YEARS 1930 - 1940	
ANNUAL TOTAL		
ANNUAL MEAN	497	
HIGHEST ANNUAL MEAN	1931	1938
LOWEST ANNUAL MEAN	2.66	1931
HIGHEST DAILY MEAN	69900	Feb 12 1938
LOWEST DAILY MEAN	.00	Jul 1 1931
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 1 1931
INSTANTANEOUS PEAK FLOW	75000	Feb 12 1938
INSTANTANEOUS PEAK STAGE	25.00	Feb 12 1938
ANNUAL RUNOFF (AC-FT)	360400	
10 PERCENT EXCEEDS	727	
50 PERCENT EXCEEDS	4.7	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	25.4	35.4	221	930	1590	1271	504	127	34.6	21.0	20.0	29.9
MAX	402	389	2511	6993	16260	12640	6714	2839	767	403	354	394
(WY)	1970	1983	1983	1997	1998	1983	1958	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1991	1991	1991	1991	1990	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	34897.63		116048.90			
ANNUAL MEAN	95.6		317		394	
HIGHEST ANNUAL MEAN					2997	1983
LOWEST ANNUAL MEAN					.81	1990
HIGHEST DAILY MEAN	1500	Feb 10	6200	Feb 25	64800	Feb 26 1969
LOWEST DAILY MEAN	.00	May 18	.00	Oct 1	.00	Jan 31 1990
ANNUAL SEVEN-DAY MINIMUM	.00	May 18	.00	Oct 1	.00	Jan 31 1990
INSTANTANEOUS PEAK FLOW			7150	Feb 25	95000	Mar 12 1995
INSTANTANEOUS PEAK STAGE			11.51	Feb 25	30.29	Mar 12 1995
ANNUAL RUNOFF (AC-FT)	69220		230200		285800	
10 PERCENT EXCEEDS	281		720		625	
50 PERCENT EXCEEDS	17		16		3.3	
90 PERCENT EXCEEDS	.00		.00		.00	

11152540 EL TORO CREEK NEAR SPRECKELS, CA

LOCATION.—Lat 36°35'00", long 121°42'50", in El Toro Grant, Monterey County, Hydrologic Unit 18060005, on right bank, 0.3 mi downstream from San Benancio Gulch, and 4.7 mi southwest of Spreckels.

DRAINAGE AREA.—31.9 mi^2.

PERIOD OF RECORD.—October 1961 to current year.
SEDIMENT DATA: Water years 1986, 1990.

GAGE.—Water-stage recorder, crest-stage gage, and concrete-weir control from Oct. 1, 1992, to Feb. 3, 1998. Elevation of gage is 210 ft above sea level, from topographic map. Prior to Sept. 16, 1983, gage was at site 700 ft upstream at different datum.

REMARKS.—Records poor. No regulation or diversion upstream from station except for small stock ponds. Low flow at times affected by irrigation runoff from upstream golf course and residences. See schematic diagram of Salinas River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 669 ft^3/s, Feb. 3, 1998, gage height, 7.11 ft, from rating curve extended above 240 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 29 ft^3/s (revised), or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 18	0800	48	2.88	Feb. 23	0345	194	3.71
Jan. 23	1115	154	3.47	Feb. 27	1200	84	2.63
Feb. 13	1930	190	3.69	Mar. 5	1430	446	5.49
Feb. 16	2330	56	3.06				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.15	.18	.27	.30	10	e.70	.49	.27	.08	.05	.06
2	.42	.16	.17	.32	.42	6.0	e.68	.44	.19	.15	.04	.08
3	.38	.15	.18	.22	1.3	4.8	e.60	.31	.23	.08	.05	.09
4	.47	.17	.17	.35	.47	5.2	e.58	.29	.32	.08	.05	.09
5	.42	.31	.18	.25	.39	311	e.57	.24	.33	.10	.04	.08
6	.42	.19	.19	.25	.37	104	e.50	.28	.30	.11	.05	.03
7	.38	.43	.19	.19	.27	11	e.48	.25	.26	.17	.04	.04
8	.36	.20	.20	.31	.28	e7.8	e.46	.26	.19	.17	.05	.05
9	.33	.16	.19	.29	.28	e6.0	e.45	.28	.14	.12	.04	.07
10	.26	.15	.23	.28	.58	e5.6	e.44	.28	.17	.13	.03	.05
11	.34	.14	.21	.26	13	e4.5	e.43	.24	.17	.12	.01	.03
12	.34	.19	.19	.24	4.9	e4.0	e.42	.27	.12	.10	.03	.02
13	.31	.18	.17	.23	51	e3.8	e.41	.25	.11	.08	.05	.02
14	.35	.20	.18	.25	25	e3.5	e.48	.19	.09	.09	.03	.01
15	.29	.17	.16	.28	.22	e3.3	e1.4	.28	.10	.11	.03	.03
16	.28	.18	.18	.77	4.0	e3.2	2.4	.39	.10	.09	.04	.03
17	.27	.17	.17	.49	1.0	e2.9	4.6	.34	.09	.09	.05	.03
18	.32	.20	.21	5.3	e.80	e2.5	.34	.30	.10	.07	.05	.02
19	.25	.19	.19	e2.5	e.50	e2.3	.57	.29	.13	.06	.04	.03
20	.20	.25	.20	e.48	e.48	e2.0	.63	.29	.10	.07	.06	.03
21	.26	.20	.25	e.43	e.55	e1.9	.85	.29	.09	.07	.08	.04
22	.32	.17	.23	e.40	e6.0	e1.7	.87	.23	.07	.07	.07	.05
23	.28	.16	.26	69	89	e1.6	.71	.28	.08	.07	.05	.05
24	.27	.16	.30	7.3	18	e1.5	.68	.39	.07	.07	.06	.05
25	.21	.17	.25	2.6	.82	e1.4	.60	.44	.08	.06	.06	.04
26	.19	.17	.25	.56	e.90	e1.2	.49	.38	.09	.04	.05	.04
27	.20	.18	.26	.72	50	e1.1	.58	.22	.09	.06	.04	.03
28	.21	.17	.24	.81	45	e.90	.59	.24	.08	.07	.06	.04
29	.20	.19	.23	.39	26	e.88	.52	.28	.08	.08	.07	.05
30	.20	.17	.20	.39	---	e.80	.48	.23	.08	.06	.06	.04
31	.20	---	.25	.33	---	e.78	---	.23	---	.04	.06	---
TOTAL	9.37	5.68	6.46	96.46	341.83	517.16	23.51	9.17	4.32	2.76	1.49	1.32
MEAN	.30	.19	.21	3.11	11.8	16.7	.78	.30	.14	.089	.048	.044
MAX	.47	.43	.30	69	89	311	4.6	.49	.33	.17	.08	.09
MIN	.19	.14	.16	.19	.22	.78	.34	.19	.07	.04	.01	.01
AC-FT	19	11	13	191	678	1030	47	18	8.6	5.5	3.0	2.6

e Estimated.

11152540 EL TORO CREEK NEAR SPRECKELS, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.12	.26	.74	5.49	9.44	7.17	2.74	.48	.15	.089	.063	.060
MAX	1.52	2.23	7.08	31.9	89.9	62.2	21.6	5.61	1.37	.58	.43	.35
(WY)	1980	1983	1983	1998	1998	1983	1998	1998	1998	1998	1998	1999
MIN	.000	.000	.000	.000	.000	.058	.022	.000	.000	.000	.000	.000
(WY)	1965	1989	1990	1991	1991	1966	1990	1966	1966	1965	1962	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	820.72		1019.53			
ANNUAL MEAN	2.25		2.79		2.19	
HIGHEST ANNUAL MEAN					14.4	1998
LOWEST ANNUAL MEAN					.034	1990
HIGHEST DAILY MEAN	118	Feb 9	311	Mar 5	390	Mar 2 1983
LOWEST DAILY MEAN	.12	May 31	.01	Aug 11	.00	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	.14	Jul 28	.02	Sep 12	.00	Oct 6 1961
INSTANTANEOUS PEAK FLOW			446	Mar 5	669	Feb 3 1998
INSTANTANEOUS PEAK STAGE			5.49	Mar 5	7.11	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	1630		2020		1590	
10 PERCENT EXCEEDS	3.0		2.3		1.7	
50 PERCENT EXCEEDS	.31		.23		.10	
90 PERCENT EXCEEDS	.17		.05		.00	

11152600 GABILAN CREEK NEAR SALINAS, CA

LOCATION.—Lat 36°45'21", long 121°36'34", in La Natividad Grant, Monterey County, Hydrologic Unit 18060011, on left bank, at downstream side of county road bridge, 0.3 mi downstream from small left-bank tributary, and 6.2 mi northeast of Salinas.

DRAINAGE AREA.—36.7 mi^2.

PERIOD OF RECORD.—October 1970 to current year. January 1959 to September 1970 in reports of Monterey County Water Resources Agency.

REVISED RECORDS.—WDR CA-84-2: 1974(M), 1978(P), 1980–83(P).

GAGE.—Water-stage recorder and crest-stage gage. Concrete control since Oct. 9, 1975. Elevation of gage is 200 ft above sea level, from topographic map. Prior to Oct. 9, 1975, on right bank at different datum.

REMARKS.—Records fair except for discharges greater than 300 ft^3/s or less than 1 ft^3/s, which are poor. Natural flow of stream affected by small diversions, storage reservoirs, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,030 ft^3/s, Feb. 3, 1998, gage height, 5.17 ft, from rating curve extended above 260 ft^3/s; maximum gage height, 11.13 ft, Apr. 1, 1974, at datum then in use; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 60 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 23	1000	131	2.89	Feb. 23	0145	266	3.37
Feb. 13	2030	711	4.61	Feb. 27	1245	108	2.81

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	38	8.4	3.1	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	32	7.5	1.9	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	29	7.8	1.9	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	24	7.6	1.4	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	58	7.9	1.7	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	47	7.5	2.0	.02	.00	.00	.00
7	.00	.00	.00	.00	.00	35	8.1	2.5	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	44	7.6	5.1	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	53	6.7	3.8	.00	.00	.00	.00
10	.00	.00	.00	.00	8.8	39	7.0	3.0	.00	.00	.00	.00
11	.00	.00	.00	.00	20	33	7.1	2.9	.00	.00	.00	.00
12	.00	.00	.00	.00	38	28	6.2	2.3	.00	.00	.00	.00
13	.00	.00	.00	.00	228	24	6.1	1.9	.00	.00	.00	.00
14	.00	.00	.00	.00	183	22	6.2	2.4	.00	.00	.00	.00
15	.00	.00	.00	.00	74	21	5.8	3.0	.00	.00	.00	.00
16	.00	.00	.00	3.3	62	19	6.0	2.7	.00	.00	.00	.00
17	.00	.00	.00	.00	48	17	8.2	2.1	.00	.00	.00	.00
18	.00	.00	.00	3.8	29	15	7.2	1.7	.00	.00	.00	.00
19	.00	.99	.00	.00	22	14	6.3	.58	.00	.00	.00	.00
20	.00	.00	.00	.00	22	12	5.3	1.1	.00	.00	.00	.00
21	.00	.00	.00	.00	22	12	5.1	.67	.00	.00	.00	.00
22	.00	.00	.00	.00	19	12	5.5	.72	.00	.00	.00	.00
23	.00	.00	.00	42	104	11	5.0	.18	.00	.00	.00	.00
24	.00	.00	.00	26	52	11	5.0	.42	.00	.00	.00	.00
25	.00	.00	.00	26	38	10	4.0	.82	.00	.00	.00	.00
26	.00	.00	.00	3.9	28	10	3.7	.11	.00	.00	.00	.00
27	.00	.00	.00	2.3	83	10	3.2	.00	.00	.00	.00	.00
28	.00	.00	.00	.18	60	11	4.0	.05	.00	.00	.00	.00
29	.00	.00	.00	.00	50	11	3.5	.03	.00	.00	.00	.00
30	.00	.00	.00	3.5	---	9.9	3.6	.04	.00	.00	.00	.00
31	.00	---	.00	.04	---	9.1	---	.00	---	.00	.00	---
TOTAL	0.00	0.99	0.00	111.02	1190.80	721.0	183.1	50.12	0.02	0.00	0.00	0.00
MEAN	.000	.033	.000	3.58	41.1	23.3	6.10	1.62	.001	.000	.000	.000
MAX	.00	.99	.00	42	228	58	8.4	5.1	.02	.00	.00	.00
MIN	.00	.00	.00	.00	.00	9.1	3.2	.00	.00	.00	.00	.00
AC-FT	.00	2.0	.00	220	2360	1430	363	99	.04	.00	.00	.00

11152600 GABILAN CREEK NEAR SALINAS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.037	.60	3.84	11.1	22.2	16.8	9.35	2.87	1.33	.50	.18	.040
MAX	.50	6.20	55.0	99.5	239	124	58.7	25.2	14.8	8.24	2.85	.58
(WY)	1984	1983	1997	1997	1998	1983	1974	1998	1998	1998	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1971	1971	1972	1972	1972	1972	1972	1971	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	2698.42		2257.05			
ANNUAL MEAN	7.39		6.17		5.64	
HIGHEST ANNUAL MEAN					35.4	1998
LOWEST ANNUAL MEAN					.000	1972
HIGHEST DAILY MEAN	106	Feb 9	228	Feb 13	646	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 2	.00	Oct 1	.00	Oct 1 1970
INSTANTANEOUS PEAK FLOW			711	Feb 13	1030	Feb 3 1998
INSTANTANEOUS PEAK STAGE			4.61	Feb 13	11.13	Apr 1 1974
ANNUAL RUNOFF (AC-FT)	5350		4480		4090	
10 PERCENT EXCEEDS	23		19		11	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11154700 CLEAR CREEK NEAR IDRIA, CA

LOCATION.—Lat 36°21'53", long 120°45'19", in SE 1/4 sec.15, T.18 S., R.11 E., San Benito County, Hydrologic Unit 18060002, on right bank, in Clear Creek Management Area, 1.7 mi upstream from San Benito River, and 5.8 mi southwest of Idria.

DRAINAGE AREA.—14.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1993 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 2,600 ft above sea level, from topographic map.

REMARKS.—Records fair except estimated days and flows below 3 ft^3/s, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,100 ft^3/s, Mar. 10, 1995, gage height, 6.75 ft, from rating curve extended above 18 ft^3/s on basis of slope-area measurements at gage heights of 4.44 ft and 6.75 ft; minimum daily, 0.07 ft^3/s, Sept. 7, 8, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 30 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 25	0130	45	2.20	Feb. 23	0330	56	2.32
Feb. 11	2345	73	2.50	Feb. 27	1445	44	2.19

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.34	.64	.64	2.3	12	5.0	3.7	2.3	1.5	.86	.98
2	.32	.35	.64	.64	2.0	11	4.8	3.6	2.2	1.8	.77	1.1
3	.36	.36	.63	.62	2.1	11	4.7	3.5	2.3	1.9	.49	1.0
4	.36	.37	.64	.63	2.2	10	4.7	3.5	e2.3	1.6	.48	1.1
5	.39	.36	.64	.66	1.9	11	4.9	3.5	2.3	1.5	.50	1.2
6	.50	.33	.64	.61	1.8	9.1	4.8	3.1	2.2	1.5	.50	.60
7	.51	.55	.65	.61	1.7	10	4.6	3.2	2.2	1.6	.54	.54
8	.49	.90	.66	.60	1.6	16	4.7	3.1	2.8	1.4	.51	.59
9	.44	.55	.69	.61	1.6	13	4.6	3.4	2.5	1.4	.49	.56
10	.39	.52	.72	.62	4.2	13	4.5	3.2	2.6	1.5	.56	.53
11	.35	.48	.68	.62	7.1	12	4.4	3.1	2.3	1.4	.66	.54
12	.35	.45	.68	.63	e15	11	4.3	3.3	2.2	1.4	.56	.50
13	.34	.44	.67	.61	e21	9.9	4.2	3.0	2.2	1.4	.62	.43
14	.35	.43	.65	.60	27	9.0	4.4	3.2	2.1	1.3	.71	.50
15	.37	.46	.66	.60	13	8.6	4.2	3.3	2.1	1.1	.79	.50
16	.35	.54	.62	1.2	14	8.3	4.5	3.9	2.1	1.1	.71	.49
17	.31	.73	.62	1.5	11	7.4	18	3.7	2.1	1.0	.90	.48
18	.31	.58	.63	7.8	8.7	7.0	7.2	3.7	2.0	.95	.72	.31
19	.33	.68	.61	1.9	7.3	7.5	5.9	3.8	2.0	.91	.98	.31
20	.31	.78	.61	1.7	13	7.5	5.5	3.5	2.1	.88	1.1	.26
21	.34	.74	.62	1.3	17	6.8	5.3	3.2	2.0	.83	1.2	.27
22	.32	.64	.62	1.2	12	6.4	4.7	2.9	2.0	.76	.92	.32
23	.32	.61	.61	15	31	6.4	4.4	2.4	2.0	.71	.78	.32
24	.32	.61	.60	18	19	6.3	4.4	2.4	1.9	.73	.81	.35
25	.32	.61	.61	19	16	6.0	4.0	2.3	1.9	.65	.80	.39
26	.32	.62	.61	4.5	13	5.5	4.0	2.3	1.8	.75	.77	.37
27	.33	.62	.60	2.9	26	5.4	3.9	2.3	1.8	.55	.82	.32
28	.32	.61	.60	2.3	18	5.5	4.0	2.3	1.6	.55	.82	.37
29	.35	.57	.60	2.0	14	6.0	3.6	2.3	1.6	.59	.86	.39
30	.32	.63	.61	4.4	---	5.8	3.6	2.2	1.5	.92	.93	.39
31	.32	---	.62	2.9	---	5.3	---	2.3	---	.80	1.0	---
TOTAL	11.02	16.46	19.68	96.90	324.5	269.7	151.8	95.2	63.0	34.98	23.16	16.01
MEAN	.36	.55	.63	3.13	11.2	8.70	5.06	3.07	2.10	1.13	.75	.53
MAX	.51	.90	.72	19	31	16	18	3.9	2.8	1.9	1.2	1.2
MIN	.31	.33	.60	.60	1.6	5.3	3.6	2.2	1.5	.55	.48	.26
AC-FT	22	33	39	192	644	535	301	189	125	69	46	32

e Estimated.

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.05	1.08	2.09	7.36	13.6	15.6	9.09	6.80	4.59	2.35	1.38	1.07
MAX	2.36	1.61	5.90	24.6	46.7	49.4	20.9	21.6	14.5	6.84	3.86	2.91
(WY)	1999	1999	1997	1995	1998	1995	1998	1998	1998	1998	1998	1998
MIN	.23	.36	.43	1.25	2.87	1.79	1.35	1.11	.62	.27	.10	.11
(WY)	1995	1995	1995	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	791.06		1122.41			
ANNUAL MEAN	2.17		3.07		5.46	
HIGHEST ANNUAL MEAN					12.7	1998
LOWEST ANNUAL MEAN					1.06	1994
HIGHEST DAILY MEAN	13	Apr 11	31	Feb 23	464	Mar 10 1995
LOWEST DAILY MEAN	.31	Oct 1	.26	Sep 20	.07	Sep 7 1994
ANNUAL SEVEN-DAY MINIMUM	.32	Oct 17	.31	Sep 18	.08	Sep 2 1994
INSTANTANEOUS PEAK FLOW			73	Feb 11	1100	Mar 10 1995
INSTANTANEOUS PEAK STAGE			2.50	Feb 11	6.75	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	1570		2230		3960	
10 PERCENT EXCEEDS	4.9		8.4		14	
50 PERCENT EXCEEDS	1.1		1.2		1.9	
90 PERCENT EXCEEDS	.45		.36		.51	

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1993 to current year.
CHEMICAL DATA: November 1993 to current year.
WATER TEMPERATURE: October 1993 to September 1996.
SEDIMENT DATA: November 1993 to current year.

PERIOD OF DAILY RECORD.—October 1993 to September 1996.
WATER TEMPERATURE: October 1993 to September 1996.

REMARKS.—Zero bed-load discharge observed for flows less than 5.6 ft^3/s during current year.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 35.5°C, Aug. 13–15, 1994; minimum recorded, 0.0°C, several days during water year 1994, and Jan. 23, 1996.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JAN											
24...	1430	8.1	695	--	--	8.9	965	12.0	620	31	2.88
FEB											
21...	1200	17	690	104	11.1	9.1	857	8.0	550	43	2.78
MAR											
28...	1245	6.4	694	102	9.1	8.9	970	16.0	640	59	2.48
SEP											
06...	1230	.66	696	103	8.8	8.9	1060	18.5	660	75	2.30

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
JAN											
24...	150	1.3	.2	9.1	3	601	577	72	20.1	<.1	4.1
FEB											
21...	132	.9	.1	7.1	3	516	489	65	12.4	<.1	5.3
MAR											
28...	154	.9	.1	7.7	3	589	581	63	15.9	<.1	4.1
SEP											
06...	159	1.2	.2	11.4	4	594	582	66	21.8	<.1	2.4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	TUR-BID-ITY (NTU) (00076)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
JAN										
24...	7.0	.83	608	550	60	<15	57	<13	<10	15.9
FEB										
21...	6.5	.68	499	473	57	<15	52	<13	<10	10.1
MAR										
28...	5.1	.82	602	539	.8	<15	65	<13	<10	12.6
SEP										
06...	5.2	.76	556	556	.2	<15	76	<13	<10	17.9

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

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

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

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)
JAN										
24...	e2	<.2	<.3	<34	4	<2.4	<1	41.7	<10	.41
FEB										
21...	<2	<.2	<.3	<34	4	<2.4	<1	39.9	<10	.72
MAR										
28...	<2	<.2	e.2	<34	2	e1.5	<1	40.1	<10	.33
SEP										
06...	<2	<.2	<.3	<34	e1	<2.4	<1	42.0	<10	.26

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN						
24...	1655	12	12.0	317	10	90
FEB						
09...	1210	1.5	12.0	2	.01	--
21...	1105	20	8.5	242	13	60
MAR						
28...	1305	5.9	16.0	22	.35	--
APR						
18...	1230	7.6	--	34	.70	--
MAY						
16...	1230	4.1	14.5	2	.02	--
SEP						
06...	1310	.66	18.5	1	.00	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
24...	1645	1000	1150	.250	0	1640	1650	30	.5
FEB									
21...	1125	1000	1150	.250	0	1121	1128	30	1.0
21...	1205	1000	1150	.250	0	1201	1208	30	1.0

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

11154700 CLEAR CREEK NEAR IDRIA, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
JAN								
24...	1	24	24	.25	12	12.0	<.01	.06
FEB								
21...	1	15	15	.50	17	8.5	.12	2.2
21...	1	15	15	.50	17	8.5	.17	2.2

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
JAN								
24...	1	2	8	23	41	60	86	100
FEB								
21...	1	4	18	50	73	82	89	100
21...	1	2	12	37	61	86	98	100

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

11156500 SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL, CA

LOCATION.—Lat 36°36'34", long 121°12'07", in SE 1/4 SE 1/4 sec.21, T.15 S., R.7 E., San Benito County, Hydrologic Unit 18060002, on left bank, 0.9 mi northwest of Willow Creek School, 1.3 mi downstream from Willow Creek, and 10 mi northwest of San Benito.

DRAINAGE AREA.—249 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1565: 1948(M), 1949. WSP 1315-B: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 925.52 ft above sea level. Prior to Jan. 28, 1948, and Nov. 11, 1955, to Sept. 30, 1965, at site 0.9 mi downstream at different datum. Jan. 28, 1948, to Nov. 10, 1955, and Oct. 1, 1965, to Oct. 22, 1970, at present site at datum 2.37 ft higher.

REMARKS.—Records are poor. Medium and low flows frequently regulated by Hernandez Reservoir 40 mi upstream beginning in December 1961, capacity, 18,500 acre-ft. Small diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,660 ft^3/s, Mar. 10, 1995, gage height, 14.55 ft, from floodmarks, from rating curve extended above 2,100 ft^3/s on basis of slope-area measurement at gage height 12.94 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of February 1938 reached a stage of about 9.0 ft, from floodmarks at former site 0.9 mi downstream, referenced to datum used at that site, flow estimated at 9,000 ft^3/s, based on 1941 peak and rating extrapolation.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	1430	252	6.93				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.0	2.8	5.6	5.9	16	48	10	16	21	22	26	28
2	e5.5	2.8	5.6	5.7	13	56	10	16	20	22	27	29
3	e4.5	2.8	5.7	5.6	12	52	9.6	15	21	22	27	29
4	e4.0	2.8	5.8	5.7	15	62	8.8	14	21	23	28	28
5	e3.5	2.9	5.8	5.7	13	90	9.0	16	22	23	27	28
6	e3.0	3.0	5.9	5.5	13	102	8.5	16	23	24	28	28
7	e3.0	3.3	5.9	5.5	11	122	8.5	17	23	23	25	27
8	e3.0	4.7	6.0	5.5	10	189	8.2	18	26	23	26	26
9	e2.8	4.1	6.3	5.4	7.6	179	8.3	16	26	23	26	26
10	e2.8	4.1	6.5	5.4	9.0	156	8.6	15	23	23	27	26
11	e2.8	4.0	6.2	5.3	10	149	10	15	23	23	27	26
12	e2.8	3.9	6.2	5.4	29	146	11	15	23	23	26	25
13	e2.8	3.9	6.2	4.9	46	144	12	15	23	23	26	26
14	e2.8	3.9	6.1	4.9	45	146	13	14	22	23	26	25
15	2.9	3.8	6.2	4.9	41	142	14	15	21	23	26	25
16	2.8	4.1	6.3	5.7	28	147	15	16	21	24	25	23
17	2.8	4.7	6.2	6.0	41	94	30	16	21	24	25	13
18	2.8	4.5	6.1	7.5	27	43	53	14	22	27	26	9.6
19	2.9	4.9	6.0	6.5	20	29	48	13	23	26	26	7.8
20	2.9	5.6	5.9	8.9	23	24	47	12	23	30	27	6.4
21	2.8	5.2	6.0	7.2	62	20	39	12	22	23	27	5.4
22	2.8	5.0	5.9	6.7	41	18	33	11	22	24	27	5.5
23	2.8	5.1	5.9	16	95	16	27	10	22	25	27	5.4
24	2.9	5.2	6.0	19	49	15	25	11	24	25	26	4.9
25	2.9	5.3	6.0	20	39	14	23	11	23	25	26	4.6
26	2.8	5.4	5.9	21	38	13	20	16	23	26	25	4.3
27	2.9	5.4	5.9	18	60	13	19	18	22	26	25	4.0
28	2.9	5.4	5.8	19	68	12	19	18	22	27	25	3.9
29	2.9	5.3	5.9	17	42	12	20	20	22	25	26	3.9
30	2.8	5.6	5.9	16	---	11	18	21	22	26	29	3.7
31	2.8	---	5.9	16	---	11	---	22	---	28	28	---
TOTAL	97.7	129.5	185.6	291.8	923.6	2275	585.5	474	672	754	818	507.4
MEAN	3.15	4.32	5.99	9.41	31.8	73.4	19.5	15.3	22.4	24.3	26.4	16.9
MAX	6.0	5.6	6.5	21	95	189	53	22	26	30	29	29
MIN	2.8	2.8	5.6	4.9	7.6	11	8.2	10	20	22	25	3.7
AC-FT	194	257	368	579	1830	4510	1160	940	1330	1500	1620	1010

e Estimated.

11156500 SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.58	5.83	15.5	33.4	73.0	80.1	43.9	22.4	19.8	14.5	14.1	11.1
MAX	53.4	51.6	181	238	869	655	532	130	88.5	79.2	71.0	67.2
(WY)	1996	1996	1956	1952	1998	1983	1958	1983	1962	1967	1967	1978
MIN	.013	.069	.095	.081	.11	.23	.21	.15	.078	.019	.000	.000
(WY)	1962	1990	1991	1990	1991	1977	1990	1961	1989	1961	1961	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	4697.70		7714.1			
ANNUAL MEAN	12.9		21.1		28.1	
HIGHEST ANNUAL MEAN					126	1941
LOWEST ANNUAL MEAN					.15	1990
HIGHEST DAILY MEAN	89	Feb 10	189	Mar 8	5000	Mar 10 1995
LOWEST DAILY MEAN	.80	Jun 29	2.8	Oct 9	.00	Sep 19 1947
ANNUAL SEVEN-DAY MINIMUM	1.1	Jun 24	2.8	Oct 9	.00	Sep 19 1947
INSTANTANEOUS PEAK FLOW			252	Mar 8	9660	Mar 10 1995
INSTANTANEOUS PEAK STAGE			6.93	Mar 8	14.55	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	9320		15300		20370	
10 PERCENT EXCEEDS	30		31		58	
50 PERCENT EXCEEDS	8.0		16		3.9	
90 PERCENT EXCEEDS	2.8		3.9		.19	

11157500 TRES PINOS CREEK NEAR TRES PINOS, CA

LOCATION.—Lat 36°45'53", long 121°17'45", in NW 1/4 NE 1/4 sec.34, T.13 S., R.6 E., in Santa Ana y Quien Sabe Grant, San Benito County, Hydrologic Unit 18060002, on right bank, 2.0 mi southeast of Tres Pinos, and 4.7 mi upstream from mouth.

DRAINAGE AREA.—208 mi^2.

PERIOD OF RECORD.—October 1939 to September 1983, October 1996 to current year. Yearly estimate only for 1940 and monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 515 ft above sea level, from topographic map. Water years 1939–83, located 1.5 mi upstream at different datum.

REMARKS.—Records poor. No regulation. Diversions above station for irrigation can divert total flow in summer months, and since 1962, diversions into basin above station from San Benito River (via Paicines Reservoir) for ground-water recharge and irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 27,200 ft^3/s, Feb. 3, 1998, gage height, 16.00 ft, from floodmarks, from rating curve extended above 9,000 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in 1952, 1957–61, 1965, 1998, 1999.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in February 1938 reached a stage of about 9.0 ft, from floodmarks at datum then in use.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 450 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	1200	200	2.20				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	2.7	2.5	2.1	2.1	108	e12	9.0	7.3	7.0	8.0	9.1
2	3.6	2.7	2.5	2.2	2.1	99	e12	10	7.2	12	7.9	9.0
3	4.1	2.6	2.4	2.3	2.1	92	e11	8.1	8.3	13	8.0	8.6
4	4.1	2.7	2.5	2.3	2.2	83	e10	6.8	9.0	9.0	8.1	8.6
5	4.3	2.6	2.6	2.3	2.1	94	e10	5.5	7.6	8.0	8.0	8.6
6	4.4	2.6	2.5	2.4	2.1	109	e9.7	5.6	7.5	7.0	8.0	8.4
7	4.3	2.7	2.5	2.4	2.1	89	e9.5	5.7	7.4	7.0	8.1	8.4
8	4.3	2.6	2.5	2.4	2.0	106	e9.1	5.3	8.1	6.7	8.1	8.4
9	4.4	2.7	2.7	2.3	2.1	89	e9.8	4.5	8.0	7.0	8.1	8.4
10	4.4	2.8	2.5	2.3	2.1	78	e8.7	4.7	8.3	10	8.0	8.4
11	4.2	2.5	2.5	2.3	2.1	70	e8.2	4.5	7.9	10	8.0	8.1
12	4.3	2.6	2.5	2.2	2.2	63	e7.7	4.5	7.7	8.0	8.0	8.1
13	3.7	2.4	2.6	2.2	2.6	54	e7.4	4.6	8.1	7.0	8.0	8.0
14	3.6	2.5	2.6	2.3	92	46	e7.0	4.6	8.1	7.0	8.0	7.9
15	3.9	2.5	2.5	2.3	81	45	e7.0	4.8	8.6	7.0	8.1	7.5
16	3.8	2.4	2.5	2.4	49	48	e6.5	4.8	10	6.0	8.2	7.7
17	3.5	2.5	2.6	2.5	58	39	e6.0	4.6	9.0	8.0	8.2	7.4
18	3.7	2.5	2.6	2.5	41	38	e5.5	4.7	9.0	7.0	8.6	7.1
19	3.8	2.6	2.8	2.3	33	37	e5.0	4.5	9.2	5.8	8.9	6.9
20	3.8	2.5	2.6	2.7	29	32	e5.0	4.8	9.3	e8.0	9.0	6.8
21	3.7	2.6	2.7	2.3	57	30	6.5	5.0	9.3	e7.5	9.0	7.0
22	3.7	2.5	2.6	2.3	45	23	7.0	6.0	8.0	e7.5	8.7	6.9
23	3.6	2.4	2.5	3.5	159	22	8.0	22	9.0	e7.5	9.0	6.8
24	3.6	2.4	2.6	2.6	116	21	9.0	5.6	11	7.3	8.8	6.8
25	3.6	2.3	2.6	2.8	84	17	9.0	6.1	9.2	7.7	8.6	6.7
26	3.6	2.4	2.7	2.4	65	17	9.0	8.0	10	7.4	8.5	6.7
27	3.6	2.4	2.7	2.4	88	16	9.0	6.6	9.0	7.1	8.6	6.5
28	3.6	2.4	2.7	2.3	128	14	9.0	6.9	9.0	7.5	8.6	6.4
29	3.4	2.4	1.9	2.3	99	13	9.9	7.2	9.9	7.5	9.0	6.4
30	2.8	2.5	2.1	2.2	---	13	9.1	6.9	8.0	7.5	8.9	6.3
31	2.7	---	2.1	2.1	---	e13	---	7.3	---	7.6	8.9	---
TOTAL	117.8	76.0	78.2	73.9	1251.9	1618	252.6	199.2	258.0	242.6	259.9	227.9
MEAN	3.80	2.53	2.52	2.38	43.2	52.2	8.42	6.43	8.60	7.83	8.38	7.60
MAX	4.4	2.8	2.8	3.5	159	109	12	22	11	13	9.0	9.1
MIN	2.7	2.3	1.9	2.1	2.0	13	5.0	4.5	7.2	5.8	7.9	6.3
AC-FT	234	151	155	147	2480	3210	501	395	512	481	516	452

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

MEAN	2.77	4.21	15.8	40.1	67.1	41.0	25.9	7.08	5.13	4.70	4.34	3.51
MAX	7.40	23.0	205	313	835	391	327	76.1	29.8	18.9	20.6	14.1
(WY)	1970	1997	1956	1997	1998	1983	1958	1998	1998	1979	1978	1983
MIN	.22	.19	.64	1.06	.88	.52	.18	.22	.21	.14	.15	.12
(WY)	1965	1965	1978	1961	1961	1948	1964	1964	1950	1966	1965	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	3330.97		4656.0			
ANNUAL MEAN	9.13		12.7		18.2	
HIGHEST ANNUAL MEAN					98.9	1998
LOWEST ANNUAL MEAN					.69	1964
HIGHEST DAILY MEAN	110	Feb 9	159	Feb 23	9000	Feb 3 1998
LOWEST DAILY MEAN	.00	Aug 4	1.9	Dec 29	.00	Aug 30 1952
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 4	2.1	Feb 5	.05	Aug 4 1999
INSTANTANEOUS PEAK FLOW			200	Mar 8	27200	Feb 3 1998
INSTANTANEOUS PEAK STAGE			2.20	Mar 8	16.00	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	6610		9240		13180	
10 PERCENT EXCEEDS	18		29		18	
50 PERCENT EXCEEDS	4.4		7.0		3.0	
90 PERCENT EXCEEDS	2.3		2.4		.47	

e Estimated.

11158600 SAN BENITO RIVER AT STATE HIGHWAY 156, NEAR HOLLISTER, CA

LOCATION.—Lat 36°51'07", long 121°25'44", in San Justo Grant, San Benito County, Hydrologic Unit 18060002, on right bank, at downstream side of bridge on State Highway 156, and 1.6 mi west of Hollister.

DRAINAGE AREA.—607 mi^2.

PERIOD OF RECORD.—October 1970 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 poor. Gage datum lowered by 3.00 ft on Oct. 1, 1999, to account for channel scour. Low flows regulated by Hernandez Reservoir 73 mi upstream, capacity, 18,500 acre-ft. Some diversions upstream from station for irrigation, and interbasin transfer to Tres Pinos Creek for ground-water recharge. Percolation ponds are constructed upstream from station during summer months.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 34,500 ft^3/s, Feb. 3, 1998, gage height, 13.48 ft, at datum then in use, from rating curve extended above 3,200 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1530	470	5.28				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.45	2.0	.00	2.3	5.7	173	15	4.0	.00	.00	.00	.12
2	e.46	2.2	.00	1.9	5.5	150	14	2.9	.00	.00	.00	.15
3	e.47	2.1	.00	2.0	5.3	146	13	1.6	.00	.00	.00	.15
4	e.48	1.8	.00	2.3	5.3	145	12	.87	.00	.00	.00	.15
5	e.49	1.6	.00	2.6	4.9	189	11	1.1	.02	.00	.00	.15
6	e.51	1.5	.00	2.7	3.9	238	10	1.0	.01	.00	.00	.16
7	e.54	1.9	.00	2.5	3.7	214	9.1	.79	.01	.00	.00	.20
8	e.58	1.2	.00	2.6	3.8	223	7.9	2.2	.18	.00	.00	.22
9	e.68	.99	.24	2.6	4.1	255	7.0	2.0	.02	.00	.00	.24
10	e.73	.82	.82	2.7	5.6	219	6.1	1.3	.00	.00	.00	.22
11	e.76	.71	1.0	2.7	18	201	5.2	.88	.00	.00	.00	.22
12	e.79	.66	1.2	2.7	20	188	4.6	.29	.00	.00	.00	.22
13	e.82	.62	1.2	2.6	76	181	4.3	.25	.00	.00	.00	.24
14	e.86	.44	1.3	2.6	190	173	4.2	.48	.00	.00	.00	.22
15	e.96	.33	1.5	2.1	182	165	3.8	1.2	.00	.00	.00	.22
16	e1.0	.28	1.8	5.9	109	150	4.1	1.2	.00	.00	.00	.25
17	e1.1	.24	2.1	6.4	99	139	14	.52	.00	.00	.00	.28
18	e1.1	.18	2.2	11	83	84	18	.09	.00	.00	.00	.26
19	.85	.60	2.2	6.7	25	66	45	.00	.00	.00	.02	.28
20	.82	.17	2.2	12	16	59	28	.00	.00	.00	.07	.37
21	.80	.13	2.6	8.5	42	52	26	.00	.00	.00	.12	.38
22	.84	.08	2.6	6.4	113	46	22	.00	.00	.00	.15	.36
23	.84	.06	2.5	67	268	42	21	.00	.00	.00	.15	.27
24	.81	.05	2.5	28	237	38	13	.00	.00	.00	.12	.28
25	.73	.05	2.7	39	184	35	9.1	.00	.00	.00	.07	.19
26	.63	.07	2.6	26	120	33	8.1	.00	.00	.00	.09	.33
27	.67	.05	2.5	24	142	31	5.9	.00	.00	.00	.05	.33
28	.80	.00	2.3	21	241	29	4.8	.00	.00	.00	.05	.33
29	.79	.00	2.3	14	187	22	4.2	.03	.00	.00	.05	.18
30	1.3	.00	2.6	8.2	---	18	4.0	.03	.00	.00	.05	.12
31	1.9	---	2.3	7.4	---	17	---	.01	---	.00	.08	---
TOTAL	24.56	20.83	45.26	328.4	2399.8	3721	354.4	22.74	0.24	0.00	1.07	7.09
MEAN	.79	.69	1.46	10.6	82.8	120	11.8	.73	.008	.000	.035	.24
MAX	1.9	2.2	2.7	67	268	255	45	4.0	.18	.00	.15	.38
MIN	.45	.00	.00	1.9	3.7	17	3.8	.00	.00	.00	.00	.12
AC-FT	49	41	90	651	4760	7380	703	45	.5	.00	2.1	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	2.97	6.79	20.0	74.7	178	151	44.0	17.4	7.90	5.49	5.28	4.98
MAX	10.4	54.4	175	581	2350	1545	381	233	76.3	28.3	19.5	16.3
(WY)	1996	1997	1997	1997	1998	1983	1998	1998	1998	1998	1995	1973
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1973	1975	1977	1977	1977	1977	1977	1976	1972	1972	1972	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	5712.93		6925.39			
ANNUAL MEAN	15.7		18.9		42.5	
HIGHEST ANNUAL MEAN					287	1998
LOWEST ANNUAL MEAN					.000	1977
HIGHEST DAILY MEAN	735	Feb 10	268	Feb 23	19800	Feb 3 1998
LOWEST DAILY MEAN	.00	Jun 11	.00	Nov 28	.00	Feb 1 1971
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 11	.00	Nov 28	.00	Oct 11 1971
INSTANTANEOUS PEAK FLOW			470	Feb 23	34500	Feb 3 1998
INSTANTANEOUS PEAK STAGE			5.28	Feb 23	13.48	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	11330		13740		30760	
10 PERCENT EXCEEDS	44		48		41	
50 PERCENT EXCEEDS	.82		.77		1.8	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

11159000 PAJARO RIVER AT CHITTENDEN, CA

LOCATION.—Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, Santa Cruz County, Hydrologic Unit 18060002, on left bank, at downstream side of bridge on State Highway 129, 0.6 mi downstream from Pescadero Creek, 0.6 mi southeast of Chittenden, and 2.3 mi downstream from San Benito River.

DRAINAGE AREA.—1,186 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "near Chittenden."
CHEMICAL DATA: Water years 1952–92.
BIOLOGICAL DATA: Water years 1978–81.
SPECIFIC CONDUCTANCE: Water years 1978–81, daily.
WATER TEMPERATURE: Water years 1978–81, daily.
SEDIMENT DATA: Water years 1978–92.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 81.89 ft above sea level. Prior to May 13, 1949, nonrecording gage on former bridge 100 ft downstream at same datum, except for periods in 1947 and 1948 when a water-stage recorder was in use.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Low flows regulated by Hernandez Reservoir, capacity, 18,500 acre-ft; Pacheco Lake, capacity, 6,140 acre-ft; Chesbro Reservoir, capacity, 8,090 acre-ft; Uvas Reservoir, capacity, 9,950 acre-ft; and San Felipe Lake. Many diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,100 ft^3/s, Feb. 3, 1998, gage height, 33.73 ft, from rating curve extended above 8,300 ft^3/s on basis of slope-conveyance study; no flow at times in July and August 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in February 1938 reached a stage of 31.3 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 25	1230	2,750	13.80	Feb. 23	2030	3,560	16.06
Feb. 14	1245	6,320	21.70				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	9.7	24	33	305	1610	144	71	25	13	8.0	8.4
2	8.5	9.8	24	33	274	1290	138	66	25	14	7.6	8.5
3	9.5	10	24	32	260	975	137	61	24	13	7.3	8.8
4	8.5	12	25	32	276	851	126	55	23	13	7.4	7.5
5	7.5	12	25	32	242	962	127	51	22	13	7.1	6.9
6	7.7	12	25	33	243	1080	126	49	21	14	7.6	7.9
7	8.0	14	25	32	184	1020	122	46	22	14	7.2	8.5
8	7.3	17	25	33	130	1010	120	53	24	14	6.6	8.9
9	6.3	17	25	33	98	1490	117	53	26	14	7.2	9.3
10	7.3	16	25	32	110	1470	114	48	24	13	8.0	9.3
11	7.9	17	25	35	166	1150	e108	46	23	12	7.8	8.1
12	7.5	18	26	38	1520	1040	e102	44	22	13	7.7	7.7
13	7.2	18	26	37	1800	905	e96	42	21	13	8.0	7.0
14	6.5	18	27	37	5800	788	e92	41	19	13	7.7	7.8
15	6.7	19	28	40	4610	691	e85	43	19	13	6.9	9.0
16	7.1	21	28	57	2760	623	e77	45	19	14	6.6	8.4
17	7.2	21	28	61	2110	579	122	43	20	13	6.9	8.2
18	7.2	21	29	81	1510	509	143	42	20	11	6.7	7.7
19	6.2	22	30	100	996	458	143	40	18	11	6.3	8.1
20	6.0	25	31	68	776	430	163	40	18	11	6.9	9.2
21	7.2	23	31	63	786	364	134	35	18	11	6.9	8.9
22	7.9	23	31	60	723	295	121	32	18	9.7	6.6	9.9
23	9.1	23	30	313	2540	252	115	32	18	11	6.7	9.3
24	8.6	23	30	1350	2710	230	110	32	18	9.7	7.1	9.8
25	8.0	23	30	2280	1920	215	96	32	19	9.9	7.5	8.7
26	8.2	23	31	905	1440	200	90	31	16	10	8.0	8.8
27	9.2	23	31	497	2010	193	86	30	15	11	8.4	9.4
28	10	23	31	414	2420	188	79	29	14	10	8.0	10
29	9.7	22	31	346	1760	178	76	27	14	10	7.9	10
30	9.5	24	32	337	---	165	72	26	14	10	8.7	9.8
31	10	---	33	381	---	156	---	26	---	8.6	8.6	---
TOTAL	246.5	559.5	866	7825	40479	21367	3381	1311	599	369.9	229.9	259.8
MEAN	7.95	18.6	27.9	252	1396	689	113	42.3	20.0	11.9	7.42	8.66
MAX	10	25	33	2280	5800	1610	163	71	26	14	8.7	10
MIN	6.0	9.7	24	32	98	156	72	26	14	8.6	6.3	6.9
AC-FT	489	1110	1720	15520	80290	42380	6710	2600	1190	734	456	515

e Estimated.

11159000 PAJARO RIVER AT CHITTENDEN, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.36	31.9	146	443	655	478	256	54.1	16.9	8.25	6.41	6.55
MAX	22.7	843	1990	3779	6978	4227	3165	646	162	32.1	22.8	93.3
(WY)	1984	1951	1956	1997	1998	1983	1958	1983	1998	1998	1998	1959
MIN	.10	.27	.60	1.22	1.28	1.50	.97	.75	.66	.37	.37	.24
(WY)	1962	1993	1962	1991	1991	1977	1977	1977	1977	1961	1948	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	61291.9		77493.6			
ANNUAL MEAN	168		212		173	
HIGHEST ANNUAL MEAN					905	1983
LOWEST ANNUAL MEAN					1.06	1977
HIGHEST DAILY MEAN	3800	Feb 10	5800	Feb 14	21700	Dec 24 1955
LOWEST DAILY MEAN	6.0	Oct 20	6.0	Oct 20	.00	Jul 11 1948
ANNUAL SEVEN-DAY MINIMUM	6.7	Oct 14	6.7	Oct 14	.00	Aug 16 1948
INSTANTANEOUS PEAK FLOW			6320	Feb 14	25100	Feb 3 1998
INSTANTANEOUS PEAK STAGE			21.70	Feb 14	33.73	Feb 3 1998
INSTANTANEOUS LOW FLOW					.00	Jul 11 1948
ANNUAL RUNOFF (AC-FT)	121600		153700		125400	
10 PERCENT EXCEEDS	437		643		270	
50 PERCENT EXCEEDS	26		25		12	
90 PERCENT EXCEEDS	8.5		7.7		1.2	

11159200 CORRALITOS CREEK AT FREEDOM, CA

LOCATION.—Lat 36°56'22", long 121°46'10", in Los Corralitos Grant, Santa Cruz County, Hydrologic Unit 18060002, on right bank, just upstream from Green Valley Road Bridge, 0.2 mi north of Freedom, and 2.3 mi north of Watsonville.

DRAINAGE AREA.—27.8 mi^2.

PERIOD OF RECORD.—October 1956 to current year.
SEDIMENT DATA: Water years 1976–77, 1980–81.

GAGE.—Water-stage recorder. Datum of gage is 89.43 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges and those less than 1 ft^3/s, which are poor. No regulation; Watsonville Water Works can divert up to 8.0 ft^3/s upstream from station for municipal supply, domestic use, and irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,610 ft^3/s, Jan. 4, 1982, gage height, 16.66 ft, from rating curve extended above 1,400 ft^3/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1955, reached a stage of 15.6 ft, from floodmarks, discharge, 3,620 ft^3/s, based on contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 600 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	2100	1,890	9.64	Feb. 27	0515	664	5.97
Feb. 13	2215	4,260	14.40				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.16	1.3	.31	29	104	15	4.4	1.1	.66	.57	.46
2	.32	.16	.57	.31	23	86	14	4.2	1.0	.61	.39	.71
3	.26	.18	.36	.31	27	73	14	4.1	1.1	.59	.47	.40
4	.22	.23	.31	.32	22	65	14	4.1	.91	.70	.44	.27
5	.22	.21	.31	.36	18	128	13	3.9	.84	.65	.42	.32
6	.21	.22	.31	.36	16	81	12	3.9	.87	.64	.46	.27
7	.21	3.5	.31	.36	14	72	12	5.4	1.1	.57	.38	.27
8	.18	13	.31	.36	12	102	11	14	1.3	.57	.49	.28
9	.18	3.9	.42	.36	11	146	11	7.8	.99	.57	.65	.27
10	.15	1.0	.37	.36	42	103	11	4.7	1.5	.66	.41	.27
11	.14	.34	.36	2.5	179	82	9.8	4.2	2.2	.71	.39	.27
12	.20	.30	.36	10	370	71	8.6	e3.9	1.5	.69	.43	.29
13	.19	.27	.36	3.8	1510	62	9.4	e3.7	.85	.56	.33	.26
14	.21	.27	.31	2.9	e995	55	9.3	e3.4	.67	.56	.32	.23
15	.25	.26	.31	2.8	349	48	8.3	e3.2	.74	.74	.31	.26
16	.20	.43	.31	21	237	43	7.9	e3.0	1.1	.61	.34	.27
17	.21	1.3	.31	8.4	176	38	23	e2.7	.95	.56	.38	.26
18	.18	.71	.31	66	140	35	13	e2.4	.66	.53	.31	.23
19	.19	32	.31	14	116	33	11	2.2	.83	.41	.38	.25
20	.18	11	.60	9.4	121	31	9.3	1.8	.82	.43	.30	.26
21	.33	4.1	1.5	5.6	119	28	8.1	1.5	.70	.52	.28	.29
22	.20	2.8	.70	4.1	126	26	7.5	1.2	.68	.56	.42	.50
23	.19	2.4	.32	224	335	25	6.7	1.4	.77	.41	.38	.30
24	.19	.72	.31	1040	182	23	6.9	1.4	.74	.51	.35	.27
25	.20	.40	.31	465	150	22	6.4	1.7	.76	.60	.40	.27
26	.18	.36	.31	136	130	21	6.0	1.5	.68	.55	.45	.27
27	.19	.50	.31	71	377	20	5.5	1.3	.77	.47	.36	.31
28	.62	.51	.31	43	182	19	4.9	1.2	.68	.55	.48	.27
29	.55	.42	.35	29	138	18	4.8	1.1	.78	.54	.72	.27
30	.22	1.6	.34	67	---	17	4.6	1.1	.90	.44	.62	.27
31	.16	---	.31	46	---	16	---	1.1	---	.37	.44	---
TOTAL	7.24	83.25	13.18	2274.91	6146	1693	298.0	101.5	28.49	17.54	13.07	9.12
MEAN	.23	2.78	.43	73.4	212	54.6	9.93	3.27	.95	.57	.42	.30
MAX	.62	32	1.5	1040	1510	146	23	14	2.2	.74	.72	.71
MIN	.14	.16	.31	.31	11	16	4.6	1.1	.66	.37	.28	.23
AC-FT	14	165	26	4510	12190	3360	591	201	57	35	26	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

MEAN	.78	5.12	16.9	52.3	62.5	38.1	22.3	5.38	1.15	.42	.19	.60
MAX	17.4	37.3	208	248	263	209	166	39.1	9.10	4.77	1.15	20.8
(WY)	1963	1984	1997	1997	1998	1983	1958	1983	1983	1983	1983	1959
MIN	.000	.000	.000	.000	.003	.076	.000	.000	.000	.000	.000	.000
(WY)	1962	1981	1991	1991	1991	1988	1977	1977	1962	1961	1961	1961

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	9571.13		10685.30			
ANNUAL MEAN	26.2		29.2		16.9	
HIGHEST ANNUAL MEAN					56.4	1983
LOWEST ANNUAL MEAN					.17	1977
HIGHEST DAILY MEAN	890	Jan 20	1510	Feb 13	2290	Jan 4 1982
LOWEST DAILY MEAN	.14	Oct 11	.14	Oct 11	.00	Jun 12 1957
ANNUAL SEVEN-DAY MINIMUM	.18	Oct 7	.18	Oct 7	.00	Jun 12 1957
INSTANTANEOUS PEAK FLOW			4260	Feb 13	5610	Jan 4 1982
INSTANTANEOUS PEAK STAGE			14.40	Feb 13	16.66	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	18980		21190		12260	
10 PERCENT EXCEEDS	64		66		35	
50 PERCENT EXCEEDS	1.6		.71		.40	
90 PERCENT EXCEEDS	.27		.26		.00	

e Estimated.

11160000 SOQUEL CREEK AT SOQUEL, CA

LOCATION.—Lat 36°59'29", long 121°57'17", in NE 1/4 sec.10, T.11 S., R.1 W., Santa Cruz County, Hydrologic Unit 18060001, on left bank, 0.2 mi upstream from highway bridge in town of Soquel, and 0.4 mi downstream from Bates Creek.

DRAINAGE AREA.—40.2 mi^2.

PERIOD OF RECORD.—May 1951 to current year.
CHEMICAL DATA: Water years 1952–66, 1977.
WATER TEMPERATURE: Water years 1966–79.
SEDIMENT DATA: Water years 1976–77, 1990–93.

REVISED RECORDS.—WSP 1715: Drainage area. WSP 2129: 1958, 1959–60(P).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 21.38 ft above sea level.

REMARKS.—Records good. No regulation; many diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,800 ft^3/s, Dec. 23, 1955, gage height, 22.33 ft, from rating curve extended above 2,900 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in 1977, 1988, 1992–1995.

EXTREMES OUTSIDE PERIOD OF RECORD.— Flood of Feb. 13, 1937, reached a discharge of 5,950 ft^3/s, gage height 12.6 ft, from floodmarks, from precipitation records and comparison with nearby streams. Flood of Nov. 18, 1950, reached a discharge of about 7,800 ft^3/s, gage height about 15.33 ft, from rating curve extended above 2,900 ft^3/s on basis of slope-area measurement of peak flow at gage height 22.33 ft.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1930	5,150	13.59	Feb. 23	0130	1,180	6.81
Feb. 13	2030	4,170	12.28	Feb. 27	0400	1,480	7.53

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.8	6.3	6.6	75	210	39	27	14	9.5	5.7	6.4
2	4.5	3.8	4.9	6.7	70	175	37	27	14	9.4	5.5	8.0
3	4.7	3.9	4.5	6.5	78	149	35	26	14	9.1	5.3	6.6
4	4.6	4.1	4.2	6.5	76	137	34	25	14	9.2	5.3	5.2
5	4.6	4.3	3.9	6.6	74	215	34	25	14	9.1	5.2	4.8
6	4.7	4.2	3.8	6.8	72	152	33	24	14	9.1	5.3	4.5
7	4.7	10	4.4	6.9	66	135	32	26	13	8.9	5.2	4.2
8	4.6	21	5.0	7.2	63	252	31	31	15	8.7	5.3	4.2
9	4.3	8.1	7.7	7.2	61	296	30	26	14	8.8	5.1	4.3
10	4.2	6.0	7.6	7.1	154	223	29	24	13	9.0	5.1	4.4
11	4.1	5.4	6.5	18	486	186	29	22	13	8.9	5.0	4.2
12	4.2	5.3	5.9	14	654	164	29	22	13	8.8	4.8	4.1
13	4.3	5.5	5.8	7.4	1790	143	34	21	12	8.7	4.8	3.9
14	4.4	5.5	5.7	5.9	1160	126	33	21	12	8.4	4.6	e4.0
15	4.1	5.9	5.4	5.5	388	111	32	26	11	8.6	4.5	e4.2
16	4.1	6.4	5.4	32	281	98	34	23	11	8.9	4.4	e4.1
17	3.7	8.4	5.4	17	218	88	130	21	12	8.7	4.3	e3.8
18	3.9	6.9	5.4	134	172	81	51	20	11	8.3	4.3	e4.8
19	4.4	52	5.9	49	146	76	40	19	11	8.1	4.2	e4.0
20	4.3	22	6.0	45	178	71	36	19	11	7.7	4.3	e4.6
21	3.9	6.5	6.7	22	193	67	35	18	11	7.5	4.5	e8.0
22	3.6	4.3	6.7	16	193	62	34	17	11	7.2	4.7	10
23	3.6	3.7	6.7	359	528	59	33	17	11	7.1	4.8	11
24	3.7	3.5	6.8	2890	238	58	32	17	11	6.8	4.7	8.5
25	3.8	3.3	6.9	587	189	55	31	17	11	6.7	4.5	7.6
26	3.8	3.4	6.8	159	162	52	30	16	10	6.5	4.5	7.1
27	3.9	3.5	6.7	97	727	50	29	16	10	6.4	4.6	7.6
28	5.6	3.6	6.8	77	326	48	29	16	9.8	6.3	4.6	7.5
29	4.8	3.9	6.5	67	261	46	28	15	9.9	6.3	5.3	7.4
30	4.2	6.9	6.3	112	---	44	28	14	9.7	6.3	5.9	7.7
31	3.9	---	6.5	91	---	41	---	15	---	6.0	5.5	---
TOTAL	131.6	235.1	183.1	4872.9	9079	3670	1091	653	360.4	249.0	151.8	176.7
MEAN	4.25	7.84	5.91	157	313	118	36.4	21.1	12.0	8.03	4.90	5.89
MAX	5.6	52	7.7	2890	1790	296	130	31	15	9.5	5.9	11
MIN	3.6	3.3	3.8	5.5	61	41	28	14	9.7	6.0	4.2	3.8
AC-FT	261	466	363	9670	18010	7280	2160	1300	715	494	301	350

e Estimated.

11160000 SOQUEL CREEK AT SOQUEL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.32	16.4	59.2	125	131	97.3	54.9	20.4	9.73	5.48	3.43	3.32
MAX	111	78.5	625	437	596	577	324	95.9	34.9	17.8	10.9	22.4
(WY)	1963	1973	1956	1997	1986	1983	1982	1983	1998	1998	1998	1959
MIN	.65	1.36	2.74	2.57	3.96	3.97	2.81	2.26	.91	.26	.17	.058
(WY)	1989	1991	1991	1991	1977	1988	1977	1977	1977	1977	1977	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	16361.9		20853.6			
ANNUAL MEAN	44.8		57.0		44.0	
HIGHEST ANNUAL MEAN					169	1983
LOWEST ANNUAL MEAN					2.89	1977
HIGHEST DAILY MEAN	972	Feb 9	2890	Jan 24	8800	Dec 23 1955
LOWEST DAILY MEAN	3.3	Nov 25	3.3	Nov 25	.00	Jul 30 1977
ANNUAL SEVEN-DAY MINIMUM	3.6	Nov 23	3.6	Nov 23	.00	Aug 15 1992
INSTANTANEOUS PEAK FLOW			5150	Jan 24	15800	Dec 23 1955
INSTANTANEOUS PEAK STAGE			13.59	Jan 24	22.33	Dec 23 1955
INSTANTANEOUS LOW FLOW					.00	Jul 30 1977
ANNUAL RUNOFF (AC-FT)	32450		41360		31900	
10 PERCENT EXCEEDS	109		136		87	
50 PERCENT EXCEEDS	10		8.9		7.8	
90 PERCENT EXCEEDS	4.3		4.2		1.5	

11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA

LOCATION.—Lat 37°03'19", long 122°02'25", in San Augustine Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank, 0.3 mi downstream from unnamed left bank tributary, 100 ft northeast of Mt. Hermon Road, 1.2 mi northwest of Scotts Valley Post Office, and 1.8 mi east of Felton.

DRAINAGE AREA.—8.81 mi^2.

PERIOD OF RECORD.—January 1989 to current year.

REVISED RECORDS.—WDR CA-93-2: 1989–92 (P).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 320 ft above sea level, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation; small diversions upstream from station for domestic use.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,710 ft^3/s, Feb. 3, 1998, gage height, 10.85 ft, from rating curve extended above 310 ft^3/s on basis of slope-area measurement at gage height 9.29 ft; minimum daily, 0.94 ft^3/s, Jan. 31, 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1845	1,030	8.78	Feb. 22	2400	555	7.22
Feb. 13	1945	1,010	8.71	Feb. 27	0330	323	6.38

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.7	3.1	2.5	23	e52	e8.0	6.0	4.4	3.2	2.4	2.8
2	2.0	1.8	2.8	2.4	20	e43	e7.5	5.9	4.3	3.2	2.4	2.5
3	2.0	1.7	2.7	2.5	23	e45	e7.6	5.9	4.3	3.3	2.4	2.4
4	2.0	1.8	2.8	2.4	20	e36	e6.8	5.8	4.4	3.3	2.5	2.4
5	1.9	1.8	2.9	2.4	22	e45	e7.0	5.7	4.2	3.2	2.5	2.4
6	2.0	1.9	2.9	2.3	19	e38	e7.1	5.7	4.3	3.2	2.4	2.4
7	2.1	7.1	2.8	2.4	17	e31	e6.2	6.6	4.2	3.1	2.5	2.2
8	2.0	4.8	2.8	2.4	16	e36	e6.2	6.3	4.4	3.1	2.5	2.3
9	2.0	2.7	4.1	2.4	15	e68	e5.9	5.8	4.2	3.1	2.4	2.4
10	1.9	2.5	2.9	2.5	54	e50	e6.8	5.6	4.1	3.1	2.3	2.4
11	1.9	2.5	2.7	5.1	179	e43	e6.3	5.4	3.9	3.1	2.4	2.3
12	1.9	2.5	2.6	3.4	205	e37	e5.9	5.4	3.9	3.1	2.3	2.4
13	2.0	2.5	2.6	2.8	565	e32	e6.8	5.4	3.8	3.0	2.4	2.4
14	1.9	2.5	2.6	2.6	369	e28	e9.0	5.6	3.7	3.0	2.4	2.5
15	2.0	2.6	2.7	2.7	110	e26	e6.5	6.9	3.6	2.9	2.3	2.4
16	1.9	3.5	2.7	7.1	72	e23	e12	5.6	3.7	3.0	2.3	2.3
17	2.0	3.1	2.7	4.0	53	e21	e35	5.5	3.7	2.9	2.3	2.3
18	2.0	2.8	2.7	26	42	e19	e17	5.4	3.6	2.8	2.3	2.1
19	1.9	23	2.7	14	37	e17	e11	5.3	3.6	2.8	2.2	2.1
20	1.9	6.6	2.7	8.1	59	e15	e9.2	5.1	3.5	2.8	2.3	2.3
21	2.0	4.2	2.7	5.1	64	e14	e8.5	4.9	3.6	2.8	2.3	2.6
22	2.0	3.2	2.6	4.5	94	e13	8.7	4.6	3.5	2.8	2.3	2.8
23	2.0	2.9	2.6	86	226	e12	7.9	4.7	3.5	2.7	2.3	2.7
24	2.0	2.8	2.6	634	e100	e11	7.4	4.7	3.4	2.7	2.3	2.7
25	2.0	2.8	2.6	145	e54	e10	7.0	4.6	3.4	2.6	2.4	2.7
26	2.0	2.8	2.6	47	e42	e9.7	6.7	4.8	3.3	2.5	2.4	2.7
27	1.9	2.8	2.6	31	e140	e8.9	6.5	4.7	3.2	2.5	2.6	2.9
28	2.2	2.7	2.5	24	e73	e8.9	6.3	4.5	3.1	2.6	2.4	2.9
29	1.7	3.0	2.6	20	e59	e8.0	6.2	4.4	3.2	2.6	2.6	3.0
30	1.8	3.7	2.5	38	---	e7.6	6.1	4.4	3.3	2.5	2.5	2.7
31	1.7	---	2.6	27	---	e7.3	---	4.5	---	2.4	2.5	---
TOTAL	60.6	110.3	85.0	1161.6	2772	815.4	259.1	165.7	113.3	89.9	74.1	75.0
MEAN	1.95	3.68	2.74	37.5	95.6	26.3	8.64	5.35	3.78	2.90	2.39	2.50
MAX	2.2	23	4.1	634	565	68	35	6.9	4.4	3.3	2.6	3.0
MIN	1.7	1.7	2.5	2.3	15	7.3	5.9	4.4	3.1	2.4	2.2	2.1
AC-FT	120	219	169	2300	5500	1620	514	329	225	178	147	149

e Estimated.

11160430 BEAN CREEK NEAR SCOTTS VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.39	3.60	11.4	39.5	45.0	23.9	8.42	5.37	3.47	2.52	2.21	2.12
MAX	3.14	5.89	72.5	99.7	167	71.8	21.7	12.2	9.41	4.89	3.31	2.63
(WY)	1995	1998	1997	1995	1998	1995	1998	1998	1998	1998	1998	1998
MIN	1.95	1.96	2.16	2.11	2.42	3.81	2.62	2.33	1.79	1.71	1.84	1.76
(WY)	2000	1993	1991	1991	1991	1994	1990	1989	1994	1991	1989	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	3803.0		5782.0			
ANNUAL MEAN	10.4		15.8		12.8	
HIGHEST ANNUAL MEAN					26.0	1998
LOWEST ANNUAL MEAN					3.00	1990
HIGHEST DAILY MEAN	198	Feb 9	634	Jan 24	900	Dec 10 1996
LOWEST DAILY MEAN	1.7	Oct 29	1.7	Oct 29	.94	Jan 31 1992
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 29	1.7	Oct 29	1.0	Jan 21 1992
INSTANTANEOUS PEAK FLOW			1030	Jan 24	1710	Feb 3 1998
INSTANTANEOUS PEAK STAGE			8.78	Jan 24	10.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	7540		11470		9240	
10 PERCENT EXCEEDS	27		35		25	
50 PERCENT EXCEEDS	2.9		3.2		2.8	
90 PERCENT EXCEEDS	2.0		2.1		1.9	

11160500 SAN LORENZO RIVER AT BIG TREES, CA

LOCATION.—Lat 37°02'40", long 122°04'17", in Zayante Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank, 20 ft upstream from bridge on Henry Cowell State Park Road, 200 ft upstream from Shingle Mill Creek, 0.3 mi downstream from Zayante Creek, 0.9 mi northwest of Big Trees Station on Southern Pacific Railroad, and 5.3 mi northwest of Santa Cruz.

DRAINAGE AREA.—106 mi^2.

PERIOD OF RECORD.—October 1936 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL DATA: Water years 1906–07, 1952–67, 1969–70, 1973–75, 1977, 1980–81.
WATER TEMPERATURE: Water years 1966–82, daily.
SEDIMENT DISCHARGE: Water years 1973–82, daily; 1986, 1990–93, monthly.

REVISED RECORDS.—WSP 1315-B: 1938(M). WSP 1715: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 227.00 ft above sea level. Prior to Oct. 6, 1972, at site 1.3 mi downstream at different datum.

REMARKS.—Records good. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by an inflatable fiber dam located 500 ft upstream from gage. Many small diversions upstream from station for domestic supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,400 ft^3/s, Dec. 23, 1955, gage height, 22.55 ft, site and datum then in use, from rating curve extended above 11,000 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 28.85 ft, Jan. 5, 1982; minimum daily discharge, 5.6 ft^3/s, July 27, 28, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,800 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	0830	5,320	13.21	Feb. 23	0100	4,360	12.15
Feb. 13	2115	7,550	15.40	Feb. 27	0515	2,250	9.33

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	35	24	185	660	137	87	53	37	27	28
2	20	21	30	24	161	545	132	85	52	37	26	29
3	20	21	28	24	182	486	127	84	51	37	26	27
4	20	24	27	24	166	443	125	81	51	37	26	25
5	21	22	26	24	182	555	122	79	50	37	26	24
6	21	22	25	24	169	473	119	78	48	37	25	23
7	22	50	25	23	150	438	115	88	49	37	25	23
8	21	83	25	23	136	756	112	97	52	36	25	23
9	21	31	34	23	126	797	109	86	53	36	26	22
10	21	23	32	23	521	605	106	79	50	36	25	22
11	21	22	28	47	1250	511	104	77	48	36	25	22
12	21	20	26	42	1810	454	103	74	47	36	24	22
13	20	20	26	29	3420	404	120	72	46	35	24	22
14	21	20	26	26	3220	366	124	77	45	34	23	25
15	21	20	25	26	1260	349	109	89	44	33	23	23
16	20	27	25	77	860	296	144	88	44	33	23	21
17	20	28	25	45	636	281	512	82	44	33	23	21
18	20	25	25	265	501	263	206	70	44	33	22	20
19	20	170	25	149	421	249	154	72	43	32	22	22
20	20	78	25	107	539	235	137	68	43	31	22	22
21	20	37	25	61	685	219	127	66	43	31	23	21
22	19	30	24	49	782	205	123	63	42	30	23	22
23	19	28	24	732	1910	199	118	62	42	30	23	22
24	20	27	24	3840	809	192	111	63	42	29	23	22
25	20	26	24	1200	622	182	107	62	41	29	23	21
26	20	25	24	409	503	172	103	59	40	29	22	21
27	20	25	24	252	1520	167	102	57	39	28	22	21
28	29	25	24	192	897	162	97	56	39	28	22	21
29	25	26	24	161	786	155	93	55	39	28	23	21
30	22	38	24	351	---	149	90	54	38	27	24	21
31	22	---	24	241	---	142	---	54	---	27	24	---
TOTAL	647	1035	808	8537	24409	11110	3988	2264	1362	1019	740	679
MEAN	20.9	34.5	26.1	275	842	358	133	73.0	45.4	32.9	23.9	22.6
MAX	29	170	35	3840	3420	797	512	97	53	37	27	29
MIN	19	20	24	23	126	142	90	54	38	27	22	20
AC-FT	1280	2050	1600	16930	48420	22040	7910	4490	2700	2020	1470	1350

11160500 SAN LORENZO RIVER AT BIG TREES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.1	53.7	150	325	420	303	176	74.0	42.0	27.3	20.4	18.3
MAX	176	461	1319	1242	1853	1483	1005	322	131	65.8	44.0	52.1
(WY)	1963	1951	1956	1952	1998	1983	1958	1983	1998	1983	1983	1959
MIN	8.26	11.4	14.7	13.8	16.6	21.4	12.3	11.6	9.37	6.66	6.50	8.28
(WY)	1978	1991	1991	1991	1977	1977	1977	1977	1977	1977	1977	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1937 - 2000	
ANNUAL TOTAL	42126		56598			
ANNUAL MEAN	115		155		135	
HIGHEST ANNUAL MEAN					391	1983
LOWEST ANNUAL MEAN					13.2	1977
HIGHEST DAILY MEAN	2000	Feb 9	3840	Jan 24	17000	Dec 23 1955
LOWEST DAILY MEAN	19	Oct 22	19	Oct 22	5.6	Jul 27 1977
ANNUAL SEVEN-DAY MINIMUM	20	Oct 17	20	Oct 17	5.8	Jul 26 1977
INSTANTANEOUS PEAK FLOW			7550	Feb 13	30400	Dec 23 1955
INSTANTANEOUS PEAK STAGE			15.40	Feb 13	28.85	Jan 5 1982
INSTANTANEOUS LOW FLOW					5.6	Jul 27 1977
ANNUAL RUNOFF (AC-FT)	83560		112300		97470	
10 PERCENT EXCEEDS	275		413		280	
50 PERCENT EXCEEDS	37		36		34	
90 PERCENT EXCEEDS	21		21		13	

11161000 SAN LORENZO RIVER AT SANTA CRUZ, CA

LOCATION.—Lat 36°59'27", long 122°01'51", in La Carbonera Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank, in city of Santa Cruz Water Meter Repair compound, 0.3 mi upstream from intersection of State Highways 1 and 9, 1.0 mi north of Santa Cruz, and 2.4 mi upstream from mouth.

DRAINAGE AREA.—115 mi^2.

PERIOD OF RECORD.—October 1952 to September 1960, October 1987 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 5.84 ft above sea level (levels by city of Santa Cruz Water Department). October 1952 to September 1960, water-stage recorder at site 0.1 mi downstream at different datum.

REMARKS.—Records good. Low flow partially regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft, and by an inflatable fiber dam located 6.8 mi upstream from gage. Water is diverted 50 ft upstream from station by city of Santa Cruz for municipal supply; many small diversions upstream from station for domestic supply.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,400 ft^3/s, Dec. 23, 1955, gage height, 23.10 ft, site and datum then in use, from rating curve extended above 4,500 ft^3/s on basis of slope-area measurement of peak flow; no flow for several days in 1955 and many days in 1960.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,800 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1900	9,840	13.73	Feb. 23	0200	5,380	12.24
Feb. 13	2130	11,300	15.69	Feb. 27	0645	2,950	10.12

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	36	20	187	755	147	98	60	43	31	35
2	13	14	28	20	158	614	141	96	59	42	30	41
3	14	14	25	18	175	539	138	95	59	42	30	34
4	14	14	25	19	172	475	135	90	59	42	30	31
5	14	17	23	19	173	651	132	82	58	42	29	29
6	14	15	21	18	165	536	127	80	56	41	29	27
7	14	30	22	19	145	468	123	86	57	41	29	29
8	14	106	21	18	134	900	119	95	58	41	29	29
9	13	36	30	19	125	1030	117	90	59	41	29	28
10	13	21	30	18	554	736	115	82	57	41	29	28
11	14	18	26	41	1330	598	115	78	56	42	28	28
12	13	17	23	44	2740	518	115	76	55	42	28	27
13	13	17	23	27	5190	459	133	75	55	40	27	27
14	13	16	23	22	4560	417	134	76	53	39	26	30
15	13	16	23	20	1380	396	126	84	52	38	25	27
16	13	22	20	63	850	334	143	83	52	38	25	27
17	13	30	21	44	603	314	635	81	52	37	27	26
18	13	23	21	346	460	294	246	73	52	37	28	26
19	13	195	20	173	372	277	184	72	51	36	28	26
20	13	115	21	129	450	259	158	70	51	36	27	29
21	13	43	20	59	681	244	146	69	49	38	28	27
22	13	29	21	45	650	228	140	69	50	38	28	28
23	13	28	21	1070	2550	215	135	72	48	38	28	28
24	14	31	20	6990	997	205	127	70	47	37	28	27
25	13	30	21	1780	708	193	121	70	47	36	28	26
26	13	29	22	503	557	185	115	70	46	37	27	25
27	13	29	19	282	1910	179	112	67	45	35	27	24
28	19	29	19	202	1150	173	108	65	44	32	27	25
29	19	29	20	166	958	164	104	63	44	31	28	24
30	15	37	20	359	---	159	102	63	44	31	30	24
31	15	---	19	260	---	152	---	61	---	31	29	---
TOTAL	428	1064	704	12813	30084	12667	4493	2401	1575	1185	872	842
MEAN	13.8	35.5	22.7	413	1037	409	150	77.5	52.5	38.2	28.1	28.1
MAX	19	195	36	6990	5190	1030	635	98	60	43	31	41
MIN	13	14	19	18	125	152	102	61	44	31	25	24
AC-FT	849	2110	1400	25410	59670	25120	8910	4760	3120	2350	1730	1670

11161000 SAN LORENZO RIVER AT SANTA CRUZ, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.2	29.0	161	352	480	248	149	73.0	37.7	20.3	12.2	11.5
MAX	28.9	86.1	1366	1391	2652	999	1017	212	137	67.2	39.9	40.4
(WY)	1990	1998	1956	1997	1998	1995	1958	1998	1998	1998	1998	1959
MIN	1.83	3.45	7.30	5.60	15.3	16.8	15.9	13.7	4.64	1.48	.27	.17
(WY)	1989	1991	1991	1991	1991	1988	1990	1988	1988	1988	1960	1960

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	50833		69128			
ANNUAL MEAN	139		189		131	
HIGHEST ANNUAL MEAN					384	1998
LOWEST ANNUAL MEAN					21.5	1988
HIGHEST DAILY MEAN	3270	Feb 9	6990	Jan 24	17400	Dec 23 1955
LOWEST DAILY MEAN	13	Oct 2	13	Oct 2	.00	Sep 3 1955
ANNUAL SEVEN-DAY MINIMUM	13	Oct 12	13	Oct 12	.00	Sep 20 1960
INSTANTANEOUS PEAK FLOW			11300	Feb 13	30400	Dec 23 1955
INSTANTANEOUS PEAK STAGE			15.69	Feb 13	23.10	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	100800		137100		94580	
10 PERCENT EXCEEDS	321		453		270	
50 PERCENT EXCEEDS	32		41		27	
90 PERCENT EXCEEDS	15		17		3.1	

11161300 CARBONERA CREEK AT SCOTTS VALLEY, CA

LOCATION.—Lat 37°03'02", long 122°00'45", in San Augustine Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank, at east city limits of Scotts Valley, 1.1 mi upstream from Glen Canyon Road, 3.3 mi east of Felton, and 4.1 mi upstream from Branciforte Creek.

DRAINAGE AREA.—3.60 mi^2.

PERIOD OF RECORD.—February 1985 to current year.

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

REMARKS.—Records fair. No regulation or diversion upstream from station. Low flows affected by return flow from urban irrigation and by periodic flushing of upstream county well.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,620 ft^3/s, Dec. 10, 1996, gage height, 11.89 ft, from rating curve extended above slope-area measurement made at gage height 9.48 ft; no flow for many days in several years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1800	703	8.34	Feb. 22	2215	514	7.27
Feb. 11	2030	530	7.37				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.15	e.50	e.46	e17	15	e5.4	1.2	.74	.36	.37	1.9
2	.58	.20	e.56	e.46	e16	15	e5.0	1.2	.73	.43	.32	.71
3	.67	.20	.60	e.46	e32	13	e4.5	1.1	.88	.46	.34	.57
4	.58	.18	.85	e.46	e15	e26	e4.3	1.1	.74	.37	.35	.41
5	1.0	.20	.85	e.45	e27	e20	e4.0	1.1	.71	.47	.30	.41
6	.28	.21	.84	e.45	e15	e13	e3.8	1.0	.72	.45	.33	.33
7	.32	19	.86	e.45	e14	e28	e3.5	3.5	1.1	.39	.34	.28
8	.38	3.6	.86	e.45	e13	e67	e3.3	1.9	1.2	.32	.38	.29
9	.28	.29	6.0	e.45	e14	e29	e2.7	1.2	.58	.37	.39	.30
10	.29	.19	.67	e.45	e101	e23	e1.3	1.1	.47	.41	.36	.30
11	.28	.15	.53	9.4	e140	e26	1.3	1.1	.48	.45	.32	.28
12	.31	.15	.51	1.1	e99	e19	2.2	1.2	.42	.41	.33	.25
13	.26	.16	e.50	.62	280	e13	e2.2	1.1	.40	.31	.34	.22
14	.26	.28	e.50	.59	e140	e10	11	2.3	.41	.33	.30	.24
15	.29	.35	e.49	.76	e44	e9.8	7.3	2.8	.50	.32	.34	.26
16	.20	4.4	e.48	10	e45	e8.8	20	1.4	.51	.36	.31	.24
17	.23	1.6	e.48	2.9	26	e8.4	e29	1.1	.50	.29	.35	.19
18	.22	.22	e.48	46	20	e8.1	e4.2	1.0	.45	.35	.35	.15
19	.25	46	e.47	15	16	e8.4	e4.0	.97	.44	.26	.38	.20
20	.21	1.9	e.47	4.5	e65	e8.4	e3.6	.91	.45	.32	.38	.23
21	.19	.89	e.47	2.5	e31	e8.4	5.8	.89	.46	.35	.40	.43
22	.20	.77	e.47	2.4	e116	e8.8	1.9	.86	.54	.32	.50	.98
23	.08	.68	e.46	136	e68	e7.5	1.7	.89	.52	.34	.48	.34
24	.09	.55	e.46	464	e29	e5.9	1.6	.94	.44	.38	.58	.27
25	.08	e.53	e.46	e77	e20	e7.2	1.5	.90	.39	.41	.74	.26
26	.10	e.50	e.46	e32	e35	e7.2	1.5	.87	.37	.38	.38	.28
27	.10	e.48	e.46	e22	e102	e6.7	1.4	.83	.38	.40	.47	.27
28	3.1	e.47	e.46	e22	36	e6.0	1.3	.80	.47	.38	.45	.25
29	.17	e.46	e.46	e20	31	e5.9	1.3	.75	.51	.39	1.5	.26
30	.15	e5.0	e.46	e70	---	e5.4	1.2	.77	.58	.36	.44	.29
31	.14	---	e.46	e22	---	e5.2	---	.75	---	.34	.45	---
TOTAL	11.81	89.76	22.58	965.31	1607	443.1	141.8	37.53	17.09	11.48	13.27	11.39
MEAN	.38	2.99	.73	31.1	55.4	14.3	4.73	1.21	.57	.37	.43	.38
MAX	3.1	46	6.0	464	280	67	29	3.5	1.2	.47	1.5	1.9
MIN	.08	.15	.46	.45	13	5.2	1.2	.75	.37	.26	.30	.15
AC-FT	23	178	45	1910	3190	879	281	74	34	23	26	23

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

MEAN	.65	2.58	6.43	15.6	21.4	11.0	2.38	1.49	.41	.19	.22	.23
MAX	3.01	6.24	38.3	41.0	68.1	32.0	7.42	5.63	1.95	.59	.91	.68
(WY)	1990	1997	1997	1995	1998	1986	1998	1998	1998	1998	1989	1989
MIN	.039	.002	.51	.35	.95	.25	.41	.099	.002	.005	.000	.000
(WY)	1987	1987	1987	1991	1988	1988	1987	1987	1987	1990	1985	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1985 - 2000	
ANNUAL TOTAL	1777.18		3372.12			
ANNUAL MEAN	4.87		9.21		5.18	
HIGHEST ANNUAL MEAN					10.5	1998
LOWEST ANNUAL MEAN					1.33	1990
HIGHEST DAILY MEAN	140	Feb 7	464	Jan 24	464	Jan 24 2000
LOWEST DAILY MEAN	.05	Sep 1	.08	Oct 23	.00	Jun 28 1985
ANNUAL SEVEN-DAY MINIMUM	.12	Oct 21	.12	Oct 21	.00	Jun 28 1985
INSTANTANEOUS PEAK FLOW			703	Jan 24	1620	Dec 10 1996
INSTANTANEOUS PEAK STAGE			8.34	Jan 24	11.89	Dec 10 1996
ANNUAL RUNOFF (AC-FT)	3530		6690		3750	
10 PERCENT EXCEEDS	10		21		9.0	
50 PERCENT EXCEEDS	.57		.56		.45	
90 PERCENT EXCEEDS	.22		.26		.00	

e Estimated.

11162500 PESCADERO CREEK NEAR PESCADERO, CA

LOCATION.—Lat 37°15'39", long 122°19'40", in SW 1/4 sec.5, T.8 S., R.4 W., San Mateo County, Hydrologic Unit 18050006, on left bank, at downstream side of highway bridge, 3.0 mi east of Pescadero, and 5.3 mi upstream from mouth.

DRAINAGE AREA.—45.9 mi^2.

PERIOD OF RECORD.—April 1951 to current year.
CHEMICAL DATA: Water year 1977.
WATER TEMPERATURE: Water years 1965–80.
SEDIMENT DATA: Water years 1971, 1973, 1980, 1986, 1990–93.

REVISED RECORDS.—WSP 1445: 1952–53(M). WSP 1715: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 62.3 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Small diversions upstream from station by pumping.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,600 ft^3/s, Feb. 3, 1998, gage height, 22.47 ft, from rating curve extended above 2,700 ft^3/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 700 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1945	2,100	9.28	Feb. 23	0100	2,050	9.17
Feb. 13	2130	4,660	14.12	Feb. 27	0600	1,030	6.54

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	4.0	10	6.7	61	264	43	25	13	8.9	5.4	5.2
2	5.6	4.0	7.5	7.5	51	206	41	24	13	9.0	5.4	6.6
3	5.6	3.9	6.0	7.2	52	170	40	23	13	9.1	5.3	6.5
4	8.5	4.0	5.2	6.6	54	144	37	23	13	9.1	5.1	5.4
5	5.7	4.0	4.7	6.9	48	186	36	22	13	9.3	4.9	5.1
6	5.4	4.0	4.6	6.6	48	176	35	21	13	9.4	4.9	4.8
7	5.4	7.1	4.8	6.2	42	151	33	22	13	9.3	4.9	4.6
8	5.6	21	4.9	6.1	38	360	33	32	16	9.0	4.8	4.5
9	5.5	8.9	6.5	6.4	35	409	32	25	15	8.8	4.8	4.4
10	5.3	4.9	8.2	6.6	87	280	31	23	13	8.7	4.8	4.4
11	5.3	4.3	6.1	9.0	304	207	30	21	13	8.5	4.7	4.4
12	5.1	3.9	5.3	16	728	167	29	20	13	8.3	4.5	4.3
13	5.0	3.8	5.5	9.3	1380	138	36	19	12	8.1	4.4	4.4
14	5.1	3.8	5.3	6.8	1780	118	34	21	12	7.8	4.3	4.4
15	5.3	3.9	5.2	6.5	565	104	32	26	11	7.7	e4.2	4.3
16	5.1	5.1	4.9	33	381	94	34	25	11	8.0	e4.2	4.4
17	4.6	8.2	5.1	19	301	85	118	24	11	8.3	e4.3	4.4
18	4.2	7.1	4.9	48	246	80	64	21	11	8.4	e4.5	4.4
19	4.2	13	5.7	35	212	80	50	20	11	8.0	e4.6	4.3
20	4.2	24	6.8	32	224	77	43	19	11	7.6	e4.7	4.2
21	4.1	8.3	6.7	21	270	72	40	18	10	7.7	e4.8	4.2
22	4.0	6.1	6.7	15	333	67	39	17	10	7.7	e4.9	4.5
23	3.9	5.0	6.4	137	917	64	36	17	9.8	7.7	e4.9	4.6
24	3.9	4.5	5.7	1480	393	61	33	16	9.9	7.4	e4.8	4.6
25	4.1	4.3	5.7	508	306	59	31	16	9.6	7.3	e4.9	4.5
26	4.1	4.2	6.0	168	260	56	30	15	9.5	6.7	e4.8	4.4
27	4.2	4.4	5.9	97	666	55	29	15	9.2	6.1	e4.9	4.4
28	5.4	4.3	5.9	69	378	53	28	15	9.0	5.9	e4.9	4.3
29	5.8	4.7	6.0	54	324	51	26	14	8.9	5.8	e5.0	4.3
30	4.4	10	6.1	83	---	48	26	14	8.9	5.8	e5.0	4.3
31	4.1	---	6.3	83	---	45	---	14	---	5.7	e5.2	---
TOTAL	154.4	198.7	184.6	2996.4	10484	4127	1149	627	345.8	245.1	148.8	139.1
MEAN	4.98	6.62	5.95	96.7	362	133	38.3	20.2	11.5	7.91	4.80	4.64
MAX	8.5	24	10	1480	1780	409	118	32	16	9.4	5.4	6.6
MIN	3.9	3.8	4.6	6.1	35	45	26	14	8.9	5.7	4.2	4.2
AC-FT	306	394	366	5940	20800	8190	2280	1240	686	486	295	276

e Estimated.

11162500 PESCADERO CREEK NEAR PESCADERO, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.49	13.2	55.7	123	140	96.2	55.4	19.3	9.19	5.24	3.59	2.81
MAX	92.8	85.9	469	435	865	540	398	93.8	32.5	17.5	11.6	8.64
(WY)	1963	1984	1956	1997	1998	1983	1958	1983	1998	1998	1998	1998
MIN	.38	1.61	2.30	2.75	2.92	4.25	1.93	2.00	.78	.20	.012	.083
(WY)	1962	1992	1977	1991	1977	1988	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	17060.5		20799.9			
ANNUAL MEAN	46.7		56.8		43.7	
HIGHEST ANNUAL MEAN					164	1983
LOWEST ANNUAL MEAN					1.72	1977
HIGHEST DAILY MEAN	1390	Feb 9	1780	Feb 14	5560	Dec 23 1955
LOWEST DAILY MEAN	3.8	Nov 13	3.8	Nov 13	.00	Sep 9 1961
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 31	4.0	Oct 31	.00	Aug 17 1977
INSTANTANEOUS PEAK FLOW			4660	Feb 13	10600	Feb 3 1998
INSTANTANEOUS PEAK STAGE			14.12	Feb 13	22.47	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	33840		41260		31630	
10 PERCENT EXCEEDS	110		124		90	
50 PERCENT EXCEEDS	10		8.9		7.2	
90 PERCENT EXCEEDS	4.9		4.3		1.5	

11162618 PILARCITOS LAKE NEAR HILLSBOROUGH, CA

LOCATION.—Lat 37°32'57", long 122°25'21", in SE 1/4 SE 1/4 sec.28, T.4 S., R.5 W., San Mateo County, Hydrologic Unit 18050006, on dam, west side of spillway, and 2.0 mi southwest of Hillsborough.

DRAINAGE AREA.—3.91 mi^2.

PERIOD OF RECORD.—October 1999 to September 2000.

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

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. Reservoir is formed by earthfill dam; storage began 1866. Capacity is 3,100 acre-ft, spillway at crest is 700.0 ft. Stores water from Hetch-Hetchy Aqueduct for municipal use.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	687.90	687.88	688.70	688.67	688.50	688.48	688.00	687.96	695.66	695.57	693.18	693.04
2	687.92	687.90	688.72	688.70	688.50	688.47	688.02	687.98	695.73	695.66	693.04	692.82
3	687.93	687.92	688.75	688.72	688.48	688.45	688.05	688.02	695.76	695.68	692.82	692.52
4	687.95	687.93	688.78	688.75	688.46	688.43	688.08	688.05	695.68	695.50	692.52	692.28
5	687.97	687.95	688.80	688.78	688.43	688.40	688.12	688.08	695.50	695.38	692.29	692.12
6	688.00	687.97	688.83	688.80	688.40	688.38	688.14	688.11	695.38	695.23	692.12	691.90
7	688.02	688.00	688.95	688.82	688.38	688.35	688.17	688.14	695.23	695.08	691.90	691.70
8	688.04	688.02	689.01	688.94	688.36	688.33	688.20	688.17	695.08	694.91	691.82	691.69
9	688.05	688.04	689.02	689.00	688.36	688.33	688.23	688.20	694.91	694.75	692.00	691.82
10	688.07	688.05	689.04	689.02	688.35	688.33	688.28	688.23	694.75	694.71	692.07	692.00
11	688.09	688.07	689.06	689.04	688.33	688.31	688.56	688.28	695.42	694.70	692.07	692.05
12	688.11	688.09	689.07	689.04	688.31	688.29	688.63	688.56	695.98	695.15	692.05	691.99
13	688.13	688.11	689.04	688.93	688.30	688.28	688.69	688.63	696.22	694.80	692.06	692.01
14	688.16	688.13	688.93	688.84	688.28	688.25	688.73	688.69	696.79	696.21	692.07	692.06
15	688.18	688.16	688.84	688.78	688.26	688.23	688.82	688.73	696.21	694.10	692.07	692.04
16	688.20	688.18	688.78	688.73	688.24	688.21	688.99	688.80	694.10	692.36	692.04	691.98
17	688.22	688.19	688.76	688.71	688.21	688.19	689.06	688.99	692.36	691.84	692.03	691.97
18	688.24	688.22	688.71	688.65	688.20	688.17	689.33	689.06	691.84	691.62	692.16	692.03
19	688.26	688.24	688.69	688.62	688.18	688.15	689.51	689.33	691.63	691.60	692.33	692.16
20	688.29	688.26	688.69	688.66	688.16	688.13	689.61	689.51	691.60	691.56	692.48	692.33
21	688.31	688.29	688.67	688.63	688.13	688.11	689.67	689.61	691.58	691.52	692.63	692.48
22	688.33	688.31	688.63	688.60	688.11	688.09	689.74	689.67	691.60	691.46	692.78	692.63
23	688.36	688.33	688.60	688.57	688.09	688.07	690.61	689.74	691.94	691.60	692.91	692.77
24	688.38	688.35	688.57	688.53	688.07	688.05	693.69	690.61	692.12	691.94	693.05	692.91
25	688.40	688.38	688.54	688.51	688.05	688.03	694.57	693.69	692.18	692.12	693.18	693.05
26	688.43	688.40	688.51	688.48	688.04	688.01	694.90	694.57	692.31	692.17	693.30	693.18
27	688.52	688.43	688.48	688.46	688.02	688.00	695.08	694.90	692.83	692.31	693.42	693.30
28	688.59	688.52	688.46	688.43	688.00	687.97	695.19	695.08	692.98	692.83	693.53	693.42
29	688.62	688.59	688.45	688.40	687.97	687.95	695.28	695.19	693.16	692.98	693.65	693.53
30	688.64	688.62	688.50	688.45	687.96	687.95	695.46	695.28	---	---	693.75	693.65
31	688.67	688.64	---	---	687.96	687.94	695.57	695.46	---	---	693.85	693.75
MONTH	688.67	687.88	689.07	688.40	688.50	687.94	695.57	687.96	696.79	691.46	693.85	691.69

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	693.93	693.84	692.78	692.67	691.50	691.46	689.99	689.93	688.80	688.74	---	---
2	694.00	693.93	692.67	692.57	691.46	691.43	689.93	689.88	688.74	688.67	---	---
3	694.09	694.00	692.57	692.47	691.43	691.38	689.89	689.84	688.68	688.61	---	---
4	694.17	694.08	692.47	692.36	691.39	691.34	689.85	689.78	688.61	688.55	---	---
5	694.26	694.17	692.37	692.25	691.35	691.31	689.80	689.76	688.55	688.49	---	---
6	694.34	694.26	692.25	692.15	691.31	691.26	689.77	689.72	688.49	688.42	---	---
7	694.43	694.34	692.17	692.13	691.28	691.24	689.72	689.69	688.42	688.37	---	---
8	694.51	694.43	692.20	692.17	691.27	691.22	689.69	689.65	688.37	688.32	---	---
9	694.59	694.51	692.18	692.11	691.25	691.20	689.65	689.62	688.32	688.27	---	---
10	694.61	694.51	---	---	691.20	691.15	689.62	689.58	688.27	688.21	---	---
11	694.51	694.38	---	---	691.16	691.11	689.58	689.54	---	---	---	---
12	694.38	694.26	---	---	691.13	691.07	689.54	689.50	---	---	---	---
13	694.31	694.20	691.88	691.81	691.09	691.05	689.50	689.46	---	---	---	---
14	694.20	694.09	691.81	691.75	691.05	691.00	689.46	689.42	---	---	---	---
15	694.09	693.96	691.77	691.71	691.00	690.94	689.42	689.38	---	---	---	---
16	693.96	693.88	691.71	691.62	690.94	690.87	689.38	689.35	---	---	---	---
17	694.01	693.93	691.65	691.55	690.87	690.80	689.35	689.31	---	---	---	---
18	694.00	693.93	691.55	691.46	690.80	690.73	689.32	689.26	---	---	---	---
19	693.93	693.85	691.46	691.39	690.73	690.66	689.28	689.23	---	---	---	---
20	693.85	693.76	691.39	691.33	690.66	690.59	689.24	689.21	---	---	---	---
21	693.76	693.66	691.37	691.35	690.59	690.53	689.21	689.17	---	---	---	---
22	693.67	693.61	691.40	691.37	690.53	690.44	689.20	689.15	---	---	---	---
23	693.62	693.50	691.44	691.40	690.46	690.38	689.16	689.13	---	---	---	---
24	693.51	693.41	691.46	691.42	690.38	690.32	689.13	689.10	---	---	---	---
25	693.42	693.31	691.48	691.44	690.32	690.26	689.10	689.06	---	---	---	---
26	693.31	693.20	691.51	691.46	690.26	690.21	689.07	689.00	---	---	---	---
27	693.20	693.10	691.56	691.51	690.21	690.16	689.05	689.00	---	---	---	---
28	693.11	692.99	691.60	691.55	690.16	690.10	689.01	688.98	---	---	---	---
29	692.99	692.89	691.61	691.56	690.10	690.04	688.98	688.93	---	---	---	---
30	692.89	692.78	691.58	691.53	690.04	689.98	688.93	688.87	---	---	---	---
31	---	---	691.54	691.50	---	---	688.87	688.80	---	---	---	---
MONTH	694.61	692.78	---	---	691.50	689.98	689.99	688.80	---	---	---	---

11162620 PILARCITOS CREEK BELOW STONE DAM, NEAR HILLSBOROUGH, CA

LOCATION.—Lat 37°31'29", long 122°23'54", NE 1/4 SW 1/4 sec.3, T.5 S., R.5 W., in San Mateo County, Hydrologic Unit 18050006, on left bank, 50 ft downstream of unnamed tributary, 0.2 mi downstream of Stone Dam, and 2.4 mi southwest of Hillsborough.

DRAINAGE AREA.—6.54 mi^2.

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 500 ft above sea level, from topographic map.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow regulated by storage in Pilarcitos Lake, 2.6 mi upstream, capacity, 3,100 acre-ft. Water is diverted by city of San Francisco water system at Pilarcitos Lake and Stone Dam.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 279 ft^3/s, Feb. 7, 1999, gage height, 7.46 ft, from rating curve extended above 90 ft^3/s; minimum daily, 0.03 ft^3/s, Oct. 13, 1997.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	e.06	.26	.05	.52	30	.61	.47	.30	.23	.15	.18
2	.15	e.06	.18	.05	.48	33	.60	.43	.29	.23	.16	.15
3	.15	e.06	.12	.05	.66	29	.59	.44	.29	.22	.17	.14
4	.15	e.06	.09	.05	.97	28	.58	.44	.28	.22	.19	.14
5	e.15	e.06	.08	.05	1.0	e20	.56	.46	.28	.24	.17	.13
6	e.15	e.06	.07	.05	1.0	e10	.56	.47	.29	.28	.16	.13
7	e.13	e.06	.07	.05	.75	e5.0	.55	.80	.29	.31	.16	.12
8	e.12	e.06	.06	.05	.62	e3.0	.53	1.3	.28	.28	.15	.12
9	e.12	e.06	.13	.05	.55	e5.5	.51	.96	.25	.28	.14	.12
10	e.11	e.11	.10	.07	.96	e7.0	.52	.85	.25	.27	.13	.13
11	e.10	e.08	.08	.62	9.5	e10	.53	.76	.25	.29	.13	.13
12	e.09	.07	.07	.32	33	e7.0	.55	.72	.25	.32	.12	.13
13	e.09	.07	.08	.16	88	e5.5	.54	.70	.26	.27	.12	.12
14	e.09	.07	.06	.11	94	e4.0	.52	.73	.25	.27	.12	.13
15	e.09	.07	.06	.09	72	e3.0	.50	.89	.24	.27	.13	.13
16	e.08	.15	.06	.61	59	3.5	.56	.86	.24	.26	.12	.14
17	e.08	.14	.06	.24	49	2.5	1.3	.76	.25	.26	.12	.13
18	e.09	.10	.05	.85	26	1.1	.68	.69	.25	.24	.13	.13
19	e.08	.36	.05	.54	8.0	.99	e.47	.53	.26	.21	.13	.13
20	e.07	.18	.05	.37	7.5	.94	.53	.47	.26	.20	.13	.13
21	e.07	.15	.05	.26	6.9	.89	.50	.40	.26	.20	.14	.13
22	e.07	.10	.04	.28	8.2	.84	.59	.36	.28	.19	.14	.17
23	e.06	.09	.04	1.7	15	.81	.55	.32	.26	.19	.14	.16
24	e.06	.07	.04	37	9.6	.77	.54	.32	.29	.19	.14	.15
25	e.06	.07	.05	4.8	8.8	.72	.51	.33	.27	.19	.13	.15
26	e.06	.06	.05	1.3	8.5	.67	.51	.32	.24	.19	.14	.16
27	e.06	.05	.05	.92	29	.65	.52	.32	.24	.18	.13	.15
28	e.15	.05	.05	.77	24	.62	.49	.31	.23	.16	.13	.16
29	e.06	.09	.05	.66	25	.60	.46	.31	.23	.16	.13	.18
30	e.06	.39	.05	.64	---	.59	.47	.33	.25	.18	.14	.17
31	e.06	---	.05	.56	---	.61	---	.34	---	.17	.14	---
TOTAL	3.01	3.06	2.30	53.32	588.51	216.80	16.93	17.39	7.86	7.15	4.33	4.24
MEAN	.097	.10	.074	1.72	20.3	6.99	.56	.56	.26	.23	.14	.14
MAX	.15	.39	.26	37	94	33	1.3	1.3	.30	.32	.19	.18
MIN	.06	.05	.04	.05	.48	.59	.46	.31	.23	.16	.12	.12
AC-FT	6.0	6.1	4.6	106	1170	430	34	34	16	14	8.6	8.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	.15	.39	.33	10.4	34.4	4.42	1.00	.52	.34	.28	.19	.17
MAX	.32	.72	.48	28.2	60.4	6.99	1.45	.59	.46	.38	.26	.22
(WY)	1999	1999	1999	1998	1998	2000	1999	1998	1998	1998	1998	1998
MIN	.047	.10	.074	1.18	20.3	2.82	.56	.41	.26	.21	.14	.14
(WY)	1998	2000	2000	1999	2000	1999	2000	1999	2000	1999	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	859.04		924.90			
ANNUAL MEAN	2.35		2.53		4.20	
HIGHEST ANNUAL MEAN					7.63	1998
LOWEST ANNUAL MEAN					2.46	1999
HIGHEST DAILY MEAN	59	Feb 12	94	Feb 14	102	Feb 7 1998
LOWEST DAILY MEAN	.04	Dec 22	.04	Dec 22	.03	Oct 13 1997
ANNUAL SEVEN-DAY MINIMUM	.05	Dec 18	.05	Dec 18	.03	Oct 13 1997
INSTANTANEOUS PEAK FLOW			169	Feb 13	279	Feb 7 1999
INSTANTANEOUS PEAK STAGE			6.89	Feb 13	7.46	Feb 7 1999
ANNUAL RUNOFF (AC-FT)	1700		1830		3050	
10 PERCENT EXCEEDS	2.4		3.0		4.9	
50 PERCENT EXCEEDS	.23		.24		.35	
90 PERCENT EXCEEDS	.06		.06		.08	

e Estimated

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA

LOCATION.—Lat 37°28'00", long 122°25'59", on north boundary of Miramontes Grant, San Mateo County, Hydrologic Unit 18050006, on left bank, 50 ft downstream from State Highway 1, 0.3 mi northwest of town of Half Moon Bay, and 1.0 mi upstream from mouth.

DRAINAGE AREA.—27.1 mi^2.

PERIOD OF RECORD.—July 1966 to current year.
SEDIMENT DATA: June 1990.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 31.51 ft above sea level. Prior to Nov. 17, 1983, at site 800 ft downstream at different datum.

REMARKS.—Records fair except for discharges less than 1 ft^3/s, which are poor. Flow slightly regulated by storage in Pilarcitos Lake 10 mi upstream, capacity, 3,100 acre-ft. Water is diverted to city of San Francisco water system; small diversions for irrigation upstream from station by pumping.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,750 ft^3/s, Jan. 4, 1982, gage height, 13.08 ft, site and datum then in use, from rating curve extended above 1,000 ft^3/s on basis of contracted-opening measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1730	549	7.65	Feb. 22	2215	544	7.85
Feb. 13	2045	1,250	10.64	Feb. 27	0045	354	6.78

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.8	7.8	1.8	14	e190	9.8	6.6	4.0	3.4	1.4	3.0
2	1.2	3.1	7.0	1.8	12	e150	9.8	6.1	4.0	3.8	1.2	2.4
3	1.4	4.5	4.0	1.7	29	e110	9.6	9.1	4.0	3.8	1.5	2.0
4	1.1	4.3	2.9	1.7	26	e80	9.8	8.4	4.6	3.6	1.5	1.9
5	1.5	3.5	2.6	1.5	31	e90	10	9.3	4.0	3.5	1.5	1.3
6	3.2	3.0	2.5	1.4	25	e80	9.9	8.6	4.1	3.3	1.9	1.1
7	1.8	7.4	2.7	1.3	22	e100	11	15	3.6	2.7	2.1	1.2
8	1.3	5.6	2.5	1.5	19	136	11	40	4.8	2.6	2.4	.82
9	1.2	3.0	5.7	1.5	18	154	11	22	4.0	3.4	2.2	.78
10	1.0	3.9	3.6	1.7	44	117	13	17	3.7	2.7	2.0	.98
11	1.1	5.9	2.5	7.8	182	100	16	14	3.7	3.0	2.0	1.3
12	.96	5.2	2.4	5.5	214	87	18	11	3.2	2.7	1.6	1.1
13	1.1	4.2	2.5	2.3	620	72	24	10	3.0	1.8	1.9	.98
14	.90	4.3	2.2	1.6	e400	74	23	12	2.3	1.8	1.5	.86
15	1.0	4.2	2.3	1.8	e250	67	21	12	2.4	2.2	1.2	.61
16	1.7	7.4	2.3	17	e150	61	26	10	2.4	2.7	1.2	.89
17	1.5	6.1	1.8	2.6	e90	61	51	9.6	2.7	3.1	1.4	1.2
18	1.7	3.1	2.1	22	e75	46	18	8.8	3.0	2.9	1.1	.92
19	1.4	9.6	2.3	6.3	e65	33	15	7.6	2.8	2.1	1.3	.48
20	1.0	7.4	2.0	3.7	e65	32	12	7.6	2.5	2.4	1.6	.71
21	.75	6.3	1.8	3.3	e70	25	10	6.5	2.1	2.9	1.4	.66
22	.91	3.7	1.6	4.5	e100	22	14	6.5	2.3	3.0	1.2	1.0
23	.90	3.3	1.3	53	e140	20	11	5.3	2.6	3.0	1.2	.96
24	1.1	3.2	1.7	366	e130	18	9.6	5.8	2.7	2.6	.95	1.3
25	1.2	3.1	1.9	125	e80	16	8.8	5.7	3.5	2.4	1.2	1.2
26	.94	3.0	1.9	52	e84	16	7.9	5.4	3.3	2.0	1.3	.76
27	.98	2.8	1.6	31	e140	14	7.2	5.6	2.8	1.8	1.8	.71
28	7.3	2.8	1.5	23	e270	14	6.9	5.4	3.4	1.6	1.5	.93
29	2.4	4.2	1.4	18	e230	12	7.1	5.0	3.5	1.6	1.4	.91
30	1.9	16	1.2	21	---	11	7.4	4.1	3.3	2.0	1.6	.71
31	1.9	---	1.6	16	---	10	---	4.0	---	1.8	1.5	---
TOTAL	47.27	145.9	81.2	799.3	3595	2018	418.8	304.0	98.3	82.2	47.55	33.67
MEAN	1.52	4.86	2.62	25.8	124	65.1	14.0	9.81	3.28	2.65	1.53	1.12
MAX	7.3	16	7.8	366	620	190	51	40	4.8	3.8	2.4	3.0
MIN	.75	1.8	1.2	1.3	12	10	6.9	4.0	2.1	1.6	.95	.48
AC-FT	94	289	161	1590	7130	4000	831	603	195	163	94	67

e Estimated.

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.17	5.61	15.9	48.7	54.8	39.8	19.2	6.32	2.56	1.09	.67	.42
MAX	4.44	32.5	92.1	164	329	278	127	37.2	15.8	5.35	2.41	1.89
(WY)	1983	1983	1971	1982	1998	1983	1982	1983	1998	1998	1999	1999
MIN	.000	.000	.59	.48	.66	1.44	.073	.009	.000	.000	.000	.000
(WY)	1967	1991	1991	1991	1977	1988	1977	1977	1972	1966	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	8726.48		7671.19			
ANNUAL MEAN	23.9		21.0		16.2	
HIGHEST ANNUAL MEAN					73.9	1983
LOWEST ANNUAL MEAN					.51	1977
HIGHEST DAILY MEAN	400	Feb 17	620	Feb 13	2150	Jan 4 1982
LOWEST DAILY MEAN	.75	Oct 21	.48	Sep 19	.00	Jul 1 1966
ANNUAL SEVEN-DAY MINIMUM	.97	Oct 21	.78	Sep 15	.00	Jul 1 1966
INSTANTANEOUS PEAK FLOW			1250	Feb 13	4750	Jan 4 1982
INSTANTANEOUS PEAK STAGE			10.64	Feb 13	13.08	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	17310		15220		11720	
10 PERCENT EXCEEDS	65		62		32	
50 PERCENT EXCEEDS	4.6		3.3		2.1	
90 PERCENT EXCEEDS	1.5		1.1		.00	

11162690 SAN FRANCISCO BAY AT PRESIDIO MILITARY RESERVATION, CA

LOCATION.—Lat 37°48'24", long 122°27'54", in NE 1/4 NE 1/4 sec.36, T.1 S., R.6 W., in San Miguel Grant, San Francisco County, Hydrologic Unit 18050002, at end of Coast Guard dock at Presidio Military Reservation.

PERIOD OF RECORD.—October 1990 to current year.
SPECIFIC CONDUCTANCE: October 1990 to current year.
WATER TEMPERATURE: October 1990 to current year.

PERIOD OF DAILY RECORD.—October 1990 to current year.
SPECIFIC CONDUCTANCE: October 1990 to current year.
WATER TEMPERATURE: October 1990 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1990.

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. The probe is set at 4.0 ft below Mean Lower Low Water (MLLW). Daily maximums and minimums sometimes differ from tidal cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 50,900 microsiemens, May 26, June 30, and July 1, 1991; minimum recorded, 4,250 microsiemens, Feb. 18, 1998.
WATER TEMPERATURE: Maximum recorded, 19.0°C, several days during August and September 1997; minimum recorded, 8.0°C, several days during December 1990 and January 1991.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 50,100 microsiemens, Oct. 2, 3; minimum recorded, 15,300 microsiemens, Mar. 1.
WATER TEMPERATURE: Maximum recorded, 17.0°C, several days in October, July, August, and September; minimum recorded, 10.0°C, Jan. 6, 7, Mar. 29–31.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	50000	48400	49800	48000	48900	47300	48800	43300	46200	38900	40900	15300
2	50100	48400	49700	48100	48900	46800	48900	46700	46800	37800	40300	19400
3	50100	48400	49700	48200	48800	43900	48900	46700	46900	40400	42500	21700
4	50000	48400	49600	48200	49000	46600	48900	46400	46800	39500	43700	25600
5	50000	47300	49500	48200	49200	42200	49100	46800	46500	41100	41700	26200
6	49800	47500	49600	48300	49000	47300	49100	46000	46600	39800	44200	25800
7	49700	48200	49500	48400	49100	47400	49200	45300	46400	39400	44100	28400
8	49700	48100	49600	47100	49400	46300	48700	46500	46300	39100	43400	28000
9	49600	48500	49500	45100	49100	47300	48800	46700	45900	39500	43500	22700
10	49800	48400	49800	47200	49000	45500	48700	45500	45500	37500	41900	20500
11	49700	48500	49700	48000	49200	47000	48400	46700	45900	37500	41900	19800
12	49800	48400	49700	47800	---	---	48400	45200	47000	35400	41700	19700
13	49800	48400	49700	47500	49200	46800	48300	45200	47000	39200	42200	19300
14	49700	48300	49500	47500	49300	46500	48100	43600	47700	39000	44900	20400
15	49900	47100	---	---	49200	44200	48200	45000	45500	32500	45100	26100
16	50000	46500	49100	47500	49200	43400	48200	46300	46300	32500	44900	26800
17	49900	47000	49200	47500	49200	45100	48400	45500	45900	32100	45600	28800
18	49800	47400	---	---	48900	46100	48300	45500	45900	30600	46700	31200
19	49700	47200	49300	47600	48900	46400	48100	45000	45600	29600	47100	33300
20	49700	47800	49000	46400	49200	46600	48300	44800	46000	29200	45300	33700
21	49600	47900	48900	45400	49100	46400	48400	45700	44600	28000	47200	34700
22	49500	47800	49600	46500	49400	45900	48100	45800	44600	31100	47400	36700
23	49400	48000	49400	46900	49400	44400	47900	45100	44900	24800	46800	37000
24	49200	47300	49500	47000	49200	44800	47400	44400	43600	22300	46700	35900
25	49300	46800	49600	47200	49200	45800	47300	43200	44300	16100	45200	33400
26	49200	47700	49500	47600	49200	45100	46600	42800	43400	18400	45600	30100
27	49600	47900	49400	46700	49200	45100	46900	39300	41100	18500	44200	30400
28	49800	47900	49300	46600	49100	46900	46800	38600	35100	17300	46400	29900
29	50000	48000	49200	45900	49100	46400	47200	37500	37200	22000	47700	30000
30	49800	47900	49100	45700	48800	46800	47300	39900	---	---	47800	31500
31	49700	47300	---	---	49000	46600	46400	39900	---	---	47600	33100
MONTH	50100	46500	---	---	---	---	49200	37500	47700	16100	47800	15300

11162690 SAN FRANCISCO BAY AT PRESIDIO MILITARY RESERVATION, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	47300	37900	47300	41100	48600	44100	49300	47000	48900	46700	49500	48100
2	47400	37100	46700	41700	48300	44300	49300	46800	48900	46500	49400	48000
3	46800	41700	46500	41500	48300	44600	49500	47000	48900	47000	49500	48200
4	46200	42000	46600	41800	48500	45200	49400	47000	48900	47000	49500	48100
5	46200	39800	46800	42200	49000	43300	49400	47100	48700	47100	49500	47600
6	46900	41400	47000	42500	49200	46200	49300	47100	48700	47200	49400	47100
7	46900	41300	47400	41700	49200	46300	48800	46800	49100	47100	49600	46000
8	47200	41400	46900	42000	49400	45800	49000	47100	49100	47100	49600	46900
9	47000	41700	47000	41800	48900	45800	49000	47400	49100	46900	49700	47600
10	47000	41000	47200	42100	49500	45700	49200	47400	49300	46600	49400	47500
11	47700	41400	48300	40300	49600	46300	49400	44600	49200	46600	49300	47400
12	47900	41300	48400	41100	49600	46400	49400	47700	49000	46700	48700	46900
13	47400	42500	47900	41700	49300	46300	49500	47700	49000	46900	49000	47100
14	46900	42000	47900	43300	49000	45700	49400	47500	49000	47100	49100	47400
15	46600	43000	47200	43400	49400	46200	49500	47500	49100	46600	48900	47500
16	46100	43000	47700	42700	49500	46600	49400	47600	48900	46900	49100	47500
17	46000	42800	47600	42800	49300	44900	49400	47500	49200	47300	48900	47100
18	46000	41500	47800	42700	48800	46000	49300	47200	49200	47100	48800	47000
19	46300	40800	48000	42800	49300	45900	49400	47400	49200	47100	48900	47400
20	46600	40800	48600	42200	49200	46800	49500	47200	49000	47500	49300	47100
21	46400	40800	48600	42100	49700	46900	49800	47500	49300	47500	49600	47600
22	46700	38900	48700	42600	49600	47200	49600	47000	49100	47600	49700	47600
23	46400	38800	48800	42000	49600	47000	49700	47400	49400	47400	49900	47900
24	46800	36500	49100	43100	49500	46500	49600	47400	49700	47500	49900	47900
25	46700	35700	48500	42200	49500	46600	49500	47700	49700	47800	49900	48100
26	46900	33700	48400	41000	49500	47100	49500	47500	49700	47700	49900	48200
27	46900	35700	48300	41200	49300	47200	49200	47100	49700	47700	50000	48600
28	46300	37200	48500	42400	49100	47000	49200	47000	49700	47500	50000	48800
29	47100	37700	48900	42900	49000	46900	49000	46700	49600	47100	49900	48700
30	47100	40000	48700	43300	49200	47100	49000	46600	49800	48100	49800	48500
31	---	---	48700	43200	---	---	49000	46700	49600	48000	---	---
MONTH	47900	33700	49100	40300	49700	43300	49800	44600	49800	46500	50000	46000

11162690 SAN FRANCISCO BAY AT PRESIDIO MILITARY RESERVATION, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	15.5	15.0	14.0	13.5	13.0	11.0	10.5	12.5	11.5	12.5	11.5
2	16.5	15.0	15.0	14.0	13.5	13.0	10.5	10.5	12.5	11.5	12.5	12.0
3	16.5	15.5	14.5	14.0	13.5	12.5	10.5	10.5	12.0	12.0	13.0	11.5
4	16.5	15.5	14.5	14.0	13.0	12.5	10.5	10.5	12.0	12.0	13.0	12.0
5	16.5	15.5	14.5	13.5	13.0	12.5	10.5	10.5	12.0	12.0	12.5	12.0
6	16.5	15.5	14.5	14.0	13.0	12.5	10.5	10.0	12.5	12.0	13.0	12.0
7	16.5	15.5	14.5	13.5	13.0	12.5	10.5	10.0	12.0	12.0	12.5	12.0
8	16.5	15.5	14.5	14.0	12.5	12.5	10.5	10.5	12.5	12.0	12.5	11.5
9	16.5	16.0	14.5	13.5	12.5	12.5	10.5	10.5	12.5	12.0	12.5	12.0
10	16.5	16.0	14.5	13.5	12.5	12.0	10.5	10.5	12.5	12.0	12.5	12.0
11	16.5	16.0	14.5	14.0	12.0	12.0	10.5	10.5	12.5	12.0	12.5	12.0
12	16.5	15.5	14.5	14.0	12.0	12.0	11.0	10.5	12.5	12.0	12.5	12.0
13	16.5	15.5	14.5	13.5	12.0	11.5	11.0	10.5	12.5	12.0	13.0	12.0
14	16.5	15.5	14.5	14.0	12.0	11.5	11.0	10.5	12.5	12.0	13.0	12.5
15	16.5	15.0	14.5	14.0	12.0	11.5	11.0	10.5	12.5	12.0	13.5	12.5
16	16.5	15.0	14.5	14.0	11.5	11.0	11.0	10.5	12.5	12.0	13.5	12.5
17	17.0	15.0	14.5	14.0	11.5	11.0	11.0	10.5	12.5	12.0	13.0	12.0
18	16.5	15.0	14.5	14.0	11.5	11.0	11.0	10.5	13.0	12.0	13.5	12.0
19	16.5	15.0	14.0	13.5	11.5	11.0	11.0	11.0	13.0	12.0	13.0	11.5
20	16.0	15.0	14.0	14.0	11.5	11.0	11.5	11.0	12.5	12.5	13.0	11.0
21	16.0	15.0	14.0	13.5	11.5	11.0	11.5	11.0	13.0	12.5	13.0	10.5
22	15.5	14.5	14.0	13.5	11.5	11.0	11.5	11.0	12.5	12.5	12.5	10.5
23	15.5	14.5	14.0	13.5	11.5	11.0	11.5	11.5	13.0	12.0	12.5	10.5
24	15.5	14.5	14.0	13.0	11.5	11.0	11.5	11.5	12.5	11.5	12.5	10.5
25	15.5	14.5	14.0	13.5	11.0	11.0	11.5	11.5	12.5	11.5	13.0	11.0
26	15.5	14.5	13.5	13.5	11.0	10.5	12.0	11.5	12.5	12.0	13.5	11.0
27	15.5	14.0	14.0	13.5	11.0	10.5	12.0	11.5	12.5	11.5	13.0	11.0
28	15.5	14.0	13.5	13.5	11.0	10.5	11.5	11.5	12.0	11.5	13.0	10.5
29	15.5	13.5	13.5	13.5	11.0	10.5	12.0	11.0	12.5	11.5	13.5	10.0
30	15.0	14.0	13.5	13.0	11.0	10.5	12.0	11.5	---	---	13.5	10.0
31	15.0	14.0	---	---	11.0	10.5	12.0	11.5	---	---	13.5	10.0
MONTH	17.0	13.5	15.0	13.0	13.5	10.5	12.0	10.0	13.0	11.5	13.5	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	10.5	13.5	11.5	14.5	11.5	16.5	15.0	16.5	13.5	15.5	15.0
2	12.5	10.5	13.5	11.5	15.0	12.0	16.5	14.5	16.0	13.5	15.5	15.0
3	12.0	10.5	13.5	11.5	14.5	12.0	16.5	14.5	16.0	14.0	16.0	15.0
4	12.0	11.0	13.5	11.5	14.5	12.0	16.5	14.5	16.0	14.5	16.0	15.0
5	12.5	11.0	14.0	11.5	15.0	12.0	16.0	14.0	16.0	14.5	16.5	15.0
6	12.5	11.0	13.5	11.5	14.5	12.0	16.5	14.5	15.5	14.5	16.5	15.0
7	13.0	11.0	13.5	11.5	15.0	12.5	16.5	14.5	16.0	14.5	17.0	15.0
8	13.0	11.0	14.5	11.5	15.0	12.5	16.5	14.5	16.0	14.5	16.5	14.5
9	13.5	11.0	14.5	12.0	15.5	12.5	16.0	14.5	16.5	14.5	16.0	14.5
10	13.5	11.5	14.5	12.0	15.5	12.0	16.0	14.5	16.5	14.5	16.0	15.0
11	13.5	11.0	14.5	11.0	14.5	12.0	16.0	15.0	16.5	14.5	16.5	15.0
12	13.5	11.0	14.5	11.0	14.5	12.0	16.0	15.0	16.5	14.5	16.5	15.0
13	13.5	11.5	14.0	11.0	14.5	12.0	16.0	15.0	16.5	14.5	16.5	15.0
14	13.5	12.0	13.0	11.0	15.0	12.0	16.5	15.0	16.5	14.5	16.5	15.0
15	13.0	12.5	13.0	11.5	15.0	12.0	16.5	15.0	17.0	14.5	16.5	15.5
16	13.0	12.5	13.0	12.0	14.5	12.0	16.5	15.0	17.0	14.5	16.5	15.5
17	13.5	12.5	13.5	12.0	15.0	12.5	16.5	15.0	16.5	14.5	17.0	15.5
18	13.5	12.5	14.0	12.0	15.5	13.0	17.0	15.0	16.5	14.0	17.0	15.5
19	14.0	13.0	14.5	12.0	15.5	13.5	17.0	15.0	16.0	14.0	16.5	15.0
20	14.5	13.0	15.0	12.0	16.0	13.5	16.5	15.0	16.0	14.0	16.5	15.0
21	14.5	13.0	15.5	11.5	16.0	14.0	16.5	14.5	16.0	14.0	16.5	15.0
22	15.0	13.0	15.0	11.5	15.5	14.0	16.5	14.5	16.0	14.5	16.5	15.5
23	15.0	13.0	16.0	11.5	16.0	14.5	16.5	14.0	16.0	14.5	17.0	15.5
24	15.5	12.5	15.0	11.5	16.5	14.5	16.5	14.0	16.0	14.5	17.0	15.5
25	15.5	12.5	16.0	12.5	16.5	15.0	16.0	14.0	16.0	14.5	17.0	16.0
26	16.0	12.0	16.0	12.0	16.5	15.0	16.0	14.0	16.5	14.0	17.0	16.0
27	15.5	12.0	16.5	12.0	16.0	15.0	16.0	14.0	16.5	14.0	17.0	16.0
28	15.0	12.0	16.0	12.0	16.5	15.0	16.0	14.0	16.5	14.0	17.0	16.0
29	15.0	11.0	15.5	11.5	16.5	15.0	16.5	14.0	16.0	14.0	17.0	16.0
30	14.5	11.5	14.5	11.0	16.5	15.0	16.5	14.0	16.0	14.5	17.0	16.0
31	---	---	15.0	11.0	---	---	16.5	14.0	16.0	14.5	---	---
MONTH	16.0	10.5	16.5	11.0	16.5	11.5	17.0	14.0	17.0	13.5	17.0	14.5

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA

LOCATION.—Lat 37°47'27", long 122°23'05", in SE 1/4 NW 1/4 sec.2, T.2 S., R.5 W., in San Miguel Grant, San Francisco County, Hydrologic Unit 18050002, at end of Pier 24, and directly under the west end of the San Francisco–Oakland Bay Bridge.

PERIOD OF RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

PERIOD OF DAILY RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1989.

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments and seismic work on the bridge. Upper probe is set at 9.0 ft below Mean Lower Low Water (MLLW). Lower probe is set at 30.0 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,700 microsiemens, Aug. 13, 1991; minimum recorded, 4,630 microsiemens, Feb. 22, 1998.
(Lower probe) Maximum recorded, 50,300 microsiemens, Sept. 6, 9–12, 1991; minimum recorded, 3,040 microsiemens, Mar. 18, 1995.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 20.5°C, July 23, 1992, Sept. 1, 1997; minimum recorded, 7.5°C, Dec. 26, 30, 1990, Jan. 1–3, 1991.
(Lower probe) Maximum recorded, 20.5°C, Sept. 1, 1997; minimum recorded, 7.5°C, Jan. 2, 3, 1991.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 49,200 microsiemens, Oct. 2, 10; minimum recorded, 13,900 microsiemens, Feb. 29.
(Lower probe) Maximum recorded, 49,400 microsiemens, Oct. 8, Aug. 28; minimum recorded, 14,200 microsiemens, Feb. 29.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 19.5°C, July 29; minimum recorded, 10.0°C, several days in January.
(Lower probe) Maximum recorded, 19.0°C, Sept. 24; minimum recorded, 10.0°C, several days in January and March.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	49100	47500	48500	46700	47500	46000	45400	43400	41600	32800	38500	14300
2	49200	47700	48500	47200	48200	44600	45500	43700	42600	34300	35000	15200
3	49100	47600	48400	47300	47500	44800	46400	44000	43400	35900	36000	17000
4	49000	47600	48500	47300	47400	45800	46500	44000	42500	35200	37300	18800
5	49000	47600	48500	47300	47400	45200	46700	42700	42400	35100	38300	18700
6	49000	47400	48400	47300	47200	45600	46500	42800	42600	34900	38800	18600
7	49000	47800	48400	47100	48400	44500	46900	44000	42400	33600	38800	19500
8	49100	47900	48500	46900	48000	45200	47100	44100	42200	34600	37200	20200
9	49000	47900	48400	46800	47000	45000	47100	44200	41800	34700	37800	18100
10	49200	48000	48400	46500	47000	43600	---	---	41200	33900	35900	15900
11	49100	48000	48300	46600	47000	44100	---	---	41800	32400	31500	14600
12	48900	47700	48100	45500	46800	44200	---	---	42400	35400	32900	15500
13	49000	48000	47600	45400	46700	44200	45900	42800	43800	31900	35500	15200
14	49100	47400	47500	45100	46200	43100	45900	42900	44200	31700	36900	19000
15	49100	46900	47300	45400	45300	41800	45700	42000	41100	23900	37400	18800
16	48400	46400	48200	45000	45000	40800	46500	44100	---	---	37300	22300
17	48400	45600	47100	45100	45600	40500	46700	43100	41200	22900	40000	21400
18	48300	44900	47600	44500	45500	41500	46900	42500	40600	20500	42000	22600
19	48200	45400	47800	45200	46700	42700	47100	44100	39700	21200	39900	27100
20	48300	46200	48000	46100	46900	43000	47000	42900	40300	21800	39700	25200
21	48900	47400	48200	46100	47400	44000	46900	44200	39100	20000	41100	25600
22	49000	47500	48000	46000	46900	44100	46900	43500	39800	23300	42400	26700
23	48900	47500	47900	46000	48200	44200	46600	42000	38400	17100	42400	29000
24	48700	47400	48900	45800	46700	43100	46300	40000	37000	17600	41400	26600
25	48500	47100	47800	45700	46800	42800	45700	40100	36700	16900	40200	27500
26	48700	47400	47800	45800	46800	42700	45200	38200	35600	19300	38100	26100
27	48700	47100	47800	45500	46400	42700	43300	36500	35000	17400	39100	26400
28	48600	46900	47800	45500	46100	43700	42700	32600	32900	14700	40200	28300
29	48700	47200	48700	45700	46300	42500	43100	31900	37700	13900	40800	27800
30	48600	47000	47600	45500	45700	42000	44700	33800	---	---	40900	29000
31	48600	47100	---	---	46300	42400	41400	33700	---	---	43400	29500
MONTH	49200	44900	48900	44500	48400	40500	---	---	---	---	43400	14300

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	43400	32500	41200	35300	46500	39400	48600	44000	48200	45700	48400	46500
2	43200	34600	42700	36200	46700	40000	48600	43700	47900	45600	48500	46500
3	44400	35900	42600	37300	46500	40100	48400	43900	47700	45700	48400	45200
4	44200	37200	43200	36900	46000	40600	48300	44400	47600	45400	48300	45500
5	44700	37300	43100	36700	46400	41000	48300	44600	47600	44500	48300	45100
6	44600	37600	42200	36600	46600	41000	48100	44900	47700	45100	48300	44100
7	44300	37300	41200	34800	46500	41300	48000	45200	47500	44700	48300	43700
8	44000	38100	43800	34600	46100	42300	48000	44800	---	---	47700	44600
9	44000	38700	44300	37000	46700	42300	---	---	48100	44400	48000	45500
10	43800	38700	44100	38000	47100	42200	---	---	48100	44400	47700	45500
11	43900	36700	43500	33800	46400	42100	---	---	47900	44500	47300	45100
12	43900	36600	44100	35000	45200	42100	48300	45800	48000	45600	47300	45800
13	44800	38900	43500	36900	46900	41900	48300	45600	48000	45000	47800	45800
14	44700	39400	43900	38100	---	---	48400	44700	47800	45800	47700	46000
15	44700	38700	---	---	48300	44700	48400	45700	47800	45700	47600	46000
16	44900	39600	---	---	48200	43800	48200	45700	47900	45500	47700	46000
17	---	---	---	---	48200	44600	48000	45600	48000	45400	47500	45200
18	44000	38000	44400	38400	48200	44500	47900	45600	48100	45600	47500	45400
19	42700	36300	44200	38200	48200	44600	47800	45500	48000	45200	47600	45500
20	40600	34500	44500	37600	47800	45100	47800	44800	48200	44900	47600	45300
21	40900	33200	44500	36800	47900	43700	47800	44600	48400	45400	47800	46000
22	40500	34400	44600	37500	48000	44600	47700	44600	48700	45500	48000	46200
23	40500	32300	43200	37400	47300	43500	47700	44200	48600	45300	47900	46000
24	39700	30100	43400	38000	47300	42900	47900	44500	48400	45500	47800	46100
25	40400	29800	44400	38500	48000	43000	48100	44800	48300	44800	48600	46300
26	40700	28100	43800	38600	48400	43300	48100	44000	48200	45800	---	---
27	40900	30200	42900	38800	48200	42200	48300	44800	48100	45900	---	---
28	40300	32900	44600	38400	48000	44200	48300	44300	48000	45900	---	---
29	42200	34400	42900	36800	48300	44200	48400	43600	48100	45900	---	---
30	41600	36000	44000	38300	48600	44200	48300	45700	48500	46000	---	---
31	---	---	45800	38500	---	---	48300	45600	48500	46100	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	49300	47500	48800	46900	47700	46100	47200	43500	43400	33800	43400	15900
2	49200	47600	48600	47300	48800	44800	46100	43600	43700	35600	42500	16900
3	49200	47600	48400	47300	48100	44800	46700	43900	44800	36400	41400	18400
4	49100	47600	48600	47300	47500	45800	46900	44000	44200	35800	40700	21800
5	49100	47600	48900	47300	47600	45500	47100	43000	44400	36000	40700	19500
6	49200	47500	48600	47300	47300	45700	47000	43000	44100	36000	40600	19400
7	49300	47800	48400	47300	48500	44500	47100	44000	44500	34600	40800	21900
8	49400	47900	48700	46900	48200	45200	46700	44200	44200	35300	40300	21400
9	49300	48000	48500	46900	47100	45000	46700	44200	44000	36300	40500	18400
10	49300	48000	48600	46900	47300	43600	---	---	44300	35300	39300	16600
11	49300	47900	48700	46900	47400	44300	---	---	43000	34300	41400	16400
12	49000	47800	48600	46000	47100	44300	---	---	44000	36600	42500	15700
13	49200	47900	48400	45900	47800	44400	46200	42700	45700	34700	43400	18100
14	49200	47500	48000	45300	46300	43000	46100	42900	46100	34400	43600	20100
15	49200	47000	47700	45500	46000	41800	46400	42100	43100	25600	44600	20900
16	48900	46400	47900	45200	46200	40700	46600	44400	---	---	41500	22800
17	48900	45500	47200	45300	46000	40300	46800	43400	43800	24400	42400	21800
18	48300	45300	47600	44600	46500	41400	47300	42900	43300	22500	43200	23600
19	48000	45100	48300	45300	47900	42800	47400	44400	42800	23500	43400	27000
20	48400	45800	48000	46200	47400	43500	47500	43900	44300	24400	42000	25400
21	48600	46800	48100	46200	48300	44300	47400	44400	41700	22000	44600	25800
22	48700	46900	48100	46000	47500	44300	47400	44100	42000	25100	44900	27400
23	48600	46900	48200	46100	47500	44300	47200	43100	41400	18700	43000	29200
24	48600	47000	48200	46000	47400	43300	46700	40800	41900	19600	42400	27000
25	48500	47100	49200	46000	47600	43700	46100	40900	42900	17400	42400	29100
26	48800	47300	49100	46000	47200	43000	45600	38600	44700	23400	43600	26800
27	49000	47300	49000	45600	46600	43000	45000	37800	45200	18800	44600	27300
28	48800	46900	48000	45600	46300	44100	43600	34300	44000	14900	44100	28800
29	48900	47200	48600	45900	46400	42400	44700	33500	45300	14200	45500	28500
30	48900	47000	47800	45700	46400	42000	45600	35700	---	---	45900	29900
31	49000	47100	---	---	46500	42600	43500	35100	---	---	45500	29500
MONTH	49400	45100	49200	44600	48800	40300	---	---	---	---	45900	15700
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	44700	33000	44700	37200	47200	41500	48700	45300	47700	45400	48400	47100
2	44800	35600	45300	38200	47300	42200	48700	45300	47800	45700	48600	47200
3	44400	36400	45300	39300	47600	42400	48800	45600	47600	45800	48600	46400
4	44400	37300	45500	38800	47500	43000	48800	45600	47800	46100	48700	46400
5	44600	37300	45700	39000	47800	43300	48700	46100	48000	45600	48700	45800
6	44700	37500	45800	38400	47100	43200	48300	45400	47900	45700	48900	44800
7	45100	37500	44800	36900	47000	43700	---	---	48200	45200	48900	44400
8	44800	38100	44300	36700	46600	44300	48300	45300	---	---	48600	45100
9	44300	38700	44400	37600	46900	44000	48200	45600	48300	44900	48400	46200
10	44100	38800	44300	38100	46500	43100	48000	45700	48200	45000	48300	46400
11	44800	37100	43900	35200	46600	43300	48300	45800	48200	45200	48300	46600
12	45200	36800	45300	36100	46500	43200	48300	45800	48800	46200	48000	46500
13	44900	39000	45500	37700	47100	43400	48300	45700	48900	46400	48200	46500
14	44600	39500	45300	38200	---	---	48400	45100	48900	46800	48100	46600
15	45000	38900	---	---	48500	43700	48300	45700	48900	46700	48100	46600
16	44900	39600	---	---	48600	44900	48300	45600	49000	47000	48100	46600
17	---	---	---	---	48300	45100	48100	45600	49200	47100	48300	45800
18	44300	37800	45200	38900	48300	45100	47900	45500	48700	46400	48600	46300
19	44300	37800	45500	38700	48300	45100	47800	45500	48800	46500	48800	46500
20	44000	36500	45300	38200	48300	45400	47800	45200	49000	46100	48300	45800
21	44100	36000	45300	38000	48400	45600	48000	45000	49100	46400	48600	46700
22	43200	36500	45400	38200	48300	45300	48000	44800	49300	46400	48500	46500
23	42800	34800	45500	38100	48600	45400	48300	44300	49300	46300	48300	46300
24	44200	32700	45900	40100	48600	44600	48300	45100	49200	46500	48100	46400
25	44600	32900	46000	39500	48900	45100	48200	44700	49100	46600	48000	46400
26	45100	31900	45800	40400	48900	45000	48000	44600	48600	46700	---	---
27	44800	33500	46000	40800	48800	44700	48100	44600	49200	46500	---	---
28	44500	35300	46000	39700	48700	45400	47900	44200	49400	46400	---	---
29	45200	37400	46000	39000	48800	45200	47900	44200	48800	46500	---	---
30	44800	38300	46300	40500	48800	45100	47700	45200	48500	46700	---	---
31	---	---	47200	41200	---	---	47600	45000	48500	46900	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	15.0	16.0	14.0	---	---	---	---	11.5	11.0	12.0	11.0
2	17.0	15.0	15.5	13.5	---	---	---	---	12.0	11.0	12.0	11.5
3	17.5	15.0	15.0	13.5	---	---	---	---	11.5	11.5	13.0	11.0
4	18.0	15.0	15.0	13.5	---	---	---	---	11.5	11.0	12.5	11.5
5	17.5	15.0	15.0	13.5	---	---	---	---	11.5	11.5	12.0	11.5
6	17.0	15.5	15.0	13.5	---	---	---	---	12.0	11.5	12.0	11.5
7	17.0	15.5	15.0	13.5	---	---	---	---	12.0	11.5	12.0	11.0
8	17.0	15.5	15.0	13.0	---	---	---	---	12.0	11.5	11.5	11.0
9	17.0	15.5	15.0	13.5	---	---	---	---	12.0	11.5	11.5	11.0
10	17.5	15.5	15.0	13.5	---	---	---	---	12.0	11.5	12.0	11.0
11	17.5	15.5	15.0	13.5	---	---	---	---	12.0	11.5	12.0	11.5
12	17.5	15.5	15.0	13.5	---	---	10.5	10.0	12.0	11.5	12.0	11.5
13	17.0	15.5	15.0	13.5	---	---	10.5	10.0	12.0	11.5	12.5	11.5
14	17.0	15.0	14.5	13.5	---	---	10.5	10.0	12.0	11.5	12.5	11.5
15	17.0	15.5	14.5	14.0	---	---	10.5	10.0	12.0	11.5	14.0	12.0
16	17.5	16.0	14.5	13.5	---	---	11.0	10.0	12.0	11.5	13.0	12.0
17	17.0	15.5	---	---	---	---	10.5	10.0	12.0	11.5	13.5	12.0
18	17.0	15.5	---	---	---	---	11.0	10.5	12.5	11.5	13.5	11.5
19	17.0	15.5	---	---	---	---	11.0	10.5	12.5	11.5	13.0	12.0
20	16.5	15.5	---	---	---	---	11.0	10.5	12.5	12.0	13.0	11.5
21	16.5	14.5	---	---	---	---	11.0	10.5	12.5	12.0	13.0	11.0
22	16.5	14.5	---	---	---	---	11.5	11.0	12.5	11.5	13.0	10.5
23	16.5	14.0	---	---	---	---	11.5	11.0	12.0	11.5	13.5	11.5
24	16.5	14.0	---	---	---	---	11.5	11.0	12.0	11.0	13.5	11.5
25	17.0	14.0	---	---	---	---	11.5	11.0	12.0	11.0	13.5	12.0
26	16.5	14.0	---	---	---	---	11.5	11.0	12.0	11.5	13.5	12.0
27	16.5	14.0	---	---	---	---	11.5	11.0	12.0	11.5	13.0	12.0
28	16.5	14.0	---	---	---	---	11.5	11.0	11.5	11.0	14.0	12.0
29	16.0	13.5	---	---	---	---	11.5	10.5	12.0	11.0	13.5	11.5
30	16.0	14.0	---	---	---	---	11.5	11.0	---	---	14.0	11.0
31	16.0	13.5	---	---	---	---	11.5	11.0	---	---	14.0	11.0
MONTH	18.0	13.5	---	---	---	---	---	---	12.5	11.0	14.0	10.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	11.0	15.0	12.5	16.5	11.5	18.5	15.0	18.5	14.0	16.5	15.0
2	15.5	11.0	14.5	12.0	16.5	12.0	18.5	15.0	18.5	14.0	16.5	15.0
3	14.0	11.0	14.5	12.0	16.5	12.0	18.0	15.0	18.0	14.5	16.5	15.0
4	13.5	11.5	15.0	11.5	16.5	12.0	18.0	14.5	18.5	14.5	16.5	15.5
5	13.5	11.5	15.0	11.5	16.5	12.0	17.5	14.5	17.5	15.0	17.5	15.5
6	14.0	11.5	14.5	12.0	16.5	12.5	17.5	15.0	17.5	15.0	17.0	15.5
7	14.0	11.5	14.5	12.5	16.5	12.5	17.0	15.0	17.0	15.5	17.5	15.5
8	14.0	12.0	14.5	12.5	15.5	13.0	17.0	15.0	---	---	17.0	16.0
9	14.0	12.0	14.5	12.5	15.5	13.0	17.0	15.0	17.0	15.0	17.5	15.5
10	14.0	12.0	14.0	12.5	16.0	13.0	17.5	15.0	18.0	15.0	17.5	15.5
11	14.5	12.0	14.5	12.5	16.5	13.5	17.5	15.0	18.0	15.5	17.5	15.5
12	14.5	12.0	14.5	12.0	16.5	13.5	17.5	15.0	18.5	15.5	18.5	15.5
13	14.5	12.0	14.0	12.5	18.0	13.5	18.0	15.5	19.0	15.5	17.5	15.5
14	14.5	12.5	14.0	12.0	---	---	18.5	15.5	19.0	15.5	17.5	15.5
15	14.0	12.5	14.0	12.0	16.5	12.5	18.5	15.5	19.0	15.5	17.5	15.5
16	14.0	12.5	---	---	16.5	12.5	18.5	15.5	19.0	15.5	17.5	15.5
17	14.5	12.5	14.5	12.5	17.0	13.5	18.0	15.5	19.0	15.0	18.0	15.5
18	14.0	13.0	15.0	12.5	17.5	14.0	18.5	15.5	18.5	15.0	18.5	15.5
19	14.5	13.5	15.0	13.0	18.0	14.0	18.5	15.5	18.0	15.0	18.5	15.5
20	15.0	13.5	15.5	13.0	18.0	14.5	18.5	15.5	17.5	14.5	18.5	15.5
21	15.0	13.5	16.0	13.0	17.5	14.5	17.5	15.5	17.5	14.5	18.5	15.5
22	15.0	13.5	16.0	13.0	18.0	15.0	17.5	15.5	17.5	14.5	19.0	15.5
23	15.5	13.5	16.5	13.5	18.0	15.5	18.0	15.5	17.5	14.5	18.5	16.0
24	15.5	14.0	16.5	13.5	18.5	15.5	17.5	15.0	18.0	14.5	19.0	16.0
25	15.5	13.5	16.5	13.5	18.5	15.5	17.5	14.5	18.5	14.5	18.5	16.5
26	16.0	13.5	16.5	13.5	18.5	15.0	18.0	14.5	19.0	14.5	---	---
27	15.5	13.0	16.5	14.0	17.5	15.0	18.0	14.5	18.5	14.0	---	---
28	15.0	13.0	17.5	14.0	18.0	15.5	18.5	14.5	18.0	14.5	---	---
29	15.5	12.0	17.0	13.5	18.5	15.0	19.5	14.0	18.0	14.5	---	---
30	15.5	12.5	16.5	14.0	18.5	15.0	18.5	14.0	---	---	---	---
31	---	---	16.5	12.0	---	---	19.0	14.0	17.5	14.5	---	---
MONTH	16.0	11.0	---	---	---	---	19.5	14.0	---	---	---	---

11162700 SAN FRANCISCO BAY AT PIER 24, AT SAN FRANCISCO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	15.0	15.5	13.5	13.5	13.0	---	---	11.5	11.0	12.0	11.5
2	17.5	15.0	16.0	13.5	13.0	13.0	---	---	12.0	11.0	12.0	11.5
3	17.5	15.0	15.5	13.5	13.0	12.5	---	---	11.5	11.0	12.5	11.5
4	18.0	15.0	15.0	13.5	13.0	12.5	---	---	11.5	11.0	12.5	11.5
5	17.0	15.0	15.5	13.0	13.0	12.5	---	---	11.5	11.0	12.0	11.5
6	17.5	15.5	15.0	13.0	13.0	12.5	---	---	12.0	11.0	12.0	11.5
7	17.5	15.0	14.5	13.5	13.0	12.0	---	---	12.0	11.0	12.5	11.5
8	17.5	15.5	15.0	13.0	12.5	12.0	---	---	12.0	11.5	12.0	10.5
9	17.5	15.0	15.0	13.5	12.5	12.0	---	---	12.0	11.5	11.5	11.0
10	17.5	15.5	15.0	13.0	12.5	12.0	---	---	12.0	11.5	12.0	11.0
11	17.5	15.5	15.0	13.5	12.0	11.5	---	---	12.0	11.5	12.0	11.5
12	17.5	15.5	15.0	13.5	12.5	11.5	10.5	10.0	12.0	11.0	12.0	11.0
13	17.5	15.5	14.5	13.5	12.0	11.5	10.5	10.0	12.0	11.0	12.0	11.5
14	17.5	15.0	14.5	13.5	---	---	10.5	10.0	12.0	11.5	12.5	11.5
15	17.0	15.0	14.5	13.5	---	---	10.5	10.0	12.0	11.5	13.0	11.5
16	17.0	15.5	15.0	14.0	---	---	10.5	10.0	12.5	11.5	13.5	12.0
17	17.0	15.5	15.0	14.0	---	---	11.0	10.0	12.0	11.5	13.5	11.5
18	17.0	15.5	14.5	14.0	---	---	11.0	10.0	12.5	11.5	13.0	11.5
19	17.0	15.5	14.5	13.5	---	---	11.0	10.0	12.5	11.5	13.5	11.5
20	17.0	15.0	14.5	13.0	---	---	11.0	10.5	12.5	11.5	13.0	11.5
21	17.0	14.5	14.5	13.0	---	---	11.5	10.5	12.5	11.5	13.0	10.5
22	16.5	14.5	14.5	13.0	---	---	11.5	10.5	12.5	11.5	13.0	10.0
23	16.5	14.0	14.5	13.0	---	---	11.5	10.5	12.0	11.5	13.0	11.0
24	16.5	14.0	14.5	13.0	---	---	11.5	10.5	12.0	11.0	13.0	11.0
25	17.0	14.0	14.5	13.0	---	---	11.5	11.0	12.0	11.0	13.0	11.5
26	16.5	14.0	14.0	13.0	---	---	11.5	10.5	12.0	11.5	13.0	11.0
27	16.5	14.0	14.0	13.0	---	---	11.5	10.5	12.0	11.0	13.0	11.0
28	16.5	14.0	13.5	13.0	---	---	11.5	10.5	11.5	11.0	13.5	11.0
29	16.0	13.5	13.5	13.0	---	---	11.5	10.5	12.0	11.0	13.5	10.5
30	16.0	13.5	13.5	13.0	---	---	11.5	10.5	---	---	13.5	10.5
31	16.0	13.5	---	---	---	---	11.5	10.5	---	---	14.0	10.5
MONTH	18.0	13.5	16.0	13.0	---	---	---	---	12.5	11.0	14.0	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	10.5	14.5	12.0	16.5	11.5	18.0	15.0	---	---	16.5	15.0
2	14.5	11.0	14.5	11.5	16.5	12.0	18.0	14.5	---	---	16.5	15.0
3	14.0	11.0	14.5	11.5	16.5	12.0	17.5	14.5	---	---	16.5	15.0
4	13.5	11.0	15.0	11.5	16.5	12.0	18.0	14.5	---	---	16.5	15.0
5	13.5	11.5	14.5	11.5	16.0	12.0	17.0	14.5	---	---	17.5	15.0
6	13.5	11.5	14.5	11.5	16.0	12.5	17.0	15.0	---	---	17.0	15.5
7	14.0	11.5	14.5	12.0	16.0	12.5	16.5	15.0	---	---	17.0	15.5
8	13.5	11.5	14.5	12.0	15.5	13.0	17.0	15.0	---	---	17.0	15.5
9	13.5	11.5	14.5	12.0	15.0	13.0	16.5	15.0	---	---	17.5	15.5
10	14.0	12.0	14.0	12.5	15.5	13.0	17.0	15.0	---	---	17.5	15.5
11	14.0	12.0	14.0	12.5	16.0	13.0	17.5	15.0	---	---	17.5	15.5
12	14.0	11.5	14.5	11.5	16.0	13.0	17.5	15.0	---	---	18.0	15.5
13	14.5	12.0	14.0	11.5	17.0	12.5	---	---	---	---	17.5	15.5
14	14.5	12.0	14.0	11.5	---	---	---	---	---	---	17.5	15.5
15	14.0	12.5	14.0	11.5	16.5	12.0	---	---	---	---	17.5	15.5
16	14.0	12.5	13.5	12.5	16.5	12.5	---	---	---	---	17.5	15.5
17	14.5	12.5	14.0	12.5	17.0	13.0	---	---	---	---	18.0	15.5
18	14.5	13.0	14.5	12.5	17.5	13.5	---	---	---	---	18.0	15.5
19	14.5	13.0	15.0	12.5	17.5	14.0	---	---	---	---	18.5	15.5
20	15.0	13.0	15.0	12.5	17.5	14.0	---	---	---	---	18.5	15.5
21	15.0	13.5	15.5	13.0	17.5	14.5	---	---	---	---	18.5	15.5
22	15.0	13.5	16.0	13.0	18.0	14.5	---	---	---	---	18.5	15.5
23	15.0	13.5	16.0	13.0	17.5	14.5	---	---	---	---	18.5	16.0
24	15.0	13.0	16.0	13.0	18.0	15.0	---	---	---	---	19.0	16.0
25	15.5	13.0	16.0	13.0	18.0	15.0	---	---	---	---	18.5	16.0
26	16.0	12.5	16.0	13.0	18.0	15.0	---	---	---	---	---	---
27	15.5	12.5	16.5	13.0	17.0	15.0	---	---	---	---	---	---
28	14.5	12.5	17.0	13.0	18.0	15.0	---	---	---	---	---	---
29	15.0	12.0	16.5	13.0	18.0	15.0	---	---	---	---	---	---
30	15.0	12.0	16.0	12.5	18.5	15.0	---	---	---	---	---	---
31	---	---	16.5	11.5	---	---	---	---	17.0	14.5	---	---
MONTH	16.0	10.5	17.0	11.5	---	---	---	---	---	---	---	---

11162750 CRYSTAL SPRINGS RESERVOIR AT DAM, NEAR SAN MATEO, CA

LOCATION.—Lat 37°31'47", long 122°21'43", in Pulgas Grant, San Mateo County, Hydrologic Unit 18050004, at north end of Crystal Springs Reservoir Dam, 0.6 mi upstream of Polhemus Creek, and 0.2 mi west of Hillsborough City boundary.

DRAINAGE AREA.—Indeterminate.

PERIOD OF RECORD.—October 1998 to current year.

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

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. Lake is formed by gravity type, interlocking concrete blocks. Storage began in 1888. Dam was raised in 1890 and 1911. Capacity is 58,500 acre-ft, spillway at crest is 283.9 ft, capacity can be increased by addition of 4 ft flash boards up to 8 ft. Stores water from Hetch-Hetchy Aqueduct for municipal use.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	266.58	266.47	267.46	267.40	271.46	271.30	278.13	277.92	284.06	283.84
2	---	---	266.47	266.37	267.58	267.48	271.61	271.46	278.26	278.13	283.94	283.67
3	---	---	266.37	266.17	267.70	267.58	271.74	271.61	278.53	278.26	283.67	283.25
4	---	---	266.17	266.11	267.90	267.70	271.89	271.74	278.73	278.53	283.25	282.91
5	---	---	266.11	265.94	267.96	267.90	271.95	271.87	278.97	278.72	283.05	283.00
6	---	---	265.94	265.87	268.12	267.96	272.08	271.95	279.12	278.97	283.04	282.78
7	---	---	265.87	265.75	268.28	268.12	272.13	272.06	279.34	279.12	282.78	282.55
8	---	---	265.78	265.72	268.37	268.28	272.23	272.13	279.57	279.34	282.74	282.55
9	---	---	265.73	265.68	268.56	268.40	272.31	272.23	279.72	279.56	282.55	282.34
10	---	---	265.73	265.67	268.70	268.56	272.42	272.31	280.04	279.72	282.34	282.04
11	---	---	265.72	265.68	---	---	272.63	272.41	280.75	280.04	282.04	281.80
12	---	---	265.72	265.69	269.29	269.21	272.78	272.63	281.46	280.75	281.80	281.51
13	---	---	265.77	265.70	269.37	269.27	272.97	272.78	283.24	281.46	281.51	281.39
14	---	---	265.79	265.75	269.51	269.37	273.08	272.96	284.34	283.22	281.40	281.36
15	---	---	265.81	265.77	269.57	269.49	273.30	273.08	284.62	284.34	281.36	281.30
16	---	---	265.92	265.81	269.70	269.57	273.56	273.25	284.91	284.62	281.34	281.28
17	---	---	265.94	265.90	269.79	269.68	273.73	273.56	284.97	284.78	281.30	281.23
18	---	---	266.04	265.91	270.00	269.79	274.01	273.73	284.83	284.58	281.23	281.16
19	---	---	266.25	266.08	270.08	269.99	274.21	274.00	284.58	284.25	281.17	281.07
20	---	---	266.45	266.25	270.18	270.08	274.40	274.21	284.25	284.11	281.08	280.99
21	267.18	267.15	266.56	266.44	270.25	270.18	274.57	274.40	284.19	283.96	281.00	280.90
22	267.15	267.10	266.61	266.56	270.34	270.23	274.76	274.57	284.05	283.75	280.91	280.79
23	267.10	266.98	266.74	266.61	270.35	270.30	275.23	274.76	284.32	284.05	280.81	280.72
24	266.98	266.95	266.73	266.71	270.48	270.35	276.29	275.23	284.34	284.18	280.72	280.58
25	266.99	266.93	266.88	266.73	270.66	270.48	276.70	276.29	284.26	284.02	280.58	280.45
26	266.99	---	266.93	266.85	270.86	270.66	276.91	276.70	284.03	283.80	280.45	280.31
27	266.96	266.85	267.10	266.93	270.98	270.85	277.11	276.91	284.26	283.92	280.31	280.16
28	266.95	266.88	267.13	267.08	271.14	270.98	277.30	277.11	284.30	284.17	280.17	280.09
29	266.88	266.80	267.31	267.13	271.18	271.12	277.48	277.30	284.31	284.06	280.09	279.95
30	266.80	266.76	267.46	267.29	271.32	271.18	277.70	277.48	---	---	279.95	279.80
31	266.76	266.58	---	---	271.31	271.29	277.92	277.70	---	---	279.80	279.64
MONTH	---	---	267.46	265.67	---	---	277.92	271.30	284.97	277.92	284.06	279.64

11162750 CRYSTAL SPRINGS RESERVOIR AT DAM, NEAR SAN MATEO, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	279.64	279.50	277.15	277.02	275.76	275.65	273.24	273.15	270.56	270.48	268.29	268.14
2	279.50	279.47	277.02	276.95	275.65	275.59	273.15	273.01	270.51	270.41	268.47	268.29
3	279.47	279.32	276.95	276.80	275.59	275.53	273.02	272.90	270.45	270.33	268.61	268.47
4	279.34	279.17	276.80	276.63	275.54	275.48	272.90	272.77	270.40	270.29	268.71	268.61
5	279.17	279.03	276.64	276.49	275.49	275.45	272.78	272.72	270.32	270.27	268.76	268.71
6	279.03	278.97	276.49	276.38	275.45	275.36	272.72	272.54	270.28	270.20	268.73	268.59
7	278.97	278.81	276.38	276.35	275.36	275.29	272.54	272.42	270.20	270.14	268.59	268.50
8	278.81	278.72	276.36	276.29	275.31	275.26	272.42	272.34	270.14	270.09	268.50	268.40
9	278.72	278.60	276.29	276.25	275.30	275.19	272.34	272.19	270.09	269.90	268.41	268.33
10	278.60	278.50	276.26	276.12	275.20	275.14	272.19	272.03	269.90	269.77	268.34	268.25
11	278.52	278.48	276.13	276.06	275.15	275.08	272.04	271.93	269.77	269.68	268.25	268.10
12	278.48	278.34	276.06	275.95	275.09	275.02	271.94	271.82	269.68	269.59	268.10	268.05
13	278.37	278.28	275.96	275.92	275.04	274.99	271.83	271.72	269.63	269.54	268.06	267.95
14	278.29	278.16	276.02	275.94	274.99	274.93	271.72	271.64	269.54	269.43	268.03	267.95
15	278.16	278.10	276.03	275.98	274.93	274.85	271.64	271.54	269.43	269.33	268.01	267.93
16	278.11	278.06	276.08	276.03	274.85	274.71	271.55	271.50	269.33	269.21	267.93	267.88
17	278.17	278.11	276.12	276.07	274.72	274.58	271.50	271.42	269.22	269.14	267.88	267.75
18	278.19	278.14	276.15	276.12	274.59	274.46	271.44	271.40	269.17	269.09	267.75	267.69
19	278.15	278.08	276.19	276.15	274.47	274.32	271.41	271.32	269.10	269.02	267.69	267.64
20	278.08	278.03	276.22	276.18	274.32	274.17	271.33	271.26	269.06	268.96	267.64	267.53
21	278.03	277.98	276.27	276.22	274.17	274.03	271.26	271.17	268.96	268.84	267.54	267.48
22	278.02	277.95	276.29	276.26	274.03	273.89	271.19	271.16	268.87	268.82	267.50	267.38
23	277.96	277.88	276.26	276.16	273.93	273.83	271.17	271.09	268.85	268.72	267.38	267.34
24	277.92	277.84	276.23	276.15	273.89	273.75	271.09	270.97	268.72	268.64	267.34	267.16
25	277.85	277.79	276.21	276.14	273.76	273.69	270.97	270.84	268.64	268.52	267.16	266.99
26	277.80	277.64	276.17	276.11	273.69	273.60	270.86	270.72	268.52	268.43	266.99	266.81
27	277.64	277.51	276.11	276.08	273.63	273.55	270.76	270.71	268.43	268.34	266.81	266.65
28	277.51	277.39	276.09	276.03	273.60	273.50	270.73	270.66	268.35	268.24	266.65	266.60
29	277.40	277.28	276.05	275.97	273.51	273.40	270.68	270.63	268.25	268.19	266.60	266.42
30	277.28	277.15	275.99	275.93	273.41	273.24	270.63	270.59	268.22	268.14	266.42	266.30
31	---	---	275.93	275.76	---	---	270.59	270.53	268.15	268.09	---	---
MONTH	279.64	277.15	277.15	275.76	275.76	273.24	273.24	270.53	270.56	268.09	268.76	266.30

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA

LOCATION.—Lat 37°35'04", long 122°14'59", unsurveyed, T.4 S., R.4 W., in San Mateo County, Hydrologic Unit 18050004, on Pier 20 of the San Mateo Bridge.

PERIOD OF RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

PERIOD OF DAILY RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1989.

REMARKS.—Interruptions in record were usually due to malfunction of the sensing and (or) recording instruments. Upper probe is set at 3.5 ft below Mean Lower Low Water (MLLW). Lower probe is set at 38.0 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums. On Mar. 9, 1999, the station was temporarily shut down for seismic retrofit of the bridge and data was not collected until June 15, 2000.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,200 microsiemens, Sept. 5, 1990; minimum recorded, 11,500 microsiemens, Mar. 17, 1996.
(Lower probe) Maximum recorded, 50,300 microsiemens, Oct. 31, Nov. 4, 9, 1990; minimum recorded, 14,900 microsiemens, Mar. 5, 1998.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 23.5°C, Aug. 1, 2, 28, 1993, Aug. 8, 1995; minimum recorded, 6.5°C, on several days in December 1990 and January 1991.
(Lower probe) Maximum recorded, 23.0°C, on several days in August 1990, July 16, 17, 1992, Aug. 2–6, 1993, July 16, 31, and several days in August 1995; minimum recorded, 6.5°C, Dec. 30, 1990, to Jan. 2, 1991.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: (Upper probe) No data recorded.
(Lower probe) Maximum recorded, 46,000 microsiemens, Sept. 18, 27; minimum recorded, 37,800 microsiemens, June. 23.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 22.5°C, June 26–28; minimum recorded, 19.0°C, several days in June, July, and September.
(Lower probe) Maximum recorded, 22.0°C, several days in June and September; minimum recorded, 18.5°C, June 15.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1	---	---	---	---	---	---	43100	40000	45200	42800	45400	44100
2	---	---	---	---	---	---	43300	39600	45000	42900	45400	44100
3	---	---	---	---	---	---	43100	39300	44800	42900	45200	44200
4	---	---	---	---	---	---	43700	39800	44600	42600	45300	43900
5	---	---	---	---	---	---	43200	39700	---	---	45200	44100
6	---	---	---	---	---	---	43000	40200	---	---	45400	44000
7	---	---	---	---	---	---	43300	40700	---	---	45400	44400
8	---	---	---	---	---	---	42900	40900	---	---	45500	44300
9	---	---	---	---	---	---	43600	40800	---	---	45400	44200
10	---	---	---	---	---	---	43800	41700	45100	43500	45500	44100
11	---	---	---	---	---	---	43700	41800	45100	43500	45800	44300
12	---	---	---	---	---	---	43900	41300	45200	43600	45700	44300
13	---	---	---	---	---	---	43900	40700	45600	43700	45800	44600
14	---	---	---	---	---	---	44000	41300	45500	43900	45800	44500
15	---	---	---	---	42400	39500	43900	41300	45600	43800	45900	44400
16	---	---	---	---	42000	39100	43800	40900	45800	43900	45900	44500
17	---	---	---	---	41600	38900	43900	41500	45800	43800	45900	44600
18	---	---	---	---	41900	39100	44100	41600	45800	44100	46000	44400
19	---	---	---	---	42200	39100	44000	41600	45600	44200	45800	44600
20	---	---	---	---	42000	38700	43500	41700	45800	44400	45700	44600
21	---	---	---	---	41800	38100	43600	41700	45600	44400	45600	44300
22	---	---	---	---	41900	38500	43900	41900	45500	44500	45700	44500
23	---	---	---	---	41800	37800	44100	42100	45500	44500	45800	44400
24	---	---	---	---	42200	39700	44400	42300	---	---	45800	44200
25	---	---	---	---	41900	39700	44600	42200	---	---	45800	44300
26	---	---	---	---	42500	39800	45000	42000	---	---	45900	44300
27	---	---	---	---	42500	39900	45000	42400	---	---	46000	44300
28	---	---	---	---	42600	39500	45200	42200	---	---	45700	44300
29	---	---	---	---	42600	39300	45000	42400	---	---	45700	44400
30	---	---	---	---	43000	39900	45200	42400	---	---	45700	44500
31	---	---	---	---	---	---	45200	42700	---	---	---	---
MONTH	---	---	---	---	---	---	45200	39300	---	---	46000	43900

11162765 SAN FRANCISCO BAY AT SAN MATEO BRIDGE, NEAR FOSTER CITY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	21.5	20.0	21.0	19.5	20.0	19.5
2	---	---	---	---	---	---	21.0	19.5	21.0	20.0	20.0	19.5
3	---	---	---	---	---	---	20.5	19.5	21.5	20.5	19.5	19.5
4	---	---	---	---	---	---	20.5	19.0	21.5	20.5	19.5	19.5
5	---	---	---	---	---	---	20.0	19.5	---	---	20.0	19.0
6	---	---	---	---	---	---	20.0	19.0	---	---	20.0	19.5
7	---	---	---	---	---	---	19.5	19.0	---	---	20.5	19.5
8	---	---	---	---	---	---	20.0	19.0	---	---	20.5	19.5
9	---	---	---	---	---	---	20.5	19.5	---	---	20.5	19.5
10	---	---	---	---	---	---	21.0	19.5	21.0	20.0	21.0	19.5
11	---	---	---	---	---	---	---	---	21.0	20.0	21.0	19.5
12	---	---	---	---	---	---	21.0	20.0	21.0	20.0	20.5	19.5
13	---	---	---	---	---	---	20.5	20.0	21.0	20.0	21.0	19.5
14	---	---	---	---	---	---	21.0	20.0	21.0	20.0	21.0	20.0
15	---	---	---	---	20.0	19.0	21.0	20.0	21.0	20.0	21.0	20.0
16	---	---	---	---	20.5	19.5	21.0	20.0	21.0	20.0	21.0	20.0
17	---	---	---	---	21.0	19.5	20.5	19.5	21.5	20.0	21.5	20.0
18	---	---	---	---	21.5	20.0	20.0	19.5	21.0	19.5	22.0	20.5
19	---	---	---	---	21.5	20.5	20.0	19.5	20.5	19.5	22.0	20.5
20	---	---	---	---	---	---	20.0	19.5	20.5	19.5	22.0	21.0
21	---	---	---	---	22.0	21.0	20.0	19.5	20.5	19.5	22.0	21.0
22	---	---	---	---	22.0	21.0	20.0	19.5	20.5	20.0	21.5	20.5
23	---	---	---	---	22.0	21.0	21.0	19.5	20.5	20.0	22.0	20.5
24	---	---	---	---	22.0	21.0	---	---	---	---	22.0	20.5
25	---	---	---	---	22.0	21.0	20.5	19.5	---	---	21.5	20.5
26	---	---	---	---	22.5	20.5	20.5	19.0	---	---	21.5	20.5
27	---	---	---	---	22.5	20.5	21.0	19.0	---	---	21.5	20.5
28	---	---	---	---	22.5	20.5	20.5	19.0	---	---	---	---
29	---	---	---	---	22.0	20.5	20.5	19.0	---	---	---	---
30	---	---	---	---	22.0	20.5	21.0	19.5	---	---	---	---
31	---	---	---	---	---	---	21.0	19.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

(LOWER PROBE)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	21.5	19.5	21.0	19.5	20.0	19.5
2	---	---	---	---	---	---	21.0	19.5	21.0	20.0	20.0	19.5
3	---	---	---	---	---	---	20.5	19.5	21.0	20.5	19.5	19.5
4	---	---	---	---	---	---	20.0	19.0	21.0	20.5	19.5	19.5
5	---	---	---	---	---	---	20.0	19.0	---	---	19.5	19.0
6	---	---	---	---	---	---	19.5	19.0	---	---	19.5	19.5
7	---	---	---	---	---	---	19.5	19.0	---	---	20.0	19.5
8	---	---	---	---	---	---	19.5	19.0	---	---	20.0	19.5
9	---	---	---	---	---	---	20.0	19.5	---	---	20.5	19.5
10	---	---	---	---	---	---	20.0	19.5	21.0	20.0	20.5	19.5
11	---	---	---	---	---	---	20.0	19.5	20.5	20.0	20.5	19.5
12	---	---	---	---	---	---	20.5	19.5	21.0	20.0	20.5	19.5
13	---	---	---	---	---	---	20.5	20.0	21.0	20.0	20.5	19.5
14	---	---	---	---	---	---	21.0	20.0	21.0	19.5	20.5	20.0
15	---	---	---	---	20.0	18.5	21.0	20.0	21.0	19.5	21.0	20.0
16	---	---	---	---	20.5	19.5	21.0	19.5	21.0	19.5	21.0	20.0
17	---	---	---	---	21.0	20.0	20.5	19.5	21.5	19.5	21.0	20.0
18	---	---	---	---	21.5	20.0	20.0	19.5	21.0	19.5	21.5	20.0
19	---	---	---	---	21.5	20.5	20.0	19.5	20.5	19.5	21.5	20.5
20	---	---	---	---	---	---	20.0	19.5	20.5	19.5	22.0	21.0
21	---	---	---	---	22.0	21.0	20.0	19.5	20.5	19.5	22.0	21.0
22	---	---	---	---	22.0	21.5	20.0	19.5	20.5	20.0	21.5	20.5
23	---	---	---	---	22.0	21.0	20.5	19.0	20.5	20.0	21.5	20.5
24	---	---	---	---	21.5	20.5	---	---	---	---	21.5	20.5
25	---	---	---	---	21.5	21.0	20.5	19.0	---	---	21.5	20.5
26	---	---	---	---	21.5	20.5	20.5	19.0	---	---	21.5	20.5
27	---	---	---	---	21.5	20.5	21.0	19.0	---	---	21.0	20.5
28	---	---	---	---	21.5	20.5	21.0	19.0	---	---	21.0	20.0
29	---	---	---	---	22.0	20.5	21.0	19.0	---	---	20.5	20.0
30	---	---	---	---	22.0	20.0	21.0	19.5	---	---	20.5	20.0
31	---	---	---	---	---	---	21.0	19.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	22.0	19.0

11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA

LOCATION.—Lat 37°25'24", long 122°11'18", in San Francisquito Grant, Santa Clara County, Hydrologic Unit 18050003, at golf course on right bank, 1.1 mi downstream from Los Trancos Creek, 1.1 mi west of Stanford University Post Office, and 5 mi downstream from Searsville Lake.

DRAINAGE AREA.—37.4 mi^2.

PERIOD OF RECORD.—October 1930 to September 1941, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 115.75 ft above sea level. Recording rain gage (station 372724122101201) at 345 Middlefield Road in Menlo Park, 2.5 mi northeast of gage (discontinued Sept. 30, 1995).

REMARKS.—Records good. Flow slightly regulated by Searsville Lake, capacity, 952 acre-ft. Diversions of about 800 acre-ft each year upstream from station to Los Trancos and Lagunita Canals for irrigation on Stanford University Campus downstream from station. Low flow affected by wastewater from Stanford Linear Accelerator.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,200 ft^3/s, Feb. 3, 1998; maximum gage height, 13.60 ft, Dec. 22, 1955; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 700 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	0730	1,170	4.61	Feb. 22	2330	1,550	5.18
Feb. 13	2130	3,930	9.04				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	.65	2.4	1.2	12	129	11	7.0	4.4	1.2	.56	.76
2	.46	.52	1.4	1.2	11	88	10	6.7	4.2	1.2	.58	1.0
3	.39	.51	1.1	1.3	24	75	10	6.2	3.9	1.2	.52	.75
4	.39	.54	.95	1.3	20	71	9.8	5.6	4.0	1.3	.51	.64
5	.39	.62	.94	1.3	16	113	9.6	5.3	4.1	1.3	.51	.54
6	.42	.65	.80	1.3	14	89	9.6	5.4	3.8	1.4	.51	.39
7	.49	2.9	.72	1.2	10	65	9.6	6.1	3.5	1.4	.48	.33
8	.45	4.7	.66	1.1	9.0	232	9.3	13	4.9	1.4	.49	.31
9	.42	1.8	.99	1.1	8.4	291	9.3	11	5.0	1.3	.50	.32
10	.45	1.1	1.1	1.3	30	150	9.2	8.6	4.2	1.3	.45	.33
11	.39	.99	1.0	7.1	317	105	8.9	8.0	3.9	1.2	.45	.36
12	.37	.85	1.1	8.6	449	85	9.1	7.5	3.7	1.2	.44	.32
13	.40	.84	1.3	4.1	1290	66	16	6.6	3.2	1.2	.33	.34
14	.48	.84	1.5	3.2	1340	58	12	6.8	2.7	1.1	.33	.33
15	.49	.97	1.5	2.7	243	49	12	13	2.2	1.1	.33	.39
16	.43	.97	1.4	43	119	43	11	14	1.9	1.1	.33	.40
17	.42	1.4	1.4	11	87	37	39	9.6	1.9	1.1	.35	.56
18	.40	1.2	1.4	51	63	34	19	7.3	1.9	1.2	.41	.38
19	.39	6.6	1.4	17	48	32	12	6.4	2.0	1.2	.42	.29
20	.41	4.7	1.4	11	63	30	10	5.7	1.9	1.0	.42	.26
21	.42	2.0	1.4	6.7	73	27	9.3	5.5	1.8	1.0	.43	.28
22	.42	1.4	1.3	5.3	201	25	9.6	5.1	1.7	.94	.43	.33
23	.45	1.2	1.3	98	486	24	9.5	4.9	1.7	.94	.49	.41
24	.45	1.1	1.2	886	115	22	9.2	5.2	1.8	.84	.51	.48
25	.45	1.0	1.2	257	86	21	8.7	5.4	1.5	.79	.51	.58
26	.47	.94	1.2	51	63	19	7.3	5.1	1.5	.75	.51	.54
27	.51	.94	1.2	26	184	17	6.8	5.1	1.4	.67	.54	.55
28	1.9	.94	1.2	15	186	13	6.6	5.0	1.4	.62	.51	.52
29	1.0	.97	1.2	12	190	12	7.2	4.7	1.3	.62	.47	.55
30	.87	1.3	1.2	22	---	12	7.1	4.5	1.2	.63	.67	.54
31	.72	---	1.2	17	---	11	---	4.2	---	.58	.67	---
TOTAL	16.28	45.14	38.06	1567.0	5757.4	2045	327.7	214.5	82.6	32.78	14.66	13.78
MEAN	.53	1.50	1.23	50.5	199	66.0	10.9	6.92	2.75	1.06	.47	.46
MAX	1.9	6.6	2.4	886	1340	291	39	14	5.0	1.4	.67	1.0
MIN	.37	.51	.66	1.1	8.4	11	6.6	4.2	1.2	.58	.33	.26
AC-FT	32	90	75	3110	11420	4060	650	425	164	65	29	27

11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.92	5.95	24.1	63.7	81.1	53.7	25.5	3.81	1.17	.48	.27	.31
MAX	28.2	91.9	220	301	549	315	232	39.5	11.4	4.20	1.61	2.11
(WY)	1963	1951	1956	1997	1998	1983	1958	1983	1998	1998	1983	1973
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931	1931

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	11226.98		10154.90			
ANNUAL MEAN	30.8		27.7		21.5	
HIGHEST ANNUAL MEAN					83.4	1983
LOWEST ANNUAL MEAN					.000	1931
HIGHEST DAILY MEAN	1260	Feb 7	1340	Feb 14	2650	Dec 23 1955
LOWEST DAILY MEAN	.26	Sep 29	.26	Sep 20	.00	Oct 1 1930
ANNUAL SEVEN-DAY MINIMUM	.39	Sep 24	.33	Sep 7	.00	Oct 1 1930
INSTANTANEOUS PEAK FLOW			3930	Feb 13	7200	Feb 3 1998
INSTANTANEOUS PEAK STAGE			9.04	Feb 13	13.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	22270		20140		15550	
10 PERCENT EXCEEDS	66		51		36	
50 PERCENT EXCEEDS	2.7		1.4		.45	
90 PERCENT EXCEEDS	.45		.42		.00	

11166000 MATADERO CREEK AT PALO ALTO, CA

LOCATION.—Lat 37°25'18", long 122°08'04", in Rincon de San Francisquito Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank, on Ash Street, 150 ft upstream from Lambert Avenue Bridge, and 2.1 mi southeast of Palo Alto Post Office.

DRAINAGE AREA.—7.26 mi^2.

PERIOD OF RECORD.—July 1952 to April 1991, June 1992 to current year.

REVISED RECORDS.—WDR CA-80-2: 1971, 1973–74, 1978, 1971–75(P). WDR CA-82-2: 1973–74(P), 1978(P).

GAGE.—Water-stage recorder. Datum of gage is 17.01 ft above sea level. Prior to Sept. 25, 1958, at site 150 ft downstream at different datum. Prior to Apr. 9, 1991, at same site, different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,560 ft^3/s, Feb. 2, 1998, gage height, 10.00 ft, from rating curve extended above 300 ft^3/s on basis of step-backwater computation; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1700	291	4.64	Feb. 22	2245	931	6.55
Feb. 13	1900	626	5.72	Feb. 27	0300	296	4.66

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.32	4.0	.46	1.5	16	.59	10	3.1	2.2	.34	.42
2	.21	.34	1.6	.46	1.4	16	.54	11	4.3	2.5	.35	.44
3	.20	.78	.61	.48	11	13	.55	7.5	4.7	2.2	.29	.35
4	.21	.34	.72	.53	3.2	16	.65	6.9	4.4	3.2	.27	.30
5	.16	.30	.58	.53	2.6	16	.76	5.7	4.4	3.3	.29	.36
6	.33	.30	.55	.54	1.7	11	.62	3.9	3.9	3.1	.30	.32
7	.29	9.9	.59	.97	1.5	22	.67	3.9	5.7	2.1	.28	.25
8	.26	4.7	.55	.51	1.7	43	.72	4.2	10	1.9	.36	.28
9	.26	1.2	2.3	.52	2.2	29	.74	3.1	6.6	2.6	.37	.31
10	.32	2.3	.73	.53	11	16	.76	1.7	3.9	4.6	.31	.31
11	.27	3.2	.56	1.3	76	13	.84	1.0	2.8	2.1	.26	.27
12	.22	2.9	.54	.85	30	12	3.2	.68	2.4	1.6	.34	.34
13	.11	2.6	.62	.60	179	11	5.4	.75	2.2	1.4	.38	.37
14	.13	2.2	.58	1.1	108	8.0	3.3	.82	1.6	.73	1.5	.26
15	.18	1.1	.55	.63	16	1.6	1.2	4.9	1.1	.93	1.9	.25
16	.17	1.2	.49	17	13	1.5	3.2	2.1	1.3	.65	.34	.35
17	.15	1.5	.62	1.9	8.2	1.1	13	.85	1.5	.77	.31	.33
18	.17	1.1	.64	24	5.5	1.5	1.3	.74	1.3	1.1	.27	.93
19	.25	6.9	.62	2.3	4.5	1.6	.95	.73	1.1	1.2	.29	.32
20	.33	2.2	.60	1.1	20	1.1	.86	.60	1.3	1.0	.28	.33
21	.27	2.3	.54	.87	12	1.0	.84	.49	1.4	.78	.30	.32
22	.46	1.3	.58	1.2	115	.93	.91	.52	1.3	.51	.32	.20
23	.21	1.2	.49	29	83	.91	1.3	.62	1.5	.57	.30	.22
24	.16	1.1	.52	106	18	.93	5.7	.63	1.9	.41	.30	.16
25	.22	1.1	.54	26	16	.88	8.5	.56	2.3	.63	.27	.14
26	.26	1.0	.53	4.3	20	.79	9.3	.55	1.9	.85	.29	.24
27	.41	.92	.57	2.1	99	.82	9.5	.60	2.3	.19	.19	.33
28	3.4	.75	.57	1.6	22	.82	9.3	1.6	2.1	.22	.18	.33
29	.37	2.1	.80	1.3	25	.70	10	2.6	2.0	.29	.27	.37
30	.34	5.0	.52	4.7	---	.67	11	3.0	1.6	.25	.38	.37
31	.59	---	.46	1.6	---	.64	---	2.8	---	.27	.34	---
TOTAL	11.16	62.15	24.17	234.98	908.0	259.49	106.20	85.04	85.9	44.15	12.17	9.77
MEAN	.36	2.07	.78	7.58	31.3	8.37	3.54	2.74	2.86	1.42	.39	.33
MAX	3.4	9.9	4.0	106	179	43	13	11	10	4.6	1.9	.93
MIN	.11	.30	.46	.46	1.4	.64	.54	.49	1.1	.19	.18	.14
AC-FT	22	123	48	466	1800	515	211	169	170	88	24	19

11166000 MATADERO CREEK AT PALO ALTO, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.42	1.66	3.48	8.69	9.39	5.56	2.20	.65	.32	.19	.16	.17
MAX	2.95	9.82	24.3	32.3	77.7	37.8	25.2	4.54	2.86	1.42	.70	.66
(WY)	1973	1973	1956	1983	1998	1983	1958	1998	2000	2000	1983	1983
MIN	.000	.000	.000	.016	.014	.000	.000	.000	.000	.000	.000	.000
(WY)	1953	1953	1954	1954	1964	1959	1954	1953	1953	1953	1953	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	949.78		1843.18			
ANNUAL MEAN	2.60		5.04		2.74	
HIGHEST ANNUAL MEAN					10.9	1983
LOWEST ANNUAL MEAN					.062	1954
HIGHEST DAILY MEAN	114	Feb 9	179	Feb 13	437	Feb 3 1998
LOWEST DAILY MEAN	.11	Oct 13	.11	Oct 13	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.16	Oct 12	.16	Oct 12	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			931	Feb 22	2560	Feb 2 1998
INSTANTANEOUS PEAK STAGE			6.55	Feb 22	10.00	Feb 2 1998
ANNUAL RUNOFF (AC-FT)	1880		3660		1990	
10 PERCENT EXCEEDS	4.9		11		3.5	
50 PERCENT EXCEEDS	.68		.88		.16	
90 PERCENT EXCEEDS	.26		.27		.00	

11169000 GUADALUPE RIVER AT SAN JOSE, CA

LOCATION.—Lat 37°20'04", long 121°53'54", in Santa Clara County, Hydrologic Unit 18050003, on right bank, 150 ft upstream from St. John Street Bridge, 1 block below Santa Clara Avenue, and 100 ft downstream from Los Gatos Creek.

DRAINAGE AREA.—146 mi^2.

PERIOD OF RECORD.—October 1929 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to 1945, published as Guadalupe Creek at San Jose.
CHEMICAL DATA: Water years 1979–91.
SEDIMENT DATA: Water years 1985–89.

REVISED RECORDS.—WSP 1315-B: 1943(M), 1945(M), 1949(M). WSP 1929: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 72.00 ft above sea level.

REMARKS.—Records poor. Flow regulated by Lexington Reservoir 12 mi upstream and by Calero, Almaden, and Guadalupe Reservoirs, and Lake Elsman (combined usable capacity, about 42,000 acre-ft), with water released during summer for percolation in spreading basins on tributaries. Diversions into the above impoundments come from San Luis Reservoir (part of the San Felipe Project), from the South Bay Aqueduct, and from the Hetch Hetchy Aqueduct. There are also upstream diversions by the San Jose Water Works for urban use.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,000 ft^3/s, Mar. 10, 1995, gage height, 17.4 ft, from rating curve extended above 2,500 ft^3/s on basis of slope-area measurement of peak flow; no flow several days in most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e22	e37	19	75	327	46	19	18	13	13	17
2	16	e22	e30	14	79	284	41	18	19	13	13	15
3	16	e21	e20	12	197	244	37	18	21	12	11	14
4	16	e21	19	16	114	188	30	17	20	13	11	13
5	16	e19	19	15	90	465	27	21	17	12	14	13
6	16	e18	17	16	76	254	25	20	17	12	15	13
7	16	e30	16	17	65	296	24	22	13	12	13	12
8	20	e150	15	17	56	564	23	20	29	13	13	12
9	16	e55	39	16	38	692	23	20	19	13	12	12
10	15	e23	26	17	116	627	23	22	17	13	13	12
11	15	e28	26	17	570	550	24	19	15	13	14	13
12	15	e25	21	18	644	378	23	20	14	13	14	13
13	16	e22	20	17	556	327	69	20	14	12	15	13
14	19	e19	18	15	1260	303	52	21	13	13	14	14
15	20	e25	25	16	549	286	34	36	18	12	12	15
16	18	e46	20	204	308	272	34	36	14	13	13	14
17	18	e54	26	31	178	203	272	21	16	13	13	14
18	15	e25	21	370	132	198	41	21	13	13	16	13
19	20	e33	18	138	113	172	29	25	12	14	15	15
20	19	e33	18	50	182	141	25	20	13	13	16	15
21	17	e26	21	24	131	137	23	18	19	13	16	14
22	18	e21	20	25	337	130	23	17	12	13	15	18
23	16	e18	17	507	913	121	27	17	17	14	16	16
24	16	e16	18	1420	241	106	23	19	15	13	15	15
25	17	e25	19	547	194	102	21	15	14	17	13	15
26	18	e18	19	98	221	100	19	17	15	13	12	15
27	e18	e18	20	110	900	108	18	17	13	12	13	18
28	e20	e17	21	94	420	98	19	20	12	12	13	14
29	e21	e22	25	82	477	81	19	21	11	12	13	13
30	e21	e30	20	147	---	89	20	20	12	13	14	13
31	e21	---	19	87	---	78	---	18	---	14	13	---
TOTAL	541	902	670	4176	9232	7921	1114	635	472	401	423	423
MEAN	17.5	30.1	21.6	135	318	256	37.1	20.5	15.7	12.9	13.6	14.1
MAX	21	150	39	1420	1260	692	272	36	29	17	16	18
MIN	15	16	15	12	38	78	18	15	11	12	11	12
AC-FT	1070	1790	1330	8280	18310	15710	2210	1260	936	795	839	839

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

MEAN	6.48	15.9	39.8	104	165	138	65.8	11.8	4.44	3.63	3.37	3.51
MAX	129	123	311	998	1157	1165	847	219	43.5	24.8	22.4	31.0
(WY)	1963	1984	1932	1997	1998	1983	1982	1983	1998	1998	1998	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1930	1930	1930	1931	1930	1931	1930	1930	1930	1930	1930	1930

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	13540		26910			
ANNUAL MEAN	37.1		73.5		46.1	
HIGHEST ANNUAL MEAN					270	1983
LOWEST ANNUAL MEAN					.000	1931
HIGHEST DAILY MEAN	665	Feb 9	1420	Jan 24	7870	Mar 10 1995
LOWEST DAILY MEAN	11	Aug 22	11	Jun 29	.00	Oct 1 1929
ANNUAL SEVEN-DAY MINIMUM	12	Aug 19	12	Jun 27	.00	Oct 1 1929
INSTANTANEOUS PEAK FLOW			3340	Feb 11	11000	Mar 10 1995
INSTANTANEOUS PEAK STAGE			6.46	Feb 11	17.40	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	26860		53380		33410	
10 PERCENT EXCEEDS	57		197		57	
50 PERCENT EXCEEDS	23		19		.70	
90 PERCENT EXCEEDS	15		13		.00	

e Estimated.

11169500 SARATOGA CREEK AT SARATOGA, CA

LOCATION.—Lat 37°15'16", long 122°02'18", in Quito Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank, on upstream side of private road bridge, 0.5 mi southwest of Saratoga, and 0.7 mi downstream from diversion dam.

DRAINAGE AREA.—9.22 mi^2.

PERIOD OF RECORD.—October 1933 to current year. Prior to October 1951, published as Campbell Creek at Saratoga.
CHEMICAL DATA: Water years 1972 to December 1972.

REVISED RECORDS.—WSP 1445: 1940, 1952(M). WSP 1929: Drainage area.

GAGE.—Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 500 ft above sea level, from topographic map. Prior to Dec. 6, 1968, at site 40 ft downstream at different datum.

REMARKS.—Records fair. Water is diverted for municipal use by San Jose Water Works at diversion dam upstream from station. Low flows partially regulated by Lake McKenzie 8 mi upstream, usable capacity, 184 acre-ft.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,730 ft^3/s, Dec. 22, 1955, from rating curve extended above 510 ft^3/s on basis of slope-area measurement of peak flow, site and datum then in use. Maximum gage height, 7.80 ft, Feb. 3, 1998; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 110 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1800	318	4.29	Feb. 27	0425	147	3.68
Feb. 14	0640	502	4.71	Mar. 8	1545	121	3.55
Feb. 22	2255	384	4.47				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	1.1	2.1	1.7	2.3	47	6.0	2.7	1.2	1.2	1.6	1.6
2	.90	1.1	1.9	1.7	1.7	39	11	4.9	2.2	1.1	1.5	1.7
3	.92	1.1	1.8	1.5	10	35	5.9	3.4	1.8	1.0	1.4	1.5
4	.93	1.0	1.7	1.5	3.1	30	3.1	3.3	1.5	1.1	1.3	1.4
5	.96	1.0	1.6	1.4	2.9	34	3.0	3.2	2.1	1.1	1.5	1.3
6	.97	.97	1.6	1.2	2.3	29	2.8	6.0	2.4	1.2	1.5	1.2
7	1.0	4.4	1.5	1.2	1.6	31	4.8	6.5	1.4	1.1	1.5	1.3
8	.95	4.1	1.4	1.2	.93	73	6.5	6.0	1.7	.98	1.6	1.3
9	.98	1.7	1.7	1.3	.91	85	2.4	3.0	1.5	.96	1.6	1.3
10	1.0	1.5	1.5	1.2	31	62	2.3	2.6	1.8	.98	1.6	1.3
11	.96	1.4	1.4	1.5	91	53	2.0	2.5	1.5	1.0	1.6	1.2
12	.98	1.4	1.4	1.3	113	46	1.7	1.9	.93	1.0	1.5	1.2
13	.98	1.3	1.4	1.1	182	38	4.1	1.7	.82	1.2	1.5	1.1
14	.96	1.3	1.4	1.1	228	32	2.8	3.1	.89	1.2	1.4	.95
15	.85	1.2	1.2	1.1	70	24	2.6	2.9	.99	1.1	1.3	1.0
16	.78	1.3	1.3	4.4	44	26	4.4	2.8	1.0	1.3	1.3	1.0
17	.78	1.4	1.2	1.2	34	25	25	2.6	.83	1.2	1.3	.97
18	.81	1.3	1.3	11	24	16	5.6	1.3	1.3	1.3	1.4	.87
19	.97	7.9	1.3	1.2	18	14	4.0	1.3	1.3	1.3	1.4	.83
20	1.1	3.0	1.3	1.1	36	17	3.5	1.3	1.8	1.3	1.4	.82
21	1.1	2.2	1.5	.75	40	19	4.1	1.1	1.0	.90	1.4	.68
22	1.0	1.9	1.8	.65	77	13	3.0	1.5	.74	1.2	1.4	.93
23	1.0	1.8	1.8	39	127	11	2.9	1.9	.83	1.1	1.3	1.1
24	1.1	1.7	1.8	191	81	9.3	2.8	1.6	.77	1.1	1.3	1.0
25	1.1	1.6	1.8	66	60	8.7	2.1	1.4	1.6	1.1	1.2	.96
26	1.1	1.6	1.7	13	55	7.6	1.7	1.4	.52	1.0	1.2	.93
27	1.1	1.5	1.8	6.8	105	7.2	1.5	1.3	1.2	1.0	1.2	.95
28	1.4	1.6	1.8	2.4	76	7.0	1.4	1.0	1.2	1.7	1.2	.95
29	1.1	1.6	1.7	6.5	60	6.1	1.5	.93	1.1	1.9	1.4	1.0
30	1.1	2.3	1.6	16	---	5.1	1.3	1.1	.97	1.8	1.4	.90
31	1.1	---	1.6	9.2	---	4.2	---	1.2	---	1.7	1.4	---
TOTAL	30.83	57.27	48.9	390.20	1577.74	854.2	125.8	77.43	38.89	37.12	43.6	33.24
MEAN	.99	1.91	1.58	12.6	54.4	27.6	4.19	2.50	1.30	1.20	1.41	1.11
MAX	1.4	7.9	2.1	191	228	85	25	6.5	2.4	1.9	1.6	1.7
MIN	.78	.97	1.2	.65	.91	4.2	1.3	.93	.52	.90	1.2	.68
AC-FT	61	114	97	774	3130	1690	250	154	77	74	86	66

11169500 SARATOGA CREEK AT SARATOGA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.91	2.74	9.09	22.8	31.5	23.3	13.5	3.88	1.36	.58	.40	.41
MAX	17.5	25.5	83.2	104	157	114	131	35.7	6.97	2.95	1.66	2.42
(WY)	1963	1951	1956	1997	1998	1983	1982	1983	1941	1941	1998	1998
MIN	.000	.037	.25	.31	.086	.32	.24	.065	.000	.000	.000	.000
(WY)	1950	1949	1957	1976	1964	1972	1972	1959	1950	1947	1934	1934

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1934 - 2000	
ANNUAL TOTAL	1925.71		3315.22			
ANNUAL MEAN	5.28		9.06		9.09	
HIGHEST ANNUAL MEAN					32.5	1983
LOWEST ANNUAL MEAN					.54	1977
HIGHEST DAILY MEAN	179	Feb 9	228	Feb 14	1260	Feb 27 1940
LOWEST DAILY MEAN	.75	Jul 10	.52	Jun 26	.00	Oct 1 1933
ANNUAL SEVEN-DAY MINIMUM	.84	Aug 28	.87	Sep 16	.00	Oct 1 1933
INSTANTANEOUS PEAK FLOW			502	Feb 14	2730	Dec 22 1955
INSTANTANEOUS PEAK STAGE			4.71	Feb 14	7.80	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	3820		6580		6590	
10 PERCENT EXCEEDS	14		25		20	
50 PERCENT EXCEEDS	1.4		1.5		.90	
90 PERCENT EXCEEDS	.87		.96		.00	

11172175 COYOTE CREEK ABOVE HIGHWAY 237, AT MILPITAS, CA

LOCATION.—Lat 37°25'20", long 121°55'35", in Rincon de los Esteras Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank, 500 ft upstream from Highway 237 bridge, 1 mi west of Interstate Highway 880, and 2.3 mi upstream from lower Penitencia Creek.

DRAINAGE AREA.—319 mi^2.

PERIOD OF RECORD.—January 1999 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 10 ft above sea level, from topographic map.

REMARKS.—Records fair except flows above 400 ft^3/s, which are poor. Flow regulated by Leroy Andersen Reservoir, usable capacity, 89,073 acre-ft, and Coyote Reservoir, usable capacity, 22,925 acre-ft, with water diverted for percolation in spreading basins adjacent to Coyote Creek.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,550 ft^3/s, Jan. 24, 2000, gage height, 13.10 ft, from rating curve extended above 330 ft^3/s on basis of step-backwater computations; minimum daily, 12 ft^3/s, Aug. 24, 27, 1999, and several days in January 2000.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e18	37	14	26	126	31	24	16	17	18	27
2	14	e17	20	13	25	126	32	23	17	18	17	26
3	15	e17	16	12	61	96	29	23	17	16	15	22
4	17	e17	15	15	47	86	31	23	19	15	14	17
5	16	e17	16	13	25	918	32	23	19	16	14	19
6	16	17	16	12	23	241	30	23	19	16	15	19
7	15	51	15	12	22	142	28	23	19	18	16	17
8	15	146	14	12	22	475	28	26	59	17	16	20
9	15	39	52	15	24	480	27	25	31	19	14	20
10	16	16	51	15	35	644	27	23	23	18	15	18
11	16	27	18	30	114	636	26	22	22	19	16	17
12	14	21	15	32	581	621	26	23	20	18	15	17
13	15	20	15	15	496	466	56	23	22	18	16	19
14	17	15	16	15	907	265	37	23	21	18	16	18
15	16	15	15	16	255	146	27	35	22	17	14	18
16	15	43	14	99	119	100	25	53	20	17	16	17
17	15	57	15	35	97	84	111	25	23	18	15	16
18	15	20	14	215	62	74	40	22	23	18	15	17
19	14	32	14	78	52	63	29	23	19	17	16	16
20	15	33	13	41	100	59	27	21	20	18	15	16
21	17	20	13	22	142	58	27	19	20	18	15	16
22	18	16	13	21	113	55	27	19	18	18	16	20
23	18	15	13	419	1240	52	25	19	20	18	18	19
24	19	14	13	1050	304	51	25	20	20	17	16	17
25	19	13	13	895	143	47	24	16	19	16	16	16
26	20	15	14	133	95	45	23	16	18	16	16	16
27	20	16	14	73	384	45	23	16	20	16	16	17
28	e20	15	13	46	206	47	24	16	18	17	15	18
29	e20	16	13	33	273	45	24	15	16	16	15	17
30	e19	22	15	37	---	40	24	15	19	16	16	19
31	e19	---	15	32	---	36	---	15	---	16	20	---
TOTAL	514	800	550	3470	5993	6369	945	692	639	532	487	551
MEAN	16.6	26.7	17.7	112	207	205	31.5	22.3	21.3	17.2	15.7	18.4
MAX	20	146	52	1050	1240	918	111	53	59	19	20	27
MIN	14	13	13	12	22	36	23	15	16	15	14	16
AC-FT	1020	1590	1090	6880	11890	12630	1870	1370	1270	1060	966	1090

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

MEAN	16.6	26.7	17.7	90.2	162	131	45.5	20.4	19.1	16.7	15.8	17.1
MAX	16.6	26.7	17.7	112	207	205	59.4	22.3	21.3	17.2	15.9	18.4
(WY)	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000	1999	2000
MIN	16.6	26.7	17.7	68.4	115	57.0	31.5	18.5	16.9	16.2	15.7	15.9
(WY)	2000	2000	2000	1999	1999	1999	2000	1999	1999	1999	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	13314		21542			
ANNUAL MEAN	36.5		58.9		58.9	
HIGHEST ANNUAL MEAN					58.9	2000
LOWEST ANNUAL MEAN					58.9	2000
HIGHEST DAILY MEAN	623	Feb 9	1240	Feb 23	1240	Feb 23 2000
LOWEST DAILY MEAN	12	Aug 24	12	Jan 3	12	Aug 24 1999
ANNUAL SEVEN-DAY MINIMUM	13	Aug 28	13	Jan 2	13	Jan 2 2000
INSTANTANEOUS PEAK FLOW			2550	Jan 24	2550	Jan 24 2000
INSTANTANEOUS PEAK STAGE			13.10	Jan 24	13.10	Jan 24 2000
ANNUAL RUNOFF (AC-FT)	26410		42730		42640	
10 PERCENT EXCEEDS	77		99		96	
50 PERCENT EXCEEDS	18		19		19	
90 PERCENT EXCEEDS	14		15		15	

e Estimated.

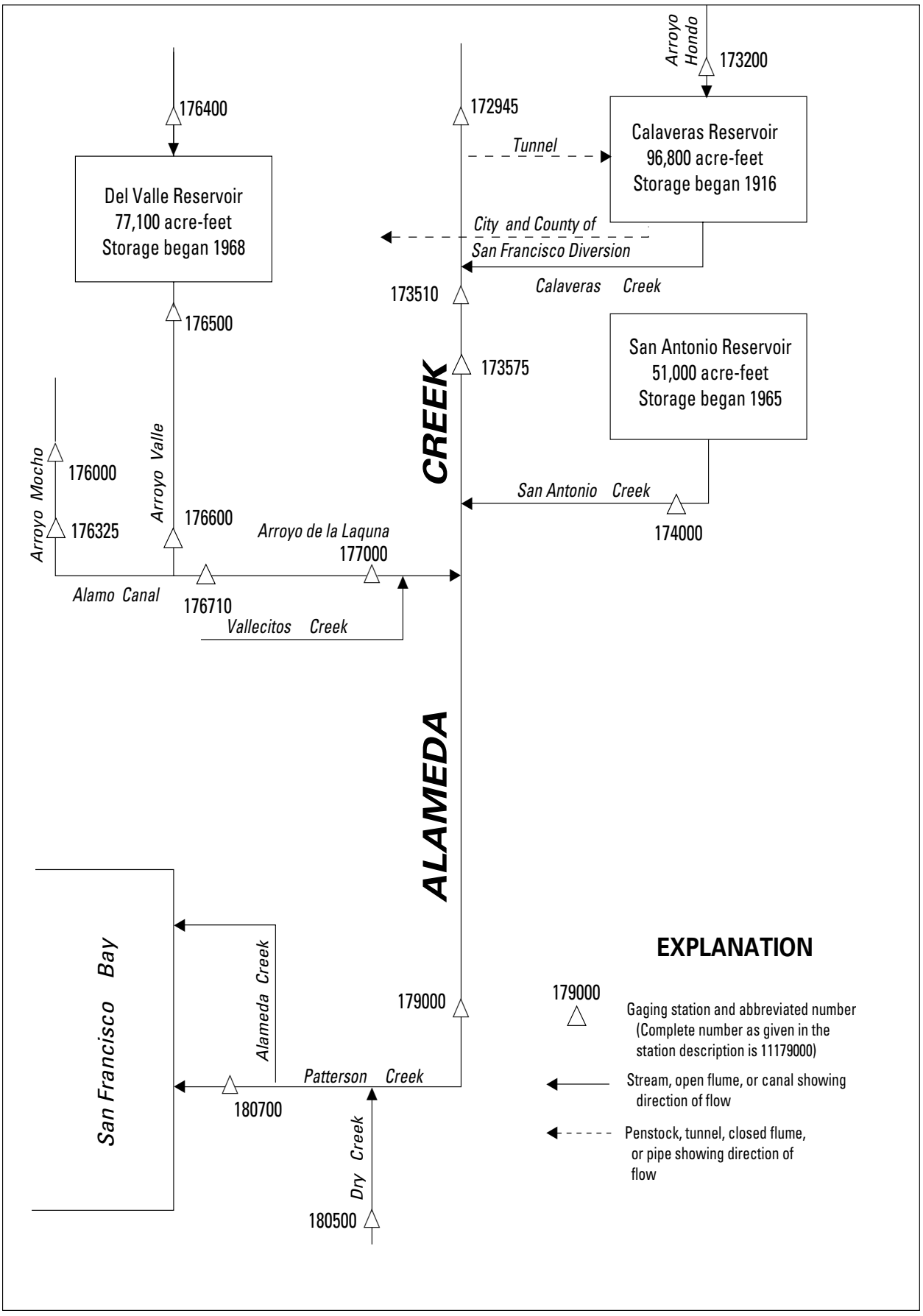

Figure 21. Diversions and storage in Alameda Creek Basin.

11172300 AGUA FRIA CREEK AT WARM SPRINGS ROAD, AT FREMONT, CA

LOCATION.—Lat 37°29'19", long 121°55'42", in Alameda County, Hydrologic Unit 18050004, in Aqua Caliente Grant, on downstream side of culvert at Warm Springs Road, at Fremont.

DRAINAGE AREA.—1.79 mi^2.

PERIOD OF RECORD.—October 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 124 mg/L, Mar. 9, 2000; minimum sampled, 78 mg/L, Jan. 25, 2000.
SEDIMENT LOAD (storm season only): Maximum sampled, 2.3 tons, Mar. 9, 2000; minimum sampled, 0.65 ton, Jan. 25, 2000.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 124 mg/L, Mar. 9; minimum sampled, 78 mg/L, Jan. 25.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
JAN								
25...	1415	3.1	14.0	78	.65	--	--	--
MAR								
09...	1105	6.9	10.0	124	2.3	96	99	100

11172360 TOROGES CREEK AT WARM SPRINGS ROAD, AT FREMONT, CA

LOCATION.—Lat 37°28'48", long 121°55'21", in Agua Caliente Grant, Alameda County, Hydrologic Unit 18050004, on upstream side of culvert, at Warm Springs Road, at Fremont.

DRAINAGE AREA.—1.23 mi^2.

PERIOD OF RECORD.—October 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 8,130 mg/L, Mar. 9, 2000; minimum sampled, 138 mg/L, May 16, 2000.
SEDIMENT LOAD (storm season only): Maximum sampled, 48 tons, Mar. 9, 2000; minimum sampled, 0.10 ton, May 16, 2000.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 8,130 mg/L, Mar. 9; minimum sampled, 138 mg/L, May 16.
SEDIMENT LOAD (storm season only): Maximum sampled, 48 tons, Mar. 9; minimum sampled, 0.10 ton, May 16.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	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)
JAN								
25...	1315	1.2	16.5	822	2.7	58	72	83
MAR								
09...	1015	2.2	12.0	8130	48	45	59	60
MAY								
16...	1030	.28	16.5	138	.10	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
JAN							
25...	92	96	98	100	--	--	--
MAR							
09...	68	76	81	91	97	99	100
MAY							
16...	--	--	96	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAY								
16...	1000	1	.28	16.5	3	11	35	59
16...	1005	1	.28	16.5	5	16	50	73
16...	1010	1	.28	16.5	4	15	52	80
16...	1015	1	.28	16.5	5	15	45	67
16...	1020	1	.28	16.5	3	10	30	48
16...	1025	1	.28	16.5	--	1	1	3

11172360 TOROGES CREEK AT WARM SPRINGS ROAD, AT FREMONT, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
MAY							
16...	74	85	95	100	--	--	--
16...	81	88	94	100	--	--	--
16...	88	91	95	100	--	--	--
16...	77	82	89	100	--	--	--
16...	58	66	80	100	--	--	--
16...	6	11	24	39	60	74	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
MAR									
09...	1020	1000	1120	.250	0	1018	1022	30	1.0
09...	1025	1000	1120	.250	0	1023	1027	30	1.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
MAR								
09...	2	3	3	1.00	2.2	12.0	.55	2.4
09...	2	3	3	1.00	2.2	12.0	.66	2.4

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
MAR								
09...	1	2	8	36	59	76	89	100
09...	1	2	9	42	71	83	94	100

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA

LOCATION.—Lat 37°28'11", long 121°55'00", in Rincon de los Esteras Grant, Alameda County, Hydrologic Unit 18050003, on right bank, 25 ft upstream of Warm Springs Boulevard, at Fremont.

DRAINAGE AREA.—0.83 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1999 to September 2000.

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

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

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 75 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 29	0405	79	44.82	Mar. 8	1115	76	44.79

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.03	e.10	.23	e.07	.29	8.6	e.17	e.14	e.12	e.11	e.05	5.3
2	e.03	e.30	.23	e.05	.36	8.2	e.17	e.14	e.12	e.10	e.05	.20
3	e.03	e.68	.19	e.06	4.1	3.6	e.16	1.7	e.12	e.10	e.05	.06
4	e.03	e.20	.15	e.07	1.1	5.4	e.16	1.2	e.11	e.10	e.05	.06
5	e.20	e.20	.16	e.15	.28	e9.5	e.15	e.35	e.10	e.09	e.05	.06
6	e.10	e.10	.23	e.11	.17	e5.0	e.14	.93	e.10	e.09	e.05	.06
7	e.07	e5.8	.19	e.13	.15	e2.4	e.13	.73	e.12	e.08	e.04	.06
8	e.08	e1.6	.26	e.10	.14	e12	e.12	.55	e.20	e.08	e.04	.06
9	e.08	e.30	1.2	e.14	.28	10	e.12	.72	e.18	e.08	e.04	.04
10	e.08	e.20	1.8	e.18	2.5	3.0	e.11	2.6	e.17	e.08	e.04	.05
11	e.07	e.10	.61	e.66	11	.30	e.11	2.2	e.15	e.08	e.04	.07
12	e.23	e.10	.17	.52	16	.28	e.11	3.0	e.12	e.07	e.04	.06
13	e.13	e.20	.18	.36	e24	.20	1.7	3.5	e.10	e.07	e.04	.06
14	e.08	e1.2	.23	.32	e11	.21	1.0	2.2	e.10	e.07	e.07	.07
15	e.05	e.70	e.09	.35	2.2	.12	.53	2.2	e.13	e.07	e.06	.07
16	e.03	e1.0	e.08	e4.4	9.8	.09	.33	1.3	e.15	e.07	e.05	.06
17	e.04	e.50	e.07	e1.3	6.9	.14	1.2	.63	e.15	e.07	e.03	.07
18	e.20	e.50	e.09	e4.1	6.9	.13	1.9	.25	e.14	e.06	e.03	.06
19	e.15	e6.0	e.10	e3.4	7.1	.32	1.3	.20	e.14	e.06	.02	.06
20	e.10	e.70	e.11	2.0	14	e.34	.87	.22	e.14	e.06	.02	.05
21	e.14	e.34	e.08	1.4	10	e.23	.81	.15	e.14	e.06	.02	.05
22	e.15	.41	e.07	15	11	e.66	e.72	.10	e.16	e.06	.03	.05
23	e.08	.31	e.07	42	30	1.0	e.68	.12	e.14	e.06	.03	.06
24	e.10	.25	e.08	e34	4.0	2.3	e.19	.13	e.13	e.06	.04	.30
25	e.08	.23	e.09	9.1	2.6	2.2	e.14	.11	e.11	e.05	.04	.27
26	e.09	.16	e.10	.37	4.8	e.35	e.13	.11	e.10	e.05	.03	.28
27	e2.1	.15	e.12	1.0	19	e.23	e.10	.09	e.10	e.05	.03	.15
28	e.60	.16	e.13	.77	4.9	e.21	e.13	.07	e.11	e.05	.05	e.17
29	e.20	.16	e.14	.59	15	e.20	e.14	.07	e.11	e.05	.04	e.17
30	e.17	.19	e.12	.90	---	e.19	e.14	.07	e.11	e.05	.07	e.16
31	e.15	---	e.09	.40	---	e.19	---	.05	---	e.05	.05	---
TOTAL	5.67	22.84	7.46	124.00	219.57	77.59	13.66	25.83	3.87	2.18	1.29	8.24
MEAN	.18	.76	.24	4.00	7.57	2.50	.46	.83	.13	.070	.042	.27
MAX	2.1	6.0	1.8	42	30	12	1.9	3.5	.20	.11	.07	5.3
MIN	.03	.10	.07	.05	.14	.09	.10	.05	.10	.05	.02	.04
AC-FT	11	45	15	246	436	154	27	51	7.7	4.3	2.6	16

e Estimated.

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to September 2000 (storm season only).
WATER TEMPERATURE: October 1999 to September 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1999 to September 2000 (storm season only).
SUSPENDED SEDIMENT DISCHARGE: October 1999 to May 2000 (storm season only).

REMARKS.—Zero bed-load discharge observed for flows less than 0.09 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 48,000 mg/L, estimated, Feb. 23, 2000; minimum daily mean, 3 mg/L, estimated, Oct. 25, 1999.
SEDIMENT LOAD (storm season only): Maximum daily, 3,890 tons, estimated, Feb. 23, 2000; minimum daily, 0 ton, estimated, several days during water year 2000.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 48,000 mg/L, estimated, Feb. 23; minimum daily mean, 3 mg/L, estimated, Oct. 25.
SEDIMENT LOAD (storm season only): Maximum daily, 3,890 tons, estimated, Feb. 23; minimum daily, 0 ton, estimated, several days during water year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
OCT								
08...	1155	.08	18.0	506	.11	--	--	--
NOV								
07...	1645	74	16.0	73500	14800	37	39	42
JAN								
25...	1145	2.7	16.0	4380	32	41	52	57
FEB								
13...	1420	44	14.0	38400	4570	33	34	37
MAR								
08...	1410	47	10.5	47500	6030	30	39	41
APR								
13...	1300	.91	21.0	3190	7.8	--	--	--
27...	1400	.10	26.0	982	.26	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
OCT								
08...	--	--	97	--	--	--	--	--
NOV								
07...	54	66	77	92	98	99	100	--
JAN								
25...	71	83	88	93	98	100	--	--
FEB								
13...	46	55	64	78	93	98	99	100
MAR								
08...	51	63	72	87	98	100	--	--
APR								
13...	--	--	96	--	--	--	--	--
27...	--	--	99	100	--	--	--	--

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
DEC								
15...	1046	1	.08	5.5	3	8	20	32
15...	1048	1	.08	5.5	3	8	21	34
15...	1050	1	.08	5.5	2	6	18	32
15...	1052	1	.08	5.5	2	6	15	24
15...	1054	1	.08	5.5	2	5	11	19
15...	1056	1	.08	5.5	2	6	15	25
15...	1058	1	.08	5.5	3	8	19	32
MAY								
16...	1315	1	.03	--	2	6	15	27
16...	1320	1	.03	--	2	6	19	34
16...	1325	1	.03	--	2	7	20	32
16...	1330	1	.03	--	1	4	13	25
16...	1335	1	.03	--	1	2	6	12
16...	1340	1	.04	--	1	3	7	12
16...	1345	1	.04	--	1	5	14	23

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
DEC							
15...	41	54	74	100	--	--	--
15...	46	58	78	100	--	--	--
15...	49	68	85	100	--	--	--
15...	40	53	74	100	--	--	--
15...	28	43	60	100	--	--	--
15...	42	54	75	100	--	--	--
15...	52	66	83	100	--	--	--
MAY							
16...	42	57	77	100	--	--	--
16...	50	61	76	100	--	--	--
16...	44	55	72	100	--	--	--
16...	33	43	56	71	88	95	100
16...	23	30	49	68	81	92	100
16...	17	23	34	48	63	73	100
16...	32	37	47	60	85	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS) (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
25...	1200	1000	1130	.250	0	1155	1205	30	1.5
25...	1208	1000	1130	.250	0	1205	1210	30	1.5
25...	1215	1000	1130	.250	0	1210	1220	30	1.5
MAR									
08...	1425	1000	1130	.250	0	1420	1430	20	1.5
08...	1435	1000	1130	.250	0	1430	1440	60	1.5
APR									
27...	1435	1000	1130	.250	0	1435	1440	300	.5
27...	1445	1000	1130	.250	0	1445	1450	300	.5

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)
JAN									
25...	3	3	3	.50	1.2	16.0	1.81	8.2	1
25...	3	3	3	.50	2.3	16.0	1.51	8.2	--
25...	3	3	3	.50	1.6	16.0	2.41	8.2	1
MAR									
08...	1	3	3	.75	9.0	10.5	1.68	7.7	1
08...	1	3	3	.75	7.2	10.5	.77	3.5	2
APR									
27...	1	1	1	.25	.15	26.0	.31	.16	1
27...	1	1	1	.25	.15	26.0	.07	.04	--

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
JAN									
25...	3	16	46	61	76	91	100	--	--
25...	1	6	30	53	68	88	100	--	--
25...	2	9	35	53	71	91	100	--	--
MAR									
08...	5	19	41	46	48	52	58	75	100
08...	9	31	52	56	58	62	69	94	100
APR									
27...	1	7	40	74	96	100	--	--	--
27...	2	27	83	94	98	100	--	--	--

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	18.0	---	---	---
2	---	---	17.0	9.5	---	15.0	---	---	---	---	---	---
3	---	18.5	---	---	10.0	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	14.0	11.0	---	11.5	16.5	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	16.0	---	---	---	---	---	---	---	---	---	---
8	18.0	18.5	---	---	16.0	10.5	---	---	---	---	---	---
9	27.0	---	15.5	---	13.5	14.5	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	10.5	---	---	---	---	---	---	---
12	22.5	---	12.0	---	---	---	22.5	---	---	---	---	---
13	---	---	---	---	14.0	---	21.0	---	---	---	---	---
14	---	17.5	---	---	13.5	---	---	---	---	---	32.5	---
15	---	---	5.5	---	---	---	---	---	---	---	---	---
16	---	---	---	15.0	10.5	---	18.0	---	---	---	---	---
17	---	---	---	12.5	---	---	14.5	---	---	---	---	---
18	---	18.0	---	---	---	---	---	---	---	---	---	---
19	19.5	---	---	15.5	---	24.0	---	---	---	---	---	---
20	---	---	11.0	---	15.0	---	---	---	---	---	---	---
21	---	16.5	---	13.0	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	22.0	---	---	14.5	---	---	17.0	---	---	---	---	---
25	---	---	---	16.0	---	21.5	---	---	---	---	---	---
26	---	16.5	---	---	---	---	---	---	---	---	---	---
27	19.0	---	---	---	15.0	---	26.0	---	---	---	---	---
28	---	15.5	---	---	---	---	---	---	---	---	---	---
29	---	---	12.5	---	15.0	---	---	---	---	---	---	---
30	---	---	---	13.0	---	27.5	26.5	---	---	---	---	---
31	21.0	---	---	---	---	---	---	---	---	---	---	---

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	e.03	e250	e.02	e.10	e21	e.01	.23	e840	e.52
2	e.03	e250	e.02	e.30	e115	e.09	.23	e820	e.51
3	e.03	e230	e.02	e.68	e510	e.94	.19	e720	e.37
4	e.03	e230	e.02	e.20	e210	e.11	.15	e570	e.23
5	e.20	e960	e.52	e.20	e200	e.11	.16	e600	e.26
6	e.10	e620	e.17	e.10	e130	e.04	.23	e730	e.45
7	e.07	e460	e.09	e5.8	e11300	e177	.19	e630	e.32
8	e.08	e506	e.11	e1.6	e2200	e9.5	.26	e840	e.59
9	e.08	e130	e.03	e.30	e640	e.52	1.2	e1580	e5.1
10	e.08	e150	e.03	e.20	e470	e.25	1.8	e9000	e44
11	e.07	e150	e.03	e.10	e290	e.08	.61	e3150	e5.2
12	e.23	e385	e.24	e.10	e330	e.09	.17	e1180	e.54
13	e.13	e260	e.09	e.20	e540	e.29	.18	e1300	e.63
14	e.08	e140	e.03	e1.2	e1950	e6.3	.23	e1820	e1.1
15	e.05	e80	e.01	e.70	e1200	e2.3	e.09	e570	e.14
16	e.03	e40	e.00	e1.0	e2200	e5.9	e.08	e540	e.12
17	e.04	e30	e.00	e.50	e1350	e1.8	e.07	e500	e.09
18	e.20	e91	e.05	e.50	e1250	e1.7	e.09	e570	e.14
19	e.15	e44	e.02	e6.0	e10100	e164	e.10	e640	e.17
20	e.10	e34	e.01	e.70	e2200	e4.2	e.11	e680	e.20
21	e.14	e42	e.02	e.34	e1310	e1.2	e.08	e340	e.07
22	e.15	e28	e.01	.41	e1550	e1.7	e.07	e320	e.06
23	e.08	e9	e.00	.31	e1200	e1.0	e.07	e320	e.06
24	e.10	e4	e.00	.25	e980	e.66	e.08	e340	e.07
25	e.08	e3	e.00	.23	e910	e.56	e.09	e330	e.08
26	e.09	e6	e.00	.16	e650	e.28	e.10	e270	e.07
27	e2.1	e198	e1.1	.15	e610	e.25	e.12	e200	e.06
28	e.60	e80	e.13	.16	e605	e.26	e.13	e130	e.04
29	e.20	e35	e.02	.16	e600	e.26	e.14	e111	e.04
30	e.17	e31	e.01	.19	e720	e.37	e.12	e83	e.03
31	e.15	e28	e.01	---	---	---	e.09	e60	e.01
TOTAL	5.67	---	2.81	22.84	---	381.77	7.46	---	61.27
		JANUARY			FEBRUARY			MARCH	
1	e.07	e42	e.01	.29	e198	e.16	8.6	e9500	e221
2	e.05	e31	e.00	.36	e243	e.24	8.2	e12300	e272
3	e.06	e36	e.01	4.1	e3650	e40	3.6	e1910	e19
4	e.07	e37	e.01	1.1	e1050	e3.1	5.4	e3900	e57
5	e.15	e54	e.02	.28	e370	e.28	e9.5	e9400	e241
6	e.11	e48	e.01	.17	e288	e.13	e5.0	e5800	e78
7	e.13	e54	e.02	.15	e305	e.12	e2.4	e3450	e22
8	e.10	e42	e.01	.14	e380	e.14	e12	e37500	e1220
9	e.14	e56	e.02	.28	e830	e.63	10	e17500	e472
10	e.18	e68	e.03	2.5	e6100	e41	3.0	e5900	e48
11	e.66	e2300	e4.1	11	e5800	e172	.30	e700	e.57
12	.52	e2150	e3.0	16	e8200	e354	.28	e660	e.50
13	.36	e1520	e1.5	e24	e21500	e1390	.20	e480	e.26
14	.32	e1380	e1.2	e11	e25000	e742	.21	e550	e.31
15	.35	e1310	e1.2	2.2	e5800	e34	.12	e300	e.10
16	e4.4	e2450	e29	9.8	e11100	e294	.09	e240	e.06
17	e1.3	e970	e3.4	6.9	e7900	e147	.14	e345	e.13
18	e4.1	e5500	e61	6.9	e10000	e186	.13	e325	e.11
19	e3.4	e5350	e49	7.1	e12600	e242	.32	e340	e.29
20	2.0	e3200	e17	14	e28000	e1060	e.34	e370	e.34
21	1.4	e920	e3.5	10	e20500	e554	e.23	e270	e.17
22	15	e8200	e332	11	e22200	e659	e.66	e270	e.48
23	42	e27000	e3060	30	e48000	e3890	1.0	e680	e1.8
24	e34	e30000	e2750	4.0	e7700	e83	2.3	e1000	e6.2
25	9.1	e13100	e322	2.6	e5200	e36	2.2	e700	e4.2
26	.37	e680	e.68	4.8	e8400	e109	e.35	e170	e.16
27	1.0	e1100	e3.0	19	e25100	e1290	e.23	e170	e.10
28	.77	e870	e1.8	4.9	e7300	e97	e.21	e260	e.15
29	.59	e670	e1.1	15	e10600	e429	e.20	e460	e.25
30	.90	e560	e1.4	---	---	---	e.19	e1640	e.84
31	.40	e263	e.28	---	---	---	e.19	e1800	e.92
TOTAL	124.00	---	6646.30	219.57	---	11853.80	77.59	---	2667.94

e Estimated.

11172365 ZONE 6 LINE B AT WARM SPRINGS BOULEVARD, AT FREMONT, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	e.17	e1780	e.82
2	e.17	e2000	e.92
3	e.16	e2100	e.91
4	e.16	e2150	e.93
5	e.15	e2300	e.93
6	e.14	e2150	e.81
7	e.13	e1700	e.60
8	e.12	e1350	e.44
9	e.12	e1050	e.34
10	e.11	e820	e.24
11	e.11	e640	e.19
12	e.11	e420	e.12
13	1.7	e5400	e25
14	1.0	e3300	e8.9
15	.53	e2750	e3.9
16	.33	e3350	e3.0
17	1.2	e1600	e5.2
18	1.9	e3400	e17
19	1.3	e2400	e8.4
20	.87	e2300	e5.4
21	.81	e2410	e5.3
22	e.72	e2700	e5.2
23	e.68	e2600	e4.8
24	e.19	e1200	e.62
25	e.14	e940	e.36
26	e.13	e790	e.28
27	e.10	e580	e.16
28	e.13	e480	e.17
29	e.14	e370	e.14
30	e.14	e315	e.12
31	---	---	---
TOTAL	13.66	---	101.20
PERIOD	470.79		21715.09

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	5.67	2.81	19	22
NOVEMBER	22.84	381.77	281	663
DECEMBER	7.46	61.27	17	78
JANUARY 2000	124.00	6646.30	2160	8810
FEBRUARY	219.57	11853.80	1270	13100
MARCH	77.59	2667.94	1290	3960
APRIL	13.66	101.20	992	1090
PERIOD	470.79	21715.09	6029	27723

e Estimated.

11172945 ALAMEDA CREEK ABOVE DIVERSION DAM, NEAR SUNOL, CA

LOCATION.—Lat 37°29'51", long 121°46'21", in SE 1/4 NE 1/4 sec.17, T.5 S., R.2 E., Alameda County, Hydrologic Unit 18050004, on right bank, 700 ft upstream from diversion dam, and 9.3 mi southeast of Sunol.

DRAINAGE AREA.—33.3 mi^2.

PERIOD OF RECORD.—October 1994 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 930 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,390 ft^3/s, Jan. 9, 1995, gage height, 7.96 ft, from rating curve extended above 100 ft^3/s on basis of flow over dam computation; no flow several days in 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2100	1,750	6.08				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	e.35	e.80	.71	8.5	121	15	5.1	2.5	.96	.20	.16
2	.34	e.35	e.80	.70	7.1	92	14	5.0	2.4	.96	.19	.17
3	.35	e.36	e.79	.69	7.3	76	13	4.9	2.3	1.0	.20	.15
4	.36	e.36	e.74	.72	11	63	13	4.7	2.3	1.0	.18	.15
5	.42	e.38	e.70	.66	9.0	251	12	4.6	2.3	1.0	.19	.13
6	.46	e.40	e.67	.60	7.8	180	12	4.6	2.2	1.1	.19	.12
7	.43	e.47	e.66	.63	6.8	118	12	5.2	2.2	1.0	.19	.12
8	.35	e.60	e.70	.67	6.0	163	11	6.2	2.8	1.0	.21	.11
9	.32	e.90	e.74	.67	5.4	202	10	5.6	2.4	.97	.24	.11
10	.30	e.80	e.80	.69	6.3	130	10	5.2	2.5	.91	.31	.10
11	.22	e.60	e.90	1.2	83	93	9.4	5.0	2.5	.91	.28	.09
12	.20	e.54	e.88	.80	253	74	8.8	4.7	2.1	.86	.19	.09
13	.20	e.48	e.85	.59	483	59	9.2	4.5	2.0	.62	.18	.09
14	.20	e.45	e.80	.56	672	50	8.7	4.4	1.9	.57	.18	.09
15	.19	e.47	e.78	.60	219	44	8.7	5.1	1.8	.48	.18	.11
16	.19	e.57	e.75	1.8	110	39	8.4	7.6	1.7	.52	.17	.10
17	.19	e.70	e.73	.46	76	36	13	6.1	1.6	.57	.16	.09
18	.20	e.90	e.72	1.6	56	33	12	5.2	1.6	.50	.16	.08
19	.21	e.86	e.71	6.4	47	31	9.1	4.7	1.6	.42	.17	.07
20	.20	e.78	e.72	4.5	43	29	8.1	4.2	1.5	.52	.17	.07
21	.20	e.94	e.70	2.7	53	26	7.7	3.9	1.4	.48	.17	.07
22	.19	e.90	e.70	1.9	64	25	7.6	3.7	1.3	.44	.16	.09
23	.20	e.75	e.71	161	430	24	7.3	3.5	1.3	.34	.16	.11
24	.22	e.60	e.70	693	134	23	7.0	3.5	1.3	.22	.16	.10
25	.29	e.59	e.71	252	93	22	6.6	3.4	1.2	.21	.15	.10
26	.27	e.60	e.71	57	68	20	6.4	3.3	1.1	.20	.14	.09
27	.27	e.60	e.70	28	408	20	6.1	3.1	1.0	.22	.13	.09
28	.60	e.60	e.71	17	243	19	6.0	3.0	.96	.25	.13	.10
29	.51	e.62	e.71	13	177	18	5.9	2.8	.97	.23	.14	.10
30	.46	e.68	.70	10	---	17	5.7	2.8	.97	.21	.16	.09
31	e.34	---	.64	10	---	16	---	2.5	---	.21	.15	---
TOTAL	9.16	18.20	22.93	1270.85	3787.2	2114	283.7	138.1	53.70	18.88	5.59	3.14
MEAN	.30	.61	.74	41.0	131	68.2	9.46	4.45	1.79	.61	.18	.10
MAX	.60	.94	.90	693	672	251	15	7.6	2.8	1.1	.31	.17
MIN	.19	.35	.64	.46	5.4	16	5.7	2.5	.96	.20	.13	.07
AC-FT	18	36	45	2520	7510	4190	563	274	107	37	11	6.2

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

MEAN	.32	4.94	28.1	147	141	83.9	27.0	11.9	4.83	1.68	.66	.42
MAX	.83	22.7	125	237	306	211	55.2	27.3	9.79	3.76	1.81	1.22
(WY)	1999	1997	1997	1997	1998	1995	1998	1995	1995	1998	1998	1998
MIN	.009	.17	.74	41.0	16.7	10.7	5.58	2.76	1.30	.54	.18	.10
(WY)	1995	1996	2000	2000	1995	1997	1997	1997	1997	1997	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	8259.43		7725.45			
ANNUAL MEAN	22.6		21.1		37.2	
HIGHEST ANNUAL MEAN					49.8	1998
LOWEST ANNUAL MEAN					21.1	2000
HIGHEST DAILY MEAN	628	Feb 9	693	Jan 24	1200	Jan 10 1995
LOWEST DAILY MEAN	.19	Oct 15	.07	Sep 19	.00	Oct 1 1994
ANNUAL SEVEN-DAY MINIMUM	.20	Oct 12	.08	Sep 16	.00	Oct 13 1994
INSTANTANEOUS PEAK FLOW			1750	Feb 13	3390	Jan 9 1995
INSTANTANEOUS PEAK STAGE			6.08	Feb 13	7.96	Jan 9 1995
ANNUAL RUNOFF (AC-FT)	16380		15320		26940	
10 PERCENT EXCEEDS	62		45		83	
50 PERCENT EXCEEDS	1.7		.89		3.1	
90 PERCENT EXCEEDS	.41		.16		.19	

e Estimated.

11173200 ARROYO HONDO NEAR SAN JOSE, CA

LOCATION.—Lat 37°27'42", long 121°46'06", in NE 1/4 NE 1/4 sec.32, T.5 S., R.2 E., Santa Clara County, Hydrologic Unit 18050004, on right bank, 150 ft upstream from road bridge, 3.5 mi southeast of Calaveras Dam, and 3.5 mi northeast of city limits of San Jose.

DRAINAGE AREA.—77.1 mi^2.

PERIOD OF RECORD.—October 1968 to September 1981, October 1994 to current year.

GAGE.—Water-stage recorder. Datum of gage is 783.86 ft above sea level.

REMARKS.—Records good except period of January 5 to May 18, which is poor. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,340 ft^3/s, Feb. 3, 1998, gage height, 15.85 ft; minimum daily, 0.11 ft^3/s, July 28–30, 1972.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 800 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	2200	1,210	9.17	Feb. 23	0500	2,060	10.36
Feb. 13	2245	5,840	13.97	Feb. 27	1815	809	8.34

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.3	4.1	3.8	30	245	34	15	6.9	3.3	1.5	1.5
2	.96	2.1	4.7	3.9	26	194	32	14	6.7	3.0	1.5	1.5
3	.96	2.1	4.5	3.9	24	166	30	14	6.5	2.9	1.5	1.5
4	.98	2.0	4.1	3.9	34	142	29	14	6.4	2.9	1.5	1.6
5	.97	1.9	3.9	4.0	26	381	27	13	6.4	3.2	1.4	1.7
6	1.1	2.0	3.6	4.1	23	371	27	13	6.4	3.4	1.4	1.8
7	1.1	2.6	3.7	4.0	21	258	26	14	6.4	3.5	1.4	1.9
8	1.2	2.6	3.7	4.0	17	323	25	16	7.8	3.6	1.4	1.9
9	1.3	6.9	3.9	3.9	15	520	24	15	9.1	3.5	1.4	1.9
10	1.5	4.9	4.5	3.9	17	339	23	13	8.0	3.5	1.3	1.9
11	1.5	3.7	5.1	4.4	103	250	22	13	7.2	3.4	1.3	1.8
12	1.6	3.1	4.8	7.0	648	200	21	12	6.7	3.2	1.2	1.7
13	1.9	2.7	4.5	7.9	1290	169	21	12	6.4	3.1	1.2	1.6
14	2.2	2.5	4.3	6.0	1590	143	21	11	5.9	3.0	1.2	1.8
15	2.0	2.4	4.3	5.1	414	125	21	12	5.3	3.1	1.2	1.7
16	1.9	2.8	4.1	11	213	110	21	14	4.9	3.3	1.1	1.7
17	1.8	3.3	3.9	15	169	97	31	13	4.7	3.3	1.0	1.6
18	1.6	5.1	4.0	21	123	87	33	12	4.7	3.2	1.1	1.6
19	1.6	4.6	4.0	33	99	80	24	11	4.9	3.2	1.0	1.6
20	1.6	4.7	3.9	19	86	74	21	10	4.9	3.1	1.0	1.6
21	1.5	5.3	3.9	14	156	68	20	9.8	4.7	2.8	1.0	1.7
22	1.4	4.5	3.9	11	141	62	20	9.4	4.6	2.7	1.1	1.8
23	1.4	3.9	3.9	108	904	57	19	8.9	4.2	2.6	1.1	1.8
24	1.6	3.5	3.9	653	322	54	18	8.8	3.8	2.3	e1.1	1.8
25	1.9	3.3	3.9	403	213	50	17	8.6	3.7	2.1	e1.1	1.7
26	2.0	3.3	3.9	111	161	47	17	8.3	3.6	1.8	1.1	1.7
27	1.9	3.3	3.9	61	591	45	16	8.2	3.6	1.8	1.1	1.8
28	2.2	3.3	3.9	40	455	42	16	8.0	3.5	1.7	1.2	1.9
29	2.2	3.3	3.9	36	310	40	15	7.5	3.3	1.6	1.3	1.9
30	2.2	3.7	3.8	33	---	37	15	7.2	3.2	1.6	1.3	2.0
31	2.3	---	3.7	34	---	35	---	7.1	---	1.5	1.3	---
TOTAL	49.37	101.7	126.2	1672.8	8221	4811	686	352.8	164.4	87.2	38.3	52.0
MEAN	1.59	3.39	4.07	54.0	283	155	22.9	11.4	5.48	2.81	1.24	1.73
MAX	2.3	6.9	5.1	653	1590	520	34	16	9.1	3.6	1.5	2.0
MIN	.96	1.9	3.6	3.8	15	35	15	7.1	3.2	1.5	1.0	1.5
AC-FT	98	202	250	3320	16310	9540	1360	700	326	173	76	103

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	1.70	13.5	50.7	191	226	142	52.2	16.4	7.38	3.14	1.58	1.25
MAX	4.74	69.4	312	595	888	523	178	55.0	27.0	12.7	6.09	3.98
(WY)	1999	1973	1997	1997	1998	1995	1974	1998	1998	1998	1998	1998
MIN	.24	.67	1.42	3.35	2.98	5.58	2.93	1.67	.74	.33	.18	.25
(WY)	1978	1978	1977	1976	1977	1977	1977	1976	1976	1977	1972	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	15035.37		16362.77			
ANNUAL MEAN	41.2		44.7		58.0	
HIGHEST ANNUAL MEAN					132	1998
LOWEST ANNUAL MEAN					2.12	1977
HIGHEST DAILY MEAN	1490	Feb 9	1590	Feb 14	3580	Jan 10 1995
LOWEST DAILY MEAN	.96	Oct 2	.96	Oct 2	.11	Jul 28 1972
ANNUAL SEVEN-DAY MINIMUM	1.0	Sep 29	1.0	Oct 1	.13	Jul 27 1972
INSTANTANEOUS PEAK FLOW			5840	Feb 13	7340	Feb 3 1998
INSTANTANEOUS PEAK STAGE			13.97	Feb 13	15.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	29820		32460		42050	
10 PERCENT EXCEEDS	108		104		124	
50 PERCENT EXCEEDS	5.6		4.1		4.8	
90 PERCENT EXCEEDS	1.4		1.4		.76	

e Estimated.

11173510 ALAMEDA CREEK BELOW CALAVERAS CREEK, NEAR SUNOL, CA

LOCATION.—Lat 37°30'13", long 121°49'25", in NE 1/4 NE 1/4 sec.13, T.5 S., R.1 E., Alameda County, Hydrologic Unit 18050004, on right bank, 0.2 mi downstream from Calaveras Creek, 1.1 mi downstream from Calaveras Dam, and 7.3 mi southeast of Sunol.

DRAINAGE AREA.—135 mi^2.

PERIOD OF RECORD.—October 1995 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 430 ft above sea level, from topographic map.

REMARKS.—Records good. No records computed above 200 ft^3/s. Flow regulated by Calaveras Reservoir, usable capacity, 96,800 acre-ft (revised), 1.1 mi upstream from gage and by diversion dam on Alameda Creek, 2.9 mi upstream. Flow is diverted out of basin from Calaveras Reservoir by city and county of San Francisco for domestic use. See schematic diagram of Alameda Creek Basin.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.44	.60	.60	2.6	---	14	7.6	3.0	2.5	.91	.14
2	.47	.39	.58	.62	2.4	---	13	7.7	2.9	2.2	.86	.14
3	.50	.41	.58	.64	3.0	---	13	7.6	2.9	1.5	.78	.19
4	.57	.41	.61	.64	3.7	---	12	7.4	2.8	1.5	.78	.31
5	.58	.42	.67	.62	2.7	---	12	7.5	2.8	1.5	.76	.30
6	.58	.46	.68	.64	2.7	---	12	7.6	2.7	1.4	.72	.29
7	.58	.60	.74	.64	2.4	---	12	9.5	2.6	1.4	.73	.25
8	.54	.55	.75	.66	2.2	---	12	7.4	3.8	2.2	.73	.24
9	.52	.50	.80	.71	2.1	---	12	6.8	3.1	2.9	.65	.25
10	.52	.49	.80	.74	2.4	---	12	6.7	2.8	3.2	.62	.26
11	.49	.39	.81	.90	18	---	11	7.3	2.6	3.2	.60	.26
12	.48	.25	.74	.81	77	---	10	8.0	2.5	3.1	.53	.27
13	.48	.25	.72	.79	---	---	11	7.2	2.3	3.0	.54	.26
14	.48	.25	.74	.81	---	---	11	7.1	2.0	2.9	.53	.28
15	.48	.26	.75	.81	44	---	11	7.1	1.9	2.8	.50	.31
16	.49	.29	.75	1.1	70	162	11	10	1.7	2.7	.50	.24
17	.50	.29	.75	.84	80	125	15	8.4	1.6	2.7	.48	.16
18	.51	.27	.59	1.2	52	91	15	6.8	1.5	2.5	.47	.17
19	.52	.29	.34	1.6	39	74	11	5.8	1.5	2.4	.46	.17
20	.51	.28	.34	4.0	35	60	9.2	5.2	1.5	2.4	.45	.18
21	.51	.27	.36	3.4	46	48	8.8	4.7	1.4	2.3	.43	.19
22	.49	.26	.36	2.6	58	31	8.6	4.2	1.4	2.2	.44	.23
23	.50	.26	.36	27	---	23	8.6	3.8	1.9	2.1	.42	.21
24	.46	.26	.37	---	146	20	8.5	3.7	2.0	2.0	.41	.21
25	.46	.26	.39	58	145	19	8.0	3.5	2.2	1.9	.31	.21
26	.46	.28	.39	12	115	18	7.9	3.4	2.7	1.9	.14	.21
27	.45	.36	.62	7.5	---	20	8.1	3.3	2.7	1.8	.14	.21
28	.49	.49	.76	5.2	---	19	7.7	3.0	2.6	1.7	.13	.21
29	.47	.51	.62	4.1	---	18	8.1	3.2	2.6	1.6	.14	.21
30	.46	.60	.59	3.5	---	17	7.8	3.6	2.5	1.4	.14	.20
31	.45	---	.59	3.0	---	16	---	3.1	---	.95	.13	---
TOTAL	15.47	11.04	18.75	---	---	---	321.3	188.2	70.5	67.85	15.43	6.76
MEAN	.50	.37	.60	---	---	---	10.7	6.07	2.35	2.19	.50	.23
MAX	.58	.60	.81	---	---	---	15	10	3.8	3.2	.91	.31
MIN	.45	.25	.34	---	---	---	7.7	3.0	1.4	.95	.13	.14
AC-FT	31	22	37	---	---	---	637	373	140	135	31	13

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA

LOCATION.—Lat 37°32'26", long 121°51'18", in unsurveyed section, T.4 S., R.1 E., Alameda County, Hydrologic Unit 18050004, on left bank, 0.3 mi downstream from Welch Creek, 4.0 mi southeast of Sunol, at bridge to entrance at city of San Francisco Water Department Filtration Plant.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.—144.8 mi^2.

PERIOD OF RECORD.—October 1999 to September 2000.

GAGE.—Water-stage recorder. Elevation of gage is 341 ft above sea level, from hand-held Global Positioning System reading.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flow regulated by Calaveras Reservoir, usable capacity, 96,800 acre-ft, 3.7 mi upstream from gage and by diversion dam on Alameda Creek, 5.5 mi upstream. Flow is diverted out of basin from Calaveras Reservoir by city and county of San Francisco for domestic use. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,910 ft^3/s, Feb. 13, 2000, gage height, 15.98 ft, from rating curve extension above 664 ft^3/s; minimum daily, 0.37 ft^3/s, Sept. 14, 2000.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.41	e.43	1.6	2.0	3.5	647	17	8.6	4.3	2.2	.83	1.2
2	e.41	e.43	1.2	2.0	3.3	496	17	8.4	4.2	2.2	.81	1.5
3	e.41	e.43	1.0	2.1	4.0	396	16	8.3	4.1	2.2	.74	.91
4	e.41	e.43	1.2	1.8	5.1	319	16	8.3	4.1	2.2	.74	.67
5	e.41	e.43	1.3	1.5	3.9	636	15	8.2	4.0	2.3	.73	.63
6	e.41	e.43	1.3	1.5	3.7	727	15	8.1	4.0	2.3	.71	.53
7	e.40	e.43	1.4	1.4	3.4	622	14	8.6	3.9	2.2	.72	.43
8	e.40	e.44	1.4	1.3	3.2	643	14	9.8	5.2	2.1	.78	.42
9	e.40	e.45	1.7	1.2	3.1	845	14	9.3	4.6	2.0	.78	.43
10	e.40	e.65	1.9	1.2	3.4	759	14	8.7	4.2	1.9	.77	.44
11	e.41	e.88	1.6	1.7	10	596	13	8.3	4.2	1.8	.76	.44
12	e.41	e1.0	1.6	1.5	92	470	13	7.7	4.0	1.8	.68	.42
13	e.41	e1.1	1.7	.96	456	369	14	7.5	3.8	1.8	.60	.40
14	e.41	e1.1	1.6	.93	675	265	14	7.5	3.5	1.7	.60	.37
15	e.42	e1.1	1.6	1.0	69	223	14	8.2	3.3	1.6	.59	.64
16	e.42	e1.1	1.6	3.1	76	180	13	12	3.2	1.7	.57	.77
17	e.42	1.0	1.5	1.2	98	141	17	9.8	3.2	1.8	.56	.59
18	e.42	.87	1.6	3.8	64	105	18	8.5	3.2	1.7	.55	.48
19	e.43	1.1	1.6	2.0	47	85	14	7.8	3.2	1.6	.51	.45
20	e.43	1.4	1.6	5.3	41	70	12	7.2	3.1	1.5	.53	.44
21	e.43	1.2	1.8	4.7	53	58	12	6.9	2.8	1.5	.53	.43
22	e.43	.91	1.9	3.7	65	39	12	6.5	2.8	1.5	.53	.48
23	e.43	.91	1.8	24	532	30	11	6.4	2.7	1.4	.53	.78
24	e.43	.92	1.7	307	177	26	11	6.3	2.5	1.2	.52	.66
25	e.43	.87	1.6	99	171	24	11	6.1	2.4	1.1	.47	.57
26	e.43	.90	1.7	17	139	23	10	6.0	2.3	1.1	.42	.56
27	e.42	.92	1.7	9.2	609	22	9.9	5.9	2.2	1.1	.46	.60
28	e.42	.93	1.7	6.3	1040	22	9.8	5.7	2.2	1.1	.45	.74
29	e.42	.93	1.7	5.0	853	21	9.6	5.3	2.2	1.1	.49	.80
30	e.42	1.3	1.8	4.4	---	19	9.0	4.9	2.2	.95	.69	.69
31	e.42	---	1.9	3.9	---	18	---	4.7	---	.87	.97	---
TOTAL	12.92	24.99	49.3	521.69	5303.6	8896	399.3	235.5	101.6	51.52	19.62	18.47
MEAN	.42	.83	1.59	16.8	183	287	13.3	7.60	3.39	1.66	.63	.62
MAX	.43	1.4	1.9	307	1040	845	18	12	5.2	2.3	.97	1.5
MIN	.40	.43	1.0	.93	3.1	18	9.0	4.7	2.2	.87	.42	.37
AC-FT	26	50	98	1030	10520	17650	792	467	202	102	39	37

e Estimated.

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to September 2000.
WATER TEMPERATURE: October 1999 to September 2000.
SEDIMENT DATA: October 1999 to September 2000.

PERIOD OF DAILY RECORD.—October 1999 to April 2000.
SUSPENDED-SEDIMENT DISCHARGE: October 1999 to April 2000.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION: Maximum daily mean, 1,180 mg/L, Feb. 14, 2000; minimum daily mean, 1 mg/L, several days.
SEDIMENT LOAD: Maximum daily, 5,230 tons, Feb. 13, 2000; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
NOV										
17...	1620	1.1	13.5	12	.04	--	--	--	--	--
JAN										
06...	1545	1.5	9.0	5	.02	--	--	--	--	--
25...	1155	65	12.0	63	11	97	--	--	--	--
FEB										
11...	1430	3.7	11.0	11	.11	--	--	--	--	--
MAR										
01...	1400	596	11.5	96	154	50	61	71	85	100
15...	1230	222	13.5	14	8.4	71	--	--	--	--
APR										
13...	0900	15	15.0	4	.16	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
SEP								
13...	0900	1	.46	20.5	11	28	50	62
13...	0903	1	.46	20.5	12	40	62	73
13...	0906	1	.46	20.5	--	1	4	18
13...	0909	1	.47	20.5	--	--	1	3
13...	0912	1	.47	20.5	--	--	--	1
13...	0915	1	.48	20.5	--	--	1	3
13...	0918	1	.48	20.5	16	49	76	89
13...	0921	1	.47	20.5	--	2	5	16
13...	0924	1	.47	20.5	6	28	67	94
13...	0927	1	.47	20.5	9	31	65	95

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
SEP							
13...	69	74	79	83	84	86	100
13...	79	87	95	98	100	--	--
13...	38	48	54	61	79	100	--
13...	8	13	21	28	39	64	100
13...	3	7	11	17	30	60	100
13...	7	16	26	36	46	76	100
13...	93	96	99	100	--	--	--
13...	20	23	32	45	63	92	100
13...	99	99	100	--	--	--	--
13...	99	99	100	--	--	--	--

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	STARTING TIME (2400 HOURS) (82073)	ENDING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
25...	1220	1000	1150	.250	0	1215	1230	30	2.0
25...	1300	1000	1150	.250	0	1245	1310	60	2.0
MAR									
01...	1455	1000	1140	.250	0	1450	1500	20	5.0
01...	1510	1000	1140	.250	0	1505	1518	20	5.0
15...	1250	1000	1150	.250	0	1245	1255	20	2.0
15...	1305	1000	1150	.250	0	1300	1310	20	2.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VERTICALS IN COMPOSITE SAMPLE (NUM) (04119)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COMPOSITE SAMPLE T/D/FT (04122)	SEDIMENT DISCHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
JAN									
25...	2	17	17	1.40	61	12.0	.07	1.7	1
25...	2	17	17	1.40	59	12.0	.03	1.7	1
MAR									
01...	2	12	12	2.50	608	11.5	1.27	97	1
01...	2	12	12	2.50	615	11.5	1.95	97	1
15...	2	21	21	1.00	223	13.5	.15	4.6	1
15...	2	20	20	1.00	222	13.5	.07	4.6	2

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
25...	8	37	63	81	100	--	--	--
25...	9	29	59	83	100	--	--	--
MAR								
01...	16	41	69	88	94	97	100	--
01...	14	44	59	68	75	84	85	100
15...	8	22	40	65	84	97	100	--
15...	12	27	45	66	88	100	--	--

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	11.5	---	---	---	---	---	---
2	---	---	---	---	12.5	11.0	---	---	---	---	---	---
3	---	---	---	7.5	---	12.0	---	---	---	---	---	---
4	---	---	---	8.5	11.0	---	---	---	---	---	---	---
5	---	---	---	9.0	---	10.5	---	---	---	---	---	---
6	---	---	---	9.0	---	11.5	---	---	---	19.5	---	---
7	---	---	11.5	8.5	---	---	---	---	---	---	---	---
8	---	---	---	---	12.5	---	17.5	---	---	---	---	---
9	---	---	---	---	13.5	11.0	---	---	---	---	---	---
10	---	14.0	9.5	10.5	---	---	---	---	---	---	---	---
11	---	---	---	---	11.0	12.5	---	---	---	---	17.0	20.5
12	---	---	9.5	10.5	11.0	---	---	---	---	---	---	---
13	---	15.0	---	---	---	14.0	15.0	---	---	---	---	---
14	---	---	8.5	11.0	11.5	---	15.5	---	---	---	---	---
15	---	---	8.0	---	---	13.5	---	---	---	---	---	---
16	---	---	8.0	11.0	11.0	14.5	---	---	---	---	---	---
17	---	13.5	8.5	---	---	15.0	16.0	14.0	---	---	---	---
18	---	---	---	11.0	11.5	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	11.5	11.5	---	---	---	---	---	---	---	---
21	16.5	---	---	---	---	14.0	18.0	---	---	---	---	---
22	---	---	---	11.5	11.0	---	---	---	---	---	---	---
23	---	---	9.5	---	---	---	---	---	---	---	---	---
24	---	---	---	12.5	9.5	---	---	---	---	---	---	---
25	---	---	---	12.5	11.0	---	---	---	---	---	---	---
26	---	---	---	12.0	---	---	---	---	---	---	---	---
27	---	---	7.0	---	---	---	---	---	---	---	---	---
28	16.0	---	---	9.5	---	14.0	16.5	---	---	---	---	---
29	---	---	---	---	11.0	---	---	---	---	---	---	---
30	---	13.5	7.5	---	---	---	19.0	---	---	---	---	---
31	---	---	---	11.5	---	16.5	---	---	---	---	---	---

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	e.41	3	.00	e.43	7	.00	1.6	2	.00
2	e.41	3	.00	e.43	8	.00	1.2	2	.00
3	e.41	3	.00	e.43	9	.01	1.0	2	.00
4	e.41	3	.00	e.43	11	.01	1.2	3	.00
5	e.41	3	.00	e.43	12	.01	1.3	3	.00
6	e.41	3	.00	e.43	13	.02	1.3	3	.01
7	e.40	3	.00	e.43	14	.02	1.4	3	.01
8	e.40	3	.00	e.44	16	.02	1.4	5	.02
9	e.40	3	.00	e.45	17	.02	1.7	7	.03
10	e.40	3	.00	e.65	17	.03	1.9	8	.04
11	e.41	3	.00	e.88	14	.03	1.6	7	.03
12	e.41	3	.00	e1.0	11	.03	1.6	4	.02
13	e.41	2	.00	e1.1	8	.02	1.7	2	.01
14	e.41	2	.00	e1.1	8	.02	1.6	1	.00
15	e.42	2	.00	e1.1	9	.03	1.6	1	.00
16	e.42	2	.00	e1.1	11	.04	1.6	2	.00
17	e.42	2	.00	1.0	12	.03	1.5	2	.00
18	e.42	2	.00	.87	11	.03	1.6	2	.00
19	e.43	2	.00	1.1	11	.03	1.6	2	.00
20	e.43	2	.00	1.4	10	.04	1.6	2	.00
21	e.43	2	.00	1.2	9	.03	1.8	2	.00
22	e.43	2	.00	.91	8	.02	1.9	2	.01
23	e.43	2	.00	.91	8	.02	1.8	2	.00
24	e.43	2	.00	.92	7	.02	1.7	2	.00
25	e.43	2	.00	.87	6	.01	1.6	2	.00
26	e.43	2	.00	.90	5	.01	1.7	2	.00
27	e.42	2	.00	.92	4	.01	1.7	2	.00
28	e.42	2	.00	.93	4	.00	1.7	2	.00
29	e.42	3	.00	.93	3	.00	1.7	1	.00
30	e.42	4	.00	1.3	2	.00	1.8	1	.00
31	e.42	6	.00	---	---	---	1.9	1	.00
TOTAL	12.92	---	0.00	24.99	---	0.56	49.3	---	0.18
		JANUARY			FEBRUARY			MARCH	
1	2.0	1	.00	3.5	5	.05	647	111	197
2	2.0	1	.00	3.3	6	.05	496	57	78
3	2.1	1	.00	4.0	6	.06	396	33	35
4	1.8	2	.00	5.1	5	.07	319	21	18
5	1.5	2	.00	3.9	4	.04	636	231	432
6	1.5	4	.02	3.7	3	.03	727	176	351
7	1.4	8	.03	3.4	3	.02	622	66	111
8	1.3	8	.03	3.2	2	.02	643	79	143
9	1.2	8	.03	3.1	2	.02	845	165	377
10	1.2	8	.03	3.4	6	.06	759	96	200
11	1.7	9	.04	10	28	3.7	596	42	69
12	1.5	11	.04	92	280	231	470	23	29
13	.96	14	.04	456	1040	5230	369	11	11
14	.93	17	.04	675	1180	2810	265	11	8.1
15	1.0	22	.06	69	92	24	223	13	8.0
16	3.1	27	.23	76	118	35	180	11	5.5
17	1.2	26	.09	98	64	18	141	8	3.3
18	3.8	24	.24	64	18	3.2	105	7	2.1
19	2.0	19	.10	47	10	1.3	85	7	1.5
20	5.3	14	.20	41	9	1.0	70	6	1.1
21	4.7	7	.09	53	8	1.2	58	5	.80
22	3.7	6	.06	65	24	13	39	5	.48
23	24	97	36	532	233	406	30	4	.34
24	307	1170	2080	177	61	30	26	4	.26
25	99	382	282	171	28	13	24	3	.22
26	17	22	1.1	139	21	8.0	23	3	.18
27	9.2	6	.16	609	171	327	22	2	.15
28	6.3	3	.05	1040	346	977	22	2	.12
29	5.0	3	.04	853	297	687	21	2	.10
30	4.4	3	.04	---	---	---	19	1	.07
31	3.9	4	.04	---	---	---	18	1	.05
TOTAL	521.69	---	2400.80	5303.6	---	10819.82	8896	---	2083.37

e Estimated.

11173575 ALAMEDA CREEK BELOW WELCH CREEK, NEAR SUNOL, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	17	1	.06
2	17	2	.07
3	16	2	.07
4	16	2	.08
5	15	2	.09
6	15	2	.10
7	14	3	.11
8	14	3	.11
9	14	3	.12
10	14	3	.13
11	13	4	.13
12	13	4	.13
13	14	4	.14
14	14	2	.09
15	14	2	.08
16	13	3	.09
17	17	3	.13
18	18	3	.14
19	14	2	.09
20	12	2	.08
21	12	2	.07
22	12	2	.07
23	11	2	.08
24	11	3	.08
25	11	3	.09
26	10	3	.09
27	9.9	4	.10
28	9.8	4	.11
29	9.6	6	.15
30	9.0	8	.18
31	---	---	---
TOTAL	399.3	---	3.06
PERIOD	15207.80		15307.79

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	12.92	0.00	0	0
NOVEMBER	24.99	0.56	0	1
DECEMBER	49.30	0.18	0	0
JANUARY 2000	521.69	2400.80	47	2450
FEBRUARY	5303.60	10819.82	682	11500
MARCH	8896.00	2083.37	1210	3290
APRIL	399.30	3.06	0	3
PERIOD	15207.80	15307.79	1939	17244

11174000 SAN ANTONIO CREEK NEAR SUNOL, CA

LOCATION.—Lat 37°34'39", long 121°51'24", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank, 0.4 mi upstream from Calaveras Road Bridge, 0.85 mi upstream from mouth, and 2 mi southeast of town of Sunol.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.—37.0 mi^2.

PERIOD OF RECORD.—January 1912 to September 1930 (records furnished by Spring Valley Water Company), February 1960 to September 1965, and October 1999 to September 2000. Monthly discharge only for some periods, published in WSP 1315-B (published as La Costa Creek near Sunol).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 271.56 ft above sea level (levels by City of San Francisco). Prior to Feb. 8, 1960, at site 0.65 mi upstream at different datum.

REMARKS.—Records good except for estimated daily discharges, which are poor. Flows regulated by Lake San Antonio located 0.6 mi upstream of gage beginning in October 1964. Reservoir filling completion date was February 1965. Flows can be released for emergency flood conditions, but purpose of the reservoir is for water supply. Total storage capacity is 50,500 acre-ft.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge prior to regulation for years with available instantaneous maxima (1921–30 and 1960–63) 1,970 ft^3/s, Jan. 31, 1963, gage height, 7.16 ft. Maximum discharge for period after regulation, 80 ft^3/s, Feb. 22, 2000, gage height, 3.94 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, 5,180 ft^3/s (by slope-area measurement of peak flow).

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.04	e.03	e.02	.13	.76	.22	.14	.10	.00	.00	.00
2	e.00	e.04	e.03	e.02	.13	.78	.22	.14	.10	.00	.00	.00
3	e.00	e.04	e.03	e.02	.16	.70	.21	.15	.10	.00	.00	.00
4	e.00	e.04	e.04	e.03	.15	.58	.20	.15	.10	.00	.00	.00
5	e.00	e.04	e.03	e.03	.13	2.7	.21	.16	.10	.00	.00	.00
6	e.00	e.05	e.04	e.04	.13	.73	.20	.18	.10	.04	.00	.00
7	e.00	e.05	e.04	e.04	.13	.56	.20	.21	.11	.06	.00	.00
8	e.00	e.03	e.05	e.04	.11	3.4	.20	.21	.16	.06	.00	.00
9	e.00	e.02	e.05	e.03	.11	1.8	.19	.19	.16	.05	.00	.00
10	e.00	e.02	e.02	e.03	.13	.77	.17	.18	.15	.04	.00	.00
11	e.00	e.02	e.02	e.03	1.5	.61	.17	.15	.15	.02	.00	.00
12	e.00	e.02	e.02	e.02	2.1	.53	.16	.14	.14	.00	.00	.00
13	e.00	e.02	e.02	e.02	6.0	.46	.19	.14	.12	.00	.00	.00
14	e.00	e.03	e.03	e.02	6.7	.41	.17	.14	.10	.00	.00	.00
15	e.00	e.03	e.03	e.02	1.2	.39	.16	.17	.08	.00	.00	.00
16	e.00	e.04	e.03	e.04	.72	.37	.16	.18	.07	.00	.00	.00
17	e.00	e.02	e.03	e.03	.57	.35	.19	.16	.07	.00	.00	.00
18	e.00	e.02	e.03	e.05	.42	.35	.16	.16	.07	.00	.00	.00
19	e.00	e.02	e.01	e.03	.36	.35	.15	.15	.08	.00	.00	.00
20	e.00	e.02	e.03	e.02	.39	.35	.15	.16	.06	.00	.00	.00
21	.00	e.02	e.03	e.02	.43	.33	.15	.16	.04	.00	.00	.00
22	.00	e.01	e.02	e.02	5.1	.32	.15	.17	.02	.00	.00	.00
23	.00	e.01	e.02	e.03	8.2	.32	.15	.14	.02	.00	.00	.00
24	e.01	e.01	e.02	2.4	1.2	.32	.14	.15	.02	.00	.00	.00
25	e.01	e.01	e.02	.99	.81	.30	.15	.14	.01	.00	.00	.00
26	e.01	e.01	e.02	.35	.66	.28	.15	.15	.00	.00	.00	.00
27	e.02	e.01	e.02	.24	6.2	.27	.14	.14	.00	.00	.00	.00
28	e.04	e.01	e.02	.19	1.8	.25	.14	.14	.00	.00	.00	.00
29	e.04	e.02	e.02	.17	1.1	.25	.14	.13	.00	.00	.00	.00
30	e.04	e.03	e.02	.17	---	.24	.14	.13	.00	.00	.00	.00
31	e.04	---	e.02	.15	---	.23	---	.12	---	.00	.00	---
TOTAL	0.21	0.75	0.84	5.31	46.77	20.06	5.13	4.83	2.23	0.27	0.00	0.00
MEAN	.007	.025	.027	.17	1.61	.65	.17	.16	.074	.009	.000	.000
MAX	.04	.05	.05	2.4	8.2	3.4	.22	.21	.16	.06	.00	.00
MIN	.00	.01	.01	.02	.11	.23	.14	.12	.00	.00	.00	.00
AC-FT	.4	1.5	1.7	11	93	40	10	9.6	4.4	.5	.00	.00

e Estimated.

11174000 SAN ANTONIO CREEK NEAR SUNOL, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1963, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.14	.55	7.60	29.5	45.9	22.9	10.1	4.31	.91	.10	.043	.17
MAX	2.00	5.11	37.7	258	205	74.4	48.6	42.8	5.11	.90	.47	2.84
(WY)	1963	1927	1923	1916	1915	1919	1963	1915	1915	1915	1915	1918
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1913	1915	1924	1924	1924	1924	1924	1924	1918	1914	1913	1912

SUMMARY STATISTICS WATER YEARS 1912 - 1963

ANNUAL MEAN	10.3		
HIGHEST ANNUAL MEAN	36.0		1916
LOWEST ANNUAL MEAN	.000		1924
HIGHEST DAILY MEAN	1460	Jan 3	1916
LOWEST DAILY MEAN	.00	Jul 26	1912
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 3	1912
INSTANTANEOUS PEAK FLOW	1970	Jan 31	1963
INSTANTANEOUS PEAK STAGE	7.16	Jan 31	1963
ANNUAL RUNOFF (AC-FT)	7510		
10 PERCENT EXCEEDS	17		
50 PERCENT EXCEEDS	.30		
90 PERCENT EXCEEDS	.00		

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.007	.025	.027	.17	1.61	.65	.17	.16	.074	.009	.000	.000
MAX	.007	.025	.027	.17	1.61	.65	.17	.16	.074	.009	.000	.000
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	.007	.025	.027	.17	1.61	.65	.17	.16	.074	.009	.000	.000
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS FOR 2000 WATER YEAR

ANNUAL TOTAL	86.40		
ANNUAL MEAN	.24		
HIGHEST DAILY MEAN	8.2	Feb 23	
LOWEST DAILY MEAN	.00	Oct 1	
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	
INSTANTANEOUS PEAK FLOW	80	Feb 22	
INSTANTANEOUS PEAK STAGE	3.94	Feb 22	
ANNUAL RUNOFF (AC-FT)	171		
10 PERCENT EXCEEDS	.36		
50 PERCENT EXCEEDS	.03		
90 PERCENT EXCEEDS	.00		

11174000 SAN ANTONIO CREEK, NEAR SUNOL, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—January 2000 to April 2000.
SEDIMENT DATA: January 2000 to April 2000.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JAN					
06...	1315	.07	9.0	1	.00
25...	1130	.86	13.0	6	.01
FEB					
10...	1520	.15	12.5	2	.00
29...	1645	.98	14.0	11	.03
MAR					
15...	0845	.40	11.5	4	.00
APR					
13...	1240	.17	16.0	2	.00

11174060 ALAMEDA CREEK AT HIGHWAY 680, NEAR SUNOL, CA

LOCATION.—Lat 37°34'33", long 121°52'23", unsurveyed, T.4 S., R.1 E., Alameda County, Hydrologic Unit 18070203, on right bank of creek at Highway 680, 1 mi upstream of mouth of Arroyo de la Laguna, and 1 mi southeast of town of Sunol.

DRAINAGE AREA.—191 mi^2.

PERIOD OF RECORD.—October 1999 to September 2000.

GAGE.—Outside staff gage only. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.—Periodic total-load sampling site. Discharge measurements made in conjunction with sediment samples are published in the tables with sample data. Flow regulated by Calaveras Reservoir, usable capacity, 96,800 acre-ft, dead storage, 3,200 acre-ft. Zero bed-load discharge observed for flows less than 72 ft^3/s during current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC						
29...	1405	.78	12.5	4	.01	--
JAN						
24...	1400	57	13.0	272	42	100
25...	0935	71	12.0	106	20	99
26...	1010	14	11.0	36	1.4	99
FEB						
11...	0940	4.9	13.5	14	.19	--
APR						
14...	1315	12	17.5	10	.33	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
SEP								
27...	1110	1	7.6	21.0	6	15	25	32
27...	1112	1	7.6	21.0	1	2	5	10
27...	1114	1	7.6	21.0	--	1	3	8
27...	1116	1	7.6	21.0	--	1	2	12
27...	1118	1	7.6	21.0	--	1	2	8
27...	1120	1	7.6	21.0	1	1	2	6
27...	1122	1	7.6	21.0	1	1	2	6
27...	1124	1	7.6	21.0	1	2	3	9
27...	1126	1	7.6	21.0	--	1	5	16
27...	1128	1	7.6	21.0	18	39	53	62

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
SEP							
27...	38	43	48	53	58	79	100
27...	14	18	29	47	73	100	--
27...	21	28	36	51	72	93	100
27...	29	33	40	51	68	93	100
27...	20	27	33	42	55	91	100
27...	15	21	27	35	47	80	100
27...	15	21	29	42	58	83	100
27...	16	24	35	45	61	90	100
27...	21	23	34	52	81	100	--
27...	69	76	86	92	94	96	100

11176000 ARROYO MOCHO NEAR LIVERMORE, CA

LOCATION.—Lat 37°37'35", long 121°42'13", in NW 1/4 SE 1/4 sec.36, T.3 S., R.2 E., Alameda County, Hydrologic Unit 18050004, on right bank, 40 ft downstream from Mines Road Bridge, 2.4 mi upstream from small right-bank tributary, and 5.2 mi southeast of Livermore.

DRAINAGE AREA.—38.2 mi^2.

PERIOD OF RECORD.—January 1912 to September 1930, October 1963 to current year. Records for water year 1914 incomplete; yearly estimate and monthly discharge only for some months, published in WSP 1315-B.
SPECIFIC CONDUCTANCE: Water years 1979–83.

GAGE.—Water-stage recorder. Datum of gage is 746.49 ft above sea level. January 1912 to October 1914, at present site at different datum. November 1914 to Sept. 30, 1930, at site 1 mi upstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge recorded, 2,250 ft^3/s, Jan. 24, 1983, gage height, 8.80 ft, from rating curve extended above 600 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 10.44 ft, Feb. 19, 1986, from floodmarks; no flow for parts of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, reached a discharge of 1,880 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 90 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 25	0130	100	4.50	Feb. 23	0330	354	5.46
Feb. 13	2330	340	5.42				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.09	e.18	.24	.40	1.7	20	2.6	1.2	.41	.12	.10	.06
2	e.09	e.18	.29	.41	1.5	15	2.6	1.2	.40	.13	.10	.06
3	e.04	e.18	.30	.43	1.4	13	2.5	1.2	.37	.14	.08	.06
4	e.04	e.22	.31	.44	1.3	10	2.5	1.1	.37	.13	.08	.06
5	e.05	e.22	.32	.44	1.3	14	2.5	1.1	.36	.10	.08	.06
6	e.09	e.16	.34	.44	1.3	11	2.4	1.1	.34	.10	.09	.06
7	e.09	e.22	.34	.44	1.2	9.3	2.3	1.5	.33	.10	.08	.06
8	e.09	e.34	.35	.44	1.1	20	2.2	1.8	.36	.10	.08	.06
9	e.09	e.34	.42	.42	1.1	40	2.2	1.5	.36	.10	.08	.06
10	e.09	e.12	.44	.41	1.3	24	2.1	1.3	.43	.09	.09	.07
11	e.09	e.07	.42	.56	2.7	17	2.0	1.2	.40	.09	.08	.06
12	e.09	e.07	.44	.72	62	13	1.9	1.1	.36	.09	.08	.06
13	e.09	e.11	.43	.68	75	9.9	2.1	1.1	.31	.11	.09	.06
14	e.09	e.11	.41	.67	189	8.0	2.0	1.1	.29	.11	.08	.06
15	e.12	e.11	.38	.62	42	6.6	2.2	1.2	.26	.11	.08	.07
16	e.07	e.14	.36	1.2	17	5.6	2.1	1.5	.24	.11	.07	.07
17	e.07	e.14	.35	1.0	12	4.7	5.8	1.4	.23	.11	.07	.06
18	e.07	e.14	.36	1.6	7.2	4.1	5.5	1.1	.21	.11	.06	.06
19	e.07	e.18	.40	1.7	5.2	4.0	3.3	.98	.20	.11	.07	.06
20	e.07	e.18	.43	1.2	4.3	3.5	2.6	.85	.18	.10	.08	.06
21	e.07	e.18	.44	.95	10	3.2	2.3	.73	.17	.09	.07	.06
22	e.07	e.17	.44	.86	11	3.1	2.1	.58	.16	.10	.06	.06
23	e.07	e.22	.44	1.6	162	3.1	1.9	.56	.16	.10	.06	.06
24	e.07	.22	.44	26	43	3.2	1.8	.62	.15	.09	.06	.06
25	e.06	.22	.45	42	21	3.1	1.6	.62	.14	.09	.06	.06
26	e.06	.23	.45	9.8	13	3.0	1.5	.61	.14	.09	.06	.06
27	e.06	.23	.44	4.8	38	3.0	1.5	.57	.13	.09	.06	.06
28	e.14	.24	.46	3.1	30	3.0	1.4	.53	.12	.10	.06	.06
29	e.14	.25	.46	2.4	24	3.0	1.4	.49	.12	.10	.06	.06
30	e.18	.25	.39	2.0	---	2.9	1.3	.47	.12	.10	.06	.06
31	e.18	---	.39	1.8	---	2.7	---	.43	---	.10	.06	---
TOTAL	2.69	5.62	12.13	109.53	781.6	286.0	70.2	30.74	7.82	3.21	2.29	1.83
MEAN	.087	.19	.39	3.53	27.0	9.23	2.34	.99	.26	.10	.074	.061
MAX	.18	.34	.46	42	189	40	5.8	1.8	.43	.14	.10	.07
MIN	.04	.07	.24	.40	1.1	2.7	1.3	.43	.12	.09	.06	.06
AC-FT	5.3	11	24	217	1550	567	139	61	16	6.4	4.5	3.6

e Estimated.

11176000 ARROYO MOCHO NEAR LIVERMORE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.11	.87	3.98	14.2	23.6	14.2	5.00	1.73	.66	.22	.099	.083
MAX	1.55	11.6	33.2	122	166	155	41.8	21.5	6.96	4.04	2.57	2.47
(WY)	1984	1984	1984	1983	1998	1983	1982	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1913	1915	1919	1991	1991	1924	1924	1920	1913	1913	1913	1913

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1913 - 2000	
ANNUAL TOTAL	628.17		1313.66			
ANNUAL MEAN	1.72		3.59		5.38	
HIGHEST ANNUAL MEAN					38.8	1983
LOWEST ANNUAL MEAN					.035	1924
HIGHEST DAILY MEAN	23	Feb 9	189	Feb 14	1510	Mar 1 1983
LOWEST DAILY MEAN	.04	Oct 3	.04	Oct 3	.00	Oct 1 1912
ANNUAL SEVEN-DAY MINIMUM	.06	Aug 30	.06	Aug 22	.00	Oct 1 1912
INSTANTANEOUS PEAK FLOW			354	Feb 23	2250	Jan 24 1983
INSTANTANEOUS PEAK STAGE			5.46	Feb 23	10.44	Feb 19 1986
ANNUAL RUNOFF (AC-FT)	1250		2610		3900	
10 PERCENT EXCEEDS	5.1		5.5		7.0	
50 PERCENT EXCEEDS	.43		.36		.27	
90 PERCENT EXCEEDS	.07		.06		.00	

11176325 ARROYO MOCHO AT HOPYARD ROAD, AT PLEASANTON, CA

LOCATION.—Lat 37°40'49", long 121°54'10", in Alameda County, Hydrologic Unit 18050004, at Hopyard Road bridge over Arroyo Mocho in Pleasonton City limits.

DRAINAGE AREA.—170 mi^2.

PERIOD OF RECORD.—October 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 414 mg/L1, Mar. 8, 2000; minimum sampled, 246 mg/L, Jan. 25, 2000.
SEDIMENT LOAD (storm season only): Maximum sampled, 184 tons, Jan. 25, 2000; minimum sampled, 140 tons, Mar. 8, 2000.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 414 mg/L, Mar. 8; minimum sampled, 246 mg/L, Jan. 25.
SEDIMENT LOAD (storm season only): Maximum sampled, 184 tons, Jan. 25; minimum sampled, 140 tons, Mar. 8.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
JAN										
25...	1135	277	13.0	246	184	92	94	96	97	100
MAR										
08...	1152	125	11.0	414	140	98	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAR								
08...	1140	1	125	11.0	2	3	7	24
08...	1145	1	125	11.0	--	--	--	13
08...	1150	1	125	11.0	--	2	16	75
08...	1155	1	125	11.0	--	1	3	22
08...	1200	1	125	11.0	1	2	19	58
MAY								
17...	1455	1	--	21.0	--	--	2	8
17...	1457	1	--	21.0	--	--	2	12
17...	1459	1	--	21.0	--	--	3	27
17...	1501	1	--	21.0	--	2	13	52
17...	1503	1	--	21.0	2	6	25	77

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)	BED MAT. SIEVE DIAM. % FINER THAN 128 MM (80175)
MAR								
08...	37	47	57	67	99	100	--	--
08...	24	27	30	34	36	41	65	100
08...	85	87	89	99	100	--	--	--
08...	37	43	50	59	68	88	100	--
08...	76	81	88	97	98	100	--	--
MAY								
17...	15	19	23	26	34	44	100	--
17...	20	29	42	62	68	79	100	--
17...	40	51	68	86	97	100	--	--
17...	79	84	95	100	--	--	--	--
17...	83	83	84	88	91	100	--	--

11176325 ARROYO MOCHO AT HOPYARD ROAD, AT PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
25...	1305	1000	1100	.250	0	1220	1350	60	1.0
MAR									
08...	1015	1000	1100	.250	0	0955	1035	60	2.0
08...	1050	1000	1100	.250	0	1035	1105	60	2.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
JAN								
25...	1	18	18	7.0	277	13.0	1.05	38
MAR								
08...	2	22	22	1.0	125	11.0	.19	8.1
08...	2	22	22	1.0	125	11.0	.18	8.1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
JAN								
25...	1	16	42	66	85	96	99	100
MAR								
08...	2	67	89	93	96	100	--	--
08...	2	58	84	91	95	100	--	--

11176400 ARROYO VALLE BELOW LANG CANYON, NEAR LIVERMORE, CA

LOCATION.—Lat 37°33'41", long 121°40'58", in NE 1/4 NE 1/4 sec.30, T.4 S., R.3 E., Alameda County, Hydrologic Unit 18050004, on left bank, 100 ft upstream from small left-bank tributary, 1.2 mi downstream from Lang Canyon, and 9.5 mi southeast of Livermore.

DRAINAGE AREA.—130 mi^2.

PERIOD OF RECORD.—October 1963 to current year. Prior to October 1974, published as "above Lang Canyon, near Livermore." SEDIMENT DATA: Water years 1963 and 1965.

GAGE.—Water-stage recorder. Concrete control since June 19, 1975. Elevation of gage is 750 ft above sea level, from topographic map. Prior to June 19, 1975, at site 1.4 mi upstream at different datum.

REMARKS.—Records good except for flows below 5 ft^3/s, which are poor. No regulation or diversion upstream from station. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,790 ft^3/s, Feb. 17, 1986, gage height, 7.36 ft, from rating curve extended above 1,000 ft^3/s on basis of slope-area measurements at gage heights 4.13, 5.40, and 7.36 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2215	3,560	4.25	Feb. 23	0830	1,760	3.15

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.34	.74	9.3	239	8.7	4.6	1.3	.00	.00	.00
2	.00	.00	.34	.74	8.8	195	8.6	5.3	1.2	.00	.00	.00
3	.00	.00	.34	.74	7.4	167	7.9	5.6	1.2	.00	.00	.00
4	.00	.00	.34	.74	6.6	138	6.9	5.3	1.1	.00	.00	.00
5	.00	.00	.34	.73	6.6	156	6.6	5.0	1.1	.00	.00	.00
6	.00	.00	.28	.52	6.6	144	6.6	5.6	1.0	.00	.00	.00
7	.00	.00	.20	.52	6.6	115	6.4	5.8	.97	.00	.00	.00
8	.00	.07	.20	.52	5.8	144	5.0	6.7	1.4	.00	.00	.00
9	.00	.20	.35	.52	4.7	212	5.6	7.6	1.6	.00	.00	.00
10	.00	.13	.52	.52	5.4	194	5.6	6.7	1.7	.00	.00	.00
11	.00	.08	.46	.76	13	161	4.9	5.9	1.4	.00	.00	.00
12	.00	.00	.34	1.4	363	135	4.9	5.6	1.3	.00	.00	.00
13	.00	.00	.34	1.5	1000	109	4.6	5.3	1.1	.00	.00	.00
14	.00	.00	.34	1.5	2030	90	4.6	5.2	.86	.00	.00	.00
15	.00	.02	.52	1.3	508	73	5.1	5.8	.67	.00	.00	.00
16	.00	.23	.74	3.8	213	61	5.6	6.7	.50	.00	.00	.00
17	.00	.52	.74	3.3	140	53	14	6.4	.40	.00	.00	.00
18	.00	.52	.74	5.2	99	49	23	5.5	.37	.00	.00	.00
19	.00	.70	.70	8.2	77	41	15	4.8	.40	.00	.00	.00
20	.00	1.3	.52	5.4	64	35	10	4.3	.40	.00	.00	.00
21	.00	.87	.52	3.7	77	28	8.2	3.8	.35	.00	.00	.00
22	.00	.61	.52	2.4	95	25	7.8	3.4	.23	.00	.00	.00
23	.00	.51	.52	24	941	23	7.2	3.0	.18	.00	.00	.00
24	.00	.48	.52	272	361	20	6.2	2.9	.21	.00	.00	.00
25	.00	.34	.52	228	205	16	5.8	2.7	.20	.00	.00	.00
26	.00	.34	.52	67	152	15	5.6	2.4	.13	.00	.00	.00
27	.00	.34	.52	34	365	15	5.6	2.2	.06	.00	.00	.00
28	.00	.34	.52	21	333	13	5.2	2.0	.00	.00	.00	.00
29	.00	.34	.60	14	260	11	5.6	1.7	.00	.00	.00	.00
30	.00	.34	.52	10	---	12	5.1	1.5	.00	.00	.00	.00
31	.00	---	.63	10	---	10	---	1.5	---	.00	.00	---
TOTAL	0.00	8.28	14.60	724.75	7363.8	2699	221.9	140.8	21.33	0.00	0.00	0.00
MEAN	.000	.28	.47	23.4	254	87.1	7.40	4.54	.71	.000	.000	.000
MAX	.00	1.3	.74	272	2030	239	23	7.6	1.7	.00	.00	.00
MIN	.00	.00	.20	.52	4.7	10	4.6	1.5	.00	.00	.00	.00
AC-FT	.00	16	29	1440	14610	5350	440	279	42	.00	.00	.00

11176400 ARROYO VALLE BELOW LANG CANYON, NEAR LIVERMORE, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.24	7.08	32.4	120	159	103	39.2	9.56	3.01	.76	.19	.11
MAX	3.12	79.2	216	588	986	625	322	71.5	18.9	7.43	3.67	2.00
(WY)	1984	1983	1984	1997	1998	1983	1982	1983	1998	1983	1983	1983
MIN	.000	.000	.000	.000	.24	.82	.14	.001	.000	.000	.000	.000
(WY)	1965	1977	1990	1991	1991	1977	1977	1977	1976	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	6601.85		11194.46			
ANNUAL MEAN	18.1		30.6		39.0	
HIGHEST ANNUAL MEAN					174	1983
LOWEST ANNUAL MEAN					.24	1977
HIGHEST DAILY MEAN	857	Feb 9	2030	Feb 14	4920	Feb 3 1998
LOWEST DAILY MEAN	.00	Jul 16	.00	Oct 1	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 1	.00	Oct 1	.00	Oct 1 1963
INSTANTANEOUS PEAK FLOW			3560	Feb 13	8790	Feb 17 1986
INSTANTANEOUS PEAK STAGE			4.25	Feb 13	7.36	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	13090		22200		28250	
10 PERCENT EXCEEDS	40		62		60	
50 PERCENT EXCEEDS	1.9		.52		1.4	
90 PERCENT EXCEEDS	.00		.00		.00	

11176500 ARROYO VALLE NEAR LIVERMORE, CA

LOCATION.—Lat 37°37'24", long 121°45'28", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank, 900 ft downstream from highway bridge, 1.1 mi upstream from Dry Creek, 1.3 mi downstream from Del Valle Dam, 4.1 mi south of Livermore, and 6.9 mi southeast of Pleasanton.

DRAINAGE AREA.—147 mi^2.

PERIOD OF RECORD.—January 1912 to September 1930, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as Arroyo del Valle near Livermore, 1912–29.
SEDIMENT DATA: Water years 1966 and 1967.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 510.44 ft above sea level. Prior to November 1914, at site 900 ft upstream at different datum. Nov. 1, 1914, to Sept. 30, 1930, at site 300 ft upstream at different datum.

REMARKS.—Records poor. Flow regulated by Del Valle Reservoir 1.3 mi upstream beginning in September 1968, capacity, 77,100 acre-ft. Water from Sacramento–San Joaquin Delta imported through South Bay Aqueduct can be pumped into Del Valle Reservoir for storage and later released into the channel above or below the gage for downstream percolation or returned to the South Bay Aqueduct. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,200 ft^3/s, Apr. 2, 1958, gage height, 10.91 ft; no flow at times. Maximum discharge since construction of Del Valle Dam in 1968, 2,980 ft^3/s, Feb. 4, 1998, gage height, 9.17 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 23, 1955, reached a stage of 13.9 ft from floodmarks, discharge, 18,200 ft^3/s, on basis of contracted-opening and slope-area measurement of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.19	.14	.55	.11	.50	5.4	.15	.12	.04	.04	.18
2	.22	.19	.14	.55	.09	2.5	5.2	.17	.12	.05	.04	.22
3	.24	.22	.12	.55	.11	8.4	4.5	.18	.13	.05	.04	.19
4	.23	.22	.14	.45	.14	9.0	3.6	.19	.13	.05	.04	.20
5	.24	.22	.17	.26	.12	11	3.7	.21	.13	.05	.04	.21
6	.24	.23	.18	.34	.12	9.0	5.2	.23	.13	.06	.05	.19
7	.23	.27	.19	.32	.11	8.8	5.0	.29	.13	.07	.05	.18
8	.22	.32	.17	.34	.11	19	.91	.28	.17	.07	.06	.17
9	.19	.21	.22	.37	.10	39	.88	.22	.15	.06	.07	.16
10	.16	.19	.22	.42	.13	49	.83	.24	.13	.06	.06	.17
11	.18	.20	.20	.40	.59	54	.69	.27	.12	.06	.07	.16
12	.18	.21	.22	.28	.99	54	.64	.26	.12	.05	.06	.18
13	.18	.19	.27	.23	1.5	38	.69	.26	.12	.05	.05	.17
14	.19	.17	.27	.23	2.6	38	2.3	.27	.10	.05	.05	.17
15	.19	.18	.29	.27	.59	38	5.1	.30	.09	.05	.05	.21
16	.18	.19	.30	.73	4.8	28	4.9	.29	.08	.05	.05	.25
17	.18	.21	.36	.58	10	20	5.2	.26	.06	.06	.05	.24
18	.21	.20	.36	1.2	9.9	20	3.1	.22	.06	.06	.04	.23
19	.20	.22	.36	.80	9.9	20	.14	.21	.06	.05	.05	.21
20	.21	.23	.36	.74	11	15	.10	.18	.06	.05	.06	.21
21	.21	.22	.42	.66	10	9.9	.09	.13	.05	.05	.05	.22
22	.20	.20	.48	.72	11	9.9	.08	.13	.05	.05	.05	.27
23	.23	.16	.52	.96	12	7.8	.07	.11	.05	.05	.06	.27
24	.25	.09	.52	3.0	169	5.3	.07	.10	.05	.04	.08	.29
25	.25	.09	.61	.80	167	5.3	.06	.11	.05	.04	.07	.25
26	.25	.10	.63	.29	1.2	5.5	.07	.13	.05	.04	.07	.18
27	.22	.10	.72	.20	167	5.5	.07	.12	.04	.05	.08	.12
28	.26	.12	.53	.16	304	5.5	.07	.12	.04	.05	.06	.13
29	.22	.13	.32	.15	190	5.3	.09	.12	.04	.05	.09	.14
30	.21	.17	.36	.15	---	5.4	.14	.12	.04	.05	.12	.13
31	.21	---	.54	.15	---	5.3	---	.12	---	.05	.13	---
TOTAL	6.57	5.64	10.33	16.85	1084.21	551.90	58.89	5.99	2.67	1.61	1.88	5.90
MEAN	.21	.19	.33	.54	37.4	17.8	1.96	.19	.089	.052	.061	.20
MAX	.26	.32	.72	3.0	304	54	5.4	.30	.17	.07	.13	.29
MIN	.16	.09	.12	.15	.09	.50	.06	.10	.04	.04	.04	.12
AC-FT	13	11	20	33	2150	1090	117	12	5.3	3.2	3.7	12

11176500 ARROYO VALLE NEAR LIVERMORE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1968, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.016	2.63	18.0	87.6	146	51.4	47.2	7.37	1.83	.32	.089	.021
MAX	.15	69.2	125	851	522	280	620	57.8	9.47	2.28	.83	.24
(WY)	1967	1927	1965	1914	1915	1958	1958	1915	1967	1967	1958	1958
MIN	.000	.000	.000	.000	.000	.000	.000	.094	.000	.000	.000	.000
(WY)	1914	1914	1918	1918	1920	1924	1924	1924	1918	1914	1913	1913

SUMMARY STATISTICS	WATER YEARS 1912 - 1968	
ANNUAL MEAN	29.6	
HIGHEST ANNUAL MEAN	118	1914
LOWEST ANNUAL MEAN	.008	1924
HIGHEST DAILY MEAN	5930	Jan 25 1914
LOWEST DAILY MEAN	.00	Sep 22 1912
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 22 1912
INSTANTANEOUS PEAK FLOW	12200	Apr 2 1958
INSTANTANEOUS PEAK STAGE	10.91	Apr 2 1958
ANNUAL RUNOFF (AC-FT)	21460	
10 PERCENT EXCEEDS	35	
50 PERCENT EXCEEDS	.20	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.28	7.77	7.17	48.1	112	69.2	20.0	5.54	8.27	12.5	11.3	9.30
MAX	43.2	39.4	35.9	544	928	653	334	30.8	51.7	46.0	54.3	48.1
(WY)	1971	1981	1981	1997	1998	1983	1982	1970	1980	1980	1981	1981
MIN	.17	.19	.33	.35	.30	.36	.22	.19	.082	.028	.043	.14
(WY)	1987	2000	2000	1990	1991	1994	1990	2000	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	107.18		1752.44			
ANNUAL MEAN	.29		4.79		26.1	
HIGHEST ANNUAL MEAN					131	1983
LOWEST ANNUAL MEAN					.39	1999
HIGHEST DAILY MEAN	4.3	Feb 9	304	Feb 28	2370	Mar 3 1983
LOWEST DAILY MEAN	.02	Jul 11	.04	Jun 27	.00	Jun 25 1983
ANNUAL SEVEN-DAY MINIMUM	.02	Jul 10	.04	Jun 25	.02	Jul 10 1999
INSTANTANEOUS PEAK FLOW			309	Feb 24	2980	Feb 4 1998
INSTANTANEOUS PEAK STAGE			5.00	Feb 24	9.17	Feb 4 1998
ANNUAL RUNOFF (AC-FT)	213		3480		18920	
10 PERCENT EXCEEDS	.60		5.4		33	
50 PERCENT EXCEEDS	.21		.19		1.1	
90 PERCENT EXCEEDS	.03		.05		.21	

11176600 ARROYO VALLE AT PLEASANTON, CA

LOCATION.—Lat 37°40'02", long 121°52'54", in Alameda County, Hydrologic Unit 18050004, Valle de San Jose Grant, on right bank, 400 ft upstream from Hopyard Road bridge, 0.6 mi northwest of Pleasanton City Hall, and 10 mi below Del Valle Reservoir.

DRAINAGE AREA.—171 mi^2.

PERIOD OF RECORD.—October 1957 to December 1985, October 1999 to May 2000 (storm season only).
CHEMICAL ANALYSES: Water years 1975, 1978–1983.
SPECIFIC CONDUCTANCE: Water years 1975–1983.
WATER TEMPERATURE: Water years 1975–1978, October 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: December 1974 to September 1983.
WATER TEMPERATURE: December 1974 to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 2,080 microsiemens, May 17, 1983; minimum recorded, 82 microsiemens, Mar. 2, 1976.
WATER TEMPERATURE: Maximum recorded, 30.5°C, Aug. 6, 8, 1978; minimum recorded, 3.0°C, Jan. 1, 1975.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 85 mg/L, Jan. 25; minimum sampled, 49 mg/L, Jan 25.
SEDIMENT LOAD (storm season only): Maximum sampled, 11 tons, Jan. 25; minimum sampled, 6.5 tons, Jan. 25.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	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)
JAN									
25...	1715	49	12.0	67	8.9	68	77	92	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
MAR							
23...	1550	1	16	16.0	1	2	6
23...	1555	1	16	16.0	--	1	2
23...	1600	1	16	16.0	--	--	--
23...	1605	1	16	16.0	--	--	--
23...	1610	1	16	16.0	--	--	--

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)	BED MAT. SIEVE DIAM. % FINER THAN 128 MM (80175)
MAR							
23...	15	29	43	65	94	100	--
23...	4	12	20	34	75	100	--
23...	--	--	--	5	10	21	100
23...	--	--	--	--	--	43	100
23...	--	--	--	--	--	100	--

11176710 ARROYO DE LA LAGUNA AT BERNAL AVENUE, AT PLEASANTON, CA

LOCATION.—Lat 37°39'19", long 121°54'15", in Alameda County, Hydrologic Unit 18050004, located 100 ft upstream of Bernal Avenue bridge over Arroyo de la Laguna.

DRAINAGE AREA.—396 mi^2.

PERIOD OF RECORD.—October 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 34 mg/L, Mar. 16, 2000; minimum sampled, 30 mg/L, Mar. 16, 2000.
SEDIMENT LOAD (storm season only): Maximum sampled, 9.5 tons, Mar. 16, 2000; minimum sampled, 8.4 tons, Mar. 16, 2000.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum sampled, 34 mg/L, Mar. 16; minimum sampled, 30 mg/L, Mar. 16.
SEDIMENT LOAD (storm season only): Maximum sampled, 9.5 tons, Mar. 16; minimum sampled, 8.4 tons, Mar. 16.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)
MAR								
16...	1400	104	16.0	32	9.0	68	79	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAR								
16...	1420	1	104	16.0	--	--	--	4
16...	1425	1	104	16.0	--	1	1	6
16...	1430	1	104	16.0	--	--	--	8
16...	1435	1	104	16.0	--	--	--	6
16...	1440	1	104	16.0	1	2	3	13
MAY								
17...	1145	1	--	17.0	--	1	2	14
17...	1150	1	--	17.0	--	--	--	7
17...	1155	1	--	17.0	--	--	2	11
17...	1200	1	--	17.0	--	--	1	9
17...	1205	1	--	17.0	--	1	4	14

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)	BED MAT. SIEVE DIAM. % FINER THAN 128 MM (80175)
MAR								
16...	16	24	30	40	56	82	100	--
16...	16	21	27	34	45	76	100	--
16...	20	26	32	40	57	86	100	--
16...	15	17	20	24	31	53	78	100
16...	26	32	37	44	62	84	100	--
MAY								
17...	29	38	46	59	75	96	100	--
17...	19	23	30	42	66	82	100	--
17...	35	44	47	52	61	83	100	--
17...	17	23	29	39	57	82	100	--
17...	22	27	33	43	59	75	100	--

11176710 ARROYO DE LA LAGUNA AT BERNAL AVENUE, AT PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)
MAR											
16...	1125	1000	1120	.250	0	1110	1140	60	1.5	1	21

DATE	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
MAR											
16...	21	1.50	104	16.0	.04	1.4	42	82	91	94	100

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA

LOCATION.—Lat 37°36'55", long 121°52'50", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank, 0.3 mi upstream from small left-bank tributary, 0.8 mi downstream from highway bridge, and 3.2 mi south of Pleasanton.

DRAINAGE AREA.—405 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1912 to September 1930, October 1969 to September 1983, October 1987 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 248.40 ft above sea level. January 1912 to September 1917, at site 3.0 mi upstream at different datum. October 1917 to September 1930, at site 0.8 mi downstream at different datum. October 1969 to September 1983, at datum 3.00 ft higher.

REMARKS.—Records fair. Flow partly regulated by Del Valle Reservoir 15 mi upstream, beginning in September 1968, capacity, 77,100 acre-ft. Water imported from Sacramento–San Joaquin Delta (see REMARKS for station 11176500). See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,400 ft^3/s, Jan. 5, 1982, gage height, 22.61 ft, present datum; no flow at times.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	24	42	5.0	50	225	50	37	23	16	20	23
2	18	28	23	6.1	48	184	50	35	23	18	18	25
3	19	23	20	6.1	107	141	52	34	24	18	16	20
4	19	22	31	17	73	105	52	32	26	19	15	17
5	17	21	31	17	65	595	51	31	27	19	13	17
6	17	23	25	13	55	174	53	33	26	21	10	18
7	14	103	30	12	49	116	53	66	26	20	11	20
8	14	207	25	13	49	601	51	100	66	19	14	18
9	14	40	54	16	44	484	45	44	29	20	13	19
10	12	23	39	16	116	224	53	37	22	20	11	19
11	11	22	25	127	532	166	55	38	20	22	10	20
12	12	23	26	79	685	146	52	35	19	20	10	20
13	12	23	26	24	1470	130	143	35	20	17	8.4	19
14	12	22	28	19	2110	110	51	42	18	16	7.9	19
15	13	22	27	21	405	103	42	91	14	15	10	21
16	13	42	27	340	216	99	42	70	17	17	11	20
17	12	64	27	70	160	95	135	43	18	20	9.0	20
18	12	27	28	431	127	80	111	35	22	21	8.3	19
19	14	120	30	104	116	77	49	24	24	20	9.0	18
20	12	67	26	63	143	74	46	24	25	20	9.4	19
21	12	36	19	45	135	69	45	25	23	21	11	19
22	12	18	19	53	344	65	47	24	20	23	17	22
23	13	9.2	21	518	1580	63	42	24	22	25	18	24
24	13	6.8	22	1750	337	61	40	28	24	25	16	20
25	12	16	22	586	399	59	40	28	23	24	16	18
26	16	21	23	148	211	56	37	28	22	23	14	18
27	18	23	21	85	797	57	33	30	20	24	14	18
28	93	28	19	61	481	58	33	29	16	23	15	16
29	32	23	9.7	48	481	56	36	29	13	22	13	18
30	23	44	11	96	---	54	36	26	13	23	19	15
31	24	---	6.2	61	---	51	---	24	---	22	16	---
TOTAL	550	1171.0	782.9	4850.2	11385	4578	1625	1181	685	633	403.0	579
MEAN	17.7	39.0	25.3	156	393	148	54.2	38.1	22.8	20.4	13.0	19.3
MAX	93	207	54	1750	2110	601	143	100	66	25	20	25
MIN	11	6.8	6.2	5.0	44	51	33	24	13	15	7.9	15
AC-FT	1090	2320	1550	9620	22580	9080	3220	2340	1360	1260	799	1150

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1930, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.43	1.96	15.9	174	234	59.5	18.5	8.67	3.52	2.06	1.36	1.19
MAX	9.90	13.4	105	1349	728	207	59.8	74.0	13.9	13.1	8.76	6.98
(WY)	1917	1927	1914	1914	1915	1919	1926	1915	1916	1916	1916	1916
MIN	.000	.000	.000	.000	.84	.53	.000	.000	.000	.000	.000	.000
(WY)	1914	1914	1919	1925	1924	1924	1929	1924	1918	1913	1913	1913

SUMMARY STATISTICS	WATER YEARS 1912 - 1930	
ANNUAL MEAN	42.5	
HIGHEST ANNUAL MEAN	180	1914
LOWEST ANNUAL MEAN	.69	1913
HIGHEST DAILY MEAN	9810	Jan 25 1914
LOWEST DAILY MEAN	.00	Jun 30 1913
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 30 1913
ANNUAL RUNOFF (AC-FT)	30800	
10 PERCENT EXCEEDS	33	
50 PERCENT EXCEEDS	.90	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.1	37.4	57.6	202	278	195	71.7	28.2	19.8	19.5	17.9	16.9
MAX	42.3	92.3	185	991	2138	1510	517	116	59.9	40.6	43.5	41.1
(WY)	1971	1983	1997	1997	1998	1983	1982	1983	1998	1975	1981	1981
MIN	3.34	2.59	6.46	6.07	12.7	9.39	6.49	4.05	2.88	1.80	2.31	2.28
(WY)	1991	1993	1990	1991	1977	1988	1990	1992	1991	1992	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	20389.2		28423.1			
ANNUAL MEAN	55.9		77.7		79.4	
HIGHEST ANNUAL MEAN					339	1983
LOWEST ANNUAL MEAN					11.6	1977
HIGHEST DAILY MEAN	1530	Feb 9	2110	Feb 14	5560	Feb 3 1998
LOWEST DAILY MEAN	6.2	Dec 31	5.0	Jan 1	.33	Jul 11 1990
ANNUAL SEVEN-DAY MINIMUM	12	Sep 11	8.7	Dec 29	1.1	Jul 6 1992
INSTANTANEOUS PEAK FLOW			4140	Feb 13	11400	Jan 5 1982
INSTANTANEOUS PEAK STAGE			13.13	Feb 13	22.61	Jan 5 1982
ANNUAL RUNOFF (AC-FT)	40440		56380		57490	
10 PERCENT EXCEEDS	105		132		106	
50 PERCENT EXCEEDS	27		24		21	
90 PERCENT EXCEEDS	12		13		4.9	

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1979–1983, October 1999 to May 2000 (storm season only).
CHEMICAL ANALYSES: Water years 1979–1983.
SPECIFIC CONDUCTANCE: Water years 1979–1983.
WATER TEMPERATURE: December 17, 1999 to May 2000 (storm season only).
SEDIMENT DATA: October 1999 to May 2000 (storm season only).

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: August 1979 to September 1983.
WATER TEMPERATURE: December 17, 1999 to May 2000 (storm season only).
SUSPENDED-SEDIMENT DISCHARGE: October 1999 to May 2000 (storm season only).

REMARKS.—Zero bed-load discharge observed for flows less than 70.0 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.—
WATER TEMPERATURE (continuous-storm season only): Maximum recorded, 23.0°C, May 2, 2000; minimum recorded, 5.0°C, Dec. 31, 1999.
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 1,860 mg/L, Feb. 14, 2000; minimum daily mean, 8 mg/L, Dec. 28–29, 1999 and Jan. 9–10, 2000.
SEDIMENT LOAD (storm season only): Maximum daily, 12,400 tons, Feb. 14, 2000; minimum daily, 0.16 ton, Dec. 31, 1999.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE (storm season only): Maximum recorded, 23.0°C, May 2; minimum recorded, 5.0°C, Dec. 31.
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 1,860 mg/L, Feb. 14; minimum daily mean, 8 mg/L, Dec. 28–29 and Jan. 9–10.
SEDIMENT LOAD (storm season only): Maximum daily, 12,400 tons, Feb. 14; minimum daily, 0.14 ton, Jan. 1.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC						
17...	1315	27	8.5	22	1.6	82
JAN						
14...	1450	18	11.0	35	1.7	55
26...	1640	130	12.0	148	52	94
29...	1540	46	11.5	174	22	86
MAR						
07...	1425	101	11.5	48	13	92

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
DEC								
17...	1400	1	27	8.5	3	8	16	23
17...	1402	1	27	8.5	5	11	20	28
17...	1404	1	27	8.5	3	6	10	17
17...	1406	1	27	8.5	--	1	3	8
17...	1408	1	27	8.5	--	1	3	11
17...	1410	1	28	8.5	--	--	1	3
17...	1412	1	28	8.5	--	--	2	13
17...	1414	1	28	8.5	--	1	2	18
17...	1416	1	28	8.5	--	1	4	20
17...	1418	1	28	8.5	1	3	7	18
17...	1420	1	28	8.5	1	3	7	14
17...	1422	1	28	8.5	2	5	12	21
MAR								
07...	1433	1	101	11.5	--	--	2	8
07...	1436	1	101	11.5	--	--	2	13
07...	1439	1	101	11.5	--	--	2	8
07...	1440	1	101	11.5	--	--	1	11
07...	1442	1	101	11.5	--	--	1	11

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
DEC							
17...	27	34	61	100	--	--	--
17...	42	56	72	84	97	100	--
17...	28	48	64	76	86	100	--
17...	17	27	40	54	72	100	--
17...	22	31	42	56	72	100	--
17...	7	10	15	22	31	51	100
17...	24	33	43	62	86	100	--
17...	35	39	47	65	92	100	--
17...	31	35	42	54	78	100	--
17...	27	33	45	61	83	100	--
17...	20	29	46	67	90	100	--
17...	28	39	58	78	99	100	--
MAR							
07...	32	56	81	94	99	100	--
07...	25	37	52	72	93	100	--
07...	17	26	42	60	79	100	--
07...	26	36	45	57	83	100	--
07...	30	37	52	71	96	100	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
MAR									
07...	1305	1000	1120	.250	0	1250	1320	60	2.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
MAR								
07...	2	22	22	5.00	103	11.5	.23	10

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
MAR								
07...	1	22	43	66	83	91	98	100

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	9.0	7.0	14.0	11.5	14.0	10.5
2	---	---	---	---	---	---	9.0	6.0	14.0	12.5	13.0	12.0
3	---	---	---	---	---	---	9.0	5.5	13.0	12.0	14.5	11.0
4	---	---	---	---	---	---	8.5	6.0	12.0	11.0	14.5	11.0
5	---	---	---	---	---	---	11.0	8.0	13.0	11.5	14.0	11.0
6	---	---	---	---	---	---	9.5	7.0	13.0	11.5	12.5	11.0
7	---	---	---	---	---	---	9.5	7.0	13.0	11.5	11.5	11.0
8	---	---	---	---	---	---	10.5	7.0	14.0	12.0	11.0	9.5
9	---	---	---	---	---	---	11.0	8.5	14.0	12.5	12.0	9.5
10	---	---	---	---	---	---	11.5	9.5	13.0	12.5	14.0	10.0
11	---	---	---	---	---	---	13.0	10.5	12.5	10.0	14.5	12.5
12	---	---	---	---	---	---	12.0	10.5	11.5	9.5	15.5	12.0
13	---	---	---	---	---	---	11.5	9.0	13.5	11.0	15.5	12.0
14	---	---	---	---	---	---	11.5	9.5	13.5	12.5	16.5	13.0
15	---	---	---	---	---	---	11.5	10.5	13.0	11.0	17.0	13.0
16	---	---	---	---	---	---	12.0	11.0	13.0	12.0	17.0	14.0
17	---	---	---	---	---	---	11.0	10.5	13.0	10.5	16.0	13.0
18	---	---	---	---	10.0	8.0	12.0	10.5	13.0	10.5	17.0	13.0
19	---	---	---	---	10.0	8.0	14.0	11.5	13.5	11.0	17.0	14.5
20	---	---	---	---	11.5	9.0	13.5	12.5	14.0	12.5	15.5	12.5
21	---	---	---	---	11.0	9.0	13.0	11.0	13.5	12.0	15.5	12.5
22	---	---	---	---	11.0	8.5	14.0	12.0	13.5	10.0	16.5	13.0
23	---	---	---	---	10.0	7.5	13.0	12.0	11.0	9.0	17.0	14.0
24	---	---	---	---	9.5	7.0	13.5	13.0	10.5	9.0	16.5	13.0
25	---	---	---	---	9.5	7.0	13.5	12.5	12.0	10.5	16.5	13.5
26	---	---	---	---	9.0	6.5	12.5	11.0	13.5	11.5	17.0	13.5
27	---	---	---	---	9.0	6.5	12.5	11.0	13.5	11.5	16.0	13.5
28	---	---	---	---	9.0	6.5	12.0	10.0	12.5	11.0	16.0	12.5
29	---	---	---	---	9.5	6.0	12.0	10.0	12.5	11.0	16.5	13.0
30	---	---	---	---	9.0	5.5	12.0	11.5	---	---	17.0	14.0
31	---	---	---	---	8.5	5.0	12.0	11.0	---	---	17.5	14.5
MONTH	---	---	---	---	---	---	14.0	5.5	14.0	9.0	17.5	9.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.0	14.5	21.0	17.0	---	---	---	---	---	---	---	---
2	19.5	16.0	23.0	18.0	---	---	---	---	---	---	---	---
3	20.0	17.0	22.0	18.0	---	---	---	---	---	---	---	---
4	19.5	17.0	22.0	18.5	---	---	---	---	---	---	---	---
5	19.0	16.5	20.5	17.5	---	---	---	---	---	---	---	---
6	19.0	15.5	18.0	16.5	---	---	---	---	---	---	---	---
7	19.0	15.0	17.5	15.5	---	---	---	---	---	---	---	---
8	19.5	16.5	19.5	16.5	---	---	---	---	---	---	---	---
9	19.5	16.0	21.0	17.0	---	---	---	---	---	---	---	---
10	19.5	15.5	19.0	16.5	---	---	---	---	---	---	---	---
11	19.5	16.5	19.0	14.5	---	---	---	---	---	---	---	---
12	21.0	18.0	19.5	15.5	---	---	---	---	---	---	---	---
13	19.5	17.0	19.0	16.5	---	---	---	---	---	---	---	---
14	18.5	16.5	16.5	15.5	---	---	---	---	---	---	---	---
15	18.0	16.5	17.0	15.5	---	---	---	---	---	---	---	---
16	16.5	15.5	17.0	15.0	---	---	---	---	---	---	---	---
17	16.0	14.5	---	---	---	---	---	---	---	---	---	---
18	17.0	13.0	---	---	---	---	---	---	---	---	---	---
19	17.5	14.0	---	---	---	---	---	---	---	---	---	---
20	19.0	15.5	---	---	---	---	---	---	---	---	---	---
21	20.0	16.5	---	---	---	---	---	---	---	---	---	---
22	18.5	16.0	---	---	---	---	---	---	---	---	---	---
23	19.0	15.0	---	---	---	---	---	---	---	---	---	---
24	19.5	15.5	---	---	---	---	---	---	---	---	---	---
25	20.0	16.0	---	---	---	---	---	---	---	---	---	---
26	21.0	17.0	---	---	---	---	---	---	---	---	---	---
27	21.0	17.0	---	---	---	---	---	---	---	---	---	---
28	19.5	16.0	---	---	---	---	---	---	---	---	---	---
29	19.5	15.0	---	---	---	---	---	---	---	---	---	---
30	20.5	16.0	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	21.0	13.0	---	---	---	---	---	---	---	---	---	---

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	15	20	.76	24	51	3.3	42	53	6.5
2	18	20	.99	28	52	3.9	23	42	2.6
3	19	20	1.1	23	53	3.3	20	41	2.2
4	19	21	1.1	22	49	2.9	31	40	3.3
5	17	21	.95	21	47	2.6	31	40	3.3
6	17	21	.96	23	45	2.8	25	39	2.7
7	14	21	.83	103	135	110	30	39	3.1
8	14	22	.79	207	317	215	25	38	2.6
9	14	22	.80	40	77	9.4	54	52	8.2
10	12	22	.72	23	24	1.5	39	36	3.9
11	11	22	.66	22	24	1.4	25	28	1.9
12	12	22	.72	23	32	2.1	26	25	1.8
13	12	23	.74	23	42	2.6	26	24	1.7
14	12	23	.73	22	40	2.3	28	33	2.5
15	13	23	.79	22	37	2.2	27	30	2.2
16	13	23	.80	42	63	14	27	21	1.6
17	12	24	.76	64	86	17	27	21	1.5
18	12	24	.77	27	52	4.0	28	18	1.4
19	14	24	.88	120	95	59	30	16	1.3
20	12	24	.81	67	86	17	26	15	1.0
21	12	25	.79	36	56	5.6	19	13	.71
22	12	25	.81	18	30	1.5	19	11	.57
23	13	25	.85	9.2	24	.60	21	11	.62
24	13	25	.88	6.8	24	.44	22	11	.64
25	12	26	.84	16	24	1.0	22	11	.65
26	16	26	1.1	21	24	1.4	23	11	.68
27	18	26	1.3	23	24	1.5	21	9	.53
28	93	136	51	28	25	1.8	19	8	.39
29	32	72	6.4	23	25	1.6	9.7	8	.21
30	23	52	3.3	44	52	6.6	11	9	.25
31	24	49	3.1	---	---	---	6.2	10	.16
TOTAL	550	---	87.03	1171.0	---	498.34	782.9	---	60.71
		JANUARY			FEBRUARY			MARCH	
1	5.0	10	.14	50	66	8.9	225	209	134
2	6.1	11	.18	48	60	7.8	184	161	84
3	6.1	13	.21	107	114	58	141	106	42
4	17	14	.65	73	61	14	105	53	16
5	17	18	.81	65	39	6.9	595	547	1030
6	13	14	.47	55	39	5.9	174	164	81
7	12	10	.30	49	40	5.3	116	58	18
8	13	9	.30	49	40	5.4	601	544	1160
9	16	8	.37	44	51	6.0	484	415	605
10	16	8	.35	116	95	36	224	144	89
11	127	83	73	532	226	1140	166	87	39
12	79	94	23	685	522	1520	146	53	21
13	24	52	3.4	1470	1340	9200	130	32	11
14	19	37	1.9	2110	1860	12400	110	28	8.2
15	21	33	1.9	405	257	308	103	26	7.4
16	340	219	343	216	142	84	99	26	6.9
17	70	58	11	160	87	38	95	32	8.2
18	431	234	387	127	53	18	80	32	6.8
19	104	28	8.3	116	43	14	77	28	5.9
20	63	19	3.2	143	89	47	74	25	5.0
21	45	20	2.4	135	110	43	69	22	4.2
22	53	21	3.0	344	214	950	65	22	3.9
23	518	283	576	1580	1240	7930	63	22	3.8
24	1750	777	3880	337	246	233	61	23	3.7
25	586	446	840	399	178	191	59	23	3.6
26	148	179	75	211	158	92	56	23	3.5
27	85	92	22	797	698	1820	57	20	3.0
28	61	57	9.3	481	354	461	58	17	2.6
29	48	131	17	481	374	488	56	15	2.3
30	96	157	46	---	---	---	54	17	2.5
31	61	87	15	---	---	---	51	19	2.6
TOTAL	4850.2	---	6345.18	11385	---	37131.2	4578	---	3414.1

11177000 ARROYO DE LA LAGUNA NEAR PLEASANTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	50	22	2.9
2	50	22	3.0
3	52	23	3.2
4	52	24	3.3
5	51	24	3.4
6	53	25	3.6
7	53	26	3.7
8	51	28	3.8
9	45	31	3.7
10	53	34	4.8
11	55	37	5.4
12	52	40	5.6
13	143	109	64
14	51	28	4.0
15	42	27	3.0
16	42	29	3.2
17	135	98	41
18	111	105	37
19	49	51	6.8
20	46	46	5.7
21	45	45	5.4
22	47	44	5.5
23	42	43	4.9
24	40	42	4.5
25	40	41	4.4
26	37	40	4.0
27	33	39	3.4
28	33	38	3.4
29	36	35	3.4
30	36	31	3.0
31	---	---	---
TOTAL	1625	---	253.0
PERIOD	24942.10		47789.56

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	550.00	87.03	0	87
NOVEMBER	1171.00	498.34	164	662
DECEMBER	782.90	60.71	0	61
JANUARY 2000	4850.20	6345.18	3730	10100
FEBRUARY	11385.00	37131.20	9570	46700
MARCH	4578.00	3414.10	2450	5860
APRIL	1625.00	253.00	90	343
PERIOD	24942.10	47789.56	16004	63813

11179000 ALAMEDA CREEK NEAR NILES, CA

LOCATION.—Lat 37°35'14", long 121°57'35", in NW 1/4 sec.15, T.4 S., R.1 W., Alameda County, Hydrologic Unit 18050004, on right bank, 0.3 mi downstream from railroad bridge, 1.2 mi northeast of Niles, and 8.3 mi downstream from James H. Turner Dam on San Antonio Creek.

DRAINAGE AREA.—633 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—January 1891 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as "at Niles Dam" 1891–1900 and as "at Sunolglen" 1901–21.

REVISED RECORDS.—WSP 1315-B: 1921. WSP 1515: 1951–52, 1956. WSP 1565: 1945. WDR CA-86-2: 1984(M).

GAGE.—Water-stage recorder and concrete control. Datum of gage is 85.65 ft above sea level. Prior to 1901, nonrecording gage at site 1 mi upstream at different datum. From 1901 to Sept. 30, 1914, nonrecording gage; Oct. 1, 1914, to Sept. 30, 1916, water-stage recorder at site 4.5 mi upstream at different datum; Oct. 1, 1916, to Dec. 17, 1923, water-stage recorder at site 800 ft upstream at different datum.

REMARKS.—Records good. Flow regulated since 1916 by Calaveras Reservoir, although dam not completed until 1925, usable capacity, 96,800 acre-ft, most of which is diverted for San Francisco water supply; since February 1965 by San Antonio Reservoir, capacity, 51,000 acre-ft; and since September 1968 by Del Valle Reservoir, 23 mi upstream, capacity, 77,100 acre-ft. Natural flow of stream affected by water imported from Delta–Mendota Canal beginning in 1962. Other diversions from ground-water basin for irrigation of 9,000 acres upstream from station. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 29,000 ft^3/s, Dec. 23, 1955, gage height, 14.9 ft; minimum (water years 1892–1962), no flow at times; minimum daily (water years 1963–96), 0.63 ft^3/s, Oct. 7–10, 1984.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	37	45	14	51	969	79	57	26	33	29	33
2	47	41	26	15	46	729	78	53	25	35	30	48
3	46	38	24	15	79	582	74	49	26	36	29	38
4	47	35	28	21	83	444	72	38	31	36	29	35
5	43	33	31	25	56	1350	73	38	32	33	30	33
6	43	32	30	21	55	978	72	42	e33	20	29	24
7	41	40	28	19	47	771	70	67	e32	19	29	18
8	41	215	28	19	46	1240	70	109	53	18	29	17
9	42	56	43	23	43	1480	68	55	32	20	30	16
10	41	29	44	23	85	1030	65	42	23	19	29	17
11	40	26	28	93	336	801	65	43	22	18	29	18
12	41	26	27	103	1020	640	63	39	19	29	31	17
13	41	26	28	33	1610	510	149	43	19	30	30	15
14	35	25	29	28	3350	406	73	50	e24	30	27	15
15	40	26	27	29	642	336	69	89	e20	15	24	18
16	42	26	27	278	287	292	70	75	e21	17	24	40
17	41	66	28	58	258	245	140	52	e22	19	29	40
18	41	33	27	361	174	205	146	43	e28	21	25	39
19	42	84	29	89	143	180	73	34	e28	30	27	33
20	41	76	30	58	143	162	66	33	e29	29	28	31
21	40	34	27	37	176	156	61	35	e26	28	29	30
22	42	25	26	42	191	135	62	33	e24	29	30	34
23	43	16	25	361	2400	118	62	28	24	31	34	40
24	44	15	26	1900	613	111	58	32	28	31	33	36
25	43	19	26	927	582	104	57	32	25	29	32	33
26	44	26	26	165	366	100	58	33	24	28	35	31
27	48	28	27	86	1560	96	49	37	22	29	34	32
28	101	29	25	64	1680	93	50	38	17	31	21	32
29	53	27	20	53	1460	90	54	38	21	31	15	30
30	39	34	16	85	---	87	58	34	28	33	31	15
31	37	---	15	67	---	83	---	28	---	32	31	---
TOTAL	1372	1223	866	5112	17582	14523	2204	1419	784	839	892	858
MEAN	44.3	40.8	27.9	165	606	468	73.5	45.8	26.1	27.1	28.8	28.6
MAX	101	215	45	1900	3350	1480	149	109	53	36	35	48
MIN	35	15	15	14	43	83	49	28	17	15	15	15
AC-FT	2720	2430	1720	10140	34870	28810	4370	2810	1560	1660	1770	1700

e Estimated.

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1961, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.61	21.0	101	185	322	213	156	18.9	8.19	5.46	3.26	3.14
MAX	36.5	581	1469	2578	2431	1439	2323	95.5	46.1	50.1	47.5	48.9
(WY)	1936	1951	1956	1952	1938	1938	1958	1941	1938	1935	1935	1935
MIN	.000	.000	.000	.22	.71	.17	1.08	.11	.000	.000	.000	.000
(WY)	1925	1926	1931	1949	1948	1931	1929	1934	1931	1929	1925	1925

SUMMARY STATISTICS	WATER YEARS 1925 - 1961	
ANNUAL MEAN	85.4	
HIGHEST ANNUAL MEAN	401	1952
LOWEST ANNUAL MEAN	.90	1961
HIGHEST DAILY MEAN	23900	Dec 23 1955
LOWEST DAILY MEAN	.00	Oct 1 1924
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1 1924
INSTANTANEOUS PEAK FLOW	29000	Dec 23 1955
INSTANTANEOUS PEAK STAGE	14.9	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	61830	
10 PERCENT EXCEEDS	91	
50 PERCENT EXCEEDS	2.7	
90 PERCENT EXCEEDS	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.7	58.8	107	314	512	380	141	60.9	45.9	40.6	39.3	32.7
MAX	78.6	247	434	1975	3715	2725	1163	318	154	62.9	65.9	62.1
(WY)	1992	1984	1984	1997	1998	1983	1982	1983	1973	1981	1972	1981
MIN	9.91	17.2	20.1	28.4	28.9	32.5	18.3	18.6	16.4	20.6	15.8	2.51
(WY)	1979	1996	1979	1985	1977	1977	1991	1971	1978	1974	1995	1984

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	35603		47674			
ANNUAL MEAN	97.5		130		145	
HIGHEST ANNUAL MEAN					621	1983
LOWEST ANNUAL MEAN					31.5	1977
HIGHEST DAILY MEAN	2260	Feb 9	3350	Feb 14	9770	Feb 3 1998
LOWEST DAILY MEAN	15	Nov 24	14	Jan 1	.63	Oct 7 1984
ANNUAL SEVEN-DAY MINIMUM	22	Dec 25	16	Sep 8	.66	Oct 4 1984
INSTANTANEOUS PEAK FLOW			6290	Feb 14	17900	Feb 3 1998
INSTANTANEOUS PEAK STAGE			9.09	Feb 14	14.83	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	70620		94560		105100	
10 PERCENT EXCEEDS	187		224		196	
50 PERCENT EXCEEDS	47		35		42	
90 PERCENT EXCEEDS	27		21		17	

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1906, 1952–73, 1975–93, October 1999 to September 2000 (storm season only).
CHEMICAL DATA: Water years 1906, 1952–67, 1969, 1975–79.
SPECIFIC CONDUCTANCE: Water years 1956–57, 1959–62, 1976–93.
WATER TEMPERATURE: Water years 1956–73, 1976–78, October 1999 to September 2000 (storm season only).
SEDIMENT DATA: Water years 1957–73, October 1999 to September 2000 (storm season only).

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: July 1956 to July 1957, August 1959 to September 1962, October 1975 to September 1993.
WATER TEMPERATURE: July 1956 to September 1973, October 1975 to September 1978, October 1999 to September 2000 (storm season only).
SUSPENDED-SEDIMENT DISCHARGE: October 1999 to September 2000 (storm season only).

REMARKS.—Zero bed-load discharge estimated at flows less than 100 ft^3/s.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 1,530 microsiemens, Nov. 19, 1977; minimum recorded, 122 microsiemens, Jan. 22, 1983.
WATER TEMPERATURE: Maximum daily recorded, 31.0°C, June 1, 1960; minimum daily, 2.5°C, Dec. 12, 1972.
SEDIMENT CONCENTRATION: Maximum daily, 5,340 mg/L, Apr. 3, 1958; minimum daily, no flow for many days in 1957, 1959–61.
SEDIMENT LOAD: Maximum daily, 285,000 tons, Apr. 3, 1958; minimum daily, 0 ton, many days in 1957, 1959–61.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum for period recorded, 20.0°C, Apr. 30; minimum for period recorded, 6.5°C, Dec. 15, 16, and 27.
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 892 mg/L, Feb. 14; minimum daily mean, 5 mg/L, Jan. 7, 8.
SEDIMENT LOAD (storm season only): Maximum daily, 9,190 tons, Feb. 14; minimum daily, 0.27 ton, Jan. 8.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN						
12...	1255	80	11.0	90	19	97
20...	1440	52	13.5	30	4.2	92
31...	1445	58	12.0	34	5.3	99
FEB						
18...	1345	170	12.0	32	15	94
MAR						
23...	1200	116	--	10	3.1	73
APR						
17...	1515	167	15.5	94	42	96

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
MAR							
23...	1235	1	116	--	--	3	13
23...	1240	1	116	--	--	1	6
23...	1245	1	116	--	--	2	5
23...	1250	1	116	--	1	4	9
23...	1255	1	116	--	--	--	--
MAY							
18...	1025	1	46	1	3	7	18
18...	1028	1	46	1	2	7	11
18...	1031	1	46	1	2	5	10
18...	1034	1	46	--	1	2	4
18...	1038	1	46	1	3	8	10

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
MAR							
23...	28	32	42	54	77	97	100
23...	12	19	26	36	54	86	100
23...	14	21	39	58	78	100	--
23...	16	24	40	59	83	100	--
23...	--	2	34	78	95	96	100
MAY							
18...	25	39	53	66	84	100	--
18...	20	34	50	67	94	100	--
18...	18	26	39	53	85	100	--
18...	9	21	41	74	99	100	--
18...	12	20	52	84	100	--	--

PARTICLE SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
MAR									
09...	1120	1000	1100	.25	0	1105	1130	30	5.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
MAR									
09...	1	20	20	2.0	1520	7.5	3.00	300	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
MAR								
09...	14	26	44	65	83	95	98	100

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	13.0	---	---	---	---	---	---	---
3	---	---	---	8.0	---	---	---	---	---	---	---	---
4	---	---	---	8.5	12.0	---	---	---	---	---	---	---
5	---	---	---	8.5	---	---	---	---	---	---	---	---
6	---	16.5	---	---	---	---	---	---	---	---	---	---
7	16.0	---	10.5	8.0	---	---	---	---	---	---	---	---
8	---	---	---	---	12.5	---	18.0	---	---	---	---	---
9	---	---	---	---	13.0	7.5	---	---	---	---	---	---
10	---	14.0	9.0	11.0	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	11.0	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	14.5	7.5	10.0	---	---	17.0	---	---	---	---	---
15	---	---	6.5	---	---	---	---	---	---	---	---	---
16	---	---	6.5	---	---	---	---	---	---	---	---	---
17	---	---	7.0	---	---	---	15.5	---	---	---	---	---
18	---	---	---	---	12.0	---	---	---	---	---	22.0	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	10.5	13.5	---	---	---	---	---	---	---	---
21	---	---	---	11.5	---	13.5	18.5	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	8.5	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	16.0	---	---	---	---	---	---
27	---	---	6.5	---	---	---	---	---	---	---	---	---
28	---	---	---	10.5	---	14.0	16.5	---	---	---	---	---
29	---	---	---	11.5	---	---	---	---	---	---	---	---
30	---	12.5	---	---	---	---	20.0	---	---	---	---	22.0
31	---	---	---	12.0	---	18.5	---	17.0	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	43	9	1.1	37	17	1.7	45	20	2.7
2	47	9	1.2	41	15	1.7	26	11	.79
3	46	9	1.2	38	14	1.4	24	11	.74
4	47	10	1.2	35	12	1.2	28	12	.88
5	43	10	1.1	33	11	.96	31	12	.97
6	43	10	1.1	32	9	.80	30	12	.95
7	41	10	1.1	40	24	15	28	12	.90
8	41	10	1.1	215	136	102	28	11	.86
9	42	10	1.2	56	25	4.0	43	34	5.5
10	41	11	1.2	29	15	1.2	44	37	4.6
11	40	11	1.2	26	16	1.1	28	13	1.0
12	41	11	1.2	26	17	1.2	27	16	1.2
13	41	11	1.2	26	19	1.3	28	13	.96
14	35	11	1.1	25	20	1.3	29	10	.82
15	40	11	1.2	26	19	1.3	27	14	1.0
16	42	12	1.3	26	18	1.2	27	10	.77
17	41	12	1.3	66	25	4.8	28	13	.98
18	41	12	1.3	33	11	1.1	27	12	.88
19	42	12	1.4	84	31	18	29	10	.80
20	41	12	1.3	76	42	9.6	30	8	.68
21	40	12	1.3	34	29	2.7	27	7	.54
22	42	13	1.4	25	28	1.9	26	7	.48
23	43	13	1.5	16	24	1.1	25	6	.42
24	44	13	1.5	15	22	.87	26	7	.48
25	43	13	1.5	19	20	1.0	26	8	.55
26	44	13	1.6	26	18	1.3	26	9	.63
27	48	15	1.9	28	16	1.2	27	10	.71
28	101	38	14	29	14	1.1	25	10	.65
29	53	22	3.3	27	12	.86	20	9	.51
30	39	20	2.1	34	13	1.3	16	9	.40
31	37	18	1.9	---	---	---	15	9	.35
TOTAL	1372	---	56.0	1223	---	184.19	866	---	33.70
		JANUARY			FEBRUARY			MARCH	
1	14	9	.32	51	27	3.8	969	311	823
2	15	8	.34	46	21	2.6	729	267	527
3	15	8	.33	79	49	23	582	209	331
4	21	10	.59	83	48	12	444	164	197
5	25	9	.61	56	37	5.6	1350	348	1350
6	21	7	.40	55	37	5.5	978	259	686
7	19	5	.28	47	31	3.9	771	206	431
8	19	5	.27	46	25	3.0	1240	312	1150
9	23	6	.34	43	23	2.7	1480	341	1390
10	23	6	.38	85	49	16	1030	224	628
11	93	122	121	336	114	452	801	181	393
12	103	155	58	1020	349	1530	640	149	258
13	33	22	2.0	1610	453	3580	510	122	168
14	28	13	.95	3350	892	9190	406	99	108
15	29	14	1.1	642	207	415	336	74	68
16	278	101	175	287	90	71	292	52	41
17	58	33	5.3	258	63	45	245	38	26
18	361	139	197	174	36	17	205	27	15
19	89	53	13	143	26	9.9	180	21	10
20	58	34	5.5	143	25	12	162	14	6.3
21	37	15	1.5	176	48	25	156	9	3.8
22	42	25	3.0	191	52	50	135	9	3.3
23	361	128	207	2400	325	2560	118	10	3.1
24	1900	676	3810	613	108	184	111	10	2.9
25	927	283	1110	582	98	155	104	9	2.6
26	165	40	19	366	124	122	100	9	2.5
27	86	23	5.4	1560	439	1960	96	10	2.7
28	64	18	3.1	1680	467	2120	93	12	2.9
29	53	18	2.6	1460	408	1610	90	11	2.6
30	85	51	18	---	---	---	87	10	2.2
31	67	40	7.5	---	---	---	83	8	1.9
TOTAL	5112	---	5769.81	17582	---	24186.0	14523	---	8636.8

11179000 ALAMEDA CREEK NEAR NILES, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	79	8	1.7
2	78	8	1.8
3	74	9	1.7
4	72	9	1.7
5	73	9	1.8
6	72	9	1.8
7	70	10	1.8
8	70	10	1.9
9	68	10	1.9
10	65	10	1.8
11	65	11	1.9
12	63	11	1.8
13	149	37	22
14	73	21	4.2
15	69	19	3.5
16	70	17	3.1
17	140	76	37
18	146	91	39
19	73	37	7.3
20	66	28	4.9
21	61	25	4.1
22	62	23	3.8
23	62	20	3.5
24	58	18	2.8
25	57	16	2.5
26	58	14	2.1
27	49	11	1.5
28	50	10	1.3
29	54	12	1.8
30	58	14	2.3
31	---	---	---
TOTAL	2204	---	168.3
PERIOD	42882		39034.80

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	1372.00	56.00	0	56
NOVEMBER	1223.00	184.19	6	190
DECEMBER	866.00	33.70	0	34
JANUARY 2000	5112.00	5769.81	620	6390
FEBRUARY	17582.00	24186.00	2890	27100
MARCH	14523.00	8636.80	1630	10300
APRIL	2204.00	168.30	3	171
PERIOD	42882.00	39034.80	5149	44241

11180500 DRY CREEK AT UNION CITY, CA

LOCATION.—Lat 37°36'22", long 122°01'22", in Arroyo de la Alameda Grant, Alameda County, Hydrologic Unit 18050004, on right bank, 900 ft downstream from bridge, on State Highway 238, in Decoto District in Union City, and 1.7 mi upstream from mouth.

DRAINAGE AREA.—9.39 mi^2.

PERIOD OF RECORD.—October 1916 to September 1919 (published as "near Decoto"), April 1959 to current year.

REVISED RECORDS.—WSP 2129: 1962(M), 1963(P), 1965(P). WDR CA-76-2: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 85.12 ft above sea level. Prior to Apr. 1, 1959, at site 1.4 mi downstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,680 ft^3/s, Jan. 9, 1995, gage height, 5.32 ft, from rating curve extended above 600 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 90 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1745	279	3.28	Mar. 5	0515	166	2.91
Feb. 13	2030	564	3.91	Mar. 8	0245	93	2.56
Feb. 22	2400	209	3.07				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	1.3	21	2.9	.99	.25	.00	.00	.00
2	.00	.00	.00	.00	1.1	21	2.9	.99	.22	.00	.00	.00
3	.00	.00	.00	.00	1.5	17	2.7	.92	.22	.00	.00	.00
4	.00	.00	.00	.00	1.6	14	2.7	.88	.21	.00	.00	.00
5	.00	.00	.00	.00	1.2	77	2.7	.86	.19	.00	.00	.00
6	.00	.00	.00	.00	1.1	34	2.6	.87	.18	.00	.00	.00
7	.00	.02	.00	.00	.96	24	2.5	1.3	.23	.00	.00	.00
8	.00	.04	.00	.00	.93	67	2.5	4.6	.85	.00	.00	.00
9	.00	.00	.00	.00	.89	43	2.5	1.7	.46	.00	.00	.00
10	.00	.00	.00	.00	2.3	31	2.4	1.1	.34	.00	.00	.00
11	.00	.00	.00	.07	62	24	2.2	.90	.24	.00	.00	.00
12	.00	.00	.00	.00	61	19	2.1	.87	.18	.00	.00	.00
13	.00	.00	.00	.00	203	16	3.3	.85	.13	.00	.00	.00
14	.00	.00	.00	.00	120	14	2.3	.93	.06	.00	.00	.00
15	.00	.00	.00	.00	39	11	2.2	2.0	.00	.00	.00	.00
16	.00	.00	.00	.04	28	9.5	2.1	1.6	.01	.00	.00	.00
17	.00	.00	.00	.00	19	8.5	2.7	1.0	.00	.00	.00	.00
18	.00	.00	.00	.36	12	7.8	2.1	.84	.00	.00	.00	.00
19	.00	.04	.00	.09	9.1	7.1	1.8	.73	.00	.00	.00	.00
20	.00	.00	.00	.00	9.9	6.0	1.7	.65	.00	.00	.00	.00
21	.00	.00	.00	.00	10	5.7	1.6	.55	.00	.00	.00	.00
22	.00	.00	.00	.00	19	5.4	2.0	.47	.00	.00	.00	.00
23	.00	.00	.00	1.7	66	e5.1	1.8	.46	.00	.00	.00	.00
24	.00	.00	.00	72	30	e4.9	1.5	.45	.00	.00	.00	.00
25	.00	.00	.00	39	22	4.5	1.4	.43	.00	.00	.00	.00
26	.00	.00	.00	13	16	4.3	1.4	.42	.00	.00	.00	.00
27	.00	.00	.00	5.4	48	4.3	1.3	.44	.00	.00	.00	.00
28	.05	.00	.00	3.1	29	4.2	1.2	.42	.00	.00	.00	.00
29	.00	.00	.00	2.2	30	3.8	1.1	.37	.00	.00	.00	.00
30	.00	.00	.00	2.2	---	3.5	1.0	.36	.00	.00	.00	.00
31	.00	---	.00	1.8	---	3.1	---	.31	---	.00	.00	---
TOTAL	0.05	0.10	0.00	140.96	845.88	520.7	63.2	29.26	3.77	0.00	0.00	0.00
MEAN	.002	.003	.000	4.55	29.2	16.8	2.11	.94	.13	.000	.000	.000
MAX	.05	.04	.00	72	203	77	3.3	4.6	.85	.00	.00	.00
MIN	.00	.00	.00	.00	.89	3.1	1.0	.31	.00	.00	.00	.00
AC-FT	.1	.2	.00	280	1680	1030	125	58	7.5	.00	.00	.00

e Estimated.

11180500 DRY CREEK AT UNION CITY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.15	.56	2.33	8.51	10.6	6.97	3.00	.65	.18	.036	.012	.004
MAX	6.31	11.3	21.0	33.8	70.1	58.2	20.1	6.45	2.87	.82	.51	.10
(WY)	1963	1984	1974	1997	1998	1983	1982	1983	1983	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1917	1917	1918	1918	1918	1972	1917	1917	1917	1917	1917	1917

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1917 - 2000	
ANNUAL TOTAL	1105.87		1603.92			
ANNUAL MEAN	3.03		4.38		2.72	
HIGHEST ANNUAL MEAN					13.0	1983
LOWEST ANNUAL MEAN					.002	1977
HIGHEST DAILY MEAN	103	Feb 7	203	Feb 13	453	Feb 3 1998
LOWEST DAILY MEAN	.00	Jan 4	.00	Oct 1	.00	Oct 1 1916
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 29	.00	Oct 1	.00	Oct 1 1916
INSTANTANEOUS PEAK FLOW			564	Feb 13	1680	Jan 9 1995
INSTANTANEOUS PEAK STAGE			3.91	Feb 13	5.32	Jan 9 1995
ANNUAL RUNOFF (AC-FT)	2190		3180		1970	
10 PERCENT EXCEEDS	7.0		9.6		4.8	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

11180700 PATTERSON CREEK AT UNION CITY, CA

LOCATION.—Lat 37°35'09", long 122°02'50", in Potrero de los Cerritos Grant, Alameda County, Hydrologic Unit 18050004, on right bank, 0.1 mi downstream from effluence from Alameda Creek, 0.2 mi upstream from bridge on Interstate 880 (Nimitz Freeway), and 2.0 mi southwest of Decoto District in Union City.

PERIOD OF RECORD.—October 1958 to current year.

GAGE.—Water-stage recorder. Datum of gage is 4.13 ft above sea level. Prior to Oct. 26, 1966, at site 0.2 mi downstream at same datum.

REMARKS.—Records poor. This stream is a distributary of Alameda Creek. Diversion by Alameda County Water District to percolation ponds between station 11179000 and this station; additional percolation to ground water by placing check dams in channel. See schematic diagram of Alameda Creek Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 25,800 ft^3/s, Feb. 3, 1998, gage height, 20.43 ft; no flow at times in each year.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.3	4.9	e.00	e12	e120	e39	e23	e4.5	e8.7	e4.8	e7.0
2	1.9	2.5	2.2	e.00	e8.1	e71	e39	e20	e3.7	e10	e5.5	e18
3	1.7	1.7	5.1	e.00	e32	e69	e36	e18	e4.4	e11	e4.7	e11
4	1.6	1.8	4.7	e.50	e35	e60	e34	e9.5	e8.0	e11	e4.7	e8.4
5	1.7	1.8	1.5	e3.4	e15	e300	e35	9.0	e8.7	e8.5	e5.4	e7.0
6	1.9	1.5	1.0	e.50	e15	e170	e34	7.1	e9.4	e.00	e4.6	e.40
7	2.1	20	.94	e.00	e8.8	e160	e33	9.2	e8.7	e.00	e4.6	e.00
8	2.2	549	9.1	e.00	e8.1	e310	e33	30	e24	e.00	e4.6	e.00
9	2.2	119	13	e2.0	e5.9	e430	e31	17	e8.6	e.00	e5.3	e.00
10	2.2	8.6	3.7	e2.0	e36	e410	e29	7.5	e2.0	e.00	e4.5	e.00
11	2.1	4.1	4.8	e53	e219	e320	e29	6.8	e1.3	e.00	e4.5	e.00
12	1.9	2.6	14	e60	e716	e280	e28	6.6	e.00	e5.4	e5.9	e.00
13	1.9	2.2	14	e9.2	e1150	e230	e90	6.5	e.00	e6.1	e5.1	e.00
14	1.9	2.1	6.3	e5.6	e3000	e180	e35	8.2	e2.6	e6.1	e2.9	e.00
15	1.9	1.9	e4.9	e6.3	e442	e170	e32	25	e.00	e.00	e.70	e.00
16	1.3	5.3	e4.9	e187	e183	e160	e33	27	e.40	e.00	e.70	e12
17	.95	40	e5.6	e27	e162	e140	e84	11	e1.1	e.00	e4.3	e12
18	.90	8.6	e4.9	e248	e101	e125	e88	6.1	e5.4	e.00	e1.4	e11
19	1.4	19	e6.3	e50	e79	e105	e35	5.6	e5.4	e5.9	e2.8	e6.8
20	.98	205	e7.0	e27	e79	e100	e30	5.3	e6.1	e5.2	e3.5	e5.3
21	.90	71	e4.9	e12	e103	e95	e26	4.9	e3.9	e4.4	e4.2	e4.6
22	1.3	9.2	e4.1	e16	e114	e80	e27	4.6	e2.4	e5.1	e5.0	e7.5
23	1.6	3.2	e3.4	e248	e2000	e68	e27	4.6	e2.4	e6.5	e7.9	e12
24	1.4	1.9	e4.1	e1360	e420	e62	e24	7.2	e5.2	e6.5	e7.1	e8.9
25	1.5	1.8	e4.1	e650	e398	e58	e23	4.6	e3.0	e5.0	e6.4	e6.7
26	1.6	1.7	e4.1	e95	e241	e55	e24	e8.7	e2.3	e4.2	e8.5	e5.2
27	1.5	1.5	e4.9	e37	e800	e52	e18	e12	e.80	e4.9	e7.8	e5.9
28	36	1.1	e3.4	e21	e700	e49	e18	e13	e.00	e6.4	e.00	e5.9
29	5.0	1.4	e.00	e13	e200	e47	e21	e13	e.00	e6.3	e.00	e4.5
30	2.0	3.4	e.00	e36	---	e45	e24	e9.9	e5.1	e7.8	e5.6	e.00
31	1.7	---	e.00	e23	---	e42	---	e5.7	---	e7.0	e5.6	---
TOTAL	89.03	1095.2	151.84	3192.50	11282.9	4563	1059	346.6	129.40	142.00	138.60	160.10
MEAN	2.87	36.5	4.90	103	389	147	35.3	11.2	4.31	4.58	4.47	5.34
MAX	36	549	14	1360	3000	430	90	30	24	11	8.5	18
MIN	.90	1.1	.00	.00	5.9	42	18	4.6	.00	.00	.00	.00
AC-FT	177	2170	301	6330	22380	9050	2100	687	257	282	275	318

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2000, BY WATER YEAR (WY)

MEAN	6.38	41.8	88.8	274	412	272	114	28.4	9.56	2.10	.61	1.21
MAX	53.0	404	757	2073	4196	3007	1091	312	120	27.1	8.73	19.1
(WY)	1963	1984	1997	1997	1998	1983	1982	1983	1973	1995	1970	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1959	1959	1959	1959	1961	1960	1959	1959	1959	1959	1959	1959

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1959 - 2000	
ANNUAL TOTAL	17792.42		22350.17			
ANNUAL MEAN	48.7		61.1		103	
HIGHEST ANNUAL MEAN					703	1983
LOWEST ANNUAL MEAN					.000	1961
HIGHEST DAILY MEAN	2910	Feb 9	3000	Feb 14	14400	Feb 3 1998
LOWEST DAILY MEAN	.00	Aug 1	.00	Dec 29	.00	Oct 1 1958
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 1	.00	Sep 7	.00	Oct 1 1958
INSTANTANEOUS PEAK FLOW			6900	Feb 14	25800	Feb 3 1998
INSTANTANEOUS PEAK STAGE			13.98	Feb 14	20.43	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	35290		44330		74390	
10 PERCENT EXCEEDS	90		119		150	
50 PERCENT EXCEEDS	4.0		6.3		.03	
90 PERCENT EXCEEDS	.00		.40		.00	

e Estimated.

11180810 PALOMARES CREEK NEAR HAYWARD, CA

LOCATION.—Lat 37°41'40", long 122°01'26", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on left bank, at Palomares School, 0.1 mi upstream of confluence with San Lorenzo Creek, and 3.6 mi northeast of Hayward.

DRAINAGE AREA.—9.08 mi^2.

PERIOD OF RECORD.—October 1997 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,940 ft^3/s, Feb. 3, 1998, gage height, 10.67 ft, from rating curve extended above 300 ft^3/s; no flow many days during water year 2000.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 250 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2100	523	5.96				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.05	.00	.35	2.9	26	4.0	.99	.35	.42	.21	.18
2	.29	.05	.17	.32	2.9	24	3.4	.90	.43	.46	.12	.11
3	.35	.11	.21	.33	3.5	22	3.2	.76	.49	.35	.05	.01
4	.36	.20	.20	.34	3.3	22	3.2	.71	.59	.32	.03	.01
5	.36	.19	.22	.32	3.0	52	3.0	.70	.57	.33	.06	.01
6	.43	.16	.26	.29	3.1	32	2.7	.65	.49	.35	.12	.01
7	.50	.69	.26	.30	2.8	29	2.6	1.1	.42	.35	.20	.04
8	.34	2.9	.28	.30	2.8	59	2.4	2.8	.79	.30	.10	.00
9	.24	.12	.34	.29	2.7	e43	2.4	1.6	.51	.39	.06	.00
10	.16	.04	.19	.31	4.3	e32	2.5	e1.5	.45	.35	.08	.00
11	.22	.03	.18	1.0	52	e26	2.3	e1.4	.36	.34	.05	.00
12	.35	.15	.19	.24	55	e23	2.3	1.3	.35	.26	.01	.00
13	.21	.35	.20	.16	202	e20	3.1	1.1	.35	.24	.00	.00
14	.33	.18	.20	.12	191	e18	2.2	1.3	.24	.26	.01	.00
15	.21	.16	.24	.10	53	16	2.2	1.7	.19	.27	.00	.00
16	.02	.28	.26	2.1	31	14	2.1	1.3	.26	.35	.00	.00
17	.00	.90	.26	.27	23	12	2.5	1.4	.16	.35	.00	.00
18	.01	.00	.26	1.5	21	10	2.1	1.3	.14	.29	.00	.00
19	.19	.26	.26	.41	18	9.2	1.8	1.0	.15	.25	.01	.00
20	.09	.00	.28	.27	18	8.3	1.8	.90	.10	.26	.01	.00
21	.07	.00	.32	.24	17	8.1	1.8	.69	.17	.23	.02	.00
22	.11	.00	.36	.26	27	7.7	1.8	.60	.29	.25	.05	.07
23	.13	.00	.40	9.9	54	7.0	1.7	.48	.31	.24	.06	.05
24	.26	.00	.44	98	30	6.5	1.7	.42	.29	.19	.01	.00
25	.30	.00	.47	42	25	5.9	1.4	.45	.31	.24	.02	.00
26	.38	.00	.49	10	23	5.6	1.3	.56	.29	.23	.00	.00
27	.38	.00	.55	4.9	50	5.4	1.1	.43	.31	.27	.01	.00
28	.65	.00	.57	4.1	35	5.2	.87	.44	.31	.29	.00	.20
29	.06	.00	.51	3.6	32	4.4	.81	.47	.29	.28	.01	.36
30	.02	.11	.50	3.9	---	4.3	.96	.44	.35	.25	.01	.00
31	.07	---	.36	3.2	---	3.1	---	.38	---	.22	.02	---
TOTAL	7.29	6.93	9.43	189.42	988.3	560.7	65.24	29.77	10.31	9.18	1.33	1.05
MEAN	.24	.23	.30	6.11	34.1	18.1	2.17	.96	.34	.30	.043	.035
MAX	.65	2.9	.57	98	202	59	4.0	2.8	.79	.46	.21	.36
MIN	.00	.00	.00	.10	2.7	3.1	.81	.38	.10	.19	.00	.00
AC-FT	14	14	19	376	1960	1110	129	59	20	18	2.6	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	.17	.43	.74	13.7	42.8	12.8	6.09	2.02	.97	.48	.20	.16
MAX	.24	.57	1.18	30.8	72.1	18.1	10.0	3.16	1.70	.76	.37	.27
(WY)	2000	1998	1998	1998	1998	2000	1998	1998	1998	1998	1998	1998
MIN	.082	.23	.30	4.24	22.4	7.79	2.17	.96	.34	.30	.043	.035
(WY)	1998	2000	2000	1999	1999	1999	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	1315.35		1878.95			
ANNUAL MEAN	3.60		5.13		6.51	
HIGHEST ANNUAL MEAN					10.7	1998
LOWEST ANNUAL MEAN					3.66	1999
HIGHEST DAILY MEAN	134	Feb 7	202	Feb 13	410	Feb 3 1998
LOWEST DAILY MEAN	.00	Oct 17	.00	Oct 17	.00	Oct 17 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Nov 20	.00	Nov 20	.00	Nov 20 1999
INSTANTANEOUS PEAK FLOW			523	Feb 13	1940	Feb 3 1998
INSTANTANEOUS PEAK STAGE			5.96	Feb 13	10.67	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	2610		3730		4710	
10 PERCENT EXCEEDS	8.8		15		16	
50 PERCENT EXCEEDS	.62		.34		.63	
90 PERCENT EXCEEDS	.09		.00		.07	

e Estimated.

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA

LOCATION.—Lat 37°41'43", long 122°02'38", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on right bank at Interstate Highway 580, 0.3 mi southeast of Independent School, and 2.2 mi east of Castro Valley.

DRAINAGE AREA.—18.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1980 to September 1994, October 1997 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 260 ft above sea level, from topographic map. October 1980 to September 1994 at site 250 ft downstream at same datum.

REMARKS.—Records good. Some regulation of low flow by ponds upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,890 ft^3/s, Feb. 3, 1998, gage height, 15.48 ft; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 275 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1715	535	6.22	Feb. 27	0345	317	5.19
Feb. 13	2000	1,710	10.26	Mar. 8	1715	325	5.23
Feb. 22	2330	639	6.66				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.42	.87	.93	4.3	29	4.4	2.8	1.5	1.2	1.9	1.3
2	.34	.43	.99	.90	4.0	28	4.4	2.8	1.5	1.2	1.3	.41
3	.36	.48	.71	.95	7.6	23	4.3	2.7	1.5	1.2	.72	.24
4	.37	.52	.66	1.0	3.9	24	4.2	2.7	1.4	1.2	.86	.26
5	.38	.63	.65	.97	5.8	88	4.2	2.7	1.5	1.2	1.1	.26
6	.40	.48	.66	.94	3.4	35	3.9	2.7	1.5	1.2	1.1	.18
7	.42	4.0	.69	.93	3.0	33	3.9	4.2	1.6	1.2	1.1	.12
8	.39	9.7	.66	.99	3.6	119	3.8	8.8	3.2	1.2	1.2	.07
9	.37	.90	3.2	.99	3.2	81	3.6	3.2	2.7	1.1	1.6	.07
10	.37	.79	.86	1.1	11	51	3.7	3.3	2.7	1.1	1.3	.05
11	.36	.59	.78	6.3	163	38	3.3	2.8	3.5	1.1	1.1	.05
12	.38	.58	.76	1.2	127	29	3.6	2.7	3.4	1.1	.75	.04
13	.39	.55	.85	.87	578	23	7.3	2.9	2.4	1.0	.37	.05
14	.38	.57	.73	.82	518	20	3.9	3.4	1.7	1.5	.35	.08
15	.40	.66	.73	.84	97	17	4.0	4.6	1.2	1.3	.70	.04
16	.34	2.4	.74	16	55	15	3.8	2.5	1.2	.99	1.0	.04
17	.31	3.0	.74	1.8	37	13	6.5	2.3	1.3	1.1	.54	.03
18	.34	.72	.74	11	28	12	3.8	2.2	1.3	1.2	.34	.03
19	.46	5.4	.71	2.9	22	11	3.4	2.1	1.2	1.2	.61	.02
20	.36	1.2	.74	1.5	26	10	3.4	2.0	1.2	.93	.87	.14
21	.35	1.1	.77	1.3	21	9.5	3.4	1.9	1.2	.91	.44	.05
22	.35	.89	.79	1.9	71	8.9	4.3	1.8	1.2	.91	.42	.29
23	.36	.75	.82	32	125	8.5	3.3	1.8	1.2	1.0	.50	.07
24	.36	.72	.82	186	41	8.3	3.2	1.7	1.1	.97	.45	.07
25	.36	.74	.82	55	27	6.0	3.1	1.7	1.2	.91	.34	.17
26	.39	.77	.84	14	25	5.4	3.1	1.7	1.2	.97	.30	.25
27	.49	.83	.85	6.8	137	5.3	3.0	1.7	1.2	.96	.28	.01
28	3.9	.83	.87	6.2	43	5.5	2.9	1.6	1.2	.90	.30	.01
29	.48	.86	.89	5.5	40	5.5	2.8	1.6	1.2	.83	.37	.35
30	.45	2.0	.90	9.2	---	5.1	2.8	1.6	1.2	.72	.41	.38
31	.43	---	.92	4.5	---	4.3	---	1.6	---	1.5	.38	---
TOTAL	15.45	43.51	26.76	375.33	2230.8	771.3	115.3	82.1	49.4	33.80	23.00	5.13
MEAN	.50	1.45	.86	12.1	76.9	24.9	3.84	2.65	1.65	1.09	.74	.17
MAX	3.9	9.7	3.2	186	578	119	7.3	8.8	3.5	1.5	1.9	1.3
MIN	.31	.42	.65	.82	3.0	4.3	2.8	1.6	1.1	.72	.28	.01
AC-FT	31	86	53	744	4420	1530	229	163	98	67	46	10

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.86	3.16	6.03	17.1	37.0	18.3	7.48	3.01	1.44	.57	.28	.22
MAX	2.20	16.6	30.1	79.3	194	90.7	42.3	13.0	4.44	2.05	.78	.53
(WY)	1992	1984	1984	1993	1998	1983	1982	1983	1998	1983	1998	1986
MIN	.072	.12	.65	.16	.65	.47	.70	.19	.14	.023	.001	.000
(WY)	1989	1993	1990	1991	1989	1990	1990	1991	1990	1989	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL	2956.98		3771.88			
ANNUAL MEAN	8.10		10.3		7.78	
HIGHEST ANNUAL MEAN					25.8	1998
LOWEST ANNUAL MEAN					.70	1989
HIGHEST DAILY MEAN	312	Feb 7	578	Feb 13	1270	Feb 3 1998
LOWEST DAILY MEAN	.31	Sep 28	.01	Sep 27	.00	Aug 28 1981
ANNUAL SEVEN-DAY MINIMUM	.35	Sep 26	.04	Sep 13	.00	Sep 6 1981
INSTANTANEOUS PEAK FLOW			1710	Feb 13	3890	Feb 3 1998
INSTANTANEOUS PEAK STAGE			10.26	Feb 13	15.48	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	5870		7480		5640	
10 PERCENT EXCEEDS	17		18		14	
50 PERCENT EXCEEDS	1.3		1.2		.81	
90 PERCENT EXCEEDS	.40		.35		.04	

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1980 to September 1994, October 1997 to current year (storm season only).
WATER TEMPERATURE: December 1980 to September 1994, October 1997 to current year.
SEDIMENT DATA: December 1980 to September 1994, October 1997 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: December 1980 to September 1994, October 1997 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1980 to September 1994, October 1997 to current year.

REMARKS.—Continuous water temperature recording since October 14, 1999 (storm season only). Zero bed-load discharge observed for flows less than 2.84 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 15,300 mg/L, Feb. 3, 1998; minimum daily mean, 0 mg/L, Feb. 26, 1989.
SEDIMENT LOAD (storm season only): Maximum daily, 80,900 tons, Feb. 3, 1998; minimum daily, 0 ton, several days in most years.
WATER TEMPERATURE (continuous-storm season only): Maximum recorded, 16.0°C, Oct. 28, 1999; minimum recorded, 4.0°C, Dec. 16, 1999.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 4,350 mg/L, Feb. 13; minimum daily mean, 12 mg/L, Oct. 1–5.
SEDIMENT LOAD (storm season only): Maximum daily, 13,100 tons, Feb. 13; minimum daily, 0.01 ton, Oct. 1–6.
WATER TEMPERATURE (storm season only): Maximum recorded, 16.0°C, Oct. 28, 1999; minimum recorded, 4.0°C, Dec. 16, 1999.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
OCT								
14...	1400	.38	14.0	17	.17	--	--	--
28...	0740	1.3	14.5	104	.36	--	--	--
NOV								
17...	1030	7.8	12.0	502	11	--	--	--
30...	0930	.90	11.5	42	.10	--	--	--
DEC								
09...	0825	2.9	8.5	258	2.0	--	--	--
JAN								
11...	1545	21	11.5	2110	120	35	36	44
26...	1220	11	9.5	46	1.4	--	--	--
FEB								
12...	0815	109	10.0	869	256	--	--	--
14...	0835	715	12.0	6580	12700	29	38	41
27...	0915	116	11.0	1370	429	44	45	50
MAR								
09...	1015	90	9.5	465	113	--	--	--
10...	0815	54	10.0	206	30	--	--	--
MAY								
10...	1015	3.6	10.0	56	.54	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70340)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70334)	(70335)
OCT								
14...	--	--	66	--	--	--	--	
28...	--	--	96	--	--	--	--	
NOV								
17...	--	--	98	99	100	--	--	
30...	--	--	97	--	--	--	--	
DEC								
09...	--	--	100	--	--	--	--	
JAN								
11...	61	73	83	92	98	100	--	
26...	--	--	93	99	100	--	--	
FEB								
12...	--	--	77	87	96	100	--	
14...	54	65	71	88	97	100	--	
27...	62	72	82	89	96	99	100	
MAR								
09...	--	--	77	85	93	99	100	
10...	--	--	76	85	93	100	--	
MAY								
10...	--	--	60	--	--	--	--	

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
OCT								
14...	1430	1	.38	14.0	--	--	1	2
14...	1435	1	.38	14.0	--	1	3	10
14...	1440	1	.38	14.0	8	20	51	76
14...	1445	1	.38	14.0	28	71	90	94
14...	1450	1	.38	14.0	15	57	92	99
14...	1455	1	.38	14.0	7	35	85	99
14...	1500	1	.38	14.0	12	22	37	53
MAY								
11..	1040	1	2.9	10.0	18	30	42	54
11...	1045	1	2.9	10.0	--	1	2	3
11...	1050	1	2.9	10.0	--	--	2	4
11...	1055	1	2.9	10.0	--	1	5	18
11...	1100	1	2.9	10.0	1	3	11	24
11...	1105	1	2.9	10.0	9	24	57	82
11...	1110	1	2.9	10.0	11	36	74	90
11...	1115	1	2.9	10.0	16	53	83	91

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT							
14...	2	3	4	8	16	57	100
14...	15	18	22	30	37	51	100
14...	84	89	95	100	--	--	--
14...	97	98	99	100	--	--	--
14...	100	--	--	--	--	--	--
14...	100	--	--	--	--	--	--
14...	64	73	83	92	97	100	--
MAY							
11...	65	75	86	100	--	--	--
11...	3	5	7	10	21	73	100
11...	6	11	20	35	58	100	--
11...	23	25	28	38	50	100	--
11...	30	35	43	56	80	100	--
11...	90	94	98	100	--	--	--
11...	94	96	99	100	--	--	--
11...	92	94	96	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
26...	1240	1000	1120	.250	0	1235	1250	30	.7
26...	1305	1000	1120	.250	0	1300	1310	30	.7
MAR									
09...	0945	1000	1120	.250	0	0940	0950	15	1.0
09...	1000	1000	1120	.250	0	0955	1005	15	1.0

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)
JAN									
26...	1	20	20	.40	11	9.5	.04	.40	1
26...	1	20	20	.40	11	9.5	.02	.40	1
MAR									
09...	1	20	20	.50	90	9.5	.85	19	1
09...	1	20	20	.50	90	9.5	1.10	19	4

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
JAN								
26...	15	79	96	98	100	--	--	--
26...	12	74	94	98	100	--	--	--
MAR								
09...	5	26	34	38	49	66	86	100
09...	8	31	46	63	78	88	95	100

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	12.5	10.0	11.0	9.5	8.0	7.5	12.5	11.0	10.5	10.0
2	---	---	12.5	10.5	11.0	8.0	7.5	5.0	12.0	10.5	10.5	10.5
3	---	---	13.0	11.5	9.0	7.5	6.0	4.5	12.5	10.5	10.5	10.5
4	---	---	12.5	10.0	8.5	7.0	7.0	4.5	11.5	9.5	11.0	10.5
5	---	---	13.5	10.5	8.0	6.0	7.5	6.0	12.5	10.0	11.0	11.0
6	---	---	13.5	12.0	9.0	6.5	6.5	4.5	11.5	10.0	11.0	10.5
7	---	---	15.0	11.0	10.0	8.0	6.5	5.0	12.0	10.0	10.5	10.0
8	---	---	14.0	11.5	8.0	6.0	8.0	6.0	11.5	10.0	10.5	10.0
9	---	---	11.5	10.0	10.5	7.0	9.0	7.5	12.0	11.0	10.0	10.0
10	---	---	13.5	10.5	8.5	6.5	9.5	8.5	12.5	10.5	10.5	10.0
11	---	---	13.0	11.5	7.0	5.5	12.0	9.5	11.0	10.0	11.5	10.5
12	---	---	13.5	11.5	8.0	5.5	10.5	9.0	11.0	10.5	11.5	11.0
13	---	---	13.0	11.0	8.5	7.0	10.0	8.0	11.0	10.5	11.5	11.0
14	---	---	12.5	11.0	7.0	5.0	9.5	7.5	11.5	11.0	12.0	11.5
15	15.0	12.5	14.0	12.5	6.5	4.5	11.0	9.5	11.5	11.0	12.0	11.5
16	14.0	11.0	14.5	11.0	6.0	4.0	11.5	9.5	11.5	11.0	12.0	12.0
17	14.5	12.0	13.0	11.0	6.5	4.5	10.0	9.0	11.5	10.0	12.0	11.5
18	13.5	10.5	11.0	9.5	7.5	5.0	11.5	10.0	11.0	10.0	12.0	11.5
19	15.5	10.0	13.0	9.5	9.0	5.0	13.5	11.0	11.5	10.0	12.0	12.0
20	13.5	10.0	12.0	10.5	10.0	9.0	12.5	10.5	12.0	11.0	12.0	12.0
21	13.5	10.5	11.5	10.0	9.0	7.5	11.0	9.0	12.0	11.0	12.0	11.5
22	13.0	10.5	10.0	8.0	9.0	7.5	11.5	10.5	12.0	11.0	11.5	11.5
23	13.0	11.5	9.0	7.0	7.5	5.0	13.0	11.5	11.0	10.0	12.0	11.5
24	13.5	11.5	9.0	7.0	7.5	5.0	12.5	12.0	10.5	9.0	12.0	11.5
25	13.0	10.5	9.0	7.5	7.0	5.0	12.5	12.0	10.5	9.5	11.5	11.5
26	13.0	10.5	10.5	8.5	6.5	4.5	12.0	9.5	11.0	10.5	11.5	11.5
27	14.5	12.5	11.5	10.5	7.0	4.5	11.0	9.0	11.0	11.0	11.5	11.5
28	16.0	12.5	11.5	11.0	6.5	5.0	10.0	7.5	11.0	10.5	11.5	11.0
29	12.5	10.5	12.0	10.5	6.5	4.5	11.0	9.0	10.5	10.5	11.5	11.5
30	12.5	9.5	13.0	11.0	6.0	4.5	11.5	10.0	---	---	11.5	11.5
31	12.5	10.0	---	---	7.5	5.0	11.0	10.0	---	---	12.0	11.5
MONTH	---	---	15.0	7.0	11.0	4.0	13.5	4.5	12.5	9.0	12.0	10.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.5	12.0	13.5	12.5	---	---	---	---	---	---	---	---
2	13.0	12.5	14.5	13.5	---	---	---	---	---	---	---	---
3	13.5	13.0	14.5	14.0	---	---	---	---	---	---	---	---
4	13.5	13.5	14.5	14.0	---	---	---	---	---	---	---	---
5	13.5	13.5	14.5	13.5	---	---	---	---	---	---	---	---
6	13.5	13.0	14.0	13.0	---	---	---	---	---	---	---	---
7	13.0	12.5	13.5	13.0	---	---	---	---	---	---	---	---
8	13.0	13.0	14.5	13.5	---	---	---	---	---	---	---	---
9	13.0	12.5	14.5	14.0	---	---	---	---	---	---	---	---
10	13.0	12.0	---	---	---	---	---	---	---	---	---	---
11	13.5	12.5	---	---	---	---	---	---	---	---	---	---
12	14.0	13.5	---	---	---	---	---	---	---	---	---	---
13	14.0	14.0	---	---	---	---	---	---	---	---	---	---
14	14.0	14.0	---	---	---	---	---	---	---	---	---	---
15	14.0	13.5	---	---	---	---	---	---	---	---	---	---
16	13.5	13.5	---	---	---	---	---	---	---	---	---	---
17	13.5	13.5	---	---	---	---	---	---	---	---	---	---
18	13.5	12.5	---	---	---	---	---	---	---	---	---	---
19	13.0	12.0	---	---	---	---	---	---	---	---	---	---
20	13.0	12.5	---	---	---	---	---	---	---	---	---	---
21	13.5	13.0	---	---	---	---	---	---	---	---	---	---
22	13.0	12.5	---	---	---	---	---	---	---	---	---	---
23	13.0	12.5	---	---	---	---	---	---	---	---	---	---
24	12.5	12.0	---	---	---	---	---	---	---	---	---	---
25	13.0	12.5	---	---	---	---	---	---	---	---	---	---
26	14.0	12.5	---	---	---	---	---	---	---	---	---	---
27	14.0	13.5	---	---	---	---	---	---	---	---	---	---
28	13.5	12.5	---	---	---	---	---	---	---	---	---	---
29	12.5	11.5	---	---	---	---	---	---	---	---	---	---
30	13.0	12.0	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	14.0	11.5	---	---	---	---	---	---	---	---	---	---

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.41	12	.01	.42	70	.08	.87	20	.05
2	.34	12	.01	.43	68	.08	.99	29	.10
3	.36	12	.01	.48	43	.06	.71	36	.07
4	.37	12	.01	.52	26	.04	.66	33	.06
5	.38	12	.01	.63	21	.04	.65	45	.08
6	.40	13	.01	.48	28	.04	.66	42	.07
7	.42	16	.02	4.0	77	3.1	.69	37	.07
8	.39	19	.02	9.7	295	37	.66	33	.06
9	.37	23	.02	.90	64	.16	3.2	191	2.4
10	.37	26	.03	.79	53	.11	.86	87	.21
11	.36	30	.03	.59	50	.08	.78	65	.14
12	.38	33	.03	.58	47	.07	.76	64	.13
13	.39	33	.03	.55	44	.07	.85	58	.14
14	.38	20	.02	.57	42	.06	.73	47	.09
15	.40	24	.03	.66	39	.07	.73	38	.08
16	.34	60	.05	2.4	158	2.8	.74	32	.06
17	.31	72	.06	3.0	239	5.3	.74	31	.06
18	.34	68	.06	.72	51	.10	.74	32	.06
19	.46	64	.08	5.4	363	19	.71	32	.06
20	.36	61	.06	1.2	40	.13	.74	32	.06
21	.35	57	.05	1.1	41	.16	.77	33	.07
22	.35	54	.05	.89	28	.07	.79	36	.08
23	.36	50	.05	.75	27	.05	.82	46	.10
24	.36	46	.05	.72	25	.05	.82	55	.12
25	.36	43	.04	.74	23	.05	.82	55	.12
26	.39	39	.04	.77	22	.05	.84	54	.12
27	.49	54	.09	.83	21	.05	.85	58	.13
28	3.9	222	7.5	.83	22	.05	.87	66	.15
29	.48	86	.11	.86	32	.12	.89	70	.17
30	.45	74	.09	2.0	130	1.1	.90	67	.16
31	.43	72	.08	---	---	---	.92	75	.19
TOTAL	15.45	---	8.75	43.51	---	70.14	26.76	---	5.46
		JANUARY			FEBRUARY			MARCH	
1	.93	60	.15	4.3	29	.34	29	124	9.6
2	.90	43	.11	4.0	29	.31	28	139	11
3	.95	38	.10	7.6	50	1.8	23	115	7.0
4	1.0	36	.10	3.9	33	.35	24	134	12
5	.97	35	.09	5.8	66	1.1	88	993	297
6	.94	32	.08	3.4	78	.71	35	566	54
7	.93	29	.07	3.0	71	.59	33	524	50
8	.99	26	.07	3.6	103	1.1	119	962	353
9	.99	23	.06	3.2	76	.65	81	389	87
10	1.1	21	.06	11	487	27	51	205	28
11	6.3	554	49	163	1740	3580	38	138	14
12	1.2	39	.13	127	911	496	29	128	10
13	.87	31	.07	578	4350	13100	23	122	7.7
14	.82	24	.05	518	3320	8010	20	115	6.2
15	.84	16	.04	97	122	33	17	109	5.1
16	16	1330	240	55	83	12	15	103	4.1
17	1.8	64	.45	37	80	8.1	13	97	3.4
18	11	373	20	28	76	5.8	12	90	2.9
19	2.9	111	1.3	22	67	4.0	11	84	2.6
20	1.5	60	.25	26	70	5.1	10	78	2.2
21	1.3	56	.20	21	58	3.2	9.5	72	1.8
22	1.9	75	.54	71	358	406	8.9	65	1.6
23	32	380	50	125	392	283	8.5	59	1.4
24	186	1860	1370	41	138	16	8.3	53	1.2
25	55	255	51	27	120	8.9	6.0	47	.76
26	14	44	1.7	25	83	8.4	5.4	40	.59
27	6.8	37	.69	137	1440	887	5.3	35	.50
28	6.2	33	.55	43	120	14	5.5	33	.48
29	5.5	28	.42	40	169	19	5.5	31	.45
30	9.2	52	2.9	---	---	---	5.1	29	.40
31	4.5	29	.35	---	---	---	4.3	27	.31
TOTAL	375.33	---	1790.53	2230.8	---	26933.45	771.3	---	976.29

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	4.4	25	.30
2	4.4	23	.27
3	4.3	21	.24
4	4.2	21	.23
5	4.2	20	.23
6	3.9	20	.21
7	3.9	20	.21
8	3.8	19	.20
9	3.6	19	.18
10	3.7	19	.19
11	3.3	18	.16
12	3.6	21	.30
13	7.3	57	1.9
14	3.9	41	.44
15	4.0	37	.40
16	3.8	33	.34
17	6.5	77	1.4
18	3.8	54	.56
19	3.4	47	.43
20	3.4	40	.37
21	3.4	34	.31
22	4.3	49	.59
23	3.3	46	.41
24	3.2	45	.38
25	3.1	43	.36
26	3.1	42	.34
27	3.0	40	.33
28	2.9	39	.30
29	2.8	37	.28
30	2.8	36	.27
31	---	---	---
TOTAL	115.3	---	12.13
PERIOD	3578.45		29796.75

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	15.45	8.75	0	9
NOVEMBER	43.51	70.14	1	71
DECEMBER	26.76	5.46	0	6
JANUARY 2000	375.33	1790.53	69	1860
FEBRUARY	2230.80	26933.45	339	27300
MARCH	771.30	976.29	56	1030
APRIL	115.30	12.13	0	12
PERIOD	3578.45	29796.75	465	30287

11180900 CROW CREEK NEAR HAYWARD, CA

LOCATION.—Lat 37°42'18", long 122°02'34", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on right bank on the upstream side of Crow Canyon Road bridge, 0.4 mi east of Canyon High School, 0.8 mi upstream of confluence of Cull Creek, and 2.3 mi northeast of Castro Valley.

DRAINAGE AREA.—10.51 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1997 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,990 ft^3/s, Feb. 3, 1998, gage height, 13.07 ft, from rating curve extended above 700 ft^3/s; minimum daily, 0.05 ft^3/s, Oct. 1, 1997.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 350 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2115	1,320	10.97				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.38	.88	.86	2.5	22	6.1	2.9	e1.7	e.75	e.56	e.46
2	.22	.38	.94	.87	2.5	22	6.1	2.8	e1.7	e.74	e.55	e.60
3	.23	.38	.77	.86	4.1	20	6.0	2.7	e1.6	e.85	e.54	e.72
4	.24	.37	.70	.80	3.0	23	5.9	2.6	e1.6	e.78	e.54	e.50
5	.25	.39	.71	.83	4.1	54	5.8	2.5	e1.5	e.78	e.54	e.46
6	.27	.40	.76	.83	3.6	20	5.7	2.5	e1.5	e.85	e.53	e.44
7	.28	2.5	.84	.78	3.2	20	5.6	3.9	e1.6	e.78	e.65	e.44
8	.27	6.5	.86	.79	3.1	57	5.5	7.9	e2.1	e.75	e.70	e.43
9	.26	1.2	2.4	.79	2.6	35	5.5	3.4	e1.8	e.70	e.62	e.42
10	.25	1.0	.74	.81	9.1	23	5.4	3.1	e1.5	e.68	e.58	e.42
11	.24	1.0	.67	3.9	122	20	5.3	2.8	e1.4	e.68	e.52	e.42
12	.39	.98	.70	1.0	73	18	5.6	2.7	e1.3	e.66	e.50	e.42
13	.23	.89	.77	.64	429	17	6.1	2.7	e1.3	.59	e.50	e.42
14	.26	.88	.69	.59	232	16	4.8	3.3	e1.2	.59	e.50	e.42
15	.25	.90	.65	.61	43	15	4.9	4.9	e1.1	.62	e.50	e.42
16	.24	2.0	.67	11	27	13	4.7	3.6	e1.0	.64	e.50	e.46
17	.23	2.0	.69	1.0	21	12	6.6	3.7	e.98	.73	e.56	e.50
18	.23	1.0	.68	6.8	18	11	4.7	3.4	e1.2	.73	e.49	e.54
19	.25	4.9	.67	1.6	16	11	4.4	3.4	e1.1	.67	e.48	e.50
20	.26	1.5	.67	.87	17	11	4.4	e3.0	e1.0	.66	e.48	e.46
21	.26	1.1	.67	.73	15	10	4.1	e2.8	e.98	e.64	e.48	e.46
22	.26	.88	.70	1.5	37	9.6	4.6	e2.7	e.90	e.60	e.48	e.45
23	.26	.88	.72	33	73	9.2	3.8	e2.5	e.88	e.72	e.48	e.44
24	.27	.87	.77	166	25	8.7	3.5	e2.3	e.84	e.60	e.47	e.44
25	.28	.78	.76	33	20	8.4	3.3	e2.1	e.82	e.60	e.46	e.44
26	.33	.81	.80	7.8	20	8.1	3.3	e2.1	e.80	e.59	e.46	e.45
27	.36	.86	.80	4.9	105	7.9	3.1	e2.0	e.79	e.58	e.46	e.45
28	3.0	.86	.78	3.7	32	7.4	3.0	e1.9	e.78	e.58	e.46	e.48
29	.39	1.0	.79	3.5	34	7.0	2.9	e1.8	e.76	e.57	e.44	e.49
30	.34	1.6	.79	7.2	---	6.8	2.8	e1.8	e.76	e.56	e.44	e.50
31	.35	---	.85	3.2	---	6.4	---	e1.7	---	e.56	e.46	---
TOTAL	11.32	39.19	24.89	300.76	1396.8	529.5	143.5	91.5	36.49	20.83	15.93	14.05
MEAN	.37	1.31	.80	9.70	48.2	17.1	4.78	2.95	1.22	.67	.51	.47
MAX	3.0	6.5	2.4	166	429	57	6.6	7.9	2.1	.85	.70	.72
MIN	.22	.37	.65	.59	2.5	6.4	2.8	1.7	.76	.56	.44	.42
AC-FT	22	78	49	597	2770	1050	285	181	72	41	32	28

e Estimated

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.43	1.31	1.92	22.3	72.5	17.8	9.76	4.05	1.98	1.01	.61	.50
MAX	.74	1.69	3.11	50.4	122	21.8	16.0	6.16	3.28	1.58	.77	.61
(WY)	1999	1999	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	.20	.94	.80	6.78	48.0	14.6	4.78	2.95	1.22	.67	.51	.43
(WY)	1998	1998	2000	1999	1999	1999	2000	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	2528.50		2624.76			
ANNUAL MEAN	6.93		7.17		10.8	
HIGHEST ANNUAL MEAN					18.2	1998
LOWEST ANNUAL MEAN					7.08	1999
HIGHEST DAILY MEAN	263	Feb 7	429	Feb 13	465	Feb 3 1998
LOWEST DAILY MEAN	.22	Oct 2	.22	Oct 2	.05	Oct 1 1997
ANNUAL SEVEN-DAY MINIMUM	.24	Oct 13	.24	Oct 13	.13	Oct 1 1997
INSTANTANEOUS PEAK FLOW			1320	Feb 13	1990	Feb 3 1998
INSTANTANEOUS PEAK STAGE			10.97	Feb 13	13.07	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	5020		5210		7840	
10 PERCENT EXCEEDS	17		15		21	
50 PERCENT EXCEEDS	1.2		.88		1.4	
90 PERCENT EXCEEDS	.37		.41		.40	

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1999 to September 2000 (storm season only).
WATER TEMPERATURE: October 1999 to September 2000 (storm season only).
SEDIMENT DATA: October 1999 to September 2000 (storm season only).

PERIOD OF DAILY RECORD.—
SUSPENDED-SEDIMENT DISCHARGE: October 1999 to September 2000 (storm season only).

REMARKS.—Sediment samples collected on most days when a water temperature is published. Zero bed-load discharge observed for flows less than 2.62 ft^3/s.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 11,200 mg/L, Feb. 13, 2000; minimum daily mean, 12 mg/L, Oct. 13, 1999.
SEDIMENT LOAD (storm season only): Maximum daily, 21,400 tons, Feb. 13, 2000; minimum daily, 0.01 ton, Oct. 13, 1999.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 11,200 mg/L, Feb. 13; minimum daily mean, 12 mg/L, Oct. 13.
SEDIMENT LOAD (storm season only): Maximum daily, 21,400 tons, Feb. 13; minimum daily, 0.01 ton , Oct. 13.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
OCT								
07...	1530	.26	15.5	42	.03	--	--	--
12...	1245	.48	18.5	12	.02	--	--	--
28...	1720	.64	14.5	40	.07	--	--	--
NOV								
17...	1140	1.9	12.5	34	.18	--	--	--
30...	1540	.89	10.5	48	.12	--	--	--
JAN								
11...	1350	35	12.0	239	22	--	--	--
11...	1405	49	12.0	401	53	--	--	--
25...	1035	27	12.0	358	26	--	--	--
25...	1305	21	12.0	253	14	--	--	--
FEB								
13...	1430	472	12.0	12000	15300	31	32	35
23...	1400	49	10.0	867	115	55	56	64
29...	1125	60	10.0	2000	326	45	47	55
MAR								
24...	1330	8.8	11.5	104	2.5	--	--	--
APR								
17...	1255	6.6	12.5	162	2.9	--	--	--
30...	1235	2.5	12.0	52	.36	--	--	--
MAY								
11...	1420	2.8	11.0	74	.56	--	--	--

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
OCT							
07...	--	--	67	--	--	--	--
12...	--	--	86	--	--	--	--
28...	--	--	95	95	96	96	100
NOV							
17...	--	--	77	77	81	86	100
30...	--	--	30	--	--	--	--
JAN							
11...	--	--	80	--	--	--	--
11...	--	--	78	91	99	100	--
25...	--	--	73	80	94	99	100
25...	--	--	91	94	99	100	--
FEB							
13...	44	56	64	79	92	99	100
23...	78	85	91	95	98	99	100
29...	69	81	89	95	99	100	--
MAR							
24...	--	--	72	--	--	--	--
APR							
17...	--	--	99	--	--	--	--
30...	--	--	54	--	--	--	--
MAY							
11...	--	--	36	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)
OCT							
07...	1535	1	.27	15.5	4	22	73
07...	1540	1	.31	15.5	3	18	68
07...	1545	1	.34	15.5	--	--	2
07...	1548	1	.34	15.5	1	3	9
07...	1550	1	.34	15.5	18	50	87
07...	1555	1	.34	15.5	15	44	77
MAY							
11...	1430	1	2.7	11.0	3	13	50
11...	1435	1	2.7	11.0	4	18	49
11...	1440	1	2.6	11.0	18	38	56
11...	1445	1	2.6	11.0	--	1	9
11...	1450	1	2.7	11.0	1	2	8
11...	1455	1	2.9	11.0	1	3	12
11...	1500	1	3.0	11.0	24	51	72
11...	1505	1	2.9	11.0	12	42	85

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT							
07...	98	99	100	--	--	--	--
07...	94	96	97	99	100	--	--
07...	10	18	25	35	53	88	100
07...	15	20	30	42	65	80	100
07...	93	94	95	97	100	--	--
07...	86	88	90	93	100	--	--
MAY							
11...	86	93	95	97	100	--	--
11...	83	95	98	99	100	--	--
11...	66	74	80	91	100	--	--
11...	28	42	56	72	85	97	100
11...	16	22	31	44	64	90	100
11...	19	23	27	39	57	78	100
11...	77	82	88	96	100	--	--
11...	94	95	96	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
25...	1235	1000	1120	.250	0	1230	1240	15	1.0
25...	1250	1000	1120	.250	0	1245	1255	15	1.0
MAR									
16...	0840	1000	1120	.250	0	830	855	30	.5
16...	0915	1000	1120	.250	0	905	925	30	.5

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)
JAN									
25...	2	18	18	.50	22	12.0	.46	9.4	--
25...	2	18	18	.50	21	12.0	.58	9.4	--
MAR									
16...	2	29	29	1.00	13	11.0	.01	.17	1
16...	2	29	29	1.00	13	11.0	.01	.17	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
JAN								
25...	1	8	44	62	71	79	88	100
25...	--	7	36	54	65	79	90	100
MAR								
16...	2	12	71	88	92	96	100	--
16...	2	19	80	96	99	100	--	--

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	9.5	---	---	---	---	---	---
2	---	15.0	---	---	10.5	10.5	---	---	---	---	---	---
3	---	---	---	---	---	10.0	---	---	---	---	---	---
4	---	12.5	---	6.5	10.0	---	14.0	---	---	---	---	---
5	---	---	---	7.5	---	10.0	---	---	---	---	---	---
6	---	---	---	---	---	10.5	---	---	---	---	---	---
7	15.5	---	10.0	7.0	---	---	---	---	---	---	---	---
8	13.5	---	---	---	10.0	---	---	---	---	---	---	---
9	---	11.0	---	---	11.0	11.0	---	---	---	---	---	---
10	---	13.5	---	10.0	11.5	---	---	---	---	---	---	---
11	---	---	7.5	12.0	10.0	---	14.5	11.0	---	---	---	---
12	18.5	---	---	9.0	---	---	---	---	---	17.0	---	---
13	---	---	9.0	---	12.0	12.0	---	---	---	---	---	---
14	---	---	7.0	7.0	12.0	---	---	---	---	---	---	---
15	16.0	---	7.0	---	---	---	---	---	---	---	---	---
16	---	---	5.0	10.0	11.0	11.0	---	---	---	---	---	---
17	---	12.5	---	---	---	---	12.5	---	---	---	---	---
18	---	11.5	---	10.0	9.5	---	---	---	---	---	---	---
19	13.5	---	---	12.5	---	---	12.0	---	---	---	---	---
20	---	---	10.5	12.0	---	---	---	---	---	---	---	---
21	---	---	---	10.0	---	---	---	---	---	---	---	---
22	14.5	---	---	---	10.5	---	---	---	---	---	---	---
23	---	---	---	---	10.0	---	---	---	---	---	---	---
24	---	---	---	---	8.0	11.5	---	---	---	---	---	---
25	---	---	---	12.0	9.5	---	---	---	---	---	---	---
26	13.0	---	---	9.5	---	---	14.5	---	---	---	---	---
27	---	---	7.5	---	---	11.0	---	---	---	---	---	---
28	14.5	---	---	8.0	---	---	---	---	---	---	---	---
29	---	---	7.0	9.5	10.0	11.0	---	---	---	---	---	---
30	---	10.5	---	10.5	---	---	12.0	---	---	---	---	14.5
31	11.5	---	---	10.0	---	13.0	---	---	---	---	---	---

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.37	53	.08	.38	61	.07	.88	53	.13
2	.22	40	.02	.38	33	.04	.94	52	.15
3	.23	41	.03	.38	22	.02	.77	47	.10
4	.24	41	.03	.37	30	.03	.70	46	.09
5	.25	41	.03	.39	29	.03	.71	48	.09
6	.27	42	.03	.40	28	.03	.76	54	.11
7	.28	44	.03	2.5	72	1.6	.84	58	.13
8	.27	65	.05	6.5	96	4.8	.86	53	.12
9	.26	45	.03	1.2	30	.10	2.4	82	1.0
10	.25	39	.03	1.0	40	.11	.74	51	.10
11	.24	36	.02	1.0	31	.09	.67	46	.08
12	.39	29	.05	.98	25	.07	.70	47	.09
13	.23	12	.01	.89	23	.05	.77	71	.15
14	.26	63	.05	.88	21	.05	.69	52	.10
15	.25	74	.05	.90	22	.05	.65	50	.09
16	.24	63	.04	2.0	42	.34	.67	24	.04
17	.23	53	.03	2.0	42	.32	.69	23	.04
18	.23	42	.03	1.0	33	.09	.68	23	.04
19	.25	33	.02	4.9	91	2.2	.67	22	.04
20	.26	32	.02	1.5	53	.22	.67	53	.10
21	.26	33	.02	1.1	52	.16	.67	50	.09
22	.26	34	.02	.88	48	.11	.70	41	.08
23	.26	33	.02	.88	47	.11	.72	33	.06
24	.27	33	.02	.87	45	.11	.77	29	.06
25	.28	32	.02	.78	44	.09	.76	25	.05
26	.33	33	.04	.81	43	.09	.80	22	.05
27	.36	34	.09	.86	42	.10	.80	19	.04
28	3.0	91	3.6	.86	41	.10	.78	25	.05
29	.39	44	.05	1.0	41	.12	.79	32	.07
30	.34	49	.05	1.6	61	.31	.79	32	.07
31	.35	53	.05	---	---	---	.85	29	.07
TOTAL	11.32	---	4.66	39.19	---	11.61	24.89	---	3.48
		JANUARY			FEBRUARY			MARCH	
1	.86	26	.06	2.5	41	.28	22	272	17
2	.87	23	.05	2.5	49	.33	22	332	20
3	.86	21	.05	4.1	83	1.5	20	213	12
4	.80	19	.04	3.0	74	.61	23	223	24
5	.83	25	.06	4.1	104	1.2	54	1080	212
6	.83	28	.06	3.6	88	.88	20	262	14
7	.78	31	.07	3.2	77	.67	20	202	13
8	.79	31	.07	3.1	74	.63	57	798	153
9	.79	29	.06	2.6	59	.42	35	580	57
10	.81	28	.06	9.1	131	4.2	23	296	19
11	3.9	138	3.8	122	4060	5380	20	240	13
12	1.0	82	.25	73	2780	785	18	215	11
13	.64	52	.09	429	11200	21400	17	191	8.5
14	.59	36	.06	232	7080	7390	16	173	7.3
15	.61	31	.05	43	738	92	15	156	6.2
16	11	658	39	27	308	23	13	142	5.0
17	1.0	170	.64	21	191	11	12	137	4.4
18	6.8	174	4.3	18	110	5.4	11	132	4.1
19	1.6	32	.16	16	87	3.8	11	127	3.8
20	.87	56	.13	17	90	4.3	11	123	3.5
21	.73	62	.12	15	99	4.0	10	118	3.2
22	1.5	86	.48	37	331	152	9.6	114	2.9
23	33	632	89	73	1130	310	9.2	109	2.7
24	166	2190	1110	25	229	16	8.7	105	2.5
25	33	377	46	20	163	8.8	8.4	102	2.3
26	7.8	64	1.4	20	187	16	8.1	101	2.2
27	4.9	49	.65	105	2380	698	7.9	101	2.2
28	3.7	48	.49	32	966	87	7.4	128	2.5
29	3.5	49	.46	34	883	90	7.0	156	2.9
30	7.2	158	4.5	---	---	---	6.8	145	2.7
31	3.2	41	.37	---	---	---	6.4	129	2.2
TOTAL	300.76	---	1302.53	1396.8	---	36487.02	529.5	---	636.1

11180900 CROW CREEK NEAR HAYWARD, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	6.1	118	1.9
2	6.1	108	1.8
3	6.0	99	1.6
4	5.9	89	1.4
5	5.8	85	1.3
6	5.7	81	1.3
7	5.6	77	1.2
8	5.5	73	1.1
9	5.5	70	1.0
10	5.4	66	.96
11	5.3	63	.89
12	5.6	67	1.2
13	6.1	77	1.3
14	4.8	63	.82
15	4.9	64	.84
16	4.7	64	.81
17	6.6	182	3.6
18	4.7	96	1.2
19	4.4	90	1.1
20	4.4	87	1.0
21	4.1	84	.93
22	4.6	103	1.3
23	3.8	80	.83
24	3.5	72	.69
25	3.3	68	.61
26	3.3	63	.57
27	3.1	60	.50
28	3.0	58	.46
29	2.9	55	.42
30	2.8	52	.39
31	---	---	---
TOTAL	143.5	---	33.02
PERIOD	2445.96		38478.42

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	11.32	4.66	2	7
NOVEMBER	39.19	11.61	6	18
DECEMBER	24.89	3.48	0	3
JANUARY 2000	300.76	1302.53	312	1610
FEBRUARY	1396.80	36487.02	1340	37800
MARCH	529.50	636.10	241	877
APRIL	143.50	33.02	0	33
PERIOD	2445.96	38478.42	1901	40348

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA

LOCATION.—Lat 37°42'55", long 122°03'12", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 0.9 mi upstream from Cull Creek Dam, and 1.1 mi northeast of Castro Valley Post Office.

DRAINAGE AREA.—5.79 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1978 to current year.

REVISED RECORDS.—WDR CA-80-2: 1979(P).

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

REMARKS.—Records fair including estimated daily discharges. No storage or diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,690 ft^3/s, Jan. 5, 1982, gage height, 8.71 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	unknown	841	5.57	Feb. 22	unknown	250	3.09

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.24	.14	.30	e14	2.9	1.3	.42	.14	.01	.02
2	.01	.00	.25	.14	.27	e14	3.1	1.3	.41	.16	.01	.01
3	.01	.00	.16	.14	.57	e11	2.7	1.2	.42	.19	.01	.00
4	.01	.00	.11	.14	.34	e13	2.6	.98	.42	.15	.01	.00
5	.01	.00	.09	.15	1.3	e36	2.6	1.1	.43	.16	.01	.00
6	.01	.00	.08	.14	.70	e13	2.5	.99	.43	.22	.01	.00
7	.01	.03	.09	.14	.30	e12	2.4	1.4	.41	.19	.01	.00
8	.01	.23	.09	.16	.26	e39	2.4	3.6	.56	.15	.01	.00
9	.00	.05	.29	.15	e.24	e23	2.3	1.4	.46	.11	.01	.00
10	.00	.01	.17	.15	e1.8	16	2.2	1.0	.42	.08	.01	.00
11	.00	.00	.15	.84	e47	13	2.1	.87	.38	.07	.01	.00
12	.00	.00	.11	1.1	e21	11	1.9	.85	.36	.09	.01	.00
13	.00	.00	.13	.20	e200	9.5	2.3	.85	.34	.06	.01	.00
14	.00	.00	.10	.13	e100	8.4	1.8	.95	.27	.05	.01	.00
15	.00	.00	.10	.11	e19	7.3	1.5	1.3	.24	.04	.01	.00
16	.00	.03	.09	6.6	e12	6.3	1.4	.92	.24	.06	.01	.00
17	.00	.21	.09	.85	e8.1	5.3	2.0	.84	.26	.13	.01	.00
18	.00	.12	.09	5.3	e5.8	5.0	1.4	.79	.26	.11	.01	.00
19	.00	.93	.09	1.1	e4.4	4.6	1.4	.74	.26	.05	.01	.00
20	.00	.79	.09	.50	e5.1	4.2	1.6	.70	.24	.04	.01	.00
21	.00	.20	.09	.25	e4.2	3.9	1.6	.66	.20	.05	.00	.00
22	.00	.10	.08	.54	e20	3.9	1.9	.61	.19	.05	.01	.00
23	.00	.08	.08	15	e67	4.2	1.6	.59	.22	.04	.01	.00
24	.00	.06	.08	74	e16	4.5	1.5	.58	.21	.02	.00	.00
25	.00	.06	.09	15	e10	4.2	1.5	.58	.19	.02	.00	.00
26	.00	.07	.10	3.2	e8.7	4.0	1.6	.58	.16	.01	.00	.00
27	.00	.07	.11	1.0	e78	3.8	1.5	.56	.13	.02	.00	.00
28	.06	.07	.11	.52	e19	3.4	1.4	.53	.11	.01	.00	.00
29	.00	.07	.12	.35	e17	3.3	1.3	.51	.12	.01	.00	.00
30	.00	.15	.11	2.7	---	3.1	1.3	.50	.13	.01	.01	.00
31	.00	---	.14	.52	---	2.8	---	.46	---	.01	.01	---
TOTAL	0.14	3.33	3.72	131.26	668.38	306.7	58.3	29.24	8.89	2.50	0.24	0.03
MEAN	.005	.11	.12	4.23	23.0	9.89	1.94	.94	.30	.081	.008	.001
MAX	.06	.93	.29	74	200	39	3.1	3.6	.56	.22	.01	.02
MIN	.00	.00	.08	.11	.24	2.8	1.3	.46	.11	.01	.00	.00
AC-FT	.3	6.6	7.4	260	1330	608	116	58	18	5.0	.5	.06

e Estimated.

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.043	.76	2.61	10.1	14.5	9.35	3.03	.88	.30	.085	.019	.007
MAX	.45	6.00	14.0	43.7	58.9	54.3	16.8	3.56	1.27	.50	.13	.079
(WY)	1983	1984	1984	1997	1998	1983	1982	1983	1998	1998	1998	1983
MIN	.000	.000	.001	.000	.045	.13	.055	.016	.007	.000	.000	.000
(WY)	1979	1987	1990	1991	1991	1988	1990	1988	1988	1981	1979	1979

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1979 - 2000	
ANNUAL TOTAL	1362.23		1212.73			
ANNUAL MEAN	3.73		3.31		3.42	
HIGHEST ANNUAL MEAN					10.3	1983
LOWEST ANNUAL MEAN					.054	1990
HIGHEST DAILY MEAN	149	Feb 7	200	Feb 13	445	Feb 15 1982
LOWEST DAILY MEAN	.00	Oct 9	.00	Oct 9	.00	Oct 1 1978
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 9	.00	Oct 9	.00	Oct 1 1978
INSTANTANEOUS PEAK FLOW			841	Feb 13	1690	Jan 5 1982
INSTANTANEOUS PEAK STAGE			5.57	Feb 13	8.71	Jan 5 1982
ANNUAL RUNOFF (AC-FT)	2700		2410		2470	
10 PERCENT EXCEEDS	10		5.5		6.5	
50 PERCENT EXCEEDS	.21		.15		.13	
90 PERCENT EXCEEDS	.01		.00		.00	

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1979 to current year (storm season only).
WATER TEMPERATURE: Water years 1979 to current year.
SEDIMENT DATA: Water years 1979 to current year.

PERIOD OF DAILY RECORD.—October 1978 to current year.
WATER TEMPERATURE: October 1978 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1978 to current year.

REMARKS.—Zero bed-load discharge observed at flows less than 4.80 ft^3/s. Sediment samples were collected on most days where a water temperature is published.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION: Maximum daily mean, 24,400 mg/L, Mar. 13, 1993; minimum daily mean, no flow many days during most years.
SEDIMENT LOAD: Maximum daily, 26,400 tons, Feb. 17, 1986; minimum daily, 0 ton, many days during most years.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 8,800 mg/L, estimated, Feb. 13; minimum daily mean, no flow many days.
SEDIMENT LOAD (storm season only): Maximum daily, 4,750 tons, estimated, Feb. 13; minimum daily, 0 ton, many days.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
JAN								
16...	1100	11	9.5	342	10	--	--	--
24...	1255	68	12.5	3220	591	48	52	56
26...	0830	3.1	8.0	43	.36	--	--	--
FEB								
13...	1720	e404	12.0	17000	e18500	28	29	31
29...	1225	e28	11.0	1520	e115	52	52	62
MAR								
09...	1455	23	11.5	759	47	--	--	--
10...	0900	17	7.5	229	10	--	--	--
APR								
17...	1335	2.3	13.5	32	.02	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
JAN							
16...	--	--	100	--	--	--	--
24...	69	79	86	92	97	100	--
26...	--	--	100	--	--	--	--
FEB							
13...	43	54	62	70	90	98	100
29...	76	84	92	96	99	100	--
MAR							
09...	--	--	86	89	95	100	--
10...	--	--	76	83	96	100	--
APR							
17...	--	--	80	--	--	--	--

e Estimated

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)
OCT							
15...	1140	12.0	1	.00	9	20	37
15...	1145	12.0	1	.00	3	13	27
15...	1150	12.0	1	.00	1	4	13
15...	1155	12.0	1	.00	1	2	3
15...	1200	12.0	1	.00	6	16	48
15...	1205	12.0	1	.00	11	26	44
MAY							
10...	1035	11.5	1	.89	2	10	38
10...	1040	11.5	1	.89	2	8	22
10...	1045	11.5	1	.89	1	2	8
10...	1050	11.5	1	.92	1	4	13
10...	1055	11.5	1	.96	9	18	31
10...	1100	11.5	1	1.0	9	24	52

DATE	BED MAT. SIEVE DIAM. % FINER THAN 500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT							
15...	49	61	72	86	100	--	--
15...	29	48	70	87	96	100	--
15...	23	42	75	93	98	98	100
15...	7	12	17	27	46	78	100
15...	74	84	91	96	100	--	--
15...	55	65	78	92	100	--	--
MAY							
10...	73	90	97	99	100	--	--
10...	42	72	92	97	100	--	--
10...	18	27	34	47	64	79	100
10...	29	55	72	89	100	--	--
10...	42	53	70	88	100	--	--
10...	65	73	83	95	100	--	--

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

PARTICLE SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	STARTING TIME (2400 HOURS) (82073)	ENDING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
26...	0900	1000	1120	.250	0	0845	0915	60	.4
MAR									
10...	0815	1000	1120	.250	0	0805	0820	30	.5
10...	0840	1000	1120	.250	0	0830	0845	30	.5

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VERTICALS IN COMPOSITE SAMPLE (NUM) (04119)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COMPOSITE SAMPLE T/D/FT (04122)	SEDIMENT DISCHARGE, BEDLOAD (TONS/DAY) (80225)
JAN								
26...	1	21	21	.80	3.7	8.0	<.01	.02
MAR								
10...	2	25	25	.60	17	7.5	.66	7.6
10...	2	25	25	.60	17	7.5	.60	7.6

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
JAN								
26...	2	4	18	68	93	96	98	100
MAR								
10...	--	--	2	20	50	78	94	100
10...	--	--	2	14	53	75	96	100

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

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	---	---	---	---	10.5	---	---	---	---	---	---
2	---	12.0	---	---	10.5	10.5	---	---	---	---	---	---
3	---	---	---	---	---	11.5	---	---	---	---	---	---
4	---	11.0	---	5.5	9.5	---	15.5	---	---	---	---	---
5	14.5	---	---	6.0	---	10.5	---	---	---	---	---	---
6	---	---	---	---	---	11.5	---	---	---	---	---	---
7	---	---	9.0	6.5	---	---	---	---	---	---	---	---
8	---	---	---	---	9.5	---	---	---	---	---	---	---
9	---	10.0	---	---	10.5	11.5	---	---	---	---	---	---
10	---	11.5	---	8.5	11.0	7.5	---	10.5	---	---	---	---
11	---	---	7.0	10.0	10.0	---	13.5	---	---	---	---	---
12	13.0	---	---	8.0	---	---	---	---	---	15.0	---	---
13	---	12.0	8.0	---	12.0	13.5	---	---	---	---	---	---
14	---	---	7.0	7.5	12.0	---	---	---	---	---	---	---
15	12.0	---	6.5	---	---	---	---	---	---	---	---	---
16	---	---	4.0	9.5	11.5	---	---	---	---	---	---	---
17	---	11.5	---	9.5	---	13.0	13.5	---	---	---	---	---
18	---	9.5	---	10.0	10.5	---	---	---	---	---	---	---
19	11.5	---	---	11.5	---	---	13.5	---	---	---	---	---
20	---	---	10.0	11.0	---	---	---	---	---	---	---	---
21	---	---	---	9.0	---	---	---	---	---	---	---	---
22	12.0	---	---	---	11.0	---	---	---	---	---	---	---
23	---	---	7.0	---	10.5	---	---	---	---	---	---	---
24	---	---	---	12.5	9.0	11.0	---	---	---	---	---	---
25	---	---	---	12.0	10.5	---	---	---	---	---	---	---
26	11.0	---	---	8.0	---	---	16.5	---	---	---	---	---
27	---	---	7.0	---	---	11.5	---	---	---	---	---	---
28	14.0	---	---	---	---	---	---	---	---	---	---	---
29	---	---	7.0	9.0	11.0	---	---	---	---	---	---	14.0
30	---	10.5	---	10.0	---	---	13.0	---	---	---	---	---
31	10.5	---	---	10.0	---	14.5	---	---	---	---	---	---

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.01	0	.00	.00	0	.00	.24	14	.00
2	.01	0	.00	.00	0	.00	.25	18	.01
3	.01	0	.00	.00	0	.00	.16	13	.00
4	.01	0	.00	.00	0	.00	.11	15	.00
5	.01	0	.00	.00	0	.00	.09	17	.00
6	.01	0	.00	.00	0	.00	.08	21	.00
7	.01	0	.00	.03	4	.00	.09	37	.00
8	.01	0	.00	.23	17	.02	.09	29	.00
9	.00	0	.00	.05	14	.00	.29	25	.02
10	.00	0	.00	.01	14	.00	.17	26	.01
11	.00	0	.00	.00	0	.00	.15	40	.02
12	.00	0	.00	.00	0	.00	.11	37	.01
13	.00	0	.00	.00	0	.00	.13	32	.01
14	.00	0	.00	.00	0	.00	.10	41	.01
15	.00	0	.00	.00	0	.00	.10	45	.01
16	.00	0	.00	.03	16	.00	.09	33	.00
17	.00	0	.00	.21	19	.01	.09	29	.00
18	.00	0	.00	.12	14	.00	.09	28	.00
19	.00	0	.00	.93	37	.16	.09	26	.00
20	.00	0	.00	.79	29	.08	.09	26	.00
21	.00	0	.00	.20	16	.00	.09	29	.00
22	.00	0	.00	.10	14	.00	.08	34	.00
23	.00	0	.00	.08	14	.00	.08	37	.00
24	.00	0	.00	.06	14	.00	.08	33	.00
25	.00	0	.00	.06	14	.00	.09	28	.00
26	.00	0	.00	.07	14	.00	.10	24	.00
27	.00	0	.00	.07	14	.00	.11	19	.00
28	.06	9	.00	.07	14	.00	.11	18	.00
29	.00	0	.00	.07	14	.00	.12	17	.00
30	.00	0	.00	.15	13	.00	.11	17	.00
31	.00	0	.00	---	---	---	.14	17	.00
TOTAL	0.14	---	0.00	3.33	---	0.27	3.72	---	0.10
		JANUARY			FEBRUARY			MARCH	
1	.14	17	.00	.30	29	.02	e14	e650	e25
2	.14	17	.00	.27	42	.03	e14	e610	e23
3	.14	17	.00	.57	69	.13	e11	e500	e15
4	.14	16	.00	.34	34	.03	e13	e550	e19
5	.15	11	.00	1.3	84	.83	e36	e1300	e126
6	.14	7	.00	.70	67	.15	e13	e550	e19
7	.14	4	.00	.30	45	.04	e12	e520	e17
8	.16	3	.00	.26	35	.02	e39	e1700	e179
9	.15	4	.00	e.24	e30	e.02	e23	e970	e60
10	.15	4	.00	e1.8	e59	e.29	16	287	12
11	.84	24	.11	e47	e240	e30	13	198	6.7
12	1.1	41	.19	e21	e110	e6.2	11	153	4.5
13	.20	10	.00	e200	e8800	e4750	9.5	112	2.9
14	.13	10	.00	e100	e4800	e1300	8.4	102	2.3
15	.11	20	.00	e19	e810	e42	7.3	98	1.9
16	6.6	252	6.5	e12	e490	e16	6.3	93	1.6
17	.85	24	.06	e8.1	e400	e8.7	5.3	89	1.3
18	5.3	49	.77	e5.8	e210	e3.3	5.0	82	1.1
19	1.1	18	.06	e4.4	e200	e2.4	4.6	76	.94
20	.50	8	.01	e5.1	e205	e2.8	4.2	69	.79
21	.25	8	.00	e4.2	e190	e2.2	3.9	62	.66
22	.54	9	.01	e20	e910	e49	3.9	55	.58
23	15	181	21	e67	e3400	e615	4.2	49	.55
24	74	3180	707	e16	e580	e25	4.5	42	.52
25	15	559	31	e10	e490	e13	4.2	38	.43
26	3.2	52	.58	e8.7	e430	e10	4.0	35	.38
27	1.0	24	.07	e78	e3300	e695	3.8	31	.32
28	.52	18	.03	e19	e800	e41	3.4	31	.28
29	.35	13	.01	e17	e770	e35	3.3	32	.28
30	2.7	110	2.0	---	---	---	3.1	33	.27
31	.52	22	.03	---	---	---	2.8	34	.25
TOTAL	131.26	---	769.43	668.38	---	7648.16	306.7	---	523.55

e Estimated.

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	2.9	31	.25
2	3.1	28	.23
3	2.7	25	.19
4	2.6	23	.16
5	2.6	23	.16
6	2.5	24	.16
7	2.4	25	.16
8	2.4	26	.16
9	2.3	27	.17
10	2.2	28	.17
11	2.1	29	.17
12	1.9	29	.15
13	2.3	30	.19
14	1.8	30	.15
15	1.5	31	.12
16	1.4	31	.12
17	2.0	32	.17
18	1.4	33	.12
19	1.4	34	.12
20	1.6	33	.14
21	1.6	31	.14
22	1.9	30	.15
23	1.6	28	.12
24	1.5	27	.11
25	1.5	26	.10
26	1.6	25	.11
27	1.5	37	.15
28	1.4	51	.19
29	1.3	66	.24
30	1.3	43	.15
31	---	---	---
TOTAL	58.3	---	4.72
PERIOD	1171.83		8946.23

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	0.14	0.00	0	0
NOVEMBER	3.33	0.27	0	0
DECEMBER	3.72	0.10	0	0
JANUARY 2000	131.26	769.43	114	883
FEBRUARY	668.38	7648.16	745	8390
MARCH	306.70	523.55	134	658
APRIL	58.30	4.72	0	5
PERIOD	1171.83	8946.23	993	9936

11181000 SAN LORENZO CREEK AT HAYWARD, CA

LOCATION.—Lat 37°41'08", long 122°03'48", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 300 ft downstream of Center Street Bridge, just outside city limits of Hayward, 0.6 mi downstream from Crow Creek, and 1.0 mi downstream from Don Castro Dam.

DRAINAGE AREA.—37.5 mi^2.

PERIOD OF RECORD.—October 1939 to September 1940, October 1946 to Apr. 28, 1983, October 1997 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1315-B: 1947(M), 1949(M). WSP 1345: 1940(M). WSP 1715: 1947.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 133.16 ft above sea level. January to September 1940, nonrecording gage on bridge 0.1 mi upstream at present datum.

REMARKS.—Records fair. Flow partly regulated since October 1962 by Cull Creek Reservoir, capacity, 310 acre-ft, and since January 1965 by Don Castro Reservoir, 1.0 mi upstream, capacity, 380 acre-ft. A few very small diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,140 ft^3/s, Feb. 3, 1998, gage height, 21.85 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 550 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 24	1730	649	7.82	Feb. 22	2330	655	7.91
Feb. 13	2100	2,890	13.82				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.37	3.2	2.9	9.5	72	22	10	3.7	2.1	1.1	6.8
2	1.9	.38	2.9	2.8	9.3	72	22	10	3.7	2.3	1.1	2.4
3	2.0	.36	2.3	2.8	16	63	21	10	3.7	2.3	.87	1.2
4	2.2	.36	1.8	2.9	11	65	21	10	3.6	2.1	1.2	1.0
5	2.2	.42	1.7	3.1	13	141	21	10	3.7	2.5	1.3	.99
6	2.0	.44	1.8	3.0	11	73	20	10	3.5	1.8	1.2	.98
7	1.9	9.6	1.9	2.9	9.1	69	20	18	7.6	1.6	1.1	.87
8	1.6	23	1.8	3.1	8.5	151	20	32	4.5	2.2	1.3	.97
9	1.4	1.5	10	3.2	8.3	121	20	9.7	3.6	2.0	1.4	.99
10	1.3	.90	2.8	3.3	28	89	19	8.0	3.3	1.7	1.4	.96
11	1.1	.95	2.1	18	204	75	19	7.1	3.1	.91	1.2	1.3
12	1.4	.65	2.0	5.1	170	66	19	6.6	3.0	1.5	1.2	1.5
13	1.0	.56	2.3	3.4	848	58	25	7.6	2.7	1.8	1.4	1.6
14	.95	.62	2.0	2.5	588	53	15	17	2.2	1.9	.92	1.6
15	.82	1.1	2.0	2.4	141	49	15	9.9	2.1	1.9	.87	1.6
16	.61	5.0	2.1	38	97	44	14	8.3	2.2	1.9	1.4	1.3
17	.56	7.2	2.1	4.6	74	41	25	7.7	2.4	1.9	.99	1.0
18	.55	1.5	2.1	30	62	39	16	7.3	2.4	2.1	.85	1.1
19	.48	14	2.3	9.2	55	37	14	7.0	2.3	2.0	1.0	1.1
20	.59	2.8	2.4	4.6	64	34	13	6.7	2.2	1.7	1.1	.98
21	.57	1.4	2.5	3.3	55	32	13	6.2	2.1	2.2	.99	1.0
22	.52	1.3	2.7	6.5	94	31	17	6.0	2.2	2.2	.94	2.7
23	.47	1.3	2.7	82	199	30	13	5.9	2.3	2.0	1.1	1.6
24	.53	1.3	2.8	334	85	30	12	5.8	2.3	1.5	1.2	1.0
25	.63	1.3	2.8	87	70	28	12	5.6	2.3	.98	.94	.97
26	.82	1.3	2.8	27	66	27	11	5.5	2.1	1.7	.90	.97
27	1.1	1.4	2.8	16	209	27	11	5.2	2.1	1.3	.95	1.2
28	15	1.4	2.9	12	93	27	11	4.9	2.0	1.4	1.2	1.3
29	.82	1.4	2.7	11	94	26	11	4.6	2.0	1.7	.98	1.5
30	.42	4.5	2.8	23	---	24	10	4.4	2.0	1.4	1.2	1.4
31	.40	---	2.8	12	---	22	---	4.1	---	.94	1.3	---
TOTAL	47.94	88.31	81.9	761.6	3391.7	1716	502	271.1	86.9	55.53	34.60	43.88
MEAN	1.55	2.94	2.64	24.6	117	55.4	16.7	8.75	2.90	1.79	1.12	1.46
MAX	15	23	10	334	848	151	25	32	7.6	2.5	1.4	6.8
MIN	.40	.36	1.7	2.4	8.3	22	10	4.1	2.0	.91	.85	.87
AC-FT	95	175	162	1510	6730	3400	996	538	172	110	69	87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	3.65	3.58	20.7	54.7	56.1	38.2	25.1	5.76	2.36	1.06	.73	.64
MAX	107	30.1	184	227	327	267	255	21.3	9.03	5.22	4.58	2.89
(WY)	1963	1951	1956	1952	1998	1983	1958	1967	1967	1982	1980	1968
MIN	.000	.000	.13	.39	.73	.84	.29	.12	.043	.000	.000	.000
(WY)	1947	1949	1949	1949	1948	1972	1977	1976	1977	1961	1947	1947

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	6242.03		7081.46			
ANNUAL MEAN	17.1		19.3		16.5	
HIGHEST ANNUAL MEAN					56.4	1982
LOWEST ANNUAL MEAN					.63	1977
HIGHEST DAILY MEAN	600	Feb 7	848	Feb 13	2600	Oct 13 1962
LOWEST DAILY MEAN	.36	Nov 3	.36	Nov 3	.00	Sep 19 1940
ANNUAL SEVEN-DAY MINIMUM	.39	Oct 30	.39	Oct 30	.00	Oct 1 1946
INSTANTANEOUS PEAK FLOW			2890	Feb 13	8140	Feb 3 1998
INSTANTANEOUS PEAK STAGE			13.82	Feb 13	21.85	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	12380		14050		11950	
10 PERCENT EXCEEDS	37		50		34	
50 PERCENT EXCEEDS	3.1		2.7		1.6	
90 PERCENT EXCEEDS	1.2		.95		.00	

11181008 CASTRO VALLEY CREEK AT HAYWARD, CA

LOCATION.—Lat 37°40'48", long 122°04'46", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 500 ft east of Hayward City Hall, 700 ft upstream from mouth, and 700 ft downstream from small left-bank tributary.

DRAINAGE AREA.—5.51 mi^2.

PERIOD OF RECORD.—October 1971 to current year (seasonal records only, water years 1975–77).

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,550 ft^3/s, Feb. 2, 1998, gage height, 9.12 ft, from rating curve extended above 61 ft^3/s on basis of slope-area measurement at gage height 3.92 ft and step-backwater computation to gage height 10.40 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 8	0330	587	5.65	Feb. 11	1835	873	6.85
Jan. 16	0240	520	5.33				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.30	.67	.36	.95	4.9	.62	.51	.47	.51	.23	8.8
2	.03	.23	1.9	.30	.71	8.5	.61	.50	.47	.51	.22	.53
3	.02	.23	.36	.51	9.2	3.7	.67	.51	.43	.58	.22	.39
4	.02	.26	.33	.39	.88	26	.59	.81	.45	.59	.19	e.45
5	.02	.31	.31	.31	10	28	.65	.47	.44	.56	.19	e.40
6	.07	.21	.32	.37	1.2	6.0	.56	.66	.47	.60	.18	e.38
7	.20	13	.38	.28	.83	14	.49	11	1.1	.59	.19	e.35
8	.19	20	.30	.28	.65	29	.51	27	4.1	.57	.19	e.30
9	.15	.44	14	.28	.59	15	.49	1.4	.37	.60	.19	e.35
10	.16	.33	.60	.34	23	6.2	.47	.96	.34	.57	.18	e.35
11	.24	.30	.44	13	100	4.5	.46	.78	.35	.54	.26	e.55
12	.17	.28	.39	.67	21	3.6	6.9	.71	.34	.54	.19	e.50
13	.22	.27	.58	.63	223	2.9	6.1	.68	.40	.53	.17	e.45
14	.18	.41	.37	.41	72	2.5	1.0	3.7	.50	.58	.18	e.40
15	.19	.32	.37	.34	10	2.2	2.1	13	.55	.54	.18	e.40
16	.16	7.2	.39	30	11	1.8	.70	.98	.52	.54	.18	e.45
17	.16	8.9	.38	2.5	4.5	1.6	9.4	.77	.48	.57	.17	e.75
18	.17	.60	.39	30	3.0	1.6	.92	.74	.49	.59	.18	e.60
19	.16	19	.30	7.9	2.4	1.5	.70	.68	.53	.72	.17	e.65
20	.16	.95	.34	.80	23	1.3	.65	.78	.57	.57	.16	e.70
21	.18	.74	.30	.42	4.6	1.3	.63	.92	.63	.59	.26	1.7
22	.18	.69	.32	10	54	1.2	3.9	.85	.59	.60	.19	1.8
23	.17	.50	.30	105	23	1.1	.70	.82	.56	.67	.19	1.5
24	.16	.49	.30	192	8.6	1.1	.64	.71	.57	.60	.18	.87
25	.17	.35	.30	13	4.9	1.0	.59	.54	.62	.60	.19	.33
26	.17	.35	.28	3.8	15	.89	.60	.54	.61	.46	.17	.92
27	.40	.35	.31	2.0	40	.75	.55	.55	.58	.21	.18	.71
28	21	.32	.34	1.3	7.4	.73	.49	.51	.70	.19	.23	.93
29	.28	.39	.33	.92	13	.68	.53	.57	.77	.26	.22	.61
30	.25	4.0	.30	15	---	.67	.50	.53	.52	.20	.26	.78
31	.23	---	.30	1.5	---	.60	---	.49	---	.21	.27	---
TOTAL	25.93	81.72	26.50	434.61	688.41	174.82	43.72	73.67	19.52	15.99	6.16	27.90
MEAN	.84	2.72	.85	14.0	23.7	5.64	1.46	2.38	.65	.52	.20	.93
MAX	21	20	14	192	223	29	9.4	27	4.1	.72	.27	8.8
MIN	.02	.21	.28	.28	.59	.60	.46	.47	.34	.19	.16	.30
AC-FT	51	162	53	862	1370	347	87	146	39	32	12	55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

MEAN	1.53	4.78	5.21	10.2	11.0	7.45	2.80	1.17	.58	.39	.38	.51
MAX	4.97	19.0	14.2	29.3	45.6	34.6	12.3	3.23	1.55	1.15	1.50	1.62
(WY)	1976	1974	1997	1998	1998	1983	1974	1990	1995	1974	1983	1983
MIN	.15	.24	.24	.39	1.06	.60	.20	.30	.28	.17	.14	.12
(WY)	1978	1993	1990	1991	1977	1988	1977	1992	1980	1991	1980	1980

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	1192.45		1618.95			
ANNUAL MEAN	3.27		4.42		4.02	
HIGHEST ANNUAL MEAN					9.14	1998
LOWEST ANNUAL MEAN					1.51	1972
HIGHEST DAILY MEAN	96	Feb 7	223	Feb 13	322	Jan 4 1982
LOWEST DAILY MEAN	.02	Oct 3	.02	Oct 3	.00	Oct 11 1977
ANNUAL SEVEN-DAY MINIMUM	.06	Sep 30	.06	Oct 1	.00	Oct 11 1977
INSTANTANEOUS PEAK FLOW			873	Feb 11	1550	Feb 2 1998
INSTANTANEOUS PEAK STAGE			6.85	Feb 11	9.12	Feb 2 1998
ANNUAL RUNOFF (AC-FT)	2370		3210		2910	
10 PERCENT EXCEEDS	7.0		9.3		6.9	
50 PERCENT EXCEEDS	.51		.55		.49	
90 PERCENT EXCEEDS	.25		.19		.19	

e Estimated.

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA

LOCATION.—Lat 37°41'03", long 122°08'20", in San Lorenzo (Soto) Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 400 ft downstream from Washington Avenue Bridge in San Lorenzo, and 1.6 mi upstream from mouth.

DRAINAGE AREA.—44.6 mi^2.

PERIOD OF RECORD.—October 1967 to September 1978, October 1987 to current year.
WATER TEMPERATURE: Water years 1989–93 (storm season only).
SEDIMENT DATA: Water years 1989–93 (storm season only).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 6.13 ft above sea level (levels by Alameda County Flood Control and Water Conservation District).

REMARKS.—Records poor. Flow partly regulated since October 1962 by Cull Creek Reservoir, capacity, 310 acre-ft, and since January 1965 by Don Castro Reservoir, capacity, 380 acre-ft, 7 mi upstream. A few very small diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,300 ft^3/s, Feb. 3, 1998, gage height, 14.27 ft, from rating curve extended above 1,200 ft^3/s; minimum daily, 0.01 ft^3/s, several days in June and July 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2315	4,840	9.07	Feb. 23	0130	1,810	6.37

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	1.1	6.6	e8.2	15	34	e18	14	e7.0	e2.8	e2.2	25
2	1.0	.78	7.2	e8.2	13	37	e18	14	e6.9	e3.0	e2.2	7.8
3	.72	.77	e5.6	e8.5	34	30	e19	13	e6.8	e3.1	e2.1	2.7
4	1.2	.86	e4.8	e8.6	16	57	e18	13	e6.6	e2.9	e2.1	2.1
5	1.3	1.1	e4.9	e8.7	31	145	e19	12	e6.5	e3.3	e2.0	2.0
6	1.5	1.1	e5.0	e8.6	19	33	e18	12	e6.5	e2.5	e2.0	e1.9
7	.89	40	e5.0	e8.8	17	37	e17	29	e16	e2.0	e2.0	e1.8
8	.86	128	e9.0	e9.0	15	e180	e16	94	e10	e3.0	e2.0	e1.8
9	.74	16	e19	e9.4	16	157	e15	11	e7.5	e2.6	e1.9	e1.7
10	.75	12	e9.0	e20	77	92	e15	12	e6.0	e2.5	e1.9	e1.7
11	.80	7.8	e6.0	e31	326	75	e14	13	e5.2	e2.4	e1.8	e1.7
12	.68	8.4	e5.8	e15	102	63	33	14	e4.8	e2.4	e2.0	e1.7
13	.89	7.9	e6.3	e9.0	1020	55	54	e25	e4.0	e2.3	e2.2	e1.7
14	.61	8.3	e5.7	e5.2	1030	50	25	e44	e3.4	e2.4	2.0	e1.6
15	4.0	2.0	e5.6	e6.0	103	45	25	e24	e3.1	e2.4	1.5	e1.6
16	5.0	16	e5.8	e66	58	41	23	e20	e3.2	e2.5	2.1	e1.6
17	4.2	39	e6.0	e12	40	38	41	e17	e3.6	e2.5	2.0	e1.6
18	.92	12	e6.1	e51	30	35	26	e16	e3.5	e2.6	1.6	e1.6
19	2.6	70	e6.8	e20	22	33	22	e15	e3.3	e2.6	1.8	e1.5
20	5.2	13	e7.0	e9.0	51	31	21	e14	e3.0	e2.5	2.0	e1.5
21	6.2	3.1	e7.2	e10	27	29	20	13	e2.9	e2.5	2.2	e1.5
22	6.2	1.7	e7.6	e35	119	29	23	13	e3.0	e2.4	1.8	e3.0
23	6.2	1.6	e8.0	e80	260	28	19	11	e3.1	e2.5	2.3	e4.2
24	1.2	2.1	e8.1	e350	39	27	18	e10	e3.4	e2.5	3.1	e2.0
25	1.3	1.2	e8.1	e110	31	27	17	e9.0	e3.2	e2.4	2.7	e1.5
26	1.1	1.2	e8.1	e30	38	e25	16	8.3	e3.0	e2.4	2.8	e1.5
27	1.5	1.3	e8.0	e21	238	e22	16	8.0	e2.8	e2.4	2.6	e1.4
28	78	1.2	e8.0	17	52	e21	15	7.9	e2.6	e2.5	2.8	e1.4
29	4.2	1.5	e7.9	23	58	e20	15	e7.5	e2.7	e2.4	2.9	e1.4
30	.92	10	e7.8	49	---	e19	14	e7.3	e2.8	e2.3	3.2	e1.3
31	.92	---	e8.0	21	---	e18	---	e7.2	---	e2.3	3.2	---
TOTAL	142.19	411.01	224.0	1068.2	3897	1533	630	528.2	146.4	78.9	69.0	83.8
MEAN	4.59	13.7	7.23	34.5	134	49.5	21.0	17.0	4.88	2.55	2.23	2.79
MAX	78	128	19	350	1030	180	54	94	16	3.3	3.2	25
MIN	.59	.77	4.8	5.2	13	18	14	7.2	2.6	2.0	1.5	1.3
AC-FT	282	815	444	2120	7730	3040	1250	1050	290	156	137	166

e Estimated.

11181040 SAN LORENZO CREEK AT SAN LORENZO, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.21	9.92	24.0	73.2	71.2	44.9	23.1	9.56	4.24	1.92	1.56	1.81
MAX	30.2	38.1	106	259	390	154	108	31.9	17.0	5.99	3.25	4.58
(WY)	1992	1974	1971	1997	1998	1995	1974	1996	1993	1998	1969	1975
MIN	.23	1.49	1.41	1.14	2.15	1.83	2.07	.85	.066	.64	.11	.35
(WY)	1978	1991	1990	1991	1977	1972	1976	1972	1977	1990	1977	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	9002.16		8811.70			
ANNUAL MEAN	24.7		24.1		22.3	
HIGHEST ANNUAL MEAN					65.6	1998
LOWEST ANNUAL MEAN					2.38	1977
HIGHEST DAILY MEAN	934	Feb 7	1030	Feb 14	2400	Jan 21 1970
LOWEST DAILY MEAN	.59	Oct 1	.59	Oct 1	.01	Jun 12 1977
ANNUAL SEVEN-DAY MINIMUM	.76	Oct 8	.76	Oct 8	.01	Jun 10 1977
INSTANTANEOUS PEAK FLOW			4840	Feb 13	10300	Feb 3 1998
INSTANTANEOUS PEAK STAGE			9.07	Feb 13	14.27	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	17860		17480		16180	
10 PERCENT EXCEEDS	46		41		45	
50 PERCENT EXCEEDS	7.2		7.2		2.8	
90 PERCENT EXCEEDS	1.2		1.5		.61	

380519122262901 SAN PABLO BAY AT PETALUMA RIVER CHANNEL MARKER 9, CA

LOCATION.—Lat 38°05'19", long 122°26'29", unsurveyed, sec.20 T.3 N., R.5 W., Marin County, Hydrologic Unit 18050001, at Coast Guard channel marker 9.

PERIOD OF RECORD.—November 1998 to current year.
SPECIFIC CONDUCTANCE: November 1998 to current year.
WATER TEMPERATURE: November 1998 to current year.

PERIOD OF DAILY RECORD.—November 1998 to current year.
SPECIFIC CONDUCTANCE: November 1998 to current year.
WATER TEMPERATURE: November 1998 to current year.

INSTRUMENTATION.—Water-quality monitor since November 1998.

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instrument. The probe is set at 4.0 ft below Mean Lower Low Water (MLLW). Daily maximums and minimums sometimes differ from tidal cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: Maximum recorded, 39,000 microsiemens, Oct. 26, 1999; minimum recorded, 667 microsiemens (REVISED), Feb. 17, 1999.
WATER TEMPERATURE: Maximum recorded, 26.5°C, May 23, 2000; minimum recorded, 3.5°C, Dec. 23, 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: Maximum recorded, 39,000 microsiemens, Oct. 26; minimum recorded, 2,930 microsiemens, Feb. 16.
WATER TEMPERATURE: Maximum recorded, 26.5°C, May 23; minimum recorded, 7.0°C, Dec. 28, Jan. 7.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	38000	37300	---	---	35800	34800	34700	33900	---	---	---	---
2	38000	37400	---	---	---	---	---	---	---	---	---	---
3	38100	36400	---	---	35800	34900	---	---	---	---	---	---
4	38200	36700	---	---	---	---	---	---	---	---	---	---
5	38100	36500	---	---	---	---	---	---	---	---	---	---
6	38200	36600	---	---	---	---	---	---	---	---	---	---
7	38400	36700	---	---	---	---	---	---	---	---	---	---
8	38300	34400	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	38300	36300	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	8000	4420
16	---	---	---	---	---	---	---	---	13000	2930	10100	4310
17	38600	34300	---	---	---	---	---	---	11000	3120	14300	4690
18	---	---	---	---	---	---	---	---	8860	3570	11600	5700
19	38100	35200	---	---	---	---	---	---	9170	4580	13100	5930
20	38200	33600	---	---	---	---	---	---	9230	6280	15200	6900
21	38300	36200	---	---	35200	33200	---	---	8350	5150	15600	7840
22	38500	34200	---	---	35100	33500	---	---	7850	6140	14400	8310
23	38700	37000	---	---	35000	33900	---	---	7680	5770	13700	9000
24	38800	37000	36700	34900	34900	33900	---	---	7920	5890	14200	9080
25	38800	37100	36600	35100	34800	34100	---	---	8270	5460	15300	10100
26	39000	37700	36700	35300	34700	33600	---	---	8280	5590	---	---
27	38600	37800	---	---	34700	33800	---	---	7000	5320	18800	11800
28	38700	37700	---	---	---	---	---	---	6480	4180	19500	16200
29	38300	37600	---	---	---	---	---	---	---	---	20500	16100
30	38300	37400	35900	34800	---	---	---	---	---	---	17900	14300
31	38100	37400	---	---	34700	33900	---	---	---	---	21000	13900
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

380519122262901 SAN PABLO BAY AT PETALUMA RIVER CHANNEL MARKER 9, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	22600	15000	28100	23800	30300	26700	35200	32400	---	---	36700	35600
2	23300	15400	28000	24400	31900	26800	35300	31300	36000	32000	36700	34400
3	25400	16200	28900	24900	32300	26800	---	---	---	---	---	---
4	27000	15800	29500	24500	33200	27000	---	---	---	---	---	---
5	27500	16200	29700	23600	34600	27300	---	---	---	---	---	---
6	27600	16500	29900	24300	33600	27900	---	---	34900	33200	---	---
7	27900	15000	28300	24800	33300	28400	---	---	---	---	---	---
8	27100	16600	27200	24100	32900	29100	---	---	---	---	37000	33700
9	30900	17800	28000	24400	34200	30400	---	---	---	---	---	---
10	29300	18400	29200	25300	35100	31100	---	---	---	---	37200	30000
11	27100	19200	29400	25600	34900	32200	---	---	---	---	---	---
12	26400	22500	29200	23200	35000	32000	---	---	---	---	---	---
13	26500	23200	28200	24000	---	---	---	---	---	---	---	---
14	---	---	27500	24300	---	---	---	---	---	---	---	---
15	26700	24900	25500	24000	---	---	---	---	---	---	---	---
16	26600	24400	26700	21500	---	---	35500	30100	---	---	---	---
17	25600	23700	26900	23300	---	---	---	---	---	---	37000	34500
18	---	---	26000	23700	34300	29900	---	---	---	---	37600	35100
19	25800	20500	26000	23900	---	---	---	---	---	---	38000	35300
20	25600	20600	26100	24700	33900	29900	36000	31500	---	---	37900	35600
21	26300	21000	26200	25400	---	---	36000	33500	36900	35600	36600	35100
22	28200	21800	26700	25600	33900	29900	36200	32400	---	---	37200	35400
23	28200	21600	27500	26100	33800	28800	---	---	---	---	36800	36000
24	28300	22400	28300	26000	---	---	---	---	---	---	37100	36000
25	---	---	29200	26500	---	---	---	---	---	---	36800	35700
26	---	---	30900	27000	---	---	---	---	37100	33400	---	---
27	---	---	30200	27300	34400	32900	---	---	---	---	37600	36100
28	---	---	30000	27900	34600	32600	36400	30000	37100	34600	37700	36500
29	31400	24700	30000	28000	35400	31900	---	---	37400	35000	37500	36600
30	28600	23700	---	---	35400	30900	---	---	37000	35100	37400	36700
31	---	---	30100	26300	---	---	36100	31100	36800	35300	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

380519122262901 SAN PABLO BAY AT PETALUMA RIVER CHANNEL MARKER 9, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.0	19.5	16.5	14.0	12.5	11.5	9.5	8.5	12.0	11.0	---	---
2	20.5	19.0	16.5	14.5	12.5	11.5	9.0	8.0	12.5	11.0	---	---
3	20.0	18.5	16.5	15.0	12.0	9.5	9.0	8.0	12.0	11.5	---	---
4	19.0	18.0	16.5	14.5	11.0	9.5	9.0	7.5	11.5	11.0	---	---
5	19.0	17.5	16.5	14.5	11.0	9.0	9.5	8.0	11.5	11.0	---	---
6	18.5	17.5	16.0	14.5	11.0	9.0	9.5	7.5	12.0	11.0	---	---
7	19.0	17.0	16.0	14.5	---	---	9.5	7.0	12.0	11.0	---	---
8	19.0	17.0	15.5	14.0	---	---	10.0	7.5	12.5	11.0	---	---
9	19.5	17.0	15.0	13.5	---	---	10.0	7.5	12.5	11.5	---	---
10	19.5	17.5	15.0	13.5	---	---	10.5	8.0	12.5	12.0	---	---
11	19.5	18.0	15.0	14.0	---	---	10.5	9.0	12.0	11.5	---	---
12	19.0	17.5	15.0	14.0	---	---	10.5	9.0	11.5	11.0	---	---
13	19.5	18.0	15.5	14.0	---	---	10.5	9.0	12.0	11.0	---	---
14	19.5	18.0	15.5	14.0	---	---	11.0	9.5	13.0	12.0	---	---
15	19.0	17.5	15.5	14.0	---	---	11.0	10.5	---	---	18.0	12.5
16	19.0	17.5	15.0	14.0	---	---	11.5	11.0	13.0	12.0	17.5	13.0
17	19.5	17.0	15.0	13.5	---	---	11.0	10.5	12.5	11.5	15.5	12.5
18	18.5	17.0	14.5	13.0	---	---	11.0	10.5	12.5	11.5	15.5	13.5
19	18.5	16.0	14.0	12.5	---	---	11.5	11.0	13.0	11.5	15.5	13.5
20	18.0	15.5	14.0	12.0	---	---	11.5	11.0	12.5	11.5	13.5	11.5
21	17.5	15.0	14.0	11.5	10.5	9.0	11.5	10.5	12.5	11.0	14.0	11.5
22	17.0	15.0	12.5	10.0	10.5	8.5	11.5	10.5	12.5	11.5	15.0	12.5
23	17.0	14.5	12.0	9.5	10.5	8.0	11.5	11.0	12.0	11.0	15.0	14.0
24	17.0	13.5	12.0	9.5	10.5	7.5	11.5	11.0	11.5	10.5	16.0	13.5
25	16.5	13.5	13.0	10.0	10.5	7.5	12.0	11.5	11.5	10.5	16.0	13.5
26	17.0	14.0	13.5	10.5	10.5	7.5	12.0	11.0	12.0	11.0	16.0	13.5
27	16.5	15.0	13.5	10.5	9.5	7.5	12.0	11.0	12.5	11.5	16.0	13.5
28	16.5	14.5	12.5	11.0	10.0	7.0	12.0	11.0	12.5	11.0	15.5	13.0
29	16.0	14.0	12.5	11.0	9.5	7.5	12.0	10.5	---	---	16.5	13.0
30	16.0	14.0	13.0	11.5	9.5	8.0	12.0	11.0	---	---	17.5	13.0
31	16.5	14.0	---	---	9.5	8.0	11.5	11.0	---	---	17.0	14.0
MONTH	21.0	13.5	16.5	9.5	---	---	12.0	7.0	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.0	14.0	18.0	15.5	21.0	18.5	21.0	20.0	23.0	20.0	18.5	17.5
2	19.0	15.0	19.0	16.0	21.0	19.0	21.5	19.5	23.5	20.5	18.5	17.5
3	19.0	15.5	19.5	16.5	20.5	18.5	21.0	19.0	22.0	20.0	19.0	17.5
4	18.0	15.0	18.5	16.0	20.5	18.0	21.5	18.5	23.5	20.5	19.5	17.5
5	16.5	15.0	18.0	16.0	21.0	17.5	22.0	18.5	23.0	20.5	19.5	18.0
6	17.0	15.0	17.5	15.5	22.5	18.0	22.0	18.5	21.0	19.5	21.0	18.5
7	17.0	15.0	16.5	15.0	22.0	18.0	21.0	18.0	---	---	21.0	19.0
8	17.0	15.5	16.5	15.0	21.5	18.0	21.5	18.5	22.0	19.5	21.0	19.0
9	17.5	14.0	19.0	15.0	21.5	17.5	21.0	19.0	22.0	19.5	20.5	18.5
10	18.5	14.5	20.0	15.0	21.0	17.5	21.0	19.5	21.5	19.5	20.5	18.5
11	20.0	15.5	19.5	14.0	21.0	17.5	21.0	19.0	22.0	19.5	20.0	18.0
12	21.0	15.5	19.0	15.0	21.5	18.0	21.5	19.0	---	---	20.0	18.5
13	20.0	15.5	18.0	15.0	22.0	19.5	21.5	19.0	22.0	20.0	20.5	18.5
14	19.5	15.5	17.5	15.5	24.0	20.5	22.0	19.5	---	---	20.5	19.0
15	17.5	15.5	17.5	15.5	25.0	20.5	21.5	19.5	---	---	21.0	19.0
16	16.5	15.0	17.5	15.5	24.0	20.5	21.0	19.5	23.0	20.5	21.0	19.0
17	16.0	15.0	18.0	15.5	23.0	20.0	20.0	19.0	22.5	20.5	22.0	19.5
18	17.0	15.0	19.0	16.5	23.0	21.0	21.0	18.5	---	---	23.0	20.5
19	17.0	15.0	20.5	17.5	23.0	20.5	21.0	19.5	---	---	23.0	21.0
20	18.0	15.5	21.0	18.0	23.0	20.5	21.5	19.5	21.5	19.0	23.0	21.5
21	18.5	16.0	23.0	18.5	24.0	21.0	21.5	19.5	---	---	22.5	21.5
22	18.0	15.5	25.0	19.5	23.0	21.0	22.0	19.0	21.5	19.0	21.5	20.5
23	18.0	15.0	26.5	19.5	22.5	18.5	22.5	19.0	21.5	19.5	21.0	19.0
24	19.0	15.0	25.5	19.0	23.0	19.0	22.5	19.5	---	---	21.0	19.0
25	19.0	15.5	23.5	18.5	23.0	20.0	22.0	19.5	21.5	19.5	21.0	18.5
26	22.5	16.0	22.0	19.0	23.0	20.0	22.5	20.0	21.5	20.0	---	---
27	20.5	15.5	23.0	18.5	22.5	20.0	22.0	19.5	21.0	19.5	---	---
28	17.5	14.5	23.5	19.0	23.5	20.5	22.0	19.5	21.0	19.5	---	---
29	18.5	14.0	22.5	18.0	22.5	20.5	22.0	19.5	20.0	18.5	---	---
30	19.5	15.0	---	---	22.0	20.5	22.5	20.0	19.0	18.0	---	---
31	---	---	21.0	18.0	---	---	23.0	20.0	19.0	17.5	---	---
MONTH	22.5	14.0	---	---	25.0	17.5	23.0	18.0	---	---	---	---

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA

LOCATION.—Lat 37°57'53", long 122°25'42", in NW 1/4 sec.3, T.1 N., R.5 W., Contra Costa County, Hydrologic Unit 18050002, on north end of Richmond Terminal No. 4 Pier on west side of Point San Pablo.

GAGE-HEIGHT RECORDS

DRAINAGE AREA.—Indeterminate.

PERIOD OF RECORD.—October 1989 to current year (gage height only).

GAGE.—Water-stage recorder. Datum of gage is 10.00 ft below sea level.

REMARKS.—Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height recorded, 16.17 ft, Feb. 6, 1998; minimum gage height recorded, 4.93 ft, June 13, 1995.

EXTREMES FOR CURRENT YEAR.—Maximum gage height recorded, 14.87 ft, Feb. 20; minimum gage height recorded, 5.22 ft, Nov. 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.59	7.55	12.73	7.22	12.77	7.66	13.27	7.64	13.24	6.88	12.93	7.90
2	13.34	7.55	12.91	7.49	12.93	7.83	13.01	6.74	13.50	6.86	13.00	7.81
3	13.08	7.38	12.92	7.64	12.81	7.37	12.88	6.45	14.09	7.39	13.29	7.60
4	13.08	7.22	13.21	7.93	13.13	7.13	13.00	6.29	13.91	7.01	13.64	7.78
5	13.19	7.23	13.33	7.92	13.24	6.89	13.11	6.20	14.06	6.97	13.90	7.82
6	12.93	7.44	13.50	7.74	13.31	6.73	13.13	6.10	13.64	6.92	13.68	7.84
7	12.84	7.40	13.89	8.21	13.31	6.44	13.16	6.26	13.39	7.19	13.48	8.12
8	13.02	7.71	13.62	7.20	13.25	6.45	13.13	6.26	13.06	7.48	13.35	8.31
9	13.09	7.97	13.49	7.23	13.33	6.47	12.87	6.38	12.88	8.09	13.56	8.59
10	13.22	7.85	13.47	7.28	13.11	6.42	12.68	6.70	13.48	8.58	13.20	8.02
11	13.23	7.81	13.23	7.29	12.80	6.57	12.53	7.13	13.39	9.20	13.10	7.98
12	13.16	7.81	12.95	7.40	12.66	6.93	12.28	7.35	13.82	8.98	13.06	7.99
13	13.02	7.89	12.77	7.66	---	---	12.50	7.88	14.30	8.71	13.06	7.73
14	13.00	8.11	12.51	7.85	11.88	7.08	12.80	8.35	14.60	7.77	12.98	7.37
15	12.89	8.16	12.25	8.01	12.02	7.38	13.20	8.28	14.02	6.83	13.30	7.28
16	12.49	8.08	12.52	8.10	12.34	7.47	13.84	7.45	14.40	6.67	13.45	6.67
17	12.29	7.99	12.65	8.12	12.75	7.82	13.85	6.78	14.51	6.34	13.18	6.47
18	12.28	7.99	13.22	7.98	13.14	7.47	14.37	6.37	14.41	6.27	13.44	6.75
19	12.29	7.84	13.40	8.11	13.62	6.87	14.56	6.11	14.43	6.56	13.35	6.82
20	12.51	7.69	13.41	7.43	13.98	6.31	14.58	5.82	14.87	7.56	12.92	7.22
21	12.76	7.73	13.45	6.42	14.38	6.02	14.43	5.80	14.28	7.66	12.99	7.72
22	13.11	7.85	13.67	5.98	14.34	5.42	14.16	5.97	13.83	8.29	13.44	7.93
23	13.30	7.63	13.90	5.56	14.15	5.25	14.12	6.55	13.76	8.92	13.29	7.81
24	13.49	7.11	13.81	5.22	13.84	5.26	13.70	7.01	13.47	9.15	13.29	7.98
25	13.72	6.74	13.71	5.46	13.61	5.81	13.22	7.53	13.19	8.86	13.00	7.96
26	14.00	6.67	13.74	5.95	13.19	6.19	12.97	8.01	13.12	9.01	12.52	8.08
27	14.11	6.91	13.28	6.28	12.55	6.67	13.00	8.66	13.66	9.14	12.34	8.17
28	13.74	6.46	12.79	6.71	12.60	7.39	13.04	8.59	12.76	8.48	12.12	8.10
29	13.38	6.58	12.73	7.27	12.85	7.70	13.24	8.36	13.26	8.28	11.99	7.86
30	12.99	6.88	12.85	7.46	13.06	8.07	13.93	8.22	---	---	12.05	7.63
31	12.76	6.98	---	---	13.26	8.10	13.34	7.30	---	---	12.17	7.32
MONTH	14.11	6.46	13.90	5.22	---	---	14.58	5.80	14.87	6.27	13.90	6.47

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.63	7.41	13.10	7.84	14.36	6.62	14.81	6.20	14.46	6.16	13.30	7.79
2	12.91	7.46	13.49	7.44	14.34	6.17	14.70	5.93	14.16	6.59	13.21	8.21
3	13.07	7.53	13.76	6.96	14.33	5.85	14.76	5.90	13.78	7.10	13.13	8.21
4	13.07	7.67	13.92	6.46	14.34	5.71	14.30	5.98	13.40	7.61	12.93	7.93
5	13.33	7.40	14.00	6.20	14.13	5.81	13.84	6.36	13.34	8.19	12.77	7.94
6	13.51	6.98	14.04	6.00	13.84	6.10	13.30	6.88	13.37	8.67	12.81	7.85
7	13.61	6.77	13.91	6.10	13.35	6.44	13.20	7.42	13.38	8.63	13.05	7.93
8	13.53	6.59	13.85	6.15	12.92	7.03	13.33	8.05	13.39	8.22	13.27	7.87
9	13.43	6.58	13.24	6.41	13.02	7.40	13.61	8.72	13.42	7.85	13.28	7.71
10	13.18	6.53	12.88	6.64	13.10	7.80	13.79	8.42	13.43	7.59	13.25	7.49
11	12.94	6.74	12.41	6.78	13.21	8.11	13.89	8.04	13.58	7.32	13.36	7.40
12	12.86	6.89	12.77	7.09	13.38	7.64	13.86	7.72	13.65	7.25	13.34	7.51
13	12.95	6.93	13.25	7.62	13.84	7.39	13.78	7.33	13.63	7.16	13.41	7.79
14	13.06	7.14	13.59	8.20	14.02	7.30	13.81	7.00	13.55	7.08	13.41	7.87
15	13.44	7.39	13.71	7.85	14.13	7.21	13.77	6.93	13.52	6.99	13.01	7.99
16	14.03	8.10	13.49	7.40	14.17	7.22	13.66	6.86	13.34	7.11	13.11	8.18
17	13.87	8.28	13.45	6.91	14.12	7.20	13.66	6.85	13.23	7.38	13.32	8.09
18	13.85	7.60	13.39	6.67	13.93	7.01	13.43	6.76	13.01	7.67	13.51	8.06
19	13.48	7.07	13.39	6.51	13.71	6.99	13.14	6.88	12.79	7.97	13.72	8.17
20	13.43	7.02	13.33	6.71	13.56	7.11	12.99	7.11	12.87	8.23	14.02	8.22
21	13.39	7.16	13.28	6.90	13.30	7.40	12.75	7.48	13.15	8.40	13.97	8.20
22	13.18	7.17	13.15	7.11	13.02	7.80	12.67	7.72	13.39	8.07	13.95	8.14
23	12.68	6.99	12.95	7.43	12.84	7.98	12.92	8.21	13.47	8.01	13.76	7.65
24	12.19	7.38	12.81	7.85	12.94	8.12	13.35	8.77	13.76	7.35	13.71	7.15
25	12.01	7.69	12.46	7.95	13.23	8.50	13.65	8.62	13.96	6.98	13.85	7.09
26	11.88	7.81	12.55	8.03	13.61	8.94	13.80	7.83	14.24	6.58	13.68	7.34
27	11.88	7.86	12.70	8.02	14.05	8.49	14.13	7.11	14.48	6.50	13.64	7.50
28	12.00	7.53	12.98	8.17	14.26	7.69	14.28	6.58	14.21	6.52	13.43	7.77
29	12.39	7.62	13.26	8.33	14.61	7.00	14.61	6.13	14.12	6.56	13.62	7.95
30	12.73	7.67	13.52	7.60	14.80	6.55	14.58	6.03	14.02	6.84	13.69	7.93
31	---	---	14.00	6.90	---	---	14.44	5.96	13.61	7.16	---	---
MONTH	14.03	6.53	14.04	6.00	14.80	5.71	14.81	5.90	14.48	6.16	14.02	7.09

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

PERIOD OF DAILY RECORD.—October 1989 to current year.
SPECIFIC CONDUCTANCE: October 1989 to current year.
WATER TEMPERATURE: October 1989 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1989.

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. Upper probe is set about 4.0 ft below Mean Lower Low Water (MLLW). Lower probe is set about 20.0 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 50,900 microsiemens, Aug. 25, 28, 1992; minimum recorded, 155 microsiemens, Jan. 5, 1997.
(Lower probe) Maximum recorded, 50,100 microsiemens, July 23, 1990; minimum recorded, 147 microsiemens, Jan. 5, 1997.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 24.0°C, July 31, 1993; minimum recorded, 4.5°C, Dec. 23, 1990.
(Lower probe) Maximum recorded, 22.5°C, July 30, 1995, Aug. 26, 28, Sept. 4, 1997; minimum recorded, 5.0°C, Dec. 21, 23, 1990.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 47,800 microsiemens, Oct. 26; minimum recorded, 33,300 microsiemens, July 23.
(Lower probe) Maximum recorded, 47,700 microsiemens, Oct. 26; minimum recorded, 4,310 microsiemens, Feb. 23.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Sept. 17; minimum recorded, 9.0°C, Jan. 7.
(Lower probe) Maximum recorded, 21.0°C, Sept. 17–19; minimum recorded, 9.0°C, Jan. 6.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	46400	37700	---	---	---	---	---	---	---	---	---	---
2	46300	38100	---	---	---	---	---	---	---	---	---	---
3	46000	38400	---	---	---	---	---	---	---	---	---	---
4	46100	38600	---	---	---	---	---	---	---	---	---	---
5	46100	38900	---	---	---	---	---	---	---	---	---	---
6	45100	38100	---	---	---	---	---	---	---	---	---	---
7	45900	38200	---	---	---	---	---	---	---	---	---	---
8	45500	37800	46600	38500	---	---	---	---	---	---	---	---
9	45100	37600	46400	37900	---	---	---	---	---	---	---	---
10	45300	38200	46100	37600	---	---	---	---	---	---	---	---
11	45600	38100	---	---	---	---	---	---	---	---	---	---
12	45000	38600	---	---	---	---	---	---	---	---	---	---
13	45100	38200	---	---	---	---	---	---	---	---	---	---
14	45500	37100	---	---	---	---	---	---	---	---	---	---
15	45800	38100	---	---	---	---	---	---	---	---	---	---
16	45300	37900	---	---	---	---	---	---	---	---	---	---
17	44700	36500	---	---	---	---	---	---	---	---	---	---
18	45100	36400	45400	36100	---	---	---	---	---	---	---	---
19	45700	36600	45300	36100	---	---	---	---	---	---	---	---
20	45900	38400	45200	37300	---	---	---	---	---	---	---	---
21	45700	39000	---	---	---	---	---	---	---	---	---	---
22	46500	39900	---	---	---	---	---	---	---	---	---	---
23	46600	40400	---	---	---	---	---	---	---	---	---	---
24	46600	39500	---	---	---	---	---	---	---	---	---	---
25	47100	38900	---	---	---	---	---	---	---	---	---	---
26	47800	39200	---	---	---	---	---	---	---	---	---	---
27	47000	39700	---	---	---	---	---	---	---	---	---	---
28	47100	40200	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	46400	36600	44400	34100	45900	38200
2	---	---	---	---	---	---	46300	36700	44600	34500	45600	38200
3	---	---	---	---	---	---	46100	36100	43800	35700	45500	37400
4	---	---	---	---	---	---	45900	36600	44100	35600	44600	38000
5	---	---	---	---	---	---	45300	36600	44300	34500	43700	36300
6	---	---	---	---	---	---	44700	36300	44700	35600	44000	37000
7	---	---	---	---	---	---	44600	35100	44300	35200	44300	35500
8	---	---	---	---	---	---	44800	34700	43300	34500	45400	34500
9	---	---	---	---	---	---	44900	36600	43100	35500	44900	37900
10	---	---	---	---	---	---	45600	36200	42500	35700	44900	37800
11	---	---	---	---	---	---	45100	37000	44300	35400	45200	37500
12	---	---	---	---	---	---	45300	37300	44200	35000	45400	37900
13	---	---	---	---	---	---	45000	37300	44000	36000	45600	38200
14	---	---	---	---	---	---	44800	36800	44800	36100	45700	38200
15	---	---	---	---	---	---	44800	36500	44500	36000	45600	39100
16	---	---	---	---	45900	36700	44600	36400	44500	35600	45400	38000
17	---	---	---	---	45900	37200	44700	36600	44500	35900	45600	38700
18	---	---	---	---	45700	37100	44400	35800	44500	35600	45400	38000
19	---	---	---	---	44400	36700	44000	34800	44800	35300	45700	38300
20	---	---	---	---	44600	36300	44100	35800	45200	34700	45800	38300
21	---	---	---	---	44800	35400	43900	36000	45300	35800	45600	39300
22	---	---	---	---	44600	36900	44400	33500	45600	35800	45500	40200
23	---	---	---	---	44500	37100	44400	33300	45200	37200	45300	39500
24	---	---	---	---	45000	33700	44600	33600	45100	37100	45400	38900
25	---	---	---	---	45200	34200	44900	34300	45300	37000	45400	38500
26	---	---	---	---	45800	35100	44400	34500	45700	37300	45400	38800
27	---	---	---	---	45600	36700	44700	35900	45000	36900	45300	40200
28	---	---	---	---	45700	37300	44900	34900	45100	37300	45500	38800
29	---	---	---	---	46200	37300	44900	35000	46000	38200	45500	39600
30	---	---	---	---	45700	37600	44900	34300	46400	38800	45600	39900
31	---	---	---	---	---	---	44500	34500	46000	38800	---	---
MONTH	---	---	---	---	---	---	46400	33300	46400	34100	45900	34500

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	46800	38300	---	---	---	---	45300	37000	41500	22800	35800	6660
2	47600	38500	---	---	---	---	45200	37000	41500	23000	37200	7600
3	46400	38800	---	---	---	---	45100	36100	41600	24600	35700	7470
4	46600	38800	---	---	---	---	45500	35600	40800	23900	35100	6920
5	47100	39900	---	---	---	---	45700	35900	40900	22800	36000	9480
6	46700	38800	---	---	---	---	45600	35900	41000	22100	35000	7740
7	46800	39900	---	---	---	---	46000	36100	41100	22100	34600	5520
8	46700	39200	47200	38900	---	---	45600	36400	40300	22100	33800	5590
9	46700	38900	47100	38200	---	---	45200	36400	39800	20800	33100	4840
10	46800	39000	46800	38200	---	---	---	---	40100	23300	31800	5980
11	46900	38500	---	---	---	---	45200	36700	40400	24800	33600	5590
12	46300	38900	---	---	---	---	45100	35600	39200	21800	35000	8220
13	46400	38000	---	---	---	---	45300	33400	39100	16500	36000	5850
14	46100	38500	---	---	45100	32000	45300	35800	37700	19100	38400	9220
15	46300	37700	---	---	44900	32200	45500	35600	36900	13100	37200	11400
16	46200	38100	---	---	45300	32200	46100	36900	40300	10000	39000	11500
17	46300	37300	45300	37400	45500	34400	45900	35800	38600	11700	37500	11800
18	46300	38500	45300	36900	45200	35200	46100	34900	37800	9550	38600	10400
19	46100	37000	45800	36500	45200	35000	46200	35000	37300	8090	37800	12600
20	45800	38500	45600	37300	45700	34200	46300	35900	36100	9890	38600	15300
21	46000	39000	---	---	46100	35200	45900	35300	35400	8190	39300	15300
22	46500	37300	---	---	45900	34800	45500	34900	33900	5400	39100	15700
23	46700	40200	---	---	46100	35000	45200	32600	34700	4310	39400	19300
24	46700	39500	---	---	45800	34500	44200	31900	34800	6710	39900	17000
25	47300	39100	---	---	45700	35000	43300	29900	35500	8640	38100	17300
26	47700	39100	---	---	45500	35200	42900	24600	34700	8940	39200	13300
27	47600	39600	---	---	45000	35000	42400	26200	36400	8380	40400	16600
28	47300	40700	---	---	45100	33000	42800	24500	36600	5760	40700	18800
29	---	---	---	---	45200	33500	43300	22600	36100	4630	41400	19800
30	---	---	---	---	45400	34800	41800	22400	---	---	41900	20200
31	---	---	---	---	45300	36000	41600	22400	---	---	41000	24200
MONTH	---	---	---	---	---	---	---	---	41600	4310	41900	4840
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	42700	25900	42100	27500	46400	33400	46400	35100	47500	35400	46500	37600
2	41100	28500	41900	29500	46400	32400	46300	35000	47500	35700	46200	38500
3	40800	29800	42900	30700	45700	33600	46100	34600	46700	36200	46200	37500
4	41000	29300	43200	29300	45600	33900	46000	35500	46600	36300	45900	39200
5	40900	29900	43200	30000	46300	37400	45300	36000	46400	34600	46100	37800
6	41500	29200	43500	28400	46000	34700	45100	35500	46600	36100	46200	36400
7	41800	28400	43200	25900	45000	34100	45900	34200	46200	35200	46300	36100
8	42200	28600	43100	26200	45100	34600	45900	34800	45900	36300	45800	33900
9	42200	29300	42700	26100	45000	32500	46100	37000	45900	35700	45600	36700
10	42200	26800	42400	24300	44700	35000	46900	35400	45900	35300	45800	36700
11	41500	26300	41500	24700	44800	34600	46800	37000	45300	34800	45500	36200
12	41100	22900	41800	24200	44900	33900	47100	37300	45200	34500	46000	37200
13	41600	24700	42400	25600	45300	35600	46900	37700	45100	35200	45900	37600
14	41700	25600	42200	27500	45200	35000	46700	36800	45500	35400	46200	37300
15	41300	26200	42800	26800	46000	34800	46800	36500	45200	35300	46100	39100
16	41300	26600	43100	30300	46500	35900	46900	36300	45300	35100	46000	38100
17	41600	27500	43900	29600	46700	36700	47000	37300	45500	35000	46300	38600
18	41400	27600	43100	28100	46700	36600	46400	36100	45500	35100	46600	38000
19	41200	25500	43400	28100	45800	36000	46100	34600	45500	33900	46800	38300
20	41300	24600	43700	27800	45700	35400	46400	35900	46000	36100	46900	38300
21	41500	21200	43800	27000	45800	34500	46200	36000	46500	35100	46800	39300
22	41300	21900	43300	26400	45600	35900	46300	33000	46800	35100	46600	40300
23	41400	21200	43800	28000	45400	36500	46300	33700	46900	36700	46700	39400
24	41300	18900	43800	30000	46000	35200	46800	35200	46900	37300	46900	38700
25	41600	21100	43900	32400	46100	32700	46900	36500	47000	36800	46900	38600
26	42000	22100	44900	29700	46500	35500	46800	34800	47200	37100	46900	38700
27	42800	21700	44500	29400	46400	36000	47200	36500	46900	36400	46800	40200
28	43200	23700	44500	29000	46700	36400	47500	35100	46900	37000	46900	39000
29	42800	26400	44300	28700	46300	35800	47500	35500	46800	38200	46900	39800
30	42400	27600	45400	30700	45700	36200	47500	34800	46800	37800	47100	40000
31	---	---	46300	34100	---	---	47400	35400	46500	37800	---	---
MONTH	43200	18900	46300	24200	46700	32400	47500	33000	47500	33900	47100	33900

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

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

11181360 SAN PABLO STRAIT AT POINT SAN PABLO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	17.0	---	---	---	---	10.5	10.0	11.5	11.0	13.5	11.5
2	19.5	17.0	---	---	---	---	10.5	9.5	12.0	11.0	12.5	12.0
3	19.0	17.0	---	---	---	---	10.5	9.5	12.0	11.0	13.0	12.0
4	18.5	16.5	---	---	---	---	10.5	9.5	12.0	11.0	13.0	12.0
5	18.5	16.5	---	---	---	---	10.5	9.5	12.0	11.0	12.5	11.5
6	18.5	16.5	---	---	---	---	10.5	9.0	12.5	11.0	12.5	11.5
7	19.0	16.5	---	---	---	---	10.5	9.5	12.5	11.5	12.5	11.5
8	19.5	16.5	16.0	14.5	---	---	10.5	9.5	12.5	11.5	12.5	11.0
9	20.0	17.0	15.5	14.5	---	---	10.5	10.0	12.5	11.5	12.0	11.0
10	20.0	17.0	15.5	14.5	---	---	---	---	12.0	11.5	12.5	11.0
11	19.5	17.0	---	---	---	---	11.0	10.0	12.5	11.5	13.0	11.5
12	19.0	17.0	---	---	---	---	10.5	10.0	12.5	11.0	13.0	11.5
13	19.0	17.0	---	---	---	---	10.5	10.0	12.5	11.5	13.5	12.0
14	19.0	17.0	---	---	12.0	10.5	11.0	10.0	12.5	11.5	14.5	12.0
15	19.0	17.0	---	---	12.0	10.5	11.0	10.0	12.5	11.5	15.0	12.5
16	18.5	17.0	---	---	11.5	10.5	11.5	10.0	12.5	11.5	15.5	12.5
17	18.5	17.0	---	---	11.5	10.5	11.0	10.0	12.5	11.5	14.5	12.5
18	18.5	17.0	---	---	11.5	10.5	11.0	10.0	12.5	11.5	15.5	12.5
19	18.0	16.5	15.0	14.0	11.5	10.5	11.5	10.5	12.5	11.5	15.5	12.5
20	18.0	16.5	15.0	14.0	12.0	11.0	11.5	10.5	12.5	12.0	13.5	11.5
21	18.0	16.0	14.5	13.5	11.5	11.0	11.5	10.5	13.0	11.5	14.5	11.5
22	18.5	16.0	---	---	11.5	11.0	11.5	10.5	12.5	11.5	14.0	11.5
23	17.5	16.0	---	---	11.5	10.5	11.5	11.0	12.5	11.0	14.0	11.5
24	17.5	15.5	---	---	11.5	10.5	11.5	11.0	12.5	11.0	14.0	12.0
25	17.5	15.5	---	---	11.5	10.0	12.0	11.0	12.5	11.0	13.5	12.0
26	17.0	15.0	---	---	11.0	10.0	11.5	10.5	12.0	11.5	14.0	11.5
27	16.5	15.0	---	---	11.0	10.0	11.5	10.5	12.5	11.5	13.5	11.5
28	16.5	15.5	---	---	11.0	10.0	11.5	10.5	12.5	11.5	13.5	11.5
29	---	---	---	---	11.0	10.0	11.5	10.5	12.5	11.5	14.0	11.0
30	---	---	---	---	10.5	10.0	11.5	11.0	---	---	15.5	11.0
31	---	---	---	---	10.5	10.0	11.5	11.0	---	---	14.5	11.0
MONTH	---	---	---	---	---	---	---	---	13.0	11.0	15.5	11.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.0	11.0	16.5	13.0	18.5	13.5	19.5	16.0	19.5	15.5	17.5	15.5
2	16.0	11.5	17.0	13.5	18.0	13.5	19.0	16.0	20.0	15.5	18.5	16.0
3	15.5	12.0	17.0	13.0	18.5	13.5	19.0	16.0	19.0	15.5	19.0	16.0
4	15.5	12.5	17.0	13.5	18.0	13.5	19.0	16.0	19.0	16.0	18.5	16.0
5	15.5	12.5	16.5	13.5	17.5	13.5	19.0	16.0	19.0	16.0	19.0	16.0
6	15.5	12.5	16.0	13.0	17.5	14.0	19.0	16.0	19.0	16.0	20.0	16.5
7	15.0	12.5	15.5	13.0	18.0	14.5	19.0	16.0	19.0	16.0	20.0	16.5
8	15.0	12.5	15.5	13.0	17.5	14.5	19.0	16.0	19.0	16.0	20.0	16.5
9	15.0	12.5	16.0	13.0	18.5	14.5	19.0	16.0	19.0	16.0	18.5	16.5
10	15.5	12.5	16.0	13.0	18.5	14.5	18.5	16.0	19.0	16.5	18.5	16.5
11	15.5	12.5	16.0	13.0	19.0	14.5	18.0	16.0	19.0	16.5	19.5	16.5
12	16.5	13.0	17.0	13.0	18.5	14.5	19.0	16.0	19.5	16.5	19.0	16.5
13	16.5	12.5	16.0	13.0	19.5	14.5	18.5	16.0	19.5	16.5	19.0	16.5
14	16.5	13.0	15.0	12.5	19.5	14.5	19.0	16.5	19.0	16.0	19.5	16.5
15	16.0	13.0	16.0	12.5	20.0	14.5	19.0	16.5	19.5	16.5	20.0	16.5
16	15.0	13.5	16.0	13.0	18.5	14.5	19.0	16.5	20.0	16.5	20.0	17.0
17	16.0	13.5	16.0	13.0	19.5	14.5	18.5	16.5	19.5	16.5	21.0	16.5
18	16.0	13.5	16.0	13.5	19.5	14.5	18.5	16.5	19.0	16.5	21.0	17.0
19	16.0	13.5	16.5	13.5	19.0	15.5	18.5	16.5	19.5	16.5	21.0	17.0
20	16.5	14.0	17.0	13.5	19.0	16.0	18.5	16.5	19.0	16.5	20.5	17.0
21	16.5	14.0	18.0	14.0	19.5	16.0	18.5	16.5	19.0	16.0	20.5	17.0
22	16.0	14.0	18.5	14.5	19.0	16.5	19.0	16.5	19.0	16.0	19.5	17.0
23	16.0	14.0	19.5	14.5	19.0	16.0	19.0	16.5	18.5	15.5	19.5	17.0
24	16.0	14.0	19.0	14.5	18.5	16.0	19.0	16.0	18.5	16.0	19.5	17.0
25	16.0	14.0	18.0	14.5	19.0	16.0	19.0	16.0	19.5	16.0	20.0	17.0
26	17.0	13.5	18.5	14.5	19.5	16.0	19.0	16.0	19.5	15.5	20.0	17.0
27	17.0	13.0	19.0	14.0	19.5	16.5	19.0	16.0	19.5	15.5	20.0	17.0
28	16.0	13.0	19.5	14.5	19.5	16.5	19.0	15.5	19.0	15.5	19.0	17.0
29	16.5	13.0	20.0	14.5	19.0	16.0	19.0	15.5	18.5	15.5	19.0	17.0
30	17.5	13.0	19.0	14.5	19.5	16.5	19.5	15.5	18.0	15.5	19.5	17.0
31	---	---	18.5	13.5	---	---	20.0	15.5	18.0	15.5	---	---
MONTH	17.5	11.0	20.0	12.5	20.0	13.5	20.0	15.5	20.0	15.5	21.0	15.5

11182500 SAN RAMON CREEK AT SAN RAMON, CA

LOCATION.—Lat 37°46'23", long 121°59'37", in sec.8, T.2 S., R.1 W., Contra Costa County, Hydrologic Unit 18050001, on right bank, 0.2 mi downstream from Bollinger Creek, and 1.0 mi southwest of San Ramon.

DRAINAGE AREA.—5.89 mi^2.

PERIOD OF RECORD.—October 1952 to current year.

REVISED RECORDS.—WSP 1445: 1953–54(P).

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 530 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,600 ft^3/s, Oct. 13, 1962, gage height, 16.98 ft, from rating curve extended above 200 ft^3/s on basis of culvert computations at gage heights 11.80, 12.09, 14.20, and 16.98 ft; no flow for parts of most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2100	545	5.80	Feb. 22	2245	226	3.88

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.11	.49	.29	1.2	14	3.7	1.6	.87	.50	.20	.31
2	.03	.11	.33	.29	1.1	15	3.8	1.7	.87	.52	.20	.36
3	.03	.11	.32	.29	1.6	13	3.6	1.6	.87	.51	.20	.22
4	.04	.11	.26	.29	1.2	14	3.5	1.5	.87	.49	.20	.18
5	.06	.11	.25	.29	2.0	24	3.5	1.5	.87	.49	.20	.18
6	.08	.11	.26	.29	1.6	12	3.4	1.5	.87	.53	.22	.17
7	.06	.37	.26	.29	1.1	12	3.3	2.6	.88	.53	.28	.13
8	.04	1.2	.29	.29	1.1	27	3.2	4.1	.95	.50	.32	.11
9	.03	.28	.32	.29	1.1	22	3.2	2.1	.87	.44	.27	.11
10	.03	.18	.29	.29	4.2	15	3.1	1.8	.83	.41	.23	.12
11	.03	.16	.29	1.8	45	13	2.9	1.6	.81	.37	.21	.11
12	.03	.14	.29	.67	27	12	2.8	1.5	.77	.38	.18	.12
13	.03	.14	.29	.36	192	11	3.9	1.5	.72	.38	.18	.12
14	.03	.14	.29	.31	150	9.9	2.9	1.8	.60	.35	.18	.10
15	.02	.14	.29	.33	30	9.1	2.9	2.5	.59	.35	.18	.13
16	.01	.26	.29	3.5	18	8.4	2.8	1.8	.60	.35	.16	.14
17	.01	.35	.29	.59	13	7.7	4.4	1.5	.64	.43	.14	.13
18	.01	.24	.29	2.8	9.8	7.3	2.9	1.4	.65	.41	.14	.09
19	.01	.89	.27	.91	8.3	7.0	2.7	1.2	.68	.35	.14	.09
20	.01	.46	.23	.63	9.5	6.6	2.5	1.2	.62	.35	.17	.08
21	.01	.29	.23	.49	7.8	6.0	2.5	1.1	.57	.35	.17	.08
22	.02	.21	.23	.65	25	5.8	2.6	1.1	.53	.35	.14	.17
23	.02	.18	.23	12	42	5.8	2.4	1.0	.58	.35	.17	.18
24	.03	.18	.23	65	14	5.6	2.2	1.0	.55	.31	.18	.17
25	.03	.18	.23	11	12	5.4	2.1	1.0	.55	.27	.16	.14
26	.03	.18	.23	3.2	11	5.1	2.0	1.0	.49	.29	.13	.13
27	.05	.18	.23	2.0	53	5.0	1.9	.99	.44	.31	.11	.11
28	.68	.18	.23	1.4	18	4.9	1.9	.96	.42	.29	.11	.15
29	.18	.20	.26	1.2	20	4.8	1.8	.92	.41	.27	.13	.18
30	.14	.44	.29	3.3	---	4.4	1.7	.92	.45	.23	.18	.13
31	.14	---	.29	1.6	---	4.0	---	.91	---	.24	.18	---
TOTAL	1.95	7.83	8.57	116.64	721.6	316.8	86.1	46.90	20.42	11.90	5.66	4.44
MEAN	.063	.26	.28	3.76	24.9	10.2	2.87	1.51	.68	.38	.18	.15
MAX	.68	1.2	.49	65	192	27	4.4	4.1	.95	.53	.32	.36
MIN	.01	.11	.23	.29	1.1	4.0	1.7	.91	.41	.23	.11	.08
AC-FT	3.9	16	17	231	1430	628	171	93	41	24	11	8.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

MEAN	.48	.63	3.30	9.37	11.0	7.94	4.81	1.42	.56	.22	.092	.060
MAX	17.0	5.49	27.2	42.3	67.2	60.6	44.9	4.92	1.99	.83	.42	.33
(WY)	1963	1984	1956	1997	1998	1983	1958	1967	1967	1958	1998	1982
MIN	.000	.000	.001	.002	.039	.17	.016	.000	.000	.000	.000	.000
(WY)	1953	1956	1977	1991	1991	1977	1977	1977	1976	1955	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	1444.55		1348.81			
ANNUAL MEAN	3.96		3.69		3.28	
HIGHEST ANNUAL MEAN					12.4	1983
LOWEST ANNUAL MEAN					.029	1977
HIGHEST DAILY MEAN	162	Feb 7	192	Feb 13	411	Oct 13 1962
LOWEST DAILY MEAN	.01	Oct 16	.01	Oct 16	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.01	Oct 15	.01	Oct 15	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			545	Feb 13	1600	Oct 13 1962
INSTANTANEOUS PEAK STAGE			5.80	Feb 13	16.98	Oct 13 1962
ANNUAL RUNOFF (AC-FT)	2870		2680		2380	
10 PERCENT EXCEEDS	9.3		8.3		6.7	
50 PERCENT EXCEEDS	.46		.43		.30	
90 PERCENT EXCEEDS	.08		.11		.00	

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA

LOCATION.—Lat 38°03'68", long 122°13'53", unsurveyed, T.3 N., R.3 W., Solano County, Hydrologic Unit 18050001, at north side of center bridge pier, directly under Carquinez Bridge.

PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1998.

REMARKS.—Interruptions in record were due to malfunction of sensing and (or) recording instruments. Upper probe is set at 30.0 ft below Mean Lower Low Water (MLLW). Lower probe is set at 72.0 ft below MLLW.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 42,100 microsiemens, Sept. 9, 10, 1999; minimum recorded, 170 microsiemens, Mar. 11, 2000.
(Lower probe) Maximum recorded, 41,600 microsiemens, Sept. 30, 1999; minimum recorded, 166 microsiemens, Mar. 11, 2000.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Aug. 22, 1999 and Sept. 19, 2000; minimum recorded, 7.5°C, several days in December 1998 and January, 1999.
(Lower probe) Maximum recorded, 21.0°C, July 13, 1999 and Sept. 20, 2000; minimum recorded, 10.0°C, several days in January 2000.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 41,400 microsiemens, Oct. 1; minimum recorded, 170 microsiemens, Mar. 11.
(Lower probe) Maximum recorded, 41,400 microsiemens, Oct. 1; minimum recorded, 166 microsiemens, Mar. 11.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 21.5°C, Sept. 19; minimum recorded, 10.0°C, several days in December and January.
(Lower probe) Maximum recorded, 21.0°C, Sept. 20; minimum recorded, 10.0°C, several days in January.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	41400	23800	---	---	---	---	38000	25200	27600	7770	---	---
2	39400	25500	---	---	---	---	37000	23700	28300	8200	---	---
3	39700	26200	---	---	---	---	37600	21600	30300	9170	---	---
4	39700	26600	---	---	---	---	38100	22000	27600	7230	---	---
5	39700	26900	---	---	---	---	38500	22100	28300	6760	---	---
6	38600	26500	---	---	---	---	38400	21400	26800	4640	---	---
7	37200	26200	---	---	---	---	38800	23200	25900	4890	---	---
8	37600	26200	---	---	---	---	38700	22900	24900	5230	---	---
9	37900	26900	---	---	---	---	37300	23200	25400	5550	---	---
10	38400	26900	---	---	---	---	37800	24100	26300	7290	---	---
11	---	---	---	---	---	---	36900	24100	28500	7290	11000	170
12	---	---	---	---	---	---	35800	24700	27000	8420	12600	176
13	---	---	---	---	---	---	37300	20800	26000	7500	16500	206
14	---	---	---	---	---	---	37700	22200	18400	2450	14000	196
15	---	---	---	---	---	---	38500	15400	---	---	16800	215
16	---	---	---	---	---	---	39200	27200	19700	304	17400	216
17	---	---	---	---	---	---	39000	24600	18100	233	13600	199
18	---	---	---	---	---	---	39300	23700	17000	207	18400	251
19	---	---	---	---	---	---	39100	22800	15900	197	17000	282
20	---	---	---	---	---	---	38600	21500	17500	205	11600	247
21	---	---	---	---	---	---	38200	20400	13800	181	20200	425
22	---	---	---	---	38100	20500	37400	18400	9480	174	21800	2570
23	---	---	---	---	37500	19600	36700	17400	8170	174	20400	2640
24	---	---	---	---	37000	19200	34600	15600	11100	176	21200	2540
25	---	---	---	---	37200	19400	31000	14600	12100	198	21100	3210
26	---	---	---	---	36600	19300	28800	8940	14900	1040	24400	3710
27	---	---	---	---	35600	19000	28500	8260	8800	216	29600	4640
28	---	---	---	---	35000	19300	29400	7200	6810	195	27700	5260
29	---	---	---	---	36500	18800	30500	8670	---	---	31400	5500
30	---	---	---	---	36800	20500	33000	12800	---	---	31500	8440
31	---	---	---	---	38000	24300	28800	9000	---	---	29600	10900
MONTH	---	---	---	---	---	---	39300	7200	---	---	---	---

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	31000	13700	31600	15100	35400	16800	38200	21500	---	---	37100	23300
2	33800	15800	30000	13900	37400	17600	38400	14400	---	---	36700	22500
3	31600	17600	29800	12000	37500	17700	38500	20300	---	---	37100	23300
4	30200	16600	30000	10000	37900	18100	37900	20200	---	---	36800	24500
5	30200	14700	29000	9300	37000	15600	36500	20500	---	---	37600	22300
6	31300	13200	30000	7860	35900	16900	35300	19900	---	---	37800	18100
7	30800	11500	31200	6370	34900	15700	35500	19400	---	---	37900	20300
8	30600	11900	29700	6880	34000	16100	36600	19500	---	---	37800	22700
9	28300	10800	26500	5520	34300	13300	36600	20200	---	---	37800	20600
10	29700	9290	23500	5220	35200	16300	36200	23900	---	---	37100	25000
11	28600	8970	24700	3370	35000	15700	36600	14300	---	---	37200	24100
12	30100	9460	26900	4860	35000	19400	37500	24400	---	---	37600	16800
13	28700	11300	28000	8920	35200	17100	37600	22200	---	---	38100	16200
14	30800	11200	27400	9510	36700	18200	37300	14500	---	---	37500	25400
15	28700	11100	27300	12200	37900	19300	37100	20300	---	---	36600	25900
16	28600	10100	27500	11600	37400	21100	37500	20600	---	---	36900	25500
17	29000	10300	26300	9630	35500	21900	36500	19800	---	---	38000	16500
18	28400	8600	29800	8960	37800	14300	35400	19100	---	---	38600	19700
19	27400	8040	---	---	36300	19300	35000	18800	---	---	39300	20300
20	26400	5390	---	---	37300	10300	34800	19600	---	---	39800	18500
21	26900	5380	---	---	35200	16900	33400	19200	---	---	38600	19400
22	22200	3700	---	---	35700	21600	34200	18000	---	---	38400	19500
23	19700	2240	32900	10400	35100	17900	33800	17800	---	---	36800	25400
24	25800	3080	31500	15500	35000	21300	35700	20700	---	---	38100	24900
25	28000	5510	31500	11100	36600	18100	36000	20400	---	---	38700	23500
26	32100	5900	31800	11500	36300	15200	---	---	---	---	38300	23000
27	32900	11600	31300	12300	37100	19900	---	---	---	---	38600	27900
28	27100	8680	31500	16800	---	---	---	---	---	---	38000	27200
29	28900	9660	33300	18100	38400	23600	---	---	38500	25300	38700	27000
30	31000	11800	34900	18400	37900	22600	---	---	39000	23700	39200	27000
31	---	---	35300	11100	---	---	---	---	37800	23300	---	---
MONTH	33800	2240	---	---	---	---	---	---	---	---	39800	16200

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	41400	28700	---	---	36800	19100	39100	27300	31500	9940	---	---
2	40300	29300	---	---	37800	26500	38400	25300	32500	10200	---	---
3	39900	28400	---	---	37000	25200	38200	22700	32200	11200	---	---
4	---	---	---	---	37900	22300	38700	23400	30900	7790	---	---
5	39400	26800	---	---	38900	25600	39000	22700	29200	7100	---	---
6	39800	27300	---	---	38800	25000	39000	23000	28700	4830	---	---
7	39200	28200	---	---	38600	23800	39100	24600	28100	6300	---	---
8	39400	28700	---	---	38900	23000	39500	24100	28200	6700	---	---
9	39800	28900	---	---	38900	24500	36800	22200	28300	8900	---	---
10	40400	29300	39400	27400	38800	22500	38800	26100	28600	12500	---	---
11	40600	29100	39800	26600	38500	22200	37700	19600	29000	12500	19600	166
12	40500	29400	40200	26000	39200	22900	37900	17300	27600	10700	22100	173
13	---	---	40700	26000	37700	18500	38600	20800	27800	9160	26000	207
14	---	---	40300	26100	38000	19400	38300	17600	21000	2510	25200	193
15	---	---	40000	27800	38200	20500	35500	16600	---	---	25000	213
16	---	---	39900	27200	37300	24200	39300	28300	25500	304	24200	216
17	---	---	37800	27100	38200	27100	37800	17200	24300	233	24200	198
18	---	---	38300	26900	38000	25600	40000	24700	21200	205	22900	250
19	---	---	38300	28700	37600	18100	39600	23800	19400	195	21100	281
20	---	---	37700	28100	38000	13700	39100	22000	20800	202	20600	253
21	---	---	37100	25600	---	---	38800	21300	18200	179	25500	694
22	---	---	37300	24400	37900	21000	38100	19500	14200	170	26400	4840
23	---	---	38600	24200	37900	20100	37400	19300	11400	171	23900	4620
24	---	---	38600	23400	37800	19500	36400	16000	20400	173	26000	5130
25	---	---	38800	23900	37800	20300	33400	15500	23400	207	28300	6850
26	---	---	38900	24600	37400	22200	30600	13200	27800	3120	31600	8530
27	---	---	39300	24400	37100	21500	30900	10500	23600	216	34000	14100
28	---	---	39300	24200	37100	21800	32400	13700	24400	194	34900	15600
29	---	---	39400	25900	37100	23100	34700	14800	---	---	36900	18900
30	---	---	37700	27400	38500	24200	35200	17800	---	---	30900	17300
31	---	---	---	---	38900	28700	32500	12100	---	---	36000	17000
MONTH	---	---	---	---	---	---	40000	10500	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	36200	17700	34400	19700	34300	16300	38600	20300	---	---	37300	25600
2	35700	18200	32500	17000	35200	13000	38900	21600	---	---	37800	24700
3	33200	19900	33100	13800	35600	17300	39000	20400	---	---	37700	25500
4	30700	18600	33200	11400	35700	17200	38400	20100	---	---	37800	26400
5	31800	16100	33000	11000	35200	14000	37200	21300	---	---	38600	17300
6	32100	14800	33100	9620	34600	16400	36100	20900	---	---	39500	22300
7	32100	12700	34100	7680	34800	16600	36300	21300	---	---	39800	23700
8	32700	13400	31200	8060	34600	8650	37200	22500	---	---	38900	25700
9	31800	12400	30800	6970	33900	19300	37200	26400	---	---	37800	17100
10	32100	11400	30200	6240	34300	13400	34800	18400	---	---	37700	26300
11	32100	12100	30500	6450	34800	10800	37100	24700	---	---	37500	25600
12	33600	14000	31100	9250	34800	21300	37900	24600	---	---	38100	25000
13	33200	14700	31900	14600	35400	19100	38000	23100	---	---	38200	25700
14	32200	14500	31800	14100	36600	15000	38000	21400	---	---	38200	21900
15	31500	13600	30500	16500	36900	18700	37600	21600	---	---	36900	26100
16	30300	13400	31800	14300	36300	21500	37800	21900	---	---	37200	26000
17	31200	13600	31200	11900	36400	12600	37300	19700	---	---	38200	18600
18	30600	9720	32800	13000	37100	20800	36300	20800	---	---	38900	25700
19	30600	10500	32300	11900	36200	18200	36900	20600	---	---	40200	27300
20	29600	6960	32400	9160	36400	20100	36500	21300	---	---	40000	28500
21	29700	7440	31600	12000	37500	20600	36400	21800	---	---	38700	31100
22	27000	5600	32300	11200	37600	22600	35900	22500	---	---	39200	28900
23	29200	2950	33800	15500	36500	23100	35600	24700	---	---	39600	26300
24	34000	6480	32800	17100	36200	13400	37100	26300	---	---	39300	21100
25	35700	13400	31300	14200	37200	23700	36300	25500	---	---	38500	25300
26	37500	20100	34400	16900	37500	13500	---	---	---	---	37900	22000
27	38400	14300	35500	19300	38200	22300	---	---	---	---	39000	28100
28	36400	12400	33300	21100	---	---	---	---	---	---	38300	27700
29	36300	18700	33300	13900	38700	24200	---	---	38500	25600	39000	21500
30	35900	20300	33700	20000	38200	23300	---	---	38800	23900	39500	28500
31	---	---	33900	16100	---	---	---	---	38200	24600	---	---
MONTH	38400	2950	35500	6240	---	---	---	---	---	---	40200	17100

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	19.0	---	---	---	---	10.5	10.5	11.5	11.5	---	---
2	19.5	18.5	---	---	---	---	10.5	10.0	11.5	11.5	---	---
3	19.0	18.5	---	---	---	---	10.5	10.0	11.5	11.5	---	---
4	19.0	18.0	---	---	---	---	10.5	10.0	11.5	11.5	---	---
5	18.5	18.0	---	---	---	---	10.5	10.0	11.5	11.5	---	---
6	18.5	18.0	---	---	---	---	10.5	10.0	12.0	11.5	---	---
7	18.5	18.0	---	---	---	---	10.5	10.0	12.0	11.5	---	---
8	19.0	18.0	---	---	---	---	10.5	10.0	12.0	11.5	---	---
9	19.0	18.0	---	---	---	---	10.5	10.0	12.0	11.5	---	---
10	19.0	18.5	---	---	---	---	10.5	10.0	12.0	11.5	---	---
11	19.0	18.5	---	---	---	---	11.0	10.5	12.0	11.5	11.5	11.0
12	19.0	18.5	---	---	---	---	11.0	10.5	12.0	11.5	13.0	11.5
13	---	---	---	---	---	---	11.0	10.5	12.0	11.5	13.0	11.5
14	---	---	---	---	---	---	11.0	10.5	12.0	11.5	13.0	12.0
15	---	---	---	---	---	---	11.0	10.5	---	---	13.5	12.5
16	---	---	---	---	---	---	11.0	11.0	12.0	11.5	13.5	13.0
17	---	---	---	---	---	---	11.0	11.0	12.0	11.5	13.5	13.0
18	---	---	---	---	---	---	11.0	11.0	12.0	11.5	14.0	13.0
19	---	---	---	---	---	---	11.0	11.0	12.0	11.5	14.0	13.5
20	---	---	---	---	---	---	11.5	11.0	12.0	12.0	14.0	13.5
21	---	---	---	---	---	---	11.5	11.0	12.0	11.5	14.0	13.0
22	---	---	---	---	11.0	11.0	11.5	11.0	12.0	11.5	14.0	13.0
23	---	---	---	---	11.0	10.5	11.5	11.0	12.0	11.5	14.0	13.0
24	---	---	---	---	11.0	10.5	11.5	11.0	12.0	11.5	14.0	13.0
25	---	---	---	---	11.0	10.5	11.5	11.0	11.5	11.0	14.0	13.0
26	---	---	---	---	11.0	10.5	11.5	11.0	12.0	11.0	14.0	13.0
27	---	---	---	---	11.0	10.0	12.0	11.0	11.5	11.5	14.0	12.5
28	---	---	---	---	11.0	10.0	11.5	11.5	11.5	11.0	13.5	12.5
29	---	---	---	---	11.0	10.0	11.5	11.0	---	---	13.5	12.0
30	---	---	---	---	10.5	10.0	11.5	11.5	---	---	14.0	12.0
31	---	---	---	---	10.5	10.0	11.5	11.5	---	---	14.0	12.5
MONTH	---	---	---	---	---	---	12.0	10.0	---	---	---	---

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

11455820 CARQUINEZ STRAIT AT CARQUINEZ BRIDGE, NEAR CROCKETT, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	19.0	---	---	13.5	13.0	10.5	10.5	11.5	11.5	---	---
2	19.5	18.5	---	---	13.5	13.0	10.5	10.0	11.5	11.5	---	---
3	19.0	18.5	---	---	13.5	13.0	10.5	10.0	12.0	11.5	---	---
4	19.0	18.5	---	---	13.0	12.5	10.5	10.0	11.5	11.5	---	---
5	18.5	18.0	---	---	12.5	12.5	10.5	10.0	11.5	11.5	---	---
6	18.5	18.0	---	---	12.5	12.5	10.5	10.0	11.5	11.5	---	---
7	18.5	18.0	---	---	12.5	12.5	10.5	10.0	12.0	11.5	---	---
8	19.0	18.0	---	---	12.5	12.0	10.5	10.0	12.0	11.5	---	---
9	19.0	18.0	---	---	12.0	12.0	10.5	10.0	12.0	11.5	---	---
10	19.0	18.5	16.0	15.5	12.0	11.5	10.5	10.0	12.0	11.5	---	---
11	19.0	18.5	16.0	15.5	11.5	11.5	11.0	10.5	12.0	11.5	11.5	11.0
12	19.0	18.5	16.0	15.5	11.5	11.0	11.0	10.5	12.0	11.5	12.0	11.5
13	---	---	16.0	15.5	11.5	11.0	11.0	10.5	12.0	11.5	12.5	12.0
14	---	---	16.0	15.5	11.5	11.0	11.0	10.5	12.0	11.5	13.0	12.0
15	---	---	16.0	15.5	11.5	11.0	11.0	10.5	---	---	13.5	12.5
16	---	---	16.0	15.5	11.0	11.0	11.0	11.0	12.0	11.5	13.5	12.5
17	---	---	15.5	15.5	11.0	11.0	11.0	11.0	12.0	11.5	13.5	13.0
18	---	---	15.5	15.0	11.0	11.0	11.0	11.0	12.0	11.5	14.0	13.0
19	---	---	15.5	15.0	11.0	11.0	11.0	11.0	12.0	11.5	14.0	13.5
20	---	---	15.0	14.5	11.0	11.0	11.0	11.0	12.0	12.0	14.0	13.5
21	---	---	15.0	14.5	---	---	11.5	11.0	12.0	11.5	13.5	13.0
22	---	---	14.5	14.0	11.0	11.0	11.5	11.0	12.0	11.5	13.5	13.0
23	---	---	14.5	14.0	11.0	10.5	11.5	11.0	12.0	11.5	13.5	13.0
24	---	---	14.0	13.5	11.0	10.5	11.5	11.0	12.0	11.5	13.5	13.0
25	---	---	14.0	13.5	11.0	10.5	11.5	11.0	12.0	11.0	13.5	12.5
26	---	---	14.0	13.5	11.0	10.5	11.5	11.0	12.0	11.5	13.5	12.5
27	---	---	14.0	13.5	11.0	10.5	11.5	11.0	12.0	11.0	13.0	12.0
28	---	---	13.5	13.5	11.0	10.5	11.5	11.5	12.0	11.0	13.0	12.0
29	---	---	13.5	13.5	11.0	10.5	11.5	11.5	---	---	13.0	12.0
30	---	---	13.5	13.5	10.5	10.5	11.5	11.5	---	---	13.5	11.5
31	---	---	---	---	10.5	10.5	11.5	11.5	---	---	13.5	12.0
MONTH	---	---	---	---	---	---	11.5	10.0	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	12.0	16.0	14.0	19.0	17.0	19.5	18.5	---	---	19.0	18.0
2	14.0	12.0	16.0	14.5	18.5	17.0	19.0	18.5	---	---	19.0	18.0
3	14.5	12.5	16.5	15.0	19.0	17.0	19.5	18.5	---	---	18.5	18.0
4	14.5	13.5	17.0	15.5	18.5	17.0	19.5	18.0	---	---	18.5	18.0
5	14.5	14.0	16.5	15.5	19.0	17.0	19.5	18.5	---	---	18.5	18.0
6	15.0	14.0	16.5	15.5	19.0	17.5	19.5	18.5	---	---	18.5	18.0
7	15.0	14.0	16.0	15.0	18.5	17.5	19.5	18.5	---	---	19.0	18.0
8	15.0	14.0	16.0	15.0	18.5	17.5	19.5	18.0	---	---	19.0	18.0
9	15.0	14.0	16.0	15.0	18.5	17.0	19.5	18.5	---	---	19.0	19.0
10	15.0	14.0	16.5	15.0	18.5	17.0	19.5	18.5	---	---	19.0	18.5
11	15.5	14.0	16.0	14.5	18.5	17.0	19.0	18.5	---	---	19.0	18.5
12	15.5	14.0	16.5	14.5	18.5	17.0	19.0	18.5	---	---	19.5	18.5
13	16.0	14.0	16.0	14.5	19.0	17.0	19.5	18.5	---	---	19.5	19.0
14	16.0	14.5	15.5	14.5	19.0	17.5	19.5	18.5	---	---	19.5	19.0
15	16.0	14.5	15.5	14.5	19.5	17.5	19.5	19.0	---	---	20.0	19.0
16	16.0	14.5	15.5	14.5	20.0	18.5	19.5	18.5	---	---	20.0	19.5
17	15.5	14.5	16.0	15.0	20.0	18.5	19.0	18.5	---	---	20.5	19.5
18	15.5	14.5	16.5	15.0	20.0	18.5	19.5	18.5	---	---	20.5	19.5
19	16.0	14.5	16.5	15.5	20.0	19.0	20.0	18.5	---	---	20.5	19.5
20	16.0	15.0	17.0	16.0	20.5	19.0	20.0	19.0	---	---	21.0	20.0
21	16.0	15.0	17.5	16.0	20.5	18.5	19.5	18.5	---	---	20.5	20.0
22	16.5	15.5	18.5	16.0	20.0	18.5	19.5	18.5	---	---	20.5	20.0
23	16.5	15.0	19.0	16.5	20.0	18.5	20.0	19.0	---	---	20.0	19.5
24	16.0	14.5	19.0	17.0	19.5	18.5	20.0	19.0	---	---	20.0	19.5
25	15.5	14.5	19.0	17.5	19.5	18.0	20.0	19.0	---	---	20.0	19.5
26	16.0	14.0	19.0	16.5	19.5	18.0	---	---	---	---	20.5	19.5
27	17.0	14.0	19.5	16.5	19.5	18.0	---	---	---	---	20.0	19.5
28	16.0	14.5	19.0	17.0	---	---	---	---	---	---	20.0	19.5
29	15.5	14.0	19.0	17.0	19.5	18.5	---	---	19.5	18.5	20.0	19.0
30	15.5	14.0	18.5	17.0	19.5	19.0	---	---	19.0	18.5	20.0	19.0
31	---	---	18.5	17.0	---	---	---	---	19.0	18.0	---	---
MONTH	17.0	12.0	19.5	14.0	---	---	---	---	---	---	21.0	18.0

11456000 NAPA RIVER NEAR ST. HELENA, CA

LOCATION.—Lat 38°29'52", long 122°25'37", in Carne Humana Grant, Napa County, Hydrologic Unit 18050002, on right bank, 0.2 mi upstream from highway bridge, 1.3 mi northeast of Zinfandel, and 2.5 mi east of St. Helena.

DRAINAGE AREA.—81.4 mi^2.

PERIOD OF RECORD.—October 1929 to September 1932, October 1939 to June 30, 1995, June 2000 to September 2000. Stage only July 1, 1995, to May 2000. Monthly discharge only for some periods, published in WSP 1315-B.
WATER TEMPERATURE.—Water years 1958–79.
SEDIMENT DATA.—Water years 1961–62.

REVISED RECORDS.—WSP 1929: Drainage area. WDR CA-78-2: 1977(M).

GAGE.—Water-stage recorder. Datum of gage is 170.12 ft above sea level. Prior to Nov. 22, 1958, at datum 3.00 ft higher. Nov. 22, 1958, to July 22, 1976, at datum 2.00 ft higher.

REMARKS.—Interruptions in stage record were usually due to malfunction of the sensing and (or) recording instruments. Discharge records fair, including estimated daily discharges. Some regulation by Kimball Creek Reservoir, capacity, 344 acre-ft, since 1939, and Bell Canyon Reservoir, capacity, 2,530 acre-ft, since 1959. Small diversions upstream from station for irrigation of about 1,500 acres.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 16,900 ft^3/s, Feb. 17, 1986, gage height, 18.52 ft, from rating curve extended above 11,000 ft^3/s on basis of slope-area measurement of peak flow; no flow at times.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.83	2.79	2.86	2.83	3.28	3.12	3.07	3.05	---	---	5.71	5.16
2	2.80	2.79	2.85	2.84	3.13	3.08	3.07	3.05	4.05	3.86	5.28	5.09
3	2.81	2.80	2.85	2.84	3.08	3.05	3.07	3.05	4.05	3.78	5.15	4.85
4	2.81	2.80	2.85	2.84	3.05	3.04	3.07	3.05	3.97	3.74	5.43	4.71
5	2.82	2.80	2.86	2.85	3.04	3.02	3.07	3.05	4.20	3.70	5.64	5.19
6	2.84	2.80	2.88	2.85	3.03	3.01	3.07	3.05	4.10	3.87	5.30	4.99
7	2.85	2.83	3.28	2.86	3.03	3.01	3.07	3.05	3.87	3.73	5.56	4.82
8	2.85	2.81	3.32	3.05	3.03	3.02	3.07	3.05	3.73	3.66	6.59	5.22
9	2.86	2.80	3.06	2.94	3.17	3.02	3.06	3.04	3.66	3.61	7.43	5.98
10	2.81	2.79	2.95	2.92	3.13	3.08	3.09	3.05	4.18	3.61	6.15	5.39
11	2.86	2.80	2.93	2.91	3.09	3.06	4.15	3.09	7.39	3.88	5.49	5.11
12	2.83	2.82	2.92	2.89	3.07	3.04	3.56	3.22	7.60	5.41	5.16	4.81
13	2.84	2.82	2.90	2.89	3.05	3.03	3.22	3.14	11.22	5.40	4.87	4.61
14	2.86	2.81	2.92	2.89	3.04	3.03	3.16	3.14	11.33	7.14	4.64	4.40
15	2.83	2.80	2.95	2.90	3.04	3.03	3.30	3.15	7.44	5.76	4.43	4.21
16	2.84	2.80	3.06	2.90	3.04	3.02	4.93	3.29	5.78	5.31	4.22	4.10
17	2.81	2.79	3.02	2.93	3.04	3.03	3.72	3.36	5.32	4.83	4.12	4.00
18	2.80	2.77	2.96	2.92	3.04	3.02	3.85	3.35	4.88	4.60	4.01	3.91
19	2.80	2.78	3.47	2.91	3.04	3.01	3.61	3.45	4.61	4.38	3.93	3.87
20	2.82	2.80	3.38	3.13	3.03	3.01	3.51	3.40	5.71	4.31	3.88	3.80
21	2.81	2.79	3.13	3.02	3.04	3.02	3.54	3.36	5.63	4.88	3.80	3.72
22	2.83	2.81	3.03	3.00	3.05	3.03	3.55	3.39	8.43	4.73	3.73	3.67
23	2.85	2.82	3.00	2.98	3.04	3.03	4.20	3.40	8.59	5.72	3.69	3.64
24	2.83	2.81	2.98	2.97	3.05	3.03	6.36	4.20	5.85	5.25	3.66	3.63
25	2.82	2.81	2.98	2.95	3.05	3.03	---	---	5.30	4.92	3.64	3.60
26	2.81	2.80	2.97	2.95	3.07	3.05	4.36	3.92	7.39	4.84	3.61	3.56
27	3.13	2.19	2.98	2.97	---	---	3.92	3.69	9.05	6.23	3.58	3.55
28	3.24	2.93	2.98	2.96	3.07	3.04	---	---	6.53	5.50	3.56	3.52
29	2.99	2.88	3.06	2.95	3.06	3.04	---	---	6.31	5.49	3.53	3.48
30	2.89	2.85	3.34	3.06	3.06	3.04	4.63	3.47	---	---	3.50	3.45
31	2.86	2.84	---	---	3.06	3.04	4.34	4.09	---	---	3.47	3.42
MONTH	3.24	2.19	3.47	2.83	---	---	---	---	---	---	7.43	3.42

11456000 NAPA RIVER NEAR ST. HELENA, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.43	3.40	3.28	3.24	---	---	---	---	---	---	---	---
2	3.43	3.40	3.25	3.24	---	---	---	---	---	---	---	---
3	3.40	3.37	3.25	3.23	---	---	---	---	---	---	---	---
4	3.38	3.37	3.24	3.23	---	---	---	---	---	---	---	---
5	3.38	3.36	3.24	3.22	---	---	---	---	---	---	---	---
6	3.37	3.35	3.24	3.22	---	---	---	---	---	---	---	---
7	3.35	3.33	3.31	3.23	---	---	---	---	---	---	---	---
8	3.34	3.33	3.34	3.26	---	---	---	---	---	---	---	---
9	3.33	3.32	3.26	3.23	---	---	---	---	---	---	---	---
10	3.33	3.30	3.24	3.23	---	---	---	---	---	---	---	---
11	3.31	3.29	3.23	3.21	---	---	---	---	---	---	---	---
12	3.36	3.29	3.22	3.20	---	---	---	---	---	---	---	---
13	3.46	3.34	3.21	3.19	---	---	---	---	---	---	---	---
14	3.35	3.32	3.35	3.19	---	---	---	---	---	---	---	---
15	3.36	3.32	3.40	3.31	---	---	---	---	---	---	---	---
16	3.67	3.32	3.32	3.25	---	---	---	---	---	---	---	---
17	4.17	3.67	3.25	3.22	---	---	---	---	---	---	---	---
18	4.14	3.58	3.22	3.19	---	---	---	---	---	---	---	---
19	3.58	3.47	3.20	3.18	---	---	---	---	---	---	---	---
20	3.48	3.43	3.20	3.16	---	---	---	---	---	---	---	---
21	3.44	3.40	3.18	3.15	---	---	---	---	---	---	---	---
22	3.41	3.37	3.16	3.14	---	---	---	---	---	---	---	---
23	3.38	3.35	3.16	3.14	---	---	---	---	---	---	---	---
24	3.37	3.34	3.15	3.13	---	---	---	---	---	---	---	---
25	3.34	3.32	3.15	3.12	---	---	---	---	---	---	---	---
26	3.33	3.30	3.14	3.11	---	---	---	---	---	---	---	---
27	3.31	3.30	3.13	3.10	---	---	---	---	---	---	---	---
28	3.31	3.28	3.12	3.09	---	---	---	---	---	---	---	---
29	3.30	3.27	3.09	3.08	---	---	---	---	---	---	---	---
30	3.29	3.27	3.10	3.08	---	---	---	---	---	---	---	---
31	---	---	3.10	3.07	---	---	---	---	---	---	---	---
MONTH	4.17	3.27	3.40	3.07	---	---	---	---	---	---	---	---

11456000 NAPA RIVER NEAR ST. HELENA, CA—Continued

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	11	4.1	1.0	.56
2	---	---	---	---	---	---	---	---	10	3.2	1.2	.66
3	---	---	---	---	---	---	---	---	9.6	3.6	1.4	.67
4	---	---	---	---	---	---	---	---	9.3	5.2	1.1	.65
5	---	---	---	---	---	---	---	---	8.8	4.5	1.0	.57
6	---	---	---	---	---	---	---	---	9.0	4.5	.99	.55
7	---	---	---	---	---	---	---	---	9.5	4.4	1.0	.53
8	---	---	---	---	---	---	---	---	11	3.9	1.1	.51
9	---	---	---	---	---	---	---	---	11	3.6	1.1	.45
10	---	---	---	---	---	---	---	---	9.9	4.5	.99	.48
11	---	---	---	---	---	---	---	---	9.4	4.2	.77	.45
12	---	---	---	---	---	---	---	---	9.0	3.7	.75	.46
13	---	---	---	---	---	---	---	---	8.4	3.2	.83	.42
14	---	---	---	---	---	---	---	---	7.5	e3.0	.86	.38
15	---	---	---	---	---	---	---	---	6.4	e2.5	.78	.37
16	---	---	---	---	---	---	---	---	5.9	e1.9	.74	.36
17	---	---	---	---	---	---	---	---	5.9	e2.1	.71	.32
18	---	---	---	---	---	---	---	---	6.6	e2.7	.65	.33
19	---	---	---	---	---	---	---	---	6.9	e3.0	.58	.36
20	---	---	---	---	---	---	---	---	6.6	3.1	.66	.39
21	---	---	---	---	---	---	---	---	6.2	2.6	.62	.42
22	---	---	---	---	---	---	---	---	6.3	2.2	.52	.42
23	---	---	---	---	---	---	---	---	6.3	1.9	.65	.38
24	---	---	---	---	---	---	---	---	6.3	1.6	.67	.36
25	---	---	---	---	---	---	---	---	6.3	1.6	.53	.35
26	---	---	---	---	---	---	---	---	6.3	2.2	.47	.33
27	---	---	---	---	---	---	---	---	5.7	2.1	.50	.34
28	---	---	---	---	---	---	---	---	5.4	1.6	.52	.41
29	---	---	---	---	---	---	---	---	5.2	1.5	.51	.45
30	---	---	---	---	---	---	---	---	4.7	1.2	.53	.39
31	---	---	---	---	---	---	---	---	---	1.1	.52	---
TOTAL	---	---	---	---	---	---	---	---	230.4	90.5	24.25	13.32
MEAN	---	---	---	---	---	---	---	---	7.68	2.92	.78	.44
MAX	---	---	---	---	---	---	---	---	11	5.2	1.4	.67
MIN	---	---	---	---	---	---	---	---	4.7	1.1	.47	.32
AC-FT	---	---	---	---	---	---	---	---	457	180	48	26

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

MEAN	5.13	34.7	171	303	295	199	88.4	22.3	7.40	2.52	1.28	1.01
MAX	179	415	1088	1338	1798	1144	584	105	27.3	7.66	4.43	6.44
(WY)	1963	1974	1956	1970	1986	1983	1982	1995	1967	1941	1941	1982
MIN	.000	.10	.24	2.17	4.34	4.16	1.81	.89	.081	.000	.000	.000
(WY)	1978	1932	1940	1991	1977	1998	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	WATER YEARS 1930 - 2000	
ANNUAL MEAN	91.4	
HIGHEST ANNUAL MEAN	270	1983
LOWEST ANNUAL MEAN	1.90	1977
HIGHEST DAILY MEAN	13700	Feb 17 1986
LOWEST DAILY MEAN	.00	Sep 23 1947
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 23 1947
INSTANTANEOUS PEAK FLOW	16900	Feb 17 1986
INSTANTANEOUS PEAK STAGE	18.52	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	66200	
10 PERCENT EXCEEDS	176	
50 PERCENT EXCEEDS	6.6	
90 PERCENT EXCEEDS	.44	

e Estimated.

11458000 NAPA RIVER NEAR NAPA, CA

LOCATION.—Lat 38°22'06", long 122°18'08", in Yajome Grant, Napa County, Hydrologic Unit 18050002, on left bank, downstream side of Oak Knoll Avenue Bridge, 0.4 mi downstream from Dry Creek, 5 mi north of Napa, and 12.8 mi downstream from Conn Dam.

DRAINAGE AREA.—218 mi^2.

PERIOD OF RECORD.—October 1929 to September 1932, October 1959 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL DATA: Water years 1973–93.
BIOLOGICAL DATA: Water years 1978–81.
SPECIFIC CONDUCTANCE: Water years 1978–93.
WATER TEMPERATURE: Water years 1977–93.
SEDIMENT DATA: Water years 1971, 1977–93.

REVISED RECORDS.—WSP 1315-B: 1930(M). WDR CA-87-2: 1963(M), 1965(M), 1967(M), 1982–85.

GAGE.—Water-stage recorder. Datum of gage is 24.74 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are fair. Flow regulated by Lake Hennessey beginning in December 1945, 12.8 mi upstream, capacity, 31,000 acre-ft; Rector Reservoir beginning in 1948, 12.4 mi upstream, capacity, 4,400 acre-ft; Bell Canyon Reservoir beginning in 1959, 19.6 mi upstream, capacity, 2,530 acre-ft. Diversions for irrigation upstream from station of about 10,000 acres.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 37,100 ft^3/s, Feb. 18, 1986, gage height, 30.20 ft, from floodmarks; maximum gage height, 30.50 ft, Mar. 9, 1995; no flow at times.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	2.4	22	5.9	237	1200	105	53	22	4.9	.89	.60
2	.55	2.0	20	6.0	186	973	103	51	21	5.8	.80	.60
3	.55	1.1	13	6.0	154	862	94	49	20	5.2	.72	.58
4	.55	.93	10	5.9	156	742	90	48	20	5.0	.71	.63
5	.53	1.4	8.5	5.9	139	1050	87	46	19	4.9	.77	.67
6	.52	1.6	7.6	5.9	202	955	85	45	19	4.7	.68	.57
7	.63	2.0	6.8	5.9	156	828	81	49	19	4.6	1.1	.60
8	.66	8.6	6.3	5.9	124	1250	78	59	20	4.3	1.0	.60
9	.62	18	6.3	5.9	110	2120	75	51	20	4.3	1.2	.60
10	.71	10	9.5	5.8	137	1440	72	45	19	e4.4	1.2	.60
11	.73	7.0	11	8.2	447	1010	69	39	18	e4.2	1.1	.57
12	.65	5.6	9.4	75	1520	789	64	49	17	e4.0	1.2	.54
13	3.0	6.2	8.4	26	2470	639	75	42	16	e3.9	.97	.52
14	4.4	4.9	6.9	16	5750	542	73	43	14	e3.7	1.1	.49
15	4.6	4.2	6.6	15	2000	468	69	68	11	e3.4	.87	.48
16	2.8	4.5	6.5	136	1050	402	71	62	9.1	e3.2	.81	e.48
17	1.7	5.5	6.3	101	768	347	211	50	7.9	e3.1	.79	e.48
18	1.4	6.9	6.2	71	604	321	172	44	9.6	e2.9	.77	e.48
19	.86	8.0	6.0	88	507	296	114	41	9.4	e2.8	.69	e.47
20	.62	26	5.2	61	506	274	95	40	7.8	3.1	.63	e.47
21	.48	18	3.6	50	874	248	87	37	6.9	4.3	.71	e.47
22	.48	11	4.6	53	892	222	80	34	6.7	1.9	.67	e.47
23	.48	7.8	4.1	67	2690	203	74	31	6.9	2.1	.62	e.46
24	.51	6.4	5.6	847	1110	191	70	29	7.6	3.3	.60	e.46
25	.66	5.8	5.6	538	818	177	67	28	9.1	2.1	.60	e.46
26	.66	5.5	5.6	254	748	164	62	26	7.9	1.7	.57	e.45
27	.59	5.1	5.7	158	2600	157	61	25	6.0	1.5	.58	e.45
28	.67	4.6	5.9	110	1560	147	59	24	5.7	1.1	.76	e.45
29	1.2	4.5	5.9	85	1480	131	56	23	5.3	.99	.71	.44
30	3.0	4.9	5.9	159	---	119	55	22	4.9	.98	.68	.44
31	2.7	---	5.9	249	---	112	---	22	---	.91	.66	---
TOTAL	38.09	200.43	240.9	3226.3	29995	18379	2554	1275	385.8	103.28	25.16	15.58
MEAN	1.23	6.68	7.77	104	1034	593	85.1	41.1	12.9	3.33	.81	.52
MAX	4.6	26	22	847	5750	2120	211	68	22	5.8	1.2	.67
MIN	.48	.93	3.6	5.8	110	112	55	22	4.9	.91	.57	.44
AC-FT	76	398	478	6400	59500	36450	5070	2530	765	205	50	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

MEAN	11.9	78.3	267	716	743	492	185	51.1	17.6	5.70	2.72	2.25
MAX	338	616	1474	3083	4089	2598	1341	226	100	23.9	9.43	10.7
(WY)	1963	1974	1984	1995	1986	1983	1982	1983	1998	1998	1983	1982
MIN	.000	1.10	.73	2.17	.42	2.60	.20	.000	.000	.000	.000	.000
(WY)	1961	1991	1977	1991	1977	1977	1977	1977	1977	1961	1960	1960

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	69996.15		56438.54			
ANNUAL MEAN	192		154		212	
HIGHEST ANNUAL MEAN					585	1983
LOWEST ANNUAL MEAN					.72	1977
HIGHEST DAILY MEAN	5960	Feb 7	5750	Feb 14	26200	Feb 17 1986
LOWEST DAILY MEAN	.48	Oct 21	.44	Sep 29	.00	Jul 14 1960
ANNUAL SEVEN-DAY MINIMUM	.55	Oct 21	.45	Sep 24	.00	Jul 14 1960
INSTANTANEOUS PEAK FLOW			7140	Feb 14	37100	Feb 18 1986
INSTANTANEOUS PEAK STAGE			19.45	Feb 14	30.50	Mar 9 1995
ANNUAL RUNOFF (AC-FT)	138800		111900		153600	
10 PERCENT EXCEEDS	525		416		438	
50 PERCENT EXCEEDS	15		7.3		14	
90 PERCENT EXCEEDS	.73		.60		.59	

e Estimated.

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA

LOCATION.—Lat 38°06'40", long 122°16'25", T.3 N., R.4 W., Solano County, Hydrologic Unit 18050002, at east side of Napa River main channel, and underneath Mare Island Causeway Bridge.

PERIOD OF DAILY RECORD.—October 1998 to current year.
SPECIFIC CONDUCTANCE: October 1998 to current year.
WATER TEMPERATURE: October 1998 to current year.

INSTRUMENTATION.—Water-quality monitor since October 1998.

REMARKS.—Interruptions in record were due to malfunction of the sensing instruments. Upper probe is set at 5.0 ft below Mean Lower Low Water (MLLW). Lower probe is set at 27.0 ft below MLLW. Daily maximums and minimums sometimes differ from tidal-cycle (24.8 hours) maximums and minimums.

EXTREMES FOR PERIOD OF RECORD.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 37,400 microsiemens, Oct. 27, 1999; minimum recorded, 72 microsiemens, Mar. 4, 5, 1999.
(Lower probe) Maximum recorded, 44,600 microsiemens, Jan. 11, 1999; minimum recorded, 81 microsiemens, Mar. 4, 1999.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 22.5°C, July 11–13, 1999, Jun. 15, 2000; minimum recorded, 6.5°C, Jan. 11, 1999.
(Lower probe) Maximum recorded, 22.0°C, several days in June, August, and September 2000; minimum recorded, 6.5°C, Dec. 24, 1998.

EXTREMES FOR CURRENT YEAR.—
SPECIFIC CONDUCTANCE: (Upper probe) Maximum recorded, 37,400 microsiemens, Oct. 27; minimum recorded, 90 microsiemens, Mar. 8, 10.
(Lower probe) Maximum recorded, 39,500 microsiemens, Sept. 7; minimum recorded, 90 microsiemens, Feb. 22.
WATER TEMPERATURE: (Upper probe) Maximum recorded, 22.5°C, June 15; minimum recorded, 10.5°C, Feb. 25.
(Lower probe) Maximum recorded, 22.0°C, several days in June, August, and September; minimum recorded, 9.5°C, several days in December and January.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	34600	27200	33200	28500	29800	27700	31700	25700	22800	11600	2020	254
2	34100	28500	33000	28700	29800	27200	31000	25900	24200	11500	1940	239
3	32900	28800	32700	30100	29700	27200	30200	23700	25200	12100	3860	177
4	33000	27900	31800	29800	30400	26100	30800	23800	23200	10400	4420	265
5	31600	27700	31700	30400	31800	26300	31400	23700	22800	10100	2260	193
6	---	---	32600	30700	32400	26300	31500	24000	19100	9420	1690	95
7	31300	28000	33600	30700	32900	26500	32100	24000	18100	7920	951	100
8	30900	28100	34000	29700	32100	25900	33100	25100	---	---	909	90
9	30000	29000	33300	28600	32200	24700	32000	24800	16600	8700	890	95
10	30600	28800	34300	28300	32200	25200	32100	25000	19500	10100	840	90
11	32100	28600	34900	28100	31600	24200	31500	25400	19900	12000	757	108
12	32300	29600	33800	27600	32600	23000	29900	26100	22300	11400	2120	290
13	33100	28700	34400	27300	30300	22700	30300	24600	24700	7740	4400	531
14	34400	29400	33900	27400	28300	21400	31200	25900	13900	1350	3460	314
15	34000	29900	32600	28800	28500	21000	32300	26200	7160	368	7060	322
16	33300	29000	33000	27600	30100	21200	34400	26400	12900	372	8860	311
17	34600	28600	31600	28900	31100	24000	33400	26600	8570	249	3140	115
18	35000	29500	31200	28100	31200	25200	32800	25600	3170	254	6720	177
19	34300	30500	32000	28500	30000	24000	32800	24600	2430	110	7300	399
20	33600	30200	31000	28900	29200	22900	33500	23500	7940	110	2640	353
21	33000	30400	31700	27600	32000	22900	31700	22400	2650	131	7130	353
22	33500	30700	31600	26800	31800	22800	30500	21400	1350	100	14000	1660
23	34100	30900	32900	26500	31600	22000	31800	19500	1370	105	15600	2490
24	34200	31200	33300	25800	30700	21100	26600	18200	1320	224	13200	3250
25	34300	30800	33300	25400	30100	20400	21000	16000	2320	852	15600	3910
26	36500	30400	34600	25900	29800	21200	18900	13400	5480	836	12400	4440
27	37400	30800	33400	26600	28200	21200	18600	9980	3870	814	16400	5630
28	---	---	33400	26000	27800	21300	17500	9590	1350	532	14700	6230
29	35500	29700	32800	26200	27900	22400	24800	12900	2360	597	18700	7440
30	34400	28200	31900	27600	31800	23700	29000	13800	---	---	23400	8800
31	34000	28200	---	---	33300	24500	22900	12100	---	---	23200	11500
MONTH	---	---	34900	25400	33300	20400	34400	9590	---	---	23400	90

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	27100	14000	24100	16200	28200	18500	34800	24200	31200	20900	---	---
2	26900	15600	22300	16500	28400	18600	33500	23600	29200	21400	---	---
3	25200	16300	23000	15600	29400	19100	33200	22900	28600	22600	30300	25900
4	23500	17100	23300	13200	29400	19400	32000	22700	28200	22700	29600	26800
5	22200	17500	23400	12200	29700	19700	31200	23200	27000	22800	30800	25000
6	22400	16400	24600	10800	28900	18600	29600	22400	28400	23400	33600	23200
7	24300	14900	25900	9160	27700	18700	28100	22800	29800	24500	34600	23800
8	24400	15300	26800	9700	26900	19100	29500	23100	31100	25000	33200	26100
9	22900	13900	18500	8540	24300	19300	30600	24200	31100	24600	31900	27100
10	24100	12600	18800	8210	26800	19900	28600	24600	30600	23900	31000	26200
11	23600	12800	14600	6510	26300	20100	30300	24800	31900	22300	30900	26100
12	25900	13800	19800	9630	27700	20300	30200	25000	30500	21900	31000	26100
13	24400	15100	22900	11000	28500	20400	32600	24900	30700	22900	31000	25700
14	21500	14700	24300	13100	32900	20400	31900	23500	30300	22400	31300	26900
15	20900	14400	22400	13800	30400	21400	30400	22700	30800	22700	30000	27300
16	20400	14600	20800	14300	30800	21600	30400	23700	29600	21800	30000	27700
17	20200	13900	21000	13000	30600	22000	31900	23000	29300	23800	29900	27000
18	18900	11900	23700	12300	30800	22500	29100	21600	28600	24200	31900	26800
19	20900	9690	23500	11500	30000	21200	28600	21500	28100	24100	34000	27700
20	19000	8450	22000	11400	30500	21000	28200	22200	27700	24100	36500	27900
21	20100	8320	24500	11700	29900	21900	28800	22600	30000	25200	36500	28200
22	16300	6670	23900	13200	30300	22900	27500	22400	31100	25800	34900	28000
23	12300	5090	23800	11400	29000	22000	28100	22600	31200	26000	33300	26900
24	12700	6960	22600	14600	27200	23000	31500	24200	---	---	31500	26300
25	15300	8840	21900	14700	29300	23300	31100	24800	---	---	32900	25900
26	19700	11000	21000	13000	32600	23900	29500	25200	---	---	31500	27400
27	23600	12300	23400	14200	31000	23900	30900	24100	---	---	32200	28200
28	21800	12300	24700	16400	30400	24100	30600	22600	---	---	32600	28500
29	22800	13800	26600	17200	31900	24400	30600	22000	---	---	31000	28500
30	23800	15400	26100	17500	34100	24700	29700	22100	---	---	32100	29100
31	---	---	27600	18200	---	---	30500	21400	---	---	---	---
MONTH	27100	5090	27600	6510	34100	18500	34800	21400	---	---	---	---

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	36000	28200	33900	29200	30700	27400	32700	25600	30100	12000	2840	259
2	34800	28900	33200	29300	30900	27600	32300	25600	30800	11600	2790	218
3	33200	28900	32700	30000	31300	27600	32700	24600	29900	12500	7340	223
4	33500	28200	32500	29800	32400	26900	34100	24700	27500	10300	10800	223
5	32300	27900	32700	30300	33800	26900	34700	24400	28100	10200	5210	193
6	---	---	33800	30400	34700	26700	35200	24900	22800	9540	2990	100
7	31500	28000	35300	30700	33900	26900	35700	24900	23300	7980	1070	115
8	31700	28300	34700	30400	35100	26600	34500	25600	---	---	946	126
9	31500	29200	34800	29100	36500	25600	33800	25600	22100	9530	890	115
10	31900	29000	36400	28800	34500	25800	32400	25700	22500	11400	821	98
11	33900	28800	36100	28700	32600	25200	32400	25600	23600	12200	833	120
12	32800	29800	36400	28300	37000	23800	30300	25900	26100	11600	6320	327
13	33300	29400	37600	28300	31500	25600	30900	25600	26600	9140	8590	511
14	34800	29900	36200	28800	30000	24000	33400	25600	17700	2430	8680	278
15	35200	30100	35100	29500	30600	24400	34300	26300	15300	399	17400	350
16	36600	30100	35300	29400	32700	24500	36300	26400	20600	367	18900	265
17	37700	29900	33200	29300	33800	24600	34700	26600	15000	265	8550	167
18	36800	30100	32300	29300	33000	25000	36600	25700	9200	239	12700	213
19	34400	30400	34100	29100	32200	25000	36100	24600	6100	136	10600	415
20	33800	30400	32400	28900	32900	23200	35300	23500	10500	130	5380	423
21	33500	30600	32200	27600	34700	23200	34100	23200	4250	151	12400	528
22	33600	30600	32200	26900	35200	23100	32800	21700	1440	90	17700	1970
23	34400	30900	34200	26700	34600	22200	32700	19600	1410	136	17300	2720
24	34500	31200	35600	26000	34200	21200	28900	19100	1340	203	20100	3490
25	34600	30900	36200	25500	33700	20600	22700	16400	3030	805	22200	4900
26	36600	30500	36700	26000	32200	21300	20100	14300	10500	884	20500	6910
27	37300	30700	34300	26700	29500	22100	23400	12400	4720	873	25300	9990
28	---	---	33800	26500	28900	22300	27300	12900	1500	743	22200	10900
29	35900	29600	34000	27100	30100	23400	33500	13700	6230	698	27900	12800
30	35100	28500	32500	27600	32900	23400	35800	15000	---	---	28600	14200
31	34900	28900	---	---	34500	24600	28500	13500	---	---	29300	14900
MONTH	---	---	37600	25500	37000	20600	36600	12400	---	---	29300	98

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	31000	15700	27000	16500	31700	18900	35500	24700	33600	21300	---	---
2	30000	17100	25600	16700	31800	18900	35700	24000	32600	21900	---	---
3	26300	17000	25200	16400	31900	19400	35700	23300	30900	23400	31700	26900
4	24600	17600	25200	13800	32800	19700	35700	23200	28900	23300	32200	27400
5	23800	17700	27100	12800	32100	20000	33500	23700	29300	23700	36300	26900
6	24500	17000	27600	11600	31600	19500	30100	23200	31200	24500	38600	27000
7	25900	15800	29000	11000	30200	19900	28500	23600	33400	24800	39500	27300
8	26900	15800	30600	10800	28600	20000	30600	24300	36700	25100	34700	27300
9	25300	15000	28700	10900	26400	20300	31700	24500	36700	25600	32200	27500
10	28500	14500	24400	10800	28600	20500	31800	24700	33800	25100	31400	27100
11	30600	15000	19700	9080	29300	20600	32400	25000	35200	24000	31600	26800
12	32700	15500	23100	11200	29500	20800	33400	25200	34100	23700	31600	26700
13	29100	15400	25400	12200	31000	21000	34500	25500	33500	23900	31600	26500
14	25900	15600	26300	13400	35400	21300	34900	24200	33500	23900	31900	27500
15	23400	15600	26000	14000	35400	21700	34900	23800	32500	23900	30500	27600
16	23000	15100	24100	14500	32900	21800	33600	24400	31300	23400	29500	27600
17	23200	14500	25300	13800	33400	22400	34200	23800	31300	24800	30500	27200
18	21000	12300	25900	13400	32200	22800	31600	22900	29000	25100	32900	27300
19	22500	10600	27200	12800	32000	22200	32500	23200	28100	25000	35100	27800
20	22100	9860	29700	13400	34900	22500	30600	23300	30200	25300	36600	27800
21	24700	9780	30700	14000	35200	22900	30200	23700	32200	25600	35700	28000
22	19100	8700	31800	14700	32300	23300	28500	24200	32400	26000	35100	28100
23	17100	7180	31100	14900	30600	23200	31300	24200	32300	26200	34700	27500
24	21000	9900	27400	16000	29500	23100	34900	24700	---	---	33200	26900
25	23800	12500	27000	17000	31500	23400	32800	24800	---	---	33200	26800
26	28800	14300	26200	16800	33900	24300	31100	25300	---	---	33200	28100
27	30300	17600	29000	16800	32700	24400	32700	24600	---	---	32700	28400
28	24900	16800	30000	17400	32900	24400	33000	23300	---	---	33000	29100
29	27000	15400	29300	17900	34200	24600	33800	22700	---	---	32500	29200
30	27600	15800	28300	18000	35100	24900	33700	22600	---	---	33600	29600
31	---	---	30000	18500	---	---	33900	22100	---	---	---	---
MONTH	32700	7180	31800	9080	35400	18900	35700	22100	---	---	---	---

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(UPPER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	13.0	11.5
2	---	---	---	---	---	---	---	---	---	---	13.0	11.5
3	---	---	---	---	---	---	---	---	---	---	13.5	11.5
4	---	---	---	---	---	---	---	---	---	---	13.5	12.0
5	---	---	---	---	---	---	---	---	---	---	13.0	12.0
6	---	---	---	---	---	---	---	---	---	---	12.5	11.5
7	---	---	---	---	---	---	---	---	---	---	12.5	11.5
8	---	---	---	---	---	---	---	---	---	---	11.5	11.0
9	---	---	---	---	---	---	---	---	---	---	11.5	11.0
10	---	---	---	---	---	---	---	---	---	---	12.0	11.0
11	---	---	---	---	---	---	---	---	---	---	12.5	11.5
12	---	---	---	---	---	---	---	---	---	---	13.0	11.5
13	---	---	---	---	---	---	---	---	---	---	14.0	12.0
14	---	---	---	---	---	---	---	---	---	---	15.0	12.0
15	---	---	---	---	---	---	---	---	---	---	15.5	13.0
16	---	---	---	---	---	---	---	---	---	---	15.5	13.0
17	---	---	---	---	---	---	---	---	---	---	15.5	13.5
18	---	---	---	---	---	---	---	---	---	---	16.5	13.5
19	---	---	---	---	---	---	---	---	12.5	11.5	16.0	14.0
20	---	---	---	---	---	---	---	---	12.0	11.5	14.5	13.5
21	---	---	---	---	---	---	---	---	12.5	11.5	14.0	13.0
22	---	---	---	---	---	---	---	---	12.0	11.5	14.5	13.0
23	---	---	---	---	---	---	---	---	12.0	11.0	14.5	13.5
24	---	---	---	---	---	---	---	---	11.5	11.0	14.5	13.5
25	---	---	---	---	---	---	---	---	11.5	10.5	14.5	13.5
26	---	---	---	---	---	---	---	---	11.5	11.0	14.5	13.5
27	---	---	---	---	---	---	---	---	11.5	11.5	14.0	13.5
28	---	---	---	---	---	---	---	---	12.0	11.0	14.0	13.0
29	---	---	---	---	---	---	---	---	13.0	11.0	14.5	13.0
30	---	---	---	---	---	---	---	---	---	---	15.5	13.0
31	---	---	---	---	---	---	---	---	---	---	15.5	13.0
MONTH	---	---	---	---	---	---	---	---	---	---	16.5	11.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15.5	12.5	17.5	15.5	20.5	18.5	20.0	19.0	22.0	20.0	---	---
2	16.5	13.0	18.0	16.0	20.5	18.5	19.5	19.0	22.0	20.0	---	---
3	16.5	13.5	18.5	16.0	20.0	18.0	19.5	18.5	21.5	20.5	18.5	18.0
4	16.5	14.0	18.5	16.5	19.5	18.0	19.5	18.5	21.0	20.5	19.0	18.0
5	16.0	14.5	17.5	16.5	19.0	18.0	19.5	18.5	21.0	20.0	19.0	18.0
6	16.0	14.5	16.5	16.0	19.0	18.0	19.5	18.5	21.0	20.0	19.5	18.0
7	16.5	14.5	16.0	15.5	19.0	18.0	19.5	18.5	21.0	19.5	20.0	18.0
8	15.5	14.5	17.0	15.5	18.5	18.0	19.5	18.5	20.5	19.5	20.0	18.5
9	15.5	14.5	17.0	16.0	18.5	18.0	20.0	19.0	21.0	19.5	20.0	18.5
10	15.5	14.5	16.5	15.5	19.0	18.0	20.0	19.0	21.0	19.5	20.0	18.5
11	16.5	14.5	17.0	15.5	19.5	18.0	20.0	19.0	21.5	19.5	20.5	18.5
12	16.5	14.5	17.5	15.5	19.5	18.0	20.0	19.0	21.5	19.5	20.5	19.0
13	17.0	15.0	17.0	15.5	21.0	18.0	20.5	19.0	21.5	19.5	20.5	19.0
14	17.0	15.5	16.0	15.0	---	---	20.5	19.0	21.5	20.0	21.0	19.0
15	17.0	15.5	17.0	15.5	22.5	19.0	20.0	19.0	22.0	20.0	20.5	19.0
16	16.0	15.5	16.5	15.5	22.0	19.5	20.0	19.0	22.0	20.0	20.5	19.5
17	16.5	15.5	17.5	15.5	21.5	19.5	20.0	18.5	21.5	20.0	21.5	19.5
18	17.0	15.5	18.5	15.5	21.0	19.5	20.0	18.5	21.0	20.0	22.0	20.0
19	17.0	15.5	19.5	16.0	21.0	19.5	20.0	19.0	21.0	20.0	22.0	20.0
20	17.5	15.5	19.5	16.5	21.0	19.5	20.0	19.0	20.5	20.0	22.0	20.0
21	17.0	15.5	20.0	17.0	21.0	19.5	20.0	19.0	21.0	20.0	21.5	20.0
22	17.0	16.0	21.5	17.5	20.5	20.0	20.5	19.0	20.5	19.5	20.5	19.5
23	17.0	15.5	21.5	17.5	20.0	19.5	21.0	19.5	20.5	19.5	20.5	19.5
24	17.5	16.0	20.5	18.0	20.0	18.5	21.0	19.0	---	---	21.0	19.5
25	17.0	15.5	20.0	18.5	20.5	19.0	21.0	19.5	---	---	21.5	20.0
26	17.5	16.0	20.0	18.5	21.0	19.0	20.5	19.5	---	---	21.0	20.0
27	17.0	16.0	20.0	18.5	20.5	19.5	21.0	19.5	---	---	20.5	19.5
28	16.5	15.0	20.5	18.5	21.0	19.5	21.5	19.5	---	---	20.0	19.5
29	17.0	15.5	20.5	18.0	21.0	19.5	22.0	19.5	---	---	20.0	19.0
30	17.5	15.5	20.0	18.5	20.0	19.0	21.5	20.0	---	---	20.5	19.5
31	---	---	21.0	18.5	---	---	22.0	20.0	---	---	---	---
MONTH	17.5	12.5	21.5	15.0	---	---	22.0	18.5	---	---	---	---

11458370 NAPA RIVER AT MARE ISLAND CAUSEWAY, NEAR VALLEJO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

(LOWER PROBE)

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	17.0	16.5	13.5	12.5	10.0	9.5	12.0	11.0	12.5	11.5
2	---	---	17.0	16.5	13.5	12.5	10.0	9.5	12.0	11.5	12.5	11.5
3	---	---	17.0	16.5	13.0	12.0	10.0	9.5	12.0	11.5	13.0	11.5
4	---	---	16.5	16.0	13.0	11.5	10.0	9.5	12.0	11.5	13.0	11.5
5	---	---	16.5	16.0	12.5	11.5	10.0	9.5	12.0	11.5	12.5	11.5
6	---	---	16.5	16.0	12.5	11.5	10.0	9.5	12.0	11.5	12.5	11.5
7	19.5	18.5	16.5	16.0	12.5	11.5	10.0	9.5	12.0	11.5	12.0	11.5
8	20.0	19.0	16.0	16.0	12.0	11.0	10.0	9.5	---	---	11.5	11.0
9	20.5	19.0	16.0	15.5	12.0	11.0	10.0	9.5	12.5	11.5	11.5	10.5
10	21.0	19.5	16.0	15.5	11.5	10.5	10.5	10.0	12.5	11.5	11.5	10.5
11	20.5	19.0	16.0	15.5	11.5	10.5	10.5	10.0	12.0	11.5	12.0	11.0
12	20.5	19.0	16.0	15.5	11.5	10.5	10.5	10.0	12.0	11.5	12.0	11.5
13	20.0	19.5	16.0	15.5	11.5	10.5	10.0	10.0	12.0	11.5	13.0	11.5
14	20.0	19.0	16.0	15.5	11.0	10.0	10.5	10.0	12.5	11.5	13.5	12.0
15	20.0	19.0	16.0	15.5	11.0	10.0	10.5	10.0	13.0	11.5	14.5	12.5
16	20.0	19.0	16.0	15.5	11.0	10.0	11.0	10.5	12.5	11.5	15.0	12.5
17	19.5	18.5	15.5	15.5	11.0	10.0	10.5	10.5	12.5	11.5	15.0	13.0
18	19.0	18.5	15.5	15.0	11.0	10.0	11.0	10.5	13.0	11.5	16.0	13.0
19	18.5	18.0	15.0	14.5	11.0	10.0	11.0	10.5	12.5	11.5	15.5	13.5
20	19.0	18.0	15.0	14.5	11.0	10.5	11.5	10.5	12.5	11.5	14.5	13.0
21	19.0	18.0	15.0	14.0	11.0	10.5	11.5	10.5	12.5	11.5	14.0	13.0
22	18.5	18.0	14.5	13.5	11.0	10.5	11.5	11.0	12.5	11.5	14.5	13.0
23	18.0	17.5	14.5	13.5	11.0	10.0	11.5	10.5	12.0	11.5	14.5	13.0
24	18.0	17.0	14.0	13.0	11.0	10.0	11.5	11.0	11.5	11.0	14.0	13.0
25	18.0	17.0	14.0	13.0	10.5	10.0	11.5	11.0	11.5	10.5	14.0	13.0
26	17.5	16.5	14.0	13.0	10.5	10.0	11.5	11.0	11.5	11.0	13.5	13.0
27	17.5	16.5	14.0	13.0	10.5	9.5	11.5	11.0	11.5	11.0	13.5	13.0
28	---	---	13.5	13.0	10.5	9.5	11.5	11.0	12.0	11.0	13.5	13.0
29	17.0	16.0	13.5	13.0	10.5	9.5	11.5	11.0	12.5	11.0	13.5	12.5
30	16.5	16.0	13.5	13.0	10.5	9.5	11.5	11.0	---	---	13.5	12.5
31	16.5	16.5	---	---	10.5	9.5	11.5	11.0	---	---	14.5	12.5
MONTH	---	---	17.0	13.0	13.5	9.5	11.5	9.5	---	---	16.0	10.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.5	12.5	17.0	15.0	20.0	18.0	20.0	19.0	22.0	19.5	---	---
2	15.5	12.5	17.5	15.5	20.0	18.0	19.5	19.0	22.0	20.0	---	---
3	16.5	13.5	17.5	15.5	19.5	18.0	19.5	18.0	21.5	20.0	19.0	18.0
4	16.5	14.0	18.0	16.0	19.0	18.0	19.5	18.5	21.0	20.0	19.0	18.0
5	16.0	14.5	17.5	16.0	19.0	17.5	19.5	19.0	21.0	20.0	19.0	18.0
6	16.0	14.5	16.5	16.0	19.0	18.0	19.5	18.5	21.0	19.5	19.5	18.0
7	16.0	14.5	16.0	15.5	19.0	18.0	19.0	18.5	20.5	19.0	20.0	18.0
8	15.5	14.5	16.5	15.0	18.5	17.5	19.0	18.5	20.5	19.0	20.0	18.5
9	15.0	14.5	16.5	15.0	18.5	18.0	19.5	18.5	20.0	19.0	20.0	18.5
10	15.5	14.5	16.5	15.5	18.5	18.0	19.5	19.0	20.5	19.0	19.5	19.0
11	15.5	14.0	16.0	15.5	18.5	17.5	19.5	19.0	20.5	19.0	20.0	19.0
12	16.5	14.0	16.5	15.5	18.5	17.5	19.5	19.0	21.0	19.0	20.5	19.0
13	16.5	14.5	16.5	15.0	19.5	18.0	19.5	18.5	21.0	19.5	20.5	19.0
14	17.0	15.0	16.0	15.0	21.0	18.0	20.0	19.0	21.5	19.5	21.0	19.0
15	16.5	15.5	16.5	15.0	22.0	18.0	20.0	19.0	21.5	20.0	20.5	19.5
16	16.0	15.0	16.5	15.5	21.5	19.0	20.0	19.0	22.0	20.0	20.5	19.5
17	16.5	15.0	17.0	15.5	21.0	19.5	19.5	18.5	21.5	20.0	21.5	19.5
18	16.5	15.5	18.0	15.5	20.5	19.5	20.0	19.0	21.5	20.5	22.0	19.5
19	16.5	15.5	18.0	15.5	20.5	19.5	20.0	19.0	21.0	20.0	22.0	20.0
20	17.0	15.5	19.0	15.5	20.5	19.5	20.0	19.0	21.0	20.0	22.0	20.0
21	17.0	15.5	19.5	16.0	20.5	19.0	20.0	19.0	20.5	19.5	21.5	20.0
22	17.0	16.0	20.0	16.0	20.5	19.5	20.0	19.0	20.5	19.5	21.0	20.0
23	16.5	15.5	21.0	16.5	20.0	19.0	20.0	19.0	20.5	19.5	20.5	19.5
24	16.0	15.5	19.5	17.5	19.5	19.0	20.5	19.0	---	---	21.0	20.0
25	16.0	15.5	19.5	18.0	20.0	19.0	20.5	19.0	---	---	21.0	20.0
26	16.5	15.0	19.5	18.0	20.0	18.5	20.5	19.5	---	---	21.0	20.0
27	16.0	15.0	19.5	17.5	20.0	19.0	20.5	19.5	---	---	20.5	19.5
28	16.0	15.5	20.0	17.5	20.0	19.0	20.5	19.5	---	---	20.0	19.5
29	16.0	15.0	19.5	18.0	20.5	19.0	21.0	19.5	---	---	20.0	19.0
30	16.5	15.0	19.5	18.0	20.0	19.0	21.5	19.5	---	---	20.5	19.5
31	---	---	20.0	18.0	---	---	21.5	19.5	---	---	---	---
MONTH	17.0	12.5	21.0	15.0	22.0	17.5	21.5	18.0	---	---	---	---

11459150 PETALUMA RIVER AT COPLAND PUMPING STATION, AT PETALUMA, CA

LOCATION.—Lat 38°14'18", long 122°38'12", in sec.33, T.5 N., R.7 W., Sonoma County, Hydrologic Unit 18050002, on left bank, 0.1 mi upstream from Washington Street Bridge, at Copland Pumping Station, in Petaluma.

DRAINAGE AREA.—45.4 mi^2.

PERIOD OF RECORD.—October 1998 to current year (high flow above 50 ft^3/s only).

GAGE.—Water-stage recorder and dopler-velocity system. Datum of gage is sea level.

REMARKS.—Records poor. Flows affected by tide. No regulation or diversion above gage.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,890 ft^3/s, Feb. 13, 2000, gage height, 6.04 ft, Feb. 7, 1999.

EXTREMES FOR 1999 WATER YEAR (NOT PREVIOUSLY PUBLISHED).—

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 7	0730	(a)	6.04	Feb. 17	0030	(a)	5.00
Feb. 7	0815	2,730		Mar. 25	0045	1,500	
Feb. 16	2330	2,500		Mar. 25	0715	(a)	4.29

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1500 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0745	(a)	5.67	Feb. 22	1600	(a)	4.80
Feb. 13	1945	2,890		Feb. 22	2300	1,560	

(a) Affected by tide

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAILY MEAN VALUES

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e160	---	---	138	---	---	---	---	---	---
2	---	---	---	---	---	56	---	---	---	---	---	---
3	---	---	e170	---	---	89	---	---	---	---	---	---
4	---	---	e70	---	---	---	---	---	---	---	---	---
5	---	---	e80	---	---	---	---	---	---	---	---	---
6	---	---	---	---	369	---	---	---	---	---	---	---
7	---	---	---	---	1600	---	---	---	---	---	---	---
8	---	---	---	---	262	91	51	---	---	---	---	---
9	---	---	---	---	956	189	---	---	---	---	---	---
10	---	---	---	---	129	---	---	---	---	---	---	---
11	---	---	---	---	58	---	518	---	---	---	---	---
12	---	---	---	---	---	---	83	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	70	---	---	---	---	---	---
15	---	---	---	---	---	82	---	---	---	---	---	---
16	---	---	---	---	862	---	---	---	---	---	---	---
17	---	---	---	---	905	---	---	---	---	---	---	---
18	---	---	---	---	265	---	---	---	---	---	---	---
19	---	---	---	51	140	---	---	---	---	---	---	---
20	---	---	---	104	245	---	---	---	---	---	---	---
21	---	---	---	79	343	---	---	---	---	---	---	---
22	---	---	---	---	e125	---	---	---	---	---	---	---
23	---	---	---	74	56	---	---	---	---	---	---	---
24	---	---	---	---	66	177	---	---	---	---	---	---
25	---	---	---	---	475	629	---	---	---	---	---	---
26	---	---	---	---	79	69	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	153	---	---	---	---	---	---	---
29	---	e200	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	266	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

11459150 PETALUMA RIVER AT COPLAND PUMPING STATION, AT PETALUMA, CA—Continued

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	76	---	---	---	---	---	---
2	---	---	---	---	---	74	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	87	---	---	---	---	---	---
5	---	---	---	---	---	226	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	84	---	---	---	---	---	---
8	---	---	---	---	---	446	---	---	---	---	---	---
9	---	---	---	---	---	200	---	---	---	---	---	---
10	---	---	---	---	66	63	---	---	---	---	---	---
11	---	---	---	---	251	---	---	---	---	---	---	---
12	---	---	---	---	446	---	---	---	---	---	---	---
13	---	---	---	---	2000	---	---	---	---	---	---	---
14	---	---	---	---	1230	---	---	---	---	---	---	---
15	---	---	---	---	184	---	---	---	---	---	---	---
16	---	---	---	---	112	---	---	---	---	---	---	---
17	---	---	---	---	84	---	85	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	166	---	---	---	---	---	---	---
21	---	---	---	---	254	---	---	---	---	---	---	---
22	---	---	---	---	343	---	---	---	---	---	---	---
23	---	---	---	---	468	---	---	---	---	---	---	---
24	---	---	---	262	106	---	---	---	---	---	---	---
25	---	---	---	58	97	---	---	---	---	---	---	---
26	---	---	---	---	100	---	---	---	---	---	---	---
27	---	---	---	---	404	---	---	---	---	---	---	---
28	---	---	---	---	82	---	---	---	---	---	---	---
29	---	---	---	---	448	---	---	---	---	---	---	---
30	---	---	---	65	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

11459500 NOVATO CREEK AT NOVATO, CA

LOCATION.—Lat 38°06'28", long 122°34'44", in Novato Grant, Marin County, Hydrologic Unit 18050002, on left bank, in Novato, 100 ft upstream from 7th Street Bridge, and 3.9 mi downstream from Novato Creek Dam.

DRAINAGE AREA.—17.6 mi^2.

PERIOD OF RECORD.—October 1946 to current year. Prior to October 1966, published as "near Novato."

GAGE.—Water-stage recorder. Datum of gage is 14.76 ft above sea level. Prior to Aug. 23, 1967, at site 0.6 mi upstream at different datum.

REMARKS.—Records good except for estimated daily discharges, which are fair. Flow regulated by Stafford Lake beginning Dec. 1, 1951, capacity, 4,500 acre-ft, since Oct. 18, 1954. Diversion from Stafford Lake for municipal water supply began Apr. 25, 1952.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,000 ft^3/s, Jan. 4, 1982, gage height, 14.52 ft, from contracted opening and slope-area measurements of 3,800 ft^3/s at the gage site, and slope-conveyance computations of 1,200 ft^3/s of overflow about 1 mi upstream, which entered the adjoining Warner Creek Basin; no flow for many days most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.32	1.3	.76	5.4	71	4.7	1.5	e.90	e.88	.41	.35
2	.21	.31	.98	.76	4.3	69	4.7	1.7	e.92	e.88	.38	.33
3	.22	.31	.65	.76	6.5	56	4.7	1.6	e.95	e.89	.86	.32
4	.22	.31	.60	.95	4.7	55	4.6	1.4	e.98	e.92	.40	.79
5	.24	.32	.60	.78	20	56	4.5	1.4	e1.0	e.88	.34	.34
6	.24	.32	.60	.83	9.9	46	4.2	1.5	e.96	e.92	.33	.27
7	e.24	4.4	.91	.85	7.1	51	3.8	5.2	e.90	e.90	.34	.26
8	e.24	3.7	.80	1.1	5.9	110	3.9	3.0	e.82	e.88	.38	.26
9	e.23	.94	3.8	.95	5.2	106	3.9	2.1	e.95	e.84	.34	.27
10	e.23	.46	.84	.95	25	81	3.7	1.6	e.90	e.84	.51	.27
11	e.23	.40	.71	7.2	69	67	3.3	1.5	e.88	.86	.35	.29
12	e.22	.37	.63	2.0	53	55	3.5	1.4	e.90	.87	.34	.28
13	e.22	.36	.60	1.7	193	44	4.5	.97	e.98	1.3	.30	.27
14	.22	.47	.69	1.6	161	38	5.7	4.8	e.95	.79	.31	.62
15	.22	1.4	.82	2.0	45	31	6.0	2.6	e.90	.77	.30	.32
16	.19	4.5	.71	9.9	27	26	16	1.4	e.90	.81	.31	.29
17	.15	.88	.68	2.6	20	22	26	1.3	e.88	.87	.28	.27
18	.18	.92	.66	8.0	16	20	12	1.2	e.90	.82	.28	.25
19	.20	11	.64	5.5	14	17	8.5	1.2	e.93	.77	.30	.25
20	.21	1.7	.68	3.0	33	13	4.6	1.1	e.90	.77	.31	.24
21	.50	1.0	.78	2.8	28	12	3.5	1.0	e.90	.77	.31	.24
22	.23	.61	.68	2.8	65	10	3.5	1.0	e.94	.76	.32	.28
23	.18	.52	.68	20	59	9.8	2.7	1.0	e.90	.73	.91	.27
24	.21	.50	.74	99	36	9.3	2.4	1.0	e.88	.62	.35	.26
25	.22	.46	.76	17	25	8.5	2.1	1.0	e.88	.59	.30	.25
26	.22	.45	.68	7.8	26	7.7	2.0	1.0	e.89	.57	.29	.26
27	2.2	.45	.68	5.7	70	7.4	1.8	1.0	e.86	.60	.30	.26
28	2.4	.45	.72	4.4	53	7.0	1.8	.98	e.86	.58	.30	.28
29	.36	1.4	.75	3.7	96	6.1	1.7	.94	e.92	.59	.31	.28
30	.32	4.4	.76	12	---	5.9	1.5	.93	e.88	.58	.32	.27
31	.31	---	.78	6.6	---	5.2	---	e.92	---	.52	.34	---
TOTAL	11.51	43.63	25.91	233.99	1183.0	1122.9	155.8	49.24	27.31	24.37	11.42	9.19
MEAN	.37	1.45	.84	7.55	40.8	36.2	5.19	1.59	.91	.79	.37	.31
MAX	2.4	11	3.8	99	193	110	26	5.2	1.0	1.3	.91	.79
MIN	.15	.31	.60	.76	4.3	5.2	1.5	.92	.82	.52	.28	.24
AC-FT	23	87	51	464	2350	2230	309	98	54	48	23	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	.71	3.18	15.1	48.1	48.7	26.5	9.30	1.49	.76	.65	.40	.30
MAX	9.07	17.2	117	210	386	207	81.3	12.9	7.73	8.61	8.53	5.40
(WY)	1963	1974	1956	1995	1998	1983	1958	1983	1980	1980	1980	1967
MIN	.000	.000	.000	.26	.35	.84	.17	.016	.000	.000	.000	.000
(WY)	1947	1948	1950	1948	1948	1976	1977	1961	1951	1947	1947	1947

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	3861.61		2898.27			
ANNUAL MEAN	10.6		7.92		12.8	
HIGHEST ANNUAL MEAN					47.9	1983
LOWEST ANNUAL MEAN					.40	1976
HIGHEST DAILY MEAN	259	Feb 7	193	Feb 13	2850	Jan 4 1982
LOWEST DAILY MEAN	.15	Oct 17	.15	Oct 17	.00	Oct 1 1946
ANNUAL SEVEN-DAY MINIMUM	.20	Oct 14	.20	Oct 14	.00	Oct 1 1946
INSTANTANEOUS PEAK FLOW			405	Feb 13	5000	Jan 4 1982
INSTANTANEOUS PEAK STAGE			5.66	Feb 13	14.52	Jan 4 1982
INSTANTANEOUS LOW FLOW					.00	Oct 1 1946
ANNUAL RUNOFF (AC-FT)	7660		5750		9260	
10 PERCENT EXCEEDS	33		21		22	
50 PERCENT EXCEEDS	1.0		.90		.61	
90 PERCENT EXCEEDS	.32		.27		.00	

e Estimated.

11460400 LAGUNITAS CREEK AT SAMUEL P. TAYLOR STATE PARK, CA

LOCATION.—Lat 38°01'37", long 122°44'07", Marin County, Hydrologic Unit 18050005, in Samuel P. Taylor State Park, on left bank, 300 ft upstream from Deadman's Gulch, 0.9 mi downstream from park entrance, 2.1 mi northwest of Lagunitas, and 3.4 mi downstream from Kent Lake.

DRAINAGE AREA.—34.3 mi^2.

PERIOD OF RECORD.—December 1982 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 102.89 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are fair. Flow regulated by Kent Lake, capacity, 16,680 acre-ft, and Alpine Lake, capacity, 8,890 acre-ft, both of which divert for domestic and industrial use in Marin County.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 5,830 ft^3/s, Feb. 3, 1998, gage height, 10.00 ft; minimum daily, 3.8 ft^3/s, Oct. 16–18, 1986.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	9.3	42	21	35	501	19	e14	12	8.7	7.9	8.0
2	8.7	9.3	39	22	30	328	19	e14	12	8.7	8.0	8.0
3	8.8	9.4	26	32	35	237	18	e13	13	8.7	8.3	8.0
4	8.8	9.4	23	39	34	190	18	13	13	8.8	8.2	8.0
5	8.8	9.3	22	39	54	235	18	13	13	8.7	7.9	8.0
6	8.9	9.3	22	32	49	209	17	13	13	8.8	7.7	7.9
7	8.9	12	21	28	35	184	e16	15	13	8.8	7.7	7.7
8	9.0	13	22	27	29	285	e16	16	13	8.8	7.8	7.7
9	e8.9	10	26	27	30	362	e16	14	13	8.8	7.8	7.8
10	e8.9	10	25	27	106	295	e15	13	12	8.8	7.7	7.8
11	8.8	10	24	52	284	230	e15	13	12	8.7	7.7	7.7
12	8.8	10	23	38	326	178	e15	13	12	8.8	7.7	7.7
13	8.8	10	23	31	899	138	e27	13	12	8.7	7.7	e7.8
14	8.8	10	23	29	467	109	20	25	12	8.6	7.6	e7.7
15	8.8	11	23	28	151	90	15	30	12	8.6	7.6	e7.8
16	8.8	12	23	67	84	73	39	21	11	8.6	7.6	e7.8
17	8.8	12	23	37	55	59	154	18	10	8.5	7.8	e7.7
18	8.8	13	23	66	41	50	47	16	10	8.5	7.8	e7.5
19	8.9	20	23	55	33	43	28	15	9.6	8.4	7.9	e7.5
20	8.9	29	23	44	50	37	21	14	8.6	8.4	7.9	e7.4
21	8.9	35	23	31	75	32	18	14	8.2	8.3	7.9	e7.7
22	9.0	35	23	25	132	27	17	13	8.2	8.3	7.8	e8.0
23	9.0	21	24	107	196	24	16	13	8.2	8.2	7.8	e7.7
24	8.9	21	24	367	95	22	e16	13	8.2	8.1	7.8	e7.6
25	9.0	21	23	96	68	20	e16	12	8.1	8.1	7.8	e7.7
26	9.1	21	23	47	195	20	e15	12	8.1	8.1	7.8	e7.7
27	9.6	21	e24	32	409	21	e15	13	8.0	8.0	7.8	e7.8
28	12	21	e23	26	259	22	e15	13	8.0	8.0	7.9	e7.9
29	9.6	24	21	24	562	21	e14	12	8.0	8.0	7.9	e7.8
30	9.4	40	21	64	---	20	e14	12	8.3	8.0	8.0	e7.7
31	9.3	---	21	45	---	20	---	12	---	8.0	8.0	---
TOTAL	280.4	498.0	749	1605	4818	4082	709	455	317.5	262.5	242.8	233.1
MEAN	9.05	16.6	24.2	51.8	166	132	23.6	14.7	10.6	8.47	7.83	7.77
MAX	12	40	42	367	899	501	154	30	13	8.8	8.3	8.0
MIN	8.7	9.3	21	21	29	20	14	12	8.0	8.0	7.6	7.4
AC-FT	556	988	1490	3180	9560	8100	1410	902	630	521	482	462

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

MEAN	8.32	24.3	52.0	129	181	114	30.1	18.7	9.74	6.99	6.30	6.21
MAX	13.4	66.3	201	568	796	503	96.6	66.9	26.6	8.69	8.65	8.90
(WY)	1990	1985	1997	1995	1998	1983	1999	1995	1998	1995	1996	1996
MIN	4.34	4.74	6.84	14.5	11.2	13.6	8.39	7.43	6.30	4.92	4.44	4.29
(WY)	1987	1987	1987	1991	1989	1988	1987	1987	1987	1992	1984	1984

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	22610.5		14252.3			
ANNUAL MEAN	61.9		38.9		45.0	
HIGHEST ANNUAL MEAN					112	1998
LOWEST ANNUAL MEAN					14.7	1987
HIGHEST DAILY MEAN	1270	Feb 17	899	Feb 13	2870	Feb 3 1998
LOWEST DAILY MEAN	6.5	Jun 27	7.4	Sep 20	3.8	Oct 16 1986
ANNUAL SEVEN-DAY MINIMUM	6.7	Jun 21	7.6	Sep 14	4.0	Oct 16 1986
INSTANTANEOUS PEAK FLOW			1760	Feb 13	5830	Feb 3 1998
INSTANTANEOUS PEAK STAGE			6.82	Feb 13	10.00	Feb 3 1998
ANNUAL RUNOFF (AC-FT)	44850		28270		32570	
10 PERCENT EXCEEDS	159		67		86	
50 PERCENT EXCEEDS	13		13		12	
90 PERCENT EXCEEDS	8.4		7.8		5.2	

e Estimated.

11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA

LOCATION.—Lat 38°04'49", long 122°47'00", in Nicasio (Black) Grant, Marin County, Hydrologic Unit 18050005, on right bank, at upstream side of road bridge, 300 ft downstream from small right-bank tributary, 1.4 mi northeast of town of Point Reyes Station, and 2.5 mi downstream from Nicasio Dam.

DRAINAGE AREA.—81.7 mi^2.

PERIOD OF RECORD.—October 1974 to current year.

REVISED RECORDS.—WDR CA-79-2: 1975, 1978. WDR CA-82-2: 1975(M), 1978(M), 1980(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.—Records good. Flow regulated by Nicasio Reservoir, capacity, 22,450 acre-ft; Kent Lake, capacity, 16,680 acre-ft; and Alpine Lake, capacity, 8,890 acre-ft, all of which divert water for domestic and industrial use in Marin County.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 22,100 ft^3/s, Jan. 4, 1982, gage height, 26.96 ft, from rating curve extended above 6,200 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.01 ft^3/s, Sept. 26, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	9.4	45	20	53	799	29	23	15	9.6	8.3	8.3
2	9.0	9.4	39	20	44	578	28	22	15	9.6	8.1	8.2
3	9.1	9.5	30	25	48	453	27	20	16	9.7	8.3	8.1
4	9.1	9.5	23	38	51	386	25	19	15	9.6	8.5	8.0
5	9.1	9.4	21	38	67	488	25	19	15	9.7	8.1	7.9
6	9.3	9.4	21	34	73	413	24	18	15	9.7	8.1	7.9
7	9.3	11	21	27	53	365	23	21	15	9.7	8.2	7.8
8	9.2	16	20	26	43	590	22	25	16	9.7	8.5	7.8
9	9.1	11	25	26	40	771	22	21	16	9.5	8.3	7.9
10	9.1	11	25	26	131	599	21	19	15	9.3	8.2	7.9
11	9.0	10	23	47	330	467	21	18	15	9.2	8.0	7.9
12	9.0	10	22	45	970	379	21	17	15	9.3	8.0	7.9
13	9.1	10	22	33	2710	285	28	17	14	9.3	7.9	8.0
14	9.1	10	22	30	2310	215	39	29	14	9.1	7.9	7.8
15	9.0	11	21	28	704	175	31	44	14	9.0	7.8	7.9
16	8.8	12	21	71	399	138	61	30	14	9.2	7.8	8.0
17	8.9	14	21	44	257	116	435	25	13	9.2	7.8	7.9
18	9.0	12	22	74	177	99	165	22	12	9.1	7.9	7.6
19	9.0	20	22	68	133	82	89	21	12	8.8	7.9	7.6
20	9.0	28	22	62	149	74	63	20	10	8.8	7.9	7.5
21	9.0	34	22	41	286	65	49	19	9.5	8.9	7.9	7.8
22	9.0	35	22	33	387	55	41	18	9.3	8.8	7.9	8.2
23	9.1	23	22	75	949	49	35	17	9.3	8.6	8.0	8.0
24	9.0	21	22	505	463	46	32	16	9.2	8.6	8.0	7.9
25	9.1	21	22	151	339	41	30	16	9.2	8.5	7.9	7.9
26	9.2	20	22	73	447	38	30	16	9.2	8.5	7.8	8.0
27	9.4	20	21	48	1180	35	28	16	9.0	8.4	7.9	8.1
28	14	20	20	38	717	36	27	16	8.9	8.4	7.8	8.2
29	10	21	20	33	909	35	25	16	8.8	8.4	8.0	8.2
30	9.6	42	20	82	---	33	24	15	8.9	8.4	8.2	8.1
31	9.5	---	20	69	---	37	---	15	---	8.3	8.2	---
TOTAL	288.0	499.6	721	1930	14419	7942	1520	630	377.3	280.9	249.1	238.3
MEAN	9.29	16.7	23.3	62.3	497	256	50.7	20.3	12.6	9.06	8.04	7.94
MAX	14	42	45	505	2710	799	435	44	16	9.7	8.5	8.3
MIN	8.8	9.4	20	20	40	33	21	15	8.8	8.3	7.8	7.5
AC-FT	571	991	1430	3830	28600	15750	3010	1250	748	557	494	473

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

MEAN	7.49	36.7	98.6	300	375	226	66.2	20.4	8.70	6.09	5.27	5.00
MAX	19.2	177	542	1427	1916	1109	531	91.4	32.4	10.3	9.36	9.25
(WY)	1984	1983	1984	1995	1998	1983	1982	1995	1998	1998	1999	1999
MIN	.19	1.35	1.51	2.37	3.52	7.40	1.59	.67	.45	1.77	1.47	1.12
(WY)	1977	1977	1977	1976	1977	1977	1977	1977	1977	1976	1976	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	42944.9		29095.2			
ANNUAL MEAN	118		79.5		94.9	
HIGHEST ANNUAL MEAN					269	1983
LOWEST ANNUAL MEAN					2.54	1977
HIGHEST DAILY MEAN	4470	Feb 7	2710	Feb 13	10700	Jan 4 1982
LOWEST DAILY MEAN	8.0	Jun 27	7.5	Sep 20	.01	Sep 26 1977
ANNUAL SEVEN-DAY MINIMUM	8.4	Jun 22	7.8	Sep 14	.02	Oct 14 1977
INSTANTANEOUS PEAK FLOW			4380	Feb 13	22100	Jan 4 1982
INSTANTANEOUS PEAK STAGE			14.69	Feb 13	26.96	Jan 4 1982
ANNUAL RUNOFF (AC-FT)	85180		57710		68770	
10 PERCENT EXCEEDS	267		150		160	
50 PERCENT EXCEEDS	16		18		10	
90 PERCENT EXCEEDS	9.1		8.0		2.6	

11460750 WALKER CREEK NEAR MARSHALL, CA

LOCATION.—Lat 38°10'33", long 122°49'02", in Soulajule (Vasquez) Grant, Marin County, Hydrologic Unit 18050005, on right bank, 0.8 mi downstream from Verde Canyon, 2.8 mi below confluence of Arroyo Sausal and Salmon Creek, and 4.0 mi east of Marshall.

DRAINAGE AREA.—31.1 mi^2.

PERIOD OF RECORD.—October 1983 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 140 ft above sea level, from topographic map.

REMARKS.—Records fair including estimated daily discharges. Flow affected by regulation and diversions and by Soulajule Reservoir on Arroyo Sausal; reservoir capacity, 10,570 acre-ft.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,500 ft^3/s, Feb. 2, 1998, gage height, 14.21 ft, from rating curve extended above 1,100 ft^3/s on basis of comparison with discontinued downstream station Walker Creek near Tomales; minimum daily, 0.73 ft^3/s, Nov. 26, 1991.

EXTREMES OUTSIDE OF PERIOD OF RECORD.—Flood of Jan. 4, 1982, reached a stage of 15.9 ft, present datum, from floodmarks, discharge, 14,600 ft^3/s.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.9	7.0	15	39	227	20	e14	6.2	6.0	5.1	5.4
2	4.9	4.5	6.6	15	32	169	20	e13	6.2	6.0	5.1	5.4
3	4.8	4.6	6.2	15	36	125	20	e12	6.2	5.9	5.1	5.2
4	4.8	4.5	6.0	15	33	115	20	e11	6.1	5.9	5.2	5.3
5	4.8	4.6	6.0	15	42	158	18	e10	6.1	5.9	5.2	5.3
6	4.8	4.6	5.9	15	37	112	16	e11	6.0	6.0	5.2	5.2
7	4.7	8.4	5.9	15	30	101	16	e12	6.2	5.9	5.3	5.2
8	4.7	6.8	6.0	15	27	252	16	e10	6.6	5.9	5.3	5.2
9	4.7	5.3	7.7	15	24	249	16	e9.5	6.2	5.8	5.2	5.2
10	4.7	5.1	6.3	15	83	164	16	e8.0	6.0	5.8	5.2	5.1
11	4.7	5.1	6.1	22	189	125	16	e8.0	6.0	5.5	5.1	4.9
12	4.7	5.1	6.0	18	178	90	16	7.0	6.0	e5.5	5.1	4.9
13	4.7	5.1	6.0	16	647	67	17	6.9	5.9	e5.5	5.1	4.9
14	4.7	5.4	5.9	16	981	54	e15	9.0	5.8	e5.5	5.1	5.0
15	4.8	5.7	5.9	16	416	45	e11	9.1	5.7	e5.5	5.1	5.0
16	4.8	8.1	5.8	44	249	36	e25	7.6	5.7	e5.5	5.1	5.0
17	4.7	6.4	5.8	21	157	31	e100	7.2	5.7	e5.5	5.2	4.9
18	4.7	5.8	5.8	38	108	26	e30	7.0	5.8	e5.5	5.2	5.0
19	4.7	10	5.7	40	77	23	e22	6.9	5.7	e5.5	5.3	5.0
20	4.7	7.0	5.8	35	87	21	e19	6.7	5.6	e5.5	5.3	4.9
21	4.7	6.1	5.8	25	134	20	e18	6.6	5.6	e5.5	5.2	5.1
22	4.8	5.7	5.8	22	238	21	19	6.4	5.6	5.5	5.2	5.2
23	4.8	5.6	5.8	50	404	24	18	6.3	5.6	5.5	5.3	5.1
24	4.7	5.5	5.8	254	211	24	18	6.3	5.6	5.5	5.3	5.1
25	4.8	5.5	5.8	83	152	23	17	6.3	5.8	5.5	5.2	5.0
26	4.8	5.4	5.7	45	208	22	17	6.6	5.9	5.5	5.2	5.2
27	5.5	5.6	5.3	30	510	22	17	6.6	5.9	5.5	5.2	5.1
28	6.0	5.5	5.3	24	293	21	16	6.5	5.9	5.4	5.2	5.0
29	4.9	6.0	5.3	21	344	21	16	6.4	6.0	5.4	5.3	5.0
30	4.8	8.5	7.6	60	---	21	15	6.3	5.9	5.5	5.3	5.0
31	4.8	---	15	45	---	20	---	6.3	---	5.3	5.3	---
TOTAL	149.6	176.4	195.6	1075	5966	2429	620	256.5	177.5	174.2	161.2	152.8
MEAN	4.83	5.88	6.31	34.7	206	78.4	20.7	8.27	5.92	5.62	5.20	5.09
MAX	6.0	10	15	254	981	252	100	14	6.6	6.0	5.3	5.4
MIN	4.7	4.5	5.3	15	24	20	11	6.3	5.6	5.3	5.1	4.9
AC-FT	297	350	388	2130	11830	4820	1230	509	352	346	320	303

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

MEAN	4.83	10.7	39.4	118	156	66.3	15.2	7.39	5.37	4.81	4.65	4.71
MAX	6.27	46.3	247	572	775	374	45.6	18.6	8.13	5.93	5.84	5.80
(WY)	1990	1984	1984	1995	1998	1995	1999	1995	1998	1998	1998	1984
MIN	1.35	1.23	1.85	1.71	2.14	10.4	5.52	2.18	1.90	1.42	1.42	1.22
(WY)	1991	1992	1991	1991	1991	1988	1991	1991	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	15402.7		11533.8			
ANNUAL MEAN	42.2		31.5		35.9	
HIGHEST ANNUAL MEAN					98.3	1998
LOWEST ANNUAL MEAN					7.41	1991
HIGHEST DAILY MEAN	2240	Feb 7	981	Feb 14	4940	Feb 17 1986
LOWEST DAILY MEAN	4.5	Nov 2	4.5	Nov 2	.73	Nov 26 1991
ANNUAL SEVEN-DAY MINIMUM	4.6	Oct 31	4.6	Oct 31	.78	Nov 23 1991
INSTANTANEOUS PEAK FLOW			1410	Feb 14	10500	Feb 2 1998
INSTANTANEOUS PEAK STAGE			5.49	Feb 14	14.21	Feb 2 1998
ANNUAL RUNOFF (AC-FT)	30550		22880		25980	
10 PERCENT EXCEEDS	83		62		47	
50 PERCENT EXCEEDS	6.0		6.0		5.9	
90 PERCENT EXCEEDS	4.8		4.9		4.0	

e Estimated.

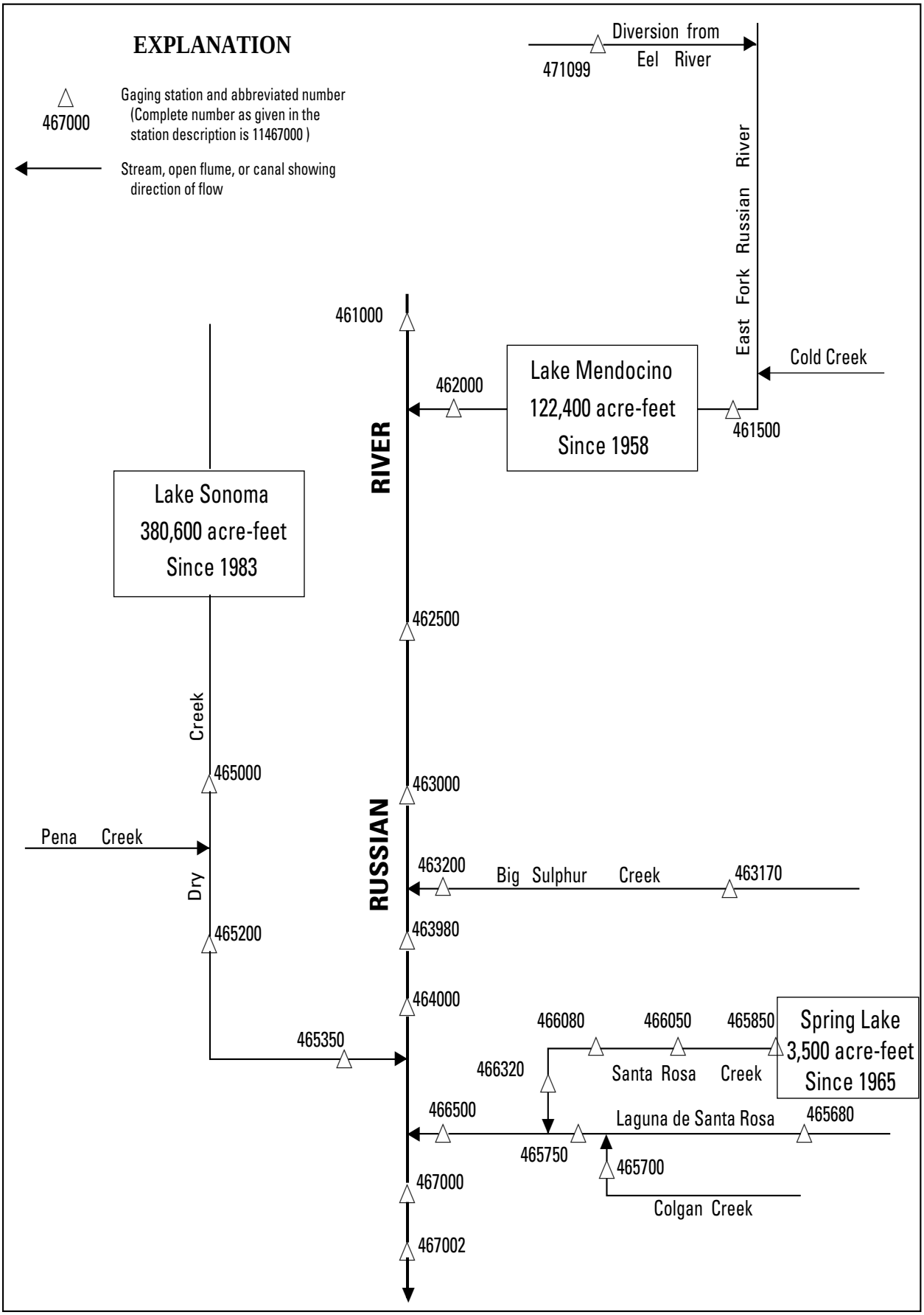

Figure 22. Diversions and storage in Russian River Basin.

11461000 RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.—Lat 39°11'44", long 123°11'38", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank, 20 ft upstream from bridge on Lake Mendocino Drive, 0.4 mi upstream from East Fork, 0.6 mi downstream from York Creek, and 3.2 mi north of Ukiah.

DRAINAGE AREA.—100 mi^2.

PERIOD OF RECORD.—August 1911 to September 1913, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL DATA: Water years 1977–79.
BIOLOGICAL DATA: Water years 1977–79.
WATER TEMPERATURE: Water years 1965–68.
SEDIMENT DATA: Water years 1964–68, 1991–92, 1994–97.

REVISED RECORDS.—WSP 1929: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 599.22 ft above sea level. Prior to October 1952, nonrecording gage at bridge 20 ft upstream at different datum. Oct. 1, 1952, to Nov. 8, 1971, water-stage recorder at site 0.6 mi upstream at different datum.

REMARKS.—Records good. No regulation. Diversions upstream from station for irrigation of about 1,000 acres. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,900 ft^3/s, Dec. 21, 1955, gage height, 19.0 ft, site and datum then in use; maximum gage height, 20.87 ft, Jan. 20, 1993; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 4,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	0700	4,050	11.40				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	1.5	183	11	624	642	55	29	11	3.4	1.1	2.0
2	.92	1.5	104	11	384	536	52	29	9.5	3.8	1.1	1.9
3	.93	1.5	77	10	305	406	51	27	9.2	3.8	1.1	1.5
4	.90	1.5	48	11	295	416	47	26	9.3	3.1	1.0	1.2
5	.95	1.5	35	12	840	509	44	25	8.6	3.1	1.2	1.1
6	1.1	1.5	27	11	586	366	41	25	7.3	2.7	1.2	1.0
7	.92	3.1	26	11	368	350	42	30	8.5	3.2	1.2	.99
8	.91	5.3	24	11	264	503	40	55	13	3.0	1.2	.80
9	.90	2.8	115	10	205	634	39	38	12	2.9	1.2	.88
10	.97	12	123	11	246	479	38	34	9.9	3.1	1.1	.90
11	.85	19	64	651	476	486	37	27	9.1	2.1	1.2	.82
12	.91	5.1	47	253	812	373	37	26	8.3	1.9	.96	.72
13	.95	3.3	48	129	2470	302	43	26	7.7	2.2	1.1	.52
14	.98	2.8	39	421	2800	247	41	30	6.4	2.1	1.2	.45
15	.87	3.9	31	484	1120	209	38	41	5.4	2.4	1.1	.69
16	.89	37	26	862	663	179	52	51	3.7	2.3	1.0	.73
17	1.5	67	22	317	480	156	339	39	4.1	2.9	1.0	.80
18	1.2	31	20	676	355	136	121	32	4.5	1.9	.98	.75
19	1.1	75	18	635	283	124	80	27	5.4	2.0	1.1	.66
20	.91	131	16	501	389	113	63	24	4.5	2.4	.98	.52
21	.98	56	15	454	532	105	55	22	4.3	2.1	1.0	.50
22	.64	31	14	351	884	96	49	19	3.3	1.2	.93	.62
23	1.3	21	13	287	1070	88	45	17	3.4	1.7	.82	.63
24	1.2	15	13	286	599	83	40	15	3.7	1.8	.96	.50
25	1.2	13	12	413	464	77	38	15	4.4	1.6	.80	.39
26	1.1	12	12	281	1070	70	37	14	4.2	1.7	.84	.69
27	2.0	11	12	189	1770	68	34	14	3.1	1.6	1.0	.66
28	4.3	10	11	142	979	63	32	13	1.9	1.3	1.1	.62
29	2.2	11	11	111	1070	59	30	13	3.0	1.5	.75	.68
30	1.8	102	11	276	---	58	31	12	3.4	1.3	.95	.66
31	1.5	---	11	785	---	56	---	12	---	1.2	1.0	---
TOTAL	37.82	689.3	1228	8613	22403	7989	1691	807	192.1	71.3	32.17	24.88
MEAN	1.22	23.0	39.6	278	773	258	56.4	26.0	6.40	2.30	1.04	.83
MAX	4.3	131	183	862	2800	642	339	55	13	3.8	1.2	2.0
MIN	.64	1.5	11	10	205	56	30	12	1.9	1.2	.75	.39
AC-FT	75	1370	2440	17080	44440	15850	3350	1600	381	141	64	49

11461000 RUSSIAN RIVER NEAR UKIAH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.44	113	339	573	514	360	156	43.2	11.6	2.38	.64	.63
MAX	147	682	1663	1986	1975	1436	770	201	57.4	10.8	3.75	2.70
(WY)	1963	1974	1965	1995	1958	1983	1963	1995	1993	1983	1998	1983
MIN	.000	.15	1.77	3.82	14.3	20.0	4.33	3.15	.22	.000	.000	.000
(WY)	1953	1953	1960	1991	1977	1988	1977	1977	1977	1977	1977	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1912 - 2000	
ANNUAL TOTAL	61962.05		43778.57			
ANNUAL MEAN	170		120		175	
HIGHEST ANNUAL MEAN					420	1983
LOWEST ANNUAL MEAN					5.76	1977
HIGHEST DAILY MEAN	2900	Feb 7	2800	Feb 14	13300	Dec 22 1964
LOWEST DAILY MEAN	.64	Oct 22	.39	Sep 25	.00	Oct 1 1911
ANNUAL SEVEN-DAY MINIMUM	.85	Sep 23	.55	Sep 19	.00	Oct 1 1911
INSTANTANEOUS PEAK FLOW			4050	Feb 14	18900	Dec 21 1955
INSTANTANEOUS PEAK STAGE			11.40	Feb 14	20.87	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	122900		86830		127100	
10 PERCENT EXCEEDS	500		414		422	
50 PERCENT EXCEEDS	18		12		13	
90 PERCENT EXCEEDS	1.1		.92		.13	

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA

LOCATION.—Lat 39°14'48", long 123°07'45", in NW 1/4 NW 1/4 sec.18, T.16 N., R.11 W., Mendocino County, Hydrologic Unit 18010110, on left bank, 0.1 mi downstream from Cold Creek, and 3.9 mi east of Calpella.

DRAINAGE AREA.—92.2 mi^2.

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 787.87 ft above sea level. Prior to May 28, 1957, at site 1.3 mi downstream at different datum. May 28, 1957, to Apr. 5, 1966, at site 0.4 mi downstream at same datum.

REMARKS.—Records good except for estimated daily discharges, which are fair. Flow greatly affected by diversion from Eel River through Potter Valley Powerplant Intake and Tailrace (stations 11471000 and 11471099, respectively). Diversion for irrigation of about 8,000 acres upstream from station. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 18,700 ft^3/s, Dec. 22, 1964, gage height, 20.21 ft, site then in use, maximum gage height, 22.89 ft, Jan. 20, 1993; minimum daily, 1.7 ft^3/s, July 23, 1990.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,300 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0800	5,480	16.91	Feb. 26	2345	3,570	14.03
Feb. 22	2200	3,940	14.61				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	208	464	105	695	848	324	196	145	87	78	116
2	145	204	393	83	488	835	298	189	135	102	90	129
3	150	199	364	85	e465	668	260	187	115	119	83	130
4	143	206	334	87	453	773	248	196	111	110	80	133
5	149	217	316	85	1080	1060	253	186	113	124	94	123
6	163	211	307	77	655	719	253	182	118	117	85	120
7	160	217	308	70	464	702	252	200	115	111	84	113
8	161	224	299	64	433	850	233	239	111	97	103	105
9	159	202	393	65	390	884	219	154	102	104	111	126
10	148	199	386	68	531	741	219	170	114	109	e118	129
11	151	209	324	392	1090	728	187	144	122	105	e113	129
12	145	173	312	302	1150	622	206	210	112	98	109	116
13	149	189	280	219	2920	561	211	230	123	97	118	124
14	151	190	184	391	2510	516	187	257	108	96	112	131
15	172	198	190	481	962	489	192	281	99	90	104	126
16	196	269	181	1020	760	463	226	232	104	87	109	114
17	211	246	177	393	611	445	520	154	95	91	95	122
18	214	211	173	946	525	431	234	169	97	92	90	128
19	201	309	167	906	476	421	182	181	93	102	95	113
20	222	345	154	631	744	285	199	192	84	97	107	110
21	248	266	152	664	864	124	199	188	84	100	111	116
22	262	315	150	509	1470	379	245	184	95	99	106	120
23	282	302	153	431	1370	397	203	146	87	101	107	127
24	241	295	154	523	763	396	140	136	86	98	105	124
25	120	292	153	612	650	393	152	130	92	85	103	130
26	29	291	152	449	1430	359	160	142	91	84	97	123
27	27	288	150	388	1770	354	177	138	98	95	111	117
28	35	285	154	364	1020	299	175	151	90	90	113	117
29	e105	288	156	352	1460	286	177	145	94	93	113	117
30	141	421	155	736	---	285	191	142	93	93	107	122
31	209	---	154	1100	---	320	---	134	---	94	102	---
TOTAL	5030	7469	7389	12598	28199	16633	6722	5585	3126	3067	3153	3650
MEAN	162	249	238	406	972	537	224	180	104	98.9	102	122
MAX	282	421	464	1100	2920	1060	520	281	145	124	118	133
MIN	27	173	150	64	390	124	140	130	84	84	78	105
AC-FT	9980	14810	14660	24990	55930	32990	13330	11080	6200	6080	6250	7240

e Estimated.

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	228	286	469	639	631	523	346	232	162	137	138	188
MAX	352	738	1476	1720	1815	1611	847	422	363	275	276	298
(WY)	1963	1982	1965	1970	1998	1983	1982	1983	1998	1967	1952	1967
MIN	4.89	74.0	30.2	42.2	21.5	42.7	11.9	23.5	15.3	8.25	19.0	23.9
(WY)	1960	1978	1960	1991	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	112523		102621			
ANNUAL MEAN	308		280		330	
HIGHEST ANNUAL MEAN					586	1983
LOWEST ANNUAL MEAN					76.8	1977
HIGHEST DAILY MEAN	3000	Feb 9	2920	Feb 13	12500	Dec 22 1964
LOWEST DAILY MEAN	27	Oct 27	27	Oct 27	1.7	Jul 23 1990
ANNUAL SEVEN-DAY MINIMUM	92	Jul 15	74	Jan 4	3.2	Jul 11 1977
INSTANTANEOUS PEAK FLOW			5480	Feb 13	18700	Dec 22 1964
INSTANTANEOUS PEAK STAGE			16.91	Feb 13	22.89	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	223200		203500		239200	
10 PERCENT EXCEEDS	577		637		556	
50 PERCENT EXCEEDS	198		171		252	
90 PERCENT EXCEEDS	98		93		80	

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.—Lat 39°11'51", long 123°11'11", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Coyote Dam, 1,300 ft upstream from mouth, and 3.2 mi northeast of Ukiah.

DRAINAGE AREA.—105 mi^2.

PERIOD OF RECORD.—August 1911 to September 1913, October 1951 to June 1956, October 1957 to current year.
CHEMICAL DATA: Water years 1953–55, 1973–82.
BIOLOGICAL DATA: Water years 1977–78.
WATER TEMPERATURE: Water years 1953–55, 1965–68, 1973–1994.
SEDIMENT DATA: Water years 1953–55, 1964–68.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 614.41 ft above sea level. Prior to October 1951, nonrecording gage at site 0.5 mi upstream at different datum. October 1951 to June 1956, water-stage recorder at site 1.0 mi upstream at different datum.

REMARKS.—Records good. Flow affected by diversion from Eel River through Potter Valley Powerplant Intake (station 11471000) and since November 1958 by storage in Lake Mendocino, capacity, 122,400 acre-ft, 500 ft upstream. Diversions upstream from station for irrigation of about 8,000 acres and about 10 ft^3/s at times, through a fish taking station which bypasses the gage. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Prior to regulation by Lake Mendocino, maximum discharge, 13,300 ft^3/s, Dec. 21, 1955, gage height, 16.86 ft, site and datum then in use, from rating curve extended above 6,300 ft^3/s on basis of maximum flow at station upstream which was defined to 8,600 ft^3/s; no flow Aug. 13–15, 1913. Maximum discharge, since regulation (1959), 7,350 ft^3/s, Jan. 24, 1970, gage height, 10.84 ft; minimum daily, 0.02 ft^3/s, Apr. 17, 1973.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	218	184	210	20	1680	177	186	191	278	276	253
2	250	215	184	210	20	898	177	184	199	293	276	242
3	250	214	184	208	20	285	177	184	206	289	287	242
4	250	212	187	206	20	285	179	184	206	289	298	241
5	248	211	188	206	20	288	180	184	206	289	298	245
6	246	210	188	206	20	447	180	184	211	281	298	244
7	244	208	188	206	38	526	180	184	218	270	298	242
8	242	208	191	206	59	857	180	184	220	267	298	246
9	242	210	191	206	57	1040	180	184	222	265	295	246
10	242	207	191	206	540	1040	180	184	225	263	293	250
11	242	206	193	206	786	820	180	179	230	263	293	254
12	242	210	195	206	859	425	180	184	230	263	282	254
13	242	207	195	182	445	240	180	184	232	259	267	254
14	242	206	195	139	32	230	180	184	230	259	266	258
15	242	198	218	122	838	230	180	240	249	259	263	259
16	242	184	249	125	2580	230	180	585	275	259	263	253
17	242	170	242	125	3450	233	180	554	297	259	271	263
18	241	149	242	72	1490	234	180	223	316	260	276	269
19	238	146	242	31	246	234	180	191	316	257	276	267
20	233	146	242	31	285	139	408	191	316	257	272	270
21	230	146	242	31	1010	77	312	191	307	259	271	271
22	230	160	233	31	1090	77	183	191	303	259	272	271
23	230	180	222	31	894	97	183	191	304	258	275	272
24	230	180	222	31	1560	113	182	191	305	254	276	275
25	228	180	222	25	965	113	180	191	285	254	274	273
26	226	181	222	19	305	113	180	191	266	271	271	275
27	222	183	222	51	307	113	180	191	262	280	271	263
28	224	181	222	107	1110	113	183	191	259	284	274	242
29	218	181	222	115	1520	130	188	191	255	282	276	244
30	218	182	215	116	---	147	187	191	254	280	272	246
31	216	---	210	67	---	161	---	191	---	278	263	---
TOTAL	7342	5689	6543	3933	20586	11615	5776	6658	7595	8338	8641	7684
MEAN	237	190	211	127	710	375	193	215	253	269	279	256
MAX	250	218	249	210	3450	1680	408	585	316	293	298	275
MIN	216	146	184	19	20	77	177	179	191	254	263	241
AC-FT	14560	11280	12980	7800	40830	23040	11460	13210	15060	16540	17140	15240

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1958, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	200	271	576	871	649	461	399	309	213	162	166	161
MAX	316	437	1138	1289	1784	709	775	367	307	260	272	266
(WY)	1958	1913	1956	1956	1958	1958	1958	1912	1953	1953	1953	1954
MIN	20.0	21.0	40.0	258	105	182	214	226	102	65.0	23.8	2.03
(WY)	1912	1912	1912	1912	1913	1913	1955	1913	1913	1912	1913	1913

SUMMARY STATISTICS	WATER YEARS 1911 - 1958	
ANNUAL MEAN	356	
HIGHEST ANNUAL MEAN	526	1958
LOWEST ANNUAL MEAN	183	1912
HIGHEST DAILY MEAN	7300	Dec 22 1955
LOWEST DAILY MEAN	.00	Aug 13 1913
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 13 1913
INSTANTANEOUS PEAK FLOW	13300	Dec 21 1955
INSTANTANEOUS PEAK STAGE	16.86	Dec 21 1955
ANNUAL RUNOFF (AC-FT)	257700	
10 PERCENT EXCEEDS	647	
50 PERCENT EXCEEDS	286	
90 PERCENT EXCEEDS	63	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	227	244	359	626	629	446	314	225	220	250	260	245
MAX	419	635	1175	1905	1934	1780	1026	448	361	336	388	416
(WY)	1994	1984	1965	1970	1986	1983	1982	1998	1998	1961	1961	1974
MIN	42.3	13.4	6.97	20.7	17.9	13.3	52.6	76.3	104	179	163	92.7
(WY)	1978	1978	1978	1977	1977	1977	1977	1968	1988	1988	1988	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	122008		100400			
ANNUAL MEAN	334		274		336	
HIGHEST ANNUAL MEAN					598	1983
LOWEST ANNUAL MEAN					103	1977
HIGHEST DAILY MEAN	2890	Feb 11	3450	Feb 17	6620	Jan 25 1970
LOWEST DAILY MEAN	131	Mar 20	19	Jan 26	.02	Apr 17 1973
ANNUAL SEVEN-DAY MINIMUM	157	Nov 17	23	Feb 1	.14	Jan 2 1971
INSTANTANEOUS PEAK FLOW			4290	Feb 16	7350	Jan 24 1970
INSTANTANEOUS PEAK STAGE			7.18	Feb 16	10.84	Jan 24 1970
ANNUAL RUNOFF (AC-FT)	242000		199100		243300	
10 PERCENT EXCEEDS	543		303		525	
50 PERCENT EXCEEDS	242		230		230	
90 PERCENT EXCEEDS	180		136		67	

11462500 RUSSIAN RIVER NEAR HOPLAND, CA

LOCATION.—Lat 39°01'36", long 123°07'46", in Rancho de Sanel Grant, Mendocino County, Hydrologic Unit 18010110, on right bank, at abandoned highway bridge, 0.2 mi downstream from McNab Creek, 4 mi north of Hopland, and 15.2 mi downstream from Coyote Valley Dam on the East Fork Russian River.

DRAINAGE AREA.—362 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1041: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 497.61 ft above sea level. Prior to Sept. 9, 1943, nonrecording gage at same site and datum.

REMARKS.—Records fair. Diversions for irrigation of about 11,800 acres upstream from station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino, capacity, 122,400 acre-ft, 15.2 mi upstream. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 45,000 ft^3/s, Dec. 22, 1955, gage height, 27.00 ft; minimum daily, 9.1 ft^3/s, Apr. 20, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1937 reached a stage of 30.0 ft, from floodmarks.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	221	472	228	1380	3940	321	249	184	200	224	231
2	209	221	352	226	809	2950	314	249	183	225	227	212
3	204	218	338	225	636	1480	307	246	186	235	230	211
4	208	210	293	227	655	1340	296	240	190	240	249	211
5	211	213	273	229	1930	1690	292	237	188	233	258	208
6	211	223	261	227	1440	1440	288	236	186	234	261	205
7	211	239	258	224	838	1510	286	242	190	226	258	203
8	209	254	257	225	645	2290	283	263	198	222	253	202
9	203	234	355	224	538	2930	279	258	195	224	256	198
10	207	252	442	225	804	2430	270	251	188	227	251	202
11	211	268	330	1210	1640	2140	266	238	197	223	252	197
12	210	245	297	706	2610	1480	266	236	201	228	245	192
13	205	238	286	413	5570	1060	282	234	201	225	237	194
14	203	237	280	646	7920	903	277	238	189	220	232	192
15	194	246	271	921	4220	801	269	291	184	208	222	192
16	192	265	290	1990	4390	718	301	512	197	213	223	194
17	204	304	276	775	5090	655	952	656	214	226	226	235
18	211	231	272	1370	3300	609	500	323	252	217	246	247
19	211	248	271	1290	1110	577	398	244	265	212	248	244
20	209	348	269	1180	1210	511	458	235	259	220	240	247
21	207	270	266	878	2370	410	507	225	253	214	243	251
22	208	235	262	808	3790	381	326	218	244	206	241	259
23	211	245	251	711	4230	364	307	211	243	209	244	257
24	218	239	248	742	3550	371	292	204	237	212	239	256
25	216	235	247	837	2580	353	285	197	238	205	237	254
26	215	233	244	634	2220	336	279	190	221	213	239	255
27	221	231	244	486	5150	323	270	195	216	234	239	245
28	242	229	242	445	3890	308	263	194	207	231	242	218
29	225	232	240	399	4740	283	252	194	205	223	246	211
30	221	311	237	685	---	317	253	193	197	222	244	203
31	222	---	229	1550	---	308	---	189	---	228	228	---
TOTAL	6538	7375	8853	20936	79255	35208	9939	7888	6308	6855	7480	6626
MEAN	211	246	286	675	2733	1136	331	254	210	221	241	221
MAX	242	348	472	1990	7920	3940	952	656	265	240	261	259
MIN	192	210	229	224	538	283	252	189	183	200	222	192
AC-FT	12970	14630	17560	41530	157200	69840	19710	15650	12510	13600	14840	13140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	231	425	1132	1842	1829	1279	707	328	217	199	208	209
MAX	555	1656	4849	5856	6799	5361	2572	820	490	326	369	383
(WY)	1958	1984	1965	1970	1958	1983	1982	1983	1998	1961	1961	1974
MIN	35.1	96.5	87.6	37.2	28.8	57.1	44.1	77.0	59.6	79.7	105	78.9
(WY)	1978	1978	1991	1977	1977	1977	1977	1977	1949	1948	1950	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	254559		203261			
ANNUAL MEAN	697		555		712	
HIGHEST ANNUAL MEAN					1587	1983
LOWEST ANNUAL MEAN					94.0	1977
HIGHEST DAILY MEAN	7960	Feb 9	7920	Feb 14	33800	Dec 22 1955
LOWEST DAILY MEAN	184	Jun 10	183	Jun 2	9.1	Apr 20 1977
ANNUAL SEVEN-DAY MINIMUM	198	Jun 16	187	May 31	13	Apr 15 1977
INSTANTANEOUS PEAK FLOW			10500	Feb 14	45000	Dec 22 1955
INSTANTANEOUS PEAK STAGE			13.07	Feb 14	27.00	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	504900		403200		516100	
10 PERCENT EXCEEDS	1600		1230		1570	
50 PERCENT EXCEEDS	266		244		254	
90 PERCENT EXCEEDS	208		203		139	

11463000 RUSSIAN RIVER NEAR CLOVERDALE, CA

LOCATION.—Lat 38°52'46", long 123°03'09", in NW 1/4 NW 1/4 sec.23, T.12 N., R.11 W., Mendocino County, Hydrologic Unit 18010110, on left bank, 0.3 mi downstream from Cummisky Creek, 5.5 mi northwest of Cloverdale, and 28 mi downstream from Coyote Dam.

DRAINAGE AREA.—503 mi^2.

PERIOD OF RECORD.—July 1951 to current year.
WATER TEMPERATURE: Water years 1964–68, 1994–96.
SEDIMENT DATA: Water years 1964–68, 1994–96.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 350 ft above sea level, from topographic map. Prior to July 30, 1970, at site 0.2 mi upstream at different datum.

REMARKS.—Records fair. Diversions for irrigation of about 15,000 acres upstream from station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 55,200 ft^3/s, Dec. 22, 1964, gage height, 31.60 ft, site and datum then in use; minimum daily, 12 ft^3/s, Apr. 22, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	227	644	245	2420	5250	421	322	208	172	185	214
2	215	226	453	243	1490	4270	411	318	201	215	194	203
3	207	225	420	242	1200	2550	403	312	202	233	197	197
4	210	217	356	242	1340	2180	391	302	205	221	213	199
5	215	213	321	243	3640	2710	384	293	210	223	225	194
6	217	223	301	242	2880	2230	377	291	204	215	234	191
7	215	239	289	239	1590	2350	372	308	204	206	249	182
8	214	300	284	240	1150	3610	362	333	220	201	243	189
9	195	254	341	239	918	4570	358	320	214	203	243	178
10	195	273	528	240	1070	3560	350	310	196	223	230	176
11	211	310	408	937	2630	3240	340	298	204	219	233	179
12	205	268	353	1080	4130	2420	342	286	213	211	223	169
13	201	254	329	671	7760	1810	372	289	207	214	219	183
14	205	252	320	1100	12100	1500	358	303	194	202	211	180
15	193	267	304	1350	6190	1310	340	375	172	193	202	180
16	185	319	317	3330	5000	1170	470	508	177	190	199	166
17	185	396	306	1380	5630	1070	2080	787	184	206	209	208
18	203	282	300	2230	4420	973	910	453	222	191	215	236
19	203	425	297	2400	1840	903	634	321	252	186	217	230
20	205	438	294	2160	2040	827	568	293	252	193	213	232
21	207	348	290	1360	3320	668	725	279	247	190	213	230
22	206	275	286	1490	5860	599	471	268	227	184	206	245
23	205	267	274	1630	6760	537	426	254	230	189	209	245
24	217	261	268	1830	4920	532	406	247	219	194	204	252
25	218	254	265	1620	3890	509	402	237	238	182	200	253
26	217	251	263	1240	3710	481	384	227	234	182	209	252
27	221	247	260	902	8480	465	368	226	217	203	209	250
28	247	244	259	775	5520	445	356	225	207	208	230	224
29	233	253	257	706	6450	400	331	224	195	204	219	215
30	221	470	256	1620	---	423	331	220	189	194	229	201
31	225	---	247	2290	---	409	---	215	---	202	209	---
TOTAL	6508	8478	10090	34516	118348	53971	14443	9644	6344	6249	6691	6253
MEAN	210	283	325	1113	4081	1741	481	311	211	202	216	208
MAX	247	470	644	3330	12100	5250	2080	787	252	233	249	253
MIN	185	213	247	239	918	400	331	215	172	172	185	166
AC-FT	12910	16820	20010	68460	234700	107100	28650	19130	12580	12390	13270	12400

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

MEAN	247	575	1551	2731	2633	1826	912	394	245	214	222	217
MAX	659	2636	6398	8324	9790	7015	3708	1156	840	336	359	385
(WY)	1963	1984	1965	1995	1998	1983	1982	1983	1998	1998	1961	1974
MIN	34.5	114	97.8	53.7	44.5	97.2	47.3	80.7	99.9	117	118	72.5
(WY)	1978	1992	1991	1977	1977	1977	1977	1977	1988	1988	1988	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	340359		281535			
ANNUAL MEAN	932		769		974	
HIGHEST ANNUAL MEAN					2144	1983
LOWEST ANNUAL MEAN					99.2	1977
HIGHEST DAILY MEAN	12100	Feb 9	12100	Feb 14	42800	Dec 22 1964
LOWEST DAILY MEAN	174	Jul 11	166	Sep 16	12	Apr 22 1977
ANNUAL SEVEN-DAY MINIMUM	196	Oct 13	176	Sep 10	16	Apr 16 1977
INSTANTANEOUS PEAK FLOW			14300	Feb 14	55200	Dec 22 1964
INSTANTANEOUS PEAK STAGE			14.30	Feb 14	31.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	675100		558400		705500	
10 PERCENT EXCEEDS	2530		2170		2290	
50 PERCENT EXCEEDS	282		253		269	
90 PERCENT EXCEEDS	212		195		157	

11463170 BIG SULPHUR CREEK AT GEYSERS RESORT, NEAR CLOVERDALE, CA

LOCATION.—Lat 38°47'52", long 122°48'05", in NW 1/4 NW 1/4 sec.19, T.11 N., R.8 W., Sonoma County, Hydrologic Unit 18010110, on left bank, 400 ft downstream from unnamed tributary, and 12 mi east of Cloverdale.

DRAINAGE AREA.—13.1 mi^2.

PERIOD OF RECORD.—October 1980 to current year.

REVISED RECORDS.—WDR CA-98-2: 1995-96(P).

GAGE.—Water-stage recorder. Elevation of gage is 1,430 ft above sea level, from topographic map.

REMARKS.—Records fair. Diversion for industrial use 150 ft upstream from station when flows are above 10 ft^3/s. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,010 ft^3/s, Jan. 1, 1997, gage height, 9.78 ft, from rating curve extended above 1,200 ft^3/s on basis of culvert computation of peak flow; minimum daily, 0.08 ft^3/s, Aug. 31, 1983.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	0415	2,050	7.04	Feb. 26	2215	1,810	6.85
Feb. 22	1830	1,170	6.24				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.4	43	4.6	96	206	10	10	7.9	4.0	1.9	1.4
2	1.0	1.4	16	4.5	66	140	9.1	9.5	7.5	4.0	1.9	1.5
3	1.1	1.4	17	4.3	56	92	9.6	9.0	7.6	3.9	1.9	1.4
4	1.1	1.4	15	4.4	47	82	9.4	9.2	7.4	3.4	1.7	1.3
5	1.2	1.4	13	4.4	185	87	8.8	9.1	7.3	3.9	2.0	1.3
6	1.2	1.4	11	4.3	131	58	8.9	9.3	7.1	4.0	1.8	1.1
7	1.1	8.0	9.9	4.2	80	70	8.9	9.2	7.2	4.0	1.8	1.1
8	1.1	54	9.0	4.1	54	108	11	9.7	8.2	4.0	2.1	1.1
9	1.1	6.3	14	4.1	40	235	11	8.6	7.3	3.7	2.1	1.2
10	1.1	12	12	4.7	78	169	10	8.4	7.0	3.5	2.0	1.2
11	1.1	13	10	165	253	145	12	8.4	6.8	3.3	1.9	1.1
12	1.1	6.6	9.1	24	279	104	12	8.5	6.6	3.3	1.9	1.0
13	1.0	5.0	8.7	56	640	77	17	8.2	6.3	3.1	1.7	1.0
14	1.0	4.4	8.0	140	1190	56	13	16	5.8	3.1	1.7	1.0
15	1.0	8.8	7.6	84	505	41	13	24	5.7	2.9	1.6	1.1
16	.98	23	7.3	239	287	34	34	11	5.3	2.9	1.5	1.1
17	1.1	14	6.9	63	184	27	157	9.6	5.0	3.0	1.5	1.0
18	1.2	8.9	6.6	68	130	19	29	10	5.1	2.8	1.5	.90
19	1.2	68	6.3	130	97	15	13	9.9	5.1	2.7	1.6	.93
20	1.2	36	6.0	121	156	14	12	10	4.8	2.6	1.6	.94
21	1.2	16	5.8	82	209	12	12	10	4.7	2.5	1.4	1.0
22	1.3	14	5.6	57	467	12	11	11	4.6	2.6	1.4	1.1
23	1.3	11	5.5	188	476	12	11	12	4.6	2.4	1.5	1.2
24	1.3	8.9	5.3	227	224	11	11	12	4.6	2.4	1.4	1.1
25	1.3	7.8	5.1	154	145	11	12	11	4.5	2.3	1.2	.96
26	1.4	7.1	5.0	90	592	11	12	11	4.3	2.2	1.2	.94
27	2.8	6.6	4.9	54	884	11	12	10	4.3	2.3	1.2	.91
28	5.5	6.0	4.8	34	368	11	11	9.1	4.2	2.1	1.2	1.0
29	2.3	17	4.8	22	364	12	11	9.5	4.1	2.1	1.3	1.0
30	1.6	97	4.8	208	---	12	11	9.1	4.0	2.1	1.4	.95
31	1.5	---	4.7	136	---	11	---	8.4	---	1.9	1.3	---
TOTAL	43.38	467.8	292.7	2385.6	8283	1905	522.7	320.7	174.9	93.0	50.2	32.83
MEAN	1.40	15.6	9.44	77.0	286	61.5	17.4	10.3	5.83	3.00	1.62	1.09
MAX	5.5	97	43	239	1190	235	157	24	8.2	4.0	2.1	1.5
MIN	.98	1.4	4.7	4.1	40	11	8.8	8.2	4.0	1.9	1.2	.90
AC-FT	86	928	581	4730	16430	3780	1040	636	347	184	100	65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

MEAN	3.19	26.0	75.9	119	133	103	32.0	19.5	6.42	2.91	1.48	1.32
MAX	20.9	146	341	639	571	358	162	81.6	18.0	7.34	2.99	2.90
(WY)	1990	1984	1997	1995	1986	1995	1982	1990	1998	1998	1998	1985
MIN	.74	1.22	1.81	2.52	7.34	8.57	8.44	4.79	2.62	.86	.70	.65
(WY)	1989	1981	1991	1991	1989	1988	1990	1986	1987	1984	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL	13208.08		14571.81			
ANNUAL MEAN	36.2		39.8		43.3	
HIGHEST ANNUAL MEAN					101	1995
LOWEST ANNUAL MEAN					15.5	1994
HIGHEST DAILY MEAN	1160	Feb 9	1190	Feb 14	3920	Feb 17 1986
LOWEST DAILY MEAN	.98	Oct 16	.90	Sep 18	.08	Aug 31 1983
ANNUAL SEVEN-DAY MINIMUM	1.0	Oct 10	.98	Sep 24	.24	Oct 13 1983
INSTANTANEOUS PEAK FLOW			2050	Feb 14	8010	Jan 1 1997
INSTANTANEOUS PEAK STAGE			7.04	Feb 14	9.78	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	26200		28900		31330	
10 PERCENT EXCEEDS	106		112		93	
50 PERCENT EXCEEDS	7.3		7.1		6.2	
90 PERCENT EXCEEDS	1.2		1.1		1.0	

11463200 BIG SULPHUR CREEK NEAR CLOVERDALE, CA

LOCATION.—Lat 38°49'34", long 122°59'45", in Rincon de Masalacon Grant, Sonoma County, Hydrologic Unit 18010110, on right bank, 900 ft downstream from unnamed tributary, 1.0 mi upstream of Russian River, and 1.8 mi northeast of Cloverdale.

DRAINAGE AREA.—85.5 mi^2.

PERIOD OF RECORD.—July 1957 to September 1972. October 1989 to current year (since October 1989, low-flow records only).

REVISED RECORDS.—WSP 1929: 1958–60.

GAGE.—Water-stage recorder. Elevation of gage is 350 ft above sea level, from topographic map. Prior to September 1972, at site 0.8 mi upstream at different datum.

REMARKS.—Records fair including estimated daily discharges. No records computed above 200 ft^3/s. Diversions for irrigation and geothermal recharge upstream from station. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge (water years 1958–72), 15,700 ft^3/s, Dec. 22, 1964, gage height, 15.08 ft, site and datum then in use, from rating curve extended above 5,700 ft^3/s on basis of slope-area measurement at gage height, 16.8 ft; minimum daily, 0.90 ft^3/s, Aug. 17, 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1955, reached a stage of 16.8 ft, from floodmarks, site and datum then in use, discharge, 20,000 ft^3/s, by slope-area measurement of peak flow.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	13	179	23	---	---	84	61	32	14	5.9	5.5
2	3.7	13	60	23	---	---	79	59	31	14	5.3	6.9
3	3.9	13	48	23	---	---	74	57	30	14	5.2	6.6
4	3.8	13	42	23	---	---	71	56	29	14	5.1	5.4
5	e3.8	13	37	24	---	---	70	54	28	13	5.2	4.7
6	e3.8	13	34	23	---	---	69	54	29	13	4.8	4.2
7	e3.8	17	32	23	---	---	65	60	28	14	4.9	3.7
8	e3.8	83	30	23	---	---	65	68	35	14	4.4	3.4
9	e3.7	26	40	23	---	---	65	56	31	13	4.9	3.2
10	e3.7	21	43	23	---	---	62	52	28	12	5.0	3.2
11	e3.7	31	37	---	---	---	59	50	28	12	5.0	3.2
12	e3.7	23	35	---	---	---	57	48	27	12	4.9	3.1
13	e3.6	19	33	---	---	---	92	47	25	11	5.1	3.0
14	e3.6	17	32	---	---	---	72	65	23	11	4.7	3.1
15	e3.6	21	30	---	---	---	64	187	21	10	4.3	3.6
16	e3.6	44	30	---	---	---	---	102	21	9.6	4.1	3.8
17	e3.6	53	29	198	---	---	---	70	21	10	4.3	3.8
18	e3.5	27	28	---	---	---	---	60	21	10	4.4	3.5
19	e3.5	136	28	---	---	183	152	54	22	9.4	4.1	3.2
20	e3.5	97	27	---	---	166	130	51	20	8.9	3.8	2.9
21	e3.5	50	26	---	---	152	120	48	19	8.5	3.9	3.0
22	3.5	32	26	---	---	141	106	46	18	8.2	3.9	3.4
23	3.6	27	25	---	---	136	96	45	18	8.0	3.8	4.1
24	3.7	24	25	---	---	131	90	43	18	7.6	3.9	4.2
25	3.7	22	25	---	---	127	84	41	17	7.0	4.0	3.9
26	3.7	21	25	---	---	121	80	39	17	6.5	3.7	3.7
27	4.7	20	25	---	---	118	77	38	16	6.5	3.5	3.6
28	21	19	24	---	---	111	72	37	15	6.6	3.5	3.6
29	18	21	24	---	---	105	69	36	15	6.4	3.6	3.9
30	15	---	23	---	---	98	65	35	14	6.2	3.9	4.0
31	13	---	23	---	---	90	---	34	---	6.0	4.9	---
TOTAL	166.8	---	1125	---	---	---	---	1753	697	316.4	138.0	117.4
MEAN	5.38	---	36.3	---	---	---	---	56.5	23.2	10.2	4.45	3.91
MAX	21	---	179	---	---	---	---	187	35	14	5.9	6.9
MIN	3.5	---	23	---	---	---	---	34	14	6.0	3.5	2.9
AC-FT	331	---	2230	---	---	---	---	3480	1380	628	274	233

e Estimated.

11463980 RUSSIAN RIVER AT DIGGER BEND, NEAR HEALDSBURG, CA

LOCATION.—Lat 38°37'59", long 122°51'16", in Sotoyome Grant, Sonoma County, Hydrologic Unit 18010110, on right bank, 1,800 ft downstream from unnamed tributary, and 1.6 mi northeast of Healdsburg.

DRAINAGE AREA.—791 mi^2.

PERIOD OF RECORD.—October 1988 to current year (low-flow records only). Records for October 1985 to September 1988 are in the files of the U.S. Geological Survey.

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

REMARKS.—Records fair including estimated daily discharges. No records computed above 400 ft^3/s. See schematic diagram of Russian River Basin.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	e209	---	e271	---	---	---	---	279	189	180	208
2	174	e209	---	e268	---	---	---	---	266	184	167	214
3	185	e210	---	e265	---	---	---	---	259	215	172	204
4	177	e207	---	e261	---	---	---	---	259	220	182	197
5	180	e204	---	e258	---	---	---	---	260	227	194	192
6	178	e199	e390	e255	---	---	---	---	255	223	205	186
7	186	e204	e362	e256	---	---	---	---	250	216	214	181
8	e190	e275	e348	e253	---	---	---	---	269	213	220	173
9	e187	e355	e398	e254	---	---	---	---	271	213	214	171
10	e174	e315	---	e254	---	---	---	---	254	209	214	167
11	e169	e303	---	e399	---	---	---	---	242	208	213	169
12	e172	e331	---	---	---	---	---	---	247	202	205	164
13	e168	e306	e399	---	---	---	---	---	242	203	200	159
14	e170	e282	e370	---	---	---	---	---	225	204	196	161
15	e177	e275	e360	---	---	---	---	---	201	197	186	157
16	e167	e280	e345	---	---	---	---	---	181	188	180	155
17	e161	e381	e350	---	---	---	---	---	181	196	180	149
18	e162	---	e335	---	---	---	---	---	195	201	175	175
19	e170	---	e320	---	---	---	---	---	228	190	189	184
20	e172	---	e315	---	---	---	---	---	245	183	195	181
21	e174	---	e310	---	---	---	---	---	246	185	197	188
22	e174	---	e308	---	---	---	---	---	241	181	196	195
23	e175	e385	e305	---	---	---	---	---	233	178	194	202
24	e180	e343	e302	---	---	---	---	377	231	181	195	206
25	e185	e320	e300	---	---	---	---	355	232	181	192	207
26	e190	e303	e291	---	---	---	---	334	234	173	189	211
27	e200	e295	e294	---	---	---	---	321	220	180	193	208
28	e220	e287	e286	---	---	---	---	311	210	190	198	207
29	e230	e288	e283	---	---	---	---	299	204	192	200	191
30	e221	---	e279	---	---	---	---	295	198	193	210	181
31	e215	---	e276	---	---	---	---	286	---	190	213	---
TOTAL	5661	---	---	---	---	---	---	---	7058	6105	6058	5543
MEAN	183	---	---	---	---	---	---	---	235	197	195	185
MAX	230	---	---	---	---	---	---	---	279	227	220	214
MIN	161	---	---	---	---	---	---	---	181	173	167	149
AC-FT	11230	---	---	---	---	---	---	---	14000	12110	12020	10990

e Estimated.

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA

LOCATION.—Lat 38°36'48", long 122°50'07", in Sotoyome Grant, Sonoma County, Hydrologic Unit 18010110, on left bank, 2 mi east of Healdsburg, and 3.5 mi upstream from Dry Creek.

DRAINAGE AREA.—793 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 981: 1942. WSP 1929: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 77.01 ft above sea level.

REMARKS.—Records fair. Several diversions for irrigation of about 17,800 acres upstream from station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino, 63 mi upstream. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 73,000 ft^3/s, Jan. 9, 1995, gage height, 26.23 ft; maximum gage height, 30.0 ft, Feb. 28, 1940; minimum daily discharge, 12 ft^3/s, June 14, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1937 reached a stage of 30.8 ft, from floodmarks.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	206	974	261	3990	8650	689	503	265	187	185	211
2	178	206	784	257	2800	7320	696	479	252	175	169	220
3	179	206	581	253	2100	5090	697	458	246	210	176	211
4	175	206	497	251	2170	4000	687	444	242	225	184	204
5	172	202	429	251	3990	4920	676	429	255	229	208	201
6	176	199	384	251	6010	4030	651	420	264	230	222	185
7	176	211	355	247	3220	3620	631	436	262	224	232	177
8	178	291	334	247	2330	5730	609	465	247	215	234	171
9	176	354	382	247	1820	8140	596	459	281	209	234	166
10	166	307	473	246	2050	6360	588	436	271	209	234	165
11	162	300	507	373	3590	5350	583	426	246	210	233	168
12	166	320	425	1510	8460	4240	567	406	259	204	227	175
13	164	299	387	805	13000	3290	559	394	254	199	218	166
14	165	274	363	1220	23900	2990	566	408	237	210	214	167
15	168	268	349	1600	13400	2750	554	568	197	195	203	164
16	164	284	335	4350	8610	2490	604	591	173	180	189	162
17	157	381	340	2660	8190	2240	2890	709	170	184	183	199
18	157	413	331	2530	7200	2020	1980	745	185	196	181	185
19	164	469	322	3320	3910	1840	1140	527	232	179	199	194
20	168	823	317	3970	3430	1700	908	449	256	174	209	192
21	168	619	312	2300	6020	1540	914	413	257	175	210	197
22	169	443	306	2350	7050	1370	867	387	241	173	211	204
23	168	362	301	2830	14300	1240	813	366	244	169	208	214
24	168	335	292	5010	8070	1160	794	351	245	173	206	218
25	175	315	287	3590	6590	1090	768	336	239	174	204	221
26	180	304	284	2670	5790	1020	722	314	246	166	195	221
27	183	289	295	1850	17900	961	684	303	236	167	197	222
28	217	281	275	1430	10500	903	653	298	221	184	200	220
29	227	280	271	1190	10700	830	601	288	212	191	205	201
30	223	620	271	2880	---	768	534	282	208	192	214	186
31	210	---	266	3640	---	721	---	273	---	192	220	---
TOTAL	5474	10067	12029	54589	211090	98373	24221	13363	7143	6000	6404	5787
MEAN	177	336	388	1761	7279	3173	807	431	238	194	207	193
MAX	227	823	974	5010	23900	8650	2890	745	281	230	234	222
MIN	157	199	266	246	1820	721	534	273	170	166	169	162
AC-FT	10860	19970	23860	108300	418700	195100	48040	26510	14170	11900	12700	11480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	273	776	2419	4125	4146	2830	1458	564	271	187	187	192
MAX	1605	5293	8945	14490	16450	11810	6592	1638	972	300	331	360
(WY)	1958	1974	1956	1995	1998	1983	1982	1983	1998	1961	1974	1974
MIN	33.7	122	111	90.9	58.7	146	55.7	85.1	81.3	70.5	82.8	67.4
(WY)	1978	1992	1991	1977	1977	1977	1977	1977	1977	1947	1947	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	500363		454540			
ANNUAL MEAN	1371		1242		1441	
HIGHEST ANNUAL MEAN					3277	1983
LOWEST ANNUAL MEAN					101	1977
HIGHEST DAILY MEAN	24200	Feb 9	23900	Feb 14	69300	Jan 9 1995
LOWEST DAILY MEAN	157	Oct 17	157	Oct 17	12	Jun 14 1988
ANNUAL SEVEN-DAY MINIMUM	163	Oct 13	163	Oct 13	21	Apr 20 1977
INSTANTANEOUS PEAK FLOW			26500	Feb 14	73000	Jan 9 1995
INSTANTANEOUS PEAK STAGE			14.38	Feb 14	30.00	Feb 28 1940
ANNUAL RUNOFF (AC-FT)	992500		901600		1044000	
10 PERCENT EXCEEDS	3930		3600		3410	
50 PERCENT EXCEEDS	334		288		314	
90 PERCENT EXCEEDS	176		175		142	

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1951 to current year.
CHEMICAL DATA: Water years 1951–66, 1980.
WATER TEMPERATURE: Water years 1966 to current year.

PERIOD OF DAILY RECORD.—October 1965 to current year.
WATER TEMPERATURE: October 1965 to current year.

INSTRUMENTATION.—Temperature recorder since October 1965 provides hourly recordings.

REMARKS.—Temperature during summer months affected by recreation dams above and below gage.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 32.0°C, July 18 and Aug. 3, 1998; minimum recorded, 3.0°C, Dec. 23, 1990.

EXTREMES FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 28.5°C, June 15; minimum recorded, 7.5°C, Dec. 31 and Jan. 3.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	18.5	17.5	14.5	12.5	11.0	9.5	8.0	11.0	10.0	12.0	10.5
2	21.0	18.5	17.5	14.5	11.5	11.0	9.5	8.0	13.0	11.0	12.5	11.0
3	20.5	18.0	17.5	15.5	11.0	9.5	9.0	7.5	12.5	11.5	13.0	10.5
4	20.0	18.0	17.0	14.5	10.5	9.5	10.0	8.0	11.5	11.0	12.5	11.0
5	19.0	16.5	17.5	15.0	11.0	9.5	9.5	8.0	11.5	11.0	12.0	11.0
6	20.0	17.5	17.0	16.0	11.0	10.0	9.5	8.0	11.5	10.5	12.0	10.0
7	21.0	16.5	16.0	15.0	11.0	10.0	9.5	8.0	12.5	10.5	11.0	10.5
8	21.5	17.0	16.0	14.5	10.5	9.5	10.5	9.0	12.5	11.0	10.5	9.0
9	21.5	17.5	15.0	14.0	11.0	9.5	11.0	9.5	12.5	12.0	11.0	9.0
10	22.0	17.5	15.0	14.5	10.0	9.0	12.5	11.0	12.5	12.0	11.0	10.0
11	21.0	17.5	16.5	14.5	9.5	8.5	12.0	10.5	12.0	10.5	13.0	10.5
12	21.0	17.0	17.0	15.0	10.5	9.5	10.5	9.0	11.0	10.5	13.5	11.0
13	20.0	17.0	16.5	15.0	10.5	9.5	10.0	9.0	11.5	10.5	14.0	11.0
14	21.0	17.5	15.5	14.5	10.0	9.0	11.0	10.0	12.0	11.5	15.0	12.5
15	20.5	17.0	16.0	14.5	9.5	8.5	11.5	11.0	12.0	11.5	15.0	12.5
16	19.0	16.0	15.0	14.0	9.5	8.0	11.5	10.0	12.0	11.0	15.0	12.5
17	17.5	15.0	14.5	13.0	10.5	9.0	10.0	9.0	12.0	10.5	14.5	12.0
18	17.5	14.0	13.5	12.5	11.0	9.5	10.5	10.0	12.0	10.5	15.0	12.0
19	17.0	14.0	13.5	12.5	11.5	10.0	12.0	10.5	12.5	10.5	15.0	13.5
20	17.5	14.0	13.5	12.5	12.0	10.5	12.0	11.0	12.0	11.5	14.0	11.5
21	18.0	14.5	13.5	12.0	11.5	10.0	11.5	11.0	12.5	11.0	15.0	12.0
22	17.5	15.0	12.0	11.0	11.0	10.0	11.5	11.0	12.0	10.5	15.5	13.0
23	17.0	15.5	12.5	11.0	10.0	9.0	11.5	11.0	10.5	10.0	16.5	14.0
24	17.0	13.5	12.5	11.0	10.0	8.5	12.0	11.5	10.0	9.5	16.0	13.5
25	17.0	14.0	13.0	11.0	10.0	8.5	12.5	11.5	11.0	9.5	15.5	13.0
26	17.0	15.0	13.5	12.0	10.0	8.5	12.0	10.5	12.0	11.0	16.0	13.0
27	16.5	16.0	14.0	13.0	10.0	8.5	11.5	10.0	11.5	11.0	16.5	14.0
28	17.0	15.5	14.0	13.5	9.5	8.0	11.5	9.5	12.0	10.5	15.5	13.0
29	16.5	14.0	13.5	13.5	9.5	8.0	11.0	9.5	12.0	11.0	16.0	13.0
30	16.5	14.0	13.5	12.5	9.5	8.0	11.0	10.5	---	---	17.0	14.0
31	17.0	14.0	---	---	9.0	7.5	10.5	10.0	---	---	17.5	14.5
MONTH	22.5	13.5	17.5	11.0	12.5	7.5	12.5	7.5	13.0	9.5	17.5	9.0

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.0	15.0	20.0	16.5	24.5	18.5	25.5	22.0	26.5	24.5	20.5	19.5
2	19.0	15.5	21.0	17.5	24.5	19.0	25.0	21.5	27.0	24.0	21.0	19.0
3	19.5	16.5	22.5	18.0	24.5	19.0	24.5	21.0	26.5	23.5	22.0	18.5
4	18.5	16.5	21.5	18.0	24.0	19.0	25.0	21.0	26.0	23.0	21.5	18.5
5	18.0	16.0	20.5	16.5	24.5	18.5	24.5	21.0	26.0	22.5	22.0	18.5
6	19.0	16.0	18.0	16.0	25.5	19.0	23.5	21.0	26.0	22.5	22.0	19.0
7	19.0	15.5	16.0	15.0	22.5	20.0	24.0	20.5	25.5	22.5	23.0	19.5
8	18.5	16.0	19.5	15.0	22.5	18.5	24.5	21.0	24.5	21.5	23.0	20.0
9	19.0	15.5	19.5	17.0	23.0	18.5	25.0	21.0	24.5	21.5	23.0	20.0
10	19.0	15.5	19.0	16.0	23.5	19.0	25.0	21.5	24.0	21.5	23.0	20.0
11	19.0	16.5	19.5	14.5	23.0	18.5	25.0	21.5	25.0	21.0	23.0	20.0
12	18.5	17.0	19.0	15.5	24.5	19.5	24.0	21.5	25.5	22.0	22.5	20.0
13	18.0	16.5	19.0	16.0	26.0	21.0	23.5	20.5	25.5	21.5	23.0	21.5
14	17.5	16.5	17.5	15.5	28.0	22.5	24.5	20.5	25.5	21.5	24.0	21.5
15	16.5	15.5	17.5	15.0	28.5	24.5	25.0	22.0	25.5	22.0	23.5	21.0
16	15.5	14.0	18.5	15.0	27.5	23.5	23.0	21.5	25.5	22.5	23.5	21.0
17	14.5	13.0	19.5	16.0	25.5	22.5	23.5	20.5	25.5	22.5	24.5	21.5
18	15.5	12.5	20.5	16.5	23.5	21.5	25.0	20.5	24.5	21.5	26.0	21.0
19	16.0	13.0	22.5	18.5	25.5	20.5	25.5	21.5	24.0	21.0	26.0	21.0
20	18.0	14.0	24.5	19.5	26.5	22.0	25.5	22.0	24.5	21.0	25.5	21.5
21	18.5	15.0	26.0	21.0	27.0	22.5	25.5	22.0	24.5	21.5	23.0	21.0
22	18.0	15.0	26.5	22.0	26.0	22.0	26.0	22.0	24.5	21.5	21.5	19.5
23	17.5	14.5	26.0	22.5	25.0	21.5	26.5	22.5	23.0	21.0	22.5	18.0
24	18.5	14.5	25.5	21.5	24.5	21.0	26.5	23.0	24.0	20.5	23.0	18.5
25	19.0	15.5	24.0	20.0	25.0	21.5	26.5	22.5	24.5	21.5	23.0	18.5
26	20.0	16.0	25.0	19.0	26.0	22.0	26.0	23.0	24.5	22.0	23.0	19.0
27	18.5	16.5	26.0	20.0	26.5	22.5	25.5	22.0	24.5	21.5	22.0	19.0
28	18.0	15.0	25.5	21.0	26.0	22.5	26.0	22.5	24.0	21.5	21.5	18.5
29	19.0	14.5	24.5	19.0	25.5	22.5	26.5	23.0	22.5	20.0	22.5	17.5
30	20.5	16.0	23.0	18.0	25.5	22.0	26.0	23.0	20.0	19.0	23.5	19.0
31	---	---	23.5	17.5	---	---	27.0	23.5	21.5	18.5	---	---
MONTH	20.5	12.5	26.5	14.5	28.5	18.5	27.0	20.5	27.0	18.5	26.0	17.5

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA

LOCATION.—Lat 38°43'11", long 122°59'58", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Warm Springs Dam, 500 ft upstream from county road bridge, and 5.0 mi west of Geyserville.

DRAINAGE AREA.—131 mi^2.

PERIOD OF RECORD.—October 1939 to September 1942 (published as "Dry Creek near Healdsburg"), October 1981 to current year. WATER TEMPERATURE RECORD: Water years 1981–94.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 188.21 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 30, 1942, nonrecording gage at site 500 ft downstream at different datum.

REMARKS.—Records good. Flow affected by storage in Lake Sonoma, capacity, 380,600 acre-ft, beginning October 1983. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 22,500 ft^3/s, Feb. 28, 1940, gage height, 16.9 ft, datum then in use; no flow Oct. 1 to Dec. 8, 1939. Maximum discharge since regulation by Lake Sonoma, 5,590 ft^3/s, Feb. 11, 1998, gage height, 10.38 ft; minimum daily, 6.1 ft^3/s, Oct. 21, 22, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1937 reached a stage of 21.8 ft from floodmarks, discharge about 25,000 ft^3/s.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	122	120	120	89	2690	177	97	104	99	109	113
2	105	122	120	120	89	3270	141	97	104	99	109	113
3	105	122	120	108	90	2470	104	97	103	99	109	113
4	105	121	120	84	90	1490	104	97	104	99	110	113
5	104	121	120	78	94	998	104	97	103	99	110	113
6	105	121	120	82	90	789	104	97	103	99	110	113
7	104	122	119	89	90	678	104	97	102	98	110	113
8	105	121	119	88	90	681	104	97	102	99	110	113
9	105	121	120	88	90	845	104	96	102	99	110	114
10	105	121	120	87	137	936	105	96	102	104	110	114
11	105	121	120	88	183	936	106	96	102	107	110	114
12	105	120	120	87	182	936	107	96	102	108	111	113
13	104	119	120	87	187	940	107	96	102	108	111	113
14	104	120	119	87	182	736	108	96	102	108	111	113
15	105	120	120	88	1020	430	109	96	102	108	110	113
16	108	121	120	89	2760	290	110	96	102	108	110	113
17	113	120	120	87	3140	247	110	96	101	108	110	113
18	113	120	120	89	2440	179	109	95	101	107	110	113
19	112	124	120	89	2440	179	110	95	101	107	111	112
20	112	121	120	88	2440	179	549	95	101	107	111	113
21	112	121	120	88	1650	231	426	95	101	108	111	116
22	112	121	120	87	664	259	95	95	101	108	112	115
23	112	121	120	90	1180	259	93	95	101	108	112	115
24	112	122	120	89	1370	259	94	85	101	108	112	115
25	112	121	120	88	506	259	95	99	101	108	112	115
26	112	121	120	88	1020	207	95	99	101	108	112	115
27	116	121	126	88	1020	179	95	99	100	109	112	115
28	124	121	120	88	1020	179	96	99	100	110	113	116
29	123	121	120	88	1340	178	96	98	100	109	112	115
30	123	121	120	91	---	178	99	102	100	109	112	115
31	123	---	120	90	---	178	---	104	---	109	111	---
TOTAL	3410	3631	3723	2798	25693	22265	3960	2995	3051	3264	3433	3414
MEAN	110	121	120	90.3	886	718	132	96.6	102	105	111	114
MAX	124	124	126	120	3140	3270	549	104	104	110	113	116
MIN	104	119	119	78	89	178	93	85	100	98	109	112
AC-FT	6760	7200	7380	5550	50960	44160	7850	5940	6050	6470	6810	6770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

MEAN	82.6	152	189	418	588	445	182	95.2	113	115	110	92.1
MAX	120	524	1501	1986	2583	1494	948	265	276	274	169	122
(WY)	1997	1984	1984	1997	1998	1995	1995	1995	1998	1987	1987	1996
MIN	7.70	50.8	49.8	49.3	73.3	25.0	23.0	26.1	25.1	27.0	42.0	39.0
(WY)	1984	1986	1986	1986	1988	1985	1985	1985	1985	1985	1985	1985

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	93642		81637			
ANNUAL MEAN	257		223		213	
HIGHEST ANNUAL MEAN					512	1995
LOWEST ANNUAL MEAN					46.0	1985
HIGHEST DAILY MEAN	2350	Feb 11	3270	Mar 2	5300	Feb 11 1998
LOWEST DAILY MEAN	28	Jul 26	78	Jan 5	6.1	Oct 21 1983
ANNUAL SEVEN-DAY MINIMUM	33	Jul 22	85	Jan 4	6.3	Oct 18 1983
INSTANTANEOUS PEAK FLOW			4150	Feb 16	5590	Feb 11 1998
INSTANTANEOUS PEAK STAGE			9.13	Feb 16	10.38	Feb 11 1998
ANNUAL RUNOFF (AC-FT)	185700		161900		154500	
10 PERCENT EXCEEDS	642		259		256	
50 PERCENT EXCEEDS	111		110		101	
90 PERCENT EXCEEDS	91		91		42	

11465200 DRY CREEK NEAR GEYSERVILLE, CA

LOCATION.—Lat 38°41'55", long 122°57'25", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on left bank pier of bridge, 0.3 mi downstream from Pena Creek, 3.0 mi downstream from Warm Springs Dam, and 3 mi west of Geyserville.

DRAINAGE AREA.—162 mi^2.

PERIOD OF RECORD.—October 1959 to current year.
CHEMICAL DATA: Water years 1971–81.
WATER TEMPERATURE: Water years 1964–86,
SEDIMENT DATA: Water years 1964–87.
TURBIDITY: Water years 1964–86.

REVISED RECORDS.—WDR CA-65-1: 1962(M), 1963(M).

GAGE.—Water-stage recorder. Datum of gage is 156.40 ft above sea level. Prior to Oct. 1, 1964, at datum 4.00 ft higher. Oct. 1, 1964, to Apr. 8, 1976, at datum 3.00 ft higher; Apr. 9, 1976, to Sept. 30, 1982, at datum 2.00 ft higher.

REMARKS.—Records fair except for period of January 16 to July 7, which is poor. Small diversions upstream from station for irrigation of about 1,200 acres. Flow affected by storage in Lake Sonoma, 3.0 mi upstream, capacity, 380,600 acre-ft, beginning October 1983. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 32,400 ft^3/s, Jan. 31, 1963, gage height, 20.50 ft, present datum; no flow at times. Maximum discharge since regulation by Lake Sonoma, 7,600 ft^3/s, Jan. 8, 1995, gage height, 15.48 ft; minimum daily, 19 ft^3/s, Oct. 18–25, 1984.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	134	180	139	280	3230	222	117	119	113	111	115
2	104	134	163	139	225	3740	183	114	118	113	111	115
3	105	135	157	126	205	3150	132	112	117	112	111	115
4	104	136	153	89	197	2130	129	111	118	112	112	114
5	105	136	151	80	669	1380	129	110	116	113	112	113
6	105	137	149	80	487	1080	128	110	115	111	112	113
7	105	144	148	83	298	930	128	119	118	106	112	113
8	105	142	148	83	224	1030	125	120	119	103	112	113
9	104	140	151	83	190	1280	125	115	118	103	112	114
10	104	144	147	83	282	1350	123	118	118	107	112	114
11	104	141	145	91	545	1310	125	116	117	111	111	113
12	104	141	145	91	693	1270	124	118	116	112	111	113
13	103	140	145	97	1330	1250	132	117	115	112	112	114
14	102	141	144	152	1770	1030	133	126	113	112	111	114
15	102	144	144	145	1700	635	136	132	112	112	110	115
16	107	149	143	389	3340	476	180	122	114	113	111	115
17	115	150	143	161	3700	407	423	117	115	113	112	114
18	115	145	144	228	2970	272	225	117	117	113	112	113
19	115	221	144	266	2940	264	189	116	116	112	113	112
20	115	174	143	242	2960	262	618	115	115	113	114	113
21	115	155	142	183	2330	353	612	112	115	112	111	117
22	115	149	143	158	1410	420	158	111	115	112	112	115
23	116	146	143	478	1860	422	144	112	115	112	113	116
24	116	144	143	489	2120	424	138	103	115	111	115	117
25	115	144	142	299	848	427	133	114	115	111	114	116
26	114	144	142	204	1630	289	131	115	115	112	113	116
27	119	144	147	170	2170	225	130	114	113	112	114	116
28	135	143	140	147	1680	224	129	115	113	112	114	117
29	135	148	140	134	2000	217	123	113	113	111	115	117
30	135	174	139	386	---	216	123	116	112	112	115	117
31	134	---	139	323	---	225	---	120	---	110	115	---
TOTAL	3475	4419	4547	5818	41053	29918	5530	3587	3467	3443	3485	3439
MEAN	112	147	147	188	1416	965	184	116	116	111	112	115
MAX	135	221	180	489	3700	3740	618	132	119	113	115	117
MIN	102	134	139	80	190	216	123	103	112	103	110	112
AC-FT	6890	8770	9020	11540	81430	59340	10970	7110	6880	6830	6910	6820

11465200 DRY CREEK NEAR GEYSERVILLE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1983, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.5	240	610	1178	959	666	345	80.3	23.3	6.01	1.70	1.35
MAX	323	1619	2035	3930	2038	3095	1499	369	76.0	20.9	8.91	8.61
(WY)	1963	1974	1965	1970	1983	1983	1982	1983	1983	1983	1983	1983
MIN	.000	.54	4.31	22.7	27.1	34.1	9.58	5.64	.25	.000	.000	.000
(WY)	1961	1981	1977	1976	1977	1977	1977	1977	1977	1977	1972	1972

SUMMARY STATISTICS	WATER YEARS 1960 - 1983	
ANNUAL MEAN	342	
HIGHEST ANNUAL MEAN	790	1983
LOWEST ANNUAL MEAN	8.81	1977
HIGHEST DAILY MEAN	19400	Jan 16 1974
LOWEST DAILY MEAN	.00	Sep 17 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 17 1960
INSTANTANEOUS PEAK FLOW	32400	Jan 31 1963
INSTANTANEOUS PEAK STAGE	20.50	Jan 31 1963
ANNUAL RUNOFF (AC-FT)	247800	
10 PERCENT EXCEEDS	868	
50 PERCENT EXCEEDS	32	
90 PERCENT EXCEEDS	.08	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	91.3	143	173	654	972	682	232	115	134	128	118	98.1
MAX	116	459	539	2634	3890	2110	1115	341	379	296	180	128
(WY)	1997	1987	1997	1997	1998	1995	1995	1995	1998	1987	1987	1988
MIN	42.2	60.4	88.2	83.0	85.4	86.0	38.5	36.6	91.8	85.6	96.1	44.1
(WY)	1991	1986	1991	1991	1991	1988	1990	1991	1996	1999	1990	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	123407		112181			
ANNUAL MEAN	338		307		283	
HIGHEST ANNUAL MEAN					676	1995
LOWEST ANNUAL MEAN					90.5	1990
HIGHEST DAILY MEAN	2850	Feb 21	3740	Mar 2	6260	Feb 16 1998
LOWEST DAILY MEAN	30	Jul 24	80	Jan 5	27	May 20 1992
ANNUAL SEVEN-DAY MINIMUM	33	Jul 22	83	Jan 4	29	Oct 7 1997
INSTANTANEOUS PEAK FLOW			4390	Feb 16	7600	Jan 8 1995
INSTANTANEOUS PEAK STAGE			12.08	Feb 16	15.48	Jan 8 1995
ANNUAL RUNOFF (AC-FT)	244800		222500		205200	
10 PERCENT EXCEEDS	993		565		478	
50 PERCENT EXCEEDS	125		119		112	
90 PERCENT EXCEEDS	92		111		80	

11465350 DRY CREEK NEAR MOUTH, NEAR HEALDSBURG, CA

LOCATION.—Lat 38°35'15", long 122°51'40", in Sotoyome Grant, Sonoma County, Hydrologic Unit 18010110, on right bank, 0.25 mi upstream from mouth, 0.4 mi downstream from Mill Creek, 13.5 mi downstream from Warm Springs Dam, and 1.7 mi south of Healdsburg.

DRAINAGE AREA.—217 mi^2.

PERIOD OF RECORD.—November 1980 to current year (low-flow records only).

GAGE.—Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.—Records fair. No records computed above 200 ft^3/s. Some diversions for irrigation upstream from station. Flow regulated by Lake Sonoma, 13.5 mi upstream, beginning October 1983. See schematic diagram of Russian River Basin.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	123	---	133	---	---	---	138	118	106	91	97
2	94	123	171	132	---	---	---	134	114	90	91	99
3	95	123	158	131	---	---	171	131	121	97	91	97
4	96	124	150	106	---	---	155	127	118	90	91	96
5	96	124	146	90	---	---	152	123	117	93	94	94
6	96	124	143	85	---	---	147	121	114	90	98	94
7	95	150	141	86	---	---	141	137	117	92	97	93
8	95	146	140	86	---	---	136	143	125	92	96	92
9	94	131	154	85	---	---	136	135	118	90	96	94
10	94	147	147	85	---	---	134	133	117	89	95	102
11	94	141	143	112	---	---	131	134	114	93	93	103
12	93	133	142	134	---	---	128	139	112	95	92	97
13	92	132	140	107	---	---	144	138	106	91	93	98
14	91	132	139	171	---	---	135	170	99	88	93	98
15	89	143	139	---	---	---	131	199	93	89	90	99
16	91	156	139	---	---	---	---	154	95	91	91	98
17	100	150	138	---	---	---	---	147	98	97	92	96
18	103	141	137	---	---	---	---	145	101	98	93	94
19	104	---	137	---	---	---	---	139	104	95	93	90
20	105	---	137	---	---	---	---	129	105	96	96	89
21	104	163	136	---	---	---	---	123	107	97	98	96
22	104	149	135	---	---	---	---	130	121	97	98	98
23	106	142	135	---	---	---	178	117	119	96	98	107
24	106	138	135	---	---	---	158	113	115	94	96	106
25	107	136	135	---	---	---	154	121	113	90	95	101
26	107	135	135	---	---	---	172	121	92	89	95	99
27	112	134	137	---	---	---	170	124	90	91	96	100
28	124	133	135	---	---	---	158	122	89	91	97	99
29	122	142	134	---	---	---	150	118	90	91	98	101
30	123	190	133	---	---	---	145	119	112	97	100	99
31	124	---	133	---	---	---	---	123	---	97	100	---
TOTAL	3149	---	---	---	---	---	---	4147	3254	2892	2937	2926
MEAN	102	---	---	---	---	---	---	134	108	93.3	94.7	97.5
MAX	124	---	---	---	---	---	---	199	125	106	100	107
MIN	89	---	---	---	---	---	---	113	89	88	90	89
AC-FT	6250	---	---	---	---	---	---	8230	6450	5740	5830	5800

11465680 LAGUNA DE SANTA ROSA AT STONY POINT ROAD, NEAR COTATI, CA

LOCATION.—Lat 38°21'08", long 122°44'35", in Llano de Santa Rosa Grant, Sonoma County, Hydrologic Unit 180101110, on right bank, upstream side of Stony Point Road bridge, 300 ft downstream of unnamed tributary, and 1.5 mi west of Rohnert Park.

DRAINAGE AREA.—40.75 mi^2.

PERIOD OF RECORD.—November 1998 to current year.

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

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,850 ft^3/s, Feb. 13, 2000, gage height, 87.29 ft; minimum daily, 0.26 ft^3/s, Sept. 20–21, 2000.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,200 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0815	2,850	87.29	Feb. 22	2330	1,280	84.78

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.1	32	.48	70	142	6.3	3.2	1.4	.81	.50	.30
2	.97	.88	5.4	.48	50	121	6.4	3.0	1.3	.84	.42	.50
3	.94	.73	2.4	.47	43	103	5.8	3.0	1.3	.77	.44	1.3
4	.91	.69	1.5	.48	52	108	5.5	2.8	1.5	.81	.45	1.0
5	.84	.67	1.1	.49	72	226	5.3	2.8	1.3	.97	.43	.70
6	.84	.65	.88	.48	80	108	5.2	2.9	1.2	.89	.45	.63
7	.86	14	.79	.46	51	91	5.0	5.2	1.2	.74	.44	.57
8	.84	74	.70	.46	35	352	4.8	18	4.0	.71	.45	.47
9	e.81	21	5.6	.46	26	382	4.8	8.8	4.2	.69	.45	.40
10	e.78	3.1	6.3	.47	88	124	4.6	4.1	2.2	.71	.47	.36
11	e.78	1.7	2.3	28	224	92	4.6	2.7	1.6	.68	.50	.34
12	e.75	1.3	1.3	35	518	75	4.5	2.3	1.3	.68	.51	.32
13	e.72	1.0	.92	4.1	1940	64	51	2.2	1.2	.67	.50	.31
14	.71	.91	.75	2.0	1030	56	21	15	1.1	.64	.47	.31
15	.68	1.5	.63	4.6	228	50	9.6	68	1.1	.66	.45	.30
16	.65	16	.59	83	134	42	23	28	1.0	.64	.44	.29
17	.63	50	.57	29	117	33	167	5.8	.96	.66	.45	.28
18	.59	7.9	.56	84	78	27	58	3.4	1.0	.65	.44	.27
19	.57	33	.54	57	64	21	18	2.7	1.0	.63	.43	.27
20	.58	62	.52	27	136	16	9.9	2.3	.97	.64	.42	.26
21	.58	12	.51	11	217	16	8.2	2.2	.93	.58	.40	.26
22	.57	3.4	.49	13	261	15	7.1	2.0	.94	.60	.39	.27
23	.58	1.9	.48	25	439	13	6.2	2.0	.90	.57	.38	.27
24	.57	1.4	.48	346	127	11	5.5	2.0	.96	.63	.36	.28
25	.59	1.1	.47	128	128	11	5.0	1.9	.88	.57	.37	.28
26	.62	.98	.48	62	170	10	4.7	1.7	.86	.55	.37	.28
27	.64	.89	.49	39	366	9.4	4.0	1.6	.87	.50	.37	.28
28	59	.86	.48	24	130	9.0	3.8	1.6	.89	.50	.37	.28
29	18	.81	.47	16	464	8.3	3.5	1.6	.84	.48	.34	.27
30	3.0	13	.47	83	---	7.8	3.1	1.5	.76	.46	.27	.27
31	1.5	---	.47	89	---	7.0	---	1.4	---	.49	.28	---
TOTAL	101.10	328.47	70.64	1194.43	7338	2350.5	471.4	205.7	39.66	20.42	13.01	11.92
MEAN	3.26	10.9	2.28	38.5	253	75.8	15.7	6.64	1.32	.66	.42	.40
MAX	59	74	32	346	1940	382	167	68	4.2	.97	.51	1.3
MIN	.57	.65	.47	.46	26	7.0	3.1	1.4	.76	.46	.27	.26
AC-FT	201	652	140	2370	14550	4660	935	408	79	41	26	24

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

MEAN	3.26	10.9	9.31	39.3	232	75.1	24.5	5.26	1.23	.72	.66	.66
MAX	3.26	10.9	16.3	40.0	253	75.8	33.2	6.64	1.32	.77	.91	.92
(WY)	2000	2000	1999	1999	2000	2000	1999	2000	2000	1999	1999	1999
MIN	3.26	10.9	2.28	38.5	210	74.4	15.7	3.88	1.14	.66	.42	.40
(WY)	2000	2000	2000	2000	1999	1999	2000	1999	1999	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	11148.71		12145.25			
ANNUAL MEAN	30.5		33.2		33.2	
HIGHEST ANNUAL MEAN					33.2	2000
LOWEST ANNUAL MEAN					33.2	2000
HIGHEST DAILY MEAN	1030	Feb 7	1940	Feb 13	1940	Feb 13 2000
LOWEST DAILY MEAN	.47	Dec 25	.26	Sep 20	.26	Sep 20 2000
ANNUAL SEVEN-DAY MINIMUM	.48	Dec 25	.27	Sep 17	.27	Sep 17 2000
INSTANTANEOUS PEAK FLOW			2850	Feb 13	2850	Feb 13 2000
INSTANTANEOUS PEAK STAGE			87.29	Feb 13	87.29	Feb 13 2000
ANNUAL RUNOFF (AC-FT)	22110		24090		24040	
10 PERCENT EXCEEDS	68		81		80	
50 PERCENT EXCEEDS	1.2		1.2		1.5	
90 PERCENT EXCEEDS	.66		.43		.48	

e Estimated.

11465700 COLGAN CREEK NEAR SEBASTOPOL, CA

LOCATION.—Lat 38°22'25", long 122°46'02", in Llano de Santa Rosa Grant, Sonoma County, Hydrologic Unit 180101110, on left bank, downstream side of Llano Road bridge, 0.5 mile upstream of Laguna de Santa Rosa, and 3.5 mi southeast of Sebastopol.

DRAINAGE AREA.—6.78 mi^2.

PERIOD OF RECORD.—November 1998 to current year.

GAGE.—Water-stage recorder and dopler-velocity system. Datum of gage is sea level.

REMARKS.—Records poor. No regulation or diversion upstream of station. High-flow periods are effected by backwater from Laguna de Santa Rosa. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 818 ft^3/s, Feb. 13, 2000, maximum gage height, 77.21 ft, Feb. 7, 1999; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 290 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2030	818	(a)	Feb. 22	2300	(a)	75.47
Feb. 13	2100	(a)	77.02	Feb. 29	0800	339	(a)
Feb. 22	2200	450	(a)	Feb. 29	0915	(a)	74.92

(a) Backwater from Laguna de Santa Rosa.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.09	3.9	.03	9.3	23	1.6	1.0	.31	e.16	e.08	e.00
2	.00	.06	.33	.02	3.1	72	1.6	1.0	.21	e.16	e.08	e.00
3	.00	.03	.12	.02	4.6	47	1.5	.99	.19	e.16	e.08	e.00
4	.00	.01	.06	.02	4.0	39	1.5	.90	.22	e.16	e.08	e.00
5	.00	.00	.02	.02	12	57	1.5	.84	.28	e.15	e.07	e.00
6	.00	.00	.00	.02	14	17	1.5	.79	.25	e.15	e.07	e.00
7	.00	14	.00	.02	3.0	25	1.4	3.5	.19	e.15	e.07	e.00
8	.00	13	.00	.03	2.2	110	1.3	6.4	3.4	e.15	e.07	e.00
9	.00	.25	4.1	.04	2.0	139	1.3	1.7	1.0	e.14	e.06	e.00
10	.00	.09	.55	.06	27	27	1.3	2.2	.41	e.14	e.06	e.00
11	.00	.08	.16	17	87	21	1.2	1.1	.27	e.14	e.06	e.00
12	.00	.15	.06	2.2	130	17	1.5	.72	.35	e.14	e.05	e.00
13	.01	.10	.01	.36	488	10	24	1.3	.29	e.13	e.05	e.00
14	.00	.09	.00	.30	216	7.4	2.9	5.3	.23	e.13	e.05	e.00
15	.01	1.0	.00	3.0	51	5.9	1.7	20	.25	e.13	e.05	e.00
16	.00	18	.00	39	13	4.9	7.5	2.6	.15	e.13	e.04	e.00
17	.00	5.2	.00	1.9	11	4.0	42	1.1	.17	e.12	e.04	e.00
18	.00	.45	.00	47	4.6	3.6	4.9	.77	.23	e.12	e.04	e.00
19	.00	32	.00	6.4	5.4	3.3	2.3	.65	.25	e.12	e.04	e.00
20	.00	4.7	.00	3.5	55	3.0	1.9	.56	.19	e.11	e.03	e.00
21	.00	.51	.00	2.7	51	2.7	1.7	.51	e.19	e.11	e.03	e.00
22	.00	.27	.00	2.9	118	2.6	1.6	.46	e.19	e.11	e.03	e.00
23	.00	.12	.01	9.1	122	2.5	1.4	.45	e.18	e.11	e.03	e.00
24	.00	.05	.00	88	23	2.4	1.3	.43	e.18	e.10	e.02	e.00
25	.00	.02	.01	17	33	2.3	1.3	.38	e.18	e.10	e.02	e.00
26	.00	.01	.01	4.1	92	2.2	1.2	.37	e.18	e.10	e.02	e.00
27	.01	.00	.01	2.2	120	2.0	1.9	.32	e.17	e.10	e.02	e.00
28	18	.00	.01	1.6	19	2.0	2.2	.29	e.17	e.09	e.01	e.00
29	.62	.01	.02	1.3	99	1.9	1.3	.27	e.17	e.09	e.01	e.00
30	.23	4.9	.03	31	---	1.8	1.1	.29	e.17	e.09	e.00	e.00
31	.10	---	.03	20	---	1.7	---	.30	---	e.09	e.00	---
TOTAL	18.98	95.19	9.44	300.84	1819.2	660.2	119.4	57.49	10.62	3.88	1.36	0.00
MEAN	.61	3.17	.30	9.70	62.7	21.3	3.98	1.85	.35	.13	.044	.000
MAX	18	32	4.1	88	488	139	42	20	3.4	.16	.08	.00
MIN	.00	.00	.00	.02	2.0	1.7	1.1	.27	.15	.09	.00	.00
AC-FT	38	189	19	597	3610	1310	237	114	21	7.7	2.7	.00

e Estimated.

11465700 COLGAN CREEK NEAR SEBASTOPOL, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.61	3.17	2.03	10.0	57.7	18.7	5.38	1.27	.30	.079	.025	.003
MAX	.61	3.17	3.76	10.3	62.7	21.3	6.77	1.85	.35	.13	.044	.005
(WY)	2000	2000	1999	1999	2000	2000	1999	2000	2000	2000	2000	1999
MIN	.61	3.17	.30	9.70	52.5	16.1	3.98	.69	.24	.033	.006	.000
(WY)	2000	2000	2000	2000	1999	1999	2000	1999	1999	1999	1999	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	2643.56		3096.60			
ANNUAL MEAN	7.24		8.46		8.46	
HIGHEST ANNUAL MEAN					8.46	2000
LOWEST ANNUAL MEAN					8.46	2000
HIGHEST DAILY MEAN	268	Feb 7	488	Feb 13	488	Feb 13 2000
LOWEST DAILY MEAN	.00	Jul 16	.00	Oct 1	.00	Jul 16 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 12	.00	Oct 1	.00	Aug 12 1999
INSTANTANEOUS PEAK FLOW			818	Feb 13	818	Feb 13 2000
INSTANTANEOUS PEAK STAGE			77.02	Feb 13	77.21	Feb 7 1999
ANNUAL RUNOFF (AC-FT)	5240		6140		6130	
10 PERCENT EXCEEDS	13		18		18	
50 PERCENT EXCEEDS	.21		.18		.43	
90 PERCENT EXCEEDS	.00		.00		.00	

11465750 LAGUNA DE SANTA ROSA NEAR SEBASTOPOL, CA

LOCATION.—Lat 38°25'32", long 122°49'41", in SE 1/4 NW 1/4 sec.26, T.7 N., R.9 W., Sonoma County, Hydrologic Unit 180101110, on right bank, upstream side of Occidental Road bridge, and 1.6 mi north of Sebastopol.

DRAINAGE AREA.—79.6 mi^2.

PERIOD OF RECORD.—Nov. 18, 1998, to current year.

GAGE.—Water-stage recorder and dopler-velocity system. Datum of gage is sea level.

REMARKS.—Records poor. No regulation or diversion upstream of station. High-flow periods are affected by backwater. See schematic diagram of Russian River Basin.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2245	5,140	(a)	Feb. 14	0930	(a)	66.85

(a) Backwater

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	14	35	22	163	783	28	14	3.5	2.0	.40	.11
2	.86	9.8	50	23	139	345	25	13	3.4	2.0	.33	.43
3	.86	6.9	43	23	122	314	23	13	3.2	1.9	.25	1.2
4	.87	5.3	e37	24	124	245	21	12	3.2	1.9	.24	1.4
5	.91	4.1	e30	26	131	568	20	11	3.2	1.7	.23	1.4
6	.96	3.2	e24	25	170	411	19	11	3.2	1.6	.23	1.2
7	1.0	3.2	e17	25	162	250	19	12	3.2	1.5	.22	.96
8	.99	13	e11	21	143	367	18	17	4.0	1.4	.22	.64
9	.95	42	32	20	128	1070	16	21	5.0	1.3	.24	.39
10	.90	49	37	19	140	487	16	21	6.4	1.2	.25	.21
11	.88	33	42	30	216	239	15	18	7.3	1.2	.28	.13
12	.87	21	36	61	407	165	14	15	6.6	1.2	.31	.09
13	.89	15	32	71	2680	135	24	12	5.5	1.2	.29	.08
14	.91	11	30	60	3710	118	48	11	4.5	1.1	.27	.07
15	.88	10	31	63	1480	106	42	19	3.8	1.1	.27	.07
16	.86	11	33	119	644	97	36	35	3.2	1.1	.24	.05
17	.82	21	34	142	381	89	138	31	2.8	1.1	.21	.04
18	.78	45	33	167	283	82	205	22	2.7	1.1	.19	.03
19	.75	55	32	174	208	77	142	16	2.6	1.1	.16	.02
20	.72	83	31	128	159	73	102	13	2.5	1.0	.14	.01
21	.72	91	30	80	641	68	79	11	2.4	.96	.13	.01
22	.86	68	28	62	356	63	63	8.8	2.4	.92	.12	.02
23	.93	51	25	56	1360	58	52	7.4	2.4	.83	.12	.02
24	.92	40	24	273	653	52	42	6.4	2.3	.74	.12	.02
25	.89	31	24	453	386	47	34	5.8	2.3	.66	.11	.02
26	.85	23	24	195	377	41	28	5.2	2.3	.59	.12	.03
27	.84	18	23	117	1270	38	24	4.7	2.2	.58	.12	.03
28	e3.2	14	22	92	730	36	20	4.4	2.2	.55	.12	.03
29	e9.0	12	22	81	906	35	18	4.2	2.2	.52	.12	.04
30	e40	19	22	93	---	33	15	4.0	2.1	.49	.09	.06
31	20	---	21	148	---	30	---	3.8	---	.46	.10	---
TOTAL	95.75	822.5	915	2893	18269	6522	1346	402.7	102.6	35.00	6.24	8.81
MEAN	3.09	27.4	29.5	93.3	630	210	44.9	13.0	3.42	1.13	.20	.29
MAX	40	91	50	453	3710	1070	205	35	7.3	2.0	.40	1.4
MIN	.72	3.2	11	19	122	30	14	3.8	2.1	.46	.09	.01
AC-FT	190	1630	1810	5740	36240	12940	2670	799	204	69	12	17

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

MEAN	3.09	27.4	73.2	127	598	186	61.2	12.2	4.40	1.71	.76	.64
MAX	3.09	27.4	117	161	630	210	77.5	13.0	5.38	2.30	1.32	.98
(WY)	2000	2000	1999	1999	2000	2000	1999	2000	1999	1999	1999	1999
MIN	3.09	27.4	29.5	93.3	566	161	44.9	11.5	3.42	1.13	.20	.29
(WY)	2000	2000	2000	2000	1999	1999	2000	1999	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	30640.25		31418.60			
ANNUAL MEAN	83.9		85.8		85.8	
HIGHEST ANNUAL MEAN					85.8	2000
LOWEST ANNUAL MEAN					85.8	2000
HIGHEST DAILY MEAN	2230	Feb 7	3710	Feb 14	3710	Feb 14 2000
LOWEST DAILY MEAN	.72	Sep 3	.01	Sep 20	.01	Sep 20 2000
ANNUAL SEVEN-DAY MINIMUM	.79	Oct 16	.02	Sep 19	.02	Sep 19 2000
INSTANTANEOUS PEAK FLOW			5140	Feb 13	5140	Feb 13 2000
INSTANTANEOUS PEAK STAGE			66.85	Feb 14	66.85	Feb 14 2000
ANNUAL RUNOFF (AC-FT)	60770		62320		62190	
10 PERCENT EXCEEDS	201		166		229	
50 PERCENT EXCEEDS	10		14		13	
90 PERCENT EXCEEDS	.93		.21		.75	

e Estimated.

11465850 SPRING LAKE AT SANTA ROSA, CA

LOCATION.—Lat 38°27’26", long 122°38’59", Sonoma County, Hydrologic Unit 18010110, 100 ft northwest of spillway, in Santa Rosa.

PERIOD OF RECORD.—October 1997 to current year.

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

REMARKS.—Reservoir is formed by earth-fill dam, capacity, 3,500 acre-ft. Spring Lake is a flood-control reservoir. Water is diverted from Santa Rosa Creek into Spring Lake during flood events beginning in 1965. Gage is for local flood warning and is operated seasonally from Oct. 1 to Apr. 30. Spillway elevation is 307.07 ft. Figures given represent only those days when the elevation was above 291.50 ft. See schematic diagram of Russian River Basin.

NOTE: There were no days during the 2000 water year when the elevation was above 291.50 ft.

11466050 SANTA ROSA CREEK AT MISSION BOULEVARD, AT SANTA ROSA, CA

LOCATION.—Lat 38°27'28", long 122°40'16", Sonoma County, Hydrologic Unit 18010110, at upstream side of bridge on Mission Boulevard, in Santa Rosa.

PERIOD OF RECORD.—November 1997 to current year.

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

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. Gage is for local flood warning and is operated seasonally from Oct. 1 to Apr. 30. See schematic diagram of Russian River Basin.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	216.5	216.1	216.8	216.5	217.8	217.2
2	---	---	---	---	---	---	216.5	216.1	216.7	216.3	217.5	217.2
3	---	---	---	---	---	---	216.6	215.9	217.1	216.5	217.5	216.8
4	---	---	---	---	---	---	216.5	216.0	216.8	216.5	218.0	217.0
5	---	---	---	---	---	---	216.4	215.9	217.1	216.6	218.0	217.4
6	216.2	215.9	---	---	---	---	216.5	216.0	217.0	216.5	217.4	217.1
7	216.3	215.9	---	---	---	---	216.5	215.9	216.8	216.5	217.9	217.0
8	216.2	215.8	---	---	---	---	216.3	216.0	216.7	216.4	218.3	217.5
9	216.2	215.8	---	---	---	---	216.3	216.0	216.6	216.5	218.8	217.8
10	216.1	215.9	---	---	---	---	216.3	216.2	217.2	216.6	218.0	217.6
11	216.1	215.8	---	---	---	---	217.7	216.3	219.0	216.8	217.7	217.1
12	216.1	215.7	---	---	---	---	216.8	216.2	218.9	217.5	217.4	216.9
13	216.1	215.7	---	---	---	---	216.4	216.2	220.8	217.5	217.2	216.8
14	216.1	215.7	---	---	---	---	216.4	216.2	220.7	219.3	217.1	216.8
15	216.0	215.6	---	---	216.9	216.3	216.6	216.3	---	---	217.1	216.6
16	216.2	215.8	---	---	216.9	216.2	217.9	216.5	---	---	216.9	216.7
17	216.1	215.5	---	---	216.9	216.2	216.6	216.4	---	---	216.9	216.5
18	216.2	215.8	---	---	216.8	216.4	217.2	216.5	---	---	216.8	216.4
19	216.2	215.8	---	---	216.8	216.3	216.7	216.5	---	---	216.8	216.4
20	216.1	215.7	---	---	216.7	216.2	216.7	216.4	---	---	216.7	216.4
21	216.2	215.7	---	---	216.8	216.2	216.6	216.5	---	---	216.6	216.3
22	---	---	---	---	216.8	216.2	216.6	216.3	---	---	216.7	216.3
23	---	---	---	---	216.7	216.1	217.2	216.4	---	---	216.6	216.2
24	---	---	---	---	216.7	216.1	218.2	217.2	---	---	216.5	216.2
25	---	---	---	---	216.7	216.0	217.4	216.9	---	---	216.5	216.1
26	---	---	---	---	216.7	215.9	217.0	216.4	---	---	216.5	216.1
27	---	---	---	---	216.7	216.1	216.8	216.3	---	---	---	---
28	---	---	---	---	216.7	216.0	216.7	216.2	---	---	---	---
29	---	---	---	---	216.6	215.9	216.5	215.9	218.4	217.4	---	---
30	---	---	---	---	216.6	216.0	217.4	216.4	---	---	---	---
31	---	---	---	---	216.6	216.0	216.9	216.8	---	---	---	---
MONTH	---	---	---	---	---	---	218.2	215.9	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	216.8	216.4	---	---	---	---	---	---	---	---	---	---
14	216.4	216.2	---	---	---	---	---	---	---	---	---	---
15	216.5	216.3	---	---	---	---	---	---	---	---	---	---
16	217.0	216.3	---	---	---	---	---	---	---	---	---	---
17	217.3	216.5	---	---	---	---	---	---	---	---	---	---
18	216.8	216.2	---	---	---	---	---	---	---	---	---	---
19	216.6	216.1	---	---	---	---	---	---	---	---	---	---
20	216.4	216.1	---	---	---	---	---	---	---	---	---	---
21	216.4	216.0	---	---	---	---	---	---	---	---	---	---
22	216.4	216.1	---	---	---	---	---	---	---	---	---	---
23	216.4	215.9	---	---	---	---	---	---	---	---	---	---
24	216.4	215.9	---	---	---	---	---	---	---	---	---	---
25	216.3	216.0	---	---	---	---	---	---	---	---	---	---
26	216.3	215.8	---	---	---	---	---	---	---	---	---	---
27	216.3	216.0	---	---	---	---	---	---	---	---	---	---
28	216.3	216.0	---	---	---	---	---	---	---	---	---	---
29	216.3	215.9	---	---	---	---	---	---	---	---	---	---
30	216.3	215.9	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11466080 SANTA ROSA CREEK AT ALDERBROOK DRIVE, AT SANTA ROSA, CA

LOCATION.—Lat 38°26'58", long 122°41'50", Sonoma County, Hydrologic Unit 18010110, on upstream side of bridge on Alderbrook Drive, in Santa Rosa.

PERIOD OF RECORD.—October 1997 to current year.

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

REMARKS.—Interruptions in record were due to malfunction of the sensing and (or) recording instruments. Gage is for local flood warning and is operated seasonally from Oct. 1 to Apr. 30. See schematic diagram of Russian River Basin.

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	216.5	216.1	216.8	216.5	217.8	217.2
2	---	---	---	---	---	---	216.5	216.1	216.7	216.3	217.5	217.2
3	---	---	---	---	---	---	216.6	215.9	217.1	216.5	217.5	216.8
4	---	---	---	---	---	---	216.5	216.0	216.8	216.5	218.0	217.0
5	---	---	---	---	---	---	216.4	215.9	217.1	216.6	218.0	217.4
6	216.2	215.9	---	---	---	---	216.5	216.0	217.0	216.5	217.4	217.1
7	216.3	215.9	---	---	---	---	216.5	215.9	216.8	216.5	217.9	217.0
8	216.2	215.8	---	---	---	---	216.3	216.0	216.7	216.4	218.3	217.5
9	216.2	215.8	---	---	---	---	216.3	216.0	216.6	216.5	218.8	217.8
10	216.1	215.9	---	---	---	---	216.3	216.2	217.2	216.6	218.0	217.6
11	216.1	215.8	---	---	---	---	217.7	216.3	219.0	216.8	217.7	217.1
12	216.1	215.7	---	---	---	---	216.8	216.2	218.9	217.5	217.4	216.9
13	216.1	215.7	---	---	---	---	216.4	216.2	220.8	217.5	217.2	216.8
14	216.1	215.7	---	---	---	---	216.4	216.2	220.7	219.3	217.1	216.8
15	216.0	215.6	---	---	216.9	216.3	216.6	216.3	---	---	217.1	216.6
16	216.2	215.8	---	---	216.9	216.2	217.9	216.5	---	---	216.9	216.7
17	216.1	215.5	---	---	216.9	216.2	216.6	216.4	---	---	216.9	216.5
18	216.2	215.8	---	---	216.8	216.4	217.2	216.5	---	---	216.8	216.4
19	216.2	215.8	---	---	216.8	216.3	216.7	216.5	---	---	216.8	216.4
20	216.1	215.7	---	---	216.7	216.2	216.7	216.4	---	---	216.7	216.4
21	216.2	215.7	---	---	216.8	216.2	216.6	216.5	---	---	216.6	216.3
22	---	---	---	---	216.8	216.2	216.6	216.3	---	---	216.7	216.3
23	---	---	---	---	216.7	216.1	217.2	216.4	---	---	216.6	216.2
24	---	---	---	---	216.7	216.1	218.2	217.2	---	---	216.5	216.2
25	---	---	---	---	216.7	216.0	217.4	216.9	---	---	216.5	216.1
26	---	---	---	---	216.7	215.9	217.0	216.4	---	---	216.5	216.1
27	---	---	---	---	216.7	216.1	216.8	216.3	---	---	---	---
28	---	---	---	---	216.7	216.0	216.7	216.2	---	---	---	---
29	---	---	---	---	216.6	215.9	216.5	215.9	218.4	217.4	---	---
30	---	---	---	---	216.6	216.0	217.4	216.4	---	---	---	---
31	---	---	---	---	216.6	216.0	216.9	216.8	---	---	---	---
MONTH	---	---	---	---	---	---	218.2	215.9	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	216.8	216.4	---	---	---	---	---	---	---	---	---	---
14	216.4	216.2	---	---	---	---	---	---	---	---	---	---
15	216.5	216.3	---	---	---	---	---	---	---	---	---	---
16	217.0	216.3	---	---	---	---	---	---	---	---	---	---
17	217.3	216.5	---	---	---	---	---	---	---	---	---	---
18	216.8	216.2	---	---	---	---	---	---	---	---	---	---
19	216.6	216.1	---	---	---	---	---	---	---	---	---	---
20	216.4	216.1	---	---	---	---	---	---	---	---	---	---
21	216.4	216.0	---	---	---	---	---	---	---	---	---	---
22	216.4	216.1	---	---	---	---	---	---	---	---	---	---
23	216.4	215.9	---	---	---	---	---	---	---	---	---	---
24	216.4	215.9	---	---	---	---	---	---	---	---	---	---
25	216.3	216.0	---	---	---	---	---	---	---	---	---	---
26	216.3	215.8	---	---	---	---	---	---	---	---	---	---
27	216.3	216.0	---	---	---	---	---	---	---	---	---	---
28	216.3	216.0	---	---	---	---	---	---	---	---	---	---
29	216.3	215.9	---	---	---	---	---	---	---	---	---	---
30	216.3	215.9	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11466320 SANTA ROSA CREEK AT WILLOWSIDE ROAD, NEAR SANTA ROSA, CA

LOCATION.—Lat 38°26'43", long 122°48'22", in NW 1/4 sec.13, T.7 N., R.9 W., Sonoma County, Hydrologic Unit 18010110, on right bank, upstream side of Willowside Road bridge, 1.6 mi upstream of the confluence of Laguna de Santa Rosa, and 5.4 mi west of Santa Rosa.

DRAINAGE AREA.—77.6 mi^2.

PERIOD OF RECORD.—December 1998 to current year.

GAGE.—Water-stage and dopler-velocity recorder. Datum of gage is sea level.

REMARKS.—Records fair except for estimated daily discharges, which are poor. Backwater conditions from Laguna de Santa Rosa can occur during periods of heavy rainfall. Diversions upstream from station for irrigation of about 5,000 acres. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,190 ft^3/s, Feb. 7, 1999, gage height, 68.94 ft; minimum daily, 3.4 ft^3/s, Aug. 31, 1999.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	2115	6,000	68.83	Feb. 27	0045	3,220	62.73
Feb. 22	2245	3,900	58.89				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	e6.8	51	8.5	108	343	22	15	11	6.3	4.6	6.7
2	4.2	e5.8	20	8.3	75	330	18	18	9.7	5.7	4.6	55
3	4.1	e5.5	15	8.0	105	270	15	16	9.8	5.7	4.6	13
4	4.0	e5.2	12	8.0	76	334	15	14	10	5.3	4.6	6.1
5	4.1	e5.0	11	8.0	145	429	14	13	9.9	5.2	4.6	5.2
6	5.4	e4.8	10	8.1	107	251	12	12	9.0	5.6	4.6	5.0
7	4.8	104	9.6	8.3	65	278	12	49	10	8.0	4.6	5.0
8	4.6	107	9.0	8.6	53	900	12	80	42	7.9	4.5	4.4
9	4.2	24	55	8.6	52	1030	11	22	14	8.7	4.4	4.5
10	4.2	21	22	9.5	189	349	10	17	11	7.7	4.4	5.0
11	4.0	16	13	135	662	256	12	17	10	5.8	4.4	5.1
12	3.9	8.8	11	40	910	199	12	15	9.7	6.0	4.4	4.7
13	3.8	7.2	11	22	3230	162	164	13	8.9	6.5	4.4	4.5
14	3.7	7.8	11	19	2570	138	39	83	8.3	6.6	4.4	4.1
15	4.0	46	9.8	49	903	118	29	118	7.8	6.7	4.4	4.1
16	3.7	110	9.9	317	351	100	110	40	8.0	7.0	4.4	4.8
17	3.5	42	10	34	235	87	365	24	8.5	7.6	4.4	4.8
18	3.9	20	9.3	268	187	76	103	16	9.2	6.9	4.3	4.3
19	4.2	271	8.5	77	161	68	68	15	9.2	6.5	4.3	5.0
20	4.1	39	8.3	53	399	59	52	14	8.4	6.3	4.4	3.7
21	4.2	19	9.1	60	363	53	38	17	7.9	5.6	4.3	5.6
22	4.3	12	8.4	38	1010	47	32	17	7.7	5.0	4.0	7.6
23	4.5	10	7.8	96	1000	43	26	13	8.1	4.8	4.0	7.9
24	4.6	9.1	8.0	794	337	40	22	12	7.7	4.9	4.1	4.7
25	5.0	9.0	8.0	257	276	35	20	12	7.8	5.5	4.2	4.2
26	5.0	8.5	8.0	114	657	32	19	11	7.5	7.0	4.1	4.2
27	208	8.4	8.0	80	1460	32	20	11	7.1	4.6	4.1	3.7
28	e200	8.3	8.0	64	413	35	18	12	7.3	4.6	3.9	4.1
29	e22	16	8.0	55	788	33	17	11	6.4	4.6	4.1	4.5
30	e12	115	8.0	287	---	29	15	10	7.1	4.7	5.0	4.6
31	e8.1	---	8.3	164	---	25	---	10	---	4.7	5.1	---
TOTAL	559.9	1072.2	406.0	3106.9	16887	6181	1322	747	299.0	188.0	136.2	206.1
MEAN	18.1	35.7	13.1	100	582	199	44.1	24.1	9.97	6.06	4.39	6.87
MAX	208	271	55	794	3230	1030	365	118	42	8.7	5.1	55
MIN	3.5	4.8	7.8	8.0	52	25	10	10	6.4	4.6	3.9	3.7
AC-FT	1110	2130	805	6160	33500	12260	2620	1480	593	373	270	409

e Estimated.

11466320 SANTA ROSA CREEK AT WILLOWSIDE ROAD, NEAR SANTA ROSA, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.1	35.7	13.1	113	663	191	76.1	25.0	11.4	6.30	4.53	5.87
MAX	18.1	35.7	13.1	126	748	199	108	25.9	12.9	6.53	4.66	6.87
(WY)	2000	2000	2000	1999	1999	2000	1999	1999	1999	1999	1999	2000
MIN	18.1	35.7	13.1	100	582	183	44.1	24.1	9.97	6.06	4.39	4.87
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	37488.7		31111.3			
ANNUAL MEAN	103		85.0		85.0	
HIGHEST ANNUAL MEAN					85.0	2000
LOWEST ANNUAL MEAN					85.0	2000
HIGHEST DAILY MEAN	4040	Feb 7	3230	Feb 13	4040	Feb 7 1999
LOWEST DAILY MEAN	3.4	Aug 31	3.5	Oct 17	3.4	Aug 31 1999
ANNUAL SEVEN-DAY MINIMUM	3.8	Aug 26	3.8	Oct 12	3.8	Aug 26 1999
INSTANTANEOUS PEAK FLOW			6000	Feb 13	8190	Feb 7 1999
INSTANTANEOUS PEAK STAGE			68.83	Feb 13	68.94	Feb 7 1999
ANNUAL RUNOFF (AC-FT)	74360		61710		61580	
10 PERCENT EXCEEDS	214		202		237	
50 PERCENT EXCEEDS	15		10		14	
90 PERCENT EXCEEDS	4.2		4.3		4.4	

11466500 LAGUNA DE SANTA ROSA NEAR GRATON, CA

LOCATION.—Lat 38°27'10", long 122°50'03", in Molinos Grant, Sonoma County, Hydrologic Unit 18010110, on downstream side of left bank pier of highway bridge, 0.2 mi downstream from Santa Rosa Creek, and 2 mi northeast of Graton.

PERIOD OF RECORD.—February 1940 to September 1949 (contents only), October 1964 to current year.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 31, 1958, at site 75 ft downstream at same datum.

REMARKS.—The laguna is a natural water channel and overflow basin connecting Santa Rosa Creek, Mark West Creek, and other smaller creeks with the Russian River. During floods, directions of flow may be either to or from the Russian River, and the laguna acts as a natural regulator of floods on the lower Russian River. Figures given represent only those days when the elevation was above 55.0 ft. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 74.6 ft, Feb. 18, 1986.

EXTREMES FOR CURRENT YEAR.—Maximum elevation recorded, 64.0 ft, Feb. 14.

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

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e55.1	e56.7	---	---	---	---	---	---
2	---	---	---	---	---	e56.0	---	---	---	---	---	---
3	---	---	---	---	---	55.5	---	---	---	---	---	---
4	---	---	---	---	---	55.8	---	---	---	---	---	---
5	---	---	---	---	---	56.2	---	---	---	---	---	---
6	---	---	---	---	e55.0	55.7	---	---	---	---	---	---
7	---	---	---	---	---	55.7	---	---	---	---	---	---
8	---	---	---	---	---	57.2	---	---	---	---	---	---
9	---	---	---	---	---	58.5	---	---	---	---	---	---
10	---	---	---	---	---	56.9	---	---	---	---	---	---
11	---	---	---	---	e56.4	55.8	---	---	---	---	---	---
12	---	---	---	---	e58.1	55.2	---	---	---	---	---	---
13	---	---	---	---	e63.5	---	---	---	---	---	---	---
14	---	---	---	---	e62.9	---	---	---	---	---	---	---
15	---	---	---	---	e59.6	---	---	---	---	---	---	---
16	---	---	---	---	e57.4	---	---	---	---	---	---	---
17	---	---	---	---	e56.3	---	---	---	---	---	---	---
18	---	---	---	e55.4	e55.5	---	---	---	---	---	---	---
19	---	---	---	e55.4	e55.1	---	---	---	---	---	---	---
20	---	---	---	e55.0	e55.6	---	---	---	---	---	---	---
21	---	---	---	---	e56.4	---	---	---	---	---	---	---
22	---	---	---	---	e57.0	---	---	---	---	---	---	---
23	---	---	---	e55.0	e58.2	---	---	---	---	---	---	---
24	---	---	---	e56.9	e56.8	---	---	---	---	---	---	---
25	---	---	---	e56.3	e56.0	---	---	---	---	---	---	---
26	---	---	---	e55.5	e57.0	---	---	---	---	---	---	---
27	---	---	---	e55.0	e59.2	---	---	---	---	---	---	---
28	---	---	---	---	e57.2	---	---	---	---	---	---	---
29	---	---	---	---	e58.1	---	---	---	---	---	---	---
30	---	---	---	e55.0	---	---	---	---	---	---	---	---
31	---	---	---	e55.3	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated.

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA
(National Stream-Quality Accounting Network Station)

LOCATION.—Lat 38°30'31", long 122°55'36", in NE 1/4 SE 1/4 sec.26, T.8 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on right bank, at downstream side of Hacienda Bridge, 0.1 mi upstream from Hobson Creek, and 3.8 mi east of Guerneville.

DRAINAGE AREA.—1,338 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "at Guerneville."
CHEMICAL DATA: Water years 1951–1995. Published as "at Guerneville" in 1961–65.
BIOLOGICAL DATA: Water years 1975–81.
SPECIFIC CONDUCTANCE: Water years 1973–81.
WATER TEMPERATURE: Water years 1964–81.
SEDIMENT DATA: Water years 1966–95.

REVISED RECORDS.—WSP 1395: Drainage area at former site. WSP 1929: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 20.14 ft above sea level. Prior to Oct. 1, 1954, nonrecording gage at bridge 5.3 mi downstream at datum 8.58 ft lower. Oct. 1, 1954, to Oct. 23, 1974, at site 0.7 mi downstream at datum 2.75 ft lower. Supplementary water-stage recorder 2.1 mi downstream used during periods of low flow, 1948–54.

REMARKS.—Records good including estimated daily discharges. Flow regulated by Lake Mendocino 77 mi upstream, beginning November 1958, and by Lake Sonoma 26 mi upstream, beginning October 1983. Many diversions upstream from station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations), and by diversion for municipal use at Wohler Pumping Plant 4.0 mi upstream beginning in May 1959. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 102,000 ft^3/s, Feb. 18, 1986, gage height, 48.56 ft, from rating curve extended above 57,000 ft^3/s, maximum gage height, 49.7 ft, Dec. 23, 1955, site and datum then in use, from floodmarks; minimum daily discharge, 0.75 ft^3/s, May 6, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	268	1230	446	5040	13900	991	641	315	205	158	204
2	177	235	1070	442	3790	12500	968	535	299	198	157	213
3	180	251	824	438	2930	10300	903	575	295	213	150	233
4	180	266	731	420	2880	7380	864	560	293	204	155	209
5	180	230	657	405	4550	7470	838	552	294	204	166	200
6	187	227	609	397	7740	6670	817	541	307	208	180	181
7	199	275	577	394	4350	5630	796	568	294	218	190	182
8	183	515	553	392	3110	7350	774	617	308	207	209	163
9	191	483	581	390	2530	12000	755	617	312	215	205	177
10	169	433	648	388	2910	10500	736	570	307	194	206	156
11	167	447	727	512	4270	8280	715	542	289	190	204	192
12	158	435	649	1560	11400	6800	699	523	272	190	190	186
13	160	398	603	1160	17400	5520	795	504	268	185	197	177
14	162	372	572	1280	34400	4620	801	531	249	191	180	e140
15	164	385	555	1800	28300	3720	765	715	218	190	164	e138
16	161	524	538	4360	15000	3150	794	749	188	187	158	140
17	161	578	536	3740	13300	2780	3410	784	179	191	152	142
18	163	559	526	3190	11100	2430	2990	856	194	217	151	209
19	173	807	519	4150	8020	2200	1880	632	215	201	160	161
20	184	1160	510	4900	6700	2010	1490	547	236	202	169	148
21	186	857	503	3160	9560	1850	1770	492	240	185	184	157
22	188	672	497	2970	8370	1720	1270	472	225	192	167	180
23	185	573	490	3800	18600	1610	1020	396	221	181	165	203
24	187	528	480	7270	13200	1520	921	396	233	171	167	204
25	192	499	473	6020	9220	1460	859	384	232	186	165	216
26	198	477	468	4340	8380	1370	807	373	205	156	162	210
27	202	461	466	2970	22400	1250	764	362	206	154	164	212
28	311	449	462	2250	17700	1180	732	352	223	165	167	225
29	291	449	458	1820	14300	1120	698	342	221	193	191	213
30	275	753	454	3440	---	1060	663	328	211	168	202	196
31	272	---	451	5100	---	1030	---	324	---	164	206	---
TOTAL	5967	14566	18417	73904	311450	150380	32285	16380	7549	5925	5441	5567
MEAN	192	486	594	2384	10740	4851	1076	528	252	191	176	186
MAX	311	1160	1230	7270	34400	13900	3410	856	315	218	209	233
MIN	158	227	451	388	2530	1030	663	324	179	154	150	138
AC-FT	11840	28890	36530	146600	617800	298300	64040	32490	14970	11750	10790	11040

e Estimated.

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA—Continued
(National Stream-Quality Accounting Network Station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	308	1175	3979	6955	7036	4641	2288	737	312	180	169	184
MAX	2515	9425	17410	25220	26940	23290	11700	2798	1418	350	308	344
(WY)	1963	1974	1956	1995	1998	1983	1982	1983	1998	1998	1961	1961
MIN	25.3	140	116	127	88.2	201	48.2	39.0	22.6	32.0	36.7	35.9
(WY)	1978	1940	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	726874		647831			
ANNUAL MEAN	1991		1770		2310	
HIGHEST ANNUAL MEAN					5898	1983
LOWEST ANNUAL MEAN					88.7	1977
HIGHEST DAILY MEAN	30800	Feb 9	34400	Feb 14	97700	Feb 18 1986
LOWEST DAILY MEAN	142	Jul 13	138	Sep 15	.75	May 6 1977
ANNUAL SEVEN-DAY MINIMUM	159	Jul 9	154	Sep 14	5.9	Jul 29 1977
INSTANTANEOUS PEAK FLOW			37900	Feb 14	102000	Feb 18 1986
INSTANTANEOUS PEAK STAGE			31.89	Feb 14	49.70	Dec 23 1955
ANNUAL RUNOFF (AC-FT)	1442000		1285000		1673000	
10 PERCENT EXCEEDS	6250		4940		5570	
50 PERCENT EXCEEDS	462		444		362	
90 PERCENT EXCEEDS	180		167		140	

11467002 RUSSIAN RIVER AT JOHNSONS BEACH, AT GUERNEVILLE, CA

LOCATION.—Lat 38°30'03", long 122°59'36", in NE 1/4 NW 1/4 sec.32, T.8 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on downstream side of old Highway 116 bridge, 0.1 mi upstream from Pocket Creek, in Guerneville.

DRAINAGE AREA.—1353 mi^2.

PERIOD OF RECORD.—December 1939 to September 1954 published as "at Guerneville" (station 11467000). Oct. 13, 1995, to current year, stage only above 5.96 ft.

GAGE.—Water-stage recorder. Datum of gage is 8.67 ft above sea level.

REMARKS.—Interruptions in record when above 5.73 ft were due to malfunction of the sensing and (or) recording instruments. Stage data for the period June 1 to Sept. 30 are affected by summer recreation dam. Flow regulated by Lake Mendocino, 82 mi upstream, and by Lake Sonoma, 31 mi upstream. Many diversions upstream from station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations 11461500 and 11462000) and by diversion for municipal use. See schematic diagram of Russian River Basin.

EXTREMES FOR PERIOD OUTSIDE OF RECORD.—Maximum elevation, 48.8 ft, Feb. 18, 1986.

EXTREMES FOR PERIOD OF RECORD.—Maximum elevation, 46.87 ft, Feb. 28, 1940.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.68	8.62	---	---	6.45	---	---	---	11.05	10.48	19.22	17.29
2	8.64	8.60	---	---	6.37	---	---	---	10.48	9.24	17.34	16.65
3	8.65	8.61	---	---	---	---	---	---	9.25	8.70	16.67	13.65
4	8.65	8.61	---	---	---	---	---	---	8.83	8.70	13.65	12.42
5	8.65	8.62	---	---	---	---	---	---	13.03	8.67	13.13	12.41
6	8.67	8.62	---	---	---	---	---	---	14.11	11.37	12.85	11.55
7	8.71	8.63	---	---	---	---	---	---	11.37	9.64	11.69	11.08
8	8.70	8.61	---	---	---	---	---	---	9.64	8.73	14.91	11.34
9	8.72	8.62	---	---	---	---	---	---	8.73	8.14	16.91	14.91
10	8.66	8.58	---	---	---	---	---	---	9.66	8.11	16.88	14.31
11	8.65	6.07	---	---	---	---	---	---	12.72	9.32	14.31	13.03
12	6.09	---	---	---	---	---	7.36	---	16.55	12.72	13.13	11.78
13	---	---	---	---	---	---	6.81	5.97	25.20	15.49	11.79	10.86
14	---	---	---	---	---	---	6.97	---	29.61	25.20	10.86	10.18
15	---	---	---	---	---	---	7.38	6.97	29.46	21.27	10.18	9.58
16	---	---	---	---	---	---	10.52	7.38	21.27	16.98	9.60	9.01
17	---	---	---	---	---	---	---	---	17.38	16.81	9.06	8.64
18	---	---	---	---	---	---	---	---	16.81	14.99	8.70	8.28
19	---	---	6.51	---	---	---	---	---	15.01	12.18	8.32	8.09
20	---	---	6.48	6.09	---	---	---	---	12.80	11.73	8.11	7.89
21	---	---	6.10	---	---	---	---	---	15.06	12.78	7.89	7.69
22	---	---	---	---	---	---	---	---	16.63	12.72	7.69	7.53
23	---	---	---	---	---	---	---	---	21.99	16.63	7.53	7.37
24	---	---	---	---	---	---	---	---	19.48	16.11	7.38	7.27
25	---	---	---	---	---	---	---	---	16.11	13.49	7.28	7.17
26	---	---	---	---	---	---	---	---	16.30	12.96	7.18	7.04
27	---	---	---	---	---	---	---	---	24.67	16.30	7.06	6.93
28	---	---	---	---	---	---	8.38	7.65	23.95	17.71	6.95	6.84
29	---	---	---	---	---	---	7.65	7.15	19.28	17.08	6.86	6.74
30	---	---	---	---	---	---	11.33	7.11	---	---	6.77	6.64
31	---	---	---	---	---	---	11.56	10.41	---	---	6.66	6.58
MONTH	---	---	---	---	---	---	---	---	29.61	8.11	19.22	6.58

11467002 RUSSIAN RIVER AT JOHNSONS BEACH, AT GUERNEVILLE, CA—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.59	6.52	6.01	5.95	---	---	8.45	8.36	8.27	8.23	8.28	---
2	6.54	6.50	5.95	5.73	---	---	8.43	8.36	8.27	8.24	---	---
3	6.50	6.34	5.86	5.73	---	---	8.47	8.34	8.24	8.22	---	---
4	6.35	6.27	5.86	5.75	---	---	8.49	8.34	8.25	8.23	---	---
5	6.28	6.23	5.82	5.80	---	---	8.40	8.38	8.30	8.25	---	---
6	6.23	6.18	5.82	5.79	---	---	8.42	8.39	8.35	8.30	---	---
7	6.19	6.12	6.04	5.82	---	---	8.49	8.39	8.39	8.34	---	---
8	6.14	6.06	6.15	6.04	---	---	8.48	8.37	8.47	8.37	---	---
9	6.09	5.99	6.17	6.13	---	---	8.45	8.40	8.47	8.37	---	---
10	6.06	5.87	6.13	5.98	---	---	8.45	8.35	8.45	8.37	---	---
11	5.88	5.87	5.99	5.97	---	---	8.38	8.35	8.45	8.38	---	---
12	6.03	5.87	5.98	5.92	---	---	8.38	8.35	8.42	8.34	---	---
13	6.34	5.87	5.93	5.90	---	---	8.37	8.34	8.41	8.33	---	---
14	6.28	6.20	6.30	5.92	---	---	8.38	8.34	8.41	8.32	8.38	---
15	6.22	6.10	6.80	6.30	8.06	---	8.38	8.35	8.32	8.28	8.36	8.34
16	6.80	6.09	6.82	6.72	8.18	8.06	8.36	8.34	8.28	8.22	8.35	8.33
17	10.87	6.80	7.09	6.71	8.20	8.17	8.37	8.36	8.26	8.18	8.42	8.35
18	10.63	8.49	7.20	6.84	8.28	8.20	8.49	8.37	8.25	8.15	8.62	8.40
19	8.49	7.63	6.84	6.40	8.34	7.27	8.49	8.36	8.27	8.14	8.60	8.47
20	7.67	7.30	6.40	6.24	8.42	7.25	8.43	8.36	8.31	8.15	8.48	8.45
21	8.10	7.62	6.24	6.13	8.43	8.41	8.40	8.30	8.36	8.20	8.50	8.46
22	7.62	6.96	6.19	6.06	8.44	8.36	8.41	8.34	8.24	8.18	8.60	8.50
23	6.97	6.68	6.06	---	8.43	8.37	8.40	8.31	8.20	8.17	8.63	8.57
24	6.68	6.56	---	---	8.46	8.42	8.36	8.27	8.25	8.17	8.65	8.56
25	6.56	6.42	---	---	8.46	8.44	8.42	8.27	8.34	8.17	8.66	8.58
26	6.42	6.31	---	---	8.46	8.25	8.35	8.23	8.31	8.26	8.63	8.57
27	6.31	6.22	---	---	8.48	8.15	8.25	8.23	8.30	8.24	8.64	8.56
28	6.23	6.15	---	---	8.48	8.39	8.32	8.21	8.27	8.23	8.65	8.60
29	6.16	6.08	---	---	8.47	8.39	8.39	8.31	8.31	8.22	8.65	8.56
30	6.09	6.01	---	---	8.46	8.36	8.35	8.26	8.31	8.22	8.61	8.54
31	---	---	---	---	---	---	8.32	8.26	8.28	8.21	---	---
MONTH	10.87	5.87	---	---	---	---	8.49	8.21	8.47	8.14	---	---

11468000 NAVARRO RIVER NEAR NAVARRO, CA

LOCATION.—Lat 39°10'14", long 123°40'01", in SE 1/4 sec.7, T.15 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on left bank, 2.8 mi downstream from North Fork, 5.3 mi upstream from mouth, and 6.7 mi west of Navarro.

DRAINAGE AREA.—303 mi^2.

PERIOD OF RECORD.—October 1950 to current year.

WATER-DISCHARGE RECORDS

REVISED RECORDS.—WSP 1445: 1954(M). WSP 1929: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 4.79 ft above sea level. Prior to Oct. 1, 1998, at site 0.1 mi downstream at datum 2.00 ft lower. Prior to Jan. 9, 1995, at current datum. Prior to Oct. 1, 1969, at site 0.1 mi upstream at datum 0.14 ft lower.

REMARKS.—Records good. Minor diversion upstream from station at discharges above 200 ft^3/s for irrigation.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 64,500 ft^3/s, Dec. 22, 1955, gage height, 40.60 ft, site and datum then in use, from rating curve extended above 19,000 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.23 ft^3/s, July 13, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1937 reached a stage of 38.2 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 7,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1230	14,600	24.64				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	19	600	50	1110	2920	196	132	59	26	14	9.6
2	9.4	17	370	51	841	2260	187	130	57	26	14	11
3	9.8	17	288	50	688	1710	179	125	55	25	13	12
4	10	16	210	51	802	1370	169	118	54	27	12	13
5	11	17	164	55	2410	1470	164	114	53	26	12	12
6	12	17	134	53	2830	1250	159	111	53	26	11	13
7	12	21	118	50	1660	1090	153	117	52	25	11	9.3
8	11	66	106	49	992	1560	147	135	62	25	11	7.8
9	11	84	207	48	721	2130	145	129	65	24	11	6.6
10	10	94	361	49	636	1880	140	117	58	24	10	6.5
11	10	304	251	654	736	1660	136	115	52	24	9.7	7.0
12	11	148	191	888	2330	1340	136	105	50	22	8.9	7.6
13	11	77	163	433	3820	1120	150	100	49	22	8.5	7.2
14	9.8	52	139	799	10200	938	151	100	48	22	8.4	7.0
15	11	48	120	1420	5350	797	143	136	44	22	7.9	6.9
16	9.9	192	105	2990	3190	683	167	154	42	22	8.3	6.9
17	9.7	552	96	1620	2260	589	1180	133	40	22	7.9	7.0
18	9.4	207	89	1910	1630	520	621	113	39	22	8.1	7.0
19	9.3	277	84	1970	1300	469	400	102	38	22	8.0	7.6
20	9.4	609	79	2300	1140	429	315	94	38	21	8.1	7.6
21	10	288	75	1480	1470	395	268	90	37	20	7.7	6.7
22	10	177	70	1380	1870	365	239	86	35	19	7.5	6.7
23	10	128	65	1070	4410	337	215	81	33	18	8.5	6.3
24	10	101	61	1420	2620	315	194	77	32	18	8.4	7.4
25	10	86	60	1300	1930	295	181	73	32	19	8.1	7.6
26	19	76	57	1040	1710	275	171	70	32	18	7.9	7.7
27	15	69	56	754	5200	259	161	67	31	17	7.9	7.4
28	37	64	54	585	4340	247	156	66	30	17	7.5	7.4
29	48	65	52	472	3870	233	147	64	29	16	7.2	7.1
30	29	354	51	898	---	219	138	61	27	16	7.8	7.2
31	21	---	50	1160	---	207	---	59	---	15	8.5	---
TOTAL	425.3	4242	4526	27049	72066	29332	6908	3174	1326	668	289.8	244.1
MEAN	13.7	141	146	873	2485	946	230	102	44.2	21.5	9.35	8.14
MAX	48	609	600	2990	10200	2920	1180	154	65	27	14	13
MIN	9.3	16	50	48	636	207	136	59	27	15	7.2	6.3
AC-FT	844	8410	8980	53650	142900	58180	13700	6300	2630	1320	575	484

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	39.3	269	957	1712	1526	1084	490	140	54.8	21.5	11.6	10.3
MAX	367	2033	4396	6496	5546	4280	2517	499	261	74.0	31.7	32.6
(WY)	1958	1974	1965	1995	1998	1983	1982	1983	1998	1998	1998	1957
MIN	2.95	9.06	18.5	24.0	58.6	69.8	34.2	14.1	4.23	.62	.67	1.33
(WY)	1995	1991	1977	1991	1977	1988	1977	1977	1977	1977	1977	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	192497.8		150250.2			
ANNUAL MEAN	527		411		522	
HIGHEST ANNUAL MEAN					1310	1983
LOWEST ANNUAL MEAN					25.0	1977
HIGHEST DAILY MEAN	10200	Feb 9	10200	Feb 14	45100	Jan 16 1974
LOWEST DAILY MEAN	7.7	Sep 11	6.3	Sep 23	.23	Jul 13 1977
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 11	7.0	Sep 9	.28	Jul 8 1977
INSTANTANEOUS PEAK FLOW			14600	Feb 14	64500	Dec 22 1955
INSTANTANEOUS PEAK STAGE			24.64	Feb 14	40.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	381800		298000		378400	
10 PERCENT EXCEEDS	1590		1370		1250	
50 PERCENT EXCEEDS	82		64		61	
90 PERCENT EXCEEDS	10		8.2		7.8	

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1959 to current year (storm season only).
CHEMICAL ANALYSES: Water years 1959–66, 1973–79.
WATER TEMPERATURE: Water years 1966 to February 1979, January 1999 to current year (storm season only).
SEDIMENT DATA: Water years October 1998 to current year (storm season only).

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1965 to February 1979, January 1999 to current year (storm season only).
SUSPENDED-SEDIMENT DISCHARGE: October 1998 to current year (storm season only).

REMARKS.—Zero bed-load discharge observed at flows less than 9.70 ft^3/s.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 26.5°C, July 8, 1976; minimum recorded, 3.0°C, Jan. 2, 1976.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,030 mg/L, Feb. 14, 2000; minimum daily mean, 1 mg/L, many days during 1999.
SEDIMENT LOAD: Maximum daily, 59,400 tons, Feb. 14, 2000; minimum daily, 0.04 ton, many days during 1999.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION (storm season only): Maximum daily mean, 2,030 mg/L, Feb. 14; minimum daily mean, 1 mg/L, Dec. 31, Jan. 1, and 2.
SEDIMENT LOAD (storm season only): Maximum daily, 59,400 tons, Feb. 14; minimum daily, 0.05 ton, Oct. 1, 2, and 17.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
DEC								
03...	1425	272	9.5	12	8.8	--	--	--
JAN								
14...	1440	869	5.5	90	211	--	--	--
FEB								
05...	1655	4450	11.0	2050	24600	22	26	34
13...	1705	4980	11.0	713	9590	--	--	--
15...	1045	5260	11.0	617	8760	--	--	--
15...	1535	4660	12.0	463	5820	--	--	--
23...	1145	4090	10.0	432	4770	--	--	--
27...	1225	5270	11.0	798	11400	--	--	--
MAR								
08...	0955	1480	9.0	156	623	--	--	--
12...	1035	1350	10.0	70	255	--	--	--
17...	1500	577	12.0	21	33	--	--	--
APR								
18...	1500	561	14.0	30	45	--	--	--
MAY								
18...	1400	112	17.0	2	.60	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
DEC								
03...	--	--	62	--	--	--	--	--
JAN								
14...	--	--	68	69	80	100	--	--
FEB								
05...	48	61	76	79	89	98	100	--
13...	--	--	74	81	91	99	100	--
15...	--	--	64	66	76	84	86	100
15...	--	--	68	80	92	100	--	--
23...	--	--	70	82	94	100	--	--
27...	--	--	67	75	82	88	95	100
MAR								
08...	--	--	71	--	--	--	--	--
12...	--	--	51	--	--	--	--	--
17...	--	--	69	--	--	--	--	--
APR								
18...	--	--	76	88	97	100	--	--
MAY								
18...	--	--	82	--	--	--	--	--

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAMPLING POINTS (COUNT) (00063)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
OCT								
22...	1350	1	9.9	11.5	--	1	6	34
22...	1351	1	9.9	11.5	--	1	4	12
22...	1352	1	9.9	11.5	1	1	4	9
22...	1353	1	9.9	11.5	1	2	6	16
22...	1354	1	9.9	11.5	--	1	2	12
22...	1355	1	9.9	11.5	--	1	2	10
22...	1356	1	9.9	11.5	--	1	3	12
22...	1357	1	9.9	11.5	--	1	3	12
22...	1358	1	10	11.5	--	--	2	12
22...	1359	1	10	11.5	--	--	2	11
22...	1400	1	10	11.5	--	--	3	14
22...	1401	1	10	11.5	--	--	3	17
22...	1402	1	10	11.5	--	--	2	14
22...	1403	1	10	11.5	--	1	4	16
22...	1404	1	10	11.5	--	--	3	14
22...	1405	1	10	11.5	--	1	4	16
22...	1406	1	10	11.5	--	4	44	96
22...	1407	1	10	11.5	4	22	90	100
MAY								
18...	1215	1	113	17.0	--	1	3	8
18...	1218	1	113	17.0	--	--	1	3
18...	1330	1	113	17.0	--	1	3	16
18...	1338	1	113	17.0	--	1	3	14
18...	1342	1	113	17.0	--	--	1	8
18...	1344	1	113	17.0	--	--	--	--
18...	1345	1	113	17.0	--	1	6	21
18...	1347	1	113	17.0	7	27	86	99

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)	BED MAT. SIEVE DIAM. % FINER THAN 128 MM (80175)
OCT								
22...	40	44	56	81	95	100	--	--
22...	14	16	23	33	46	70	100	--
22...	10	13	25	41	60	74	100	--
22...	18	26	40	55	64	76	100	--
22...	26	33	37	44	59	87	100	--
22...	15	18	22	28	40	57	62	100
22...	16	19	25	34	53	75	100	--
22...	18	21	26	36	53	70	100	--
22...	22	27	35	49	68	92	100	--
22...	18	23	33	43	56	81	100	--
22...	20	24	31	41	58	87	100	--
22...	30	37	47	58	76	90	100	--
22...	28	32	42	57	73	93	100	--
22...	30	35	43	54	71	93	100	--
22...	21	28	39	56	78	98	100	--
22...	21	25	33	45	67	100	--	--
22...	97	97	98	100	--	--	--	--
22...	--	--	--	--	--	--	--	--
MAY								
18...	10	15	29	52	73	81	100	--
18...	3	4	5	8	23	65	100	--
18...	29	33	44	61	88	100	--	--
18...	31	41	51	64	81	100	--	--
18...	14	20	30	45	72	100	--	--
18...	1	2	7	24	57	82	100	--
18...	30	36	48	66	84	85	100	--
18...	100	--	--	--	--	--	--	--

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
14...	1600	1000	1100	.250	0	1545	1615	30	5.0
FEB									
15...	1655	1000	1100	.250	0	1640	1710	30	5.0
APR									
18...	1600	1000	1100	.250	0	1550	1615	30	4.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
JAN									
14...	1	19	19	7.00	895	5.5	1.27	122	2
FEB									
15...	1	19	19	2.00	4500	11.0	4.41	419	3
APR									
18...	1	22	22	2.00	541	14.0	.91	82	4

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
14...	44	76	89	96	99	99	100	--
FEB								
15...	30	46	55	65	75	86	95	100
APR								
18...	61	82	92	98	100	--	--	--

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	18.0
2	---	---	---	---	---	11.0	---	---	---	---	---	---
3	---	---	9.5	---	---	11.0	---	---	---	---	---	---
4	---	---	---	---	---	11.0	---	---	---	---	---	---
5	---	---	---	---	12.0	11.0	---	---	---	---	---	---
6	---	---	---	---	10.0	10.0	---	---	---	---	---	---
7	---	14.0	---	---	---	10.0	---	---	---	---	---	---
8	17.0	13.0	---	---	---	9.0	---	---	---	---	---	---
9	---	---	---	---	11.5	9.0	---	---	---	---	---	---
10	---	13.0	---	---	11.5	10.0	---	---	---	---	---	---
11	---	13.5	---	---	11.5	11.0	---	---	---	---	---	---
12	---	---	---	---	10.5	10.0	15.0	---	---	---	---	---
13	---	---	---	---	11.0	---	15.0	---	---	---	---	---
14	---	---	---	5.5	---	---	---	---	---	---	---	---
15	---	14.0	---	---	11.0	---	---	---	---	---	---	---
16	---	14.0	---	---	11.0	12.5	---	---	---	---	---	---
17	---	10.5	---	---	---	12.0	---	---	---	---	---	---
18	---	11.5	---	---	10.5	---	14.0	17.0	---	---	---	---
19	---	---	---	---	---	---	---	---	21.5	---	---	---
20	---	---	---	---	11.0	---	---	---	---	---	---	---
21	---	---	---	---	11.0	---	---	---	---	---	---	---
22	11.5	---	---	---	11.0	---	---	---	---	---	---	---
23	---	---	---	---	10.0	---	---	---	---	---	---	---
24	---	---	---	---	9.5	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	11.0	---	---	---	---	---	---	---
27	---	---	---	---	11.0	---	---	---	---	---	---	---
28	---	---	---	9.5	11.0	---	---	---	---	---	---	---
29	---	---	6.0	---	11.0	---	---	---	---	---	---	---
30	---	---	---	9.5	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	9.6	2	.05	19	4	.19	600	163	272
2	9.4	2	.05	17	4	.16	370	44	45
3	9.8	2	.06	17	3	.14	288	14	11
4	10	2	.06	16	3	.13	210	10	5.7
5	11	2	.07	17	3	.12	164	8	3.6
6	12	3	.08	17	2	.11	134	6	2.1
7	12	3	.09	21	2	.12	118	4	1.3
8	11	3	.09	66	8	1.8	106	4	1.2
9	11	3	.09	84	10	2.3	207	13	9.4
10	10	3	.08	94	7	2.4	361	33	32
11	10	3	.08	304	44	37	251	22	15
12	11	3	.08	148	11	4.7	191	14	7.4
13	11	3	.08	77	6	1.3	163	11	4.7
14	9.8	2	.07	52	4	.53	139	8	3.2
15	11	2	.07	48	3	.37	120	7	2.1
16	9.9	2	.06	192	43	51	105	5	1.4
17	9.7	2	.05	552	138	254	96	4	1.0
18	9.4	2	.06	207	17	10	89	4	.85
19	9.3	2	.06	277	63	143	84	3	.68
20	9.4	3	.07	609	173	335	79	2	.53
21	10	3	.08	288	44	36	75	2	.40
22	10	3	.09	177	20	9.8	70	2	.36
23	10	4	.11	128	11	3.9	65	2	.33
24	10	4	.11	101	9	2.4	61	2	.32
25	10	4	.11	86	8	1.9	60	2	.31
26	19	3	.16	76	7	1.5	57	2	.29
27	15	2	.07	69	7	1.2	56	2	.27
28	37	5	.51	64	6	.96	54	2	.25
29	48	6	.78	65	5	.86	52	2	.23
30	29	5	.35	354	73	101	51	2	.21
31	21	4	.23	---	---	---	50	1	.19
TOTAL	425.3	---	4.00	4242	---	1003.89	4526	---	423.32
		JANUARY			FEBRUARY			MARCH	
1	50	1	.18	1110	100	303	2920	289	2310
2	51	1	.19	841	67	154	2260	153	946
3	50	2	.20	688	34	63	1710	101	470
4	51	2	.22	802	59	129	1370	76	282
5	55	2	.25	2410	830	9480	1470	110	442
6	53	2	.25	2830	415	3540	1250	63	214
7	50	2	.25	1660	112	527	1090	51	150
8	49	2	.25	992	57	156	1560	172	755
9	48	2	.24	721	44	86	2130	257	1480
10	49	2	.29	636	44	76	1880	134	685
11	654	50	173	736	83	228	1660	105	473
12	888	56	154	2330	249	1580	1340	71	260
13	433	23	27	3820	625	7170	1120	56	170
14	799	91	215	10200	2030	59400	938	42	107
15	1420	202	789	5350	637	9920	797	33	71
16	2990	488	4450	3190	303	2650	683	27	50
17	1620	225	1050	2260	178	1100	589	22	35
18	1910	285	1690	1630	92	410	520	19	27
19	1970	272	1530	1300	51	179	469	17	21
20	2300	259	1680	1140	44	137	429	14	16
21	1480	167	681	1470	104	419	395	12	13
22	1380	212	830	1870	155	1500	365	11	11
23	1070	158	466	4410	506	6670	337	10	8.7
24	1420	231	897	2620	190	1370	315	8	7.2
25	1300	187	657	1930	109	576	295	7	5.9
26	1040	118	339	1710	103	493	275	7	5.3
27	754	59	122	5200	700	10000	259	7	4.8
28	585	35	56	4340	369	4490	247	7	4.5
29	472	26	33	3870	396	4290	233	6	4.1
30	898	81	290	---	---	---	219	6	3.8
31	1160	77	246	---	---	---	207	6	3.5
TOTAL	27049	---	16377.32	72066	---	127096	29332	---	9035.8

11468000 NAVARRO RIVER NEAR NAVARRO, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL	
1	196	6	3.3
2	187	6	3.1
3	179	6	2.8
4	169	6	2.6
5	164	5	2.4
6	159	5	2.2
7	153	5	2.0
8	147	5	1.9
9	145	4	1.8
10	140	4	1.6
11	136	4	1.5
12	136	4	1.5
13	150	5	2.0
14	151	5	2.1
15	143	5	1.9
16	167	8	3.7
17	1180	68	242
18	621	33	57
19	400	19	21
20	315	12	11
21	268	9	6.5
22	239	7	4.4
23	215	6	3.2
24	194	5	2.6
25	181	5	2.4
26	171	5	2.2
27	161	5	2.0
28	156	4	1.9
29	147	4	1.7
30	138	4	1.6
31	---	---	---
TOTAL	6908	---	395.9
PERIOD	144548.3		154336.23

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	425.30	4.00	0	4
NOVEMBER	4242.00	1003.89	37	1040
DECEMBER	4526.00	423.32	25	448
JANUARY 2000	27049.00	16377.32	3260	19600
FEBRUARY	72066.00	127096.00	6960	134000
MARCH	29332.00	9035.80	3660	12700
APRIL	6908.00	395.90	756	1150
PERIOD	144548.30	154336.23	14698	168942

11468500 NOYO RIVER NEAR FORT BRAGG, CA

LOCATION.—Lat 39°25'42", long 123°44'12", in NE 1/4 sec.15, T.18 N., R.17 W., Mendocino County, Hydrologic Unit 18010108, on right bank, 0.7 mi downstream from South Fork, and 3.5 mi east of Fort Bragg.

DRAINAGE AREA.—106 mi^2.

PERIOD OF RECORD.—August 1951 to current year.

REVISED RECORDS.—WSP 1929: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 11.73 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 26,600 ft^3/s, Mar. 29, 1974, gage height, 27.14 ft, from rating curve extended above 4,500 ft^3/s on basis of slope-conveyance study; minimum daily, 0.79 ft^3/s, Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,400 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1130	3,920	14.35				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	11	363	27	524	1220	88	60	e36	e20	e13	7.4
2	3.8	9.7	255	28	469	888	85	61	e35	e19	e12	7.8
3	3.6	7.6	201	27	e399	670	81	60	e34	e18	e12	7.5
4	3.5	6.6	153	29	e333	550	77	57	e33	e19	e11	7.2
5	3.5	4.8	116	35	407	570	75	54	e34	e20	e10	6.8
6	4.0	4.0	88	33	663	517	73	52	e34	e19	e9.7	5.9
7	4.4	4.8	77	31	565	466	71	52	e36	e20	e9.7	5.5
8	5.1	24	64	29	445	580	68	72	e41	e19	e9.7	5.4
9	5.2	21	131	29	356	e685	67	66	e39	e19	e9.7	5.4
10	4.6	65	195	29	303	e600	64	62	e37	e19	e9.0	5.0
11	4.4	84	168	461	276	e540	62	61	e35	e19	e8.8	5.1
12	4.2	41	137	521	567	e482	61	56	e34	e18	e8.5	5.1
13	4.4	26	123	377	1160	e410	69	53	e34	e18	e8.0	5.0
14	4.5	18	100	531	3080	e371	68	53	e34	e18	e7.5	4.8
15	4.8	20	83	825	1880	e323	64	63	e33	e17	e7.4	4.8
16	4.6	70	72	1100	1080	301	89	95	e32	e17	e7.3	4.8
17	4.8	121	64	814	743	260	309	80	e31	e17	e7.2	5.1
18	4.8	60	59	662	556	236	244	70	e30	e17	7.2	5.5
19	4.9	78	53	658	449	217	181	63	e30	e17	7.0	5.1
20	4.9	167	49	857	389	196	145	58	e29	e17	7.4	4.7
21	5.0	141	46	672	390	179	122	54	e29	e16	7.5	4.9
22	3.9	89	42	533	578	163	109	50	e27	e16	7.6	5.1
23	3.7	63	38	466	1430	150	96	47	e26	e15	7.9	5.1
24	3.5	49	35	442	969	139	87	46	e25	e16	7.9	5.1
25	3.4	41	34	516	705	132	81	44	e24	e17	8.0	4.8
26	3.2	36	33	531	753	123	77	e43	e24	e16	8.1	5.0
27	5.2	33	32	450	1940	115	72	e42	e23	e15	7.2	5.1
28	57	30	30	359	1810	110	71	e40	e22	e14	6.9	5.1
29	30	37	29	284	1530	105	67	e39	e22	e14	7.0	5.1
30	17	217	29	361	---	97	62	e38	e21	e14	6.6	5.3
31	13	---	28	493	---	92	---	e39	---	e13	6.6	---
TOTAL	232.8	1579.5	2927	12210	24749	11487	2885	1730	924	533	263.4	164.5
MEAN	7.51	52.7	94.4	394	853	371	96.2	55.8	30.8	17.2	8.50	5.48
MAX	57	217	363	1100	3080	1220	309	95	41	20	13	7.8
MIN	3.2	4.0	28	27	276	92	61	38	21	13	6.6	4.7
AC-FT	462	3130	5810	24220	49090	22780	5720	3430	1830	1060	522	326

e Estimated.

11468500 NOYO RIVER NEAR FORT BRAGG, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.6	115	398	668	571	453	213	78.2	35.2	14.6	8.05	6.50
MAX	166	750	2293	1890	2114	1406	877	377	170	32.0	17.7	12.7
(WY)	1963	1974	1965	1953	1958	1983	1963	1990	1993	1953	1953	1983
MIN	2.97	5.29	9.25	16.6	18.1	32.4	11.7	9.50	3.88	1.90	1.35	2.16
(WY)	1979	1960	1977	1977	1977	1988	1977	1977	1977	1977	1977	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1952 - 2000	
ANNUAL TOTAL	88505.3		59685.2			
ANNUAL MEAN	242		163		213	
HIGHEST ANNUAL MEAN					484	1983
LOWEST ANNUAL MEAN					10.9	1977
HIGHEST DAILY MEAN	4300	Feb 7	3080	Feb 14	20500	Dec 22 1964
LOWEST DAILY MEAN	3.2	Oct 26	3.2	Oct 26	.79	Sep 8 1977
ANNUAL SEVEN-DAY MINIMUM	3.8	Sep 30	3.8	Oct 1	1.0	Aug 16 1977
INSTANTANEOUS PEAK FLOW			3920	Feb 14	26600	Mar 29 1974
INSTANTANEOUS PEAK STAGE			14.35	Feb 14	27.14	Mar 29 1974
ANNUAL RUNOFF (AC-FT)	175600		118400		154700	
10 PERCENT EXCEEDS	718		526		536	
50 PERCENT EXCEEDS	43		37		33	
90 PERCENT EXCEEDS	5.3		5.1		5.3	

11469000 MATTOLE RIVER NEAR PETROLIA, CA

LOCATION.—Lat 40°18'48", long 124°16'56", in SE 1/4 NW 1/4 sec.10, T.2 S., R.2 W., Humboldt County, Hydrologic Unit 18010107, on downstream side of bridge, on left bank, 0.2 mi downstream from Mill Creek, 0.8 mi south of Petrolia, and 0.6 mi upstream from North Fork.

DRAINAGE AREA.—245 mi^2.

PERIOD OF RECORD.—October 1911 to December 1913, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1285: 1912–13. WSP 1929: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 49.41 ft above sea level. November 1911 to December 1913, nonrecording gages at several sites upstream within 0.3 mi of present site at various datums. Dec. 11, 1950, to July 14, 1955, at site 0.3 mi upstream at datum 7.48 ft higher. July 15, 1955, to Oct. 26, 1967, at site 0.4 mi downstream at different datum. Oct. 27, 1967, to Oct. 30, 1996, at site 1.1 mi upstream at datum 7.00 ft higher.

REMARKS.—Records poor. Diversions for irrigation of about 350 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 90,400 ft^3/s, Dec. 22, 1955, gage height, 36.60 ft, site and datum then in use, from rating curve extended above 26,000 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 17 ft^3/s, Sept. 5, 15, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	1200	22,600	22.25	Feb. 27	0200	15,500	20.25
Feb. 14	0645	27,900	23.49				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	66	3100	288	4610	5960	e627	416	179	72	40	27
2	20	64	2270	301	4280	5010	e607	425	174	72	39	30
3	21	61	1840	295	3810	4270	e585	404	170	71	38	30
4	21	59	1310	317	3660	3710	e556	384	166	70	38	32
5	22	59	994	329	5090	3320	e548	368	163	70	37	33
6	24	59	790	297	4920	2830	e527	357	158	72	36	30
7	25	63	799	280	4050	2590	e505	371	155	73	36	28
8	25	351	723	266	3430	2790	e494	556	175	72	35	27
9	24	258	1480	235	3050	3380	e484	557	173	69	35	25
10	23	2260	1620	373	2860	3380	e475	523	163	66	34	25
11	22	1310	1280	8920	2980	3500	e463	508	148	63	34	24
12	21	857	1080	4200	4350	3000	e462	460	142	61	34	24
13	20	415	e1420	4420	5540	2730	e573	427	137	59	33	23
14	20	309	e1160	16500	19200	2370	e505	414	142	57	33	24
15	20	322	994	10100	8980	1950	e460	414	137	55	32	25
16	19	1650	872	10000	5500	1760	e900	394	124	54	30	26
17	19	1690	786	6350	4230	1560	e2040	361	115	55	29	25
18	19	934	697	4540	3640	1420	e1090	335	115	55	29	24
19	19	1840	614	4870	3250	1320	887	313	112	54	29	22
20	19	2130	560	6220	2880	1230	763	306	110	52	29	22
21	19	1340	518	4960	2630	1140	695	293	108	50	28	21
22	19	846	482	4260	4150	1070	643	274	100	47	28	20
23	19	667	448	3870	5470	995	590	261	98	46	28	20
24	19	558	423	4680	4590	932	548	243	95	45	28	20
25	20	459	401	6110	4040	892	527	226	93	41	27	20
26	21	399	376	5170	7610	841	504	223	92	39	27	20
27	71	365	347	4300	13800	799	496	220	89	e52	27	21
28	612	325	322	3620	8920	755	485	219	85	45	27	20
29	231	868	304	3190	7700	e717	454	207	81	43	26	19
30	112	2890	291	3720	---	e684	428	194	76	42	26	19
31	77	---	282	4090	---	e651	---	186	---	42	26	---
TOTAL	1643	23474	28583	127071	159220	67556	18921	10839	3875	1764	978	726
MEAN	53.0	782	922	4099	5490	2179	631	350	129	56.9	31.5	24.2
MAX	612	2890	3100	16500	19200	5960	2040	557	179	73	40	33
MIN	19	59	282	235	2630	651	428	186	76	39	26	19
AC-FT	3260	46560	56690	252000	315800	134000	37530	21500	7690	3500	1940	1440

e Estimated.

11469000 MATTOLE RIVER NEAR PETROLIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	226	1413	2887	3639	3152	2305	1202	544	213	82.6	50.3	60.0
MAX	1900	7159	8340	8928	10710	7929	5225	1842	1058	191	164	237
(WY)	1951	1974	1956	1970	1958	1983	1963	1960	1993	1993	1983	1977
MIN	23.8	41.8	39.7	135	243	187	166	151	68.9	31.3	22.9	22.0
(WY)	1988	1960	1977	1977	1977	1988	1988	1970	1977	1977	1977	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1912 - 2000	
ANNUAL TOTAL	450382		444650			
ANNUAL MEAN	1234		1215		1307	
HIGHEST ANNUAL MEAN					2642	1983
LOWEST ANNUAL MEAN					157	1977
HIGHEST DAILY MEAN	14800	Feb 7	19200	Feb 14	55200	Dec 22 1964
LOWEST DAILY MEAN	19	Oct 16	19	Oct 16	17	Sep 5 1977
ANNUAL SEVEN-DAY MINIMUM	19	Oct 16	19	Oct 16	17	Sep 5 1977
INSTANTANEOUS PEAK FLOW			27900	Feb 14	90400	Dec 22 1955
INSTANTANEOUS PEAK STAGE			23.49	Feb 14	36.60	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	893300		882000		947000	
10 PERCENT EXCEEDS	3830		4110		3400	
50 PERCENT EXCEEDS	280		311		277	
90 PERCENT EXCEEDS	24		24		36	

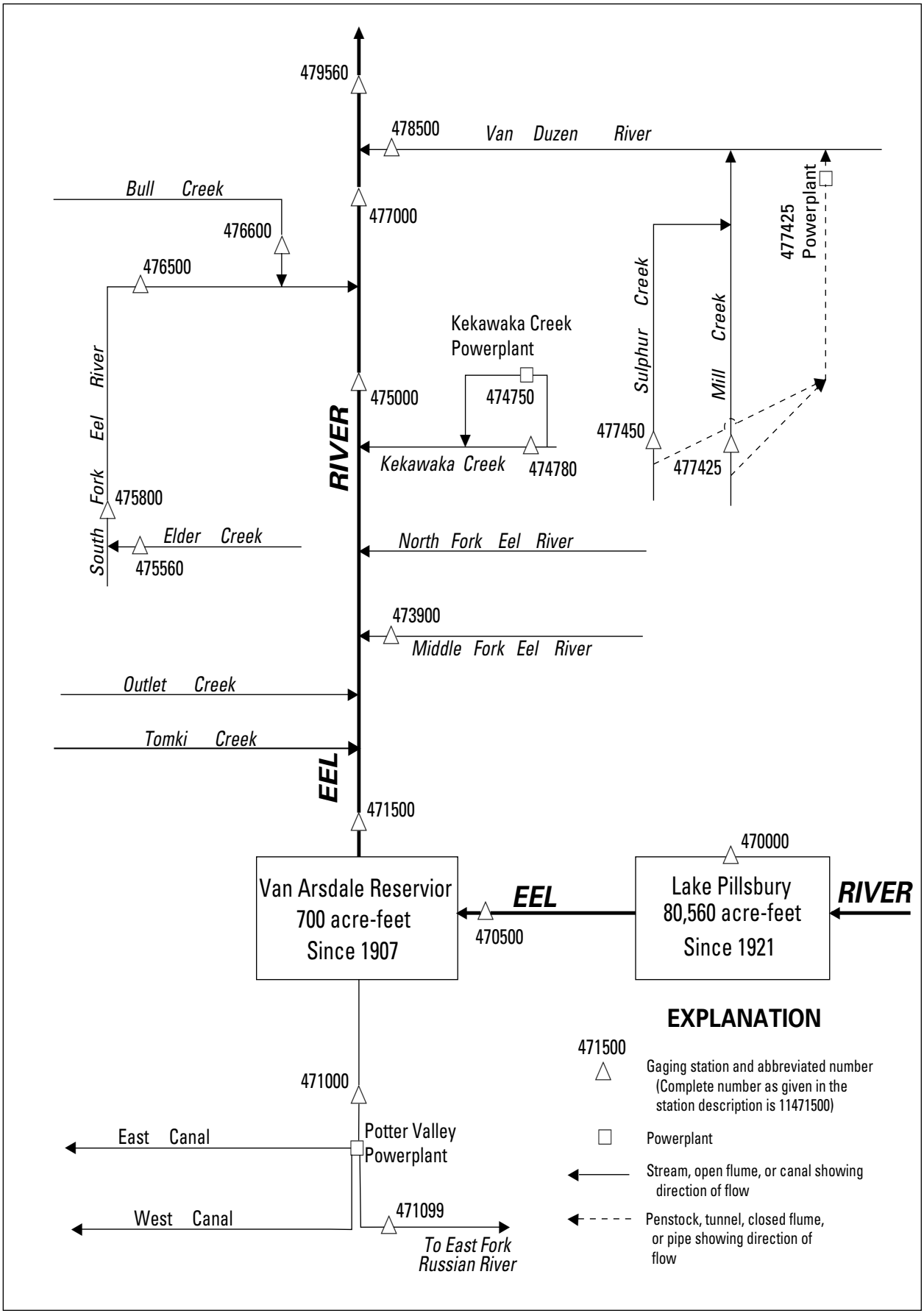

Figure 23. Diversions and storage in Eel River Basin.

11470000 LAKE PILLSBURY NEAR POTTER VALLEY, CA

LOCATION.—Lat 39°24'30", long 122°57'30", on line between secs.14 and 23, T.18 N., R.10 W., Lake County, Hydrologic Unit 18010103, Mendocino National Forest, at Scott Dam, near right bank of Eel River, 0.3 mi downstream from Rice Fork, and 10.2 mi northeast of town of Potter Valley.

DRAINAGE AREA.—289 mi^2.

PERIOD OF RECORD.—October 1922 to September 1928 (daily gage heights only), October 1928 to current year. Monthend contents only for some periods, published in WSP 1315-B. Prior to October 1953, published as "at Hullville."

GAGE.—Water-stage recorder and nonrecording gage. Datum of gage is 81.7 ft below sea level (river-profile survey). Prior to Jan. 26, 1950, nonrecording gage at same site and datum.

REMARKS.—Reservoir is formed by concrete overflow-type dam; storage began in December 1921. Beginning Oct. 1, 1985, capacity based on 1984 resurvey. Usable capacity, 80,556 acre-ft, between gage heights, 1,822.4 ft, sill of outlet gate, and 1,910.0 ft, top of spillway gates; dead storage, 87 acre-ft. Water is released down Eel River to Van Arsdale Reservoir, most of which is diverted through tunnel to Potter Valley Powerplant (station 11477100); part is then used for irrigation and remainder flows into East Fork Russian River. Records given, including extremes, represent total contents at 2400 hours. See schematic diagram of Eel River Basin.

COOPERATION.—Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 95,600 acre-ft, May 13, 16, 1925, gage height, 1,910.8 ft; maximum gage height, 1,911.84 ft, Dec. 22, 1964, from floodmarks; minimum contents, 10 acre-ft, Dec. 9, 10, 1931, gage height, 1,822.5 ft.

Capacity table (elevation, in feet, and contents in acre-feet)
(Based on table provided by Pacific Gas & Electric Co., dated April 1984)

1,822.4	87	1,835	1,371	1,855	7,831	1,875	22,451	1,895	50,179
1,824	153	1,840	2,463	1,860	10,456	1,880	28,071	1,900	59,469
1,827	333	1,845	3,391	1,865	13,701	1,885	34,474	1,905	69,675
1,830	626	1,850	5,710	1,870	17,664	1,890	41,811	1,910	80,643

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46900	34700	30100	22800	62100	62700	64500	79200	78900	71900	63800	54700
2	46900	34300	30200	22700	61700	62400	65000	79300	78700	71600	63500	54400
3	46900	33800	30100	22500	61400	62000	65500	79300	78500	71300	63300	54100
4	46900	33400	29900	22400	61200	62200	66000	79300	78300	71000	63000	53900
5	46900	32900	29600	22200	62600	62700	66400	79300	78100	70700	62700	53600
6	46900	32500	29200	22100	62100	62300	66800	79300	77900	70500	62400	53300
7	46900	32300	28800	22000	61600	62100	67200	79500	77700	70300	62100	53000
8	46900	32000	28400	21800	61200	61900	67500	79800	77500	70000	61800	52700
9	46900	31800	28100	21700	61000	61900	67800	79900	77300	69800	61500	52400
10	46500	32200	27800	21600	61200	61900	68100	80000	77100	69500	61200	52100
11	46200	32500	27400	23400	62200	61900	68400	79900	76900	69300	60900	51800
12	45800	32300	27100	24300	62400	61700	68800	79700	76700	69000	60600	51400
13	45500	31900	26900	25600	65400	61600	69400	79600	76400	68800	60300	51100
14	45100	31600	26800	28200	67900	61500	69900	79600	76200	68500	60000	50800
15	44700	31400	26600	31200	64500	61400	70200	80100	76000	68200	59700	50500
16	41000	31600	26500	36200	63100	61300	71100	80300	75800	68000	59400	50200
17	40200	31700	26300	38200	62200	61200	74000	80500	75600	67700	59100	49900
18	39500	31500	26100	41600	61700	61100	75400	80500	75400	67500	58700	49600
19	39000	32400	25900	46200	61400	61100	76300	80500	75200	67200	58500	49300
20	38500	32900	25700	50100	61600	61000	76900	80500	75000	67000	58100	48900
21	37900	32800	25500	52600	62000	60900	77400	80500	74700	66700	57900	48600
22	37400	32400	25300	54600	63900	60800	77700	80400	74500	66500	57600	48300
23	36800	32000	25100	56400	63000	60700	78100	80400	74200	66200	57300	48000
24	36300	31500	24800	58800	62200	60700	78400	80300	73900	65900	57000	47700
25	36200	31000	24600	60900	61800	61000	78600	80200	73700	65700	56700	47400
26	36100	30500	24300	61100	65400	61600	78700	80000	73400	65400	56400	47100
27	36300	30000	24100	60900	65600	62200	78900	79900	73100	65100	56100	46800
28	36200	29500	23800	60700	63800	62800	79000	79700	72800	64900	55800	46400
29	36000	29100	23500	60500	63500	63400	79100	79500	72500	64600	55500	46100
30	35600	29600	23200	61400	---	63800	79100	79300	72200	64300	55200	45800
31	35100	---	23000	61900	---	64200	---	79200	---	64100	54900	---
TOTAL	1294000	958100	824700	1216600	1819700	1918000	2170200	2475500	2274200	2107200	1841000	1509900
MEAN	41742	31937	26603	39245	62748	61871	72340	79855	75807	67974	59387	50330
MAX	46900	34700	30200	61900	67900	64200	79100	80500	78900	71900	63800	54700
MIN	35100	29100	23000	21600	61000	60700	64500	79200	72200	64100	54900	45800

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CA

LOCATION.—Lat 39°24'29", long 122°58'29", in SE 1/4 sec.15, T.18 N., R.10 W., Lake County, Hydrologic Unit 18010103, Mendocino National Forest, on left bank, 0.4 mi upstream from Soda Creek, 0.7 mi downstream from Scott Dam, and 9.7 mi northeast of town of Potter Valley.

DRAINAGE AREA.—290 mi^2.

PERIOD OF RECORD.—October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as "South Eel River at Hullville," and October 1929 to September 1953, "at Hullville."

REVISED RECORDS.—WSP 1315-B: 1923(M), 1938(M). WSP 1395: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 1,740 ft above sea level, from topographic map. Prior to Dec. 15, 1930, at datum 3.00 ft higher.

REMARKS.—Flow regulated by Lake Pillsbury (station 11470000) 0.7 mi upstream. No diversion upstream from station. See schematic diagram of Eel River Basin.

COOPERATION.—Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 56,300 ft^3/s, Dec. 22, 1964, gage height, 24.24 ft, from floodmarks, from rating curve extended above 37,000 ft^3/s; minimum daily, 0.1 ft^3/s, Sept. 8, 1924.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	286	419	153	1620	2780	250	221	204	163	132	145
2	181	286	415	152	1540	2160	220	221	203	162	132	144
3	181	286	410	153	1310	1790	195	220	201	161	131	144
4	186	285	413	154	1200	1590	196	218	196	160	137	144
5	196	269	412	150	1480	2220	202	219	194	153	135	144
6	201	258	411	138	2090	2080	208	217	193	144	133	143
7	202	260	411	132	1510	1700	210	217	192	143	137	144
8	206	260	408	135	1210	1560	196	195	192	139	140	152
9	210	200	410	136	1030	1510	195	183	191	138	145	156
10	210	172	402	137	1060	1480	189	194	187	138	150	158
11	210	172	397	139	1230	1520	180	236	184	137	146	159
12	214	231	395	139	1960	1470	172	278	183	136	143	159
13	220	285	293	141	3590	1370	158	277	181	136	145	159
14	223	285	243	142	9230	1290	152	278	180	136	145	159
15	254	286	243	145	6250	1240	160	279	171	135	147	159
16	270	287	235	153	3520	1190	142	221	155	134	147	159
17	286	286	236	150	2210	1150	120	203	153	134	145	159
18	294	286	236	156	1600	1070	122	215	152	133	144	159
19	294	289	224	158	1340	1060	169	226	151	133	144	153
20	319	281	217	158	1220	1030	178	229	156	132	144	160
21	345	375	216	159	1620	954	215	228	166	131	144	159
22	365	424	220	168	1910	898	241	211	157	131	144	159
23	364	423	224	206	3430	865	195	198	160	130	144	157
24	272	420	224	215	2180	830	186	203	164	132	144	157
25	102	419	224	491	1610	573	221	211	164	133	144	157
26	80	419	223	1050	2440	300	221	215	165	133	144	157
27	81	417	227	1020	6590	253	222	215	165	133	144	157
28	136	415	232	905	4560	222	221	210	165	134	144	157
29	181	415	231	781	3580	238	221	208	164	133	144	156
30	249	419	230	905	---	235	221	207	163	133	144	156
31	288	---	209	1360	---	246	---	205	---	132	144	---
TOTAL	7001	9396	9290	10181	74120	36874	5778	6858	5252	4302	4406	4631
MEAN	226	313	300	328	2556	1189	193	221	175	139	142	154
MAX	365	424	419	1360	9230	2780	250	279	204	163	150	160
MIN	80	172	209	132	1030	222	120	183	151	130	131	143
AC-FT	13890	18640	18430	20190	147000	73140	11460	13600	10420	8530	8740	9190

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

MEAN	222	279	740	1296	1459	1074	664	336	202	177	179	210
MAX	361	1851	4945	5687	6624	4536	3357	1184	717	329	334	336
(WY)	1963	1974	1965	1970	1986	1983	1982	1983	1998	1959	1959	1996
MIN	19.1	13.3	27.6	35.8	7.28	11.8	15.4	34.4	50.3	64.5	65.0	34.4
(WY)	1978	1934	1960	1944	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1923 - 2000	
ANNUAL TOTAL	239479		178089			
ANNUAL MEAN	656		487		566	
HIGHEST ANNUAL MEAN					1443	1983
LOWEST ANNUAL MEAN					85.4	1977
HIGHEST DAILY MEAN	9310	Feb 9	9230	Feb 14	45300	Dec 22 1964
LOWEST DAILY MEAN	80	Oct 26	80	Oct 26	.10	Sep 8 1924
ANNUAL SEVEN-DAY MINIMUM	131	Aug 31	132	Jul 18	.43	Sep 6 1924
INSTANTANEOUS PEAK FLOW			11000	Feb 14	56300	Dec 22 1964
INSTANTANEOUS PEAK STAGE			12.11	Feb 14	24.24	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	475000		353200		409800	
10 PERCENT EXCEEDS	1510		1320		1140	
50 PERCENT EXCEEDS	286		204		234	
90 PERCENT EXCEEDS	136		137		92	

11471000 POTTER VALLEY POWERHOUSE INTAKE NEAR POTTER VALLEY, CA

LOCATION.—Lat 39°22'00", long 123°07'35", in SW 1/4 SW 1/4 sec.31, T.18 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, in penstock of powerhouse of Pacific Gas & Electric Co., 1.5 mi southwest of Van Arsdale Dam, and 3.2 mi northwest of town of Potter Valley.

PERIOD OF RECORD.—December 1909 to current year. Prior to October 1922, monthly discharge only, published in WSP 1315-B. Prior to October 1931, published as Snow Mountain Water and Power Co.'s Tailrace near Potter Valley. October 1931 to September 1984, published as Potter Valley Powerhouse Tailrace near Potter Valley.

REVISED RECORDS.—WSP 1395: 1950. WDR CA-89-2: 1988.

GAGE.—Acoustic flowmeter in penstock of powerplant. Elevation of gage is 1,440 ft above sea level, from topographic map. Prior to Dec. 11, 1985, water-stage recorder and Parshall flume. See WSP 1929 for history of changes prior to Apr. 12, 1950.

REMARKS.—Water is diverted from Eel River above Van Arsdale Dam. After passing through powerhouse, part is used for irrigation in Potter Valley and remainder flows into East Fork Russian River. See schematic diagram of Eel River Basin.

COOPERATION.—Records collected by Pacific Gas & Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD (1922 TO CURRENT YEAR).—Maximum daily discharge, 351 ft^3/s, Oct. 31, 1982; no flow at times in several years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	214	301	64	302	311	268	189	148	141	99	142
2	176	204	303	56	305	311	236	187	148	145	133	140
3	174	195	297	56	305	310	204	185	148	153	129	139
4	171	199	283	58	305	311	196	180	145	154	126	140
5	174	205	274	55	310	310	201	179	145	154	133	140
6	179	200	271	49	300	311	206	179	149	144	129	140
7	180	202	268	40	282	311	207	184	141	143	131	141
8	177	208	265	38	310	314	186	193	134	137	136	142
9	176	174	282	40	285	316	181	136	134	136	140	153
10	177	162	286	44	310	316	176	152	134	134	147	154
11	176	171	270	189	311	316	164	165	134	135	145	157
12	177	152	268	184	310	315	160	224	134	134	140	156
13	181	171	214	169	269	315	150	226	134	132	141	152
14	183	168	147	264	126	316	133	234	134	133	141	152
15	198	172	152	280	192	317	141	250	137	131	142	148
16	210	184	146	317	311	317	149	196	140	131	144	151
17	219	196	144	291	309	317	222	142	134	129	141	149
18	230	182	139	300	310	317	148	161	136	133	140	149
19	230	223	132	318	309	317	150	172	134	134	142	147
20	240	241	122	317	309	133	167	182	135	131	140	147
21	252	237	122	318	310	101	184	178	147	131	141	148
22	269	279	122	309	311	310	223	171	143	130	138	151
23	275	271	126	304	310	325	172	144	137	130	140	148
24	217	267	125	310	310	324	135	146	145	131	140	148
25	60	265	124	314	310	315	139	156	143	130	138	149
26	.50	264	123	315	311	296	156	164	145	134	140	149
27	.50	261	123	315	181	288	171	163	143	133	141	148
28	41	260	128	317	302	254	180	160	143	131	140	149
29	107	257	128	319	312	268	189	156	141	132	139	153
30	148	286	128	319	---	253	190	154	141	128	139	157
31	208	---	122	322	---	265	---	150	---	127	139	---
TOTAL	5382.00	6470	5935	6591	8427	9100	5384	5458	4206	4201	4254	4439
MEAN	174	216	191	213	291	294	179	176	140	136	137	148
MAX	275	286	303	322	312	325	268	250	149	154	147	157
MIN	.50	152	122	38	126	101	133	136	134	127	99	139
AC-FT	10680	12830	11770	13070	16710	18050	10680	10830	8340	8330	8440	8800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2000, BY WATER YEAR (WY)

MEAN	188	195	211	225	242	245	231	214	178	159	155	179
MAX	321	311	311	316	325	330	330	330	325	314	320	314
(WY)	1991	1963	1982	1982	1982	1998	1998	1982	1982	1953	1953	1967
MIN	.000	9.70	3.10	15.4	11.8	.000	18.9	39.0	38.5	11.0	2.29	2.67
(WY)	1960	1934	1934	1944	1977	1950	1977	1977	1920	1920	1920	1920

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1910 - 2000	
ANNUAL TOTAL	68153.57		69847.00			
ANNUAL MEAN	187		191		202	
HIGHEST ANNUAL MEAN					305	1967
LOWEST ANNUAL MEAN					84.0	1920
HIGHEST DAILY MEAN	331	Mar 20	325	Mar 23	351	Oct 31 1982
LOWEST DAILY MEAN	.16	Mar 2	.50	Oct 26	.00	Jul 31 1910
ANNUAL SEVEN-DAY MINIMUM	.21	Feb 24	46	Jan 4	.00	Aug 7 1913
ANNUAL RUNOFF (AC-FT)	135200		138500		146300	
10 PERCENT EXCEEDS	322		310		313	
50 PERCENT EXCEEDS	171		164		215	
90 PERCENT EXCEEDS	131		130		60	

11471099 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CA

LOCATION.—Lat 39°21'42", long 123°07'38", in SW 1/4 NW 1/4 sec.6, T.17 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, 100 ft downstream from powerhouse of Pacific Gas and Electric Co., 1.8 mi southwest of Van Arsdale Dam, and 2.9 mi northwest of town of Potter Valley.

PERIOD OF RECORD.—October 1987 to current year. October 1931 to September 1984, record published for Potter Valley Powerhouse Intake (station 11471000) not equivalent because diversion for irrigation is included.

GAGE.—Discharge computed as difference between Potter Valley Powerhouse Intake (station 11471000) and the combined flows of Potter Valley Irrigation District East Canal (station 11471105) and Potter Valley Irrigation District West Canal (station 11471106). Elevation of tailrace is 1,020 ft above sea level, from topographic map.

REMARKS.—Flow represents inflow into the Russian River Basin after passing through powerhouse. See schematic diagrams of Russian River and Eel River Basins.

COOPERATION.—Records collected by Pacific Gas and Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 335 ft^3/s, Mar. 19, 20, 22, 23, 1998; no flow Apr. 4, 5, July 18–20, 1990; Nov. 15–19, 1993; and many days in 1995.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	211	300	63	301	310	267	181	135	112	75	121
2	160	196	302	55	304	310	235	178	140	119	105	125
3	158	191	296	55	304	309	203	176	128	127	99	127
4	156	198	282	57	304	310	195	174	121	127	96	126
5	163	204	273	54	309	309	200	172	121	135	103	123
6	167	199	270	48	299	310	205	173	124	129	100	124
7	168	201	267	39	281	310	206	181	116	120	101	122
8	168	207	264	37	309	312	185	191	109	113	107	122
9	172	173	281	39	284	314	176	135	109	116	116	132
10	169	161	285	43	309	314	159	151	111	114	130	135
11	163	170	269	188	310	314	143	160	115	115	131	136
12	164	151	267	183	309	313	142	210	114	115	121	134
13	163	170	213	168	268	313	146	221	115	114	122	135
14	167	167	146	263	125	313	132	233	116	110	123	138
15	184	171	151	279	191	315	140	247	121	98	113	130
16	202	183	145	316	310	315	148	189	121	98	115	129
17	217	195	143	290	308	316	221	135	113	96	110	129
18	222	181	138	299	309	316	147	160	115	100	111	132
19	214	222	131	316	308	316	149	171	112	103	115	130
20	224	240	121	314	308	132	166	180	107	105	117	129
21	241	236	121	315	309	100	183	174	116	108	120	129
22	262	278	121	308	310	308	222	165	112	108	118	141
23	272	270	125	303	309	324	171	131	107	108	120	135
24	214	266	124	309	309	323	132	126	108	108	118	135
25	59	264	123	313	309	314	138	133	101	102	115	139
26	.26	263	122	314	310	295	153	141	109	107	117	136
27	.28	260	122	314	180	286	161	140	111	108	121	128
28	38	259	127	316	301	245	173	138	110	109	127	134
29	102	256	127	318	311	250	182	134	111	113	120	135
30	148	285	127	318	---	238	184	135	114	111	118	145
31	208	---	121	321	---	259	---	133	---	109	118	---
TOTAL	5105.54	6428	5904	6555	8398	9013	5264	5168	3462	3457	3522	3936
MEAN	165	214	190	211	290	291	175	167	115	112	114	131
MAX	272	285	302	321	311	324	267	247	140	135	131	145
MIN	.26	151	121	37	125	100	132	126	101	96	75	121
AC-FT	10130	12750	11710	13000	16660	17880	10440	10250	6870	6860	6990	7810

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

MEAN	192	186	194	204	228	252	204	185	150	109	108	155
MAX	311	291	292	294	319	329	327	316	307	160	151	286
(WY)	1991	1998	1989	1998	1996	1998	1998	1993	1998	1993	1996	1996
MIN	79.3	90.1	60.5	35.8	45.0	51.4	53.7	97.0	59.0	60.1	81.5	66.4
(WY)	1989	1988	1995	1991	1991	1995	1990	1988	1994	1994	1988	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	64044.94		66212.54			
ANNUAL MEAN	175		181		180	
HIGHEST ANNUAL MEAN					248	1998
LOWEST ANNUAL MEAN					82.8	1995
HIGHEST DAILY MEAN	330	Mar 20	324	Mar 23	335	Mar 19 1998
LOWEST DAILY MEAN	.00	Feb 21	.26	Oct 26	.00	Apr 4 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 21	45	Jan 4	.00	Mar 10 1995
ANNUAL RUNOFF (AC-FT)	127000		131300		130700	
10 PERCENT EXCEEDS	321		309		320	
50 PERCENT EXCEEDS	161		154		141	
90 PERCENT EXCEEDS	103		108		75	

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA

LOCATION.—Lat 39°23'19", long 123°06'54", in NE 1/4 sec.30, T.18 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, on left bank, 1,000 ft downstream from Van Arsdale Dam, and 4.6 mi north of town of Potter Valley.

DRAINAGE AREA.—349 mi^2.

PERIOD OF RECORD.—November 1909 to September 1922 (combined monthly discharge only, of Eel River at this station and Snow Mountain Water and Power Co.'s tailrace near Potter Valley), October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as South Eel River at Van Arsdale Dam, near Potter Valley.

REVISED RECORDS.—WSP 1315-B: 1913, 1920–23, 1925–27. WSP 1395: 1923(M), 1938.

GAGE.—Water-stage recorder. Elevation of gage is 1,400 ft above sea level, from topographic map. Nov. 18, 1909, to Mar. 3, 1927, recorder in reservoir 800 ft upstream from Van Arsdale Dam at different datum. Oct. 1, 1927, to Feb. 28, 1937, nonrecording gage at present site and datum.

REMARKS.—Flow regulated by Lake Pillsbury (station 11470000) 11 mi upstream. Low flows may be further regulated at Van Arsdale Dam by calibrated gates in dam and fish ladder. Water is diverted from Van Arsdale Reservoir through tunnel to Potter Valley Powerhouse Intake (station 11471000), after which part is used for irrigation and remainder flows into East Fork Russian River (see station 11471099). Records given represent flow only in the Eel River. See schematic diagram of Eel River Basin.

COOPERATION.—Records collected by Pacific Gas and Electric Co., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 64,100 ft^3/s, Dec. 22, 1964, gage height, 33.9 ft, from floodmarks; no flow at times.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	41	103	111	1550	3090	92	120	113	38	9.8	11
2	5.7	54	104	111	1890	2420	93	121	114	28	9.8	11
3	7.8	61	103	101	1480	1980	92	122	112	17	9.8	10
4	10	55	103	112	1280	1730	93	124	100	14	9.7	10
5	13	40	103	115	1610	2340	96	125	97	10	9.8	9.8
6	17	33	103	109	2340	2210	97	126	84	9.4	9.8	9.8
7	16	32	103	107	1780	1830	97	127	83	9.3	9.6	9.5
8	18	32	103	110	1260	1660	102	129	77	9.5	8.7	9.4
9	22	32	103	112	981	1620	97	127	76	9.7	8.7	9.2
10	23	35	103	110	950	1600	99	129	69	9.7	8.7	9.1
11	24	42	103	284	1270	1660	96	135	63	9.7	8.7	9.0
12	26	49	103	105	2290	1560	97	150	63	9.8	8.8	8.8
13	29	97	103	105	4760	1370	99	144	52	9.8	8.9	8.7
14	29	101	103	121	9410	1230	101	145	51	9.7	8.9	9.2
15	29	101	103	171	5250	1130	103	152	34	9.7	9.0	9.3
16	35	101	102	399	3210	1030	105	161	34	9.5	9.1	9.2
17	35	101	102	142	2350	968	111	166	33	8.9	9.1	9.0
18	35	101	103	304	1730	864	101	151	32	8.9	9.4	8.9
19	35	101	103	327	1220	836	117	150	37	9.0	9.0	8.7
20	35	101	100	353	1130	962	114	143	36	8.8	9.7	8.6
21	35	101	99	175	1730	891	125	145	36	8.8	10	8.6
22	35	101	99	134	2070	646	123	139	36	9.0	11	8.4
23	36	101	99	106	2550	593	146	136	36	9.0	10	8.3
24	43	103	99	122	2330	555	131	144	36	9.2	9.8	8.2
25	75	103	99	354	1670	411	193	137	36	9.1	9.7	8.1
26	59	103	99	937	2550	149	171	138	36	9.0	9.7	8.0
27	67	103	99	920	6960	105	153	137	37	9.5	9.3	7.9
28	72	103	99	698	5060	94	138	136	37	9.4	9.1	8.3
29	98	103	99	411	3940	100	123	135	38	9.4	9.7	8.0
30	68	104	99	724	---	91	120	134	38	9.2	11	8.1
31	53	---	99	1010	---	92	---	136	---	9.2	11	---
TOTAL	1091.3	2335	3145	9000	76601	35817	3425	4264	1726	349.2	295.3	270.1
MEAN	35.2	77.8	101	290	2641	1155	114	138	57.5	11.3	9.53	9.00
MAX	98	104	104	1010	9410	3090	193	166	114	38	11	11
MIN	5.7	32	99	101	950	91	92	120	32	8.8	8.7	7.9
AC-FT	2160	4630	6240	17850	151900	71040	6790	8460	3420	693	586	536

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

MEAN	12.1	127	705	1402	1557	1062	555	180	28.9	5.68	5.68	5.44
MAX	153	2389	5249	6293	8904	5492	3863	1174	366	25.3	54.1	27.9
(WY)	1963	1974	1965	1970	1986	1983	1982	1983	1998	1999	1980	1959
MIN	.86	1.30	1.78	2.00	3.62	2.00	2.00	2.00	1.07	1.06	1.09	1.10
(WY)	1953	1953	1937	1924	1977	1924	1924	1924	1931	1931	1931	1931

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1923 - 2000	
ANNUAL TOTAL	216750.1		138318.9			
ANNUAL MEAN	594		378		461	
HIGHEST ANNUAL MEAN					1546	1983
LOWEST ANNUAL MEAN					3.46	1977
HIGHEST DAILY MEAN	10600	Feb 9	9410	Feb 14	49500	Dec 22 1964
LOWEST DAILY MEAN	5.3	Sep 19	5.7	Oct 2	.00	Sep 13 1953
ANNUAL SEVEN-DAY MINIMUM	5.5	Jul 14	8.1	Sep 24	.16	Dec 5 1965
INSTANTANEOUS PEAK FLOW			10800	Feb 14	64100	Dec 22 1964
INSTANTANEOUS PEAK STAGE			18.20	Feb 14	33.90	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	429900		274400		334200	
10 PERCENT EXCEEDS	1700		1270		1100	
50 PERCENT EXCEEDS	101		99		9.5	
90 PERCENT EXCEEDS	5.6		9.0		2.0	

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA

LOCATION.—Lat 39°42'23", long 123°19'27", in NE 1/4 SE 1/4 sec.5, T.21 N., R.13 W., Mendocino County, Hydrologic Unit 18010104, on right bank, 0.6 mi upstream from Eastman Creek, 1.9 mi upstream from mouth, and 1.7 mi southeast of Dos Rios.

DRAINAGE AREA.—745 mi^2.

PERIOD OF RECORD.—October 1965 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 901.58 ft above sea level.

REMARKS.—Records fair except for estimated daily discharges and discharges above 16,000 ft^3/s, which are poor. No regulation or diversion upstream from station. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 135,000 ft^3/s, Jan. 1, 1997, gage height, 31.46 ft, from rating curve extended above 52,000 ft^3/s; maximum gage height, 32.86 ft, Jan. 4, 1966; minimum daily, 0.39 ft^3/s, Sept. 1, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 25,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1100	34,600	17.93				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	68	2410	188	5490	4740	1610	869	280	50	20	e13
2	11	60	1590	181	4940	4280	1710	910	248	49	19	e14
3	11	55	1510	171	4160	3650	1900	871	231	49	18	e13
4	10	51	1030	173	3790	3420	2100	858	216	53	17	e18
5	11	49	817	185	5310	5760	1970	799	205	52	16	e17
6	12	48	692	168	6130	4350	1810	736	194	51	15	e16
7	13	48	655	154	4070	3640	1680	728	186	53	15	e16
8	14	67	632	154	3200	3280	1660	926	190	55	15	e16
9	14	172	715	145	2690	3570	1590	848	197	53	15	e16
10	14	290	813	146	2870	3210	1490	764	180	51	14	e15
11	13	1200	587	5690	3660	3490	1430	753	167	49	14	e14
12	13	464	612	3840	5410	3040	1450	712	157	47	14	e14
13	13	279	986	2540	8320	2810	1860	646	152	45	14	e14
14	13	209	869	4870	25100	2840	1960	598	146	43	13	e13
15	13	192	673	7080	10500	2860	1700	1050	136	42	12	e13
16	13	474	572	9380	5430	2910	1630	1030	127	41	13	e13
17	12	1010	508	4830	3930	3030	3640	887	115	40	12	e12
18	12	469	494	5410	3010	2710	3060	779	107	40	12	e12
19	12	1120	490	5960	2420	3240	2220	717	101	38	12	e12
20	12	3070	551	7850	2120	3020	1850	716	96	37	12	e12
21	12	1490	559	4620	2750	2540	1650	712	89	36	12	e11
22	12	956	486	4040	4220	2410	1530	721	83	35	12	e11
23	12	705	425	3260	5610	2490	1430	699	79	33	11	e11
24	12	541	378	4060	3260	2360	1290	702	75	32	12	e11
25	12	431	342	4880	2600	2240	1170	630	69	31	12	e10
26	13	371	312	4200	4430	2140	1120	565	62	30	e12	e10
27	17	342	282	3240	13200	2120	1070	506	61	29	e12	e10
28	199	320	255	2560	7310	2030	1040	459	58	27	e12	e10
29	210	307	232	2100	6460	1890	964	414	55	24	e12	e10
30	114	2180	214	3550	---	1770	896	358	52	22	e12	e10
31	81	---	200	4990	---	1660	---	316	---	20	e12	---
TOTAL	941	17038	20891	100615	162390	93500	50480	22279	4114	1257	423	387
MEAN	30.4	568	674	3246	5600	3016	1683	719	137	40.5	13.6	12.9
MAX	210	3070	2410	9380	25100	5760	3640	1050	280	55	20	18
MIN	10	48	200	145	2120	1660	896	316	52	20	11	10
AC-FT	1870	33790	41440	199600	322100	185500	100100	44190	8160	2490	839	768

e Estimated.

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	96.5	1146	2428	4390	3651	3474	2080	1262	424	85.3	25.8	23.2
MAX	475	6823	7477	13540	12870	8622	6632	3852	1868	316	63.9	172
(WY)	1980	1974	1997	1970	1986	1983	1982	1983	1998	1998	1998	1986
MIN	5.11	26.9	30.5	94.3	172	384	333	241	82.5	13.2	4.33	1.04
(WY)	1995	1996	1977	1977	1977	1977	1977	1977	1977	1977	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	573050		474315			
ANNUAL MEAN	1570		1296		1582	
HIGHEST ANNUAL MEAN					3351	1983
LOWEST ANNUAL MEAN					121	1977
HIGHEST DAILY MEAN	18700	Feb 7	25100	Feb 14	81200	Jan 1 1997
LOWEST DAILY MEAN	10	Oct 4	10	Oct 4	.39	Sep 1 1994
ANNUAL SEVEN-DAY MINIMUM	11	Sep 29	10	Sep 24	.42	Aug 28 1994
INSTANTANEOUS PEAK FLOW			34600	Feb 14	135000	Jan 1 1997
INSTANTANEOUS PEAK STAGE			17.93	Feb 14	31.46	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	1137000		940800		1146000	
10 PERCENT EXCEEDS	4570		3870		3900	
50 PERCENT EXCEEDS	429		314		354	
90 PERCENT EXCEEDS	14		12		15	

11474780 KEKAWAKA CREEK BELOW KEKAWAKA CREEK POWERHOUSE DIVERSION, NEAR ZENIA, CA

LOCATION.—Lat 40°06'37", long 123°27'59", in SW 1/4 SE 1/4 sec.14, T.4 S., R.6 E., Trinity County, Hydrologic Unit 18010105, on left bank, approximately 200 ft downstream from diversion dam, 3.6 mi upstream from confluence with Eel River, and 6.7 mi south of Zenia.

DRAINAGE AREA.—20.7 mi^2.

PERIOD OF RECORD.—January 1990 to current year.

GAGE.—Water-stage recorder, and 120° V-notch weir. Elevation of gage is 1,480 ft above sea level, from topographic map.

REMARKS.—Water is diverted from creek upstream from gage to Kekawaka Creek Powerplant. See schematic diagram of Eel River Basin.

COOPERATION.—Records provided by STS Hydro Power Ltd., under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.—Creek only, maximum discharge, 3,040 ft^3/s, Dec. 31, 1996, gage height, 11.03 ft.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.60	38	5.1	97	115	3.0	3.1	5.1	1.3	.40	.30
2	.20	.50	8.3	5.6	38	80	3.0	3.7	4.6	1.3	.40	.50
3	.20	.40	3.5	5.6	21	41	3.0	3.7	4.3	1.3	.30	.70
4	.20	.40	3.1	7.2	7.6	52	3.0	3.8	4.1	1.4	.30	.60
5	.30	.40	3.1	8.1	85	80	3.0	3.8	4.0	1.4	.20	.60
6	.40	.40	3.1	6.7	67	50	3.0	3.8	4.0	1.5	.20	.50
7	.50	.40	3.1	6.3	16	29	3.0	3.8	4.1	1.5	.20	.40
8	.40	2.6	3.1	6.0	6.0	18	3.0	3.9	5.4	1.5	.20	.30
9	.40	1.9	3.8	6.0	3.8	25	3.0	3.9	4.8	1.3	.20	.30
10	.40	4.6	3.2	9.4	3.4	17	3.0	3.9	4.3	1.4	.20	.30
11	.30	6.4	3.1	146	25	17	3.0	3.9	4.1	1.2	.20	.40
12	.20	4.3	3.1	17	84	7.0	3.0	3.9	4.0	1.1	.20	.30
13	.20	2.9	3.6	5.7	159	6.6	3.0	3.9	3.9	1.0	.30	.20
14	.20	2.2	3.1	78	682	6.7	3.2	4.0	3.4	1.0	.20	.20
15	.20	2.6	3.1	233	288	5.9	3.1	7.7	3.0	1.0	.30	.20
16	.20	4.9	3.1	293	114	4.9	3.4	3.9	2.9	.90	.30	.30
17	.20	3.1	3.1	95	50	4.1	16	3.8	2.5	1.2	.30	.40
18	.10	3.1	3.2	82	17	3.5	6.6	4.8	2.4	1.1	.30	.30
19	.10	5.7	3.1	124	8.2	3.5	3.3	3.8	2.4	1.0	.30	.20
20	.20	4.8	3.1	127	5.9	3.1	3.1	3.8	2.3	.80	.40	.20
21	.20	3.1	3.1	82	6.2	3.0	3.0	3.8	2.0	.80	.40	.10
22	.20	3.1	3.0	61	226	3.0	3.0	3.7	2.0	.80	.40	.10
23	.20	3.1	4.8	27	173	3.0	3.1	7.2	2.0	.80	.30	.10
24	.20	4.5	7.4	17	83	3.0	3.0	7.1	1.8	.70	.20	.20
25	.30	5.9	6.9	57	44	3.0	3.0	6.8	1.6	.60	.20	.30
26	.30	5.0	6.5	26	157	3.0	3.0	6.6	1.5	.70	.20	.30
27	1.3	4.5	6.1	8.8	322	3.0	3.0	6.2	1.3	.70	.20	.20
28	5.0	3.8	5.8	5.4	230	3.0	3.0	6.0	1.2	.70	.20	.20
29	2.2	12	5.5	3.7	194	3.0	3.0	5.1	1.1	.60	.20	.30
30	1.2	64	5.4	71	---	3.0	3.0	5.8	1.1	.50	.20	.40
31	.70	---	5.1	110	---	3.0	---	5.4	---	.50	.10	---
TOTAL	16.90	161.20	163.5	1735.6	3213.1	602.3	107.8	144.6	91.2	31.60	8.00	9.40
MEAN	.55	5.37	5.27	56.0	111	19.4	3.59	4.66	3.04	1.02	.26	.31
MAX	5.0	64	38	293	682	115	16	7.7	5.4	1.5	.40	.70
MIN	.10	.40	3.0	3.7	3.4	3.0	3.0	3.1	1.1	.50	.10	.10
AC-FT	34	320	324	3440	6370	1190	214	287	181	63	16	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	1.06	7.06	41.5	106	82.8	48.3	12.2	8.29	5.05	1.97	.76	.53
MAX	2.24	24.1	214	262	314	198	51.4	21.1	14.2	4.09	1.88	1.05
(WY)	1998	1999	1997	1995	1998	1995	1995	1990	1993	1993	1993	1995
MIN	.52	1.31	3.48	5.08	8.02	5.12	3.36	3.59	1.90	.51	.036	.008
(WY)	1995	1991	1991	1991	1991	1994	1991	1994	1992	1994	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	8674.30		6285.20			
ANNUAL MEAN	23.8		17.2		26.9	
HIGHEST ANNUAL MEAN					53.5	1998
LOWEST ANNUAL MEAN					6.47	1991
HIGHEST DAILY MEAN	501	Feb 9	682	Feb 14	1700	Jan 1 1997
LOWEST DAILY MEAN	.10	Oct 18	.10	Oct 18	.00	Sep 3 1992
ANNUAL SEVEN-DAY MINIMUM	.17	Oct 13	.17	Oct 13	.00	Sep 3 1992
INSTANTANEOUS PEAK FLOW			929	Feb 14	3040	Dec 31 1996
INSTANTANEOUS PEAK STAGE			6.28	Feb 14	11.03	Dec 31 1996
ANNUAL RUNOFF (AC-FT)	17210		12470		19500	
10 PERCENT EXCEEDS	67		42		53	
50 PERCENT EXCEEDS	3.3		3.0		3.2	
90 PERCENT EXCEEDS	.50		.20		.40	

11475000 EEL RIVER AT FORT SEWARD, CA

LOCATION.—Lat 40°13'05", long 123°37'54", in SE 1/4 NE 1/4 sec.8, T.3 S., R.5 E., Humboldt County, Hydrologic Unit 18010105, on right bank, at downstream side of bridge, 1.0 mi southeast of Fort Seward, 1.9 mi upstream from Dobbyn Creek, and 11.8 mi northeast of Garberville.

DRAINAGE AREA.—2,107 mi^2.

PERIOD OF RECORD.—September 1955 to current year. Prior to October 1965, published as "at Alderpoint."

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 217.26 ft above sea level. Prior to Dec. 22, 1964, at site 7.5 mi upstream at datum 46.55 ft higher. Feb. 2 to Sept. 30, 1965, at site 7.7 mi upstream at datum 49.42 ft higher.

REMARKS.—Records good except for estimated daily discharges, which are fair. Flow slightly regulated by Lake Pillsbury (station 11470000) 99 mi upstream and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 561,000 ft^3/s, Dec. 22, 1964, gage height, 82.6 ft, from floodmarks, present site and datum, 87.2 ft, from floodmarks, site and datum then in use, from rating curve extended above 110,000 ft^3/s on basis of slope-area measurement at gage height 72.5 ft; minimum daily, 1.2 ft^3/s, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 41,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1700	101,000	34.42	Feb. 27	1015	48,600	25.62

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e28	269	9710	551	16800	22500	2740	1730	838	155	38	20
2	e24	209	5360	546	14000	17800	2710	1740	799	139	37	22
3	e22	176	4760	535	11000	14900	2840	1750	761	134	35	20
4	e22	148	2990	541	9670	12500	3010	1650	729	131	34	21
5	e21	137	2160	573	10800	15900	2990	1620	701	130	32	24
6	e26	146	1750	597	17200	14900	2810	1540	677	130	38	31
7	e23	144	1650	551	12300	12300	2650	1510	662	126	37	38
8	e27	182	1750	510	9360	11600	2540	1580	658	123	32	39
9	e26	294	2280	494	7450	13000	2510	1890	666	130	28	36
10	e26	818	3400	522	6640	13600	2410	1670	674	117	26	34
11	e30	2660	2520	11300	7600	13200	2300	1630	635	110	23	33
12	e43	2100	2090	13300	15700	11600	2280	1540	603	104	22	33
13	43	1140	2460	6970	20800	9970	2500	1470	581	95	20	32
14	46	717	2690	11700	75900	8840	3060	1390	558	87	20	32
15	49	599	2050	21900	54400	8120	2740	1610	525	80	20	31
16	48	896	1680	25300	27300	7360	2640	2280	498	75	19	29
17	48	4000	1450	17900	19100	7120	6310	2030	470	73	18	28
18	51	2460	1290	14100	14000	6390	7940	1740	399	71	18	28
19	52	2300	1220	15500	10900	6100	4640	1560	344	68	18	27
20	53	7460	1140	20500	9100	6280	3490	1450	320	65	17	26
21	60	3970	1190	14500	9840	5620	3000	1410	305	62	18	26
22	59	2200	1110	13300	14000	5040	2710	1360	286	60	18	25
23	59	1500	985	10200	26900	4620	2540	1330	265	58	18	25
24	59	1140	884	10500	17600	4470	2360	1300	251	55	18	25
25	62	927	808	12100	13700	4190	2200	1250	234	51	18	24
26	70	783	752	11500	16700	3900	2110	1150	219	47	18	23
27	87	703	705	9180	43500	3520	2050	1080	206	43	18	23
28	331	651	662	7250	36300	3410	2000	1030	194	42	19	22
29	744	680	623	5830	28000	3210	1940	983	183	41	19	23
30	608	4690	595	7800	---	3020	1810	921	173	38	19	24
31	362	---	570	14700	---	2880	---	871	---	39	19	---
TOTAL	3209	44099	63284	280750	576560	277860	87830	46065	14414	2679	734	824
MEAN	104	1470	2041	9056	19880	8963	2928	1486	480	86.4	23.7	27.5
MAX	744	7460	9710	25300	75900	22500	7940	2280	838	155	38	39
MIN	21	137	570	494	6640	2880	1810	871	173	38	17	20
AC-FT	6370	87470	125500	556900	1144000	551100	174200	91370	28590	5310	1460	1630

e Estimated.

11475000 EEL RIVER AT FORT SEWARD, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	369	2898	8655	13390	13000	9866	5229	2315	722	149	54.3	54.4
MAX	4938	18740	56050	43180	47700	30660	23040	7449	4194	510	199	359
(WY)	1963	1974	1965	1995	1986	1995	1982	1983	1993	1998	1983	1986
MIN	20.5	49.4	45.5	222	434	1071	476	356	131	18.4	3.27	9.57
(WY)	1965	1960	1977	1991	1977	1988	1977	1977	1977	1977	1977	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	1881031		1398308			
ANNUAL MEAN	5154		3821		4691	
HIGHEST ANNUAL MEAN					10350	1983
LOWEST ANNUAL MEAN					260	1977
HIGHEST DAILY MEAN	69500	Feb 9	75900	Feb 14	434000	Dec 22 1964
LOWEST DAILY MEAN	20	Sep 22	17	Aug 20	1.2	Sep 13 1977
ANNUAL SEVEN-DAY MINIMUM	21	Sep 19	18	Aug 17	1.4	Sep 7 1977
INSTANTANEOUS PEAK FLOW			101000	Feb 14	561000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			34.42	Feb 14	82.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	3731000		2774000		3399000	
10 PERCENT EXCEEDS	14100		12600		11900	
50 PERCENT EXCEEDS	1260		804		734	
90 PERCENT EXCEEDS	33		24		35	

11475560 ELDER CREEK NEAR BRANSCOMB, CA
(Hydrologic-Benchmark Station)

LOCATION.—Lat 39°43'47", long 123°38'34", in NW 1/4 NE 1/4 sec.29, T.22 N., R.16 W., Mendocino County, Hydrologic Unit 18010106, on right bank, 0.2 mi upstream from mouth, and 5.3 mi north of Branscomb.

DRAINAGE AREA.—6.50 mi^2.

PERIOD OF RECORD.—October 1967 to current year.
CHEMICAL DATA: Water years 1968 to March 1996.
WATER TEMPERATURE: Water years 1968–79.
SEDIMENT DATA: Water years 1969 to March 1996.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,391.08 ft above sea level.

REMARKS.—Records good except for estimated daily discharges, which are fair. No regulation; small diversion upstream from station for domestic use. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,480 ft^3/s, Dec. 30, 1996, gage height, 9.88 ft, from rating curve extended above 700 ft^3/s on basis of slope-area measurements at gage heights 9.40 and 11.41 ft; minimum daily, 0.27 ft^3/s, Sept. 10–15, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1964, reached a stage of 11.41 ft, from floodmarks, discharge, 3,660 ft^3/s by slope-area measurement of peak flow.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 16	0130	581	6.46				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	1.7	30	5.4	67	140	12	9.1	5.5	2.7	1.4	1.0
2	.77	1.6	27	5.3	63	100	11	9.0	5.4	2.7	1.3	1.2
3	.78	1.6	23	5.1	58	78	11	8.4	5.2	2.6	1.3	1.1
4	.79	1.4	18	5.8	51	69	10	8.1	5.1	2.6	1.2	1.1
5	.85	1.4	15	5.2	60	63	10	7.9	5.0	2.6	1.2	1.0
6	.89	1.4	13	4.9	69	56	9.7	7.7	5.0	2.6	1.2	.98
7	.92	2.4	13	4.6	62	53	9.3	8.3	5.0	2.6	1.2	.93
8	.89	6.2	11	4.5	54	51	9.0	12	5.1	2.5	1.2	.88
9	.86	4.0	14	4.3	47	64	8.8	10	4.8	2.4	1.2	.87
10	.84	17	e19	7.0	43	69	8.5	10	4.8	2.3	1.2	.84
11	.82	12	e15	165	46	71	8.2	9.5	4.6	2.2	1.2	.82
12	.79	7.8	13	85	60	65	8.2	9.2	4.5	2.2	1.1	.79
13	.78	5.9	14	70	98	58	9.1	8.8	4.4	2.1	1.1	.78
14	.75	4.9	13	140	459	52	8.1	9.2	4.2	2.1	1.1	.80
15	.75	5.9	12	190	294	46	8.4	9.4	4.0	2.1	1.0	.87
16	.72	9.5	11	207	154	41	12	8.9	3.9	2.0	1.0	.88
17	.72	13	11	138	97	36	35	8.4	3.9	2.0	1.0	.84
18	.71	9.8	10	100	74	33	22	8.2	3.7	2.0	1.0	.77
19	.72	21	9.5	92	60	30	18	7.9	3.7	2.0	1.0	.73
20	.73	24	8.9	99	52	27	16	7.7	3.5	1.9	1.0	.69
21	.73	15	8.6	92	46	25	14	7.4	3.4	1.8	1.0	.68
22	.72	12	8.0	86	73	23	13	7.2	3.4	1.8	.96	.75
23	.72	10	7.5	79	99	21	12	6.9	3.3	1.8	.95	.76
24	.78	8.8	7.1	72	82	19	12	6.8	3.2	1.7	.95	.75
25	.78	7.8	6.8	77	69	18	11	6.5	3.2	1.6	.93	.73
26	.81	7.0	6.7	74	111	17	11	6.4	3.1	1.6	.89	.71
27	6.2	6.6	6.4	66	286	16	11	6.2	2.9	1.6	.88	.70
28	8.2	6.1	6.1	56	255	15	10	6.2	2.9	1.6	.86	.69
29	3.7	8.3	5.9	47	190	14	9.7	6.0	2.8	1.5	.82	.71
30	2.4	23	5.7	54	---	13	9.2	5.8	2.7	1.5	.82	.67
31	1.9	---	5.5	60	---	12	---	5.7	---	1.4	.86	---
TOTAL	42.80	257.1	374.7	2101.1	3179	1395	357.2	248.8	122.2	64.1	32.82	25.02
MEAN	1.38	8.57	12.1	67.8	110	45.0	11.9	8.03	4.07	2.07	1.06	.83
MAX	8.2	24	30	207	459	140	35	12	5.5	2.7	1.4	1.2
MIN	.71	1.4	5.5	4.3	43	12	8.1	5.7	2.7	1.4	.82	.67
AC-FT	85	510	743	4170	6310	2770	709	493	242	127	65	50

e Estimated.

11475560 ELDER CREEK NEAR BRANSCOMB, CA—Continued
(Hydrologic-Benchmark Station)

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.17	19.3	48.5	73.8	63.5	55.2	25.8	11.7	5.86	2.39	1.33	1.10
MAX	8.72	132	192	210	173	147	91.9	33.4	31.6	5.84	2.49	2.36
(WY)	1980	1974	1997	1970	1986	1983	1982	1996	1993	1993	1990	1986
MIN	.57	.99	1.04	2.32	3.40	5.45	3.01	2.13	1.35	.67	.48	.51
(WY)	1988	1996	1977	1977	1977	1988	1977	1977	1977	1977	1977	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	9529.74		8199.84			
ANNUAL MEAN	26.1		22.4		25.7	
HIGHEST ANNUAL MEAN					54.4	1974
LOWEST ANNUAL MEAN					2.12	1977
HIGHEST DAILY MEAN	455	Feb 7	459	Feb 14	1620	Jan 1 1997
LOWEST DAILY MEAN	.64	Sep 28	.67	Sep 30	.27	Sep 10 1981
ANNUAL SEVEN-DAY MINIMUM	.66	Sep 24	.71	Sep 24	.27	Sep 9 1981
INSTANTANEOUS PEAK FLOW			581	Jan 16	2480	Dec 30 1996
INSTANTANEOUS PEAK STAGE			6.46	Jan 16	9.88	Dec 30 1996
ANNUAL RUNOFF (AC-FT)	18900		16260		18650	
10 PERCENT EXCEEDS	77		69		67	
50 PERCENT EXCEEDS	6.9		6.3		5.4	
90 PERCENT EXCEEDS	.78		.82		.94	

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA

LOCATION.—Lat 39°52'29", long 123°43'10", in NE 1/4 SE 1/4 sec.3, T.23 N., R.17 W., Mendocino County, Hydrologic Unit 18010106, on right bank, near Standish Hickey State Park, 0.2 mi upstream from Rock Creek, and 0.7 mi northwest of Leggett.

DRAINAGE AREA.—248 mi^2.

PERIOD OF RECORD.—October 1965 to June 1995, October 1997 to April 1999 (seasonal), October 1999 to current year. Stage only July 1995 to September 1997.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 691.32 ft above sea level. Prior to July 29, 1988, at datum 2.00 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 72,700 ft^3/s, Jan. 4, 1966, gage height, 27.4 ft, from floodmarks, present datum, from rating curve extended above 21,000 ft^3/s on basis of slope-area measurement at gage height 28.13 ft; minimum daily, 7.3 ft^3/s, Aug 4–6, 12, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1964, reached a stage of 28.13 ft, from floodmarks, present datum, discharge, 78,700 ft^3/s, by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 8,500 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0915	11,000	11.10	Feb. 14	0745	11,800	11.45

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	47	1440	130	2580	3160	371	231	143	63	32	22
2	13	41	944	131	2100	2610	352	242	138	63	31	23
3	13	36	745	126	1800	2220	332	230	134	64	30	23
4	14	34	555	140	1640	2040	315	218	131	64	29	23
5	15	31	445	165	2240	2170	301	211	129	64	28	24
6	16	29	376	147	2400	1870	285	205	128	66	28	23
7	17	34	386	133	1870	1700	269	212	129	67	27	22
8	17	140	371	126	1560	1850	255	304	138	68	27	21
9	17	151	544	122	1350	2500	245	299	136	66	27	20
10	17	582	694	158	1270	2360	235	289	131	63	27	20
11	17	638	536	6180	1410	2340	227	280	125	60	27	18
12	17	319	465	3190	2300	1990	228	258	121	58	27	17
13	16	185	535	2670	3200	1740	265	248	119	56	25	17
14	15	134	453	4030	10200	1520	262	246	114	56	25	16
15	15	144	396	5350	5910	1330	239	286	106	54	24	17
16	14	379	352	5990	3560	1180	310	275	100	53	23	17
17	14	738	315	3590	2700	1050	1250	251	96	53	23	17
18	14	400	286	2990	2270	954	691	232	93	54	23	16
19	14	898	258	2770	1960	879	490	218	92	54	23	16
20	14	1070	235	3130	1770	805	413	208	89	51	23	16
21	14	542	216	2730	1700	743	369	199	86	49	23	16
22	14	370	199	2650	2860	687	342	190	83	47	23	16
23	14	275	184	2340	3730	639	318	182	80	45	22	16
24	15	223	177	2310	2710	600	296	174	79	43	23	16
25	15	187	168	2700	2330	564	287	167	78	41	22	15
26	16	164	160	2350	4100	528	276	162	75	40	21	15
27	73	153	153	1960	7210	499	266	160	72	39	21	15
28	349	140	145	1640	5430	473	265	159	69	38	20	15
29	156	169	140	1370	4360	446	252	155	66	38	20	15
30	87	1150	136	1990	---	419	238	151	64	37	20	15
31	60	---	132	2540	---	394	---	147	---	36	20	---
TOTAL	1115	9403	12141	65848	88520	42260	10244	6789	3144	1650	764	542
MEAN	36.0	313	392	2124	3052	1363	341	219	105	53.2	24.6	18.1
MAX	349	1150	1440	6180	10200	3160	1250	304	143	68	32	24
MIN	13	29	132	122	1270	394	227	147	64	36	20	15
AC-FT	2210	18650	24080	130600	175600	83820	20320	13470	6240	3270	1520	1080

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	69.4	746	1558	2437	2226	1842	811	292	129	49.7	29.4	29.7
MAX	272	4050	6072	7278	7294	5515	3528	830	630	129	65.4	87.8
(WY)	1980	1974	1984	1970	1986	1983	1982	1990	1993	1993	1993	1986
MIN	14.9	40.2	32.9	98.1	137	147	78.4	59.5	26.7	9.96	9.67	10.7
(WY)	1995	1994	1977	1977	1977	1988	1977	1977	1977	1977	1977	1992

SUMMARY STATISTICS	FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	242420			
ANNUAL MEAN	662		807	
HIGHEST ANNUAL MEAN			1778	1983
LOWEST ANNUAL MEAN			69.5	1977
HIGHEST DAILY MEAN	10200	Feb 14	49800	Jan 4 1966
LOWEST DAILY MEAN	13	Oct 1	3.3	Nov 28 1995
ANNUAL SEVEN-DAY MINIMUM	14	Oct 16	7.5	Jul 31 1977
INSTANTANEOUS PEAK FLOW			72700	Jan 4 1966
INSTANTANEOUS PEAK STAGE			27.40	Jan 4 1966
ANNUAL RUNOFF (AC-FT)	480800		584400	
10 PERCENT EXCEEDS	2320		2310	
50 PERCENT EXCEEDS	160		158	
90 PERCENT EXCEEDS	17		23	

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA

LOCATION.—Lat 40°10'55", long 123°46'30", in NW 1/4 sec.30, T.3 S., R.4 E., Humboldt County, Hydrologic Unit 18010106, on right bank, 0.5 mi upstream from Rocky Glen Creek, 20 mi upstream from mouth, and 4.3 mi southeast of Miranda.

DRAINAGE AREA.—537 mi^2.

PERIOD OF RECORD.—October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
TEMPERATURE DATA: Water years 1960–83.
SEDIMENT DATA: Water year 1981.

REVISED RECORDS.—WSP 1395: Drainage area. WSP 2129: 1955.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 217.57 ft above sea level. Prior to Nov. 2, 1940, nonrecording gage at site 200 ft upstream at datum 0.8 ft higher. Nov. 2, 1940, to Oct. 31, 1944, nonrecording gage at present site and datum.

REMARKS.—Records good. Occasional storage and release for recreational use during summer months at Benbow Reservoir, capacity, 1,060 acre-ft, 16 mi upstream. No diversion upstream from station. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 199,000 ft^3/s, Dec. 22, 1964, gage height, 46.0 ft, from floodmarks, from rating curve extended above 53,000 ft^3/s on basis of slope-area measurement at gage height 42.7 ft; minimum observed, 9 ft^3/s, Oct. 17, 1944.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	1630	19,700	16.96	Feb. 14	1315	40,100	22.77
Jan. 16	1200	17,200	16.07	Feb. 27	1015	17,600	16.22

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	103	4040	311	5000	7580	693	526	228	82	50	34
2	29	84	2420	313	4030	5730	676	550	218	79	49	40
3	29	75	2010	302	3380	4390	655	523	210	78	47	42
4	30	69	1400	312	3030	3750	631	491	204	78	45	41
5	30	66	1100	342	3360	3880	614	471	200	78	44	38
6	33	64	892	337	4420	3230	570	457	199	90	43	38
7	35	68	839	305	3330	2810	514	456	200	82	42	38
8	38	157	841	286	2840	2910	523	537	219	82	41	37
9	38	264	1320	275	2480	3810	513	652	217	83	41	35
10	37	911	1720	304	2290	4090	500	616	208	80	41	34
11	37	1350	1330	11200	2360	4010	480	561	196	83	42	33
12	36	758	1120	7040	4220	3380	486	496	189	82	41	32
13	35	442	1240	4770	6370	2920	571	464	184	80	40	32
14	36	299	1130	7980	30800	2500	555	449	177	80	39	32
15	34	294	989	13000	17600	2120	584	494	169	78	38	33
16	31	608	882	15100	8870	1840	675	516	159	76	37	33
17	30	1460	774	8780	5910	1620	2390	465	146	76	36	32
18	30	975	676	6050	4410	1460	1820	423	140	77	35	32
19	29	1520	620	5750	3540	1340	1130	448	134	77	35	31
20	29	2870	572	6790	3030	1180	981	393	140	74	34	30
21	29	1420	531	5260	2780	1080	877	354	135	72	33	29
22	29	898	494	5030	4650	1030	812	341	120	70	33	29
23	30	668	458	4220	8250	993	726	332	122	67	33	29
24	30	534	428	4530	5340	977	677	319	122	65	33	29
25	30	445	406	5120	4220	931	649	305	111	62	33	29
26	30	386	387	4630	7510	886	630	274	106	59	33	28
27	60	353	370	3770	16600	849	604	257	104	58	33	28
28	473	318	353	3150	13600	818	601	252	101	57	33	28
29	424	440	337	2670	10800	783	579	247	93	55	32	27
30	206	2690	327	3530	---	746	543	236	86	54	31	28
31	136	---	316	4910	---	715	---	229	---	52	32	---
TOTAL	2132	20589	30322	136367	195020	74358	22259	13134	4837	2266	1179	981
MEAN	68.8	686	978	4399	6725	2399	742	424	161	73.1	38.0	32.7
MAX	473	2870	4040	15100	30800	7580	2390	652	228	90	50	42
MIN	29	64	316	275	2290	715	480	229	86	52	31	27
AC-FT	4230	40840	60140	270500	386800	147500	44150	26050	9590	4490	2340	1950

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	260	1465	4029	5470	4871	3623	1838	696	306	113	60.9	60.1
MAX	3332	10130	17260	17530	16640	13000	8425	2370	1754	276	131	221
(WY)	1963	1974	1965	1970	1986	1983	1982	1990	1993	1993	1983	1986
MIN	20.0	25.0	74.6	207	284	304	176	122	52.7	20.4	18.0	29.1
(WY)	1940	1940	1977	1977	1977	1988	1977	1977	1977	1977	1977	1949

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	655438		503444			
ANNUAL MEAN	1796		1376		1888	
HIGHEST ANNUAL MEAN					4393	1983
LOWEST ANNUAL MEAN					156	1977
HIGHEST DAILY MEAN	31900	Feb 7	30800	Feb 14	161000	Dec 22 1964
LOWEST DAILY MEAN	29	Sep 28	27	Sep 29	10	Aug 30 1964
ANNUAL SEVEN-DAY MINIMUM	29	Sep 27	28	Sep 24	14	Jul 30 1977
INSTANTANEOUS PEAK FLOW			40100	Feb 14	199000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			22.77	Feb 14	46.00	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	1300000		998600		1368000	
10 PERCENT EXCEEDS	5560		4220		4920	
50 PERCENT EXCEEDS	386		337		348	
90 PERCENT EXCEEDS	35		33		45	

11476600 BULL CREEK NEAR WEOTT, CA

LOCATION.—Lat 40°21'05", long 124°00'10", in SW 1/4 NW 1/4 sec.30, T.1 S., R.2 E., Humboldt County, Hydrologic Unit 18010106, on left bank, 0.2 mi downstream from Albee Creek, 4.5 mi northwest of Weott, and 4.6 mi upstream from mouth.

DRAINAGE AREA.—28.1 mi^2.

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 269.36 ft above sea level. Prior to Dec. 22, 1964, water-stage recorder, and Jan. 14 to Aug. 10, 1965, nonrecording gage at site 150 ft downstream at datum 8.90 ft lower.

REMARKS.—Records fair. Minor diversions upstream from station for domestic and recreational use. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 7,830 ft^3/s, Dec. 31, 1996, gage height, 12.84 ft, maximum gage height, 20.6 ft^3/s, Dec. 22, 1964, site and datum then in use; minimum daily, 0.25 ft^3/s, Sept. 27, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 1,700 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	0315	2,700	7.71				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	3.8	223	33	386	555	47	26	12	5.1	2.0	1.1
2	.66	3.3	193	31	355	448	45	26	12	5.1	1.9	1.3
3	.66	3.0	144	29	334	369	42	24	11	5.0	1.8	1.4
4	.65	2.7	117	38	331	318	41	23	11	4.9	1.7	1.4
5	.70	2.4	102	32	520	281	39	23	11	5.1	1.8	1.3
6	1.2	2.2	92	29	553	242	37	23	11	5.3	1.8	1.2
7	1.3	4.6	99	28	472	228	35	24	12	5.0	1.8	1.1
8	1.1	27	89	26	412	217	34	26	13	4.8	1.7	.96
9	1.1	14	184	26	366	275	33	24	12	4.5	1.6	.94
10	1.1	143	170	41	329	278	32	26	12	4.2	1.6	.90
11	1.0	67	137	376	332	274	31	25	11	3.9	1.6	.82
12	.99	50	128	204	409	253	32	23	11	3.7	1.5	.78
13	.93	30	133	408	523	234	40	22	10	3.5	1.5	.74
14	.87	22	113	1170	2040	213	31	22	9.6	3.5	1.5	1.0
15	.86	26	101	1030	1060	189	29	22	8.9	3.3	1.4	1.3
16	.87	105	91	1210	650	169	49	22	8.5	3.2	1.4	1.3
17	.82	73	83	724	464	149	89	20	8.1	3.3	1.4	1.1
18	.80	48	76	530	355	133	54	19	7.6	3.4	1.3	.99
19	.80	194	69	568	293	120	45	18	7.5	3.1	1.3	.86
20	.79	163	64	543	257	107	41	17	7.2	3.0	1.3	.78
21	.78	103	59	486	220	97	38	16	6.8	2.8	1.2	.71
22	.78	76	54	447	378	89	36	16	6.6	2.7	1.2	.69
23	.76	65	50	432	389	82	34	15	6.6	2.6	1.1	.71
24	.80	54	47	571	341	76	32	15	6.3	2.4	1.1	.64
25	.83	47	44	587	305	71	32	15	6.0	2.4	1.1	.62
26	.89	44	41	502	556	66	30	14	5.7	2.3	1.1	.63
27	36	39	39	434	1110	63	29	14	5.4	2.3	1.1	.59
28	36	36	37	376	785	59	29	14	5.2	2.3	1.1	.59
29	11	62	35	330	753	56	27	13	5.0	2.2	.99	.54
30	6.3	212	34	386	---	53	26	13	5.0	2.1	.96	.46
31	4.6	---	32	401	---	50	---	13	---	2.1	.96	---
TOTAL	116.64	1722.0	2880	12028	15278	5814	1139	613	265.0	109.1	43.81	27.45
MEAN	3.76	57.4	92.9	388	527	188	38.0	19.8	8.83	3.52	1.41	.91
MAX	36	212	223	1210	2040	555	89	26	13	5.3	2.0	1.4
MIN	.65	2.2	32	26	220	50	26	13	5.0	2.1	.96	.46
AC-FT	231	3420	5710	23860	30300	11530	2260	1220	526	216	87	54

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

MEAN	12.7	110	259	334	309	238	119	40.7	17.1	6.59	3.42	2.87
MAX	160	683	780	901	1056	717	526	137	88.0	14.5	10.0	12.8
(WY)	1963	1974	1997	1978	1986	1983	1963	1963	1993	1993	1983	1986
MIN	.72	3.61	3.67	10.5	13.8	16.0	11.2	10.3	4.84	1.81	.70	.50
(WY)	1988	1994	1977	1977	1977	1988	1988	1988	1977	1977	1992	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1961 - 2000	
ANNUAL TOTAL	40624.43		40036.00			
ANNUAL MEAN	111		109		120	
HIGHEST ANNUAL MEAN					287	1983
LOWEST ANNUAL MEAN					9.72	1977
HIGHEST DAILY MEAN	931	Feb 25	2040	Feb 14	4900	Jan 16 1974
LOWEST DAILY MEAN	.63	Sep 29	.46	Sep 30	.25	Sep 27 1994
ANNUAL SEVEN-DAY MINIMUM	.65	Sep 24	.58	Sep 24	.29	Sep 22 1994
INSTANTANEOUS PEAK FLOW			2700	Feb 14	7830	Dec 31 1996
INSTANTANEOUS PEAK STAGE			7.71	Feb 14	20.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	80580		79410		87040	
10 PERCENT EXCEEDS	346		377		320	
50 PERCENT EXCEEDS	32		24		23	
90 PERCENT EXCEEDS	.85		.95		2.0	

11477000 EEL RIVER AT SCOTIA, CA

LOCATION.—Lat 40°29'30", long 124°05'55", in SW 1/4 sec.5, T.1 N., R.1 E., Humboldt County, Hydrologic Unit 18010105, near center of span in left pier of A.S. Murphy Memorial Bridge on State Highway 283, 0.5 mi north of Scotia, and 6 mi upstream from Van Duzen River.

DRAINAGE AREA.—3,113 mi^2.

PERIOD OF RECORD.—October 1910 to current year. Monthly discharge only for some periods and yearly estimates for 1915–16, published in WSP 1315-B.
CHEMICAL DATA: Water years 1952–75, 1977, 1979–95.
BIOLOGICAL DATA: Water years 1979–81.
SPECIFIC CONDUCTANCE: Water years 1979–81.
WATER TEMPERATURE: Water years 1958–82.
SEDIMENT DATA: Water years 1955–95; October 1997 to September 1998.

REVISED RECORDS.—WSP 931: 1938. WSP 1315-B: 1914–15(M), 1917(M), 1927–28(M), 1936(M), 1939(M). WSP 1345: Drainage area. WSP 1715: 1959.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 35.50 ft above sea level. Prior to Dec. 12, 1940, nonrecording gage at same site and datum.

REMARKS.—Records good. Low flow slightly regulated by Lake Pillsbury (station 11470000) 138 mi upstream since December 1921 and by diversion through Potter Valley Powerhouse Intake (station 11471000). See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 752,000 ft^3/s, Dec. 23, 1964, gage height, 72.0 ft, from floodmarks, from rating curve extended above 220,000 ft^3/s on basis of maximum flow at upstream stations; minimum observed, 10 ft^3/s, Aug. 12–14, 1924.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 72,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	2200	166,000	38.25	Feb. 27	2145	87,200	29.10

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	570	17600	1210	27500	41200	3790	2490	1220	347	149	80
2	88	444	11700	1210	23200	29100	3650	2510	1170	334	145	83
3	85	373	9450	1190	18400	23700	3680	2510	1100	321	141	91
4	83	324	6920	1210	15800	19100	3800	2390	1050	312	138	93
5	79	289	5050	1300	15600	21900	3940	2270	1000	312	131	96
6	81	269	3990	1280	26800	22100	3730	2190	966	310	128	90
7	90	274	3710	1270	20500	18200	3520	2160	960	317	126	85
8	95	406	3950	1170	15700	16900	3330	2240	996	313	125	82
9	93	506	5000	1110	12800	18400	3230	2710	976	307	127	91
10	93	1680	7320	1140	11200	21700	3120	2900	986	302	117	96
11	94	3670	6450	13500	11400	20400	2950	2750	965	277	114	96
12	92	4720	5090	31700	21500	18400	2850	2620	913	276	111	92
13	91	2550	5310	15700	29600	15700	3100	2370	868	267	107	86
14	95	1590	5640	25600	111000	13800	3700	2220	833	258	105	91
15	99	1210	4790	46800	105000	12600	3820	2340	792	246	100	92
16	102	1740	3980	52800	47500	11500	3620	3190	743	237	98	85
17	106	4840	3440	40700	29300	10600	6970	3360	700	230	95	84
18	106	5610	3040	22600	21200	9780	13100	2930	655	225	96	81
19	105	4640	2750	25200	17100	8950	8170	2580	606	221	94	78
20	106	10800	2540	33500	14600	8980	5940	2320	568	218	91	75
21	109	8970	2360	25300	13800	8250	4920	2190	544	213	91	72
22	109	5030	2300	22200	17900	7600	4330	2080	518	204	90	71
23	114	3350	2090	18000	42700	6860	4030	2000	497	203	89	72
24	117	2500	1890	19000	28600	6580	3710	1910	475	197	87	71
25	118	1950	1730	21300	21100	6180	3440	1860	459	184	85	69
26	123	1650	1630	21700	23400	5820	3110	1740	443	181	84	68
27	165	1450	1520	17200	68500	5280	3010	1630	422	176	84	67
28	344	1310	1430	13900	70600	4970	2960	1520	403	170	84	65
29	970	1320	1370	11400	51200	4670	2850	1450	380	166	84	65
30	1180	5570	1310	12200	---	4340	2660	1370	358	161	81	65
31	818	---	1250	23400	---	4060	---	1280	---	154	80	---
TOTAL	6040	79605	136600	525790	933500	427620	125030	70080	22566	7639	3277	2432
MEAN	195	2654	4406	16960	32190	13790	4168	2261	752	246	106	81.1
MAX	1180	10800	17600	52800	111000	41200	13100	3360	1220	347	149	96
MIN	79	269	1250	1110	11200	4060	2660	1280	358	154	80	65
AC-FT	11980	157900	270900	1043000	1852000	848200	248000	139000	44760	15150	6500	4820

11477000 EEL RIVER AT SCOTIA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	666	5107	13830	20190	20180	14450	8863	3672	1287	342	151	143
MAX	10910	38690	84420	69950	77680	51150	39190	11570	7511	920	422	735
(WY)	1963	1974	1965	1970	1958	1983	1982	1912	1993	1993	1983	1986
MIN	50.5	59.3	168	659	389	946	703	278	75.7	25.1	22.1	19.4
(WY)	1930	1930	1977	1977	1920	1924	1924	1924	1924	1924	1924	1924

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1911 - 2000	
ANNUAL TOTAL	2897289		2340179			
ANNUAL MEAN	7938		6394		7350	
HIGHEST ANNUAL MEAN					17300	1983
LOWEST ANNUAL MEAN					563	1977
HIGHEST DAILY MEAN	95900	Feb 9	111000	Feb 14	648000	Dec 23 1964
LOWEST DAILY MEAN	79	Sep 26	65	Sep 28	12	Aug 12 1924
ANNUAL SEVEN-DAY MINIMUM	82	Sep 24	67	Sep 24	14	Aug 10 1924
INSTANTANEOUS PEAK FLOW			166000	Feb 14	752000	Dec 23 1964
INSTANTANEOUS PEAK STAGE			38.25	Feb 14	72.00	Dec 23 1964
INSTANTANEOUS LOW FLOW					10	Aug 12 1924
ANNUAL RUNOFF (AC-FT)	5747000		4642000		5325000	
10 PERCENT EXCEEDS	23200		20700		18000	
50 PERCENT EXCEEDS	1890		1480		1400	
90 PERCENT EXCEEDS	106		90		104	

11477425 MILL CREEK BELOW DIVERSION DAM, NEAR DINSMORE, CA

LOCATION.—Lat 40°27'52", long 123°35'59", in NE 1/4 SW 1/4 sec.15, T.1 N., R.5 E., Humboldt County, Hydrologic Unit 18010105, on left bank, and 1.9 mi south-southeast of Dinsmore.

DRAINAGE AREA.—0.74 mi^2.

PERIOD OF RECORD.—October 1990 to current year.

GAGE.—Water-stage recorder and 90° V-notch weir. Elevation of gage is 3,660 ft above sea level, from topographic map.

REMARKS.—Records of fishery release normally are computed only during periods of diversion to powerhouse. Flow over spillway bypasses this station. See schematic diagram of Eel River Basin.

COOPERATION.—Records provided by North Coast Hydroelectric, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e.43	.42	.35	---	---	---	---	---
2	---	---	---	---	e.42	.40	.38	---	---	---	---	---
3	---	---	---	---	e.40	.40	---	---	---	---	---	---
4	---	---	---	.40	e.37	.40	---	---	---	---	---	---
5	---	---	.33	.40	e.35	.40	---	---	---	---	---	---
6	---	---	.33	---	e.36	.40	---	.48	---	---	---	---
7	---	---	.33	---	.35	.40	---	.40	---	---	---	---
8	---	---	.33	---	.35	.40	---	.38	---	---	---	---
9	---	---	.33	---	.33	.38	---	.40	---	---	---	---
10	---	---	.33	.46	.33	.40	---	.40	---	---	---	---
11	---	---	.33	.44	.33	.40	---	.40	---	---	---	---
12	---	---	.33	.46	.35	.40	---	.40	---	---	---	---
13	---	---	.35	.46	.40	.40	---	.38	---	---	---	---
14	---	---	.38	.49	.42	.42	---	.35	---	---	---	---
15	---	---	.35	.51	.38	.40	.40	.35	---	---	---	---
16	---	---	.33	.51	.38	.42	.40	.35	---	---	---	---
17	---	---	.33	.42	.35	.40	.42	.35	---	---	---	---
18	---	---	.33	.42	.33	.40	.42	.35	---	---	---	---
19	---	---	.33	.42	.33	.42	.40	.35	---	---	---	---
20	---	.44	.33	.42	.33	.40	.40	.34	---	---	---	---
21	---	.42	.31	.42	.38	.40	.35	---	---	---	---	---
22	---	.42	.29	.42	.38	.40	.42	---	---	---	---	---
23	---	.42	.29	.42	.38	.40	.33	---	---	---	---	---
24	---	.42	.29	.42	.38	.40	.33	---	---	---	---	---
25	---	.42	---	.44	.38	.40	.33	---	---	---	---	---
26	---	---	---	.44	.40	.40	.33	---	---	---	---	---
27	---	---	---	.44	.42	.38	.44	---	---	---	---	---
28	---	---	---	.44	.42	.35	.40	---	---	---	---	---
29	---	---	---	.44	.42	.35	---	---	---	---	---	---
30	---	---	---	.44	---	.35	---	---	---	---	---	---
31	---	---	---	.44	---	.35	---	---	---	---	---	---
TOTAL	---	---	---	---	10.85	12.24	---	---	---	---	---	---
MEAN	---	---	---	---	.37	.39	---	---	---	---	---	---
MAX	---	---	---	---	.43	.42	---	---	---	---	---	---
MIN	---	---	---	---	.33	.35	---	---	---	---	---	---
AC-FT	---	---	---	---	22	24	---	---	---	---	---	---

e Estimated.

11477450 SULPHUR CREEK BELOW DIVERSION DAM, NEAR DINSMORE, CA

LOCATION.—Lat 40°27'50", long 123°36'15", in NW 1/4 SW 1/4 sec.15, T.1 N., R.5 E., Humboldt County, Hydrologic Unit 18010105, on right bank, and 2 mi south-southeast of Dinsmore.

DRAINAGE AREA.—1.06 mi^2.

PERIOD OF RECORD.—October 1990 to current year.

GAGE.—Water-stage recorder and 90° V-notch weir. Elevation of gage is 3,660 ft above sea level, from topographic map.

REMARKS.—Records of fishery release normally are computed only during periods of diversion to powerhouse. Flow over spillway bypasses this station. See Schematic diagram of Eel River Basin.

COOPERATION.—Records provided by North Coast Hydroelectric, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.54	.63	.63	---	---	---	---	---
2	---	---	---	---	.49	.54	.63	---	---	---	---	---
3	---	---	---	---	.46	.51	---	---	---	---	---	---
4	---	---	---	.40	.44	.51	---	---	---	---	---	---
5	---	---	.46	.42	.40	.66	---	---	---	---	---	---
6	---	---	.46	---	.31	.63	---	.40	---	---	---	---
7	---	---	.46	---	.38	.75	---	.38	---	---	---	---
8	---	---	.44	---	.46	.72	---	.40	---	---	---	---
9	---	---	.44	---	.46	.69	---	.40	---	---	---	---
10	---	---	.46	.49	.46	.75	---	.42	---	---	---	---
11	---	---	.46	.33	.46	.88	---	.42	---	---	---	---
12	---	---	.49	.38	.49	.75	---	.42	---	---	---	---
13	---	---	.63	.46	.66	.78	---	.40	---	---	---	---
14	---	---	.51	.54	---	.88	---	.49	---	---	---	---
15	---	---	.46	.33	---	.78	.63	.49	---	---	---	---
16	---	---	.44	.40	---	.85	.66	.49	---	---	---	---
17	---	---	.44	.38	---	.72	.85	.49	---	---	---	---
18	---	---	.46	.38	---	.72	.60	.49	---	---	---	---
19	---	---	.46	.38	---	.69	.51	.49	---	---	---	---
20	---	.54	.46	.33	---	.69	.46	.49	---	---	---	---
21	---	.42	.42	.29	.38	.69	---	---	---	---	---	---
22	---	.40	.40	.27	.40	.69	---	---	---	---	---	---
23	---	.38	.42	.29	.40	.69	---	---	---	---	---	---
24	---	.38	.40	.40	.38	.66	---	---	---	---	---	---
25	---	.35	---	.49	.42	.66	---	---	---	---	---	---
26	---	---	---	.44	.78	.63	---	---	---	---	---	---
27	---	---	---	.38	.66	.63	.51	---	---	---	---	---
28	---	---	---	.35	.75	.66	.46	---	---	---	---	---
29	---	---	---	.35	.75	.63	---	---	---	---	---	---
30	---	---	---	.35	---	.63	---	---	---	---	---	---
31	---	---	---	.44	---	.63	---	---	---	---	---	---
TOTAL	---	---	---	---	---	21.33	---	---	---	---	---	---
MEAN	---	---	---	---	---	.69	---	---	---	---	---	---
MAX	---	---	---	---	---	.88	---	---	---	---	---	---
MIN	---	---	---	---	---	.51	---	---	---	---	---	---
AC-FT	---	---	---	---	---	42	---	---	---	---	---	---

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CA

LOCATION.—Lat 40°28'50", long 123°53'23", in NE 1/4 SE 1/4 sec.12, T.1 N., R.2 E., Humboldt County, Hydrologic Unit 18010105, on left bank, at downstream side of bridge on State Highway 36, 0.9 mi upstream from Grizzly Creek, and 5 mi west of Bridgeville.

DRAINAGE AREA.—222 mi^2.

PERIOD OF RECORD.—October 1950 to current year.

REVISED RECORDS.—WSP 1735: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 358.18 ft above sea level. Prior to Oct. 1, 1965, at site 2.4 mi upstream at different datum.

REMARKS.—Records good. No storage or large diversion upstream from station. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 48,700 ft^3/s, Dec. 22, 1964, gage height, 24.0 ft, from floodmarks, present site and datum, from rating curve extended above 20,000 ft^3/s on basis of slope-area measurement at gage height 21.3 ft, former site and datum; minimum daily, 4.4 ft^3/s, Sept. 28, 1992.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 15,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	0800	20,500	12.39				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	41	2000	131	3640	2730	337	268	139	35	14	7.6
2	6.6	34	1750	136	2440	1990	340	297	130	35	13	8.5
3	6.7	30	1410	131	1840	1680	348	271	122	35	13	11
4	6.6	26	961	184	1660	1690	351	250	115	34	12	13
5	6.6	24	692	239	2270	1900	332	236	110	34	12	11
6	8.7	23	564	179	2320	1540	311	226	107	36	11	10
7	9.5	25	916	155	1670	1390	288	244	106	36	11	10
8	10	66	846	144	1420	1330	275	338	119	38	11	9.8
9	9.7	154	1080	144	1220	1530	266	333	118	40	10	9.3
10	9.3	609	949	333	1120	1500	254	448	119	36	10	8.8
11	8.9	611	694	6480	1220	1830	243	598	108	32	10	8.8
12	8.5	390	697	2500	1960	1480	247	509	101	30	9.9	8.6
13	8.2	235	1430	2700	2690	1320	355	409	102	27	9.7	8.2
14	8.1	152	992	9040	15500	1270	419	370	94	25	9.5	8.6
15	7.9	138	718	7920	6380	1140	336	580	85	24	9.5	8.6
16	7.8	421	567	9400	2970	1070	477	539	79	23	9.4	8.7
17	7.7	671	482	4230	1800	990	1230	434	74	23	9.4	8.5
18	7.3	342	465	2650	1390	876	1220	369	67	23	9.4	8.2
19	7.0	1170	422	3390	1200	885	815	327	64	23	9.3	8.0
20	7.0	1670	373	3850	1120	797	614	295	61	22	9.0	7.6
21	7.0	980	335	2430	1060	686	506	268	57	21	8.8	7.2
22	7.0	577	299	2040	2050	624	443	246	54	20	9.0	6.9
23	7.0	424	259	1780	1850	604	401	227	52	19	9.0	6.7
24	7.1	345	230	2600	1410	555	360	212	50	18	8.7	6.7
25	7.3	270	208	3180	1500	512	337	199	48	18	8.7	6.6
26	7.7	230	191	2150	3670	477	315	187	45	17	8.4	6.5
27	12	218	175	1680	9480	455	300	177	42	16	8.1	6.5
28	122	186	161	1440	5430	438	370	170	39	16	8.1	6.5
29	180	328	151	1190	4290	406	321	161	37	15	8.1	6.5
30	82	2510	143	2050	---	376	287	153	35	15	7.8	6.9
31	54	---	135	2930	---	351	---	145	---	15	7.5	---
TOTAL	651.8	12900	20295	77406	86570	34422	12698	9486	2479	801	304.3	249.8
MEAN	21.0	430	655	2497	2985	1110	423	306	82.6	25.8	9.82	8.33
MAX	180	2510	2000	9400	15500	2730	1230	598	139	40	14	13
MIN	6.6	23	135	131	1060	351	243	145	35	15	7.5	6.5
AC-FT	1290	25590	40260	153500	171700	68280	25190	18820	4920	1590	604	495

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

MEAN	146	898	1848	2303	2074	1635	922	444	143	36.4	17.0	19.7
MAX	1464	5476	6046	6608	6232	5015	3255	1139	821	98.0	82.4	144
(WY)	1963	1974	1956	1995	1958	1995	1963	1953	1993	1953	1983	1986
MIN	7.20	16.8	18.8	103	156	172	131	109	40.4	12.2	5.89	5.72
(WY)	1988	1960	1977	1977	1977	1988	1977	1985	1987	1977	1977	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	289306.4		258262.9			
ANNUAL MEAN	793		706		869	
HIGHEST ANNUAL MEAN					1610	1974
LOWEST ANNUAL MEAN					95.7	1977
HIGHEST DAILY MEAN	9670	Feb 28	15500	Feb 14	33900	Dec 22 1964
LOWEST DAILY MEAN	6.6	Sep 27	6.5	Sep 26	4.4	Sep 28 1992
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 29	6.6	Sep 23	4.6	Aug 13 1977
INSTANTANEOUS PEAK FLOW			20500	Feb 14	48700	Dec 22 1964
INSTANTANEOUS PEAK STAGE			12.39	Feb 14	24.00	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	573800		512300		629500	
10 PERCENT EXCEEDS	1920		1860		2160	
50 PERCENT EXCEEDS	259		186		182	
90 PERCENT EXCEEDS	8.1		8.2		12	

11479560 EEL RIVER AT FERNBRIDGE, CA

LOCATION.—Lat 40°36'57", long 124°12'06", in SW 1/4 NE 1/4 sec.29, T.3 N., R.1 W., Humboldt County, Hydrologic Unit 18010105, on right bank, downstream from bridge on county road, and at Fernbridge.

DRAINAGE AREA.—3,614 mi^2.

PERIOD OF RECORD.—October 1989 to current year. Records prior to October 1989 are in the files of the California Department of Water Resources.

GAGE.—Water-stage recorder. Datum of gage is 3.64 ft above sea level.

REMARKS.—Data is collected for flood-warning purposes only. Figures given represent only those days when the gage height was above 0.52 ft. See schematic diagram of Eel River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 25.31 ft, Jan. 9, 1995.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	6.03	4.67	---	---	8.20	7.68	10.95	8.69
2	---	---	---	---	5.68	4.60	---	---	7.68	6.68	8.69	7.52
3	---	---	---	---	4.65	3.86	---	---	6.68	5.80	7.52	6.66
4	---	---	---	---	3.86	2.90	---	---	5.80	5.41	6.66	6.19
5	---	---	---	---	2.90	2.32	.62	---	6.21	5.27	7.19	6.37
6	---	---	---	---	2.32	1.95	.53	---	8.01	6.21	7.19	6.39
7	---	---	---	---	2.43	1.93	.57	---	---	---	6.41	5.87
8	---	---	.80	---	2.45	2.16	---	---	---	---	5.87	5.76
9	---	---	---	---	3.62	2.18	---	---	---	---	6.65	5.75
10	---	---	1.36	---	3.71	3.46	.53	---	---	---	6.90	6.48
11	---	---	2.01	1.36	3.48	2.82	8.84	.53	---	---	6.68	6.46
12	---	---	2.44	1.85	2.82	2.50	9.83	6.43	---	---	6.59	5.93
13	---	---	1.85	1.02	3.20	2.61	6.43	5.34	8.99	7.28	5.93	5.47
14	---	---	1.02	---	3.03	2.78	10.40	6.15	19.04	8.99	5.47	5.09
15	---	---	.53	---	2.78	2.29	11.95	9.84	18.92	12.79	5.09	4.76
16	---	---	1.39	---	2.29	1.95	12.15	10.94	12.79	9.29	4.77	4.50
17	---	---	3.00	1.39	1.96	1.72	12.00	8.23	9.29	7.47	4.51	4.28
18	---	---	3.02	2.09	1.72	1.56	8.23	6.84	7.47	6.40	4.29	3.97
19	---	---	3.39	1.82	1.58	1.39	8.09	7.00	6.40	5.63	3.98	3.77
20	---	---	4.95	3.39	1.52	1.26	9.28	8.09	5.63	5.13	3.90	3.77
21	---	---	4.80	3.21	2.01	1.13	8.61	6.92	5.23	5.00	3.77	3.52
22	---	---	3.21	2.17	1.68	1.05	7.02	6.67	8.01	5.23	3.53	3.30
23	---	---	2.20	1.59	1.45	.91	6.67	5.80	10.50	8.01	3.30	3.08
24	---	---	1.66	1.20	1.24	.78	6.46	5.81	9.12	7.19	3.09	2.98
25	---	---	1.51	.91	1.09	.68	7.14	6.42	7.19	6.27	2.99	2.83
26	---	---	1.30	.69	.79	.59	7.19	6.35	9.01	6.21	2.84	2.70
27	.77	---	.81	.56	.65	---	6.36	5.53	14.38	9.01	2.71	2.50
28	2.10	---	.79	---	.54	---	5.53	4.86	14.34	11.49	2.51	2.42
29	---	---	.93	---	---	---	4.86	4.26	11.51	10.91	2.42	2.29
30	---	---	4.67	.93	---	---	6.12	4.16	---	---	2.29	2.16
31	---	---	---	---	---	---	7.73	6.12	---	---	2.16	2.06
MONTH	---	---	---	---	---	---	---	---	---	---	10.95	2.06

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.07	1.95	1.41	1.33	.95	---	1.08	---	.85	---	---	---
2	1.95	1.90	1.44	1.32	.95	---	1.14	---	.67	---	---	---
3	1.94	1.87	1.65	1.34	.92	---	1.37	---	---	---	---	---
4	2.01	1.89	1.72	1.26	1.04	---	.70	---	---	---	---	---
5	2.06	1.93	1.53	1.21	.83	---	---	---	---	---	---	---
6	1.98	1.86	1.42	1.17	---	---	---	---	---	---	---	---
7	1.88	1.76	1.33	1.14	---	---	---	---	---	---	---	---
8	1.80	1.67	1.32	1.17	---	---	---	---	---	---	---	---
9	1.69	1.64	1.58	1.29	---	---	---	---	---	---	---	---
10	1.65	1.57	1.73	1.58	---	---	---	---	---	---	---	---
11	1.57	1.50	1.82	1.72	---	---	---	---	---	---	---	---
12	1.50	1.44	1.72	1.57	---	---	---	---	---	---	---	---
13	1.68	1.47	1.57	1.41	---	---	---	---	---	---	---	---
14	2.01	1.68	1.41	1.30	---	---	---	---	---	---	---	---
15	2.01	1.85	1.58	1.29	.79	---	---	---	---	---	---	---
16	2.11	1.76	1.95	1.54	.79	---	---	---	---	---	---	---
17	4.33	2.11	1.95	1.76	.82	---	---	---	---	---	---	---
18	5.57	4.33	1.77	1.54	---	---	---	---	---	---	---	---
19	4.53	3.28	1.55	1.38	---	---	---	---	---	---	---	---
20	3.28	2.70	1.38	1.25	---	---	---	---	---	---	---	---
21	2.70	2.36	1.26	1.17	---	---	---	---	---	---	---	---
22	2.36	2.14	1.18	1.09	---	---	---	---	---	---	---	---
23	2.14	1.99	1.09	1.04	---	---	---	---	---	---	---	---
24	1.99	1.84	1.04	.95	---	---	---	---	---	---	---	---
25	1.84	1.71	.95	.91	---	---	---	---	---	---	---	---
26	1.72	1.60	.92	.80	---	---	---	---	---	---	---	---
27	1.61	1.57	.82	.72	---	---	---	---	.74	---	---	---
28	1.65	1.55	.73	.65	.53	---	---	---	.66	---	---	---
29	1.61	1.51	.65	.59	.90	---	.77	---	.55	---	---	---
30	1.52	1.41	.60	---	1.12	---	.67	---	---	---	---	---
31	---	---	.70	---	---	---	.91	---	---	---	---	---
MONTH	5.57	1.41	1.95	---	---	---	---	---	---	---	---	---

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CA

LOCATION.—Lat 40°17'04", long 123°20'03", in NW 1/4 NE 1/4 sec.24, T.2 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, on left bank, on downstream side of Zenia Road Bridge, 500 ft downstream from unnamed creek, 0.4 mile downstream from Tompkins Creek, and 6.1 mi southwest of Forest Glen.

DRAINAGE AREA.—93.8 mi^2.

PERIOD OF RECORD.—June 1980 to current year. Discharge measurements only September to December 1971, July 1972, June to September 1977.

REVISED RECORDS.—WDR CA-80-2: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 2,700 ft above sea level, from topographic map. June 28 to Sept. 30, 1990, nonrecording gage 400 ft upstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 15,000 ft^3/s, Feb. 17, 1986, gage height, 11.39 ft in gage, 12.94 ft from crest-stage gage, from rating curve extended above 5,000 ft^3/s, maximum gage height, 13.10 ft, Jan. 20, 1993; no flow at times each year.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1300	6,340	9.56	Feb. 27	0100	4,070	8.01

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.19	385	22	1360	940	97	67	32	3.4	.58	.00
2	.00	.18	429	22	999	768	92	72	30	3.2	.54	.00
3	.00	.13	313	21	704	638	88	64	28	3.0	.51	.00
4	.00	.10	184	23	553	640	85	60	26	2.8	.55	.00
5	.00	.07	128	24	735	855	81	57	25	2.7	.46	.00
6	.00	.03	100	22	791	740	78	54	24	2.6	.41	.00
7	.00	.08	104	21	596	616	75	60	23	2.6	.38	.00
8	.00	2.3	100	20	478	532	72	65	26	2.5	.37	.00
9	.00	1.6	103	20	411	529	70	60	26	2.2	.33	.00
10	.00	20	106	70	386	540	67	60	24	2.1	.31	.00
11	.00	67	96	1680	432	598	64	61	23	1.9	.39	.00
12	.00	45	123	713	634	533	67	57	22	1.5	.23	.00
13	.00	32	282	503	1510	466	96	54	21	1.3	.21	.00
14	.00	25	204	966	5220	417	100	57	19	1.2	.21	.00
15	.00	29	150	2020	2520	371	89	100	16	1.1	.17	.00
16	.00	80	117	2030	1260	336	97	144	14	1.0	.15	.00
17	.00	142	96	1070	848	296	195	115	13	.96	.10	.00
18	.00	75	83	856	643	266	240	95	11	.90	.07	.00
19	.00	170	71	1130	512	252	182	83	10	.83	.06	.00
20	.00	281	62	1450	441	232	153	75	9.7	.94	.03	.00
21	.00	139	55	919	395	209	135	67	8.9	.79	.03	.00
22	.00	87	48	868	576	192	120	61	8.1	.77	.00	.00
23	.00	64	43	680	667	178	108	56	7.3	.76	.00	.00
24	.00	51	38	653	585	165	99	52	6.6	.75	.00	.00
25	.00	42	35	764	533	153	92	48	6.0	.73	.00	.00
26	.00	36	32	654	1600	142	86	46	5.4	.71	.00	.00
27	3.0	32	30	505	3030	135	82	43	4.9	.69	.00	.00
28	4.3	28	28	413	1700	129	81	40	4.4	.68	.00	.00
29	1.2	51	26	353	1290	120	76	38	4.0	.65	.00	.00
30	.59	408	24	553	---	111	70	36	3.6	.66	.00	.00
31	.30	---	23	863	---	103	---	34	---	.63	.00	---
TOTAL	9.39	1908.68	3618	19908	31409	12202	3037	1981	481.9	46.55	6.09	0.00
MEAN	.30	63.6	117	642	1083	394	101	63.9	16.1	1.50	.20	.000
MAX	4.3	408	429	2030	5220	940	240	144	32	3.4	.58	.00
MIN	.00	.03	23	20	386	103	64	34	3.6	.63	.00	.00
AC-FT	19	3790	7180	39490	62300	24200	6020	3930	956	92	12	.00

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.73	172	425	639	668	523	261	112	47.6	7.42	1.18	.94
MAX	57.6	741	1684	1887	2136	1299	878	301	229	25.0	4.87	12.2
(WY)	1990	1985	1997	1995	1986	1995	1982	1995	1993	1993	1993	1986
MIN	.000	.000	8.08	28.5	85.3	38.6	32.0	20.4	5.31	1.27	.000	.000
(WY)	1988	1994	1991	1991	1991	1988	1988	1987	1987	1985	1984	1984

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	92249.42		74607.61			
ANNUAL MEAN	253		204		237	
HIGHEST ANNUAL MEAN					419	1995
LOWEST ANNUAL MEAN					61.4	1994
HIGHEST DAILY MEAN	3960	Feb 7	5220	Feb 14	10300	Jan 1 1997
LOWEST DAILY MEAN	.00	Sep 18	.00	Oct 1	.00	Oct 8 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 24	.00	Oct 1	.00	Sep 11 1982
INSTANTANEOUS PEAK FLOW			6340	Feb 14	15000	Feb 17 1986
INSTANTANEOUS PEAK STAGE			9.56	Feb 14	13.10	Jan 20 1993
ANNUAL RUNOFF (AC-FT)	183000		148000		171500	
10 PERCENT EXCEEDS	685		641		624	
50 PERCENT EXCEEDS	44		33		34	
90 PERCENT EXCEEDS	.00		.00		.00	

11480400 RUTH RESERVOIR NEAR FOREST GLEN, CA

LOCATION.—Lat 40°22'08", long 123°25'56", in NW 1/4 NW 1/4 sec.19, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, near center of Robert W. Matthews Dam on Mad River, and 5.6 mi west of Forest Glen.

DRAINAGE AREA.—121 mi^2.

PERIOD OF RECORD.—October 1966 to current year. Records prior to October 1966 in files of Humboldt Bay Municipal Water District.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by Humboldt Bay Municipal Water District).

REMARKS.—Reservoir is formed by earthfill dam; storage began July 1961. Total capacity, 48,000 acre-ft, elevation, 2,654.0 ft, crest of spillway. Minimum pool capacity, 7,810 acre-ft, elevation, 2,600 ft. Water is released down Mad River for municipal use. Records given represent total contents at 2400 hours.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 68,000 acre-ft, Feb. 17, 1986, elevation, 2,667.06 ft; minimum, 11,700 acre-ft, Oct. 24–28, 1977; minimum elevation, 2,607.13 ft, Oct. 28, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 55,500 acre-ft, Feb. 14, elevation, 2,660.42 ft; minimum contents, 29,100 acre-ft, Nov. 9, elevation, 2634.59 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Humboldt Bay Municipal Water District in 1977)

2,595	5,920	2,620	18,100	2,645	38,600
2,600	7,810	2,625	21,500	2,650	43,700
2,605	10,000	2,630	25,300	2,655	49,200
2,610	12,500	2,635	29,400	2,660	55,100
2,615	15,100	2,640	33,800	2,664	60,200

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34400	30100	33300	37300	50900	50800	47600	46900	46900	44300	41400	36900
2	34200	29900	34200	37300	50600	50400	47700	46900	46900	44200	41300	36700
3	34100	29800	34900	37200	50200	50000	47800	47000	46800	44100	41200	36500
4	33900	29700	35200	37100	49800	50000	47900	46900	46700	44000	41100	36400
5	33800	29500	35400	37100	50200	50200	48000	46900	46600	43900	41000	36200
6	33600	29400	35500	37000	50200	50100	48100	46900	46500	43900	40800	36100
7	33500	29300	35700	37000	49800	49900	47900	47000	46400	43800	40700	35900
8	33300	29200	35800	36900	49500	49700	47600	47000	46300	43700	40600	35800
9	33200	29100	36000	36900	49300	49700	47300	47000	46200	43700	40500	35600
10	33000	29300	36100	37000	49200	49700	47100	47100	46100	43600	40300	35500
11	32900	29300	36200	40700	49300	49800	46900	47000	46000	43500	40200	35300
12	32700	29300	36500	42300	49700	49700	46900	47000	45900	43400	40000	35200
13	32600	29300	37000	43900	51700	49500	47000	47000	45700	43300	39900	35000
14	32400	29300	37300	46700	55500	49400	47100	47100	45700	43200	39700	34900
15	32300	29200	37600	50600	53000	49200	47200	47200	45600	43100	39500	34700
16	32100	29400	37700	51800	51400	49100	47400	47300	45500	43000	39400	34500
17	31900	29700	37800	50800	50600	48900	47800	47400	45500	42900	39200	34400
18	31800	29700	37800	50500	49900	48800	48000	47500	45500	42800	39000	34200
19	31600	30300	37900	50800	49500	48700	48000	47500	45400	42700	38900	34100
20	31500	30900	37900	50900	49300	48600	47900	47600	45400	42600	38700	33900
21	31300	31200	37900	50600	49100	48500	47800	47600	45300	42500	38600	33800
22	31200	31300	37800	50300	49800	48400	47600	47500	45200	42400	38400	33600
23	31000	31300	37800	50100	49800	48400	47400	47500	45100	42300	38300	33400
24	30900	31300	37800	50100	49700	48300	47200	47500	45000	42200	38100	33300
25	30700	31300	37700	50200	49600	48200	46900	47400	45000	42100	37900	33100
26	30600	31200	37600	49900	52000	48100	46800	47400	44900	42000	37800	33000
27	30800	31200	37600	49600	53200	48000	46800	47300	44800	41900	37600	32800
28	30700	31100	37500	49300	52100	47800	46800	47200	44600	41800	37500	32700
29	30500	31300	37500	49100	51500	47700	46800	47200	44500	41700	37300	32500
30	30400	32400	37400	49600	---	47600	46900	47100	44400	41600	37200	32400
31	30300	---	37400	50300	---	47600	---	47000	---	41500	37000	---
MAX	34400	32400	37900	51800	55500	50800	48100	47600	46900	44300	41400	36900
MIN	30300	29100	33300	36900	49100	47600	46800	46900	44400	41500	37000	32400
a	2635.97	2638.40	2643.77	2655.99	2657.03	2653.60	2652.97	2653.10	2650.72	2647.92	2643.40	2638.36
b	-4200	+2100	+5000	+12900	+1200	-3900	-700	+100	-2600	-2900	-4500	-4600

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

11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CA

LOCATION.—Lat 40°22'16", long 123°26'06", in SW 1/4 SW 1/4 sec.18, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, on left bank, 1,200 ft downstream from Robert W. Matthews Dam, and 5.8 mi west of Forest Glen.

DRAINAGE AREA.—121 mi^2.

PERIOD OF RECORD.—October 1980 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 2,560 ft above sea level, from topographic map.

REMARKS.—Records good. Flow regulated by Ruth Reservoir (station 11480400) 1,200 ft upstream.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 17,800 ft^3/s, Feb. 17, 1986, gage height, 17.61 ft, from floodmarks, from rating curve extended above 8,800 ft^3/s; minimum daily, 5.6 ft^3/s, Mar. 2, 1991.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	71	72	55	1350	1670	117	77	82	44	47	77
2	76	71	72	54	1410	1300	83	77	83	44	47	77
3	76	71	72	55	1140	1050	66	77	82	44	47	77
4	76	71	71	55	907	893	51	78	82	45	53	77
5	76	71	71	62	878	1020	52	78	82	45	58	76
6	76	71	71	66	1080	1030	66	78	81	45	58	75
7	76	71	72	54	934	912	216	78	92	45	59	76
8	76	71	71	54	761	805	236	75	88	45	58	76
9	75	71	72	54	639	755	242	86	81	46	58	76
10	75	71	72	55	569	751	241	77	81	52	58	76
11	75	71	71	57	551	809	179	85	81	59	66	76
12	75	70	71	57	696	785	114	80	81	60	77	75
13	74	70	72	58	1180	721	153	80	81	54	76	75
14	74	70	72	175	4320	651	75	80	62	46	77	75
15	74	70	72	686	4210	590	75	80	43	46	77	76
16	74	54	72	1970	2370	531	75	100	43	46	76	75
17	74	70	72	1820	1460	478	125	82	43	47	76	75
18	74	71	72	1320	1080	429	243	82	43	50	76	75
19	73	71	72	1220	810	392	244	82	43	50	76	78
20	73	70	72	1550	671	360	245	82	43	49	76	75
21	73	70	72	1350	594	333	245	81	43	48	77	75
22	73	69	73	1210	602	309	245	81	43	48	76	75
23	73	69	73	1040	843	225	245	82	43	48	76	75
24	73	69	73	972	809	289	245	82	43	48	87	75
25	73	69	73	1010	737	265	244	82	43	49	77	75
26	72	69	73	956	1290	249	196	82	47	52	77	75
27	73	69	75	804	3270	243	103	82	55	49	77	74
28	72	70	63	668	2900	241	88	82	63	51	77	75
29	72	66	54	555	2180	241	77	82	65	48	77	74
30	72	72	55	590	---	208	77	82	44	49	77	74
31	71	---	55	855	---	146	---	82	---	48	78	---
TOTAL	2295	2089	2173	19487	40241	18681	4663	2514	1886	1500	2152	2265
MEAN	74.0	69.6	70.1	629	1388	603	155	81.1	62.9	48.4	69.4	75.5
MAX	76	72	75	1970	4320	1670	245	100	92	60	87	78
MIN	71	54	54	54	551	146	51	75	43	44	47	74
AC-FT	4550	4140	4310	38650	79820	37050	9250	4990	3740	2980	4270	4490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

MEAN	85.7	146	449	770	888	730	370	158	88.3	62.9	78.1	85.0
MAX	118	607	1780	2490	2993	1990	1426	449	408	89.3	103	101
(WY)	1984	1985	1997	1995	1986	1995	1982	1995	1993	1987	1990	1986
MIN	64.4	24.5	8.35	8.02	7.61	24.4	28.0	47.8	38.2	42.5	44.6	54.1
(WY)	1982	1993	1987	1992	1991	1988	1988	1987	1991	1982	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL	125504		99946			
ANNUAL MEAN	344		273		323	
HIGHEST ANNUAL MEAN					591	1983
LOWEST ANNUAL MEAN					101	1991
HIGHEST DAILY MEAN	3310	Mar 1	4320	Feb 14	13600	Jan 1 1997
LOWEST DAILY MEAN	44	Jun 10	43	Jun 15	5.6	Mar 2 1991
ANNUAL SEVEN-DAY MINIMUM	44	Jul 7	43	Jun 15	6.0	Feb 19 1991
INSTANTANEOUS PEAK FLOW			5680	Feb 14	17800	Feb 17 1986
INSTANTANEOUS PEAK STAGE			11.66	Feb 14	17.61	Feb 17 1986
ANNUAL RUNOFF (AC-FT)	248900		198200		234100	
10 PERCENT EXCEEDS	927		847		763	
50 PERCENT EXCEEDS	75		76		90	
90 PERCENT EXCEEDS	47		49		40	

11481000 MAD RIVER NEAR ARCATA, CA

LOCATION.—Lat 40°54'35", long 124°03'35", in NW 1/4 NW 1/4 sec.15, T.6 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank, 100 ft upstream from bridge on U.S. Highway 299, 1.0 mi downstream from Warren Creek, and 2.8 mi northeast of Arcata.

DRAINAGE AREA.—485 mi^2.

PERIOD OF RECORD.—October 1910 to September 1913, August 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 2129: 1965(M).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 10.79 ft above sea level. December 1910 to September 1913, nonrecording gage at site 0.1 mi upstream at different datum. Aug. 15, 1950, to July 23, 1956, water-stage recorder at site 0.6 mi upstream at datum 11.00 ft higher. July 24, 1956, to Aug. 10, 1992, water-stage recorder at different datums, at present site.

REMARKS.—Records good. Flow regulated by Ruth Reservoir (station 11480400), 68 mi upstream, beginning in July 1961. Water is diverted 0.5 mi upstream from station for municipal supply and industrial use in Humboldt Bay area.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 81,000 ft^3/s, Dec. 22, 1964, gage height, 30.7 ft, prior datum, from high-water profile and flood-routing study; minimum daily, 0.10 ft^3/s, Aug. 29, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	72	2400	257	5830	5610	700	623	310	106	44	49
2	47	68	2030	268	4510	4320	624	632	293	87	39	57
3	49	64	1920	259	3510	3620	537	592	281	82	35	62
4	46	62	1300	327	2820	3420	487	543	268	77	34	57
5	47	62	1020	472	2670	4070	435	500	257	76	36	53
6	55	61	913	385	3250	3450	400	473	253	80	38	50
7	61	61	1660	349	2640	3010	375	504	254	82	42	49
8	56	83	1700	318	2220	2750	482	617	299	81	41	47
9	52	123	1980	309	1930	2630	537	713	299	77	40	48
10	50	195	2000	714	1770	2740	530	1600	343	71	41	46
11	49	287	1360	11600	1690	3160	514	1790	300	69	40	46
12	46	190	1200	5080	2310	2850	489	1470	285	67	38	47
13	44	160	2180	3100	3240	2530	418	1190	350	72	38	48
14	47	121	1710	9880	16900	2520	562	1050	298	71	51	54
15	48	105	1270	9110	13000	2260	426	1360	260	68	51	56
16	48	174	1050	10000	6880	2280	588	1180	214	59	52	54
17	46	359	908	7300	4440	2100	1640	1040	180	57	51	51
18	43	235	902	4800	3330	1860	2740	883	162	60	48	51
19	44	210	846	5110	2740	1880	1760	772	153	59	46	50
20	47	1060	746	6660	2420	1720	1390	686	144	55	47	46
21	47	686	669	4740	2280	1540	1170	615	133	55	47	50
22	46	509	577	3960	2530	1420	1080	563	125	57	47	50
23	46	411	497	3330	3440	1350	1010	511	117	54	46	49
24	46	394	444	3460	2930	1200	880	469	112	51	46	49
25	47	339	407	4010	2560	1180	829	436	107	49	46	47
26	53	323	376	3630	3780	1090	779	406	100	47	53	48
27	67	356	347	2880	9250	1040	767	392	95	45	47	50
28	127	313	322	2390	9470	997	1020	401	90	45	47	50
29	166	344	305	2040	7510	940	836	376	95	44	45	50
30	105	1870	277	2480	---	889	700	350	97	45	46	51
31	81	---	260	3890	---	828	---	331	---	44	46	---
TOTAL	1801	9297	33576	113108	131850	71254	24705	23068	6274	1992	1368	1515
MEAN	58.1	310	1083	3649	4547	2299	824	744	209	64.3	44.1	50.5
MAX	166	1870	2400	11600	16900	5610	2740	1790	350	106	53	62
MIN	43	61	260	257	1690	828	375	331	90	44	34	46
AC-FT	3570	18440	66600	224300	261500	141300	49000	45760	12440	3950	2710	3010

11481000 MAD RIVER NEAR ARCATA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	313	1081	2997	4588	4164	2438	1716	1167	358	97.2	40.3	39.3
MAX	2303	2903	9335	9175	9830	5054	3450	2669	1311	210	68.2	128
(WY)	1951	1954	1956	1953	1958	1957	1958	1953	1953	1953	1953	1912
MIN	22.0	32.0	136	852	1232	1028	489	277	104	36.6	19.2	18.2
(WY)	1953	1960	1960	1960	1955	1955	1951	1954	1959	1959	1959	1951

SUMMARY STATISTICS	WATER YEARS 1911 - 1960	
ANNUAL MEAN	1573	
HIGHEST ANNUAL MEAN	2377	1958
LOWEST ANNUAL MEAN	943	1955
HIGHEST DAILY MEAN	63100	Dec 22 1955
LOWEST DAILY MEAN	17	Sep 8 1951
ANNUAL SEVEN-DAY MINIMUM	17	Sep 4 1959
INSTANTANEOUS PEAK FLOW	77800	Dec 22 1955
INSTANTANEOUS PEAK STAGE	27.30	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	1139000	
10 PERCENT EXCEEDS	4010	
50 PERCENT EXCEEDS	400	
90 PERCENT EXCEEDS	31	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	202	1285	2742	3616	3102	2893	1748	679	235	59.1	45.0	64.2
MAX	2255	6671	10400	8847	9796	7150	6253	1654	1721	152	123	392
(WY)	1963	1974	1965	1970	1986	1975	1963	1995	1993	1964	1983	1986
MIN	21.3	52.6	29.8	135	138	194	165	122	31.2	8.40	7.04	15.0
(WY)	1993	1994	1977	1977	1977	1988	1988	1968	1974	1977	1977	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1963 - 2000	
ANNUAL TOTAL	496265		419808			
ANNUAL MEAN	1360		1147		1382	
HIGHEST ANNUAL MEAN					2478	1974
LOWEST ANNUAL MEAN					151	1977
HIGHEST DAILY MEAN	11000	Feb 28	16900	Feb 14	58000	Dec 22 1964
LOWEST DAILY MEAN	36	Aug 27	34	Aug 4	.10	Aug 29 1977
ANNUAL SEVEN-DAY MINIMUM	40	Aug 22	38	Aug 2	.63	Aug 23 1977
INSTANTANEOUS PEAK FLOW			24600	Feb 14	81000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			17.35	Feb 14	30.70	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	984300		832700		1002000	
10 PERCENT EXCEEDS	3650		3240		3800	
50 PERCENT EXCEEDS	344		341		285	
90 PERCENT EXCEEDS	48		46		32	

11481200 LITTLE RIVER NEAR TRINIDAD, CA

LOCATION.—Lat 41°00'40", long 124°04'50", in NE 1/4 sec.8, T.7 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank, 0.5 mi upstream from Coon Creek, 4.7 mi southeast of Trinidad, and 9.1 mi north of Arcata.

DRAINAGE AREA.—40.5 mi^2.

PERIOD OF RECORD.—October 1955 to current year. Prior to October 1971, published as "at Crannell."

REVISED RECORDS.—WSP 2129: 1956–60. WDR CA-78-2: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 17.62 ft above sea level.

REMARKS.—Records good except for daily discharges below 20 ft^3/s, which are fair. No storage or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,830 ft^3/s, Mar. 18, 1975, gage height, 14.19 ft, from rating curve extended above 3,100 ft^3/s on basis of slope-area measurement at gage height 14.08 ft; minimum daily, 1.8 ft^3/s, Sept. 25–29, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 17, 18, 1953, reached a stage of 15.7 ft, observed by an employee of Hammond Lumber Co.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0145	3,890	8.98	Jan. 14	1100	4,330	9.49

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	6.0	331	20	283	438	54	62	40	19	10	6.9
2	4.3	5.6	281	25	225	339	52	66	38	19	10	7.8
3	4.6	5.5	178	24	186	279	50	62	37	18	9.8	7.9
4	4.7	5.5	92	50	157	292	48	59	36	18	9.6	6.8
5	4.8	5.5	65	48	172	313	47	54	36	18	9.9	6.2
6	7.1	5.5	73	35	178	243	45	50	35	19	10	5.9
7	7.4	6.0	278	30	145	208	43	54	36	19	10	6.0
8	6.2	8.0	217	28	130	193	42	129	41	18	9.6	5.9
9	5.8	9.3	373	28	121	194	42	158	39	18	9.6	5.7
10	5.5	124	304	576	116	194	40	425	49	17	9.7	5.8
11	5.4	30	161	2090	112	223	38	361	38	16	9.6	5.7
12	5.1	16	123	691	298	190	39	222	50	15	9.1	5.7
13	4.9	12	263	767	346	168	44	161	67	15	8.5	5.4
14	4.9	10	156	2400	1530	201	40	145	46	15	8.3	6.8
15	4.8	9.8	106	944	708	168	42	191	39	14	8.0	9.1
16	4.7	45	76	883	442	192	59	141	35	14	7.9	7.4
17	4.5	44	59	529	381	168	209	121	32	14	7.6	6.7
18	4.4	22	73	365	317	149	195	102	30	15	7.4	5.6
19	4.5	41	59	574	264	162	107	90	29	14	6.9	5.0
20	4.7	111	47	627	231	139	80	81	27	13	6.8	4.8
21	4.8	61	40	399	207	123	67	74	26	13	6.6	4.7
22	4.8	41	34	362	298	110	65	68	24	13	6.6	4.8
23	4.8	41	30	344	395	100	57	62	24	13	6.6	5.0
24	4.8	42	27	317	289	92	51	58	23	12	6.8	4.7
25	4.9	30	26	338	233	85	52	55	22	12	6.7	4.2
26	6.4	36	24	298	330	78	50	52	21	12	6.7	4.0
27	15	49	22	232	488	75	75	56	20	11	6.6	4.1
28	31	33	20	190	404	71	119	61	19	11	6.2	4.3
29	13	152	19	159	613	66	83	49	19	11	6.1	4.4
30	8.5	501	19	233	---	61	69	45	19	11	6.4	4.2
31	6.7	---	18	348	---	57	---	42	---	11	6.7	---
TOTAL	207.2	1507.7	3594	13954	9599	5371	2004	3356	997	458	250.3	171.5
MEAN	6.68	50.3	116	450	331	173	66.8	108	33.2	14.8	8.07	5.72
MAX	31	501	373	2400	1530	438	209	425	67	19	10	9.1
MIN	4.2	5.5	18	20	112	57	38	42	19	11	6.1	4.0
AC-FT	411	2990	7130	27680	19040	10650	3970	6660	1980	908	496	340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	27.2	164	314	348	298	260	140	76.0	33.3	13.3	8.33	7.83
MAX	202	849	1083	1145	816	819	521	271	168	31.4	23.3	28.4
(WY)	1963	1974	1965	1970	1986	1975	1963	1960	1993	1983	1983	1986
MIN	4.70	4.62	7.45	28.2	19.7	35.5	22.1	21.9	12.2	6.12	3.59	3.89
(WY)	1988	1994	1977	1977	1977	1988	1977	1987	1966	1959	1959	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	51043.3		41469.7			
ANNUAL MEAN	140		113		140	
HIGHEST ANNUAL MEAN					240	1974
LOWEST ANNUAL MEAN					23.8	1977
HIGHEST DAILY MEAN	1700	Feb 28	2400	Jan 14	7860	Mar 18 1975
LOWEST DAILY MEAN	4.2	Oct 1	4.0	Sep 26	1.8	Sep 25 1991
ANNUAL SEVEN-DAY MINIMUM	4.4	Sep 27	4.3	Sep 24	1.9	Sep 24 1991
INSTANTANEOUS PEAK FLOW			4330	Jan 14	9830	Mar 18 1975
INSTANTANEOUS PEAK STAGE			9.49	Jan 14	14.19	Mar 18 1975
ANNUAL RUNOFF (AC-FT)	101200		82260		101700	
10 PERCENT EXCEEDS	462		307		366	
50 PERCENT EXCEEDS	38		39		36	
90 PERCENT EXCEEDS	5.3		5.5		5.9	

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA

LOCATION.—Lat 40°54'22", long 123°48'51", in SE 1/4 NE 1/4 sec.15, T.6 N., R.3 E., Humboldt County, Hydrologic Unit 18010102, on right bank, 400 ft upstream from Lupton Creek, and 9.1 mi east of town of Blue Lake.

DRAINAGE AREA.—67.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—June 1953 to September 1958, October 1972 to September 1993, October 1997 to current year.

REVISED RECORDS.—WDR CA-78-2: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 850 ft above sea level, from topographic map.

REMARKS.—Records fair including estimated daily discharge. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 12,200 ft^3/s, Mar. 18, 1975, gage height, 13.70 ft, from rating curve extended above 6,400 ft^3/s; minimum daily, 0.69 ft^3/s, Sept. 30, 1993.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,300 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0330	3,910	7.87	Feb. 14	1530	4,390	8.33
Jan. 14	1300	3,480	7.43				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.3	294	54	877	705	149	132	83	27	10	5.0
2	2.1	5.9	338	57	616	659	147	135	78	28	9.7	7.1
3	2.1	5.5	232	57	511	561	145	123	74	27	8.8	9.2
4	2.1	5.3	149	110	450	582	140	117	70	27	8.3	7.9
5	2.3	5.3	125	113	541	623	132	113	69	28	8.3	6.8
6	3.2	5.3	135	88	518	509	123	110	68	29	8.1	6.2
7	3.7	5.3	289	81	409	454	115	120	69	28	7.7	5.7
8	3.2	21	221	78	352	415	110	131	79	25	7.6	5.1
9	3.0	17	287	81	324	415	107	137	75	23	7.2	5.0
10	2.8	72	232	360	319	412	103	266	83	22	7.2	5.0
11	2.7	37	172	e2410	309	455	98	280	70	21	7.3	4.7
12	2.5	20	193	742	376	395	99	263	73	20	7.0	4.3
13	2.5	16	457	574	534	365	120	240	75	19	6.7	3.9
14	2.4	13	265	2040	2770	380	116	230	64	18	6.6	4.5
15	2.4	13	191	1560	1400	341	122	280	58	18	6.6	5.4
16	2.3	57	153	1880	843	372	155	239	54	17	6.5	5.0
17	2.3	70	137	978	636	341	411	212	50	18	6.2	4.8
18	2.1	39	159	702	513	307	408	190	47	18	6.1	4.3
19	2.2	111	142	878	436	336	268	171	45	17	6.2	3.5
20	2.2	187	132	886	398	297	216	158	42	16	6.3	3.1
21	2.2	109	122	624	377	269	187	144	40	15	6.3	2.9
22	2.1	75	109	546	479	254	185	134	38	15	5.8	3.0
23	2.1	65	96	480	500	248	168	125	37	15	5.5	3.1
24	2.2	62	89	516	404	227	151	118	36	14	5.2	3.0
25	2.4	52	81	540	359	215	148	111	34	13	5.2	3.0
26	2.8	61	75	466	723	202	137	106	32	13	5.4	2.9
27	4.9	67	69	384	1250	197	141	103	31	13	5.1	2.8
28	36	52	64	330	986	191	171	103	29	12	4.7	2.7
29	20	70	60	294	951	176	153	97	28	12	4.2	2.9
30	9.7	386	58	471	---	164	140	92	27	11	3.9	3.0
31	7.3	---	55	686	---	154	---	88	---	11	4.1	---
TOTAL	142.0	1710.9	5181	19066	19161	11221	4865	4868	1658	590	203.8	135.8
MEAN	4.58	57.0	167	615	661	362	162	157	55.3	19.0	6.57	4.53
MAX	36	386	457	2410	2770	705	411	280	83	29	10	9.2
MIN	2.1	5.3	55	54	309	154	98	88	27	11	3.9	2.7
AC-FT	282	3390	10280	37820	38010	22260	9650	9660	3290	1170	404	269

e Estimated.

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	37.5	254	439	515	577	483	299	156	68.7	21.7	9.74	8.81
MAX	226	1179	1563	1628	1479	1306	748	337	253	46.4	27.4	29.2
(WY)	1974	1974	1956	1956	1958	1975	1982	1993	1993	1993	1983	1986
MIN	2.30	15.2	12.3	31.3	42.2	81.5	62.6	53.0	22.3	10.5	3.14	2.19
(WY)	1988	1977	1977	1977	1977	1988	1988	1992	1987	1985	1992	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1954 - 2000	
ANNUAL TOTAL	88399.5		68802.5			
ANNUAL MEAN	242		188		237	
HIGHEST ANNUAL MEAN					423	1956
LOWEST ANNUAL MEAN					44.2	1977
HIGHEST DAILY MEAN	2090	Feb 28	2770	Feb 14	8360	Mar 18 1975
LOWEST DAILY MEAN	2.1	Oct 2	2.1	Oct 2	.69	Sep 30 1993
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 28	2.2	Oct 18	1.0	Sep 24 1993
INSTANTANEOUS PEAK FLOW			4390	Feb 14	12200	Mar 18 1975
INSTANTANEOUS PEAK STAGE			8.33	Feb 14	13.70	Mar 18 1975
ANNUAL RUNOFF (AC-FT)	175300		136500		172000	
10 PERCENT EXCEEDS	653		503		600	
50 PERCENT EXCEEDS	85		75		76	
90 PERCENT EXCEEDS	2.7		3.4		6.4	

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1973 to current year.
CHEMICAL DATA: Water years 1974–75.
WATER TEMPERATURE: Water years 1973–92.
SEDIMENT DATA: Water years 1973 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1972 to September 1992.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1992.

REMARKS.—Periodic total-load sampling above 1,200 ft^3/s.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 33.5°C, Aug. 2, 1977; minimum recorded, 0.5°C, Jan. 9, 1997.
SEDIMENT CONCENTRATION: Maximum daily mean, 11,200 mg/L, Mar. 18, 1975; minimum daily mean, 0 mg/L, at times in several years.
SEDIMENT LOAD: Maximum daily, 276,000 tons, Mar. 18, 1975; minimum daily, 0 ton, at times in several years.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
JAN											
11...	1340	1920	7.0	702	3640	64	75	83	91	97	100

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
11...	1450	1000	1100	.250	0	1420	1520	15	4.0
11...	1550	1000	1100	.250	0	1525	1620	15	4.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
JAN									
11...	2	22	22	1.00	1890	7.0	16.9	1300	1
11...	2	22	22	1.00	1900	7.0	12.7	1300	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
11...	4	14	31	50	67	82	90	100
11...	5	20	36	53	67	79	88	100

11482500 REDWOOD CREEK AT ORICK, CA

LOCATION.—Lat 41°17'58", long 124°03'00", in NE 1/4 NE 1/4 sec.34, T.11 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank, on U.S. Highway 101, 0.8 mi north of Orick, 300 ft downstream from Prairie Creek, and 3.7 mi upstream from mouth.

DRAINAGE AREA.—277 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—September 1911 to September 1913, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1315-B: 1912–13.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 5.16 ft above sea level. Sept. 10, 1911, to Aug. 9, 1913, nonrecording gage at different datum. October 1953 to Apr. 16, 1987, at site 0.9 mi downstream at same datum. May 7 to Aug. 3, 1987, nonrecording gage at same site and datum.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 50,500 ft^3/s, Dec. 22, 1964, former site, from outside high-water marks, maximum gage height, 28.22 ft, Jan. 1, 1997; minimum daily, 2.1 ft^3/s, Oct. 20–22, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 18, 1953, reached a stage of 23.95 ft, former site, from floodmarks, discharge, 50,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 9,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0800	19,900	23.02	Feb. 14	2000	11,700	20.21
Jan. 14	1600	13,800	21.00				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	41	2000	276	3170	3560	522	358	301	108	48	22
2	13	33	1680	300	2580	3100	504	371	285	109	48	28
3	13	27	1500	290	2220	2630	482	351	270	107	45	32
4	13	24	994	353	1950	2440	457	334	257	103	43	32
5	14	24	790	484	1870	2620	438	320	249	103	42	30
6	16	24	705	370	1900	2150	412	313	246	107	42	27
7	16	23	1350	325	1580	1860	393	364	242	108	41	25
8	14	33	1380	303	1400	1730	376	504	264	105	40	23
9	14	53	1640	295	1300	1730	364	595	261	101	40	22
10	14	508	1770	1530	1240	1680	353	1330	278	96	39	20
11	14	311	1270	13900	1180	1800	338	1550	253	91	38	20
12	13	163	1120	5580	1550	1590	332	1170	275	87	37	19
13	13	111	1760	5090	1980	1470	370	957	311	82	35	18
14	12	84	1400	10300	8140	1540	359	848	263	80	34	18
15	12	76	1140	7780	6460	1380	352	889	233	78	33	22
16	12	179	954	7090	3960	1450	419	802	215	75	31	20
17	11	399	826	4870	3200	1340	658	724	200	74	30	19
18	11	257	797	3370	2720	1210	1030	652	186	76	29	18
19	11	352	736	3520	2340	1260	713	597	178	76	28	16
20	11	961	651	4560	2060	1160	559	552	170	73	28	15
21	11	549	591	3510	1910	1050	475	509	162	71	27	14
22	11	381	532	3430	1980	956	460	472	153	69	27	13
23	12	334	472	2920	2350	900	440	440	149	67	26	13
24	12	337	428	2670	2030	839	389	415	144	65	26	12
25	12	278	397	2670	1850	783	377	395	138	63	25	11
26	14	281	369	2420	2560	714	366	373	132	59	25	11
27	42	343	344	2090	4010	e672	365	373	126	57	24	11
28	191	284	322	1790	3810	e658	480	397	119	56	23	12
29	156	323	305	1550	4320	e598	432	358	114	56	23	12
30	97	1660	293	1810	---	e560	386	333	110	54	22	11
31	58	---	279	2550	---	e536	---	316	---	52	22	---
TOTAL	876	8453	28795	97996	77620	45966	13601	17962	6284	2508	1021	566
MEAN	28.3	282	929	3161	2677	1483	453	579	209	80.9	32.9	18.9
MAX	191	1660	2000	13900	8140	3560	1030	1550	311	109	48	32
MIN	11	23	279	276	1180	536	332	313	110	52	22	11
AC-FT	1740	16770	57110	194400	154000	91170	26980	35630	12460	4970	2030	1120

e Estimated.

11482500 REDWOOD CREEK AT ORICK, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	152	1065	2131	2559	2241	1961	1211	631	257	87.3	41.9	38.9
MAX	1559	5219	8981	6041	6320	5565	4026	1732	1213	194	91.6	149
(WY)	1963	1974	1965	1956	1986	1975	1963	1912	1993	1993	1968	1986
MIN	2.91	35.3	42.1	180	190	297	251	188	77.3	35.7	9.89	4.44
(WY)	1988	1960	1977	1977	1977	1988	1988	1987	1987	1987	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1911 - 2000	
ANNUAL TOTAL	369380		301648			
ANNUAL MEAN	1012		824		1027	
HIGHEST ANNUAL MEAN					1726	1974
LOWEST ANNUAL MEAN					192	1977
HIGHEST DAILY MEAN	10000	Feb 28	13900	Jan 11	43200	Dec 22 1964
LOWEST DAILY MEAN	11	Oct 17	11	Oct 17	2.1	Oct 20 1987
ANNUAL SEVEN-DAY MINIMUM	11	Oct 16	11	Oct 16	2.2	Oct 17 1987
INSTANTANEOUS PEAK FLOW			19900	Jan 11	50500	Dec 22 1964
INSTANTANEOUS PEAK STAGE			23.02	Jan 11	28.22	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	732700		598300		743700	
10 PERCENT EXCEEDS	2750		2170		2750	
50 PERCENT EXCEEDS	348		321		312	
90 PERCENT EXCEEDS	16		16		25	

11482500 REDWOOD CREEK AT ORICK, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1955–56, 1959 to September 1980, October 1981 to current year (storm season only).
CHEMICAL DATA: Water years 1959–66, 1973–81.
WATER TEMPERATURE: Water years 1966–92.
SEDIMENT DATA: Water years 1955–56, 1970 to current year.

PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: October 1965 to September 1981, October 1981 to September 1992 (storm season only).
SUSPENDED-SEDIMENT DISCHARGE: March 1970 to September 1981, October 1981 to September 1992 (storm season only).

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION: Maximum daily mean, 9,610 mg/L, Mar. 18, 1975; minimum daily mean, 0 mg/L, Nov. 10–12, 1986, Apr. 20, 29, 30, 1987, several days during 1989–90, many days during 1991.
SEDIMENT LOAD: Maximum daily, 1,070,000 tons, Mar. 18, 1975; minimum daily, 0 ton, Nov. 10–12, 1986, Apr. 20, 29, 30, 1987, several days during 1989–90, many days during 1991.

REMARKS: Periodic total-load sampling above 5,000 ft^3/s.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
JAN											
15...	1240	7180	9.0	498	9650	67	75	84	96	100	--
15...	1510	7180	9.5	593	11500	69	78	86	97	99	100
FEB											
15...	1235	6050	9.0	539	8800	63	64	72	83	91	100

PARTICLE SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAM-PLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
15...	1330	1000	1100	.250	0	1310	1350	10	10.0
15...	1425	1000	1100	.250	0	1410	1440	10	10.0
FEB									
15...	1330	1000	1100	.250	0	1310	1345	10	10.0
15...	1415	1000	1100	.250	0	1400	1430	10	10.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
JAN								
15...	2	23	23	5.00	7190	9.0	33.3	6460
15...	2	23	23	5.00	7180	9.0	22.9	6460
FEB								
15...	2	21	21	5.00	5900	9.0	25.2	4700
15...	2	21	21	5.00	5740	9.0	19.3	4700

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
15...	5	16	30	45	62	80	93	100
15...	6	15	28	44	59	81	97	100
FEB								
15...	7	16	28	44	64	84	97	100
15...	4	10	24	42	63	85	98	100

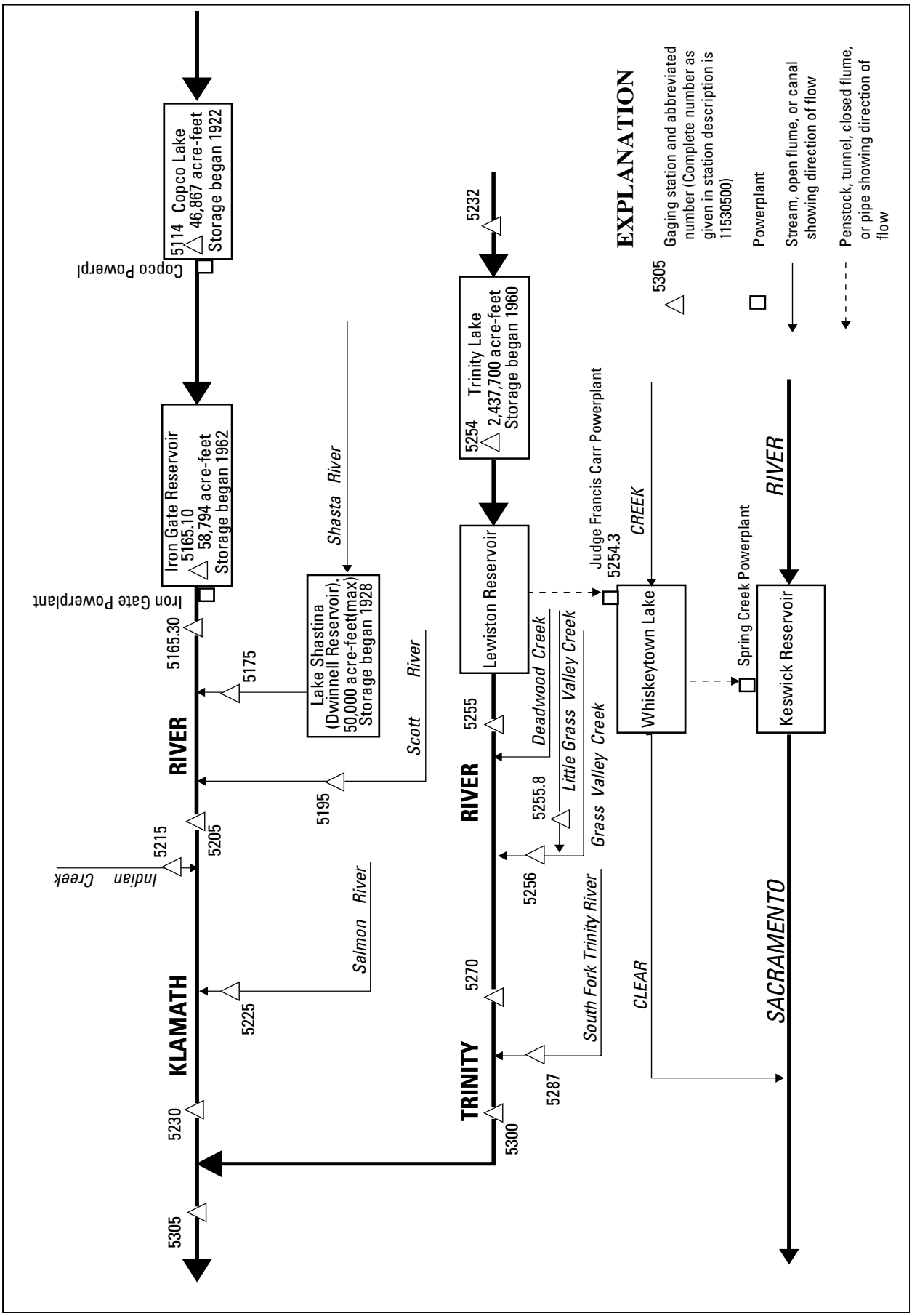

Figure 24. Diversions and storage in Klamath River and Trinity River Basins

RESERVOIRS IN KLAMATH RIVER BASIN, CA

11511400 COPCO LAKE NEAR COPCO

LOCATION.—Lat 41°58'46", long 122°20'00", in SE 1/4 SW 1/4 sec.29, T.48 N., R.4 W., Siskiyou County, Hydrologic Unit 18010206, 12.7 mi northeast of Hornbrook.

DRAINAGE AREA.—4,300 mi^2, approximately (not including Lost River, Butte Creek, or Lower Klamath Lake Basins).

PERIOD OF RECORD.—October 1967 to current year (monthend contents only).

GAGE.—Pressure device and telemark read once daily. Datum of gage is sea level (levels by PacifiCorp, formerly Pacific Power and Light Co.). Monthend contents computed from capacity table provided by Pacific Power and Light Co., dated Aug. 25, 1964.

REMARKS.—Lake is formed by gravity-type dam completed in 1922. Usable capacity, 17,107 acre-ft, between elevations 2,607.5 ft, top of tainter gates, and 2,588.5 ft, invert to powerplant intake. Dead storage, 29,760 acre-ft, below elevation 2,588.5 ft. Figures given represent total contents at 0800 hours. Lake is used for power generation. See schematic diagram of Klamath River and Trinity River Basins.

COOPERATION.—Records were provided by PacifiCorp, formerly Pacific Power & Light Co., in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.—Maximum contents, 46,818 acre-ft, June 24, 1969, elevation, 2,607.45 ft; minimum since first filling, 30,360 acre-ft, Aug. 19, 1971, elevation, 2,589.24 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.—Maximum contents, 46,481 acre-ft, Sept. 7, elevation, 2,607.11 ft; minimum, 39,982 acre-ft, Jan. 25, elevation, 2,600.30 ft.

11516510 IRON GATE RESERVOIR NEAR HORNBROOK

LOCATION.—Lat 41°55'58", long 122°26'06", in SW 1/4 SW 1/4 sec.9, T.47 N., R.5 W., Siskiyou County, Hydrologic Unit 18010206, 6.6 mi northeast of Hornbrook.

DRAINAGE AREA.—4,573 mi^2, approximately (not including Lost River, Butte Creek, or Lower Klamath Lake Basins).

PERIOD OF RECORD.—October 1967 to current year (monthend contents only).

GAGE.—Pressure device and telemark read once daily. Datum of gage is sea level (levels by PacifiCorp, formerly Pacific Power and Light Co.). Monthend contents computed from capacity table provided by Pacific Power and Light Co., dated Feb. 15, 1960.

REMARKS.—Reservoir is formed by earth and rockfill dam completed in 1962. Usable capacity, 58,387 acre-ft, between elevations 2,328.0 ft, crest of spillway, and 2,184.75 ft, invert to diversion tunnel. Dead storage, 407 acre-ft. Normal operating pool is from elevations 2,305.0 ft, capacity, 39,963 acre-ft, to 2,328.0 ft, capacity, 58,794 acre-ft. Figures given represent total contents at 0800 hours. Reservoir is used for power generation and recreation. See schematic diagram of Klamath River and Trinity River Basins.

COOPERATION.—Records were provided by PacifiCorp, formerly Pacific Power and Light Co., in connection with a Federal Energy Regulatory Commission project. Contents not rounded to U.S. Geological Survey standards.

EXTREMES (at 0800) FOR PERIOD OF RECORD.—Maximum contents, 61,797 acre-ft, Jan. 1, 1997, elevation, 2,330.98 ft; minimum since first filling, 50,103 acre-ft, Dec. 9, 1968, elevation, 2,318.40 ft.

EXTREMES (at 0800) FOR CURRENT YEAR.—Maximum contents, 59,925 acre-ft, Mar. 8, elevation, 2,329.14 ft; minimum, 54,219 acre-ft, Dec. 10, elevation, 2,323.14 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800 HOURS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Elevation (ft)	Contents (acre-ft)	Change in contents (acre-ft)	Elevation (ft)	Contents (acre-ft)	Change in contents (acre-ft)
	11511400 COPCO LAKE			11516510 IRON GATE RESERVOIR		
Sept. 30	2,603.65	43,122	—	2,325.08	56,002	—
Oct. 31	2,605.21	44,620	+1,498	2,323.46	54,509	–1,493
Nov. 30	2,602.90	42,414	–2,206	2,324.18	55,169	+660
Dec. 31	2,602.40	41,941	–473	2,327.34	58,153	+2,984
CAL YR 1999	—	—	–2,187	—	—	–1,212
Jan. 31	2,602.20	41,754	–187	2,328.58	59,365	+1,212
Feb. 29	2,602.00	41,565	–189	2,328.96	59,745	+380
Mar. 31	2,602.30	41,848	+283	2,328.42	59,207	–538
Apr. 30	2,605.36	44,765	+2,917	2,328.62	59,405	+198
May 31	2,603.30	42,790	–1,975	2,326.42	57,267	–2,138
June 30	2,605.66	45,057	+2,267	2,326.74	57,573	+306
July 31	2,606.45	45,828	+771	2,326.04	56,903	–670
Aug. 31	2,606.10	45,486	–342	2,325.82	56,696	–207
Sept. 30	2,601.57	41,164	–4,322	2,323.72	54,748	–1,948
WTR YR 2000	—	—	–1,958	—	—	–1,254

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA

LOCATION.—Lat 41°55'41", long 122°26'35", in SE 1/4 NE 1/4 sec.17, T.47 N., R.5 W., Siskiyou County, Hydrologic Unit 18010206, on left bank, 0.1 mi downstream from Bogus Creek, 0.6 mi downstream from Iron Gate Dam, and 5.9 mi northeast of Hornbrook.

DRAINAGE AREA.—4,630 mi^2, approximately (not including Lost River, Butte Creek, or Lower Klamath Lake Basins).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder. Datum of gage is 2,162.44 ft above sea level (levels by PacifiCorp, formerly Pacific Power & Light Co.).

REMARKS.—Records good. Flow regulated by Upper Klamath Lake, capacity, 523,700 acre-ft; Iron Gate Reservoir (station 11516510), other smaller reservoirs and diversions upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 29,400 ft^3/s, Dec. 22, 1964, gage height, 13.63 ft, from rating curve extended above 15,000 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 389 ft^3/s, Aug. 25–28, 1992.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	1820	1830	1930	3080	4200	2590	2450	1630	1050	1060	1080
2	1380	1820	1830	1830	3160	4010	2590	2560	1590	1050	1060	1080
3	1380	1820	1830	1830	3150	3950	2590	2580	1580	1040	1060	1080
4	1380	1830	1820	1830	3180	4020	2600	2580	1560	1040	1060	1090
5	1380	1830	1820	1830	3170	4170	2550	2560	1530	1040	1060	1090
6	1390	1830	1820	1830	3170	4070	2270	2650	1530	1040	1060	1090
7	1390	1830	1820	1830	3160	4710	2230	3000	1540	1040	1060	1120
8	1390	1830	1810	1830	3160	5060	2220	3000	1540	1050	1060	1350
9	1390	1830	1810	1830	3160	4710	2220	2950	1540	1060	1060	1350
10	1390	1830	1810	1840	3160	4660	2220	2940	1540	1060	1060	1350
11	1390	1830	1810	1960	3180	4650	2220	3020	1540	1060	1060	1350
12	1390	1820	1810	3040	3180	4510	2230	2990	1540	1050	1060	1350
13	1390	1820	1820	3320	3230	4680	2280	2670	1540	1050	1060	1330
14	1390	1820	1820	4100	3780	4690	2300	2290	1530	1050	1060	1310
15	1390	1820	1820	3620	4220	4530	2310	2250	1530	1050	1060	1310
16	1380	1820	1820	3380	4750	4000	2290	2260	1420	1050	1060	1310
17	1380	1820	1820	3210	4660	3510	2280	2250	1270	1050	1060	1310
18	1380	1820	1810	3160	4440	3380	2580	2220	1280	1050	1060	1320
19	1380	1820	1810	3200	4010	3390	2500	1870	1220	1050	1060	1310
20	1380	1820	1820	3430	3810	3380	2380	1810	1040	1050	1060	1300
21	1380	1820	1820	3460	3710	3360	2390	1810	1050	1060	1080	1300
22	1380	1820	1820	3580	3640	2950	3060	1810	1050	1060	1080	1310
23	1380	1810	1810	3540	3810	2810	3680	1800	1050	1060	1080	1310
24	1380	1820	1820	3440	3750	2730	3930	1800	1050	1060	1080	1310
25	1390	1820	1830	3190	3780	2770	3770	1800	1070	1060	1080	1310
26	1390	1820	1830	3120	4090	2910	3190	1800	1060	1060	1080	1310
27	1370	1820	1830	3090	4510	2720	2490	1800	1050	1060	1080	1310
28	1520	1810	1830	3070	4370	2580	2360	1800	1040	1060	1080	1310
29	1820	1810	1830	3060	4370	2590	2380	1810	1050	1050	1080	1320
30	1820	1830	1830	3080	---	2580	2300	1810	1050	1050	1080	1320
31	1820	---	1880	3100	---	2580	---	1810	---	1060	1080	---
TOTAL	44340	54660	56490	86560	106840	114860	77000	70750	40010	32620	33080	37990
MEAN	1430	1822	1822	2792	3684	3705	2567	2282	1334	1052	1067	1266
MAX	1820	1830	1880	4100	4750	5060	3930	3020	1630	1060	1080	1350
MIN	1370	1810	1810	1830	3080	2580	2220	1800	1040	1040	1060	1080
AC-FT	87950	108400	112000	171700	211900	227800	152700	140300	79360	64700	65610	75350

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

MEAN	1639	2107	2728	3029	3191	3709	3057	2168	1140	791	982	1299
MAX	3353	5254	6735	9553	9150	10780	6922	5559	3289	1429	1208	2052
(WY)	1985	1985	1984	1997	1965	1972	1971	1998	1998	1982	1965	1965
MIN	852	873	889	888	525	511	572	512	506	428	398	538
(WY)	1982	1992	1992	1992	1992	1992	1994	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1961 - 2000	
ANNUAL TOTAL	1051420		755200			
ANNUAL MEAN	2881		2063		2148	
HIGHEST ANNUAL MEAN					3657	1965
LOWEST ANNUAL MEAN					641	1992
HIGHEST DAILY MEAN	9070	Mar 10	5060	Mar 8	25000	Dec 22 1964
LOWEST DAILY MEAN	1100	Aug 5	1040	Jun 20	389	Aug 25 1992
ANNUAL SEVEN-DAY MINIMUM	1120	Aug 5	1040	Jul 1	390	Aug 24 1992
INSTANTANEOUS PEAK FLOW			5190	Mar 7	29400	Dec 22 1964
INSTANTANEOUS PEAK STAGE			6.70	Mar 7	13.63	Dec 22 1964
INSTANTANEOUS LOW FLOW					389	Aug 25 1992
ANNUAL RUNOFF (AC-FT)	2085000		1498000		1556000	
10 PERCENT EXCEEDS	6100		3630		4240	
50 PERCENT EXCEEDS	1830		1820		1440	
90 PERCENT EXCEEDS	1310		1060		733	

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1962–80, December 1999 to September 2000.
CHEMICAL DATA: Water years 1962–81.
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
AIR TEMPERATURE: December 1999 to September 2000.
WATER TEMPERATURE: Water years 1962–80, December 1999 to September 2000.
PRECIPITATION: December 1999 to September 2000.

PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: December 1999 to September 2000.
pH: December 1999 to September 2000.
SPECIFIC CONDUCTANCE: December 1999 to September 2000.
AIR TEMPERATURE: December 1999 to September 2000.
WATER TEMPERATURE: October 1962 to June 1980, December 1999 to September 2000.
PRECIPITATION: December 1999 to September 2000.

INSTRUMENTATION.—Water-quality monitor since December 2000. Electronic data logger with 15 minute interval.

REMARKS.—Records rated fair. Interruption in record due to malfunction of the recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 13.4 mg/L, May 4, 2000; minimum recorded, 4.0 mg/L, Sept. 14, 2000.
pH: Maximum recorded, 8.8 standard units, Aug. 12, 2000; minimum recorded, 6.6 standard units, Aug. 26–28, 2000.
SPECIFIC CONDUCTANCE: Maximum recorded, 219 microsiemens, June 16, 17, 2000; minimum recorded, 136 microsiemens, Jan. 10, 2000.
AIR TEMPERATURE: Maximum recorded, 106°F, Aug. 2, 2000; minimum recorded, 15°F, Dec. 30, 1999.
WATER TEMPERATURE: Maximum recorded, 23.5°C, Aug. 3, 4, 1977, Aug. 10, 1978; minimum recorded, 0.5°C, many days in 1972.
PRECIPITATION: Maximum daily rainfall, 0.26 inches, Jan. 10, 2000; no rainfall for many days each year.

EXTREME FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 13.4 mg/L, May 4; minimum recorded, 4.0 mg/L, Sept. 14.
pH: Maximum recorded, 8.8 standard units, Aug. 12; minimum recorded, 6.6 standard units, Aug. 26–28.
SPECIFIC CONDUCTANCE: Maximum recorded, 219 microsiemens, June 16, 17; minimum recorded, 136 microsiemens, Jan. 10.
AIR TEMPERATURE: Maximum recorded, 106°F, Aug. 2; minimum recorded, 15°F, Dec. 30.
WATER TEMPERATURE: Maximum recorded, 22.5°C, July 31; minimum recorded, 3.5°C, Jan. 17.
PRECIPITATION: Maximum daily rainfall, 0.26 inches, Jan. 10; no rainfall for many days.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	13.2	12.8
8	---	---	---	---	---	---	---	---	---	---	13.2	12.7
9	---	---	---	---	---	---	---	---	---	---	13.1	12.7
10	---	---	---	---	---	---	---	---	---	---	13.2	12.7
11	---	---	---	---	---	---	---	---	---	---	13.2	12.8
12	---	---	---	---	---	---	---	---	---	---	13.3	12.9
13	---	---	---	---	---	---	---	---	---	---	13.3	13.1
14	---	---	---	---	---	---	---	---	---	---	13.2	12.9
15	---	---	---	---	---	---	---	---	---	---	13.2	12.6
16	---	---	---	---	---	---	---	---	---	---	13.0	12.5
17	---	---	---	---	---	---	---	---	---	---	12.7	12.3
18	---	---	---	---	---	---	---	---	---	---	12.5	12.1
19	---	---	---	---	---	---	---	---	---	---	12.3	12.0
20	---	---	---	---	---	---	---	---	---	---	12.3	12.0
21	---	---	---	---	---	---	---	---	---	---	12.3	11.7
22	---	---	---	---	---	---	---	---	---	---	11.9	11.5
23	---	---	---	---	---	---	---	---	---	---	11.8	11.5
24	---	---	---	---	---	---	---	---	---	---	11.7	11.2
25	---	---	---	---	---	---	---	---	---	---	11.5	11.0
26	---	---	---	---	---	---	---	---	---	---	11.4	10.8
27	---	---	---	---	---	---	---	---	---	---	11.3	10.8
28	---	---	---	---	---	---	---	---	---	---	10.9	10.1
29	---	---	---	---	---	---	---	---	---	---	10.8	8.3
30	---	---	---	---	---	---	---	---	---	---	10.8	8.6
31	---	---	---	---	---	---	---	---	---	---	10.5	9.8
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.6	9.8	12.8	12.1	9.0	8.0	10.6	7.8	8.7	6.5	---	---
2	10.2	7.3	13.2	12.5	8.9	8.1	10.4	8.0	8.2	6.4	---	---
3	11.2	8.9	13.3	12.4	9.0	8.3	10.8	8.1	8.0	5.2	---	---
4	9.7	9.0	13.4	12.1	9.1	7.8	10.7	8.5	7.9	6.3	---	---
5	9.9	9.4	13.1	11.9	9.2	7.5	10.7	8.3	8.6	6.1	---	---
6	10.3	9.3	12.1	10.0	9.3	8.4	10.9	8.3	8.5	6.9	---	---
7	10.0	9.5	---	---	9.1	7.7	10.8	8.4	8.5	6.1	---	---
8	9.9	8.9	---	---	8.4	7.6	10.9	8.9	---	---	---	---
9	10.5	9.2	---	---	8.3	6.8	11.1	8.9	---	---	---	---
10	9.9	9.4	10.1	9.6	8.2	6.9	10.7	7.5	---	---	---	---
11	10.1	9.1	10.2	9.8	8.3	6.8	9.1	7.4	---	---	---	---
12	10.3	9.1	10.3	9.2	8.2	6.9	9.4	7.1	---	---	7.8	4.8
13	10.1	9.5	9.5	9.2	8.5	7.1	9.5	7.4	---	---	5.7	4.8
14	10.1	9.2	9.6	8.6	8.7	7.0	9.6	6.7	---	---	5.7	4.0
15	9.9	8.5	9.8	8.7	8.8	7.3	9.5	7.3	---	---	6.1	4.1
16	10.0	9.3	10.7	9.2	8.7	7.2	9.7	7.4	---	---	6.6	5.1
17	10.3	9.6	10.4	9.4	8.6	7.2	9.9	6.4	---	---	6.3	5.2
18	10.1	9.3	9.9	9.4	8.7	7.3	---	---	---	---	6.4	5.3
19	9.7	9.0	10.3	9.4	8.7	7.2	---	---	---	---	6.2	5.3
20	10.1	9.6	10.3	9.4	8.8	7.1	---	---	---	---	7.0	5.3
21	10.6	9.8	10.4	9.3	9.1	7.2	9.1	6.6	---	---	7.2	5.7
22	10.9	9.9	11.0	9.2	9.1	7.4	8.7	5.8	---	---	7.1	5.7
23	10.8	10.2	11.2	9.1	9.7	7.8	8.7	6.5	---	---	6.7	5.5
24	10.6	10.0	11.0	9.4	9.9	7.7	8.1	5.8	---	---	5.7	4.8
25	10.8	10.1	10.5	9.6	9.5	7.2	8.7	5.3	---	---	6.0	5.0
26	10.4	9.7	9.6	8.3	9.7	7.3	8.7	6.3	---	---	5.9	4.8
27	10.3	9.3	9.5	8.5	9.8	7.6	8.4	5.9	---	---	---	---
28	11.2	9.9	9.5	8.7	10.1	7.7	8.3	5.7	---	---	---	---
29	11.7	10.9	9.3	8.8	10.2	8.2	8.1	5.9	---	---	---	---
30	12.6	11.5	9.7	8.6	10.2	7.9	8.7	6.7	---	---	---	---
31	---	---	9.3	8.4	---	---	9.2	6.9	---	---	---	---
MONTH	12.6	7.3	---	---	10.2	6.8	---	---	---	---	---	---

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	7.5	7.3	7.8	7.8	7.7	7.7
2	---	---	---	---	---	---	7.5	7.4	7.8	7.8	7.7	7.7
3	---	---	---	---	---	---	7.5	7.4	7.8	7.8	7.7	7.6
4	---	---	---	---	---	---	7.5	7.4	7.8	7.8	7.7	7.6
5	---	---	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.6
6	---	---	---	---	---	---	7.4	7.4	7.8	7.8	7.8	7.3
7	---	---	---	---	---	---	7.5	7.4	7.8	7.8	7.7	7.7
8	---	---	---	---	---	---	7.5	7.4	7.8	7.8	7.7	7.7
9	---	---	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7
10	---	---	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7
11	---	---	---	---	---	---	---	---	7.8	7.8	7.8	7.7
12	---	---	---	---	---	---	---	---	7.8	7.7	7.7	7.7
13	---	---	---	---	---	---	---	---	7.8	7.7	7.7	7.7
14	---	---	---	---	---	---	---	---	7.8	7.7	7.8	7.7
15	---	---	---	---	---	---	---	---	7.8	7.7	7.8	7.7
16	---	---	---	---	7.6	7.2	7.8	7.7	7.8	7.7	7.8	7.7
17	---	---	---	---	7.5	7.2	7.7	7.7	7.8	7.7	7.8	7.7
18	---	---	---	---	7.5	7.2	7.7	7.7	7.8	7.7	7.8	7.7
19	---	---	---	---	7.5	7.4	7.7	7.7	7.8	7.7	7.8	7.7
20	---	---	---	---	7.5	7.4	7.7	7.7	7.8	7.7	7.8	7.7
21	---	---	---	---	7.5	7.4	7.8	7.7	7.7	7.7	7.8	7.7
22	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7	7.7	7.7
23	---	---	---	---	7.4	7.4	7.8	7.8	7.8	7.7	7.8	7.7
24	---	---	---	---	7.4	7.3	7.8	7.8	7.8	7.7	7.7	7.7
25	---	---	---	---	7.4	7.3	7.8	7.8	7.7	7.7	7.8	7.7
26	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7	7.8	7.7
27	---	---	---	---	7.4	7.4	7.8	7.8	7.8	7.7	7.8	7.7
28	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7	7.8	7.7
29	---	---	---	---	7.4	7.4	7.8	7.8	7.7	7.7	7.8	7.7
30	---	---	---	---	7.4	7.4	7.8	7.8	---	---	7.8	7.7
31	---	---	---	---	7.4	7.4	7.8	7.8	---	---	7.8	7.7
MONTH	---	---	---	---	---	---	---	---	7.8	7.7	7.8	7.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.8	7.7	7.9	7.6	7.2	7.0	8.3	7.8	8.3	7.8	7.0	6.9
2	7.8	7.7	7.9	7.6	7.2	7.0	8.2	7.8	8.2	7.8	7.0	6.9
3	7.9	7.7	7.9	7.5	7.2	7.0	8.3	7.8	8.2	7.9	7.1	7.0
4	7.9	7.7	8.0	7.6	7.3	7.0	8.2	7.7	8.2	7.7	7.2	7.1
5	8.0	7.7	8.0	7.6	7.3	7.0	8.1	7.6	8.6	7.8	7.2	7.2
6	8.0	7.7	7.7	7.4	7.6	7.1	7.8	7.6	8.7	8.0	7.4	7.2
7	7.8	7.7	7.7	7.4	7.7	7.4	7.7	7.5	8.6	8.2	7.4	7.4
8	7.8	7.6	7.8	7.5	7.7	7.3	7.8	7.5	8.4	8.0	7.7	7.4
9	8.0	7.6	7.6	7.3	7.6	7.4	7.8	7.6	8.5	7.6	7.6	7.5
10	7.9	7.7	7.5	7.4	7.7	7.4	8.0	7.6	8.7	7.7	7.8	7.6
11	7.8	7.6	7.6	7.4	7.6	7.3	7.9	7.6	8.7	8.3	7.9	7.7
12	7.9	7.6	7.5	7.3	7.5	7.3	7.9	7.6	8.8	8.2	7.9	7.6
13	7.8	7.6	7.4	7.3	7.7	7.3	7.9	7.6	8.6	7.9	7.8	7.6
14	7.7	7.5	7.4	7.2	7.8	7.4	8.1	7.6	8.2	7.7	7.7	7.5
15	7.6	7.5	7.4	7.2	7.8	7.5	8.0	7.6	8.2	7.7	7.7	7.5
16	7.6	7.4	7.6	7.2	7.8	7.5	8.1	7.7	8.4	7.6	7.8	7.5
17	7.6	7.4	7.4	7.2	7.7	7.5	8.2	7.6	8.6	7.8	7.7	7.5
18	7.5	7.4	7.3	7.2	7.8	7.4	8.1	7.7	8.6	7.8	7.7	7.4
19	7.5	7.4	7.3	7.1	7.7	7.4	8.2	7.6	8.0	7.6	7.6	7.3
20	7.5	7.3	7.4	7.1	7.7	7.4	8.2	7.6	7.9	7.6	7.7	7.3
21	7.6	7.4	7.3	7.1	7.7	7.4	8.1	7.6	8.0	7.6	7.7	7.4
22	7.7	7.4	7.5	7.1	7.9	7.5	8.2	7.6	8.1	7.4	7.5	7.3
23	7.6	7.4	7.6	7.1	7.9	7.6	8.0	7.6	8.6	7.5	7.4	7.2
24	7.5	7.4	7.6	7.1	7.9	7.6	8.0	7.7	8.4	7.5	7.3	7.1
25	7.7	7.4	7.9	7.2	7.9	7.5	8.2	7.6	7.8	7.2	7.2	7.1
26	7.6	7.3	7.7	7.3	8.0	7.5	8.3	7.7	7.2	6.6	7.2	7.1
27	7.5	7.2	7.7	7.4	8.0	7.6	8.1	7.7	6.9	6.6	7.1	7.0
28	7.6	7.3	7.7	7.4	8.1	7.7	8.2	7.8	6.8	6.6	7.2	7.0
29	7.7	7.4	7.6	7.3	8.0	7.7	8.1	7.8	6.9	6.7	7.1	6.9
30	7.9	7.5	7.5	7.1	8.2	7.6	8.2	7.8	7.0	6.8	7.0	6.9
31	---	---	7.2	7.0	---	---	8.5	7.8	7.2	7.0	---	---
MONTH	8.0	7.2	8.0	7.0	8.2	7.0	8.5	7.5	8.8	6.6	7.9	6.9

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	149	143	150	148	166	148
2	---	---	---	---	---	---	151	148	150	148	149	145
3	---	---	---	---	---	---	149	146	152	149	150	145
4	---	---	---	---	---	---	146	142	153	152	153	140
5	---	---	---	---	---	---	143	142	169	151	155	144
6	---	---	---	---	---	---	143	142	157	155	146	144
7	---	---	---	---	---	---	142	142	159	156	150	144
8	---	---	---	---	---	---	143	142	159	158	152	148
9	---	---	---	---	---	---	143	142	158	155	154	151
10	---	---	---	---	---	---	148	136	157	156	155	152
11	---	---	---	---	---	---	---	---	158	156	155	153
12	---	---	---	---	---	---	---	---	158	156	154	153
13	---	---	---	---	---	---	---	---	164	156	154	153
14	---	---	---	---	---	---	---	---	179	162	157	154
15	---	---	---	---	---	---	---	---	176	164	159	156
16	---	---	---	---	146	144	158	151	168	161	160	156
17	---	---	---	---	144	144	157	155	169	159	161	160
18	---	---	---	---	144	144	156	152	160	157	161	160
19	---	---	---	---	145	143	152	142	157	155	162	161
20	---	---	---	---	144	144	150	142	159	154	161	160
21	---	---	---	---	144	143	146	143	159	156	160	160
22	---	---	---	---	144	143	145	142	159	153	160	158
23	---	---	---	---	144	143	143	139	175	158	159	158
24	---	---	---	---	143	143	144	141	165	158	159	158
25	---	---	---	---	144	143	144	143	159	157	159	158
26	---	---	---	---	144	143	144	142	162	156	159	159
27	---	---	---	---	144	143	144	142	170	155	160	159
28	---	---	---	---	144	142	146	144	172	155	161	160
29	---	---	---	---	152	143	147	146	164	154	162	160
30	---	---	---	---	152	142	148	147	---	---	163	161
31	---	---	---	---	143	142	150	148	---	---	166	161
MONTH	---	---	---	---	---	---	---	---	179	148	166	140
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	165	157	160	156	199	191	204	198	178	174	---	---
2	164	163	157	153	204	199	199	195	178	175	---	---
3	164	161	154	151	207	203	198	196	180	175	---	---
4	162	161	152	148	208	200	197	191	185	179	---	---
5	162	160	148	146	211	202	195	192	185	178	---	---
6	161	160	152	147	211	207	198	194	182	178	---	---
7	162	160	150	147	212	206	199	194	180	175	---	---
8	164	160	150	148	211	206	196	193	187	174	---	---
9	164	160	151	146	211	206	195	192	176	172	---	---
10	164	162	148	145	214	210	195	191	184	172	---	---
11	162	159	148	146	212	210	194	189	196	178	199	176
12	159	156	149	147	214	208	190	187	215	196	180	178
13	156	154	150	149	215	210	189	185	---	---	180	177
14	158	154	152	149	215	211	190	183	---	---	179	176
15	157	154	152	150	217	212	188	183	---	---	179	177
16	155	152	153	150	219	216	186	182	---	---	180	178
17	152	151	154	152	219	216	186	181	---	---	180	176
18	164	151	153	152	218	214	194	180	---	---	178	176
19	168	157	156	153	217	214	191	184	---	---	178	175
20	157	152	159	156	217	215	188	183	---	---	177	176
21	152	151	162	158	217	213	186	179	---	---	177	175
22	152	145	163	160	216	213	183	179	---	---	176	175
23	152	150	165	163	214	209	182	178	---	---	176	174
24	154	152	166	163	212	209	182	179	---	---	178	176
25	156	153	169	164	218	209	196	177	---	---	178	175
26	158	155	178	169	216	208	181	173	---	---	178	176
27	159	157	179	176	214	207	177	173	---	---	179	176
28	160	158	179	177	208	204	183	174	---	---	178	174
29	160	158	182	177	205	200	184	177	---	---	179	176
30	160	158	187	181	204	201	181	174	---	---	181	178
31	---	---	191	186	---	---	176	173	---	---	---	---
MONTH	168	145	191	145	219	191	204	173	---	---	---	---

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

TEMPERATURE, AIR, DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	35	17	55	36	49	23
2	---	---	---	---	---	---	41	18	59	28	50	31
3	---	---	---	---	---	---	43	32	64	27	61	27
4	---	---	---	---	---	---	52	30	49	27	45	33
5	---	---	---	---	---	---	49	21	54	33	38	32
6	---	---	---	---	---	---	38	19	61	29	48	29
7	---	---	---	---	---	---	49	27	67	23	47	28
8	---	---	---	---	---	---	53	27	56	31	51	31
9	---	---	---	---	---	---	44	30	60	27	51	29
10	---	---	---	---	---	---	44	36	59	36	60	27
11	---	---	---	---	---	---	47	32	47	31	57	30
12	---	---	---	---	---	---	43	26	52	32	60	24
13	---	---	---	---	---	---	48	33	53	36	58	30
14	---	---	---	---	---	---	43	38	47	36	64	30
15	---	---	---	---	---	---	51	37	50	29	69	25
16	---	---	---	---	51	29	49	32	52	34	51	34
17	---	---	---	---	49	28	53	23	55	28	57	24
18	---	---	---	---	48	27	43	29	57	23	58	35
19	---	---	---	---	55	24	47	32	60	20	50	34
20	---	---	---	---	56	22	56	30	54	35	56	25
21	---	---	---	---	57	20	50	27	57	38	80	25
22	---	---	---	---	56	20	52	31	57	31	68	32
23	---	---	---	---	55	18	54	30	43	31	59	28
24	---	---	---	---	54	17	45	35	46	31	68	24
25	---	---	---	---	54	18	54	27	48	34	70	30
26	---	---	---	---	55	16	48	26	55	37	74	26
27	---	---	---	---	56	17	50	20	49	36	60	35
28	---	---	---	---	54	17	50	18	52	33	54	26
29	---	---	---	---	51	16	50	19	49	28	72	24
30	---	---	---	---	51	15	47	28	---	---	76	34
31	---	---	---	---	49	16	41	28	---	---	81	29
MONTH	---	---	---	---	---	---	56	17	67	20	81	23

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	77	33	80	36	87	34	78	50	102	57	68	52
2	84	34	75	37	87	42	78	39	106	55	68	46
3	85	35	71	45	91	41	70	44	99	58	69	39
4	78	39	64	40	87	44	75	33	97	56	70	44
5	74	33	69	32	80	43	69	47	99	56	69	46
6	66	31	62	40	82	41	77	39	97	55	81	40
7	78	32	65	39	77	45	82	49	100	54	90	40
8	71	40	70	44	60	46	80	43	98	63	81	43
9	66	37	64	44	69	44	83	48	99	61	83	40
10	75	32	51	36	64	40	88	46	91	51	86	41
11	78	37	54	34	71	38	94	50	92	49	104	49
12	70	45	62	28	74	50	94	53	94	49	96	49
13	59	44	61	40	95	43	88	51	93	47	92	52
14	63	42	63	44	93	51	87	49	90	47	89	52
15	51	41	64	40	85	55	92	55	86	47	84	50
16	59	38	63	44	84	46	92	56	91	46	75	48
17	60	39	67	43	91	55	91	62	84	47	90	46
18	44	37	80	36	91	48	91	55	80	44	102	48
19	58	41	81	43	81	47	94	52	80	48	98	54
20	75	38	87	41	92	46	98	52	82	45	99	61
21	77	36	92	44	94	50	96	56	92	46	77	48
22	69	43	88	50	87	53	84	55	94	48	68	51
23	56	35	85	49	87	50	94	50	99	45	72	40
24	67	28	79	45	88	50	95	53	91	48	82	30
25	66	39	82	43	93	50	88	51	93	45	84	33
26	80	37	81	47	99	53	88	50	90	51	85	36
27	70	37	83	55	98	51	93	51	95	49	87	38
28	51	29	76	46	94	52	97	54	96	48	84	44
29	69	27	68	38	97	53	99	55	94	49	83	42
30	83	33	58	36	85	54	99	58	88	49	86	43
31	---	---	74	30	---	---	95	60	83	49	---	---
MONTH	85	27	92	28	99	34	99	33	106	44	104	30

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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

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

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA—Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	.01	.00	.00	.00	.02	.00	.00	.00	.01
2	---	---	---	.01	.00	.03	.00	.00	.00	.00	.00	.00
3	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	---	---	---	.02	.00	.14	.00	.01	.00	.00	.00	.06
5	---	---	---	.00	.00	.04	.00	.00	.00	.00	.00	.00
6	---	---	---	.00	.00	.00	.00	.02	.00	.00	.00	.00
7	---	---	---	.00	.00	.00	.00	.00	.06	.00	.00	.00
8	---	---	---	.00	.00	.00	.00	.00	.01	.00	.00	.00
9	---	---	---	.02	.00	.00	.00	.00	.00	.00	.00	.00
10	---	---	---	.26	.03	.00	.00	.01	.00	.00	.00	.00
11	---	---	---	.14	.01	.00	.00	.00	.00	.00	.00	.00
12	---	---	---	.00	.01	.00	.05	.00	.00	.00	.00	.00
13	---	---	---	.08	.08	.00	.16	.00	.00	.00	.00	.00
14	---	---	---	.19	.11	.00	.02	.01	.00	.00	.00	.00
15	---	---	---	.10	.00	.00	.09	.04	.00	.00	.00	.00
16	---	---	.00	.01	.00	.00	.01	.01	.00	.00	.00	.00
17	---	---	.00	.00	.03	.00	.08	.00	.00	.00	.00	.00
18	---	---	.00	.07	.00	.01	.16	.00	.00	.00	.00	.00
19	---	---	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00
20	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	---	---	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
22	---	---	.00	.00	.22	.02	.00	.00	.00	.00	.00	.00
23	---	---	.00	.01	.03	.00	.00	.00	.00	.00	.00	.00
24	---	---	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00
25	---	---	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
26	---	---	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
27	---	---	.00	.00	.12	.00	.03	.00	.00	.00	.00	.00
28	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	---	---	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
30	---	---	.00	.04	---	.00	.00	.00	.00	.00	.00	.00
31	---	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	---	---	---	1.12	0.79	0.24	0.60	0.12	0.07	0.00	0.00	0.07

WTR YR 2000 TOTAL 3.01

11517500 SHASTA RIVER NEAR YREKA, CA

LOCATION.—Lat 41°49'23", long 122°35'40", in SE 1/4 NE 1/4 sec.24, T.46 N., R.7 W., Siskiyou County, Hydrologic Unit 18010207, on right bank, 24 mi downstream from Lake Shastina, 0.5 mi upstream from mouth, and 7 mi north of Yreka.

DRAINAGE AREA.—793 mi^2.

PERIOD OF RECORD.—October 1933 to December 1941, December 1944 to current year.
CHEMICAL DATA: Water years 1959–79.
WATER TEMPERATURE: Water years 1965–79.
SEDIMENT DATA: Water years 1955–56, 1958–62.

REVISED RECORDS.—WSP 1929: Drainage area.

GAGE.—Water-stage recorder and concrete control. Elevation of gage is 2,000 ft above sea level, from topographic map. Prior to Nov. 2, 1933, nonrecording gage at same site and datum.

REMARKS.—Records good. Low flow completely regulated by Lake Shastina (formerly Lake Dwinnell) beginning in 1928; storage limited to 50,000 acre-ft. Small powerplant, 5.6 miles upstream, has operated intermittently since summer of 1987. Many diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21,500 ft^3/s, Dec. 22, 1964, gage height, 12.92 ft, in gage well, 13.85 ft, from floodmarks, from rating curve extended above 4,100 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 1.5 ft^3/s, Aug. 24, 1981, July 17, 1985.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 630 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	1745	676	4.65	Mar. 5	1615	815	4.98

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	183	242	193	301	437	224	155	124	50	31	36
2	139	182	236	192	279	413	184	165	123	52	28	40
3	144	190	234	195	274	394	175	183	120	55	27	48
4	148	194	221	199	269	394	151	175	107	56	30	47
5	139	197	213	203	257	749	156	164	96	61	29	58
6	137	191	210	197	252	710	152	157	82	95	31	64
7	139	183	210	195	252	559	142	163	79	114	35	60
8	140	188	208	197	246	484	121	173	99	124	30	48
9	141	190	205	200	242	430	130	174	125	114	24	34
10	153	197	204	206	247	386	117	154	128	91	19	34
11	149	198	204	476	253	360	108	144	121	78	18	47
12	145	191	204	480	249	344	98	151	115	75	19	50
13	140	187	209	366	257	334	184	155	116	73	19	48
14	133	187	207	466	319	329	258	155	110	64	19	42
15	135	188	203	581	345	321	252	155	105	63	21	42
16	140	198	203	531	311	321	274	184	112	61	21	58
17	140	225	203	473	296	330	246	175	109	71	19	53
18	134	209	203	435	286	316	309	170	111	71	15	64
19	136	200	201	428	277	315	394	162	108	55	15	76
20	142	200	200	527	265	311	347	130	118	44	15	77
21	156	200	200	472	254	302	302	128	119	43	16	102
22	159	197	200	391	269	301	278	130	102	49	20	90
23	166	197	198	340	411	311	265	132	77	48	27	89
24	159	197	197	326	498	309	233	138	64	45	70	85
25	158	197	197	351	397	281	200	131	59	40	53	92
26	152	197	197	336	367	268	183	134	59	50	43	88
27	176	198	197	315	392	270	153	116	56	38	48	89
28	204	197	197	297	489	264	161	113	56	29	30	89
29	198	194	196	288	510	270	164	113	53	24	27	96
30	190	227	196	286	---	266	170	125	54	20	29	95
31	183	---	194	305	---	245	---	126	---	22	36	---
TOTAL	4710	5879	6389	10447	9064	11324	6131	4630	2907	1875	864	1941
MEAN	152	196	206	337	313	365	204	149	96.9	60.5	27.9	64.7
MAX	204	227	242	581	510	749	394	184	128	124	70	102
MIN	133	182	194	192	242	245	98	113	53	20	15	34
AC-FT	9340	11660	12670	20720	17980	22460	12160	9180	5770	3720	1710	385

11517500 SHASTA RIVER NEAR YREKA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	152	197	279	342	345	318	206	141	105	45.6	39.0	75.1
MAX	351	361	1223	1234	1002	946	753	678	564	147	111	182
(WY)	1963	1985	1965	1997	1958	1983	1974	1998	1998	1995	1941	1978
MIN	90.7	117	120	110	133	97.7	31.8	24.5	18.0	10.1	8.35	26.7
(WY)	1989	1937	1937	1937	1934	1977	1992	1992	1955	1960	1939	1981

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1934 - 2000	
ANNUAL TOTAL	88952		66161			
ANNUAL MEAN	244		181		187	
HIGHEST ANNUAL MEAN					364	1974
LOWEST ANNUAL MEAN					77.9	1934
HIGHEST DAILY MEAN	1610	Jan 23	749	Mar 5	10400	Dec 23 1964
LOWEST DAILY MEAN	31	Aug 10	15	Aug 18	1.5	Aug 24 1981
ANNUAL SEVEN-DAY MINIMUM	38	Jul 29	17	Aug 16	5.5	Aug 9 1939
INSTANTANEOUS PEAK FLOW			815	Mar 5	21500	Dec 22 1964
INSTANTANEOUS PEAK STAGE			4.98	Mar 5	12.92	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	176400		131200		135200	
10 PERCENT EXCEEDS	516		337		354	
50 PERCENT EXCEEDS	200		166		153	
90 PERCENT EXCEEDS	61		40		26	

11519500 SCOTT RIVER NEAR FORT JONES, CA

LOCATION.—Lat 41°38'27", long 123°00'50", in NE 1/4 NE 1/4 sec.29, T.44 N., R.10 W., Siskiyou County, Hydrologic Unit 18010208, on right bank, 1.8 mi upstream from Snow Creek, and 9.0 mi west of Fort Jones.

DRAINAGE AREA.—653 mi^2.

PERIOD OF RECORD.—October 1941 to current year. Monthly discharge only October to December 1941, published in WSP 1315-B.
CHEMICAL DATA: Water years 1959–79.
SEDIMENT DATA: Water years 1955–56.

REVISED RECORDS.—WSP 1445: 1942–43(M), 1946(M), 1948. WSP 1715: 1951–52(M). WSP 1929: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 2,623.80 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1966, water-stage recorder 400 ft downstream at datum 2.00 ft higher.

REMARKS.—Records good. Diversions for irrigation of about 30,000 acres upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 54,600 ft^3/s, Dec. 22, 1964, gage height, 25.34 ft, from floodmarks, from rating curve extended above 15,000 ft^3/s on basis of slope-area measurement at 21.40 ft, site and datum then in use; minimum daily, 4.1 ft^3/s, Sept. 20, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,700 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 16	1315	3,640	10.57	Apr. 13	1600	3,020	9.96

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	136	448	193	719	1490	971	1130	877	216	40	14
2	57	133	357	188	770	1360	1030	1250	834	207	37	14
3	59	129	339	186	750	1260	1200	1300	874	209	33	14
4	56	122	289	189	755	1210	1540	1310	915	215	30	16
5	55	118	263	189	764	1440	1670	1220	919	208	28	19
6	55	114	246	186	927	1410	1510	1100	856	208	30	20
7	55	119	241	184	819	1300	1360	1000	834	202	28	21
8	56	123	231	183	757	1230	1360	956	938	202	27	22
9	58	139	225	181	725	1170	1410	987	949	192	24	23
10	59	150	217	206	708	1110	1320	1010	832	185	21	24
11	60	169	212	1450	726	1080	1300	918	743	170	18	24
12	60	180	209	1340	744	1030	1430	838	727	153	17	23
13	60	182	228	882	775	996	2460	791	798	134	17	22
14	59	173	231	1600	1780	1020	2310	766	785	121	16	22
15	60	165	220	2120	2150	1050	1820	789	801	116	15	23
16	62	173	213	2700	1560	1060	1730	802	769	112	14	23
17	63	219	208	1860	1310	1110	1900	802	667	109	14	25
18	64	218	213	1350	1150	1090	1750	818	575	104	14	25
19	66	201	224	1210	1040	1230	1490	856	529	99	13	26
20	68	232	223	1550	975	1270	1340	1020	488	93	14	26
21	68	216	228	1320	993	1160	1270	1190	445	88	14	25
22	69	196	224	1150	1080	1110	1300	1460	407	81	15	25
23	69	184	218	1010	1420	1170	1260	1590	397	74	14	27
24	70	175	212	992	1190	1170	1180	1770	374	67	14	28
25	70	173	212	1020	1060	1120	1120	1640	335	64	14	29
26	72	196	209	952	1190	1120	1110	1430	310	61	14	31
27	79	230	206	874	1740	1150	1170	1420	283	57	13	30
28	93	217	203	810	1700	1140	1220	1410	260	53	13	31
29	132	207	200	760	1610	1080	1120	1220	246	51	12	33
30	141	414	197	740	---	1020	1050	1090	231	48	12	34
31	139	---	194	734	---	979	---	967	---	44	13	---
TOTAL	2188	5403	7340	28309	31887	36135	42701	34850	18998	3943	598	719
MEAN	70.6	180	237	913	1100	1166	1423	1124	633	127	19.3	24.0
MAX	141	414	448	2700	2150	1490	2460	1770	949	216	40	34
MIN	54	114	194	181	708	979	971	766	231	44	12	14
AC-FT	4340	10720	14560	56150	63250	71670	84700	69120	37680	7820	1190	1430

11519500 SCOTT RIVER NEAR FORT JONES, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	110	340	813	1079	1175	1062	1038	1156	728	192	64.5	54.7
MAX	941	1628	5003	4417	4793	2825	2217	2426	1801	769	269	228
(WY)	1963	1974	1965	1974	1958	1972	1952	1958	1975	1983	1983	1983
MIN	9.58	10.7	52.7	80.9	99.0	83.3	55.1	121	78.0	12.8	5.82	4.75
(WY)	1995	1995	1995	1977	1977	1977	1977	1977	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	282112		213071			
ANNUAL MEAN	773		582		648	
HIGHEST ANNUAL MEAN					1496	1974
LOWEST ANNUAL MEAN					74.9	1977
HIGHEST DAILY MEAN	3410	Mar 1	2700	Jan 16	39500	Dec 23 1964
LOWEST DAILY MEAN	54	Oct 1	12	Aug 29	4.1	Sep 20 1994
ANNUAL SEVEN-DAY MINIMUM	55	Sep 25	13	Aug 25	4.3	Sep 15 1994
INSTANTANEOUS PEAK FLOW			3640	Jan 16	54600	Dec 22 1964
INSTANTANEOUS PEAK STAGE			10.57	Jan 16	25.34	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	559600		422600		469700	
10 PERCENT EXCEEDS	1860		1360		1560	
50 PERCENT EXCEEDS	410		230		310	
90 PERCENT EXCEEDS	60		24		46	

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA

LOCATION.—Lat 41°51'14", long 123°13'52", in SW 1/4 SW 1/4 sec.3, T.46 N., R.12 W., Siskiyou County, Hydrologic Unit 18010206, Klamath National Forest, on left bank, 0.4 mi upstream from Bittenbender Creek, 1.4 mi downstream from Grider Creek, 2.2 mi west of Seiad Valley, and 55 mi downstream from Iron Gate Dam.

DRAINAGE AREA.—6,940 mi^2, approximately (not including Lost River, Butte Creek, or Lower Klamath Lake Basins).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1912 to September 1925, July 1951 to current year. Monthly discharges only for some periods, published in WSP 1315-B.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 1,320 ft above sea level, from river-profile map. November 1912 to June 1925, nonrecording gage at site 3.5 mi upstream at different datum.

REMARKS.—Records good. Low flow regulated considerably by reservoirs and powerplants upstream from station. Large diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 165,000 ft^3/s, Dec. 23, 1964, gage height, 33.75 ft, from floodmarks, from rating curve extended above 49,000 ft^3/s on basis of slope-area measurements at gage heights 20.1 and 29.2 ft; minimum daily, 320 ft^3/s, Nov. 25, 1917.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	2400	11,300	9.36	Mar. 10	0900	10,500	9.04
Feb. 15	0230	10,200	8.87				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	2200	2800	2610	4920	8400	4720	4860	3440	1500	1210	1210
2	1690	2180	2830	2470	5080	7740	4820	5160	3200	1490	1210	1240
3	1690	2180	2750	2470	5050	7340	5100	5350	3200	1470	1200	1260
4	1700	2170	2640	2490	5040	7130	5600	5330	3260	1470	1190	1280
5	1690	2180	2560	2480	5010	8080	5810	5160	3210	1500	1190	1290
6	1710	2180	2530	2460	5100	7860	5390	4950	3100	1560	1200	1290
7	1730	2350	2610	2450	5010	7670	4930	5100	3060	1550	1210	1300
8	1710	2370	2600	2460	4910	8050	4870	5210	3230	1540	1210	1410
9	1700	2370	2600	2470	4880	7650	4950	5190	3280	1530	1190	1550
10	1710	2570	2560	2910	4870	7400	4780	5090	3110	1480	1190	1540
11	1700	2510	2540	6270	4930	7200	4740	5010	2950	1440	1190	1550
12	1690	2490	2570	6040	4990	6950	4910	4940	2910	1420	1180	1560
13	1670	2440	2680	5740	5120	6960	6310	4650	2980	1400	1180	1580
14	1720	2390	2640	8390	7750	7060	6610	4200	2950	1370	1180	1520
15	1710	2370	2590	9300	9360	7060	5850	4020	2930	1360	1180	1510
16	1690	2390	2560	8980	8380	6730	5750	4070	2900	1350	1180	1510
17	1700	2410	2550	7660	7840	6290	5650	4060	2570	1360	1180	1500
18	1680	2370	2590	6450	7370	5950	6160	4060	2410	1350	1180	1490
19	1680	2410	2580	6110	6760	6120	6490	3930	2320	1330	1180	1510
20	1680	2460	2590	6770	6260	6180	5950	3850	2120	1300	1180	1490
21	1700	2360	2590	6550	6110	5970	5770	4050	1990	1300	1190	1490
22	1700	2290	2570	6340	6140	5720	6170	4440	1920	1300	1210	1490
23	1700	2280	2540	6050	7080	5410	6710	4630	1860	1290	1230	1470
24	1690	2270	2520	5970	6840	5380	7030	4900	1820	1270	1250	1470
25	1690	2280	2520	5870	6490	5210	6870	4750	1760	1260	1240	1460
26	1710	2390	2510	5630	7100	5310	6390	4420	1720	1260	1230	1460
27	1790	2450	2500	5360	8800	5330	5750	4400	1670	1250	1230	1450
28	2090	2400	2490	5150	9200	5070	5280	4350	1610	1230	1220	1450
29	2170	2390	2480	4980	8790	4930	5130	4060	1560	1230	1200	1440
30	2240	2660	2480	4920	---	4830	4860	3840	1540	1210	1200	1440
31	2220	---	2470	4920	---	4730	---	3650	---	1220	1210	---
TOTAL	54620	70760	80040	158720	185180	201710	169350	141680	76580	42590	37220	43210
MEAN	1762	2359	2582	5120	6386	6507	5645	4570	2553	1374	1201	1440
MAX	2240	2660	2830	9300	9360	8400	7030	5350	3440	1560	1250	1580
MIN	1670	2170	2470	2450	4870	4730	4720	3650	1540	1210	1180	1210
AC-FT	108300	140400	158800	314800	367300	400100	335900	281000	151900	84480	73830	85710

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2129	3071	4623	5864	6295	6603	6005	5179	3269	1682	1429	1668
MAX	4490	7654	20280	21500	17980	19120	13940	10700	7980	3908	2778	3000
(WY)	1963	1985	1965	1965	1958	1972	1974	1956	1953	1913	1913	1925
MIN	1047	1200	1395	1408	1466	1145	1132	1285	819	598	436	604
(WY)	1992	1995	1995	1992	1992	1977	1977	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1913 - 2000	
ANNUAL TOTAL	1804600		1261660			
ANNUAL MEAN	4944		3447		3973	
HIGHEST ANNUAL MEAN					7434	1956
LOWEST ANNUAL MEAN					1151	1992
HIGHEST DAILY MEAN	17000	Mar 1	9360	Feb 15	115000	Dec 23 1964
LOWEST DAILY MEAN	1430	Aug 21	1180	Aug 12	320	Nov 25 1917
ANNUAL SEVEN-DAY MINIMUM	1450	Aug 17	1180	Aug 12	417	Aug 18 1992
INSTANTANEOUS PEAK FLOW			11300	Jan 14	165000	Dec 23 1964
INSTANTANEOUS PEAK STAGE			9.36	Jan 14	33.75	Dec 23 1964
INSTANTANEOUS LOW FLOW					320	Nov 25 1917
ANNUAL RUNOFF (AC-FT)	3579000		2503000		2878000	
10 PERCENT EXCEEDS	10300		6640		8190	
50 PERCENT EXCEEDS	2930		2540		2720	
90 PERCENT EXCEEDS	1610		1250		1210	

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1955–79, December 1999 to September 2000.
CHEMICAL DATA: Water years 1959–66.
DISSOLVED OXYGEN: January 2000 to September 2000.
pH: January 2000 to September 2000.
SPECIFIC CONDUCTANCE: January 2000 to September 2000.
AIR TEMPERATURE: December 1999 to September 2000.
WATER TEMPERATURE: Water years 1964–79, January 2000 to September 2000.
SEDIMENT DATA: Water years 1955–56.

PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: January 2000 to September 2000.
pH: January 2000 to September 2000.
SPECIFIC CONDUCTANCE: January 2000 to September 2000.
AIR TEMPERATURE: December 1999 to September 2000.
WATER TEMPERATURE: October 1963 to May 1979, January 2000 to September 2000.

INSTRUMENTATION.—Water-quality monitor since January 2000.

REMARKS.—Interruption in record due to malfunction of the recording equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.—
DISSOLVED OXYGEN: Maximum recorded, 17.8 mg/L, Apr. 13, 2000; minimum recorded, 6.0 mg/L, July 12, 13, 17, 2000.
pH: Maximum recorded, 8.3 standard units, September 9–12, 2000; minimum recorded, 6.5 standard units, September 26, 27, 2000.
SPECIFIC CONDUCTANCE: Maximum recorded, 414 microsiemens, Feb. 22, 23, 2000; minimum recorded, 140 microsiemens, May 24, 2000.
AIR TEMPERATURE: Maximum recorded, 94°F, Aug. 2, 2000; minimum recorded, 24°F, Dec. 28 and Apr. 10, 2000.
WATER TEMPERATURE: Maximum recorded, 29.5°C, July 26, 1970; minimum recorded, 0.0°C, Dec. 30, 31, 1978.

EXTREME FOR CURRENT YEAR.—
DISSOLVED OXYGEN: Maximum recorded, 17.8 mg/L, Apr. 13; minimum recorded, 6.0 mg/L, July 12, 13, 17.
pH: Maximum recorded, 8.3 standard units, Sept. 9–12; minimum recorded, 6.5 standard units, Sept. 26, 27.
SPECIFIC CONDUCTANCE: Maximum recorded, 414 microsiemens, Feb. 22, 23; minimum recorded 140 microsiemens, May 24, 2000.
AIR TEMPERATURE: Maximum recorded, 94°F, Aug. 2; minimum recorded, 24°F, Dec. 28 and Apr. 10.
WATER TEMPERATURE: Maximum recorded, 26.5°C, July 31; minimum recorded, 3.5°C, Jan. 6, 13.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	11.3	10.8
9	---	---	---	---	---	---	---	---	---	---	11.4	11.2
10	---	---	---	---	---	---	---	---	---	---	11.5	11.1
11	---	---	---	---	---	---	---	---	---	---	11.4	11.1
12	---	---	---	---	---	---	---	---	---	---	11.6	10.9
13	---	---	---	---	---	---	---	---	---	---	11.6	10.8
14	---	---	---	---	---	---	---	---	---	---	11.5	11.1
15	---	---	---	---	---	---	---	---	---	---	11.6	10.9
16	---	---	---	---	---	---	---	---	---	---	11.0	10.6
17	---	---	---	---	---	---	---	---	---	---	11.3	10.5
18	---	---	---	---	---	---	---	---	---	---	10.8	10.2
19	---	---	---	---	---	---	---	---	---	---	10.7	10.2
20	---	---	---	---	---	---	---	---	---	---	11.3	10.7
21	---	---	---	---	---	---	---	---	---	---	11.2	10.2
22	---	---	---	---	---	---	---	---	---	---	10.7	9.9
23	---	---	---	---	---	---	---	---	---	---	10.5	9.9
24	---	---	---	---	---	---	---	---	---	---	10.6	9.8
25	---	---	---	---	---	---	---	---	---	---	10.2	9.5
26	---	---	---	---	---	---	---	---	---	---	10.3	9.4
27	---	---	---	---	---	---	---	---	---	---	10.1	9.3
28	---	---	---	---	---	---	---	---	---	---	10.1	9.3
29	---	---	---	---	---	---	---	---	---	---	10.1	9.2
30	---	---	---	---	---	---	---	---	---	---	9.9	8.9
31	---	---	---	---	---	---	---	---	---	---	9.6	8.7
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.4	8.5	11.9	10.8	9.5	8.0	---	---	11.1	8.1	---	---
2	9.6	8.4	12.3	11.3	9.2	7.8	---	---	11.0	8.2	---	---
3	10.1	8.8	11.9	11.2	9.3	7.7	---	---	11.2	7.9	---	---
4	12.4	9.1	12.8	11.0	9.2	7.7	---	---	11.4	8.6	---	---
5	14.1	12.4	12.8	11.2	9.5	7.8	---	---	10.7	8.0	---	---
6	14.3	13.1	12.1	11.0	9.4	7.5	---	---	10.4	7.8	---	---
7	14.3	12.8	11.0	8.2	---	---	---	---	10.8	7.8	---	---
8	14.2	12.8	9.3	7.7	---	---	---	---	10.8	7.3	---	---
9	15.3	13.8	10.8	9.2	---	---	---	---	---	---	---	---
10	15.1	13.6	10.9	9.1	---	---	---	---	---	---	---	---
11	15.2	13.6	10.7	9.5	---	---	---	---	---	---	---	---
12	15.5	14.0	10.6	9.3	---	---	7.9	6.0	---	---	---	---
13	17.8	15.4	10.2	9.2	---	---	7.9	6.0	---	---	---	---
14	17.3	9.9	10.1	9.0	---	---	8.0	6.1	---	---	---	---
15	12.7	8.0	10.1	9.0	---	---	8.2	6.1	---	---	---	---
16	13.9	12.7	10.1	8.6	---	---	8.0	6.1	---	---	---	---
17	13.8	10.7	10.0	8.5	---	---	8.1	6.0	---	---	---	---
18	14.9	11.1	10.2	8.5	---	---	8.4	6.2	---	---	---	---
19	14.0	12.0	10.2	8.4	---	---	8.6	6.4	---	---	---	---
20	12.3	11.2	10.1	8.4	---	---	9.2	6.4	---	---	---	---
21	12.1	10.8	10.6	8.7	---	---	9.5	6.6	---	---	---	---
22	12.0	10.5	10.5	8.9	---	---	9.3	7.0	---	---	---	---
23	13.3	11.9	10.6	9.2	---	---	9.8	6.6	---	---	---	---
24	13.3	12.5	11.3	9.5	---	---	8.8	6.3	---	---	---	---
25	13.5	12.2	11.2	10.1	---	---	9.8	6.2	---	---	---	---
26	13.2	11.9	10.9	9.6	---	---	9.6	6.2	---	---	---	---
27	12.9	11.7	10.4	9.5	---	---	9.9	6.9	---	---	---	---
28	12.7	11.9	10.7	9.6	---	---	10.4	7.2	---	---	---	---
29	12.9	11.7	10.9	9.4	---	---	10.7	7.7	---	---	---	---
30	12.3	11.1	10.3	8.9	---	---	10.6	7.6	---	---	---	---
31	---	---	9.9	8.5	---	---	11.0	7.7	---	---	---	---
MONTH	17.8	8.0	12.8	7.7	---	---	---	---	---	---	---	---

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	7.7	7.6	7.9	7.9
2	---	---	---	---	---	---	---	---	7.6	7.6	7.9	7.9
3	---	---	---	---	---	---	---	---	7.6	7.6	7.9	7.9
4	---	---	---	---	---	---	---	---	7.7	7.6	7.9	7.9
5	---	---	---	---	---	---	---	---	7.7	7.6	7.9	7.9
6	---	---	---	---	---	---	8.0	7.9	7.6	7.5	7.9	7.9
7	---	---	---	---	---	---	8.0	7.9	7.6	7.6	8.0	7.9
8	---	---	---	---	---	---	8.1	7.9	7.6	7.6	8.0	8.0
9	---	---	---	---	---	---	8.0	7.9	7.6	7.6	8.0	8.0
10	---	---	---	---	---	---	7.9	7.8	7.6	7.6	8.0	8.0
11	---	---	---	---	---	---	7.8	7.8	7.6	7.6	8.0	8.0
12	---	---	---	---	---	---	7.9	7.8	7.6	7.5	8.0	8.0
13	---	---	---	---	---	---	7.9	7.9	7.5	7.5	8.0	7.9
14	---	---	---	---	---	---	7.9	7.8	7.7	7.5	8.0	7.9
15	---	---	---	---	---	---	7.8	7.8	7.9	7.7	8.0	7.9
16	---	---	---	---	---	---	7.8	7.8	7.9	7.8	8.0	7.9
17	---	---	---	---	---	---	7.8	7.8	8.0	7.9	8.0	7.9
18	---	---	---	---	---	---	7.9	7.8	8.0	7.9	8.0	7.9
19	---	---	---	---	---	---	7.9	7.9	7.9	7.8	8.0	7.9
20	---	---	---	---	---	---	8.0	7.9	7.9	7.8	8.0	7.9
21	---	---	---	---	---	---	7.9	7.9	7.9	7.8	8.1	7.9
22	---	---	---	---	---	---	7.9	7.9	7.9	7.9	8.1	8.0
23	---	---	---	---	---	---	7.9	7.8	7.9	7.9	8.1	8.0
24	---	---	---	---	---	---	7.8	7.8	7.9	7.8	8.1	8.0
25	---	---	---	---	---	---	7.9	7.8	7.9	7.8	8.1	8.0
26	---	---	---	---	---	---	7.9	7.5	7.8	7.8	8.1	8.0
27	---	---	---	---	---	---	7.8	7.6	7.8	7.8	8.1	8.0
28	---	---	---	---	---	---	7.8	7.7	7.8	7.8	8.2	8.0
29	---	---	---	---	---	---	7.7	7.7	7.9	7.8	8.2	8.1
30	---	---	---	---	---	---	7.8	7.7	---	---	8.2	8.1
31	---	---	---	---	---	---	7.8	7.7	---	---	8.2	8.0
MONTH	---	---	---	---	---	---	---	---	8.0	7.5	8.2	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.2	8.0	7.3	7.2	7.9	7.5	7.7	7.7	7.9	7.1	8.0	7.9
2	8.2	8.0	7.3	7.2	7.9	7.5	7.7	7.7	8.0	7.2	8.1	8.0
3	8.2	8.0	7.3	7.2	8.0	7.5	7.7	7.6	8.0	7.2	8.1	8.0
4	8.0	7.8	7.3	7.2	8.0	7.5	7.6	7.6	7.9	7.3	8.1	8.0
5	7.9	7.7	7.3	7.2	7.9	7.5	7.6	7.6	8.0	7.2	8.1	8.0
6	7.7	7.5	7.3	7.2	7.8	7.4	7.6	7.6	7.9	7.2	8.1	8.1
7	7.6	7.5	7.3	7.3	7.5	7.3	7.6	7.6	7.8	7.1	8.1	8.1
8	7.6	7.5	7.3	7.1	7.6	7.5	7.6	7.6	7.8	7.1	8.2	8.1
9	7.6	7.4	7.2	7.1	7.6	7.5	7.6	7.5	7.4	7.1	8.3	8.1
10	7.5	7.4	7.7	7.1	7.5	7.4	7.5	7.5	7.5	7.4	8.3	8.2
11	7.4	7.3	7.6	7.2	7.5	7.5	7.9	7.5	7.5	7.4	8.3	8.2
12	7.4	7.2	7.6	7.2	7.5	7.4	7.9	7.3	7.4	7.4	8.3	7.8
13	7.3	7.3	7.6	7.2	7.4	7.4	7.9	7.3	7.4	7.3	7.9	7.4
14	7.3	7.3	7.6	7.3	7.5	7.4	7.9	7.3	7.5	7.3	7.4	7.3
15	7.3	7.2	7.6	7.3	7.4	7.4	7.9	7.3	7.5	7.4	7.4	7.3
16	7.4	7.2	7.7	7.2	7.5	7.4	7.8	7.3	7.4	7.4	7.4	7.2
17	7.4	7.3	7.8	7.3	7.5	7.4	7.9	7.2	7.4	7.4	7.2	7.2
18	7.4	7.2	7.8	7.2	7.4	7.4	7.9	7.3	7.5	7.4	7.2	7.1
19	7.4	7.3	7.8	7.3	7.6	7.4	7.9	7.3	7.5	7.5	7.1	6.9
20	7.4	7.3	7.8	7.3	7.5	7.4	7.9	7.2	7.5	7.5	6.9	6.9
21	7.3	7.3	7.8	7.3	7.5	7.5	7.9	7.2	7.5	7.5	6.9	6.8
22	7.4	7.3	7.6	7.2	7.7	7.5	8.0	7.2	7.6	7.5	6.8	6.8
23	7.4	7.3	7.7	7.2	7.6	7.5	8.1	7.3	7.7	7.6	6.8	6.7
24	7.4	7.3	7.5	7.3	7.6	7.5	8.1	7.3	7.7	7.6	6.8	6.6
25	7.4	7.2	7.5	7.3	7.5	7.4	8.0	7.3	7.8	7.6	6.6	6.6
26	7.4	7.3	7.6	7.3	7.5	7.4	8.0	7.3	7.8	7.8	6.6	6.5
27	7.3	7.2	7.5	7.3	7.5	7.5	8.0	7.3	7.8	7.8	6.6	6.5
28	7.4	7.3	7.6	7.3	7.6	7.5	8.1	7.3	7.8	7.8	6.8	6.6
29	7.3	7.2	7.7	7.4	7.6	7.5	8.0	7.2	7.9	7.8	6.8	6.6
30	7.3	7.2	7.7	7.4	7.7	7.5	8.0	7.2	7.9	7.9	6.7	6.6
31	---	---	7.9	7.4	---	---	7.9	7.1	7.9	7.9	---	---
MONTH	8.2	7.2	7.9	7.1	8.0	7.3	8.1	7.1	8.0	7.1	8.3	6.5

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	198	192	269	249
2	---	---	---	---	---	---	---	---	193	185	276	257
3	---	---	---	---	---	---	---	---	188	183	269	244
4	---	---	---	---	---	---	---	---	184	182	244	230
5	---	---	---	---	---	---	---	---	183	180	237	221
6	---	---	---	---	---	---	218	217	186	181	221	206
7	---	---	---	---	---	---	218	216	185	181	208	200
8	---	---	---	---	---	---	217	216	188	184	200	196
9	---	---	---	---	---	---	216	215	189	184	199	196
10	---	---	---	---	---	---	215	178	190	185	198	195
11	---	---	---	---	---	---	196	178	185	179	197	195
12	---	---	---	---	---	---	231	192	180	176	196	194
13	---	---	---	---	---	---	227	219	176	171	196	193
14	---	---	---	---	---	---	219	191	174	168	194	193
15	---	---	---	---	---	---	202	188	204	172	194	192
16	---	---	---	---	---	---	201	191	245	205	196	193
17	---	---	---	---	---	---	209	193	300	246	198	194
18	---	---	---	---	---	---	212	209	330	300	199	198
19	---	---	---	---	---	---	214	212	365	330	199	194
20	---	---	---	---	---	---	212	204	398	365	194	193
21	---	---	---	---	---	---	208	204	411	399	195	194
22	---	---	---	---	---	---	206	203	414	411	197	194
23	---	---	---	---	---	---	203	200	414	408	198	195
24	---	---	---	---	---	---	200	198	408	364	197	195
25	---	---	---	---	---	---	198	196	363	311	199	197
26	---	---	---	---	---	---	200	196	311	301	198	196
27	---	---	---	---	---	---	198	197	301	229	198	196
28	---	---	---	---	---	---	198	196	229	217	198	196
29	---	---	---	---	---	---	198	196	249	224	200	197
30	---	---	---	---	---	---	197	193	---	---	202	200
31	---	---	---	---	---	---	196	194	---	---	203	201
MONTH	---	---	---	---	---	---	---	---	414	168	276	192
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	203	200	167	161	185	176	193	186	172	166	199	197
2	201	194	160	156	189	181	194	180	173	165	198	194
3	194	189	160	154	190	184	189	180	171	161	195	194
4	189	175	157	144	188	183	189	181	168	161	194	192
5	175	172	152	144	185	178	184	178	183	163	197	192
6	177	173	153	146	186	176	206	178	185	179	213	196
7	180	176	193	152	187	176	202	182	185	172	231	213
8	179	174	203	171	201	187	221	184	195	173	234	210
9	174	171	171	161	232	199	261	186	232	195	210	198
10	176	173	171	158	234	222	264	245	233	214	201	188
11	176	172	163	160	237	212	245	223	230	215	190	186
12	172	160	166	163	223	213	227	222	231	201	211	186
13	160	142	170	166	214	203	226	221	203	198	210	202
14	221	147	172	170	208	198	226	217	208	202	206	200
15	249	188	175	172	205	193	222	215	211	207	210	200
16	188	176	177	173	205	193	220	216	214	204	233	210
17	209	174	177	175	199	186	229	212	209	204	245	233
18	201	166	177	174	222	188	220	212	216	208	245	241
19	188	173	177	172	217	194	218	208	212	196	243	239
20	191	187	175	169	204	194	214	199	196	193	243	239
21	194	186	170	162	202	197	208	195	197	193	242	231
22	195	178	165	158	203	188	203	190	202	193	231	224
23	178	167	158	153	198	190	201	190	210	196	224	204
24	170	166	154	140	195	188	198	188	201	196	204	200
25	170	160	149	142	195	188	192	184	208	196	201	198
26	165	162	155	148	196	189	189	181	206	199	200	198
27	165	159	158	155	203	188	189	182	211	200	200	198
28	169	164	159	152	196	187	186	175	209	203	200	198
29	165	160	161	152	206	187	180	173	204	196	201	198
30	167	162	172	161	206	189	181	174	199	194	205	200
31	---	---	181	171	---	---	178	166	200	196	---	---
MONTH	249	142	203	140	237	176	264	166	233	161	245	186

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

TEMPERATURE, AIR, DEGREES FAHRENHEIT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	46	36	45	33
2	---	---	---	---	---	---	---	---	47	37	45	35
3	---	---	---	---	---	---	---	---	56	35	52	34
4	---	---	---	---	---	---	42	30	46	33	43	35
5	---	---	---	---	---	---	---	---	45	37	40	34
6	---	---	---	---	---	---	37	25	47	37	44	34
7	---	---	---	---	---	---	42	32	46	34	45	34
8	---	---	---	---	---	---	46	34	44	36	46	33
9	---	---	---	---	---	---	41	37	51	39	44	33
10	---	---	---	---	36	30	43	37	49	41	40	34
11	---	---	---	---	41	34	44	31	44	39	46	31
12	---	---	---	---	41	35	36	29	44	37	53	29
13	---	---	---	---	---	---	31	29	41	33	49	34
14	---	---	---	---	---	---	35	30	42	36	53	34
15	---	---	---	---	40	32	38	32	44	34	56	29
16	---	---	---	---	41	34	37	33	48	37	50	32
17	---	---	---	---	---	---	36	30	47	34	54	28
18	---	---	---	---	47	30	38	32	46	31	49	36
19	---	---	---	---	44	29	41	36	46	28	46	34
20	---	---	---	---	47	30	42	35	53	33	52	30
21	---	---	---	---	---	---	40	33	49	38	62	29
22	---	---	---	---	44	29	41	33	39	34	62	36
23	---	---	---	---	46	26	38	34	40	31	53	33
24	---	---	---	---	---	---	42	37	41	31	58	27
25	---	---	---	---	---	---	45	38	44	34	60	33
26	---	---	---	---	44	26	43	31	39	30	62	34
27	---	---	---	---	---	---	40	28	45	38	50	35
28	---	---	---	---	36	24	43	26	46	36	51	29
29	---	---	---	---	36	26	41	26	42	33	58	28
30	---	---	---	---	35	26	42	27	---	---	62	29
31	---	---	---	---	---	---	37	33	---	---	67	32
MONTH	---	---	---	---	---	---	---	---	56	28	67	27

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	72	36	65	39	77	39	75	53	93	57	61	46
2	75	38	66	46	79	44	76	48	94	57	57	44
3	78	38	61	45	82	44	70	47	91	56	60	44
4	69	38	59	38	81	46	65	44	89	54	65	44
5	66	36	57	41	68	46	61	51	90	55	66	40
6	65	35	55	40	71	46	71	51	90	54	73	41
7	72	35	55	42	66	50	75	49	92	55	78	44
8	63	39	62	47	60	46	75	47	90	61	73	48
9	62	39	53	42	59	43	80	49	86	58	75	42
10	69	24	43	33	60	45	83	48	80	52	78	44
11	72	40	51	36	64	40	86	51	82	49	82	50
12	56	48	57	34	65	51	85	53	85	50	83	52
13	52	44	57	42	82	46	82	51	81	50	85	56
14	57	43	62	42	87	51	81	51	82	47	71	54
15	53	41	56	40	82	54	84	53	81	48	72	60
16	57	38	65	44	81	49	79	54	85	47	73	51
17	58	39	66	41	85	47	83	61	80	49	81	48
18	43	35	74	40	82	50	81	51	76	49	86	50
19	54	40	78	45	76	49	85	49	75	47	86	54
20	63	44	82	45	86	47	88	52	77	47	84	54
21	68	42	86	47	89	53	86	56	84	48	78	51
22	54	38	79	48	84	55	81	55	86	45	69	46
23	53	34	82	51	83	52	85	53	85	51	68	41
24	59	31	77	49	85	52	88	54	83	50	70	35
25	57	39	68	48	88	52	83	51	84	50	72	38
26	68	37	72	52	90	55	80	50	84	50	75	40
27	59	37	64	52	90	51	84	51	86	51	74	41
28	48	32	66	46	90	53	87	55	87	51	76	47
29	63	30	66	39	89	54	90	57	88	50	77	46
30	72	37	58	40	83	55	91	60	83	52	77	46
31	---	---	68	35	---	---	91	61	76	51	---	---
MONTH	78	24	86	33	90	39	91	44	94	45	86	35

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	6.0	5.5	7.5	6.5
2	---	---	---	---	---	---	---	---	6.5	6.0	7.5	7.0
3	---	---	---	---	---	---	---	---	6.0	6.0	8.0	7.0
4	---	---	---	---	---	---	---	---	6.0	6.0	8.0	7.0
5	---	---	---	---	---	---	---	---	6.5	6.0	7.0	6.5
6	---	---	---	---	---	---	4.5	3.5	6.0	6.0	7.5	6.5
7	---	---	---	---	---	---	---	---	6.0	5.5	7.0	6.5
8	---	---	---	---	---	---	---	---	6.5	6.0	7.0	6.5
9	---	---	---	---	---	---	5.5	5.0	6.5	6.0	7.0	6.5
10	---	---	---	---	---	---	6.0	5.0	7.0	6.5	7.0	6.5
11	---	---	---	---	---	---	6.0	5.0	7.0	6.5	8.0	7.0
12	---	---	---	---	---	---	5.0	4.5	6.5	6.5	8.0	7.0
13	---	---	---	---	---	---	4.5	3.5	6.5	6.0	8.0	7.0
14	---	---	---	---	---	---	5.5	4.5	6.5	6.0	9.0	7.5
15	---	---	---	---	---	---	5.5	5.5	6.5	6.0	8.5	7.0
16	---	---	---	---	---	---	6.0	5.5	7.0	6.5	9.0	8.5
17	---	---	---	---	---	---	5.5	5.0	7.5	6.5	8.5	7.5
18	---	---	---	---	---	---	5.0	4.5	7.0	6.5	8.5	8.0
19	---	---	---	---	---	---	6.0	5.0	6.5	6.0	9.0	8.5
20	---	---	---	---	---	---	6.0	5.5	7.5	6.5	8.5	7.5
21	---	---	---	---	---	---	5.5	5.5	8.0	7.0	9.0	7.5
22	---	---	---	---	---	---	5.5	5.0	7.5	6.5	9.5	8.5
23	---	---	---	---	---	---	5.5	5.5	6.5	6.0	9.5	9.0
24	---	---	---	---	---	---	6.0	5.5	6.5	6.0	9.5	8.5
25	---	---	---	---	---	---	6.0	6.0	7.0	6.5	10.5	9.0
26	---	---	---	---	---	---	6.5	6.0	7.0	6.5	11.0	9.5
27	---	---	---	---	---	---	6.0	5.0	7.5	7.0	10.5	10.0
28	---	---	---	---	---	---	5.0	4.5	7.5	7.0	10.0	9.0
29	---	---	---	---	---	---	4.5	4.5	7.5	7.0	10.0	9.0
30	---	---	---	---	---	---	5.5	4.5	---	---	10.5	9.0
31	---	---	---	---	---	---	5.5	5.0	---	---	11.0	9.5
MONTH	---	---	---	---	---	---	---	---	8.0	5.5	11.0	6.5

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

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA

LOCATION.—Lat 41°50'07", long 123°22'55", in SW 1/4 SW 1/4 sec.26, T.17 N., R.7 E., Siskiyou County, Hydrologic Unit 18010209, on right bank, 0.2 mi upstream from Slater Creek, 3.0 mi north of Happy Camp, and 3.5 mi upstream from mouth.

DRAINAGE AREA.—120 mi^2.

PERIOD OF RECORD.—September 1911 to September 1921 (fragmentary), December 1956 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1635: 1957–58.

GAGE.—Water-stage recorder. Datum of gage is 1,198.37 ft above sea level. Prior to December 1956, nonrecording gages at sites 1.0 mi upstream at different datums. December 1956 to Sept. 20, 1969, water-stage recorder at site 0.8 mi upstream at different datum.

REMARKS.—Records good. Small diversions upstream and at station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 39,000 ft^3/s, Dec. 22, 1964, gage height, 24.3 ft, from floodmarks, present site and datum; 36.59 ft from floodmarks in gage well, from rating curve extended above 6,000 ft^3/s on basis of slope-area measurement at gage height 29.0 ft, previous site and datum; minimum discharge observed, 20 ft^3/s, Aug. 19 to Sept. 6, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 21, 1955, reached a stage of 29.0 ft, at 1956–69 site and datum, from floodmarks, discharge, 23,000 ft^3/s on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 3,100 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0345	3,490	8.96	Jan. 14	1015	4,130	9.50

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	68	359	167	758	1130	500	417	257	103	59	45
2	51	63	494	164	877	987	595	432	250	101	57	54
3	51	61	400	158	804	872	722	438	246	99	56	57
4	50	59	300	178	760	823	800	426	243	100	55	52
5	50	62	261	170	814	793	731	399	236	106	54	51
6	52	72	252	158	869	723	648	381	224	105	53	49
7	53	64	311	154	751	668	598	373	221	103	53	48
8	52	82	276	153	686	626	625	404	227	110	52	47
9	52	88	301	156	669	606	627	419	218	99	52	47
10	51	395	265	816	684	593	587	440	210	94	52	46
11	51	228	248	2310	766	603	603	398	199	90	52	46
12	51	159	276	1020	805	577	696	382	210	88	52	46
13	51	113	406	862	867	567	866	372	212	85	51	45
14	50	96	322	3020	2460	620	747	381	202	83	51	45
15	50	88	282	1710	1780	600	646	449	194	82	50	46
16	50	96	256	2280	1300	637	628	425	182	80	50	45
17	50	107	247	1440	1040	630	616	421	170	80	50	45
18	50	100	285	1060	877	597	675	411	162	77	50	44
19	49	242	283	1050	775	657	602	420	156	75	50	42
20	49	428	305	1250	717	606	578	439	147	73	50	41
21	49	243	303	1110	670	562	573	446	142	71	49	40
22	49	173	284	978	868	559	601	441	138	70	48	40
23	49	151	261	892	853	588	558	441	133	70	48	40
24	49	134	245	1030	744	560	504	427	127	68	47	40
25	49	218	233	1290	685	549	480	385	123	66	47	40
26	52	352	221	1120	1270	549	465	347	120	66	47	40
27	98	308	209	910	1980	561	471	362	116	64	46	40
28	205	216	197	778	1400	541	456	347	111	63	46	40
29	110	259	188	684	1330	508	423	308	108	63	45	40
30	77	490	179	652	---	482	408	289	105	61	44	39
31	69	---	172	633	---	472	---	271	---	60	44	---
TOTAL	1870	5215	8621	28353	28859	19846	18029	12291	5389	2555	1560	1340
MEAN	60.3	174	278	915	995	640	601	396	180	82.4	50.3	44.7
MAX	205	490	494	3020	2460	1130	866	449	257	110	59	57
MIN	49	59	172	153	669	472	408	271	105	60	44	39
AC-FT	3710	10340	17100	56240	57240	39360	35760	24380	10690	5070	3090	2660

11521500 INDIAN CREEK NEAR HAPPY CAMP, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	80.2	316	618	751	835	791	669	558	267	102	60.6	52.2
MAX	414	1498	3156	2230	2820	1896	1372	1368	579	204	100	102
(WY)	1963	1974	1965	1970	1958	1972	1966	1969	1975	1983	1983	1978
MIN	29.8	45.6	45.7	50.5	87.1	170	202	152	71.8	36.5	26.3	27.9
(WY)	1992	1960	1977	1977	1977	1977	1977	1992	1992	1977	1977	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	175856		133928			
ANNUAL MEAN	482		366		424	
HIGHEST ANNUAL MEAN					817	1974
LOWEST ANNUAL MEAN					83.7	1977
HIGHEST DAILY MEAN	3830	Feb 28	3020	Jan 14	30700	Dec 22 1964
LOWEST DAILY MEAN	49	Oct 19	39	Sep 30	21	Sep 12 1977
ANNUAL SEVEN-DAY MINIMUM	49	Oct 19	40	Sep 24	22	Sep 8 1977
INSTANTANEOUS PEAK FLOW			4130	Jan 14	39000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			9.50	Jan 14	24.30	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	348800		265600		306800	
10 PERCENT EXCEEDS	1120		818		976	
50 PERCENT EXCEEDS	300		226		212	
90 PERCENT EXCEEDS	55		49		47	

11522500 SALMON RIVER AT SOMES BAR, CA

LOCATION.—Lat 41°22'40", long 123°28'35", in NE 1/4 sec.3, T.11 N., R.6 E., Siskiyou County, Hydrologic Unit 18010210, Klamath National Forest, on left bank at Somes Bar, 1.0 mi upstream from mouth.

DRAINAGE AREA.—751 mi^2.

PERIOD OF RECORD.—September 1911 to September 1915, October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1285: 1912, 1914, 1915(M), 1946(M), 1948(M). WDR CA-72-1: 1970–71(P).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 482.97 ft above sea level. Prior to October 1927, nonrecording gage at different datum, October 1927 to Dec. 22, 1964, water-stage recorder at site 0.5 mi upstream at datum 6.54 ft higher.

REMARKS.—Records good. No storage or large diversion upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 133,000 ft^3/s, Dec. 22, 1964 (result of failure of upstream debris dam), gage height, 46.6 ft, present site and datum, from floodmarks, from rating curve extended above 33,000 ft^3/s; minimum daily, 70 ft^3/s, Aug. 25, 1931.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1645	10,900	9.50				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	304	1210	569	2300	3900	2230	2490	1790	714	285	177
2	191	282	1250	558	2480	3600	2500	2760	1850	657	277	222
3	190	266	1190	540	2360	3210	3030	2820	2030	657	269	239
4	189	256	935	584	2260	3190	3710	2830	2130	612	261	228
5	189	254	839	563	2170	3520	3580	2580	2060	583	253	240
6	205	263	790	517	2130	3300	3180	2360	1840	612	246	230
7	215	253	929	511	1940	3040	2940	2160	1780	573	240	213
8	212	318	838	506	1900	2810	3130	2160	2090	564	243	201
9	204	372	853	514	1830	2630	3100	2440	1850	528	236	195
10	200	939	801	1140	1770	2480	2890	2490	1660	510	232	191
11	197	933	735	7400	1830	2480	2980	2130	1470	509	228	188
12	191	967	780	4080	2010	2360	3490	1980	1570	496	224	184
13	188	692	1220	2980	2130	2320	5050	1870	1800	475	220	179
14	185	503	1050	6630	8040	2560	3980	1870	1840	459	216	177
15	181	466	900	6320	6960	2540	3470	2070	1830	445	214	180
16	179	639	804	6540	4780	2690	3380	1970	1680	431	212	184
17	177	772	749	4710	3820	2730	3300	1990	1440	421	209	182
18	178	566	820	3540	3240	2580	3190	2110	1310	404	211	176
19	178	669	814	3230	2850	2990	2870	2320	1270	392	210	170
20	177	1160	889	3960	2630	2890	2730	2840	1120	385	210	163
21	176	803	902	3350	2460	2640	2690	3180	1090	372	208	159
22	176	614	846	2940	2650	2600	2900	3550	1110	366	202	160
23	175	554	800	2610	2900	2790	2730	3690	1080	356	195	163
24	174	516	769	2700	2620	2660	2460	3840	1040	343	189	164
25	177	563	744	2940	2420	2560	2350	3350	992	334	187	164
26	187	868	716	2740	3220	2540	2390	2890	956	328	187	161
27	290	940	682	2450	4870	2610	2600	2990	908	319	184	160
28	985	742	651	2200	4190	2530	2550	2860	842	311	180	158
29	550	734	625	1990	4200	2360	2260	2420	797	307	177	159
30	370	1530	601	1970	---	2240	2210	2160	763	301	176	158
31	329	---	579	1940	---	2170	---	1930	---	293	175	---
TOTAL	7408	18738	26311	83222	88960	85520	89870	79100	43988	14057	6756	5525
MEAN	239	625	849	2685	3068	2759	2996	2552	1466	453	218	184
MAX	985	1530	1250	7400	8040	3900	5050	3840	2130	714	285	240
MIN	174	253	579	506	1770	2170	2210	1870	763	293	175	158
AC-FT	14690	37170	52190	165100	176500	169600	178300	156900	87250	27880	13400	10960

11522500 SALMON RIVER AT SOMES BAR, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	348	1108	2188	2963	3002	2962	3013	3132	1931	627	264	203
MAX	2297	5961	10480	11260	11190	9615	5741	6174	4354	1906	839	528
(WY)	1963	1974	1965	1970	1958	1972	1938	1938	1953	1953	1983	1983
MIN	117	130	175	190	255	448	710	786	402	146	81.6	83.1
(WY)	1988	1937	1937	1937	1977	1977	1977	1977	1992	1931	1931	1931

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1912 - 2000	
ANNUAL TOTAL	754622		549455			
ANNUAL MEAN	2067		1501		1806	
HIGHEST ANNUAL MEAN					3754	1974
LOWEST ANNUAL MEAN					339	1977
HIGHEST DAILY MEAN	10000	Mar 1	8040	Feb 14	100000	Dec 22 1964
LOWEST DAILY MEAN	174	Oct 24	158	Sep 28	70	Aug 25 1931
ANNUAL SEVEN-DAY MINIMUM	176	Oct 19	161	Sep 24	73	Aug 24 1931
INSTANTANEOUS PEAK FLOW			10900	Feb 14	133000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			9.50	Feb 14	46.60	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	1497000		1090000		1308000	
10 PERCENT EXCEEDS	4840		3200		4240	
50 PERCENT EXCEEDS	1160		918		1040	
90 PERCENT EXCEEDS	213		185		180	

11523000 KLAMATH RIVER AT ORLEANS, CA

LOCATION.—Lat 41°18'13", long 123°32'00", in SW 1/4 NE 1/4 sec.31, T.11 N., R.6 E., Humboldt County, Hydrologic Unit 18010209, Six Rivers National Forest, on right bank at Orleans, 25 ft upstream from highway bridge, and 0.2 mi downstream from Cheenitch Creek.

DRAINAGE AREA.—8,475 mi^2, not including Lost River or Lower Klamath Lake Basins.

PERIOD OF RECORD.—October 1927 to current year. Monthly discharge only for some periods, published in WSP 13l5-B. Prior to October 1965, published as "at Somesbar."
SEDIMENT DATA: Water years 1967–79.

REVISED RECORDS.—WSP 1565: 1935(M), 1949.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 353.98 ft above sea level. Prior to Oct. 1, 1965, at site 6.7 mi upstream at different datum. Oct. 1, 1965, to July 14, 1992, water-stage recorder at datum 2.00 ft higher, at present site.

REMARKS.—Records good. Flow considerably regulated by reservoirs and powerplants upstream from station. Large diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 307,000 ft^3/s, Dec. 22, 1964, gage height, 76.5 ft, from floodmarks, site and datum then in use, from rating curve extended above 80,000 ft^3/s on basis of slope-conveyance study, gage height, 59.4 ft; minimum daily, 320 ft^3/s, Aug. 25, Sept. 1, 1931.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 40,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	1615	46,800	17.41	Feb. 14	1815	41,000	16.34

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	3100	7640	4260	13300	21400	10400	9790	7180	2960	1920	1660
2	2100	3030	7870	4380	14400	19300	11100	10500	6880	2860	1900	1780
3	2110	2980	7910	4150	13800	17600	12200	10900	6920	2830	1870	1850
4	2120	2960	6420	4330	13200	16700	13800	11000	7060	2770	1850	1820
5	2130	2980	5740	4370	13000	17700	13800	10500	6990	2770	1830	1820
6	2180	3060	5420	4150	13400	17400	13000	9910	6610	2890	1820	1810
7	2230	3010	6060	4080	12600	16200	11900	9540	6390	2850	1820	1780
8	2220	3190	5730	4060	11900	16000	11900	9970	6780	2870	1840	1770
9	2200	3450	5850	4110	11500	15600	12000	10400	6700	2770	1810	1900
10	2190	6690	5620	6470	11400	14800	11500	10800	6380	2690	1790	1980
11	2190	5780	5210	30100	11800	15000	11500	10000	5920	2620	1770	1980
12	2170	5070	5260	19400	12200	14400	12400	9660	5910	2550	1770	1980
13	2160	4290	7090	16100	13100	14000	15900	9320	6310	2480	1750	1970
14	2150	3790	6460	34500	31500	14700	15700	8930	6290	2420	1740	1960
15	2130	3600	5810	32300	32000	14600	13800	9030	6190	2380	1740	1930
16	2130	3890	5390	30900	24000	14500	13300	8800	5980	2340	1730	1930
17	2120	4370	5180	25800	20400	14200	12900	8740	5510	2340	1730	1930
18	2140	4020	5530	19300	17800	13300	13200	8800	4970	2300	1710	1930
19	2130	4730	5630	17100	15900	13800	12900	8960	4770	2260	1710	1920
20	2140	8220	5810	19400	14600	13800	12100	9470	4490	2210	1710	1920
21	2140	5940	5910	18200	13700	13000	11600	9910	4140	2180	1710	1900
22	2160	4870	5650	16900	14500	12700	11800	10900	4060	2150	1720	1920
23	2170	4520	5360	15700	15900	12600	12200	11100	3930	2140	1710	1920
24	2170	4300	5140	16100	15200	12200	12100	11800	3820	2110	1710	1920
25	2170	4510	5000	17700	14200	11800	11900	11100	3670	2070	1720	1930
26	2230	5790	4870	16700	17000	11700	11600	9980	3580	2040	1720	1930
27	2550	6130	4740	15000	26500	11900	11300	9880	3450	2030	1700	1930
28	5070	5180	4600	13600	23800	11600	10600	9840	3290	2000	1700	1930
29	3900	4890	4480	12500	22800	11000	9910	8930	3150	1980	1680	1930
30	3340	7910	4380	12200	---	10600	9540	8180	3050	1960	1660	1940
31	3190	---	4280	12200	---	10300	---	7640	---	1930	1660	---
TOTAL	74130	136250	176040	456060	485400	444400	367850	304280	160370	74750	54500	56870
MEAN	2391	4542	5679	14710	16740	14340	12260	9815	5346	2411	1758	1896
MAX	5070	8220	7910	34500	32000	21400	15900	11800	7180	2960	1920	1980
MIN	2100	2960	4280	4060	11400	10300	9540	7640	3050	1930	1660	1660
AC-FT	147000	270300	349200	904600	962800	881500	729600	603500	318100	148300	108100	112800

11523000 KLAMATH RIVER AT ORLEANS, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3025	6054	10720	13830	14240	14050	12790	11090	6555	2835	2067	2217
MAX	9876	22080	48770	51290	53740	42600	26860	25320	16900	7226	3666	3807
(WY)	1963	1974	1965	1997	1986	1972	1974	1938	1953	1953	1953	1953
MIN	1354	1930	2288	2334	2630	2806	3065	3081	1626	755	549	790
(WY)	1993	1988	1937	1937	1977	1977	1977	1992	1992	1931	1931	1992

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	3927500		2790900			
ANNUAL MEAN	10760		7625		8260	
HIGHEST ANNUAL MEAN					17030	1974
LOWEST ANNUAL MEAN					2520	1977
HIGHEST DAILY MEAN	52700	Feb 28	34500	Jan 14	240000	Dec 23 1964
LOWEST DAILY MEAN	2040	Sep 26	1660	Aug 30	320	Aug 25 1931
ANNUAL SEVEN-DAY MINIMUM	2050	Sep 24	1680	Aug 26	453	Aug 1 1931
INSTANTANEOUS PEAK FLOW			46800	Jan 14	307000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			17.41	Jan 14	76.50	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	7790000		5536000		5984000	
10 PERCENT EXCEEDS	22900		15700		18100	
50 PERCENT EXCEEDS	7550		5520		4920	
90 PERCENT EXCEEDS	2130		1860		1900	

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA

LOCATION.—Lat 41°06'41", long 122°42'16", in SW 1/4 NW 1/4 sec.32, T.38 N., R.7 W., Trinity County, Hydrologic Unit 18010211, Shasta National Forest, on left bank, 24 ft upstream from State Highway No. 3 Bridge, 1.8 mi upstream from Coffee Creek, and 8.6 mi north of Trinity Center.

DRAINAGE AREA.—149 mi^2.

PERIOD OF RECORD.—September 1957 to current year.

REVISED RECORDS.—WDR CA-85-2: 1982(M). WDR CA-97-2: 1982(M).

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 2,536.93 ft above sea level. Prior to Oct. 1, 1978, water-stage recorder at site 0.2 mi downstream at datum 3.57 ft lower.

REMARKS.—Records good. No regulation or diversion upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 26,500 ft^3/s, Jan. 16, 1974, gage height, 12.96 ft, site and datum then in use, from rating curve extended above 4,500 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 16 ft^3/s, Sept. 11–14, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1955, reached a stage of 10.5 ft, previous site and datum, from floodmarks, discharge, 11,400 ft^3/s.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 2,300 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 16	0230	5,010	9.30	Apr. 13	0515	5,290	9.49
Feb. 14	0900	2,750	7.53	May 23	1900	2,710	7.49

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	25	341	109	353	745	894	1270	801	214	69	46
2	36	23	274	105	365	659	1190	1370	847	211	67	51
3	36	22	226	103	408	604	1630	1410	910	238	65	54
4	36	22	197	106	508	642	2000	1380	935	199	63	55
5	38	23	181	97	850	679	1830	1220	898	195	61	57
6	44	25	164	94	966	602	1580	1060	848	198	60	52
7	46	29	159	95	725	576	1480	895	857	179	59	50
8	42	144	142	92	610	542	1570	888	1030	168	61	48
9	39	71	145	91	556	510	1450	1030	780	161	59	46
10	39	186	130	111	672	480	1360	944	671	154	58	45
11	38	262	130	775	807	472	1450	850	605	147	58	44
12	37	205	141	427	808	471	1870	826	642	139	56	42
13	37	118	159	415	798	490	3830	764	686	134	54	40
14	36	83	143	2420	2250	548	2250	756	728	128	53	45
15	35	160	137	1810	1440	609	1820	847	736	122	52	55
16	36	453	130	3010	979	687	1880	829	653	118	51	51
17	36	318	131	1190	797	730	2690	878	542	115	50	48
18	36	181	140	888	717	728	1910	964	495	110	50	44
19	35	208	139	1570	637	988	1440	1170	458	106	51	41
20	e32	214	168	1920	632	899	1220	1460	415	104	52	39
21	e26	169	162	1120	812	803	1190	1730	396	99	52	38
22	e26	136	153	805	1160	843	1270	1920	384	97	50	40
23	e26	121	146	705	994	984	1150	2220	345	93	47	42
24	e26	109	142	846	786	911	1040	2070	308	88	46	41
25	e27	121	139	859	672	922	1030	1740	295	84	45	39
26	e29	159	136	702	832	967	1110	1520	295	82	44	40
27	e64	164	131	574	1330	1000	1300	1490	275	80	43	40
28	131	143	126	487	994	935	1200	1310	254	78	43	40
29	53	284	121	423	911	843	1030	1090	236	76	43	39
30	34	603	117	423	---	791	1080	960	225	73	43	38
31	27	---	113	383	---	788	---	842	---	73	44	---
TOTAL	1219	4781	4863	22755	24369	22448	46744	37703	17550	4063	1649	1350
MEAN	39.3	159	157	734	840	724	1558	1216	585	131	53.2	45.0
MAX	131	603	341	3010	2250	1000	3830	2220	1030	238	69	57
MIN	26	22	113	91	353	471	894	756	225	73	43	38
AC-FT	2420	9480	9650	45130	48340	44530	92720	74780	34810	8060	3270	2680

e Estimated.

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.8	210	335	463	581	671	861	1066	513	135	55.8	44.9
MAX	447	1664	1726	1899	2248	1641	1558	2414	2159	778	205	134
(WY)	1963	1974	1965	1974	1958	1995	2000	1983	1998	1983	1983	1978
MIN	24.3	37.4	34.1	35.9	47.2	60.0	137	204	95.7	29.0	20.9	23.3
(WY)	1992	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	156982		189494			
ANNUAL MEAN	430		518		417	
HIGHEST ANNUAL MEAN					851	1974
LOWEST ANNUAL MEAN					66.2	1977
HIGHEST DAILY MEAN	2550	May 25	3830	Apr 13	18900	Jan 16 1974
LOWEST DAILY MEAN	22	Nov 3	22	Nov 3	16	Sep 11 1977
ANNUAL SEVEN-DAY MINIMUM	24	Oct 31	24	Oct 31	16	Sep 8 1977
INSTANTANEOUS PEAK FLOW			5290	Apr 13	26500	Jan 16 1974
INSTANTANEOUS PEAK STAGE			9.49	Apr 13	16.82	Jan 1 1997
ANNUAL RUNOFF (AC-FT)	311400		375900		301800	
10 PERCENT EXCEEDS	1170		1320		1060	
50 PERCENT EXCEEDS	207		212		176	
90 PERCENT EXCEEDS	37		39		38	

11525400 TRINITY LAKE NEAR LEWISTON, CA

LOCATION.—Lat 40°48'05", long 122°45'44", in NW 1/4 SW 1/4 sec.15, T.34 N., R.8 W., Trinity County, Hydrologic Unit 18010211, Trinity National Forest, Whiskeytown–Shasta–Trinity National Recreation Area, on side of intake structure of Trinity Dam on Trinity River, and 9 mi north of Lewiston.

DRAINAGE AREA.—692 mi^2.

PERIOD OF RECORD.—November 1960 to current year. From October 1963 to September 1997 published as Clair Engle Lake near Lewiston.

GAGE.—Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation). Prior to Jan. 4, 1962, nonrecording gage at same site and datum. Contents based on capacity table provided by U.S. Bureau of Reclamation, dated April 1962.

REMARKS.—The lake is formed by an earthfill dam completed in November 1960. Storage began Nov. 23, 1960. Usable capacity, 2,437,700 acre-ft, between elevations 1,995.5 ft, elevation of invert of river outlets, and 2,370.0 ft, crest of glory hole spillway. Dead storage, 10,000 acre-ft. Operating pool is from elevation 2,145.0 ft, capacity, 312,621 acre-ft, to 2,370.0 ft, capacity, 2,447,700 acre-ft. Figures given represent total contents at 2400 hours. Lake is used for power generation, flood control, and recreation. See schematic diagram of Klamath River and Trinity River Basins.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES (at 2400 HOURS) FOR PERIOD OF RECORD.—Maximum contents, 2,588,000 acre-ft, Jan. 19, 1974, elevation, 2,378.32 ft; minimum since first filling, 222,400 acre-ft, Nov. 9, 1977, elevation, 2,120.22 ft.

EXTREMES (at 2400 HOURS) FOR CURRENT YEAR.—Maximum contents, 2,385,036 acre-ft, May 29, elevation, 2,366.17 ft; minimum, 1,791,050 acre-ft, Sept. 30, elevation, 2,325.99 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Bureau of Reclamation, dated April 1962)

2,100	162,231	2,250	955,140
2,140	292,859	2,310	1,583,586
2,190	529,611	2,380	2,616,989

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1957352	1910281	1904242	1873281	1976016	2151242	2092599	2320962	2383902	2321437	2129693	1899615
2	1953500	1909859	1902977	1872727	1975007	2149729	2094089	2324127	2383740	2315915	2122935	1891511
3	1950361	1909441	1901293	1872036	1974287	2145958	2097515	2326974	2384388	2310253	2115888	1883843
4	1947937	1908457	1899334	1871760	1974431	2143998	2102581	2330297	2384550	2304119	2108409	1876200
5	1944798	1908035	1896680	1871207	1981206	2140983	2107063	2332353	2384388	2298170	2100942	1868718
6	1942518	1907894	1894166	1871345	1988858	2138421	2110204	2333936	2384064	2292698	2093493	1863465
7	1940248	1907191	1891652	1871207	1992479	2134803	2112298	2334094	2383902	2286759	2086055	1859732
8	1938259	1907473	1889414	1871483	1994217	2131495	2115290	2334252	2384226	2281002	2078339	1856429
9	1936842	1907191	1887460	1871483	1996245	2127590	2122935	2337594	2382930	2275556	2070341	1853128
10	1935421	1910000	1884818	1871621	2000301	2124587	2130594	2339504	2380833	2270114	2062508	1849827
11	1934004	1911546	1883148	1877867	2004661	2120081	2137818	2338390	2378417	2264532	2054988	1845977
12	1932299	1912952	1881760	1880091	2006697	2115290	2147616	2337117	2376806	2258640	2047334	1841869
13	1930882	1913652	1880648	1883566	2012077	2111999	2170327	2335207	2376967	2252450	2039553	1838722
14	1928470	1913793	1878700	1900733	2036767	2109905	2183093	2333619	2377612	2246115	2031929	1835027
15	1926778	1914636	1877172	1914215	2052044	2108110	2195132	2333936	2379705	2240090	2024329	1831198
16	1924799	1917740	1876755	1932867	2061178	2106166	2209810	2332670	2379866	2233623	2016882	1827792
17	1922824	1919860	1876200	1941099	2067976	2104819	2236703	2332986	2377773	2227156	2008587	1824113
18	1921128	1920846	1876339	1947222	2073593	2103177	2255077	2333461	2374552	2220551	2000590	1820707
19	1919011	1922118	1876894	1952930	2078339	2102730	2267634	2334570	2371814	2214260	1993928	1818527
20	1916330	1921552	1876200	1961941	2083533	2101985	2277267	2338072	2368432	2207975	1987700	1816355
21	1915765	1919860	1877033	1968108	2089917	2100495	2284114	2343164	2365537	2201401	1981639	1810793
22	1915341	1918729	1877311	1969255	2103624	2098856	2290822	2349849	2362335	2195590	1975728	1809708
23	1914214	1917033	1876061	1971263	2111999	2098111	2296919	2359453	2359133	2190102	1968251	1808487
24	1912812	1915058	1875366	1975007	2114243	2096770	2302391	2367788	2355130	2183855	1960650	1807266
25	1911968	1912671	1875922	1979476	2114243	2095877	2306950	2373263	2351288	2176248	1953358	1806046
26	1911265	1911125	1876339	1980341	2121583	2094983	2312769	2377451	2347302	2169264	1945938	1804014
27	1912109	1908879	1876339	1980053	2134350	2095132	2314814	2381638	2343164	2162438	1938686	1798477
28	1912250	1905789	1876200	1977891	2141737	2094983	2316386	2384064	2338549	2155932	1931306	1793075
29	1912250	1904383	1876339	1975440	2148973	2094983	2317802	2385036	2333619	2149276	1923812	1792264
30	1912109	1905367	1873976	1976881	---	2094536	2318747	2384874	2327765	2142943	1916046	1791050
31	1910984	---	1873698	1975728	---	2093195	---	2384064	---	2136461	1908456	---
a	2334.71	2334.31	2332.04	2339.26	2351.00	2347.28	2362.02	2366.11	2362.59	2350.17	2334.53	2325.99
b	-50670	-5617	-31669	+102030	+173245	-55778	+225552	+65317	-56299	-191304	-228005	-117406
MAX	1957352	1922118	1904242	1980341	2148973	2151242	2318747	2385036	2384550	2321437	2129693	1899615
MIN	1910984	1904383	1873698	1871207	1974287	2093195	2092599	2320962	2327765	2136461	1908456	1791050

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

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CA

LOCATION.—Lat 40°38'49", long 122°37'34", Shasta County, Hydrologic Unit 18010212, at powerplant, 1.6 mi downstream from Mill Creek, and 3.8 mi south of French Gulch.

PERIOD OF RECORD.—April 1963 to current year.

GAGE.—Recorded powerplant output.

REMARKS.—Water is diverted from Trinity River at NW 1/4 SE 1/4 sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (station 11371700). See schematic diagram of Klamath River and Trinity River Basins.

COOPERATION.—Records were provided by U.S. Bureau of Reclamation, not rounded to U.S. Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 4,000 ft^3/s, Oct. 18, 1987; no flow for many days most years.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1746	122	1511	260	1309	0	2820	3024	2467	3024	3277	3027
2	1478	93	1456	241	1884	0	2651	2957	2264	3067	3298	3037
3	1096	110	1484	597	2042	0	2831	2799	2258	3114	3305	3070
4	842	69	1465	214	2052	0	2937	2904	2876	3022	3339	3051
5	925	110	1531	4	909	0	3111	2731	2391	3070	3286	3045
6	816	112	1517	0	473	0	2884	2831	2461	3068	3290	1918
7	655	111	1512	170	1263	0	2951	2826	2594	3141	3255	1346
8	529	88	1492	0	1052	0	2844	2825	2616	3088	3038	1195
9	227	162	1460	0	873	0	262	919	2600	3178	3084	1186
10	439	111	1508	0	1045	15	382	1201	2593	3238	3094	1579
11	277	117	962	73	1429	14	533	2067	2602	3146	3068	1534
12	308	117	1039	369	2636	14	508	1372	2572	3143	3060	1318
13	408	113	975	0	2692	2	530	1372	2536	3233	3061	1202
14	475	113	942	0	0	18	840	1362	2550	3236	3050	1265
15	448	101	979	0	0	784	0	1599	1761	3111	3013	1378
16	528	209	588	0	0	766	0	1671	1875	3162	3095	1285
17	496	0	209	0	14	1443	0	1700	2564	3188	3093	1177
18	376	113	0	0	0	1888	14	1343	2568	3360	3065	1362
19	630	588	0	1436	0	2054	0	1655	2715	3310	2544	703
20	587	1090	605	1430	0	2123	14	2291	2708	3254	2808	876
21	0	993	0	538	0	2278	866	2071	2580	3263	2569	1947
22	103	704	1	1782	0	2546	864	2164	2618	2970	2538	14
23	101	989	552	1655	17	2779	906	1935	2637	2896	3111	14
24	111	923	448	2100	196	2828	1076	2162	2590	2937	2990	14
25	126	977	0	1183	2300	2749	858	2485	2744	3280	3087	14
26	109	1142	0	2570	26	2756	959	2302	2688	3026	3038	497
27	114	1463	0	2334	0	2752	2827	2202	2378	3311	2932	1834
28	110	1560	432	2546	0	2698	2827	2384	2942	3304	3022	2039
29	114	1477	0	2418	0	2701	2763	2566	2811	3294	3034	38
30	109	1512	1067	1217	---	2793	2806	2584	2575	3304	3054	14
31	178	---	235	2743	---	2820	---	2281	---	3334	3024	---
TOTAL	14461	15389	23970	25880	22212	38821	42864	66585	76134	98072	94522	40979
MEAN	466	513	773	835	766	1252	1429	2148	2538	3164	3049	1366
MAX	1746	1560	1531	2743	2692	2828	3111	3024	2942	3360	3339	3070
MIN	0	0	0	0	0	0	0	919	1761	2896	2538	14
AC-FT	28680	30520	47540	51330	44060	77000	85020	132100	151000	194500	187500	81280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1297	833	675	613	797	875	1198	1362	1858	2392	2251	2055
MAX	3363	2158	2891	2755	3223	3111	3220	3513	3662	3589	3236	3504
(WY)	1988	1967	1979	1982	1974	1974	1970	1974	1969	1968	1977	1988
MIN	166	18.0	.16	.000	.34	.000	.000	.097	.63	253	507	415
(WY)	1994	1992	1993	1986	1988	1988	1978	1991	1993	1978	1992	1997

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1963 - 2000	
ANNUAL TOTAL	469922		559889			
ANNUAL MEAN	1287		1530		1365	
HIGHEST ANNUAL MEAN					2485	1974
LOWEST ANNUAL MEAN					301	1978
HIGHEST DAILY MEAN	3327	Jan 3	3360	Jul 18	4000	Oct 18 1987
LOWEST DAILY MEAN	0	Feb 3	0	Oct 21	0	May 6 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 13	.00	Feb 27	.00	Oct 14 1969
ANNUAL RUNOFF (AC-FT)	932100		1111000		988500	
10 PERCENT EXCEEDS	2290		3070		3130	
50 PERCENT EXCEEDS	1320		1460		1130	
90 PERCENT EXCEEDS	110		.00		.00	

11525500 TRINITY RIVER AT LEWISTON, CA

LOCATION.—Lat 40°43'10", long 122°48'09", in SW 1/4 NW 1/4 sec.17, T.33 N., R.8 W., Trinity County, Hydrologic Unit 18010211, on right bank, 400 ft upstream from Deadwood Creek, 0.8 mi downstream from Lewiston Diversion Dam, and 0.8 mi northeast of Lewiston.

DRAINAGE AREA.—719 mi^2.

PERIOD OF RECORD.—August 1911 to current year.
CHEMICAL DATA: Water years 1951–81.
WATER TEMPERATURE: Water years 1952–55, 1958–83.
SEDIMENT DATA: Water years 1955–61.

REVISED RECORDS.—WSP 331: 1911–12. WSP 1181: 1949. WSP 1929: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 1,815.95 ft above sea level. See WSP 1929 for history of changes prior to July 7, 1964.

REMARKS.—Records good. Flow completely regulated by Trinity Lake (station 11525400) beginning in November 1960 and Lewiston Lake, capacity, 14,660 acre-ft, when diversion to Judge Francis Carr Powerplant (station 11525430) began in April 1963. Small diversions above head of Trinity Lake for irrigation, power, placer mining, and domestic use between Trinity Dam and station at Lewiston. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 71,600 ft^3/s, Dec. 22, 1955, gage height, 27.3 ft, from floodmarks, site and datum then in use; minimum, 23 ft^3/s, July 30, 1924. Since completion of Trinity Dam in 1960, maximum discharge, 14,400 ft^3/s, Jan. 18, 1974, gage height, 10.41 ft; minimum daily, 100 ft^3/s, Apr. 14, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of December 1861 reached a stage of 21.6 ft, from floodmarks, at site 1.1 mi downstream at different datum, discharge not determined.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	310	296	301	318	3890	323	334	1040	750	474	492
2	461	309	297	300	318	5250	322	333	1030	757	481	500
3	461	306	294	304	319	5270	320	335	1030	750	480	499
4	459	306	293	302	317	5270	320	335	1030	757	481	499
5	461	306	287	306	318	5270	321	334	1030	750	479	499
6	461	305	289	304	318	5310	321	334	1040	750	479	501
7	457	304	289	307	317	5290	321	335	1030	750	484	501
8	458	308	288	303	314	5260	323	337	907	630	488	497
9	460	305	289	300	318	5230	324	866	899	618	483	502
10	459	307	289	302	319	5270	332	1300	899	618	489	496
11	456	305	289	310	324	5260	337	1790	899	624	494	491
12	458	306	289	307	326	5280	335	2250	922	630	489	497
13	476	306	289	304	333	4740	338	2250	930	630	491	496
14	472	305	288	307	350	4000	339	2270	945	618	489	497
15	353	302	295	309	351	3480	337	2100	945	618	492	498
16	315	299	300	308	346	3060	338	1970	930	618	496	501
17	318	304	299	306	350	2540	343	1860	930	636	495	498
18	315	305	303	306	350	2070	342	1770	833	472	496	498
19	308	303	302	306	330	1740	338	1630	819	495	490	495
20	307	305	302	305	319	1570	334	1630	819	472	489	494
21	309	306	303	307	320	1420	336	1480	826	472	490	493
22	310	307	301	305	567	1230	337	1510	855	472	491	496
23	304	309	302	308	2060	1020	335	1400	841	472	488	507
24	304	298	307	311	2940	810	335	1410	841	467	493	503
25	310	290	307	317	2990	630	334	1290	841	472	489	502
26	310	292	306	316	3070	473	335	1280	833	478	486	503
27	313	290	304	317	3040	359	336	1160	833	472	490	500
28	312	291	303	316	3020	305	337	1100	757	479	491	500
29	311	295	303	317	3030	324	336	1060	750	483	490	504
30	307	296	308	321	---	321	336	1030	757	477	484	503
31	306	---	303	317	---	323	---	1040	---	472	480	---
TOTAL	11769	9080	9214	9549	27592	92265	9965	38123	27041	18159	15111	14962
MEAN	380	303	297	308	951	2976	332	1230	901	586	487	499
MAX	476	310	308	321	3070	5310	343	2270	1040	757	496	507
MIN	304	290	287	300	314	305	320	333	750	467	474	491
AC-FT	23340	18010	18280	18940	54730	183000	19770	75620	53640	36020	29970	29680

11525500 TRINITY RIVER AT LEWISTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	302	742	1257	1572	2544	2653	3675	3932	2131	611	201	158
MAX	2174	3055	5319	5734	11670	6116	6986	9062	6311	2579	628	423
(WY)	1951	1921	1956	1956	1958	1941	1915	1958	1915	1941	1941	1912
MIN	92.3	121	147	169	331	519	725	442	115	42.7	41.0	41.1
(WY)	1918	1930	1937	1937	1933	1924	1924	1924	1924	1924	1924	1924

SUMMARY STATISTICS	WATER YEARS 1912 - 1960	
ANNUAL MEAN	1641	
HIGHEST ANNUAL MEAN	3721	1958
LOWEST ANNUAL MEAN	367	1924
HIGHEST DAILY MEAN	38700	Dec 22 1955
LOWEST DAILY MEAN	28	Jul 30 1924
ANNUAL SEVEN-DAY MINIMUM	31	Jul 26 1924
INSTANTANEOUS PEAK FLOW	71600	Dec 22 1955
INSTANTANEOUS PEAK STAGE	27.3	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	1189000	
10 PERCENT EXCEEDS	4310	
50 PERCENT EXCEEDS	732	
90 PERCENT EXCEEDS	132	

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	288	302	378	624	616	739	748	856	747	381	326	319
MAX	424	849	2285	6525	3369	5489	5029	3937	5466	1096	577	556
(WY)	1993	1984	1984	1997	1998	1983	1963	1963	1998	1983	1982	1998
MIN	203	220	144	145	145	149	130	149	146	142	139	150
(WY)	1966	1971	1977	1977	1977	1977	1976	1976	1976	1976	1976	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	203859		282830			
ANNUAL MEAN	559		773		526	
HIGHEST ANNUAL MEAN					1795	1998
LOWEST ANNUAL MEAN					165	1977
HIGHEST DAILY MEAN	1980	May 13	5310	Mar 6	13800	Jan 19 1974
LOWEST DAILY MEAN	287	Dec 5	287	Dec 5	100	Apr 14 1976
ANNUAL SEVEN-DAY MINIMUM	289	Dec 5	289	Dec 5	103	Apr 12 1976
INSTANTANEOUS PEAK FLOW			5430	Mar 6	14400	Jan 18 1974
INSTANTANEOUS PEAK STAGE			7.37	Mar 6	10.41	Jan 18 1974
ANNUAL RUNOFF (AC-FT)	404400		561000		381300	
10 PERCENT EXCEEDS	888		1590		728	
50 PERCENT EXCEEDS	516		461		303	
90 PERCENT EXCEEDS	304		303		155	

11525580 LITTLE GRASS VALLEY CREEK NEAR LEWISTON, CA

LOCATION.—Lat 40°39'45", long 122°47'57", in NE 1/4 NW 1/4 sec.5, T.32 N., R.8 W., Trinity County, Hydrologic Unit 18010211, on left bank, 0.2 mi upstream from the confluence with Grass Valley Creek, 0.9 mi west of Buckhorn Station, and 3.1 mi south of Lewiston on State Highway 299.

DRAINAGE AREA.—10.7 mi^2.

PERIOD OF RECORD.—Water years 1985–2000 (discontinued).
SEDIMENT DATA: Water years 1985–2000 (discontinued).

REMARKS.—Zero bedload observed at flows less than 8.1 ft^3/s. Record is collected for hydrologic and sediment-transport correlation studies with Grass Valley Creek at Fawn Lodge, near Lewiston (station 11525600).

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
OCT										
01...	1110	2.7	9.5	14	.10	--	--	--	--	--
NOV										
17...	1115	4.8	7.0	3	.04	70	--	--	--	--
DEC										
10...	1155	4.2	3.5	2	.02	--	--	--	--	--
JAN										
18...	1140	11	4.5	24	.71	69	77	86	100	--
31...	1100	8.1	3.0	4	.09	83	--	--	--	--
FEB										
16...	1235	23	6.5	47	2.9	55	58	72	83	100
23...	1255	40	5.5	276	30	59	69	81	94	100
MAR										
09...	1135	34	5.5	126	12	28	--	--	--	--
APR										
18...	1140	33	7.0	244	22	32	--	--	--	--
MAY										
12...	1150	12	7.0	11	.36	--	--	--	--	--
AUG										
10...	1110	3.3	13.0	3	.03	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
OCT								
01...	1115	1	2.7	9.5	--	--	1	3
01...	1120	1	2.7	9.5	--	1	4	12
01...	1125	1	2.7	9.5	--	2	10	22
FEB								
16...	1310	1	23	6.5	1	2	6	11
16...	1315	1	23	6.5	1	4	8	18
16...	1320	1	23	6.5	--	1	2	6

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT							
01...	6	8	11	14	19	34	100
01...	20	27	34	37	39	60	100
01...	31	38	47	52	54	84	100
FEB							
16...	20	29	46	63	68	88	100
16...	35	56	82	96	97	100	--
16...	12	20	28	34	39	69	100

11525580 LITTLE GRASS VALLEY CREEK NEAR LEWISTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	STARTING TIME (2400 HOURS) (82073)	ENDING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORIZONTAL WIDTH OF VERTICAL (FEET) (04121)
JAN									
18...	1150	1000	1120	.250	0	1145	1155	30	.5
18...	1200	1000	1120	.250	0	1155	1205	30	.5
FEB									
16...	1250	1000	1120	.250	0	1245	1255	30	.5
16...	1300	1000	1120	.250	0	1255	1305	30	.5
23...	1310	1000	1120	.250	0	1305	1315	30	.5
23...	1325	1000	1120	.250	0	1320	1330	30	.5

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VERTICALS IN COMPOSITE SAMPLE (NUM) (04119)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COMPOSITE SAMPLE T/D/FT (04122)	SEDIMENT DISCHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)
JAN									
18...	2	11	11	1.50	11	4.5	.54	3.5	2
18...	2	11	11	1.50	11	4.5	.72	3.5	2
FEB									
16...	2	12	12	1.00	23	6.5	.55	5.0	1
16...	2	12	12	1.00	23	6.5	1.10	5.0	1
23...	2	16	16	1.00	40	5.5	1.80	13	1
23...	2	16	16	1.00	40	5.5	1.30	13	2

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JAN								
18...	19	52	83	98	100	--	--	--
18...	18	56	85	99	100	--	--	--
FEB								
16...	12	36	67	96	100	--	--	--
16...	11	44	74	96	100	--	--	--
23...	14	38	68	86	90	90	90	100
23...	16	50	73	94	99	100	--	--

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA

LOCATION.—Lat 40°40'35", long 122°49'46", in SW 1/4 NE 1/4 sec.36, T.33 N., R.9 W., Trinity County, Hydrologic Unit 18010211, on right bank, 0.1 mi upstream from Phillips Gulch, and 2.5 mi southwest of Lewiston.

DRAINAGE AREA.—30.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—November 1975 to current year.

REVISED RECORDS.—WDR CA-86-2: 1983(M). WDR CA-94-2: 1993(P). WDR CA-97-2: 1983(P).

GAGE.—Water-stage recorder. Datum of gage is 2,049.73 ft above sea level (California State Highway Department Benchmark).

REMARKS.—Records fair. Minor regulation by Buckhorn Reservoir since 1990, capacity, 1,090 acre-ft; small pumping diversions upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 3,500 ft^3/s, Feb. 28, 1983; gage height, 10.11 ft, from rating curve extended above 700 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 3.8 ft^3/s, July 29, 1994.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 220 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 5	2115	288	4.55	Feb. 26	2345	505	5.32
Feb. 14	0800	516	5.35	Apr. 17	1130	699	5.80

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	39	21	57	260	78	100	57	30	17	15
2	13	16	35	21	56	238	78	97	55	30	17	17
3	13	16	30	21	59	215	79	94	54	30	17	17
4	13	16	29	22	80	202	80	90	52	30	16	17
5	13	16	27	21	176	233	80	87	52	31	16	17
6	16	16	27	21	196	206	78	85	51	31	16	17
7	15	20	27	21	135	196	75	85	51	30	16	16
8	15	32	26	21	110	212	76	83	54	29	16	15
9	14	20	26	21	97	191	75	80	51	29	15	15
10	14	30	25	21	124	180	73	78	50	28	16	15
11	14	27	24	37	161	180	72	75	49	27	15	15
12	13	22	25	28	192	170	75	74	48	26	15	14
13	13	20	27	28	206	163	132	72	47	25	15	14
14	13	19	25	53	414	155	116	76	44	25	15	16
15	13	22	24	76	297	148	108	116	43	24	15	18
16	13	37	24	101	231	140	161	94	41	24	15	16
17	13	35	24	68	189	135	553	84	40	24	15	16
18	13	26	24	64	158	127	385	79	39	23	15	15
19	13	40	24	63	140	124	282	77	39	23	15	15
20	13	37	23	66	135	118	235	75	38	23	15	15
21	13	29	23	58	210	110	205	73	37	22	15	15
22	13	26	23	53	317	105	180	72	35	22	15	15
23	13	24	22	54	343	101	160	70	35	22	15	16
24	13	23	21	63	250	97	148	69	34	21	15	16
25	13	23	21	68	212	94	139	67	34	20	15	15
26	14	23	21	60	269	91	131	65	33	20	14	15
27	18	23	21	55	420	90	124	64	32	20	14	15
28	29	22	21	51	311	88	116	62	32	20	14	15
29	17	25	21	48	318	84	109	61	30	19	14	15
30	17	40	21	59	---	82	103	59	30	19	14	15
31	16	---	21	56	---	79	---	58	---	19	15	---
TOTAL	446	741	771	1420	5863	4614	4306	2421	1287	766	472	467
MEAN	14.4	24.7	24.9	45.8	202	149	144	78.1	42.9	24.7	15.2	15.6
MAX	29	40	39	101	420	260	553	116	57	31	17	18
MIN	13	16	21	21	56	79	72	58	30	19	14	14
AC-FT	885	1470	1530	2820	11630	9150	8540	4800	2550	1520	936	926

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.9	23.6	41.7	75.4	107	112	73.8	53.9	34.1	18.3	12.3	11.5
MAX	20.8	70.4	220	332	493	531	186	174	121	54.1	30.6	23.0
(WY)	1999	1985	1984	1995	1998	1983	1983	1983	1998	1998	1998	1983
MIN	6.94	8.88	8.20	10.2	9.10	13.8	12.3	15.1	9.64	5.85	4.95	6.50
(WY)	1992	1991	1991	1991	1991	1977	1977	1977	1977	1977	1977	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1976 - 2000	
ANNUAL TOTAL	16143		23574			
ANNUAL MEAN	44.2		64.4		48.9	
HIGHEST ANNUAL MEAN					136	1983
LOWEST ANNUAL MEAN					10.2	1977
HIGHEST DAILY MEAN	300	Mar 25	553	Apr 17	2420	Mar 2 1983
LOWEST DAILY MEAN	12	Sep 27	13	Oct 1	3.8	Jul 29 1994
ANNUAL SEVEN-DAY MINIMUM	13	Sep 23	13	Oct 12	4.0	Jul 25 1994
INSTANTANEOUS PEAK FLOW			699	Apr 17	3500	Feb 28 1983
INSTANTANEOUS PEAK STAGE			5.80	Apr 17	10.11	Feb 28 1983
ANNUAL RUNOFF (AC-FT)	32020		46760		35390	
10 PERCENT EXCEEDS	88		162		105	
50 PERCENT EXCEEDS	29		30		22	
90 PERCENT EXCEEDS	13		15		9.1	

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1976 to current year.
WATER TEMPERATURE: Water years 1976 to current year.
SEDIMENT DATA: Water years 1976 to current year.

PERIOD OF DAILY RECORD.—November 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: November 1975 to current year.

REMARKS.—Sediment samples were collected on most days where a water temperature is published. Zero bed load observed at flows less than 54 ft^3/s.

EXTREMES FOR PERIOD OF DAILY RECORD.—
SEDIMENT CONCENTRATION: Maximum daily mean, 9,550 mg/L, Mar. 2, 1983; minimum daily mean, 0 mg/L, several days most years.
SEDIMENT LOAD: Maximum daily, 65,200 tons, Mar. 2, 1983; minimum daily, 0 ton, several days most years.

EXTREMES FOR CURRENT YEAR.—
SEDIMENT CONCENTRATION: Maximum daily mean, 798 mg/L, Apr. 17; minimum daily mean, 1 mg/L, many days during the year.
SEDIMENT LOAD: Maximum daily, 1,230 tons, Apr. 17; minimum daily, 0.04 ton, many days during the year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
NOV											
17...	0940	35	8.0	4	.38	78	--	--	--	--	--
JAN											
18...	0930	67	4.5	16	2.9	70	77	86	93	100	--
31...	0940	54	3.0	2	.29	48	--	--	--	--	--
FEB											
16...	1035	230	5.5	29	18	36	49	62	80	100	--
23...	1025	336	5.0	76	69	26	30	42	60	91	100
MAR											
09...	1010	187	5.0	14	7.0	56	--	--	--	--	--
APR											
13...	1330	130	10.5	19	6.7	39	--	--	--	--	--
18...	1000	393	7.0	182	193	23	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)
OCT							
01...	0935	1	13	10.5	1	3	8
01...	0940	1	13	10.5	--	--	1
01...	0945	1	13	10.5	--	--	1
01...	0950	1	13	10.5	--	--	1
01...	0955	1	13	10.5	--	1	4

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT							
01...	15	24	34	41	53	80	100
01...	2	3	4	7	10	26	100
01...	2	5	9	13	26	62	100
01...	8	17	27	30	34	48	100
01...	10	18	26	29	39	55	100

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	TETHER LINE USED IN SAMPLNG (YES=1) (CODE) (04117)	START-ING TIME (2400 HOURS) (82073)	END-ING TIME (2400 HOURS (82074)	TIME ON BED FOR BED LOAD SAMPLE (SEC) (04120)	HORI-ZONTAL WIDTH OF VER-TICAL (FEET) (04121)
JAN									
18...	0955	1000	1120	.250	0	0950	1000	30	1.0
18...	1005	1000	1120	.250	0	1000	1010	30	1.0
FEB									
16...	1105	1000	1100	.250	0	1100	1110	30	1.0
16...	1120	1000	1100	.250	0	1115	1125	30	1.0
23...	1100	1000	1100	.250	0	1055	1110	30	2.0
23...	1115	1000	1100	.250	0	1110	1125	30	2.0

DATE	COMPSTD SAMPLES IN X-SEC BEDLOAD MEASMNT (NUM) (04118)	VER-TICALS IN COM-POSITE SAMPLE (NUM) (04119)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	DISCH, BEDLOAD AV UNIT FOR COM POSITE SAMPLE T/D/FT (04122)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)
JAN								
18...	2	14	14	6.00	67	4.5	.16	5.4
18...	2	14	14	6.00	67	4.5	.61	5.4
FEB								
16...	2	12	12	17.0	227	5.5	.17	2.2
16...	2	12	12	17.0	227	5.5	.19	2.2
23...	2	14	14	8.00	333	5.0	.17	6.4
23...	2	14	14	8.00	333	5.0	.29	6.4

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
JAN								
18...	1	6	23	54	88	96	100	--
18...	1	10	33	68	94	99	100	--
FEB								
16...	3	14	39	57	91	100	--	--
16...	4	19	37	60	90	100	--	--
23...	2	9	30	46	81	96	97	100
23...	3	13	30	58	91	100	--	--

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	---	---	---	---	---	---	---	---	---	---	---
2	---	---	6.5	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	3.0	---	---	---	---	---	---	---	---
5	9.5	9.0	---	---	6.5	6.0	---	---	---	---	---	---
6	11.5	---	---	---	---	---	---	---	---	14.0	---	---
7	---	---	5.5	---	7.0	6.0	---	---	---	---	---	---
8	---	9.5	---	---	---	---	---	---	---	---	---	---
9	---	9.5	---	---	---	5.0	---	---	---	---	---	---
10	---	9.5	4.0	5.0	---	---	8.5	---	---	---	14.5	---
11	11.5	10.0	---	6.5	---	---	---	---	---	---	---	---
12	---	10.5	---	---	6.5	---	---	7.0	13.0	---	---	---
13	---	---	---	---	5.0	---	10.5	---	---	---	---	---
14	---	---	---	6.0	6.0	---	9.0	---	---	---	---	---
15	---	10.5	3.5	6.0	6.0	---	---	9.0	---	15.0	---	---
16	---	---	---	5.5	5.5	---	---	---	---	---	---	---
17	---	8.0	---	---	---	---	6.5	---	---	---	---	---
18	---	---	---	4.5	---	---	7.0	---	---	---	---	---
19	---	8.0	---	7.0	---	---	---	---	15.0	---	---	---
20	8.5	---	---	7.0	7.0	---	---	---	---	---	---	---
21	---	6.5	---	---	7.0	---	---	---	---	---	---	---
22	---	---	---	---	6.0	---	---	---	---	---	---	---
23	7.5	---	2.5	6.5	5.0	7.0	---	---	---	---	---	---
24	---	6.5	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	5.5	7.5	---	---	---	---	---	---
26	9.0	---	---	---	---	---	---	---	---	19.0	---	---
27	---	---	---	---	5.5	---	---	---	---	---	---	---
28	9.5	---	---	---	---	---	---	---	---	---	---	---
29	---	---	2.0	---	6.5	---	---	---	---	---	---	---
30	---	7.5	---	5.5	---	---	---	---	---	---	---	---
31	9.0	---	---	3.0	---	---	---	---	---	19.0	---	---

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	13	2	.07	16	1	.05	39	4	.44
2	13	2	.06	16	1	.05	35	3	.34
3	13	1	.05	16	2	.06	30	2	.20
4	13	1	.04	16	2	.08	29	2	.14
5	13	1	.05	16	2	.09	27	1	.11
6	16	4	.19	16	2	.09	27	1	.09
7	15	4	.17	20	4	.32	27	1	.07
8	15	3	.13	32	4	.41	26	1	.07
9	14	3	.11	20	1	.06	26	1	.07
10	14	2	.09	30	8	.74	25	2	.11
11	14	2	.07	27	3	.23	24	2	.13
12	13	2	.07	22	3	.16	25	2	.16
13	13	2	.07	20	2	.10	27	3	.19
14	13	2	.07	19	1	.06	25	1	.10
15	13	2	.07	22	3	.18	24	1	.07
16	13	2	.07	37	7	.95	24	1	.06
17	13	2	.07	35	4	.46	24	1	.06
18	13	2	.07	26	1	.10	24	1	.06
19	13	2	.07	40	7	.90	24	1	.06
20	13	2	.07	37	6	.59	23	1	.06
21	13	2	.06	29	4	.30	23	1	.06
22	13	1	.04	26	3	.22	23	1	.06
23	13	1	.04	24	2	.16	22	1	.06
24	13	1	.04	23	2	.12	21	1	.06
25	13	1	.04	23	2	.10	21	1	.06
26	14	1	.04	23	1	.09	21	1	.06
27	18	3	.20	23	1	.08	21	1	.06
28	29	7	.65	22	1	.06	21	1	.06
29	17	1	.05	25	2	.17	21	1	.06
30	17	1	.05	40	10	1.2	21	1	.06
31	16	1	.04	---	---	---	21	1	.06
TOTAL	446	---	2.91	741	---	8.18	771	---	3.25

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)
		JANUARY			FEBRUARY			MARCH	
1	21	1	.06	57	2	.38	260	24	17
2	21	1	.06	56	2	.30	238	21	13
3	21	1	.06	59	6	1.1	215	15	8.9
4	22	1	.06	80	10	2.2	202	19	10
5	21	1	.06	176	142	84	233	36	23
6	21	1	.06	196	104	58	206	30	17
7	21	1	.06	135	27	10	196	28	15
8	21	1	.06	110	15	4.6	212	30	17
9	21	1	.06	97	12	3.1	191	25	13
10	21	1	.06	124	24	8.5	180	20	9.7
11	37	18	2.0	161	31	16	180	25	12
12	28	2	.16	192	27	15	170	19	8.8
13	28	4	.30	206	81	51	163	17	7.7
14	53	16	2.4	414	312	367	155	16	6.7
15	76	18	3.7	297	73	60	148	15	5.8
16	101	61	17	231	35	22	140	13	5.1
17	68	22	4.2	189	29	15	135	12	4.4
18	64	9	1.5	158	27	12	127	11	3.8
19	63	11	1.9	140	26	9.7	124	10	3.4
20	66	12	2.2	135	36	14	118	9	3.0
21	58	9	1.3	210	52	31	110	9	2.5
22	53	7	1.0	317	174	193	105	8	2.2
23	54	7	1.1	343	86	86	101	7	2.0
24	63	8	1.4	250	36	25	97	7	1.7
25	68	4	.82	212	20	12	94	6	1.5
26	60	3	.56	269	96	99	91	6	1.5
27	55	3	.44	420	145	171	90	6	1.4
28	51	3	.35	311	36	31	88	6	1.4
29	48	2	.28	318	57	51	84	6	1.3
30	59	12	2.0	---	---	---	82	6	1.2
31	56	3	.45	---	---	---	79	6	1.2
TOTAL	1420	---	45.66	5863	---	1452.88	4614	---	222.2

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	78	6	1.2	100	7	1.8	57	3	.45
2	78	5	1.2	97	6	1.7	55	3	.42
3	79	5	1.2	94	6	1.5	54	3	.40
4	80	5	1.2	90	6	1.4	52	3	.37
5	80	5	1.1	87	6	1.3	52	3	.35
6	78	5	1.1	85	5	1.2	51	2	.34
7	75	5	1.0	85	5	1.2	51	2	.33
8	76	5	1.0	83	5	1.1	54	2	.33
9	75	5	1.0	80	5	.99	51	2	.30
10	73	5	.99	78	4	.92	50	2	.29
11	72	5	.97	75	4	.85	49	2	.27
12	75	7	1.6	74	4	.80	48	2	.26
13	132	29	11	72	4	.78	47	2	.27
14	116	16	5.2	76	6	1.3	44	2	.27
15	108	10	3.0	116	18	5.6	43	2	.28
16	161	127	80	94	8	2.2	41	3	.28
17	553	798	1230	84	5	1.1	40	3	.29
18	385	164	186	79	5	1.0	39	3	.30
19	282	31	24	77	5	.95	39	3	.31
20	235	20	13	75	4	.89	38	3	.31
21	205	14	7.7	73	4	.84	37	3	.31
22	180	11	5.3	72	4	.80	35	3	.30
23	160	10	4.2	70	4	.76	35	3	.30
24	148	9	3.7	69	4	.72	34	3	.30
25	139	9	3.3	67	4	.68	34	3	.30
26	131	8	3.0	65	4	.63	33	3	.30
27	124	8	2.7	64	3	.60	32	3	.30
28	116	8	2.4	62	3	.56	32	4	.30
29	109	7	2.2	61	3	.53	30	4	.29
30	103	7	2.0	59	3	.50	30	4	.29
31	---	---	---	58	3	.47	---	---	---
TOTAL	4306	---	1602.26	2421	---	35.67	1287	---	9.41

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)
		JULY			AUGUST			SEPTEMBER	
1	30	4	.29	17	4	.19	15	1	.04
2	30	4	.30	17	4	.17	17	1	.05
3	30	4	.31	17	3	.14	17	1	.05
4	30	4	.31	16	3	.11	17	1	.05
5	31	4	.33	16	2	.10	17	1	.05
6	31	4	.34	16	2	.08	17	1	.05
7	30	4	.33	16	2	.07	16	1	.04
8	29	4	.33	16	1	.06	15	1	.04
9	29	4	.33	15	1	.05	15	1	.04
10	28	4	.33	16	1	.04	15	1	.04
11	27	5	.33	15	1	.04	15	1	.04
12	26	5	.32	15	1	.04	14	1	.04
13	25	5	.33	15	1	.04	14	1	.04
14	25	5	.33	15	1	.04	16	2	.09
15	24	5	.32	15	1	.04	18	2	.10
16	24	5	.30	15	1	.04	16	1	.04
17	24	4	.27	15	1	.04	16	1	.04
18	23	4	.24	15	1	.04	15	1	.04
19	23	4	.22	15	1	.04	15	1	.04
20	23	3	.20	15	1	.04	15	1	.04
21	22	3	.18	15	1	.04	15	1	.04
22	22	3	.16	15	1	.04	15	1	.04
23	22	3	.15	15	1	.04	16	1	.04
24	21	2	.14	15	1	.04	16	1	.04
25	20	2	.12	15	1	.04	15	1	.04
26	20	2	.11	14	1	.04	15	1	.04
27	20	2	.12	14	1	.04	15	1	.04
28	20	3	.15	14	1	.04	15	1	.04
29	19	3	.18	14	1	.04	15	1	.04
30	19	4	.21	14	1	.04	15	1	.04
31	19	5	.25	15	1	.04	---	---	---
TOTAL	766	---	7.83	472	---	1.85	467	---	1.36
YEAR	23574		3393.46						

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA—Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1999	446.00	2.91	0	3
NOVEMBER	741.00	8.18	0	8
DECEMBER	771.00	3.25	0	3
JANUARY 2000	1420.00	45.66	1	47
FEBRUARY	5863.00	1452.88	3820	5270
MARCH	4614.00	222.20	661	883
APRIL	4306.00	1602.26	2390	3990
MAY	2421.00	35.67	6	42
JUNE	1287.00	9.41	0	9
JULY	766.00	7.83	0	8
AUGUST	472.00	1.85	0	2
SEPTEMBER ...	467.00	1.36	0	1
TOTAL	23574.00	3393.46	6878	10266

11527000 TRINITY RIVER NEAR BURNT RANCH, CA

LOCATION.—Lat 40°47'20", long 123°26'20", in S 1/2 sec.19, T.5 N., R.7 E., Trinity County, Hydrologic Unit 18010211, Trinity National Forest, on left bank, 500 ft upstream from Cedar Flat Creek, 700 ft upstream from highway bridge at Cedar Flat, and 2.3 mi southeast of town of Burnt Ranch.

DRAINAGE AREA.—1,439 mi^2.

PERIOD OF RECORD.—October 1931 to September 1940, October 1956 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WDR CA-78-2: 1975(M). WSP 1929: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 944.05 ft above sea level. Oct. 1, 1931, to Jan. 19, 1940, at site 2 mi upstream at different datum.

REMARKS.—Records excellent. Flow regulated since November 1960 by Clair Engle Lake (station 11525400), 64 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 81,500 ft^3/s, Feb. 25, 1958, gage height, 30.50 ft, from rating curve extended above 40,000 ft^3/s on basis of slope-area measurement at gage height 43.2 ft; minimum, 82 ft^3/s, Aug. 31, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1955, reached a stage of 43.2 ft, from floodmarks, discharge, 172,000 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 12,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1845	12,300	12.55				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	530	1250	646	2340	7520	2020	1940	2010	1300	661	586
2	578	519	1130	637	2620	8540	2150	2030	2030	1230	657	614
3	577	509	1120	626	2620	8330	2450	2050	2140	1200	657	630
4	577	502	972	639	2720	8120	2830	2030	2210	1170	648	625
5	574	497	885	640	2970	8880	2700	1890	2190	1140	643	632
6	594	495	818	620	4070	8750	2390	1780	2090	1170	635	630
7	600	498	843	616	3310	8340	2220	1710	2060	1130	632	622
8	593	557	812	613	2730	8260	2260	1610	2140	1090	632	614
9	590	600	826	612	2340	8060	2230	1800	1940	981	629	608
10	588	783	810	632	2230	7840	2070	2340	1800	984	622	609
11	585	1040	761	2570	2410	7880	2060	2610	1730	991	624	602
12	581	1100	772	2140	3030	7770	2250	3000	1750	985	623	596
13	582	897	998	1560	3460	7440	3250	3200	2020	991	615	596
14	593	708	1000	3160	9670	6890	2760	3210	2160	961	613	597
15	588	668	901	4700	8820	6270	2330	3500	2080	937	608	609
16	497	808	845	5680	5920	5870	2580	3400	2060	925	611	615
17	461	1150	809	4060	4590	5520	5760	3190	1920	916	609	613
18	462	847	824	2960	3760	4930	6400	3080	1760	895	607	606
19	461	845	831	2870	3210	4910	4410	3020	1690	771	609	599
20	454	1220	882	3630	2860	4500	3570	3260	1580	768	605	594
21	453	956	882	2980	2970	4050	3130	3290	1560	740	605	590
22	454	796	836	2460	3540	3770	2970	3540	1630	732	605	589
23	455	733	795	2160	6190	3600	2700	3620	1640	729	600	598
24	450	698	770	2740	6300	3270	2410	3750	1630	708	597	610
25	451	667	752	3700	5890	2960	2240	3270	1600	700	600	604
26	460	752	734	3270	6310	2670	2180	2840	1590	694	594	603
27	487	787	713	2610	9200	2530	2210	2810	1560	688	594	602
28	834	735	693	2190	8360	2320	2160	2630	1490	676	593	599
29	674	728	676	1930	8010	2180	1990	2300	1380	679	592	599
30	570	1210	665	1920	---	2090	1880	2170	1340	677	592	600
31	548	---	658	2080	---	2020	---	2060	---	672	586	---
TOTAL	16951	22835	26263	67651	132450	176080	82560	82930	54780	28230	19098	18191
MEAN	547	761	847	2182	4567	5680	2752	2675	1826	911	616	606
MAX	834	1220	1250	5680	9670	8880	6400	3750	2210	1300	661	632
MIN	450	495	658	612	2230	2020	1880	1610	1340	672	586	586
AC-FT	33620	45290	52090	134200	262700	349300	163800	164500	108700	55990	37880	36080

11527000 TRINITY RIVER NEAR BURNT RANCH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	499	1192	1654	2936	5702	5569	5831	5674	3161	878	305	241
MAX	2732	4893	6426	6192	24270	10110	10090	11840	7076	2362	835	497
(WY)	1958	1938	1938	1958	1958	1938	1938	1958	1958	1958	1958	1958
MIN	138	209	253	311	831	2487	3319	1955	808	273	123	111
(WY)	1933	1937	1937	1937	1937	1935	1932	1939	1934	1934	1939	1932

SUMMARY STATISTICS	WATER YEARS 1932 - 1960	
ANNUAL MEAN	2784	
HIGHEST ANNUAL MEAN	6557	1958
LOWEST ANNUAL MEAN	1409	1939
HIGHEST DAILY MEAN	65600	Feb 19 1958
LOWEST DAILY MEAN	93	Sep 13 1939
ANNUAL SEVEN-DAY MINIMUM	95	Oct 1 1931
INSTANTANEOUS PEAK FLOW	81500	Feb 25 1958
INSTANTANEOUS PEAK STAGE	30.50	Feb 25 1958
ANNUAL RUNOFF (AC-FT)	2017000	
10 PERCENT EXCEEDS	7120	
50 PERCENT EXCEEDS	1240	
90 PERCENT EXCEEDS	198	

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	484	1097	2173	3344	3301	3497	2520	2231	1596	750	481	442
MAX	804	3570	8745	12220	10190	13770	8146	6343	7006	1988	1087	734
(WY)	1980	1974	1965	1997	1983	1983	1974	1983	1983	1998	1983	1983
MIN	298	375	274	322	373	512	530	547	449	200	189	230
(WY)	1965	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	683632		728019			
ANNUAL MEAN	1873		1989		1820	
HIGHEST ANNUAL MEAN					4816	1983
LOWEST ANNUAL MEAN					372	1977
HIGHEST DAILY MEAN	7270	Mar 1	9670	Feb 14	53300	Jan 1 1997
LOWEST DAILY MEAN	450	Oct 24	450	Oct 24	165	Aug 24 1966
ANNUAL SEVEN-DAY MINIMUM	454	Oct 20	454	Oct 20	170	Aug 21 1966
INSTANTANEOUS PEAK FLOW			12300	Feb 14	78100	Dec 22 1964
INSTANTANEOUS PEAK STAGE			12.55	Feb 14	29.82	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	1356000		1444000		1318000	
10 PERCENT EXCEEDS	3890		4170		3920	
50 PERCENT EXCEEDS	1190		1130		989	
90 PERCENT EXCEEDS	576		590		353	

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA

LOCATION.—Lat 40°39'00", long 123°29'35", in NW 1/4 SW 1/4 sec.10, T.3 N., R.6 E., Trinity County, Hydrologic Unit 18010212, Trinity National Forest, on left bank, 0.3 mi downstream from Big Creek, 3.0 mi northwest of Hyampom, and 3.5 mi downstream from Hayfork Creek.

DRAINAGE AREA.—764 mi^2.

PERIOD OF RECORD.—October 1965 to current year.
SEDIMENT DATA: Water years 1967–70, 1981–82.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 1,211.37 ft above sea level. Oct. 1, 1965 to Aug. 24, 2000, at datum 3.00 ft higher.

REMARKS.—Records good. No regulation or diversion upstream from station. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 75,000 ft^3/s, Feb. 17, 1986, gage height, 28.47 ft, present datum, from rating curve extended above 15,000 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 31.00 ft, Jan. 26, 1983, present datum; minimum daily, 14 ft^3/s, Aug. 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Dec. 22, 1964, reached a stage of 33.45 ft, present datum, from floodmarks, discharge, 88,000 ft^3/s, on basis of flood-routing study.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 8,600 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1615	21,600	14.63	Feb. 27	0600	11,200	10.41

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	124	1310	284	3310	5590	1350	914	513	187	85	51
2	64	115	1090	284	3610	5080	1330	924	493	185	81	67
3	63	109	1150	275	3490	4500	1340	875	472	188	77	76
4	63	105	847	294	3480	4250	1350	843	454	199	73	79
5	60	104	685	300	4200	5260	1320	817	438	200	71	81
6	64	101	591	280	5110	4990	1270	801	431	204	69	77
7	71	105	581	270	3930	4400	1220	855	427	223	70	73
8	74	158	552	266	3250	4150	1190	863	437	218	73	69
9	74	176	554	265	2840	3930	1170	811	445	205	74	65
10	72	300	551	305	2740	3700	1120	832	434	191	75	63
11	70	533	499	1760	2740	3870	1090	829	419	176	74	62
12	68	441	496	2140	3200	3750	1110	788	411	166	72	58
13	67	327	717	1610	3990	3520	1300	760	405	157	70	56
14	65	254	831	2990	16600	3380	1290	769	387	151	68	55
15	64	232	704	6060	12300	3230	1190	1020	363	145	66	55
16	64	262	618	7280	7770	3080	1250	1100	342	143	67	54
17	62	441	558	4680	5710	2920	1960	1010	325	141	66	54
18	62	425	527	3520	4380	2690	2530	918	312	138	67	54
19	63	493	510	3940	3560	2650	1960	850	301	134	67	51
20	64	1070	486	4940	3250	2520	1690	801	294	129	68	48
21	64	752	468	3840	3260	2270	1510	762	278	122	69	46
22	64	533	444	3290	3770	2090	1390	728	267	116	69	44
23	64	427	417	3000	4880	2000	1300	706	257	113	67	44
24	65	367	393	3820	4050	1910	1220	682	251	109	63	46
25	65	325	375	4160	3610	1830	1160	659	243	105	60	48
26	66	296	356	3670	4710	1750	1110	634	233	101	58	49
27	85	278	341	3070	9940	1700	1060	614	222	101	56	49
28	323	260	326	2590	7650	1640	1030	594	211	98	54	49
29	340	280	312	2220	6500	1560	992	571	200	97	53	48
30	200	991	300	2500	---	1480	949	553	191	93	52	48
31	146	---	290	3090	---	1400	---	531	---	89	50	---
TOTAL	2800	10384	17879	76993	147830	97090	39751	24414	10456	4624	2084	1719
MEAN	90.3	346	577	2484	5098	3132	1325	788	349	149	67.2	57.3
MAX	340	1070	1310	7280	16600	5590	2530	1100	513	223	85	81
MIN	60	101	290	265	2740	1400	949	531	191	89	50	44
AC-FT	5550	20600	35460	152700	293200	192600	78850	48430	20740	9170	4130	3410

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA—Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	123	732	1980	3614	3542	3444	1925	1028	475	185	91.5	76.9
MAX	351	3475	8338	11740	12770	9027	4989	2701	1660	406	227	185
(WY)	1980	1974	1997	1970	1986	1995	1982	1983	1993	1998	1983	1983
MIN	27.4	72.9	86.8	144	218	365	224	199	91.1	33.0	17.9	22.8
(WY)	1988	1988	1977	1977	1977	1977	1977	1977	1977	1977	1977	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	542875		436024			
ANNUAL MEAN	1487		1191		1426	
HIGHEST ANNUAL MEAN					3049	1983
LOWEST ANNUAL MEAN					131	1977
HIGHEST DAILY MEAN	10800	Mar 1	16600	Feb 14	59200	Jan 16 1974
LOWEST DAILY MEAN	60	Sep 29	44	Sep 22	14	Aug 24 1977
ANNUAL SEVEN-DAY MINIMUM	61	Sep 24	46	Sep 20	15	Aug 18 1977
INSTANTANEOUS PEAK FLOW			21600	Feb 14	75000	Feb 17 1986
INSTANTANEOUS PEAK STAGE			14.63	Feb 14	31.00	Jan 26 1983
ANNUAL RUNOFF (AC-FT)	1077000		864900		1033000	
10 PERCENT EXCEEDS	3980		3680		3600	
50 PERCENT EXCEEDS	533		426		415	
90 PERCENT EXCEEDS	67		64		68	

11530000 TRINITY RIVER AT HOOPA, CA

LOCATION.—Lat 41°03'00", long 123°40'15", in SE 1/4 NW 1/4 sec.25, T.8 N., R.4 E., Humboldt County, Hydrologic Unit 18010211, in Hoopa Valley Indian Reservation, on left bank, 0.1 mi upstream from Supply Creek, 0.1 mi downstream from Hospital Creek, and in the town of Hoopa.

DRAINAGE AREA.—2,853 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1911 to January 1914, October 1916 to September 1918, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as "near Hoopa" 1931–60.

REVISED RECORDS.—WSP 1565: 1913. WDR CA-77-2: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 274.82 ft above sea level. Prior to October 1931, nonrecording gage at site 0.4 mi upstream at different datum. October 1931 to Dec. 22, 1964, water-stage recorder at site 2.5 mi upstream at datum 31.67 ft higher.

REMARKS.—Records excellent. Flow regulated since November 1960 by Trinity Lake (station 11525400) 84 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 231,000 ft^3/s, Dec. 22, 1964, gage height, 57.0 ft, present site and datum, from floodmarks, from rating curve extended above 123,000 ft^3/s; minimum daily, 162 ft^3/s, Oct. 4, 1931.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 30,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 14	1900	47,800	29.41				

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	769	852	4020	1380	9530	19300	4970	3970	3220	1840	963	760
2	769	808	3640	1370	9830	18600	5050	4100	3190	1770	942	794
3	767	787	3790	1330	9360	17800	5370	4070	3250	1730	911	853
4	765	767	3010	1400	9110	16500	5840	3960	3310	1700	904	856
5	759	755	2500	1520	9290	18200	5730	3800	3270	1690	894	849
6	782	749	2230	1410	12300	18100	5310	3600	3170	1700	879	858
7	814	746	2450	1360	10100	16600	4940	3540	3110	1690	862	839
8	812	891	2450	1330	8530	15700	4840	3490	3210	1700	863	824
9	807	1030	2450	1340	7550	15100	4820	3450	3050	1530	854	806
10	799	1330	2440	1760	7160	14400	4540	4250	2900	1470	849	803
11	795	2060	2170	10900	7190	14500	4410	4580	2750	1460	849	798
12	787	1940	2110	9210	8260	14200	4550	4810	2700	1440	843	779
13	779	1670	3090	6250	9490	13500	5720	5000	2970	1420	838	767
14	787	1300	3330	10600	32800	12800	5680	4920	3090	1410	826	765
15	787	1150	2850	18000	37000	11800	4900	5440	2960	1350	820	777
16	746	1350	2490	21800	23000	11100	5040	5600	2930	1330	816	793
17	638	1880	2260	15900	15900	10600	7400	5270	2760	1330	816	789
18	628	1790	2220	10700	12100	9630	12100	4980	2590	1380	808	780
19	631	1720	2220	10600	10100	9460	8310	4830	2420	1180	811	767
20	625	3130	2190	13100	8980	9100	6820	4910	2310	1160	811	755
21	621	2780	2210	10800	8480	8320	6080	4930	2230	1120	809	748
22	623	2040	2090	9120	8780	7800	5760	5060	2260	1090	804	738
23	623	1700	1950	7930	13000	7560	5460	5000	2280	1080	804	740
24	621	1560	1840	8980	12500	7190	5080	5290	2260	1050	791	764
25	619	1430	1760	10700	11400	6750	4800	4760	2210	1010	789	772
26	633	1480	1690	10000	13100	6350	4610	4290	2200	1010	787	764
27	700	1580	1620	8480	25400	6100	4550	4180	2170	1000	776	765
28	1260	1490	1550	7310	24400	5870	4560	4000	2090	994	776	766
29	1540	1420	1490	6450	21600	5520	4280	3710	1960	969	765	766
30	1100	2660	1440	6520	---	5270	4040	3490	1890	975	766	766
31	929	---	1400	8040	---	5050	---	3320	---	976	764	---
TOTAL	24315	44845	72950	235590	396240	358770	165560	136600	80710	41554	25790	23601
MEAN	784	1495	2353	7600	13660	11570	5519	4406	2690	1340	832	787
MAX	1540	3130	4020	21800	37000	19300	12100	5600	3310	1840	963	858
MIN	619	746	1400	1330	7160	5050	4040	3320	1890	969	764	738
AC-FT	48230	88950	144700	467300	785900	711600	328400	270900	160100	82420	51150	46810

11530000 TRINITY RIVER AT HOOPA, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	926	2578	6468	9239	11830	10400	10170	8663	4755	1635	650	508
MAX	5405	9589	28060	30140	50380	26370	19320	16700	9875	4265	1365	1248
(WY)	1951	1938	1956	1956	1958	1938	1938	1938	1953	1941	1953	1912
MIN	260	373	531	647	2433	3815	4790	3000	1378	466	249	213
(WY)	1933	1940	1937	1937	1937	1955	1944	1934	1934	1918	1934	1934

SUMMARY STATISTICS	WATER YEARS 1912 - 1960	
ANNUAL MEAN	5618	
HIGHEST ANNUAL MEAN	12270	1958
LOWEST ANNUAL MEAN	2630	1934
HIGHEST DAILY MEAN	158000	Dec 22 1955
LOWEST DAILY MEAN	162	Oct 4 1931
ANNUAL SEVEN-DAY MINIMUM	164	Oct 1 1931
INSTANTANEOUS PEAK FLOW	a190000	Dec 22 1955
INSTANTANEOUS PEAK STAGE	36.90	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	4070000	
10 PERCENT EXCEEDS	12700	
50 PERCENT EXCEEDS	3070	
90 PERCENT EXCEEDS	442	

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

MEAN	828	3107	7103	11000	10290	10270	6646	4630	2789	1253	751	665
MAX	1805	12900	29710	32090	28810	32240	16040	12020	9731	3233	1681	1309
(WY)	1980	1974	1965	1970	1986	1983	1983	1983	1998	1983	1983	1983
MIN	472	679	529	745	891	1608	1325	1204	746	338	270	336
(WY)	1988	1991	1977	1977	1977	1977	1977	1977	1977	1977	1977	1969

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	1909051		1606525			
ANNUAL MEAN	5230		4389		4923	
HIGHEST ANNUAL MEAN					11350	1983
LOWEST ANNUAL MEAN					786	1977
HIGHEST DAILY MEAN	31000	Mar 1	37000	Feb 15	168000	Dec 22 1964
LOWEST DAILY MEAN	619	Oct 25	619	Oct 25	244	Aug 23 1977
ANNUAL SEVEN-DAY MINIMUM	623	Oct 19	623	Oct 19	246	Aug 18 1977
INSTANTANEOUS PEAK FLOW			47800	Feb 14	231000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			29.41	Feb 14	57.00	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	3787000		3187000		3566000	
10 PERCENT EXCEEDS	12500		10700		11500	
50 PERCENT EXCEEDS	2640		2230		2170	
90 PERCENT EXCEEDS	787		768		587	

a From rating curve extended above 56,000 ft3/s.

11530000 TRINITY RIVER AT HOOPA, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1960–79, 1998 to current year.
WATER TEMPERATURE: Water year 1998 to current year.
SEDIMENT DATA: Water years 1960–79.

PERIOD OF DAILY RECORD.—July 1998 to current year.
WATER TEMPERATURE: July 1998 to current year.

INSTRUMENTATION.—Temperature recorder since July 1998.

EXTREMES FOR PERIOD OF DAILY RECORD.—
WATER TEMPERATURE: Maximum recorded, 25.5°C, Aug. 1, 2, 2000 minimum recorded, 2.0°C, Dec. 23, 24, 1998.

EXTREME FOR CURRENT YEAR.—
WATER TEMPERATURE: Maximum recorded, 25.5°C, Aug., 1, 2; minimum recorded, 4.5°C, Dec. 28 to Jan. 1.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	14.0	13.0	12.0	9.0	8.5	5.0	4.5	7.5	6.5	8.5	8.0
2	14.5	13.5	13.0	12.0	9.0	8.5	5.5	5.0	8.5	7.0	9.0	8.5
3	15.0	13.5	13.0	12.0	8.5	7.5	6.0	5.5	8.0	8.0	9.0	8.5
4	16.0	14.0	13.0	12.0	7.5	7.0	6.5	6.0	8.5	8.0	9.0	8.5
5	15.5	15.0	12.5	12.0	7.5	7.0	6.5	6.0	8.5	8.0	8.5	8.0
6	16.5	15.0	13.5	12.0	8.0	7.0	6.5	5.5	8.5	8.0	8.5	8.0
7	16.5	15.0	13.0	12.5	8.0	7.5	6.5	6.0	8.5	8.0	8.5	8.0
8	16.5	15.0	13.0	12.0	8.0	7.5	7.0	6.5	8.5	8.0	8.0	8.0
9	16.5	15.0	12.5	11.5	7.5	7.0	7.0	7.0	9.0	8.5	8.0	7.5
10	16.5	15.0	12.0	11.5	7.0	6.5	7.5	7.0	10.0	9.0	8.0	8.0
11	16.5	15.0	12.5	12.0	7.0	6.5	8.0	7.5	9.5	9.0	9.0	8.0
12	15.5	14.5	13.0	12.0	7.0	6.5	7.5	7.0	9.0	8.5	9.0	8.5
13	15.5	14.5	13.0	12.0	7.5	6.5	7.5	7.0	8.5	8.0	9.0	8.5
14	15.5	14.0	12.5	12.0	7.0	6.5	8.0	7.5	8.5	8.0	10.5	9.0
15	15.0	13.5	12.5	12.0	6.5	6.0	8.5	8.0	8.5	8.0	10.0	9.0
16	14.0	12.5	12.5	11.5	6.5	6.0	8.5	8.0	8.5	8.5	10.5	9.5
17	13.0	12.0	11.5	11.0	7.0	6.0	8.0	7.5	9.0	8.5	10.0	9.0
18	12.0	11.0	11.0	10.0	7.5	6.5	7.5	7.0	9.0	8.5	9.5	9.0
19	11.5	11.0	10.5	10.0	7.5	7.0	8.0	7.5	8.5	8.0	10.5	9.5
20	11.5	11.0	10.5	10.0	7.5	7.0	8.5	8.0	8.5	8.0	9.5	8.5
21	11.5	11.0	10.0	9.5	7.0	6.5	8.0	8.0	9.5	8.5	9.5	8.0
22	12.0	11.0	9.5	9.0	7.0	6.0	8.5	8.0	9.5	8.5	10.0	9.0
23	12.5	11.0	9.0	8.5	6.0	5.5	8.0	7.5	8.5	7.5	11.0	9.5
24	12.0	11.5	9.5	8.5	6.0	5.5	8.5	8.0	8.0	7.5	10.5	9.5
25	12.5	11.5	10.0	9.0	6.0	5.5	9.0	8.5	8.0	7.5	11.0	9.5
26	13.0	12.0	10.0	9.5	5.5	5.0	9.0	8.0	8.0	8.0	11.5	10.0
27	13.0	12.5	10.5	10.0	5.5	5.0	8.0	7.5	8.5	8.0	11.0	10.0
28	12.5	12.0	10.5	9.5	5.5	4.5	7.5	6.5	8.5	8.5	11.0	9.5
29	12.5	11.5	10.0	9.5	5.0	4.5	6.5	6.0	9.0	8.5	11.0	9.0
30	12.5	11.5	9.5	9.0	5.0	4.5	7.0	6.0	---	---	11.5	9.5
31	12.5	12.0	---	---	5.0	4.5	7.0	7.0	---	---	12.0	10.0
MONTH	16.5	11.0	13.5	8.5	9.0	4.5	9.0	4.5	10.0	6.5	12.0	7.5

11530000 TRINITY RIVER AT HOOPA, CA—Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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

11530500 KLAMATH RIVER NEAR KLAMATH, CA

LOCATION.—Lat 41°30'52", long 123°59'57", in SW 1/4, sec.13, T.13 N., R.2 E., Del Norte County, Hydrologic Unit 18010209, on right bank, 0.2 mi upstream from Turwar Creek, and 2.2 mi southeast of Klamath.

DRAINAGE AREA.—12,100 mi^2, approximately (not including Lost River or Lower Klamath Lake Basins).

PERIOD OF RECORD.—October 1910 to December 1926 (published as "near Requa"), October 1950 to September 1994, October 1995 to September 1997 (stage only), and October 1997 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL DATA: Water years 1951–95.
BIOLOGICAL DATA: Water years 1975–81.
SPECIFIC CONDUCTANCE: Water years 1975–81.
WATER TEMPERATURE: Water years 1966–81.
SEDIMENT DATA: Water years 1955–56, 1975–95.

REVISED RECORDS.—WSP 1285: 1951(P). WSP 1445: 1918–20. WDR CA-81-2: 1980.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is sea level. Prior to June 1926, nonrecording gage at site 2.6 mi upstream at different datum. Oct. 1, 1950, to Oct. 2, 1975, water-stage recorder at site 2.6 mi upstream at datum 5.60 ft above sea level.

REMARKS.—Records poor. Medium and low flows considerably regulated by reservoirs and powerplants upstream from station and by transbasin diversion (from Trinity River) to Judge Francis Carr Powerplant (station 11525430) since April 1963. Large diversions for irrigation upstream from station. Gage is affected by tide at discharges below 23,000 ft^3/s. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 557,000 ft^3/s, Dec. 23, 1964, gage height, 55.3 ft, former datum, from floodmarks, from rating curve extended above 230,000 ft^3/s on basis of flood-routing study; minimum daily, 1,310 ft^3/s, Sept. 4, 1977.

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4010	5390	19400	8360	31400	59700	18400	16000	12700	6100	3910	3260
2	4020	5210	18700	8640	33000	52300	18800	16800	12200	5970	3840	3410
3	4020	5100	19800	8370	31300	48000	20300	17400	12000	5830	3750	3650
4	4010	5040	15600	8710	29200	44500	22700	17600	12200	5700	3660	3620
5	4030	5020	13200	9410	28100	46300	23600	17100	12300	5600	3590	3550
6	4100	5150	12200	8870	31400	47400	22300	16100	11800	5620	3550	3550
7	4220	5350	14000	8540	29600	43300	20300	15500	11400	5690	3530	3530
8	4260	5740	14600	8380	25900	40900	19500	15900	11500	5680	3520	3470
9	4230	6290	14500	8410	23700	39900	19700	16700	11800	5580	3530	3460
10	4180	9480	15000	15000	22300	38400	19000	20000	11300	5340	3490	3700
11	4150	12000	12900	79800	22300	39000	18400	20800	10500	5220	3470	3710
12	4120	9280	12200	58900	24500	37900	18900	19500	10400	5120	3450	3710
13	4080	8300	15900	43900	27200	36500	23400	19000	11300	5010	3430	3690
14	4080	7080	16300	76100	75600	36800	26800	18400	11300	4940	3390	3680
15	4050	6450	14300	95300	121000	35600	23200	18500	11100	4840	3370	3630
16	4020	6650	12800	83400	73000	34400	22000	18900	10700	4760	3360	3640
17	3920	8350	11900	73800	52500	33700	22500	18200	10200	4740	3360	3650
18	3860	8320	11800	48600	43000	31100	30000	17700	9300	4680	3350	3690
19	3860	8930	12100	40800	37800	30300	27600	17300	8720	4610	3340	3640
20	3870	16300	11800	47900	34200	30600	23900	17600	8330	4410	3340	e3580
21	3870	14500	12100	45200	31600	28400	21600	18000	7830	4320	3350	e3580
22	3900	11200	11600	40300	31600	26800	20800	19000	7550	4230	3350	e3520
23	3910	9690	11000	35300	38200	26000	21100	19300	7540	4200	3340	e3580
24	3980	9140	10500	34400	38000	25100	20300	20400	7370	4170	3330	e3600
25	4070	8700	10100	38700	35300	23700	19800	19600	7180	4100	3350	e3620
26	4180	9930	9790	38500	39000	22700	19300	17700	7010	4050	3410	3650
27	4560	11200	9490	33000	67600	22300	18600	16900	6880	4040	3420	3690
28	9070	10300	9170	28400	70700	21900	18500	16900	6690	4040	3380	3690
29	8580	9480	8930	25100	64300	20500	17300	15700	6460	4000	3370	3700
30	6390	14900	8690	24100	---	19500	16300	14400	6210	3960	3360	3690
31	5690	---	8470	27300	---	18700	---	13500	---	3940	3290	---
TOTAL	139290	258470	398840	1111490	1213300	1062200	634900	546400	291770	150490	107180	108140
MEAN	4493	8616	12870	35850	41840	34260	21160	17630	9726	4855	3457	3605
MAX	9070	16300	19800	95300	121000	59700	30000	20800	12700	6100	3910	3710
MIN	3860	5020	8470	8360	22300	18700	16300	13500	6210	3940	3290	3260
AC-FT	276300	512700	791100	2205000	2407000	2107000	1259000	1084000	578700	298500	212600	214500

e Estimated.

11530500 KLAMATH RIVER NEAR KLAMATH, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1962, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4987	11130	19480	27730	37540	27340	27710	23170	13830	5921	3383	3339
MAX	18950	30460	72580	83550	123200	53280	48860	37250	29580	12370	5871	5107
(WY)	1951	1921	1956	1953	1958	1957	1952	1952	1953	1953	1953	1912
MIN	2700	3502	4138	7454	6263	6916	6270	3975	2106	1731	1567	1860
(WY)	1920	1960	1960	1924	1920	1924	1924	1924	1924	1924	1918	1918

SUMMARY STATISTICS	WATER YEARS 1911 - 1962	
ANNUAL MEAN	17010	
HIGHEST ANNUAL MEAN	33360	1958
LOWEST ANNUAL MEAN	5156	1924
HIGHEST DAILY MEAN	378000	Dec 22 1955
LOWEST DAILY MEAN	1340	Jul 31 1924
ANNUAL SEVEN-DAY MINIMUM	1440	Jul 30 1924
INSTANTANEOUS PEAK FLOW	a 425000	Dec 22 1955
INSTANTANEOUS PEAK STAGE	b 49.7	Dec 22 1955
ANNUAL RUNOFF (AC-FT)	12320000	
10 PERCENT EXCEEDS	37300	
50 PERCENT EXCEEDS	10200	
90 PERCENT EXCEEDS	2860	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

MEAN	4921	14930	26330	34080	34240	34770	26460	19700	11430	4744	3153	3271
MAX	17830	55620	87770	97760	102700	82410	60400	40080	30060	12220	6599	5923
(WY)	1963	1974	1965	1970	1986	1983	1974	1983	1998	1983	1983	1983
MIN	2134	3236	3942	4212	4231	6954	5448	5638	3630	1782	1441	1977
(WY)	1995	1988	1977	1977	1977	1977	1977	1977	1977	1977	1977	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1963 - 2000	
ANNUAL TOTAL	7917020		6022470			
ANNUAL MEAN	21690		16450		17920	
HIGHEST ANNUAL MEAN					36100	1983
LOWEST ANNUAL MEAN					4036	1977
HIGHEST DAILY MEAN	128000	Mar 1	121000	Feb 15	420000	Dec 23 1964
LOWEST DAILY MEAN	3860	Oct 18	3260	Sep 1	1310	Sep 4 1977
ANNUAL SEVEN-DAY MINIMUM	3880	Oct 17	3340	Aug 18	1370	Aug 18 1977
INSTANTANEOUS PEAK FLOW			141000	Feb 14	557000	Dec 23 1964
INSTANTANEOUS PEAK STAGE			24.05	Feb 14	55.30	Dec 23 1964
ANNUAL RUNOFF (AC-FT)	15700000		11950000		12980000	
10 PERCENT EXCEEDS	46000		37900		40800	
50 PERCENT EXCEEDS	14000		11200		9780	
90 PERCENT EXCEEDS	4160		3580		2850	

a From rating curve extended above 140,000 ft^3/s on basis of flood-routing study.
b From floodmarks, site and datum then in use.

11532500 SMITH RIVER NEAR CRESCENT CITY, CA

LOCATION.—Lat 41°47'30", long 124°04'30", in SW 1/4 SW 1/4 sec.9, T.16 N., R.1 E., Del Norte County, Hydrologic Unit 18010101, Redwood National Park, on right bank, opposite mouth of Cedar Creek, 1.6 mi downstream from South Fork, and 7 mi east of Crescent City.

DRAINAGE AREA.—614 mi^2.

PERIOD OF RECORD.—October 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.—WSP 1929: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 79.26 ft above sea level. Prior to Oct. 9, 1991, at site 1.1 mi upstream at datum 10.35 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 228,000 ft^3/s, Dec. 22, 1964, gage height, 48.5 ft, from floodmarks, from rating curve extended above 110,000 ft^3/s on basis of slope-area measurement at gage height 39.51 ft, former site and datum; minimum daily, 160 ft^3/s, Oct. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Nov. 30, 1926, reached a stage of 41.40 ft at datum 10.35 ft higher, from floodmarks, discharge, 166,000 ft^3/s, from rating extension above 39.51 ft.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 36,000 ft^3/s, or maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0115	82,300	25.70	Feb. 24	1645	37,500	19.49

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

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	413	7690	1480	10800	10900	1970	2130	1410	664	400	293
2	218	368	9960	1670	10300	8700	2020	2030	1320	662	387	404
3	218	341	7750	1780	7690	7260	2100	1920	1250	638	377	497
4	220	322	5230	2520	6290	6780	2120	1860	1200	628	371	391
5	227	331	4170	3140	5900	6950	1970	1780	1160	638	369	352
6	277	412	4170	2510	6690	5940	1820	1670	1130	643	365	326
7	313	400	7330	2190	5670	5160	1710	1640	1110	627	363	313
8	264	2080	6340	2050	4990	4630	1670	2350	1150	637	361	306
9	248	1600	6430	2080	4600	4570	1630	3710	1100	604	358	303
10	241	6900	6050	21400	4290	5030	1560	6860	1130	579	364	301
11	238	3200	4660	45100	4510	6750	1520	7330	1060	561	365	297
12	233	1950	4700	16600	5610	5590	1570	5640	1610	547	353	294
13	230	1460	8380	23500	7170	4880	2010	4500	2270	535	343	287
14	228	1150	5880	47100	28400	5820	2020	4000	1670	529	338	285
15	223	996	4610	21600	18300	5100	1860	3910	1400	522	335	292
16	219	1160	3880	19900	11200	4960	2120	3420	1240	511	330	295
17	217	2150	3540	14800	8360	4640	2140	3000	1150	510	324	287
18	216	1940	4380	10400	6680	4180	3140	2680	1080	511	323	278
19	217	3870	3870	10100	5610	4370	3550	2440	1020	504	323	270
20	217	9480	3490	13100	4960	4060	3010	2250	962	490	322	263
21	217	5400	3130	10500	4520	3680	2610	2080	918	478	320	259
22	216	3820	2770	10200	6290	3420	2470	1940	882	475	313	258
23	214	3410	2460	8930	8260	3290	2300	1820	849	471	306	258
24	214	3370	2230	10100	6270	3040	2060	1720	812	455	304	257
25	217	3650	2070	11500	5350	2820	1990	1620	788	442	302	257
26	247	4980	1920	10000	16600	2650	1950	1520	765	437	303	255
27	495	4620	1780	7750	22100	2540	1960	1810	739	435	299	253
28	2810	3310	1660	6310	12200	2430	2460	2120	711	429	293	252
29	1570	3080	1560	5350	13400	2270	2640	1790	687	424	287	253
30	703	9070	1480	5610	---	2120	2380	1610	669	416	283	253
31	498	---	1410	7330	---	2010	---	1500	---	408	286	---
TOTAL	12084	85233	134980	356600	263010	146540	64330	84650	33242	16410	10367	8889
MEAN	390	2841	4354	11500	9069	4727	2144	2731	1108	529	334	296
MAX	2810	9480	9960	47100	28400	10900	3550	7330	2270	664	400	497
MIN	214	322	1410	1480	4290	2010	1520	1500	669	408	283	252
AC-FT	23970	169100	267700	707300	521700	290700	127600	167900	65940	32550	20560	17630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

MEAN	1027	4654	7545	8683	7610	6539	4382	2783	1287	536	340	336
MAX	11770	23620	21740	21930	22680	15760	11960	7550	3876	1217	715	1471
(WY)	1951	1974	1997	1953	1986	1938	1982	1933	1937	1947	1947	1978
MIN	185	200	264	767	1076	1602	1406	835	524	336	226	198
(WY)	1965	1937	1977	1977	1977	1988	1977	1947	1987	1987	1959	1939

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	1441193		1216335			
ANNUAL MEAN	3948		3323		3794	
HIGHEST ANNUAL MEAN					7027	1974
LOWEST ANNUAL MEAN					975	1977
HIGHEST DAILY MEAN	50800	Feb 28	47100	Jan 14	180000	Dec 22 1964
LOWEST DAILY MEAN	214	Oct 23	214	Oct 23	160	Oct 24 1964
ANNUAL SEVEN-DAY MINIMUM	216	Oct 18	216	Oct 18	163	Oct 20 1964
INSTANTANEOUS PEAK FLOW			82300	Jan 11	228000	Dec 22 1964
INSTANTANEOUS PEAK STAGE			25.70	Jan 11	48.50	Dec 22 1964
ANNUAL RUNOFF (AC-FT)	2859000		2413000		2749000	
10 PERCENT EXCEEDS	9160		7710		8940	
50 PERCENT EXCEEDS	2320		1780		1600	
90 PERCENT EXCEEDS	245		275		267	

11532650 SMITH RIVER NEAR FORT DICK, CA

LOCATION.—Lat 41°52'51", long 124°08'07", in SW 1/4 NW 1/4 sec.12, T.17 N., R.1 W., Del Norte County, Hydrologic Unit 18010101, on right bank, 10 ft upstream from bridge on U.S. Highway 101, 0.2 mi downstream from Hutsinpillar Creek, and 1.2 mi northeast of Fort Dick.

DRAINAGE AREA.—672 mi^2.

PERIOD OF RECORD.—October 1989 to current year. Records prior to October 1989 are in files of the California Department of Water Resources.

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

REMARKS.—Data is collected for flood-warning purposes.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 34.12 ft, Jan. 8, 1990.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.62	12.59	13.12	12.99	18.22	16.75	14.21	14.10	18.32	17.08	18.85	17.70
2	12.62	12.58	13.01	12.91	19.14	16.63	14.45	14.19	18.37	17.40	17.70	17.15
3	12.62	12.60	12.93	12.86	18.15	16.67	14.49	14.30	17.40	16.74	17.15	16.70
4	12.63	12.58	12.89	12.83	16.72	15.99	15.36	14.28	16.75	16.33	16.90	16.58
5	12.66	12.60	12.89	12.82	16.01	15.64	15.38	14.95	16.61	16.22	16.91	16.61
6	12.81	12.65	13.07	12.88	16.42	15.51	14.98	14.72	16.73	16.46	16.61	16.23
7	12.87	12.80	13.06	12.96	17.21	16.42	14.74	14.56	16.46	16.10	16.24	16.01
8	12.82	12.71	15.42	12.96	17.07	16.38	14.58	14.53	16.10	15.95	16.04	15.76
9	12.73	12.67	14.96	14.10	17.07	16.38	14.59	14.53	15.96	15.76	15.98	15.75
10	12.70	12.64	18.38	14.19	17.05	16.35	28.25	14.59	15.77	15.65	16.23	15.95
11	12.68	12.62	16.27	14.83	16.36	15.88	29.35	21.64	15.88	15.67	16.81	16.23
12	12.67	12.62	14.84	14.38	16.96	15.76	21.64	18.60	16.39	15.88	16.47	16.07
13	12.66	12.61	14.38	14.07	18.03	16.96	24.29	18.53	17.65	16.35	16.07	15.89
14	12.66	12.61	14.10	13.83	16.97	16.26	27.38	23.64	24.08	17.65	16.41	16.04
15	12.66	12.59	13.86	13.74	16.28	15.82	23.64	19.90	22.53	19.03	16.21	15.92
16	12.64	12.57	14.40	13.71	15.84	15.53	20.98	19.90	19.03	17.72	16.10	15.88
17	12.62	12.57	14.83	14.40	15.54	15.43	20.36	18.53	17.72	16.95	16.01	15.76
18	12.61	12.57	14.77	14.41	15.98	15.48	18.53	17.54	16.95	16.45	15.77	15.64
19	12.64	12.57	17.73	14.35	15.83	15.48	19.07	17.33	16.46	16.10	15.79	15.69
20	12.62	12.58	18.76	16.67	15.51	15.35	19.35	18.32	16.11	15.89	15.73	15.54
21	12.62	12.58	16.67	15.97	15.36	15.15	18.33	17.79	15.89	15.73	15.54	15.38
22	12.62	12.57	15.98	15.34	15.18	14.97	17.95	17.71	17.73	15.70	15.38	15.29
23	12.62	12.57	15.54	15.24	14.98	14.81	17.71	17.29	17.75	16.82	15.30	15.21
24	12.61	12.57	15.52	15.21	14.84	14.68	18.05	17.28	16.82	16.31	15.21	15.08
25	12.62	12.57	15.85	15.15	14.70	14.58	18.58	17.97	16.31	16.05	15.08	14.97
26	12.74	12.58	16.48	15.68	14.59	14.49	18.40	17.44	23.53	16.17	14.98	14.88
27	13.60	12.70	16.39	15.62	14.50	14.39	17.44	16.78	23.70	19.49	14.89	14.85
28	15.42	13.60	15.66	15.13	14.42	14.31	16.79	16.34	19.49	18.16	14.86	14.75
29	15.12	13.77	16.01	14.95	14.34	14.25	16.34	16.01	19.26	18.18	14.76	14.67
30	13.78	13.30	18.37	16.01	14.27	14.18	16.80	15.95	---	---	14.67	14.58
31	13.30	13.10	---	---	14.21	14.13	17.08	16.80	---	---	14.59	14.52
MONTH	15.42	12.57	18.76	12.82	19.14	14.13	29.35	14.10	24.08	15.65	18.85	14.52
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.53	14.50	14.70	14.60	14.21	14.12	13.38	13.36	12.96	12.94	12.75	12.73
2	14.57	14.51	14.61	14.52	14.12	14.05	13.40	13.36	12.95	12.92	13.07	12.74
3	14.61	14.54	14.53	14.49	14.05	13.99	13.36	13.33	12.92	12.90	13.17	13.04
4	14.64	14.55	14.50	14.41	14.00	13.95	13.33	13.31	12.91	12.89	13.05	12.91
5	14.55	14.46	14.44	14.37	13.96	13.91	13.35	13.32	12.90	12.89	12.91	12.85
6	14.46	14.38	14.37	14.30	13.92	13.88	13.35	13.33	12.90	12.88	12.87	12.80
7	14.38	14.31	14.35	14.28	13.92	13.86	13.34	13.31	12.89	12.87	12.81	12.76
8	14.32	14.30	14.99	14.34	13.94	13.89	13.35	13.32	12.89	12.87	12.78	12.76
9	14.30	14.26	16.20	14.98	13.90	13.84	13.33	13.28	12.88	12.86	12.77	12.75
10	14.26	14.21	17.12	16.20	13.93	13.86	13.28	13.23	12.89	12.87	12.77	12.74
11	14.21	14.19	17.18	16.57	13.86	13.81	13.24	13.21	12.89	12.87	12.76	12.74
12	14.28	14.18	16.59	16.03	14.88	13.82	13.22	13.19	12.88	12.85	12.75	12.71
13	14.61	14.28	16.04	15.68	14.95	14.52	13.20	13.17	12.86	12.83	12.74	12.71
14	14.65	14.41	15.69	15.55	14.52	14.24	13.18	13.15	12.84	12.82	12.73	12.71
15	14.52	14.39	15.64	15.48	14.24	14.07	13.17	13.14	12.83	12.81	12.74	12.71
16	14.62	14.51	15.48	15.23	14.08	13.96	13.16	13.13	12.82	12.80	12.75	12.73
17	14.64	14.60	15.25	15.05	13.97	13.89	13.15	13.13	12.81	12.79	12.74	12.71
18	15.49	14.62	15.06	14.90	13.89	13.82	13.14	13.13	12.81	12.79	12.73	12.68
19	15.50	15.21	14.90	14.77	13.82	13.76	13.14	13.12	12.81	12.80	12.70	12.67
20	15.21	14.99	14.79	14.68	13.77	13.70	13.13	13.09	12.82	12.80	12.68	12.65
21	14.99	14.81	14.68	14.58	13.71	13.66	13.11	13.07	12.82	12.79	12.67	12.64
22	14.84	14.79	14.58	14.48	13.66	13.62	13.09	13.07	12.81	12.78	12.66	12.64
23	14.82	14.64	14.49	14.41	13.63	13.58	13.08	13.06	12.79	12.77	12.67	12.63
24	14.65	14.53	14.42	14.34	13.59	13.53	13.07	13.03	12.78	12.76	12.66	12.62
25	14.56	14.49	14.35	14.28	13.55	13.51	13.04	13.01	12.78	12.76	12.66	12.64
26	14.56	14.46	14.28	14.22	13.52	13.49	13.02	13.01	12.78	12.75	12.66	12.64
27	14.68	14.43	14.83	14.21	13.49	13.45	13.01	13.00	12.78	12.75	12.66	12.62
28	14.90	14.68	14.84	14.56	13.46	13.41	13.01	12.99	12.77	12.74	12.65	12.61
29	14.95	14.86	14.56	14.39	13.43	13.39	13.00	12.98	12.75	12.72	12.65	12.61
30	14.86	14.70	14.40	14.29	13.40	13.36	12.99	12.97	12.74	12.72	12.65	12.62
31	---	---	14.29	14.20	---	---	12.97	12.95	12.74	12.72	---	---
MONTH	15.50	14.18	17.18	14.20	14.95	13.36	13.40	12.95	12.96	12.72	13.17	12.61
YEAR	29.35	12.57										

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.

Special study and miscellaneous sites

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the area covered by this volume.

Discharge measurements made at special study and miscellaneous sites during water year 2000

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water year)	Measurements	
					Date	Discharge (ft^3/s)
SALINAS RIVER BASIN						
11148500 Estrella River near Estrella, CA	Salinas River	Lat 35°43'02", long 120°38'21", in NW 1/4 NW 1/4 sec.36, T.25 S., R.12 E., San Luis Obispo County, Hydrologic Unit 18060004, on right bank, 0.2 mi downstream from mouth of Ranchito Canyon, and 1.9 mi northwest of Estrella.	922 not including Carrizo Plains	1954–99	03-06-2000 03-29-2000	10.1 1.53
11151870 Arroyo Seco near Greenfield, CA	Salinas River	Lat 36°14'15", long 121°28'50", in NE 1/4 SE 1/4 sec.36, T.19 S., R.4 E., Monterey County, Hydrologic Unit 18060005, on right bank, 0.6 mi downstream from Rocky Creek, and 14.5 mi southwest of Greenfield.	113	1962–99	12-20-1999 02-16-2000 03-15-2000 04-19-2000 11-15-2000 12-12-2000	13.8 1080 354 159 19.4 19.7
PAJARO RIVER BASIN						
11158300 Tres Pinos Creek at Southside Road, near Tres Pinos, CA	San Benito River	Lat 36°47'18", long 121°21'34", in NW 1/4 SW 1/4, sec.19, T.13 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 1200 ft upstream of San Benito River, and 2 mi west of Tres Pinos.	—	—	09-29-1995 11-07-1995 12-11-1995 07-09-1996 06-25-1998 08-21-2000	9.20 0.73 2.13 0.42 8.92 0.17
362357120501801 San Benito River at Hernandez Reservoir Release, CA	Pajaro River	Lat 36°23'57", long 120°50'18", in SE 1/4 SW 1/4, sec.36, T.17 S., R.10 E., San Benito County, Hydrologic Unit 18060002, 150 ft downstream of spillway, and 1.4 mi upstream of confluence of McCoy Creek.	—	—	12-07-1995 12-07-1995 12-07-1995 12-07-1995 08-15-1997 08-21-2000 08-21-2000 08-21-2000	7.41 21.1 39.6 60.7 20.2 34.2 56.5 25.9
362243120541401 San Benito River at Old Hernandez Road Bridge, CA	Pajaro River	Lat 36°22'43", long 120°54'14", in SE 1/4 NE 1/4, sec.8, T.18 S., R.10 E., San Benito County, Hydrologic Unit 18060002, 2 mi upstream of confluence of James Creek, and 17.7 mi southeast of Hollister.	—	—	08-21-2000	28.5
363921121153401 Paicines Canal below Hill Gate, near Paicines, CA	San Benito River	Lat 36°39'21", long 121°15'34", in NW 1/4 SE 1/4, sec.1, T.15 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 4.0 mi upstream of confluence of Pescadero Creek, and 5.0 mi south of Paicines. Diversion from San Benito River to Paicines Reservoir.	—	—	08-21-2000	17.5
363931121153601 San Benito River downstream of Hill Gate, CA	Pajaro River	Lat 36°39'31", long 121°15'36", in NW 1/4 SE 1/4, sec.1, T.15 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 4.0 mi upstream of confluence of Pescadero Creek, and 5.0 mi south of Paicines.	—	—	08-21-2000	3.37
363959121154201 Paicines Canal downstream of Sand Gate, near Paicines, CA	San Benito River	Lat 36°39'59", long 121°15'42", in SE 1/4 SW 1/4, sec.36, T.14 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 3.5 mi upstream of confluence of Pescadero Creek, and 4.5 mi south of Paicines. Point of irrigation diversion from Paicines Canal.	—	—	09-28-1995 11-07-1995 07-09-1996 06-25-1998 09-25-1998 08-21-2000	27.9 32.7 11.8 15.7 17.1 13.9

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water year)	Measurements	
					Date	Discharge (ft^3/s)
		PAJARO RIVER BASIN—Continued				
364204121162501 Paicines Canal downstream of canal flow measurement device, near Paicines, CA	San Benito River	Lat 36°42'31", long 121°16'25", in NE 1/4 SE 1/4, T.14 S., R.6 E., Cienega De Los Paicines land grant, San Benito County, Hydrologic Unit 18060002, 2.0 mi south of Paicines. Point downstream of canal diversions.	—	—	08-21-2000	11.8
364237121200201 Pescadero Creek 2.25 miles upstream of junction with San Benito River, below Limekiln Road, CA	San Benito River	Lat 36°42'37", long 121°20'02", in NE 1/4 SE 1/4, sec.17, T.14 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 1000 ft below Cienega School, and south of Grass Valley Road.	—	—	08-21-2000	1.39
364345121165201 Tres Pinos Creek at Paicines Reservoir Release, CA	San Benito River	Lat 36°43'45", long 121°16'52", in NE 1/4 SW 1/4, sec.11, T.14 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 3000 ft above Willow Grove School, west of Highway 25, and 0.25 mi west of Paicines.	—	—	09-28-1995 11-07-1995 12-11-1995 07-09-1996 09-24-1996 08-21-2000	11.9 4.65 6.19 5.49 4.36 7.66
364416121164501 Tres Pinos Creek above Swanson Road, near Willow Grove School, CA	San Benito River	Lat 36°44'16", long 121°16'45", in NW 1/4 NE 1/4, sec.11, T.14 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 900 ft below Willow Grove School, and east of Highway 25 at Paicines.	—	1996	08-21-2000	8.39
364626121183201 Tres Pinos Creek at Historic Park Crossing, near Tres Pinos, CA	San Benito River	Lat 36°46'26", long 121°18'32", in NE 1/4 SE 1/4, sec.28, T.13 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 1.5 mi south of Tres Pinos.	—	1996	08-21-2000	9.96
364703121212801 San Benito River at Thomas Road Bridge, near Hollister, CA	Pajaro River	Lat 36°47'03", long 121°21'28", in SE 1/4 SE 1/4, sec.19, T.13 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 2000 ft upstream of confluence of Tres Pinos Creek, and 2.0 mi west of Tres Pinos.	—	—	09-29-1995 11-07-1995 12-11-1995 07-09-1996 06-25-1998 09-25-1998 09-25-1998 08-21-2000 08-21-2000	21.1 24.3 16.8 6.18 40.2 14.1 13.9 1.16 2.88
364703121215901 San Benito River below Tres Pinos Creek, near Hollister, CA	Pajaro River	Lat 36°47'03", long 121°21'59", in SW 1/4 NE 1/4, sec.24, T.13 S., R.5 E., San Benito County, Hydrologic Unit 18060002, 1000 ft downstream of confluence of Tres Pinos Creek, and 2.5 mi west of Tres Pinos.	—	—	08-21-2000	1.74
364719121193801 Tres Pinos Creek at Southside Road Crossing, at Tres Pinos, CA	San Benito River	Lat 36°47'19", long 121°19'38", in NE 1/4 SE 1/4, sec.20, T.13 S., R.6 E., San Benito County, Hydrologic Unit 18060002, 100 ft above Southside Road, and 0.5 mi west of Tres Pinos.	—	—	09-29-1995 11-07-1995 12-11-1995 07-09-1996 09-24-1996 06-25-1998 09-25-1998 08-21-2000	6.20 2.46 3.69 1.75 2.47 9.97 2.92 4.01
364835121230601 San Benito River upstream of Tibbits Pit, near Hollister, CA	Pajaro River	Lat 36°48'35", long 121°23'06", T.13 S., R.5 E., Cienega Del Gabilan land grant, Hydrologic Unit 18060002, 3000 ft upstream of Hospital Road, and 2.0 mi southeast of Hollister.	—	—	08-21-2000	1.08

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water year)	Measurements	
					Date	Discharge (ft^3/s)
		PAJARO RIVER BASIN—Continued				
365340121383401 Pajaro River at Rogge Lane, at Aromas, CA	Pajaro River	Lat 36°53'40", long 121°38'34", T.11 S., R.3 E., Vega Del Rio Del Pajaro land grant, San Benito County, Hydrologic Unit 18060002, 0.75 mi north of Aromas.	—	—	09-11-2000	8.25
365420121450001 Salsipuedes Creek below Highway 129, at Pajaro, CA	Pajaro River	Lat 36°54'20", long 121°45'00", T.12 S., R.2 E., Bolsa De San Cayetano land grant, Santa Cruz County, Hydrologic Unit 18060002, above San Juan Road, and 0.75 mi west of Pajaro.	—	—	09-11-2000	0.32
365421121403201 Pajaro River at Murphy Crossing, near Aromas, CA	Pajaro River	Lat 36°54'21", long 121°40'32", T.11 S., R.3 E., Salsipudes land grant, Santa Cruz County, Hydrologic Unit 18060002, east of Murphy Road, and 2.2 mi west of Aromas.	—	—	09-11-2000	1.70
365423121365501 Pajaro River at Camflor Nursery, above Chittenden Pass, near Chittenden, CA	Pajaro River	Lat 36°54'23", long 121°36'55", T.12 S., R.3 E., Salsipudes land grant, Santa Cruz County, Hydrologic Unit 18060002, below Soda Lake, and 0.75 mi west of Chittenden.	—	—	09-11-2000	9.50
365431121390101 Pajaro River at mile 6.51, at Highway 129, near Aromas, CA	Pajaro River	Lat 36°54'31", long 121°39'01", T.11 S., R.3 E., Salsipudes land grant, Santa Cruz County, Hydrologic Unit 18060002, 0.5 mi south of Aromas.	—	—	09-11-2000	4.03
365442121424401 Pajaro River below Cowards Creek, near Pajaro, CA	Pajaro River	Lat 36°54'42", long 121°42'44", T.12 S., R.2 E., Bolsa De San Cayetano land grant, Monterey County, Hydrologic Unit 18060002, 2.0 mi east of Pajaro, and 1.0 mi south of Johnston Corner.	—	—	09-11-2000	0.32
365453121414301 Pajaro River 1.65 miles below Murphy Crossing, CA	Pajaro River	Lat 36°54'53", long 121°41'43", T.12 S., R.2 E., Salsipuedes land grant, Santa Cruz County, Hydrologic Unit 18060002, 2.0 mi east of Pajaro, and 1.6 mi below Murphy Crossing.	—	—	09-11-2000	0.14
		SAN LORENZO CREEK BASIN				
11181006 Castro Valley Creek at Knox Street, at Hayward, CA	San Lorenzo Creek	Lat. 37°40'56", long. 122°04'44", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank at Knox Street, 1.0 mi southeast of Castro Valley Post Office.	2.2	a 1978–80, a 1989–93	10-21-1998 01-20-1999	0.06 2.50
Castro Valley Creek at Watson Street, at Castro Valley, CA	San Lorenzo Creek	Lat. 37°41'20", long. 122°04'15" in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 1118050004, on right bank, on bridge on Watson Street, 770 ft downstream of Interstate 580, 1.0 mi upstream of mouth, and 1.2 mi southeast of Castro Valley Post Office.	—		01-20-1999 01-25-2000	2.20 3.41
Chabot Creek at Norbridge Avenue, at Castro Valley, CA	Castro Valley Creek	Lat. 37°41'28", long. 122°04'56", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank, at bridge on Norbridge Avenue, 75 ft upstream of Interstate 580, and 0.7 mi upstream of confluence of Castro Valley Creek.	—		10-22-1998 01-20-1999 01-25-2000	0.18 17.9 5.62

a Operated as continuous-record station.

		ALAMEDA CREEK BASIN			
Alameda Creek Tributary Canal at Hesperian Boulevard, at Union City, CA	San Francisco Bay	Lat. 37°36'36", long. 122°04'58" in Arroyo de la Alameda Grant, Alameda County, Hydrologic Unit 18050004, on left bank, at bridge on Hesperian Boulevard, 0.8 mi downstream of Interstate 880, 1200 ft upstream of Southern Pacific railroad crossing, and 3.3 mi northwest of Union City.	—	10-22-1998 02-19-1999 01-24-2000 01-25-2000	7.37 54.2 310 159
Alameda Creek Tributary Canal at Huntwood Avenue, at Hayward, CA	Alameda Creek	Lat. 37°37'17", long. 122°03'19" in Arroyo de la Alameda Grant, Alameda County, Hydrologic Unit 18050004, at left bank, at bridge on Huntwood Avenue, 1700 ft downstream of Southern Pacific railroad tracks, 1.0 mi upstream of Interstate 880, and 2.7 mi northwest of Union City.	—	01-20-1999 02-19-1999	7.53 1.43
Ward Creek at Folsom Street, at Hayward, CA	Alameda Creek	Lat. 37°37'28", long. 122°04'14" in Arroyo de la Alameda Grant, Alameda County, Hydrologic Unit 18050004, on left bank, at bridge on Folsom Street, 2700 ft upstream of mouth, and 3.2 mi southeast of Hayward City Hall.	—	10-02-1998 01-20-1999	0.53 35.9
		COYOTE CREEK BASIN			
11172320 Agua Fria Creek at Kato Road, at Fremont, CA	Coyote Creek	Lat. 37°29'01", long. 121°56'00", in Agua Caliente Grant, Alameda County, Hydrologic Unit 18050004, on upstream side of Interstate Highway 880 culvert in Fremont.	2.62	02-19-1999 01-24-2000	5.06 27.5
Arroyo de Laguna at Grimmer Boulevard, at Fremont, CA	Mud Slough	Lat. 37°30'09", long. 121°57'09" in SW 1/4 NE 1/4 sec.15, T.5 S., R.1 W., Alameda County, Hydrologic Unit 18050003, on left bank, at culvert on Grimmer Boulevard, 1460 ft from mouth, and 2.8 mi southwest of Mission San Jose.	—	10-22-1998 02-19-1999 01-24-2000	1.29 3.88 3.38

Low-flow partial-record stations

Measurements of streamflow in the area covered by this volume made at low-flow partial-record stations are given in the following table. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

Discharge measurements made at low-flow partial-record stations during water year 2000

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		KLAMATH RIVER BASIN				
11525520	Deadwood Creek at Lewiston, CA	Lat 40°43'02", long 122°48'04", in SW 1/4 NW 1/4 sec.17, T.33 N., R.8 W., Trinity County, 300 ft upstream from mouth and 0.7 mi northeast of Lewiston.	9.10	a1965–75, 1976–2000	02-23-00	66.9
					02-24-00	43.9
					03-02-00	45.8
					09-26-00	b1.04

a Published as a miscellaneous measurement.
b Base flow.